National Bank of Serbia

November 2021

INFLATION REPORT

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 November *Inflation Report* was considered and adopted by the NBS Executive Board at its meeting of 9 November 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 November.

Contents

I Overview

Though the global growth projection for this year has been revised down marginally, the divergence in the pace of growth of advanced and emerging economies has widened. The risks as to the speed of global economic recovery and the duration of the pandemic have become more pronounced. The main reasons are the vaccine divide and disparities in policy support.

In the period since the previous *Report*, global growth continued, though at a slower pace as emerging economies mostly face a worsening pandemic dynamics with new virus variants and advanced economies struggle with global supply disruptions. It is due to these factors that the IMF has revised down marginally the global growth projection for this year, to 5.9% (from 6%). This modest revision reflects upgraded expectations concerning the growth of primary commodity exporters on the back of a significant rise in their prices. At the same time, the risks as to the pace of global recovery and duration of the pandemic have become more pronounced. Still, owing to progress in vaccination, relevant international institutions have revised up the 2021 outlook for the euro area and countries in Central and South East Europe, which are our most important trade partners, and this is likely to positively affect our exports as well.

Though estimates that inflationary pressures are mainly temporary still prevail, cost-push pressures proved to be stronger and more durable than initially expected, which is why increasingly more central banks have begun to tighten their monetary conditions.

Global commodity and energy prices, and numerous supply-side issues continue to fuel inflationary pressures across the world. As estimated by international financial institutions, inflationary pressures are likely to subside in mid-2022 in most countries, but will remain high in some emerging economies, notably those where the depreciation of the local currency further amplified the effect of rising import prices. The risks to the inflation projection globally are judged to be tilted to the upside as halts in global production chains could last longer than expected and could spur inflation expectations, which would most probably entail faster tightening of monetary policies compared to the current estimates. Some central banks in the region have already embarked on tightening. When it comes to monetary policies of leading central banks, in November the Fed decided to reduce the pace of its monthly asset purchases, and the ECB is expected to follow suit by late this year.

The NBS Executive Board kept the key policy rate on hold since the previous Report, but took the first steps to reduce monetary accommodation.

In October, the average effective rate at securities repo sale auctions was raised by 16 bp from 0.11% (on average since early 2021). In late October, and at the first auction in November, it stood at 0.27%. The NBS stopped holding repo purchase auctions, whereby it used to provide banks with three-month dinar liquidity under highly favourable conditions (0.10%). In making the decisions on gradual monetary tightening, the Executive Board was guided primarily by the fact that global prices of oil and other primary commodities, coupled with global supply disruptions, generate stronger than initially expected cost-push pressures both globally and at home, and it is therefore important to influence inflation expectations in such an environment. The Board also had in mind that the

positive effects of earlier adopted large-scale monetary and fiscal measures on economic activity, including the effects of the third package of economic measures that support businesses and citizens, can be expected in the coming period as well, and that favourable financial conditions can be maintained at a somewhat smaller degree of monetary expansiveness. Caution in monetary policy conduct was also mandated by developments in the international financial market, i.e. primarily the expectations that quantitative easing programmes of the Fed and the ECB may change, which may reflect on capital flows towards emerging economies, including Serbia.

Owing to economic policy measures that helped preserve the quality of the assets of banks and their greater readiness to extend loans during the pandemic, lending activity has remained an important factor of investment and consumption financing.

Borrowing conditions in the domestic market remained favourable in Q3, continuing to encourage lending and a further rise in the share of dinar in total loans. As the volume of lending increased in Q3, primarily to the corporate sector, the y-o-y growth rate of total loans to the non-monetary sector stepped up to 6.6% in September, from 6.3% in June. High liquidity and capital adequacy, and a further decline in the NPL ratio to 3.55% in September, which is below the pre-crisis level, are also important factors encouraging banks to continue to support economic growth.

A better than planned fiscal performance reflects accelerated economic growth and positive labour market trends.

Under the new supplementary budget, both the central and general government deficits are projected at 4.9% of GDP. A more favourable than planned fiscal result mirrors better revenue collection owing to faster than expected recovery of personal consumption, better than anticipated corporate performance, and, consequently, higher revenue from profit tax and payment of non-tax revenue by public enterprises. The revenue overperformance created additional room for an increase in government capital expenditure aimed at ensuring additional funds for projects in transportation infrastructure and healthcare, as the key reason why expenditure was adjusted under the new supplementary budget in the first place. The share of general government public debt in GDP was 57.1% at end-September and is projected at 58.2% at year-level, i.e. below the Maastricht criterion. Although significant funds will continue to be channelled to infrastructure projects, the fiscal deficit is anticipated to narrow further in the medium run and turn to the primary surplus, which will help public debt to enter the downward trajectory.

The improvement of Serbia's external position in the nine months of this year reflects a lower current account deficit and elevated capital inflows to Serbia compared to the same period of 2020.

In the nine months of 2021, the current account deficit amounted to EUR 1.3 bn, down by around 23% y-o-y. This reflects a rising secondary income surplus and a decline in the deficit on the trade in goods and services, which fully compensated for the higher primary income deficit. As external economic flows normalised, goods exports and imports rose by 30.2% and 24.5% y-o-y, respectively. In terms of activity, exports expanded in 20 of 23 areas of manufacturing. The main impetus came from the exports of base metals, electrical equipment, metal ores, chemicals and chemical products, motor vehicles and trailers, food products, and rubber and plastic products. In terms of

purpose of imported products, over 60% of contribution to goods imports came from intermediate goods, partly owing to higher energy prices, while consumer goods and equipment provided a smaller contribution. The rise in the services surplus of close to 40% y-o-y was supported primarily by information-communication services and tourism. Under our projection, the share of the current account deficit in GDP will equal around 4% at the year-level, and 4–5% in the medium run, and will remain fully covered by net FDI. The improvement in the external position will continue to be supported by rising export capacities of the domestic economy, and the expected global economic recovery, while the planned large investment in infrastructure will drive up the imports of equipment.

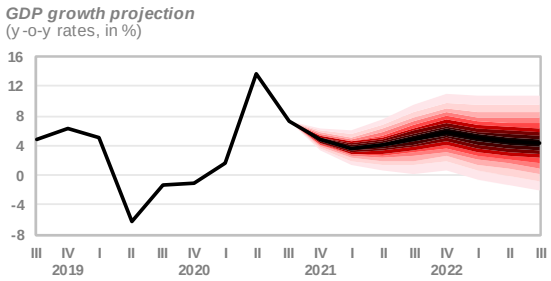
Stronger resilience to external risks is underpinned also by the country's FX reserves that rose to record highs.

In the year to September, FDI inflow to Serbia almost exceeded the total last year's figure. It amounted to EUR 2.9 bn (EUR 2.7 bn net), ensuring ample coverage of the current account deficit. Since early 2021, the country's FX reserves increased by EUR 3.3 bn to EUR 16.8 bn at end-September, owing to favourable balance of payment trends, NBS interventions in the IFEM, notably FX purchases aimed at preventing excessive short-term volatility of the exchange rate, SDR allocation by the IMF, and successful issue of eurobonds in the international financial market. Serbia is the first non-EU European country that issued a green eurobond in the international financial market. The bond is of seven-year maturity, in the nominal amount of EUR 1.0 bn, at the lowest coupon rate so far of 1.00%, and the yield rate of 1.26%. Serbia also issued a 15-year conventional euro-dominated eurobond, in the nominal amount of EUR 750 mn, at the coupon rate of 2.05% and the yield rate of 2.3%, whereby the yield curve was lengthened further. The bulk of proceeds from this issue was used for the repayment of the maturing 2012 eurobond. High demand for these securities and favourable financing conditions are another confirmation of foreign investors' confidence in the favourable macroeconomic prospects of our economy and the sustainability of the results achieved.

Thanks to favourable growth dynamics, Serbia's GDP is currently above the pre-crisis level by over 3%.

According to the SORS flash estimate, GDP grew 7.4% y-o-y in Q3. A somewhat lower than expected rise in manufacturing amid persistent halts in global supply chains and a continued increase in global primary commodity prices, was more than offset by the faster than anticipated growth in mining, services and construction. Economic growth, which exceeded our expectations in all three quarters of 2021, was supported by the preserved consumer and investment confidence, production capacities, jobs, maintained favourable financing conditions, and stepped-up government capital expenditure in Q3. Consistent with this, the Q3 growth was led by consumption and fixed investment on the expenditure side.

Owing to more favourable movements in all three quarters, the NBS revised up its GDP growth projection for 2021 from 6.5% to 6.5–7%. In cumulative terms, in the two pandemic years, Serbia will record one of the best economic growth outcomes in Europe. In the medium run, GDP growth is expected at 4.0–5.0%, supporting further convergence to EU countries.

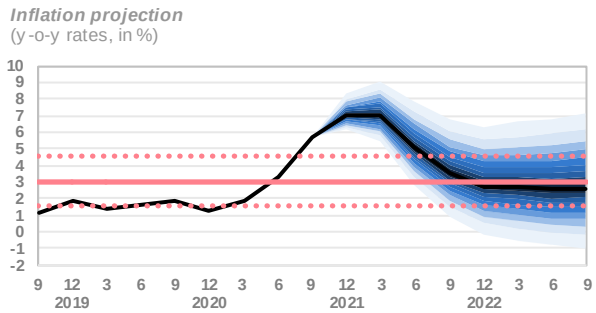


Faster than expected growth since early 2021 and our relatively conservative projection for Q4 should result in GDP growth between 6.5% and 7% this year. In 2022 and in the medium run, we expect the growth rate to move within the 4–5% range. Such outturn is supported by a more favourable medium-term outlook, preserved investment and consumer confidence, higher production capacities, more jobs, and the expected implementation of planned projects, notably in transportation, railway and utility infrastructure. This means that the Serbian Government has remained committed to preserving the model of investment- and export-driven growth, supported by rising private consumption based on real and sound foundations. The risks to the projection remain associated with the path of the pandemic and its impact on economic activity and inflation globally, including movements in commodity and financial markets. Overall, the risks are judged to be symmetric, with those from the international environment mildly tiled to the downside and those from the domestic environment slightly skewed to the upside.

Similarly to other countries, higher inflation in Serbia compared to the start of the year stems chiefly from the low last year's base and supply-side factors, which are beyond the impact of monetary policy. However, unlike most other inflation-targeters in the region, core inflation in Serbia is still in the lower half of the target band, owing primarily to preserved stability of the exchange rate.

Rising global oil and other primary commodity prices, along with the effects of low last year's base and halts in raw material supply globally, have fuelled cost-push pressures in the world and at home. Moreover, since April this year, the local market has witnessed a sharp rise in vegetable prices. In Q3, due to the drought, their seasonal decline failed to take place, which resulted in higher than expected y-o-y inflation (5.7% in September). That these are primarily supply-side pressures is shown by a 3.3. pp contribution of unprocessed food and energy prices to September inflation, while core inflation remains relatively low and stable, equalling 2.6% y-o-y in September. Important factors behind low and stable core inflation are the relative stability of the exchange rate and the inflation expectations of the financial and corporate sectors anchored within the target band.

As the effect of temporary factors wears off, in H2 2022 inflation is expected to move at the pre-pandemic levels.



Under the central November projection, we expect y-o-y inflation to hover temporarily above the upper bound of the target tolerance band (3±1.5%) until the middle of the next year when, as a result of the anticipated slowdown from Q2 2022, it will first retreat within the target tolerance band and then settle in its lower half until the end of 2022, where it will stay in 2023 as well. Such inflation movements are under the impact of higher global prices of oil, primary agricultural commodities and unprocessed food, halts in global supply chains, and significantly higher transportation costs. The effect of these factors is expected to wear off in H2 2022 and disappear altogether until end-2022. Uncertainty surrounding the inflation projection is still largely associated with the international environment, i.e. the duration of halts in global supply chains, pace of further normalisation of global economic trends, movement

of global primary agricultural commodity and energy prices, and normalisation of monetary policies of leading central banks. To a smaller extent, the risks to the projection also refer to the domestic environment, notably the oncoming agricultural season, dynamics of domestic demand and administered prices. Overall, the risks to the inflation projection are judged to be slightly tilted to the upside.

By all odds, monetary policy will continue to face numerous challenges from the international environment.

The focus of monetary policy makers will stay on maintaining price and financial stability in the medium run, as well as on supporting as fast growth of our economy as possible, a further rise in employment and living standards, expansion of the export sector, and preservation of a favourable investment environment. The NBS will continue to keep a close eye on the movement and impact of key factors from the domestic and international environment on inflation, financial stability and pace of economic growth, and, consistent with this, it will calibrate its measures in the interest of our businesses and citizens. The NBS stands ready to respond promptly by using all monetary policy instruments on hand in case of materialisation of any of the risks that would keep inflation above the upper bound of the target band for a prolonged period of time.

II Monetary policy since the August *Report*

The NBS has kept the key policy rate on hold since the previous Report, but in October it took the first steps towards reducing monetary accommodation, by raising the average effective repo rate in auctions of securities repo sale and discontinuing auctions of securities repo purchase which in the prior period supplied dinar liquidity to banks under very favourable conditions.

In making such decisions, the NBS Executive Board was guided primarily by the fact that the global prices of oil and other primary commodities, along with disruptions to global supply chains, were causing stronger than anticipated cost-push pressures both locally and worldwide. The Board also had in mind that the positive effects of past large-scale monetary and fiscal measures on economic activity, including the third support package for businesses and households, could be expected going forward as well and that the favourable financing conditions could be sustained also at a somewhat lower degree of monetary accommodation.

Caution in monetary policy-making was also warranted by developments in the international financial market, notably the expected changes in the quantitative easing programmes of leading central banks, above all the Fed in November, and possibly the ECB in December, which could affect capital flows towards emerging markets, Serbia included.

At its meetings 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 by 1.25 pp lower than pre-pandemic. **The rates on deposit (0.10%) and lending facilities (1.90%) also remained unchanged.** However, in light of inflationary pressures which are mainly of global character and reflect movements in the international commodity market, in October the NBS took the first steps towards a reduction of monetary accommodation, facilitated by the current (flexible) monetary framework. Namely, as of December 2012 securities repo sale auctions are implemented at the multiple interest rate method (instead of a fixed rate applied until then), which enables the NBS to regulate the level of the average repo rate and to adjust monetary conditions by varying the volume of liquidity it wants to absorb, without changing the main interest rates. **The average repo rate in weekly reverse repo operations was thus increased from early October.** More specifically, in the first auction in October, one day before the Executive Board meeting, the rate was raised by 13 bp, from the 0.11% it averaged since the start of 2021 to 0.24%. In the auctions that followed, the rate was gradually increased to the level of 0.27% at end-October. Besides, **as of October the NBS no longer holds the auctions of securities repo purchase**, whereby in the prior period banks were provided with dinar liquidity for a three-month term under very favourable conditions (0.10%, i.e. deposit facility rate). The auctions of repo securities purchase (as well as additional swap auctions of FX purchase held until 15 March this year) were introduced on 16 November 2020 as the sources of cheap additional dinar liquidity to support the economy amid the pandemic.

In making the decisions to scale down the degree of monetary policy expansion, the Executive Board was guided primarily by the fact that the global prices of oil and other primary commodities, along with disrupted global supply chains, were generating stronger than initially anticipated cost-push pressures both locally and worldwide. In parallel, global demand rebounded in this stage of the pandemic, bolstered by the lifting of containment measures thanks to vaccine rollout, as well as by the use of accumulated savings and the strong support measures for corporates and households still in place in most countries. Coupled with the low base effect, these factors fuelled price growth in nearly all countries, **in some of them, Serbia included, the rise in prices of some agricultural products and unprocessed food being additionally stoked by drought.** Though the expectations for the time being are that inflation rates in most countries will, after peaking late this year or in Q1 next year, recede to pre-pandemic levels in mid-2022, the outlook for the said factors and their impact on inflation remains extremely uncertain. As the risks are judged to be skewed to the upside, chiefly on account of the ongoing rise in global energy prices (oil, natural gas and consequently, electricity), concerns are growing that inflationary pressures at global level might prove to be more persistent than expected initially.

If inflationary pressures do turn out to be more persistent, leading central banks would probably begin tapering their accommodative monetary

measures, which could affect capital inflows and thereby exchange rates in emerging markets, causing a taper tantrum the likes of 2013. While the ECB is not likely to raise its interest rates any time soon, the accelerated euro area growth and higher inflation since the beginning of the year fuel expectations that it might consider changes to its asset purchase programme in December. The Fed is not likely to raise its interest rates this year either, while the rate hike next year remains uncertain as well. Nevertheless, the Fed might decide in November to downsize its asset purchases within the quantitative easing programme, which could dampen capital inflows to emerging markets, Serbia included, and therefore calls for increased caution in monetary policy conduct.

Deciding on monetary policy in the period observed, the Board had in mind that the effects of past monetary and fiscal stimuli could be expected going forward as well and that the favourable financing conditions could be sustained also at a somewhat lower degree of monetary accommodation. The third package of support measures for businesses and households worth around 4.5% of GDP is implemented this year in order to further accelerate the growth of our economy. Monetary and fiscal policy measures are therefore likely to exert continued positive effects on financing conditions for corporates and households and on their disposable income. Robust monetary and fiscal support to the people and the 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 macroeconomic stability.

Analysing economic activity indicators in its policy-making since the previous *Report*, the Executive Board stressed that since the beginning of the year the domestic economy again outperformed expectations. Namely, GDP exceeded the pre-crisis level already in Q1 as a result of the concurrent growth in economic activity and potential output, while the movement of available indicators for Q3 is consistent with the NBS August projection. The Executive Board judges that the largest contribution to GDP growth at the year level will come from fixed investment and personal consumption thanks to the maintained investment and consumer confidence, as well as production capacities and jobs. Further expansion of export capacities, spurred by high FDI inflows, will continue to work towards improving the country's external position, and so will the expected global economic recovery, notably the recovery of the euro area, our key trade partner. In terms of medium-term economic growth, the Board expects GDP growth within the 4–5% range, in light of the announced numerous infrastructure projects and their direct and indirect effects on GDP.

Analysing inflation profile and its determinants, the Executive Board kept emphasizing that the higher level of inflation in Serbia compared to the start of the year, similarly to other countries, was largely due to last year's low base and supply-side factors which are beyond the monetary policy's impact. These factors include primarily the rising global prices of oil and other primary commodities, which, along with disruptions to global supply chains, generated stronger cost-push pressures globally and at home. Moreover, since April the domestic market has experienced a more pronounced rise in vegetable prices and the seasonal decline in these prices in Q3 failed to come about due to the drought, adding steam to the y-o-y inflation growth. However, that these are mainly supply-side pressures is suggested by the still low and stable core inflation, underpinned by the relatively stable exchange rate and inflation expectations of the financial and corporate sectors that are anchored within the target band.

The Executive Board voiced expectations that y-o-y inflation in Serbia, similarly to other inflation targeters in the region, would most probably move above the upper bound of the target tolerance band in the next several months and that with the waning of the effect of this year's rise in global primary commodity prices and cost-push pressures in production and transport in H1 2022, inflation would first to return within the target band in H2 2022 and then go below the target midpoint. Furthermore, the Board made it clear that the NBS was ready to respond promptly also by using other monetary policy instruments on hand in case of materialisation of any of the risks that would keep inflation above the upper bound of the target band for a prolonged period of time.

As the main risks to inflation and economic outlook continue to emanate from the international environment, the NBS will as so far keep a close eye on trends in the international commodity and financial markets and assess their impact on the local economy. It should be noted, however, that our economy today boasts greater resilience compared to previous crises. Just as Fitch Ratings assessed in early September, affirming Serbia's credit rating at BB+ with a stable outlook – the Serbian economy proved to be resilient to the fallout from the crisis, while the limited increase in public debt underpins confidence in fiscal consolidation prospects. That confidence was echoed in mid-September when Serbia issued in the international financial market its first green instrument (seven-year green eurobond) at the

lowest coupon rate ever (1%) and a yield rate of 1.262% in an oversubscribed auction. At the same time, Serbia issued a conventional eurobond of the longest maturity so far – 15 years, at a coupon rate of 2.05% and yield rate of 2.30%, which was also in high demand of international investors.

At its meeting in November, the Executive Board decided to keep the key policy rate unchanged and to continue tightening monetary conditions via the repo rate and withdrawal of a larger amount of excess liquidity from the banking sector.

Looking ahead, the focus of monetary policy makers will stay on maintaining price and financial stability, as well as on supporting as fast growth of our economy and employment as possible, further expansion of the export sector, and a favourable investment environment. Monetary policy will continue to be predictable and consistent in delivering low and stable inflation in the medium run, while safeguarding the achieved financial stability and contributing to economic growth and higher living standards.

III Inflation movements

In the period since the previous Report, cost-push pressures in the international and domestic market intensified additionally, which, together with the seasonally unusual increase in vegetable prices due to the drought, pushed y-o-y inflation higher in Q3 relative to the August central projection, i.e. to, 5.7% at end-September. That these pressures are primarily on the supply side is indicated by the data that contribution of unprocessed food and energy prices to September y-o-y inflation equalled 3.3 pp, while core inflation was significantly lower than headline inflation and measured 2.6% y-o-y in September.

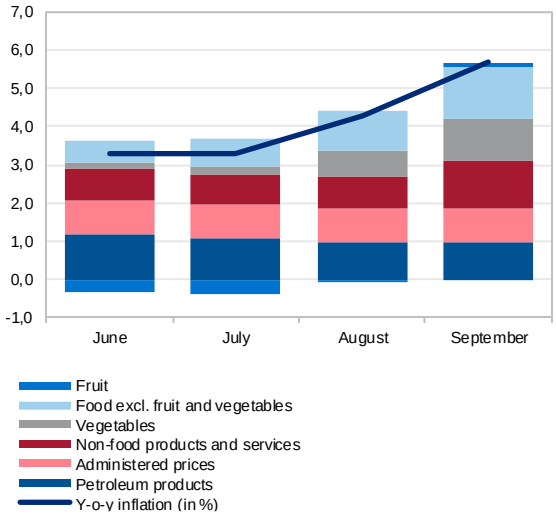
The relative stability of the exchange rate and anchored inflation expectations of the financial and corporate sectors within the target tolerance band are important factors of low and stable inflation.

Inflation movements in Q3

After moving around the target midpoint in Q2 and July, **y-o-y inflation** continued at a faster pace in the remainder of Q3 and measured 5.7% in September. Such trends reflect predominantly the prices of unprocessed food, whose contribution increased from -0.2 pp in June to 1.8 pp in September, primarily due to a robust y-o-y rise in the prices of fresh vegetables (36.2% in September vs. 2.1% in June). Vegetable prices recorded a seasonally unusual movement in Q3, mainly due to adverse weather conditions, low base effect from last year, and most likely due to the absence of cheaper imports. The low last year's base, higher prices of primary agricultural commodities and recovered demand after the relaxation of containment measures also led to a faster y-o-y rise in the prices of fresh meat (15.1% in September vs. 0.8% in June). Due to a further hike in global food prices and the associated production costs, the prices of processed food also increased their contribution to y-o-y inflation in Q3 (by 0.2 pp, to 0.8 pp), the same as the prices of services (to 0.7 pp). The contribution of the prices of industrial products excluding food and energy edged up mildly (by 0.1 pp, to 0.9 pp), while the contribution of energy prices to y-o-y inflation in September was slightly lower than in June, but remained relatively high (1.5 pp), reflecting primarily low last year's base, as well as a significant increase in global oil prices in the previous months. **Core inflation** (measured by the change in CPI excluding prices of energy, food, alcohol and cigarettes), which is most affected by the monetary policy, was significantly lower than headline inflation, measuring 2.6% y-o-y in September.

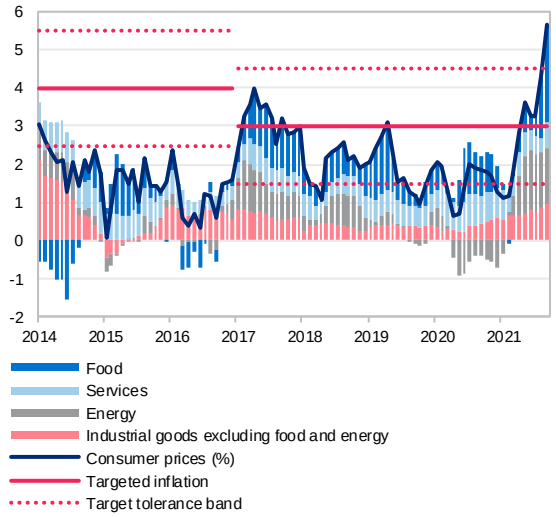
In quarterly terms, **consumer prices picked up by 1.9% in Q3**, driven dominantly by the hike in the **prices of food and non-alcoholic beverages** (3.5%). Under the impact of higher prices of fresh meat, as well as fruits and vegetables, which usually cheapen in this part of the year, the prices of **unprocessed food** increased by 8.1% in Q3, giving a 0.8 pp cumulative contribution to inflation. A positive contribution to

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



Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

quarterly inflation also came from the higher prices of **processed food** (1.1%).

Energy prices grew by 1.8% in Q3, as a result of the rise in the prices of solid fuels (3.8%) and petroleum products in the domestic market (3.1%), which reflected the hike in global prices of crude oil (6.4% on average in Q3).

The **prices of industrial products (excluding food and energy)** rose by 1.0% in Q3, driven by the cigarette price adjustment in July (by 3.2%) and higher prices of alcohol beverages, vehicles, furniture and apartment maintenance materials. In contrast, the prices of clothes and footwear experienced a seasonal decline (1.1%).

The **prices of services** increased by 0.9 % in Q3, mainly as a result of the higher prices of technical inspection of vehicles, as well as crafts, catering, medical and apartment maintenance services (with a 0.2 pp cumulative contribution to inflation).

Administered prices grew by 0.8% in Q3 on account of the regular cigarette excise tax adjustment in July. The y-o-y growth in these prices stayed unchanged in September relative to June (4.8%).

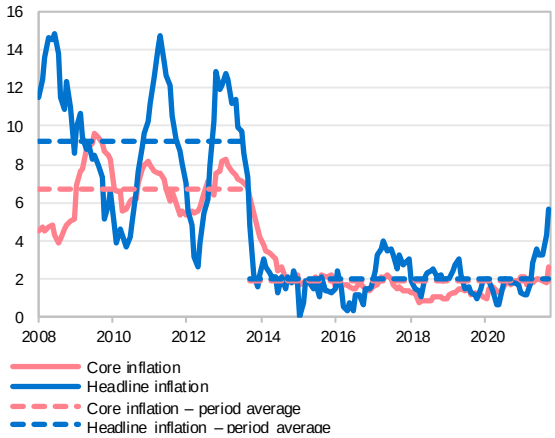
Prices within core inflation edged up by 0.7% in Q3 (with a 0.3 pp contribution to inflation), driven by the mentioned hike in the prices of technical inspection of vehicles, restaurants and hotels, as well as apartment maintenance materials, while the seasonal decline in the prices of clothes and footwear, as well as lower prices of audio devices, computer and other equipment worked in the opposite direction.

Table III.0.1 **Growth and contribution of components to consumer price growth in Q3 2021**

	Growth rates (%)	Contribution (pp)
Consumer prices (CPI)	**1.9**	**1.9**
Unprocessed food	8.1	0.9
Processed food	1.1	0.2
Industrial products excluding food and energy	1.0	0.3
Energy	1.8	0.3
Services	0.9	0.2
CPI excluding energy, food, alcohol and cigarettes	0.7	0.3
Administered prices	0.8	0.2

Sources: SORS and NBS calculation.

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



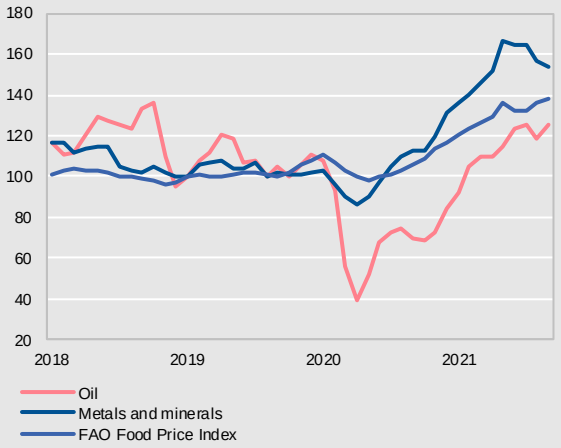
Sources: SORS and NBS calculation.

Text box 1: Causes of current inflation spikes

As in other countries, inflation in Serbia has been on an upward path over the past months, measuring 5.7% y-o-y in September. As we have repeatedly pointed out, the NBS is of the opinion that this growth is mostly temporary and that over the next year, inflation in Serbia will return to the levels recorded in the previous years. Such expectations are based on the nature of the **causes of the current rising inflation** in Serbia and other countries, namely: **the low base effect primarily for petroleum product prices from the previous year**, followed by the **high growth in the global prices of oil and other primary commodities**, including the **prices of agricultural products**, which were further affected by the drought in the countries which export these products the most. Another important factor of inflation are **global disruptions on the supply side**, which, along with the recovery in global demand, pushed up the **transport costs and producer prices**. The drought, which hit Serbia as well, reflected on the lower yields of not only autumn crops, but also vegetables and fruits, and averted the seasonal decline in their prices in Q3. Below is a detailed explanation of each of these inflation factors, as well as their expected movement in the coming period.

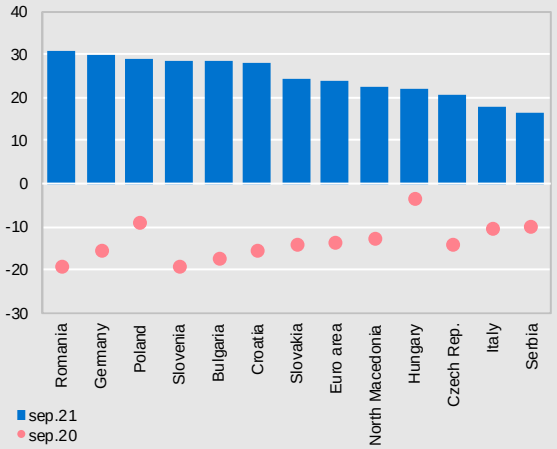
Global prices of primary commodities, primarily **oil**, have accelerated strongly since mid-2020, after touching their record lows during the first wave of the pandemic in March and April 2020 (Chart O.1.1). This accelerated growth reflects the relaxation of containment measures and the re-opening of the economy across the globe, which, along with positive news about the invention and distribution of vaccines at end-2020, improved the outlook for global economic growth and significantly increased demand for primary commodities. As a result of growing oil demand and slower adjustment of supply from OPEC+ members to such demand, global oil prices soared above their pre-crisis levels, and were in September higher by as much as over 80% y-o-y, primarily due to the low base effect, but also due to the current rise in prices. This led to a significant increase in retail petroleum product prices, which in the euro area in September this year measured 24% y-o-y and in Serbia 16.3% y-o-y, compared to the same period last year when they recorded a decrease by around 14% and 10% y-o-y, respectively (Chart O.1.2). Although oil price decreased slightly in August, mainly due to the news that the spread of the delta variant could slow global economic growth, hurricanes in the US which affected oil plants in the Gulf of Mexico drove these prices up again to around USD 75 per barrel on average during September and to around USD 84 per barrel in October.

Chart O.1.1 **Global prices of primary commodities**
(Jan. 2019. = 100)



Sources: Bloomberg, World Bank, UN FAO.

Chart O.1.2 **Rise in petroleum product prices**
(y-o-y rates, %)

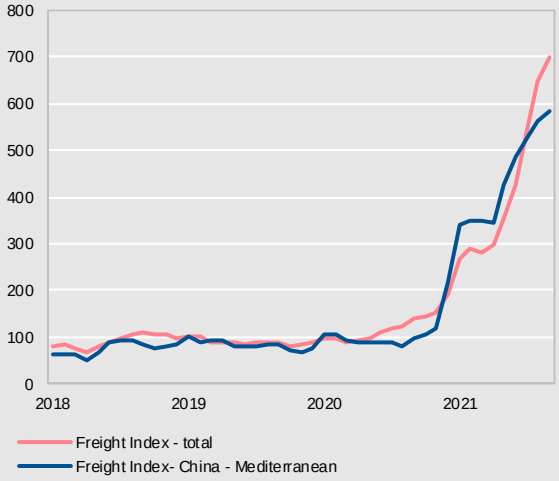


Sources: Eurostat, NBS calculation.

A similar trend this year was recorded by **metals prices**, which touched their multi-year peak in May and June, driven primarily by growing demand from China and other advanced economies, which triggered a rise in producer prices worldwide, notably industrial producers (Chart O.1.4).

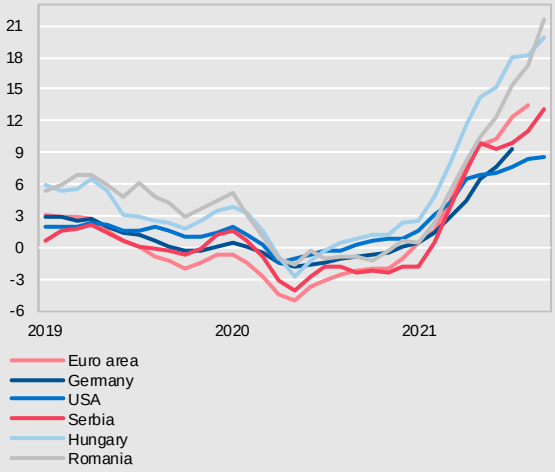
In the course of this year, **global prices of primary agricultural commodities** also grew strongly, reflecting adverse weather conditions, above all in Brazil and Argentina, which are the largest producers of cereals, especially corn, but also coffee. Higher prices of primary commodities, along with the rising demand after the relaxation of containment measures and progress in vaccination since the start of Q2, largely determined the rise in the prices of meat and other food products. As for meat prices in Serbia, it should be noted that they were at a very low level throughout 2020, which, among other things, threatened the survival of some producers and created the effect of an extremely low base for this year.

Chart O.1.3 **Price of overseas container transport**
(Jan. 2019. = 100)



Source: Reuters.

Chart O.1.4 **Industrial producer prices**
(y-o-y growth, %)

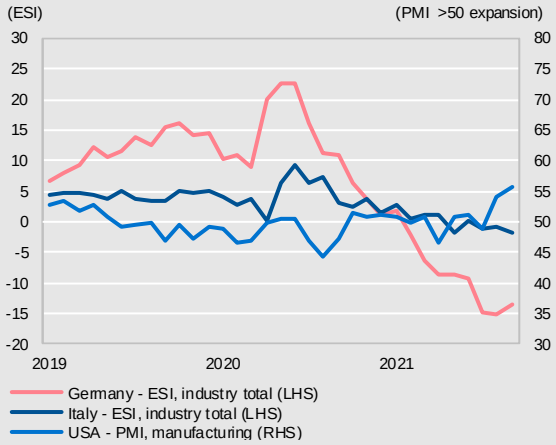


Source: Eurostat.

In addition to higher oil prices, the rise in global **transport costs** was spurred also by a sudden increase in demand for consumer goods, which, with the implementation of tightened containment and hygiene measures, extended the waiting time for loading goods and slowed down the entire transport chain, causing also a shortage of transport containers. As a result, in September the prices of container transport were at a several times higher level than in the same period last year (Chart O.1.3).

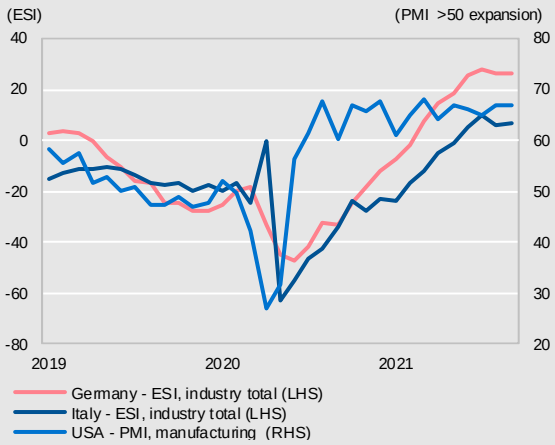
No less important, the **emergence of bottlenecks in the production of certain groups of products**, such as microchips, timber, metals and plastics amid an abrupt global demand growth after the re-opening of economies, caused a temporary supply-demand mismatch, where supply was unable to meet pent-up demand in the short term. This is indicated by data on the growing number of new orders, as well as data on the fall in the value of finished product inventories (Charts O.1.5 and O.1.6).

Chart O.1.5 **Industry inventories**



Sources: European Commission, ISM World.

Chart O.1.6 **Industry orders**

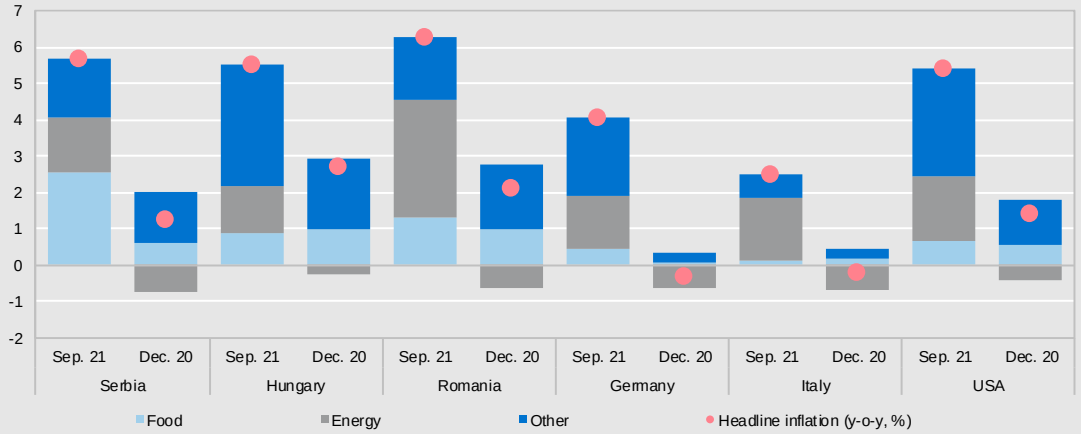


Sources: European Commission, ISM World.

All of the above factors significantly pushed up both producer and import prices, which reflected on the increase in consumer prices in many countries. Most European countries recorded a rise in inflation rates in the course of this year (Chart O.1.7), with the greatest contribution coming from no other than the prices of petroleum products and food. The level of contribution varies across countries depending on the share these groups of products have in the consumer basket (in the observed group of countries, the share of food and petroleum products is among the highest in Serbia and amounts to 31% and 6%, respectively). Thus, inflation in the euro area accelerated in September to 3.4% from -0.3% at end-2020. Inflation has also been on an upward path in other inflation targeting countries in the region, and in most of them it is currently above the upper bound of the target tolerance band (Chart O.1.8).

The mentioned global factors reflected on inflation in Serbia as well, which from April to July moved around the target midpoint, only to rise to 4.3% y-o-y in August and then to 5.7% y-o-y in September. Y-o-y inflation growth in H2 this year was expected and announced in the August inflation projection. However, the unexpected vegetable price increase in August, which extended into September, resulting from unusually hot weather and drought, as well as elevated petroleum product prices due to a further hike in global oil prices pushed the August and September inflation outturns above the central August projection. Specifically, **vegetable prices recorded a monthly rise of 5.3% in August, and additional 9.7% in September.**

Chart O.1.7 **Contribution to inflation by country - September 2021 and December 2020**
(in pp)



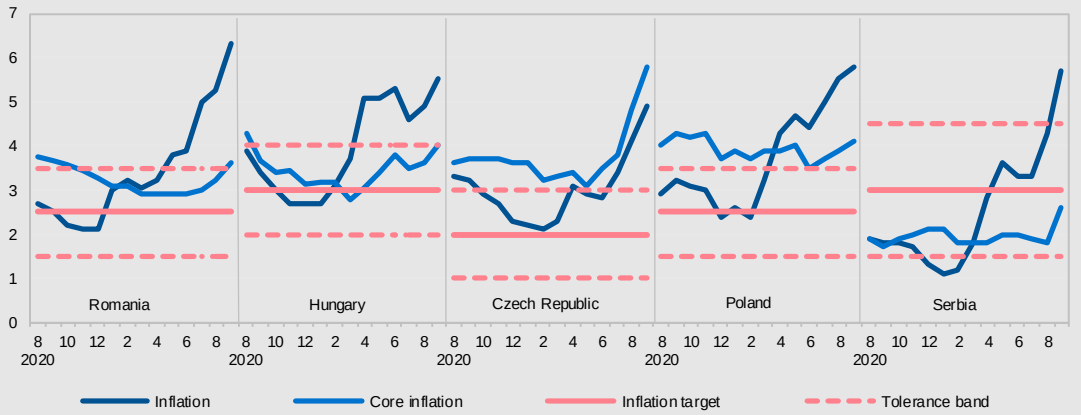
Sources: National statistical offices, NBS calculation.

Thus, contrary to the seasonal fall of around 15% at quarterly level, which is a ten-year average, these prices rose by 3.9% in Q3. Y-o-y, these prices picked up by 36.2% in September. The prices of fresh meat in the domestic market also recorded robust y-o-y growth in September (15.1%) and, contrary to global market trends, continued up in Q3.

That inflation is mainly driven by temporary supply-side factors, which are beyond the reach of monetary policy, is also indicated by the fact that close to a half of the contribution to the September y-o-y inflation stemmed from the prices of unprocessed food and petroleum products. In addition, if y-o-y inflation growth is observed relative to end-2020, it can be concluded that 3.5 pp of the 4.4 pp growth stemmed from the greater contribution of the mentioned two groups of products. If you add to that the electricity prices hike from the start of the year, higher prices of energy and unprocessed food account for close to 4 pp of the inflation spike.

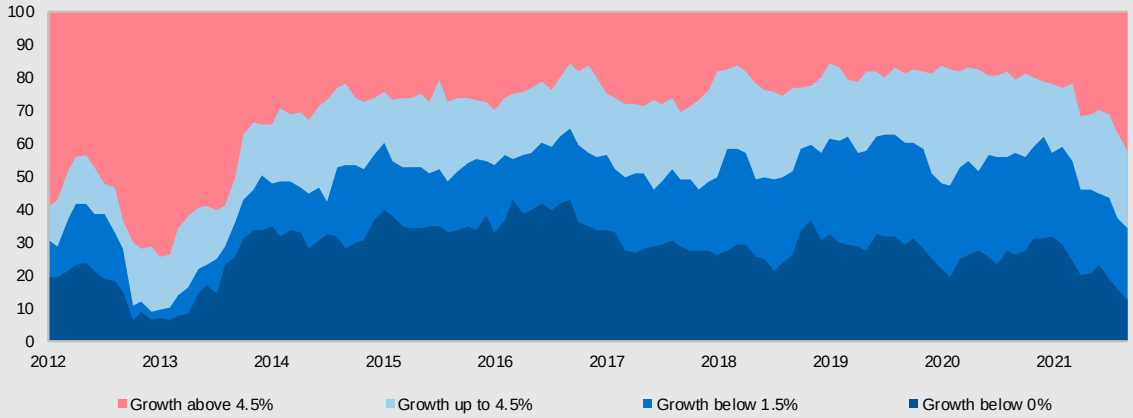
In contrast, core inflation (CPI excluding food, energy, alcohol and beverages) is significantly lower than headline inflation, and it measured 2.6% y-o-y in September. Generally, core inflation is an inflation component which, as a rule, represents its most stable segment, the least susceptible to the effects of temporary factors, and is therefore mostly viewed as a measure of inflation persistence. This inflation measure is the most affected by monetary policy, and its persistent growth is a signal to central banks that demand-side factors generate inflationary pressures, i.e. that they should react by raising the policy rate. Given that core inflation is below the target midpoint and that, according to our estimate, the output gap, which is a measure of aggregate demand, is still negative, there are no major inflationary pressures on the demand side in the domestic market. Low inflationary pressures on the demand side are confirmed also by inflation expectations of the financial and corporate sectors anchored within the target band. **In addition, unlike some countries where the depreciation of the domestic currency amplified the effect of higher import prices on domestic inflation, this was not the case in Serbia, thanks to the achieved relative stability of the exchange rate.**

Chart O.I.8 **CPI movements in selected CESEE countries**
(y-o-y rates, %)



Sources: Central banks of selected countries.

Chart O.1.9. **Distribution of products and services from the CPI list according to the level of y-o-y growth rates**
(in %)

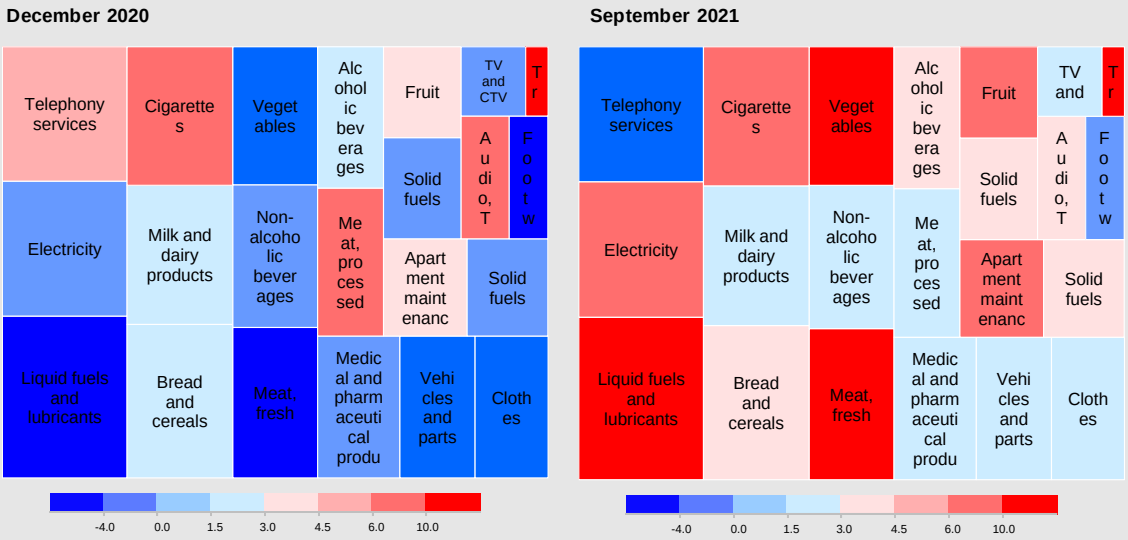


Sources: SORS, NBS calculation.

The distribution of products and services from the consumer basket, which recorded y-o-y growth rates below 4.5%, i.e. below the upper bound of the target tolerance band, reveals that this percentage has been declining in recent months, but that it is still significant – close to 60% in September, with as much as 45% of products and services recording growth of less than 1.5% y-o-y (Chart O.1.9). The products recording significant y-o-y growth rates and driving the y-o-y inflation growth relative to end-2020 are mostly petroleum products, fresh meat and vegetables (Chart 0.1.10). The hike in unprocessed food and petroleum product prices is mostly temporary in character, contrary to core inflation, as shown also by their correlograms calculated on the basis of historical movements of these data series. When a group of prices is subject to the effects of temporary, short-term factors, their time series shows a low degree of autocorrelation. In other words, the fact that e.g. vegetable prices soared in one month does not mean that such trend will continue in the months that follow. As shown in Chart O.1.11, the group of unprocessed food has zero autocorrelation already on the first lag, and fuel from the second lag onwards. In contrast, a higher degree of autocorrelation for the prices included in the calculation of core inflation, and, to a lesser extent, also for the price of processed food, indicates that they have a more persistent movement. As a result, headline inflation, which includes the most volatile price groups, oscillates more than core inflation.

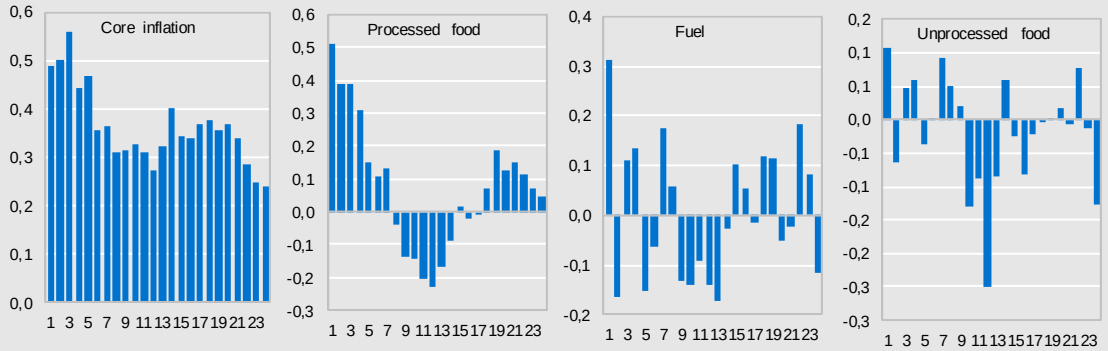
As shown in Chart O.1.12, headline inflation occasionally deviates significantly from core inflation, but approaches its most stable component after each such deviation. It should also be noted here that headline inflation is on average somewhat higher than core inflation, because core inflation does not include certain administered prices that rise faster than other prices (e.g. electricity and cigarettes).

Chart O.1.10 **Y-o-y rise in prices of selected products and services**



Sources: SORS, NBS calculation.
Note: The rectangular area represents a share in the consumer basket , while colours stand for the y-o-y price growth range of the category concerned.
[1] Audio– audio, TV, computers, telephones and other equipment; TV – TV and CTV subscription; Travel– travel packages; Services – apartment maintenance and repair services.

Chart O.1.11 **Correlogram of CPI component series**



Source: NBS calculation.

The relationship between headline (inf_t) and core inflation ($core_t$) is estimated by applying a simple error correction model in the period from January 2007 to August 2021. Regression residuals of y-o-y headline to core inflation rates (e_t) proved to be a statistically significant explanatory factor in the "short-run" equation with differences of y-o-y inflation rates (Δinf_t):

long-term equation (*p*-values in parentheses, *** and ** statistical significance of 99% and 95%, respectively):

$$inf_t = \underset{(0.34)}{0.35} + \underset{(0.00***)}{1.20} \cdot core_t + e_t$$

short-term equation:

$$\Delta inf_t = \underset{(0.91)}{0.01} + \underset{(0.00***)}{0.40} \cdot \Delta inf_{t-1} - \underset{(0.03**)}{0.05} \cdot e_{t-1}$$

The estimated relationship confirms that significant deviations of the headline from core inflation, as is the case now, are, as a rule, temporary in character.

Although this year's increase in the prices of petroleum products, food, as well as higher prices of other products and services, driven by the strengthening of cost-push pressures, will be maintained in y-o-y inflation for some time, these effects are expected to dissipate in the monetary policy horizon. Namely, leading international financial institutions still agree that the rise in the prices of primary commodities is of temporary nature and that they are likely to stabilise in the period ahead, and to slightly decrease thereafter. Such expectations are indicated by a somewhat less favourable outlook for global economic growth, primarily for China, which is the largest consumer of primary commodities. Data on futures prices also point to similar conclusions. Besides, although bottlenecks in global production proved to be more persistent than expected, the period ahead should see a gradual normalisation of production and adjustment to demand, whose global slowdown is also expected, given that the effects of exit from the pandemic will wear off – spending previously accumulated savings and compensating for lost consumption during the pandemic. The expected gradual withdrawal of fiscal and monetary stimuli in many countries, which supported corporates and citizens in fighting the pandemic during the previous and this year and encouraged domestic demand, should also work towards lower demand. In addition to these factors, the high base for vegetable prices should also work towards lower inflation in Serbia in H2 next year (especially in August and September, given this year's atypical trends),

Table O.1.1 **Revision of inflation forecasts for 2021 and 2022 by the IMF and Consensus**

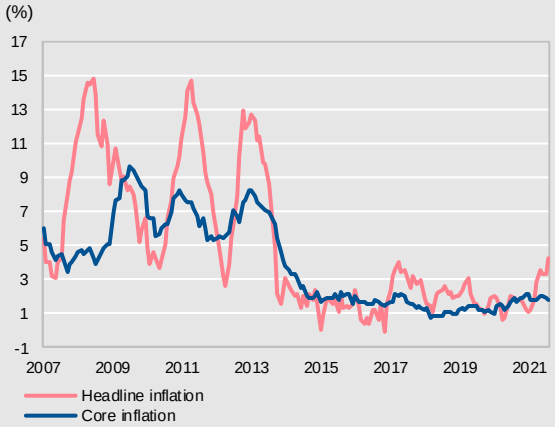
	IMF WEO				Consensus Forecast			
	2021		2022		2021		2022	
	Previous projection	New projection	Previous projection	New projection	Previous projection	New projection	Previous projection	New projection
USA	2,3	4,3	2,4	3,5	3,7	4,4	2,8	3,4
Germany	2,2	2,9	1,1	1,5	2,6	3,0	1,8	2,2
Euro area	1,4	2,2	1,2	1,7	1,9	2,3	1,4	2,0
Hungary	3,6	4,5	3,5	3,6	4,3	4,7	3,5	3,8
Romania	2,8	4,3	2,1	3,4	3,7	4,6	3,2	4,8
Bulgaria	1,0	2,1	2,0	1,9	2,2	2,5	2,3	2,7
North Macedonia	2,0	3,1	1,5	2,2	2,0	2,3	1,9	2,2
Croatia	0,7	2,0	1,2	2,0	1,7	2,1	1,7	2,1
Poland	3,2	4,4	2,5	3,3	4,0	4,6	3,4	4,4
Czech Rep.	2,3	2,7	2,0	2,3	2,7	3,5	2,3	3,7
Serbia	2,2	3,0	2,4	2,7	2,5	3,1	2,6	3,1

Source: IMF WEO (April 2021 and October 2021); Consensus Forecast (July 2021 and October 2021).

which in conditions of an average agricultural season will push vegetable prices down, and so should the drop-out of this year's price hikes in fresh meat and petroleum products from the y-o-y calculation.[1] The expected inflation slowdown in the monetary policy horizon, i.e. in H2 next year, will also be driven by the October increase in the average effective repo rate at auctions organised by the NBS. On the other hand, the latest hike in gas and electricity prices in the global market represents a potential upside risk for imported inflation, and by extension, for the inflation projection in Serbia. As the prices of household energy, which are included in the consumer price index, belong to administered prices, the change of which is decided by the Energy Agency, we do not expect a significant direct impact of the energy prices hike on headline inflation. However, it should be noted that enterprises pay the market price for electricity, which has more than doubled in recent months, while the gas price is based on the contracts with Russia, which is why its price is still low and the period ahead is likely to see it rise to a lesser degree than in the global market. In any case, higher production costs due to rising energy prices could indirectly spill over to the prices of final products, although at this point it is difficult to determine to what extent, as well as how energy prices in the global market will move in the period ahead.

To conclude, according to our new projection, **inflation will be somewhat higher at end-2021 and in H1 2022 than envisaged by the August projection, primarily due to higher vegetable prices, further growth in global prices of primary commodities and cost-push pressures, but inflation growth is still, as in other countries, mostly assessed as temporary**. Inflation should retreat within the lower part of the target tolerance band by end-2022 and remain there until the end of the projection horizon. However, due to the still high cost-push pressures from the international environment, the duration of which is difficult to estimate, given that they are affected by many factors, the NBS will continue to carefully monitor and analyse trends in the international commodity and financial markets and to assess their impact on domestic economy. **As so far, the NBS stands ready to respond adequately, in case of need, with all available monetary policy instruments, in order to maintain price and financial stability**.

Chart O.1.12 **Y-o-y growth rates of headline and core inflation**



Sources: SORS, NBS calculation.

[1] For more details on the impact of base effect on y-o-y inflation next year see the August 2021 *Inflation Report*.

Producer and import prices

In conditions of intensified cost-push pressures in the international market, **industrial producer prices in the domestic market** stepped up their y-o-y growth to 13.1% in September (from 9.4% in June). By components, the strongest contribution to the y-o-y growth in producer prices in Q3 came from the **energy production prices** (crude oil and petroleum products), and the **prices of intermediate goods** (base metals, chemicals and rubber and plastic products). The **prices of non-durable consumer goods** (primarily in food and beverage production) also edged up y-o-y in Q3, though to a smaller extent. As in industry, cost-push pressures were also pronounced in construction, as indicated by the two-digit y-o-y growth in the **prices of elements and materials incorporated in construction** (12.1% in September compared to 11.3% in June).

Import prices expressed in dinars[1] stepped up their y-o-y growth to 10.4% in September (from 7.2% in June). The y-o-y increase in the prices of goods and services imported into Serbia was supported by all components, primarily by the higher export prices of Germany, which are used for the approximation of the import prices of equipment and intermediate goods. These prices provided a contribution of 5.8 pp, as a result of further growth in the global prices of primary commodities and input shortages in global supply chains. At the same time, global oil and food prices rose further, giving a 3.9 pp cumulative contribution to the y-o-y rise in import prices in dinars, and so did euro area consumer prices (used for the approximation of the import prices of services), providing a 0.7 pp contribution.

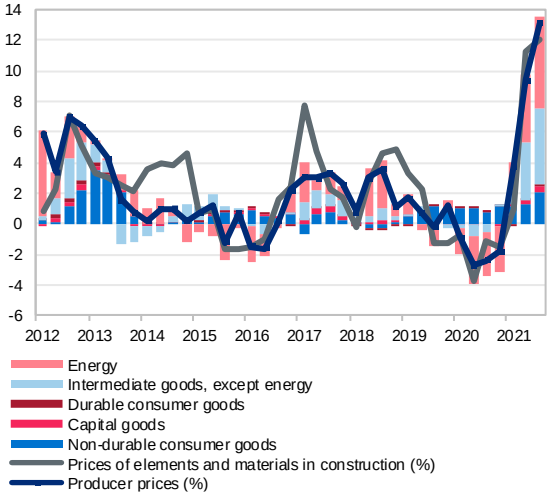
Inflation expectations

Despite higher current inflation, financial and corporate expectations in terms of inflation movements going forward remained within the target tolerance band, which is a significant indicator of the credibility of the NBS monetary policy and a pillar of price stability over the medium-term.

According to the results of the Ipsos survey, **one-year ahead inflation expectations of the financial sector** remained unchanged at end-Q3 relative to end-Q2, standing at the 3% target midpoint, while in October they increased to 4%. At the same time, according to the results of the Bloomberg survey, short-term inflation expectations of the financial sector stood at the target midpoint in September, where they stayed in October as well. The financial sector has expected inflation to be within the target tolerance band for eight years now (since October 2013).

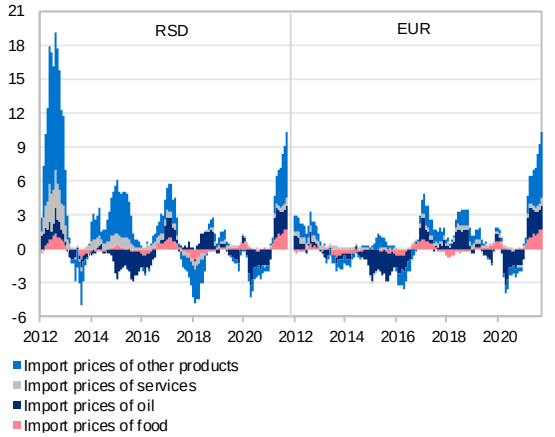
[1] Preliminary data. The weighted average of the global Brent oil price, food price index (FAO index), euro area consumer prices, and export prices of Germany, one of Serbia's most significant foreign trade partners, is used as an indicator of import prices. The base year is 2010.

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



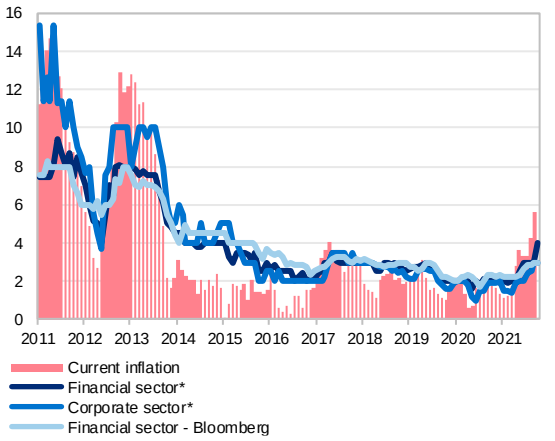
Sources: SORS and NBS calculation.
* Industrial producer prices for the domestic market

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 %)



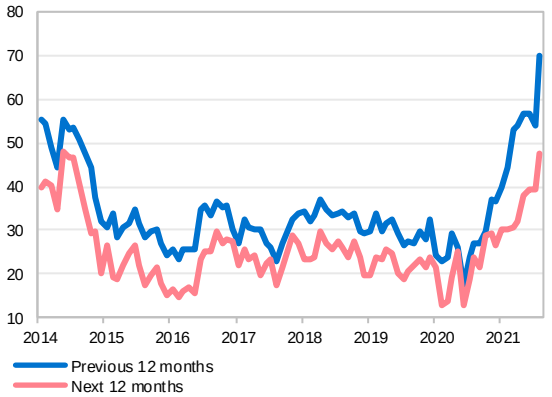
Sources: Gallup, Ipsos/Ninamedia, Bloomberg and NBS.
* Ipsos and Gallup until December 2014, Ninamedia since December 2014, and Ipsos since January 2018.

One-year ahead corporate inflation expectations recorded a mild increase, reaching in September the target midpoint, where they stayed in October as well.

Usually higher than those of other sectors, **household inflation expectations** have stood at 10% since February. Higher inflation expectations of households are most likely driven by the increase in the prices of utility services and energy. On the other hand, the results of the qualitative survey[2] show that the index of perceived inflation is higher than the index of expected inflation, indicating that one part of the population, who feel that prices increased in the past twelve months, does not expect this trend to continue in the coming twelve months.

Medium-term inflation expectations of the financial sector for two years ahead have been anchored within the NBS target tolerance band since their monitoring began in March 2014. In Q3 they moved at the target midpoint, while in October they edged up slightly (3.3%). **Three-year ahead inflation expectations have been at the target midpoint since June. Medium-term corporate expectations** were somewhat lower in both Q3 and October, moving in the range of 2.0–2.5%. **Two- and three-year ahead inflation expectations of households** stood at 10.0%..

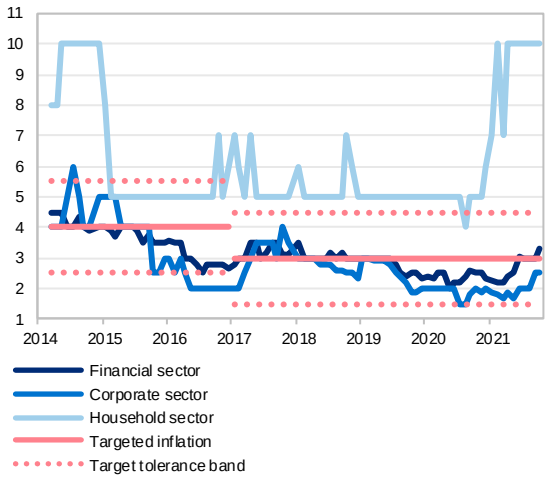
Chart III.0.7 **Household perceived and expected inflation***
(in index points)



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.

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

IV Inflation determinants

1 Financial market trends

Stable movements of interest rates in the interbank money market and interest rates on bank loans and deposits continued into Q3, while yield rates in the auctions of government dinar securities were on the decline. The secondary market of dinar government securities witnessed a rise in yields in late September.

Interest rates

The average selling repo rate for one-week securities remained almost equal to the deposit facility rate in Q3. Same as in Q2, in all auctions held in Q3, the average repo rate measured 0.11%, while the stock of securities sold (liquidity mopped up from the banking sector) increased by RSD 13 bn, to RSD 43 bn at end-September. In Q3, the NBS also held its weekly auctions of repo purchase of securities at a fixed interest rate (0.10%, i.e. deposit facility rate), with the transaction maturity of three months. The stock of liquidity provided to banks through these auctions went up from RSD 19.1 bn at end-June to RSD 49.4 bn at end-September. In mid-September, the NBS communicated it would discontinue repo purchase auctions as of October, as the first measure toward reducing monetary policy accommodation.

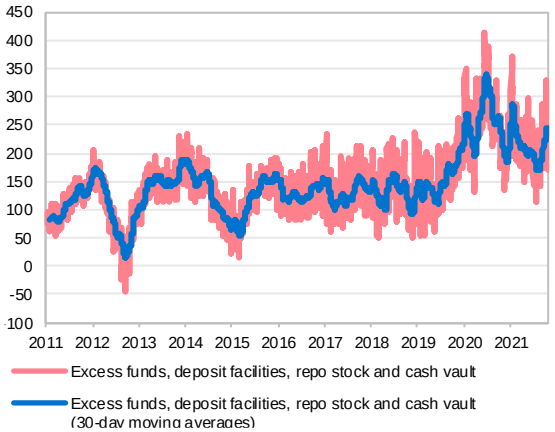
The second measure was the increased withdrawal of excess liquidity via one-week repo sale auctions, which resulted in higher weighted average repo rate. In the four auctions held in October, the average volume of liquidity withdrawn amounted to RSD 63.8 bn, which is a rise of RSD 17.2 bn since September, while the average repo rate went up by 16 bp, to 0.27% at end-October.

Trading volumes in the **interbank overnight money market** continued to increase, with the daily average of RSD 7.8 bn in Q3. BEONIA displayed minimum volatility in Q3, gaining 2 bp since June and measuring 0.14% in September. The weighted average interest rate on one-week transactions concluded in the interbank money market in the same period was also slightly adjusted upward (by 1 bp to 0.15%).

BELIBOR rates of all maturities almost flatlined relative to Q2, averaging from 0.3% for the shortest maturity to 1.07% for six-month maturity in September.

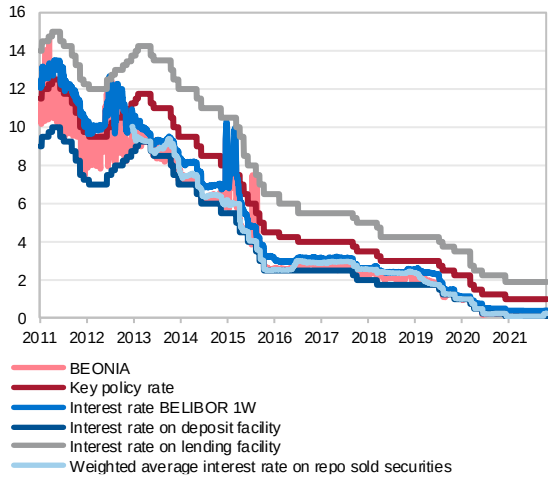
The rise in the average repo rate in October partly reflected on interest rates in the interbank money market, with average BEONIA increasing by 4 bp to

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.

0.18% in October and average BELIBOR rates of all maturities rising by up to 3 bp.

In the **primary market of dinar government securities**, sale auctions were organised for 5.5Y and 12.5Y securities. Effective rates recorded a decline, somewhat sharper for 12.5Y maturity (31 bp compared to 18 bp), so at end-September they measured 2.05% (5.5Y maturity) and 3.24% (12.5Y maturity).

Securities worth RSD 28.9 bn nominally were sold in Q3. At the same time, securities in the nominal amount of RSD 15.0 bn came due, and the government also organised two auctions for the early buyback of a portion of three-year securities maturing in January 2022. In these auctions the government prematurely redeemed RSD 14.1 bn, so the stock of sold securities declined only slightly relative to June, to RSD 1,006.6 bn at end-September.

In the primary market, non-residents did not participate in the purchase of dinar government securities, while in the secondary market they were more active on the sale side. As a result, their holdings of dinar securities decreased by RSD 26.0 bn in Q3, to RSD 201.5 bn.

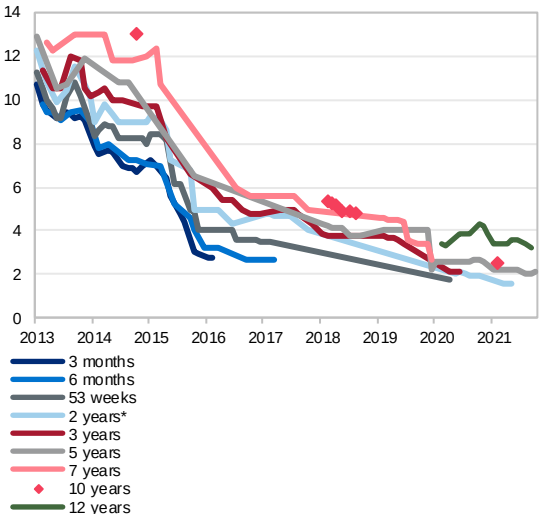
In early Q3, one auction was held for the sale of 12Y government **euro securities**, with the effective rate falling by 14 bp to 1.6%. Securities worth EUR 9.0 mn nominally were sold, and as Q3 saw the maturing of earlier sold euro securities in the amount of EUR 100 mn, the stock sold euro securities dropped by EUR 91 mn, to EUR 2,303.0 mn at end-September.

In the **secondary market**, trading in dinar government securities increased from RSD 146.0 bn in Q2 to RSD 158.8 bn in Q3, thanks to record high trading in July (RSD 94.2 bn), which may be associated with the inclusion of benchmark dinar government securities with the maturity of seven, ten and 12.5 years in J.P. Morgan indices at end-June. The yield rates for shorter maturities were adjusted slightly downward, moving in September on average from 0.8% for the remaining maturity of four months to 2.5% for the remaining maturity of 6.5 years, while the average yield rate for the remaining maturity of 11 years measured 3.5% both in September and June. At end-September, the yield rates increased along the whole yield curve of dinar government securities.

One sale auction of 5.5Y dinar government securities was held in October, with the effective rate rising by 5 bp to 2.1%. The secondary market also registered a mild rise in yield to maturity rates, with the average values in October ranging from 0.9% for the remaining maturity of four months to 3.8% for the remaining maturity of 11 years.

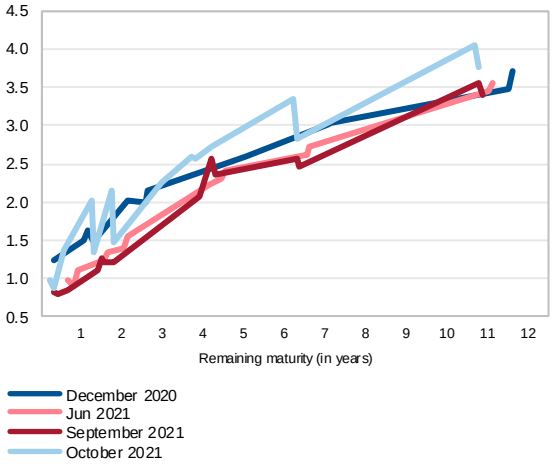
Interest rates on **new dinar loans** in Q3 were minimally adjusted – almost unchanged from June for household

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



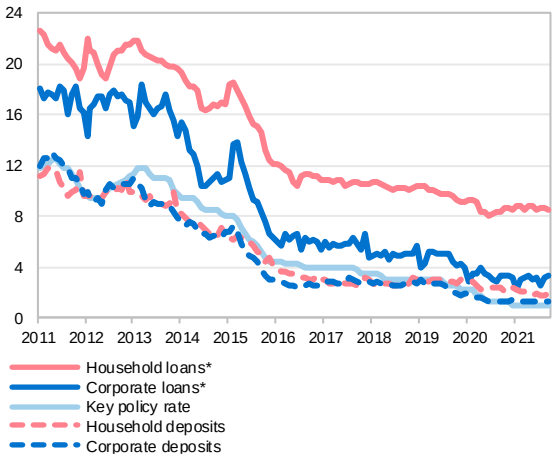
Source: Ministry of Finance.
* Excluding coupon securities with the rate linked to the NBS key policy rate.

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.

loans (8.4%) and edging up slightly (0.1 pp) for corporate loans, to 3.3% in September.

A mild rise in rates was recorded for all categories of new dinar corporate loans, while in household loans the average interest rate on dinar cash loans, as the dominant category, kept its June value in September as well (9.1%).

Interest rates on **euro-indexed** corporate loans dropped by 0.1 pp to 2.4% in September, due to the decline in interest rates on working capital loans and other non-categorised loans, while the increase in interest rates on investment loans worked in the opposite direction. As for household loans, a mild rise in interest rate on euro-indexed housing loans (by 0.1 pp to 2.6%), and interest rate on consumer and other non-categorised loans, drove the average interest rate on euro-indexed household loans up by 0.3 pp relative to June, to 3.3% in September.

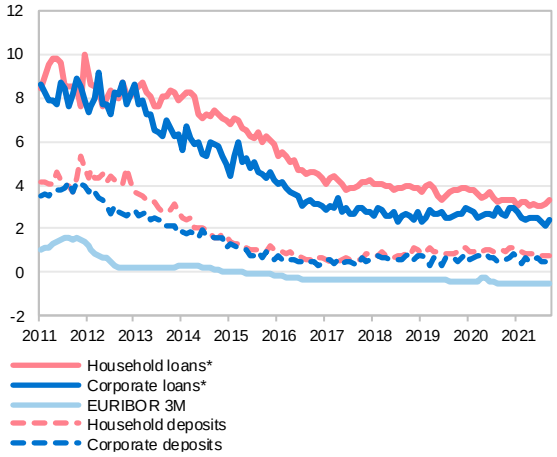
In Q3, interest rates on household **savings** were unchanged, measuring in September, same as in June, 0.8% for euro savings and 2.0% for dinar savings. In the same period, interest rates on dinar time deposits of corporates also flatlined (at 1.3%), while interest rates on euro time deposits dropped by 0.2 pp, to 0.5% in September.

Risk premium

Serbia's risk premium for euro debt, EURO EMBIG, rose by 30 bp since end-Q2 (concluding with October) coming at 174 bp. Similar movements were displayed by risk premia for euro debt of many European emerging economies, reflecting a changed investor sentiment toward emerging markets in conditions of rising long-term yields on government securities of the USA and advanced European economies. At the same time, the emerging markets risk premium for euro debt, measured by EURO EMBIG Composite, increased by 13 bp in the period observed, to 160 bp at end-October. The dollar risk premium for Serbia also increased mildly since end-Q2 (by 9 bp to 137 bp at end-October), while still remaining considerably below the composite risk measure for the dollar debt of emerging markets, EMBI Composite, which at end-October stood at 327 bp.

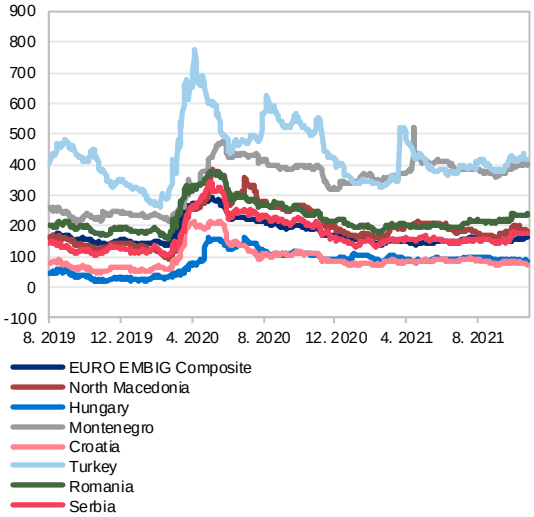
After Standard & Poor's kept Serbia's credit rating at BB+ (with a stable outlook) in June, Fitch Ratings also affirmed it in September at BB+ (with a stable outlook), one notch below the investment grade. Fitch pointed out that Serbia's rating is supported by a credible economic policy, a relatively low inflation and high level of FX reserves. Fitch further emphasized that Serbia's credit rating and a stable outlook are supported by the demonstrated resilience of the Serbian economy to the consequences of the pandemic, a limited rise in public

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



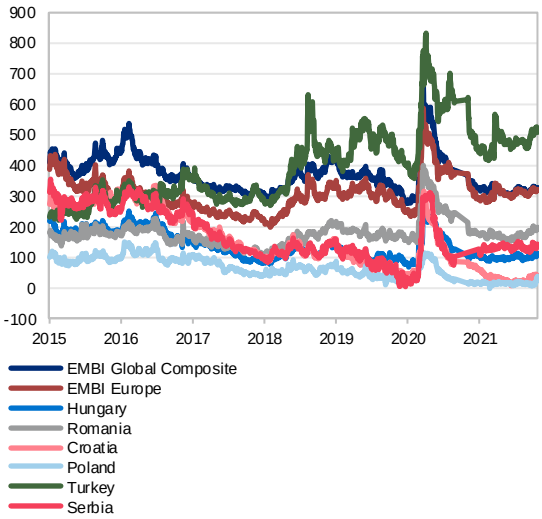
Sources: European Banking Federation and NBS.
* Excluding revolving loans, current account overdrafts and credit card debt.

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



Source: J.P. Morgan.

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



Source: J.P. Morgan.

debt and confidence in Serbia's fiscal consolidation prospects.

Foreign capital inflow

A major part of the capital inflow to the balance of payments financial account in Q3 came from two successful eurobond issues in the international market and continued FDI inflow, while resident credit borrowing also went up. Furthermore, the country's FX reserves increased on account of the IMF's SDR allocation.

According to preliminary data, **net FDI inflow** in Q3 measured EUR 1.1 bn, whereby capital inflow on this account in the first nine months of 2021 exceeded EUR 2.7 bn, ensuring multiple coverage of the current account deficit. Looking at investments in Serbia only, in the first nine months of 2021 they reached EUR 2.9 bn, which is almost equal to the total inflow generated in 2020. Over a half of these investments came in the form of equity capital. The bulk of investments came from the EU and Asian countries and were channelled to manufacturing (around 25%), followed by investments into construction, transport, mining and financial activities.

In September, Serbia issued in the international market for the first time a green bond in the amount of EUR 1 bn, with the maturity of seven years, at the historically lowest coupon rate of 1.0%. A 15-year conventional eurobond was issued at the same time, the longest eurobond maturity issued by Serbia thus far, in the amount of EUR 750 mn, at the coupon rate of 2.05%. In both auctions the demand outstripped the supply by several times, which is yet another confirmation of investors' confidence in the long-term sustainability of Serbia's good economic performance and macroeconomic stability. On the other hand, the maturing of previously issued eurobonds and non-residents acting as the net sellers of securities in the domestic secondary market is what contributed to a net capital inflow of EUR 1.1 bn on account of **portfolio investment** in Q3.

Resident net foreign liabilities arising from **financial loans** increased by EUR 228.5 mn in Q3, as a result of borrowing by the private sector (banks and companies), as well as the public sector. An inflow was also registered on account of **trade loans** (EUR 88.4 mn), and **cash and deposits** (EUR 114.9 mn) due to the reduced balances in bank accounts abroad.

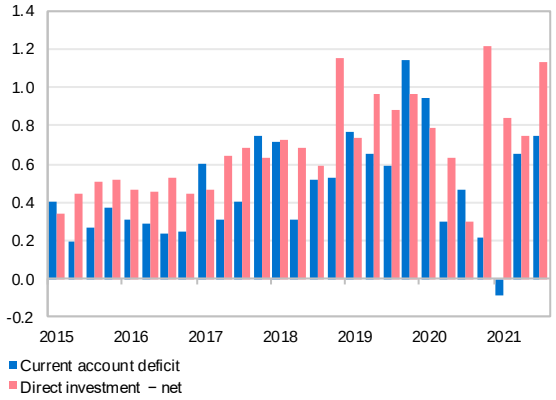
In August, the IMF realised a new general **SDR allocation** to member countries, of which SDR 627.6 mn (EUR 759.7 mn) went to Serbia. According to IMF Guidelines, the purpose of these allocations is to meet countries' long-term reserve needs, build or reinforce consumer and business confidence and support the recovery from the consequences of the pandemic.

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]

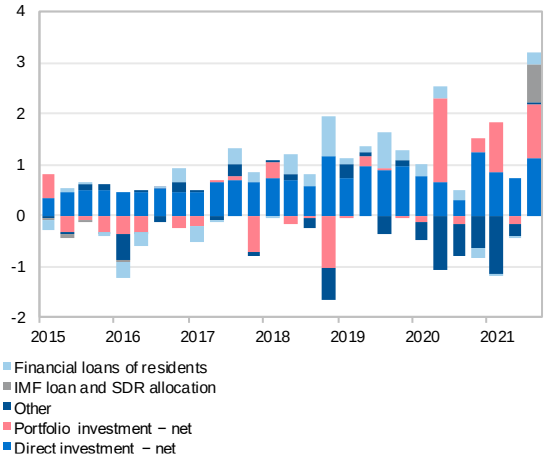
Source: NBS.
[1] March, [2] May, [3] September, [4] December.

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



Source: NBS.
Note: Preliminary data for Q3 2021.

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



Source: NBS.
Note: Preliminary data for Q3 2021.

Trends in the FX market and exchange rate

The dinar exchange rate against the euro remained stable in Q3 and its value was almost unchanged at end-September (RSD 117.6 vs EUR 1) both at the level of the quarter and since the beginning of the year. At the same time, the dinar weakened against the dollar by 2.5% in late September relative to end-June, due to the depreciation of the euro against the dollar.

Appreciation pressures prevailed in Q3 as well, and the supply of foreign currency in the IFEM by far outstripped the demand, especially in July and August. Relatively favourable foreign trade movements and high FDI inflow improved the balance between the amounts of purchase and sale of foreign currency by companies and reduced the net sale of foreign currency to companies, while the amount of net sale of foreign currency to non-residents was similar as in Q2. The rise in FX-indexed bank assets[3] and high net purchase of foreign cash, partly due to higher remittances inflow, pushed up the supply of foreign currency considerably. In addition, foreign currency inflow from payment cards continued up, exceeding in Q3 the usually high amounts from pre-pandemic summer months, driven by recovered tourism as well.

In Q3, the NBS was a net buyer of foreign currency in the IFEM, purchasing EUR 780.0 mn, the bulk of which in July. Thus, the total amount of net purchase since the beginning of the year reached EUR 1.1 bn.

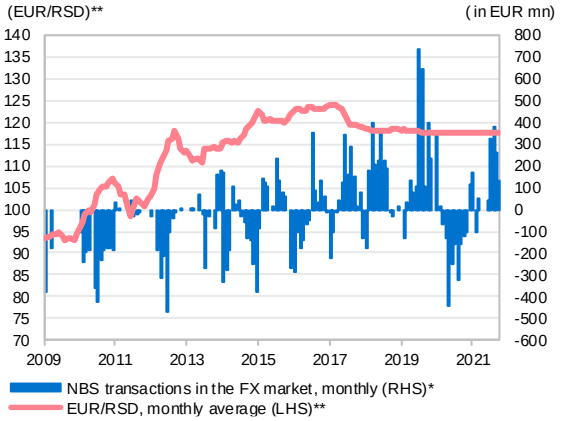
The average value of turnover in the IFEM[4] in Q3 (EUR 23.6 mn) was slightly lower than in Q2 (EUR 26.1 mn). On the other hand, turnover in regular FX swap auctions increased owing to higher volumes in two-week auctions where EUR 121.0 mn was sold to banks and the same amount was bought from them (vs. EUR 26.0 mn in Q2), while the amount of purchase and sale in three-month auctions (EUR 21.0 mn each) was the same as in Q2.

The currencies of inflation targeting countries in the region recorded divergent trends in Q3. Only the Turkish lira appreciated against the euro (0.5%), while the value of the Czech koruna stayed unchanged. On the other hand, the Hungarian forint and the Polish zloty weakened by 2.4% each, and Romanian leu by 0.4%.

2 Money and loans

A slowdown in y-o-y growth of monetary and credit aggregates under the impact of high last year's base prevailed throughout H1, but was halted in Q3 amid continued rise in economic activity and a higher increase in corporate loans compared to Q2.

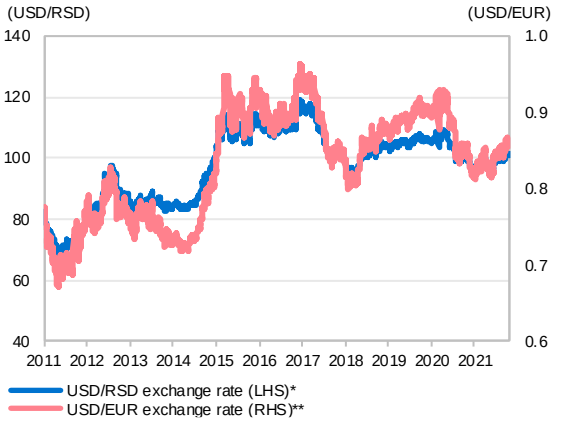
Chart IV.1.11 **Dinar exchange rate and NBS transactions in the FX market**



Source: NBS.

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

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

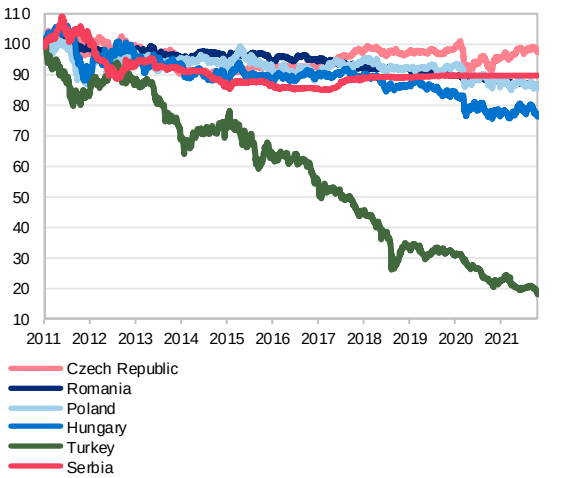


Source: NBS.

* 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] Aiming to balance their long open foreign currency position and thus reduce the exposure to FX risk, banks sell foreign currency, which results in the strengthening of the dinar.

[4] Excluding the NBS.

Monetary aggregates

The dinar monetary aggregate M2 gained 4.7% in Q3, driven primarily by the rise in the most liquid components. In the same period, monetary aggregate M3, which also incorporates FX funds, added 3.6%, 1.5 pp coming from the FX component.

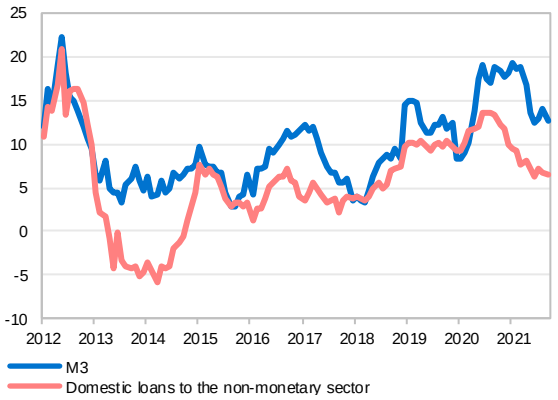
In terms of individual category, dinar **sight deposits** increased by RSD 67.4 bn in Q3, mostly owing to the rise in corporate and household deposits. Corporate transaction deposits rose by RSD 23.4 bn, with the greatest increase[5] recorded in the accounts of construction and transport companies. Households increased their transaction account balances by RSD 20.0 bn, while other sectors recorded relatively minor changes compared to end-Q2.

Dinar time and savings deposits increased by RSD 6.6 bn in Q3, with corporate deposits accounting for almost 70% of the increase. Dinar household (resident) savings extended their stable growth in place for almost four years, adding RSD 2.6 bn in Q3 and RSD 8.4 bn since the start of the year. At end-September they reached RSD 100.9 bn, the highest level on record. Stable and continuous growth of dinar savings is an indicator of citizens' confidence in the domestic currency, which facilitates the maintenance of financial and price stability. Dinar savings are more attractive than FX savings also owing to higher interest rates and a more favourable tax treatment.

FX deposits increased by EUR 433.4 mn in Q3, providing almost equal contributions to household and corporate deposits growth. In Q3, FX savings of households increased by EUR 201.7 mn, to EUR 11.9 bn at end-September,[6] their new maximum. Balances in corporate FX accounts gained EUR 201.2 mn in Q3, thanks to FX inflows from exports, FDI and corporate borrowing abroad. Relatively smaller increases were also recorded in accounts of other sectors.

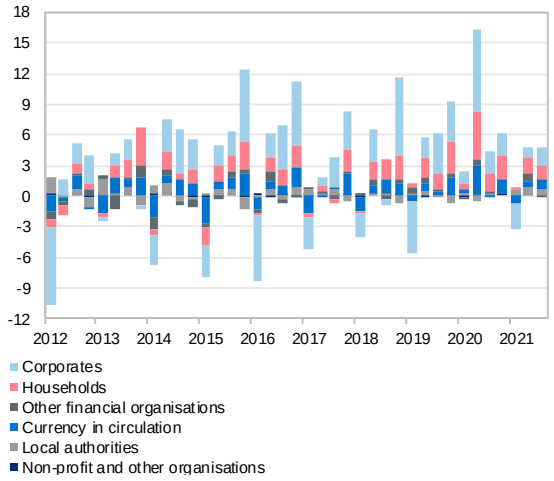
In y-o-y terms, the deceleration of monetary aggregates growth, in place since the beginning of 2021, was halted in Q3. In September, relative to end-Q2, M1, M2 and M3 slightly accelerated their growth, to 17.5%, 13.6% and 12.7%, respectively.[7] In the coming period we can expect that the high base from the previous year will continue to work towards slowing down money supply growth, while positive contributions boosting monetary aggregates will come from a rebound in economic activity, the third package of economic measures and further growth in lending, additionally supported by the approval of Guarantee Scheme loans.

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



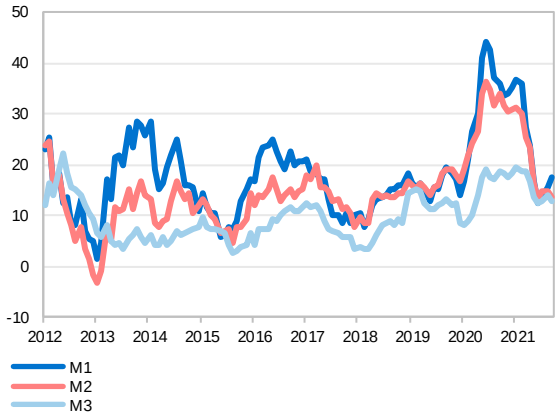
Source: NBS.

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.

[5] On the other hand, transaction deposits of companies in electricity supply and manufacturing subsided in Q3, while companies in other sectors saw minor changes relative to Q2.

[6] Money supply M3 includes only resident funds. With non-resident funds included, dinar savings at end-September reached RSD 101.5 bn and FX savings EUR 12.3 bn.

[7] At end-Q2, M1, M2 and M3 went up by 12.4%, 13.1% and 12.4%, respectively.

Loans

The volume of lending expanded in Q3, primarily in the corporate segment, resulting in the accelerated y-o-y growth rate of total loans to the non-monetary sector, from 6.3% in June to 6.6% in September. Y-o-y growth still lower than at end-2020 reflects the high base from the previous year, when the moratorium on repayment of corporate and household loans was in place. As this effect dissipated since October, y-o-y lending growth rates should gain additional momentum.

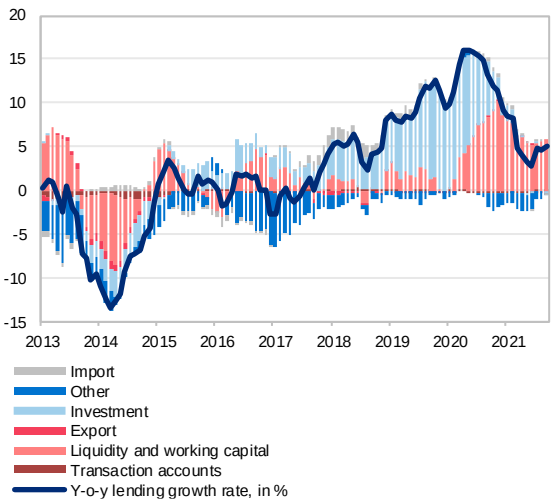
At the level of Q3, **corporate loans**, excluding the exchange rate effect, rose by RSD 49.1 bn, mostly driven by the rise in liquidity and working capital loans, supported by the Guarantee Schemes (1st and 2nd), as well as investment loans. Liquidity and working capital loans were the largest category of corporate loans, accounting for 45.9% in September, followed by investment loans, with the share of 41.6%. Continued favourable terms of financing within the Guarantee Scheme and past monetary policy easing of the NBS, thanks to which interest rates on new dinar corporate loans came closer to rates on euro-indexed loans, contributed to the faster growth of dinar lending to corporates and a rise in dinarisation. The share of dinar in total corporate loans increased during Q3 by 0.2 pp to 23.8% in September. Sector-wise, companies in manufacturing, transport and agriculture recorded the greatest increase in borrowing in Q3. Loans approved to micro, small and medium-sized enterprises accounted for 67.3% of total corporate loans in September.

The volume of new corporate loans in Q3 reached RSD 283.8 bn, rising by 14.3% from the same period last year. In Q3, corporates mostly used liquidity and working capital loans (58.2%), and over a half of these loans were channelled to micro, small and medium-sized enterprises. Investment loans made up 24.3% of new corporate loans in Q3, rising by 12.8% y-o-y, and almost four-fifths of these loans were absorbed by micro, small and medium-sized enterprises.

Household loans, excluding the exchange rate effect, gained RSD 37.8 bn in Q3. Most of this increase concerned housing loans (RSD 20.4 bn), and their y-o-y growth accelerated from 15.7% at end-June to 16.4% at end-September. In Q3, cash loans gained RSD 18.0 bn and liquidity and working capital loans approved to entrepreneurs RSD 1.8 bn. As housing loans rose faster than cash loans, the share of dinar lending to households decreased by 0.2 pp in Q3, to 55.0% in September. In the structure of household loans in September, the dominant categories were cash (44.3%) and housing loans (38.3%).

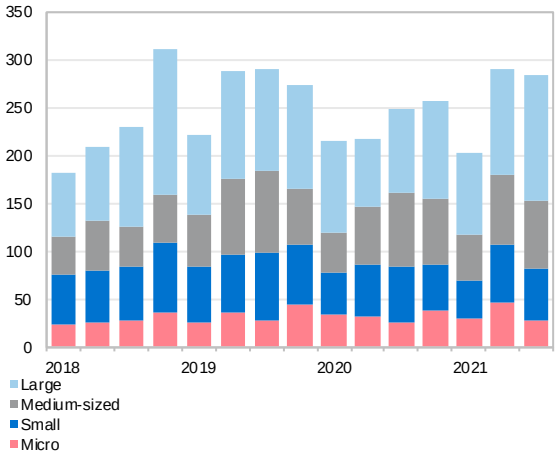
New household loans in Q3 amounted to RSD 135.2 bn, up by 12.6% from the same period last year. Cash loans made up 59.2% of new loans in Q3 and housing loans 24.3%, while the volume of new housing loans in

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



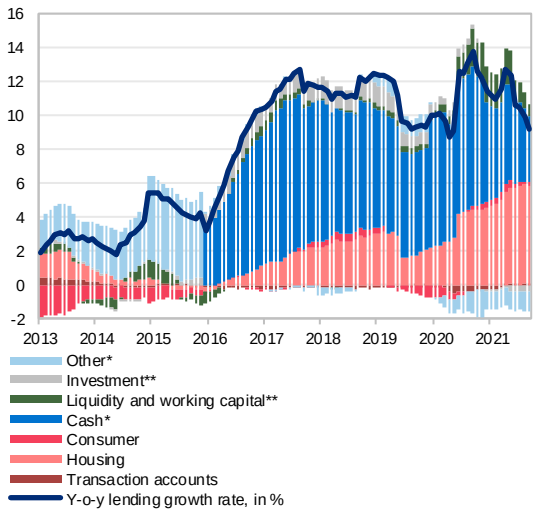
Source: NBS.

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



Source: NBS.

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.

Q3 (RSD 32.9 bn) rose by over one fourth y-o-y. Household demand for housing loans was supported by the rise in disposable income, preserved labour market, favourable terms of borrowing and increased supply of apartments, evidenced by the continuous growth in the number of apartments completed since 2016.

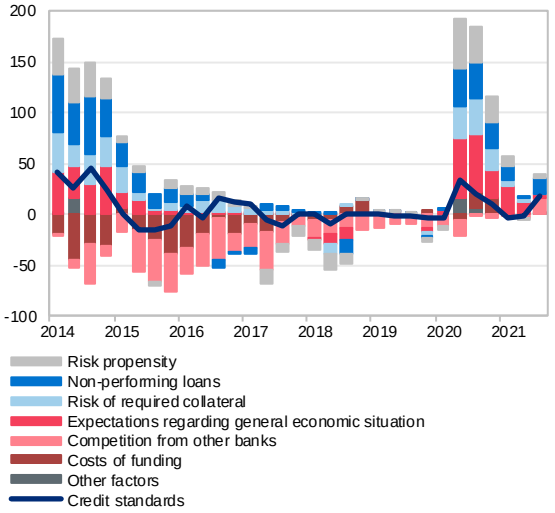
The results of the **NBS bank lending survey in October**[8] show that in Q3, overall, banks tightened their corporate loan standards in the segment of FX-indexed loans. At the same time, standards applied to dinar corporate loans were loosened for the third quarter in a row. Banks expect similar trends to extend into Q4. Household credit standards were eased in Q3, mainly in the dominant loan categories – FX-indexed housing loans and dinar cash loans (as well as refinancing loans). Banks reported the same expectations for Q4. They assess that corporate and household loan demand increased in Q3 and its further rise is expected in the coming quarter. Capital investment financing (apart from liquidity needs) increasingly gains in importance as a factor driving corporate loan demand, while real estate purchases are the leading driver of household demand.

Gross **NPL ratio** remains below its pre-crisis level, measuring 3.55% in September. This shows that the NBS and Government measures were timely in averting stronger negative effects on corporates and households and, by extension, on financial stability. Compared to Q2, the ratio was somewhat lower, thanks to the decrease of the NPL ratio in the household segment[9] (by 0.1 pp to 3.9% in September), while in the corporate segment[10] the ratio remained unchanged at 2.9%. NPL coverage still remained high – allowances for impairment of total loans stood at 94.4% of NPLs in September, while allowances for impairment of NPLs equalled 59.3% of NPLs.

Capital adequacy ratio[11] at end-Q3 2021 measured 21.7%, which indicates high capitalisation (regulatory minimum equals 8.0%) and resilience of the banking sector to external and domestic risks.

Chart IV.2.7 **Change in corporate credit standards and contributing factors**

(in net %)

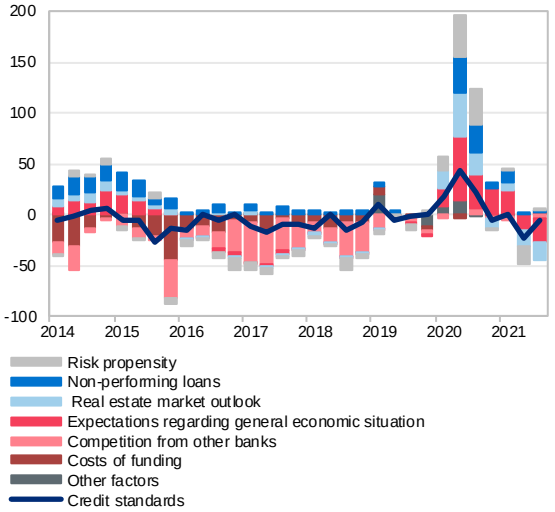


Source: NBS.

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**

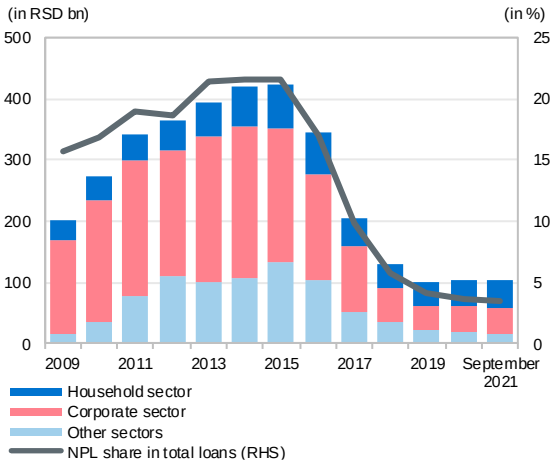
(in net %)



Source: NBS.

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

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



Source: NBS.

[8] The NBS implements the survey since the start of 2014.

[9] With entrepreneurs and private households included, the share remains at 3.9%.

[10] Includes companies and public enterprises. Looking at companies only, NPL ratio in September equalled 3.0%.

[11] The regulatory Basel III framework is applied as of 30 June 2017.

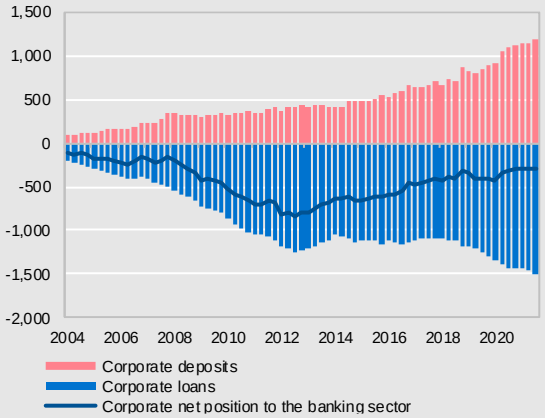
Text box 2: Net position of corporates and households to banks in Serbia and their net external position in the pandemic and comparison with the previous crisis

The Covid-19 pandemic has triggered an unprecedented global crisis, with almost all countries across the world going into lockdowns at some point, which hit the real sector first. To mitigate the negative effects of the pandemic, monetary and fiscal authorities responded with robust incentives, driving up both public and private debt. As advanced economies are recovering from the pandemic's fallout faster than earlier expected, but with rising inflationary pressures, the reduction of monetary accommodation of leading central banks is increasingly certain. This will be a new challenge for emerging markets, while those with piled-up imbalances, which widened further during the pandemic, will probably be hit more severely. In light of this, we tried to analyse the extent to which the pandemic-induced crisis has affected the net position of corporates and households in Serbia to the domestic banking sector and their net external position, i.e. the extent to which these sectors are sensitive to a potential reduction of monetary accommodation of leading central banks.

Since end-2018, the Serbian private sector has held the position of a **net creditor to the banking sector**, on account of the improvement of the net position of both the corporate and household sectors. The corporate sector is in the net debtor position and households are in the net creditor position. Given the uncertainty over the crisis' duration and the expected start of gradual tightening of monetary conditions by leading central banks in the coming period, the maintenance of sustainability of private sector debt is even more important. Almost as a rule, in all countries, Serbia being no exception, the corporate sector is in a net debtor position towards the financial system, i.e. it owes more than it claims. Owing to the ensured and preserved macroeconomic stability in the past years, the **net position of the corporate sector is improving**, and this trend continued even in the crisis. On the one hand, this reflects sound growth in lending and a loan structure that is supportive of sustainable economic growth. Under the impact of the investment cycle, the growth in corporate loans just before the pandemic was led by investment loans. These loans continued to give a significant contribution after the crisis broke out, with liquidity and working capital loans taking the leading role, also supported by favourable financing conditions within the Guarantee Schemes. On the other hand, the rise in corporate profitability in the past years and the support measures of the Government and the NBS to tackle the pandemic contributed to faster growth in corporate deposits with banks. Compared to the period just before the crisis broke out (March 2020), corporate deposits rose almost twice more than claims of domestic banks on the corporate sector – RSD 289 bn vs. RSD 157 bn. In the past several years, the currency structure of the net position of corporates also improved, mostly the dinar component, with the corporate sector, since mid-2015, being a net creditor to the banking sector in the dinar segment. Given the preserved relative stability of the exchange rate and the fact that many companies are as exporters naturally hedged against the FX risk, the FX position of the corporate sector can be assessed as stable. Within the FX component, the euro accounts for over 90%, which fully matches the currency structure of exports.

Traditionally, the **household sector is a net creditor to the banking sector**. Its net position is characterised by a relatively stable trend, which was maintained even during the pandemic. Unlike the 2008–2009 crisis, when household savings declined dramatically (within a few months only, from September to December 2008, almost EUR 1 bn worth of savings was withdrawn from banks), this time private sector deposits were preserved and continued up at an almost unchanged pace. This is particularly important given that deposits are the main source of financing of domestic lending activity. It should also be emphasised that over the past several years, dinar household savings have been rising sharply, which is another indicator of confidence in the domestic currency, underpinned by preserved price and financial stability and relative stability of the

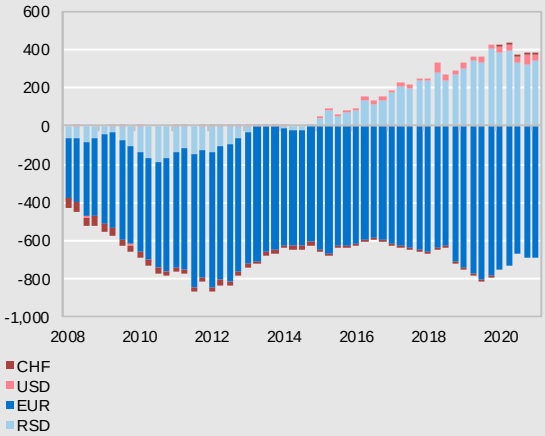
Chart O.2.1 **Corporate net position to the banking sector**
(in RSD bn)



Source: NBS.

Note: Net amount <0, debtor to the banking sector; net amount >0, creditor to the banking sector.

Chart O.2.2 **Currency structure of the corporate net position to the banking sector**
(in RSD bn, excluding the exchange rate effect)



Source: NBS.

Note: Net amount <0, debtor to the banking sector; net amount >0, creditor to the banking sector.

exchange rate. At the same time, the increase in household borrowing with banks, although on an upward trend, has a favourable structure. Housing loans are gaining an increasingly important role – in 2021 they recorded the highest rise among household loans, reflecting the reduction in interest rates, an increase in disposable income, favourable labour market trends, and NBS measures aimed at facilitating access to housing loans. Since mid-2021, housing loans have been providing the strongest impetus to y-o-y growth in household loans, unlike the previous years, when this growth was led by cash loans, used mainly to finance current consumption.

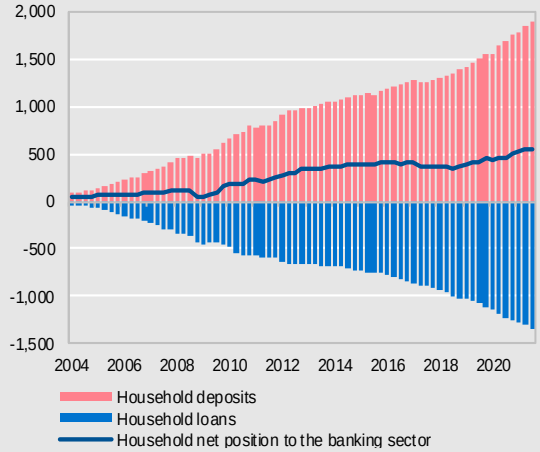
For a longer period already, lending activity has been supported by favourable conditions of private sector borrowing in the domestic market. **Interest rates remained favourable both in 2020 and 2021 and continued moving around the lowest values since current statistics have been applied, with interest rates on dinar loans converging closer to rates on euro-indexed loans, primarily in the corporate sector**. Despite the expected gradual reduction of monetary accommodation of leading central banks, we do not expect the Serbian private sector to be severely hit, owing primarily to the fact that lending activity has been rising in parallel with economic activity (the share of corporate and household loans in GDP currently equals around 48%) and the fact that we do not expect an increase in euro area interest rates for some time yet. In addition, positive trends in the credit market, even in the crisis environment, were aided by the reduction in the share of NPLs in total claims. Unlike the 2008–2009 crisis, when the unfavourable NPL ratio deteriorated further (for instance, one year after the outbreak of the global economic crisis of 2008, the NPL ratio rose by 4.5 pp to 15.7% in late-2009), in 2020 and 2021 the NPL ratio continued down – it was lower in September 2021 (3.55%) than in the months preceding the outbreak of the pandemic (4.1%).

According to the latest available data, in June 2021 companies' external credit obligations stood at EUR 12.5 bn (25.4% of GDP), up by EUR 1.5 bn from end-2019. The upward trend in corporate cross-border financing has been in place since 2016 and can be associated with rising FDI in Serbia and the lower cost of borrowing. Investment loans are dominant, mainly as intercompany loans (around 60%). In light of a potential reduction of monetary accommodation of leading central banks in the medium run, it should be stressed that loans approved at a fixed interest rate, which do not depend on changes in interest rates in the international market, account for more than a half (54%).

To conclude, the pandemic-induced crisis has not significantly affected the positions of corporates and households to domestic banks and their external position, which are much more favourable now compared to the 2008–2009 crisis, which also indicates higher resilience of these sectors to potential shocks from the domestic and international environment. Important factors contributing to reduced vulnerability include:

1. A continuous rise in household savings and corporate deposits in an environment of accelerated economic growth, which is an indicator of confidence in the banking system;

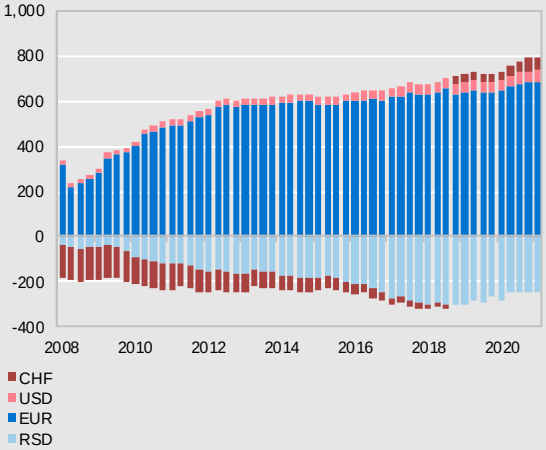
Chart O.2.3 **Household net position to the banking sector**
(in RSD bn)



Source: NBS.

Note: Net amount <0, debtor to the banking sector; net amount >0, creditor to the banking sector.

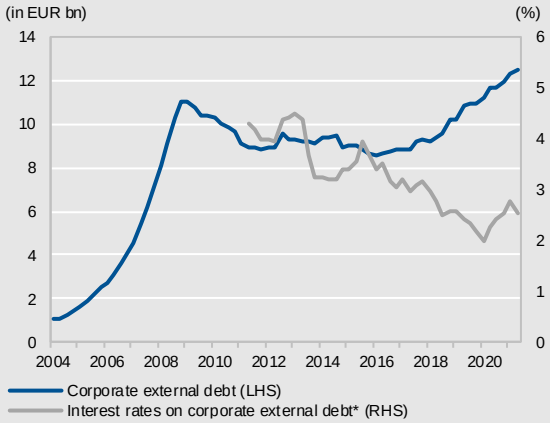
Chart O.2.4 **Currency structure of the household net position to the banking sector**
(in RSD bn, excluding the exchange rate effect)



Source: NBS.

Note: Net amount <0, debtor to the banking sector; net amount >0, creditor to the banking sector.

Chart O.2.5 **Corporate external debt**



Source: NBS.

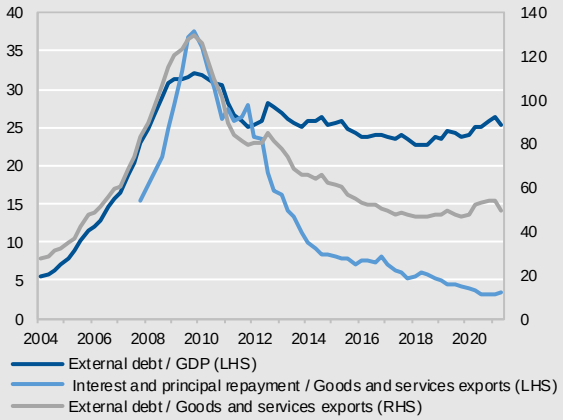
* Moving averages.

2. Sound lending growth, with a favourable structure, which enables a further rise in economic activity;

3. A rise in the degree of dinarisation, which also reduces the currency risk and its potential spillover to the credit risk;

4. The successfully implemented NPL Resolution Strategy, which helped Serbian banks to face the current crisis with their balance sheets cleansed from NPLs and with an improved practice of prevention of the occurrence and build-up of new and resolution of current NPLs.

Chart O.2.6 **Indicators of liquidity and solvency of corporate external debt**
(share, in %)



Source: NBS.

3 Aggregate demand

Owing to the measures implemented to ease the effects of the coronavirus crisis and preserve employment, as well as to the accelerated vaccine rollout, rising domestic demand remained the generator of economic growth in Q3, which reached 7.4% y-o-y according to the SORS estimate. Private investment recorded a robust rise in the maintained investment environment, which along with stepped up implementation of government investments also contributed to economic growth.

Domestic demand

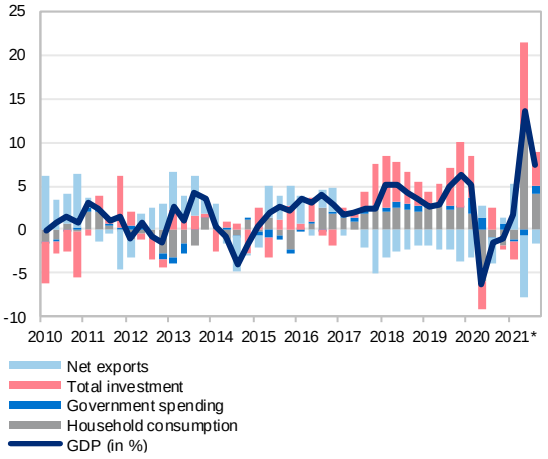
The strongest contribution to economic growth in Q3 came from private consumption (4.2 pp), which, in our estimate, increased by 6% y-o-y. This increase can be linked to the rebound of the service sectors that bore the brunt of the pandemic effects last year. Thus the number of domestic tourist arrivals and overnight stays during the summer season topped the last year's record highs by 5.2% and 3.6%, respectively. Also, catering turnover soared to its historical high in July, recording y-o-y growth of 136.4%, partly owed also to the base effect. Real growth in retail trade turnover remained stable in the course of Q3, amounting to 7.7% y-o-y.

All sources of consumption continued displaying positive trends. Thus, the wage bill, as the primary source of consumption, went up by 12.5% y-o-y during Q3 (July–August), on the heels of measures taken to contain the crisis which helped maintain employment levels and wage growth in the prior period. Besides, favourable lending conditions served as a fillip to loans intended for consumption, which increased by 6.9% y-o-y in Q3. At the same time, greater cross-border mobility of the workforce resulted in 4.9% y-o-y growth in remittances.

According to our estimate, government consumption picked up in Q3 by 5.0% y-o-y, adding 0.8 pp to GDP growth. The rise in government consumption was driven mainly by the higher healthcare spending.

The investment environment maintained thanks to macroeconomic stability and subsiding risk aversion in the wake of the launched mass vaccination process, as well as stepped-up execution of government capital expenditure supported the increase in fixed investment, which, in our estimate, reached 18% y-o-y and contributed 4.1 pp to GDP growth. Private investment growth was double-digit in Q3 (12.6% y-o-y), while government investment, according to preliminary estimates, recorded an even stronger rise (40% y-o-y) reflecting accelerated implementation of infrastructure projects. The pick-up in investment activity is suggested by a number of indicators, notably those in the construction industry, where the number of issued construction permits climbed by 26.6% y-o-y in July–August, while a decrease in construction material

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



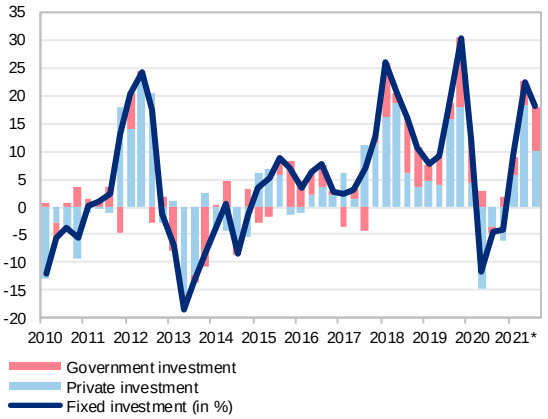
Sources: SORS and NBS calculation.
* NBS estimate for Q3 2021.

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

	2020	2021		
	Q4	Q1	Q2	Q3
Household consumption	**-2.6**	**-1.8**	**17.4**	**6.0***
Indicators				
Retail trade	2.9	6.0	17.9	7.7
Catering turnover	-32.3	2.8	135.2	136.4***
Number of domestic tourists	-36.0	-2.2	111.1	5.2
Number of overnight stays of domestic tourists	-28.9	-8.1	88.4	3.6
Consumer goods imports (BEC classification), nominal	14.1	4.3	23.1	3.5
Sources				
Total wage bill, nominal	14.2	11.2	13.9	12.5**
Net remittances inflow, nominal	2.4	13.1	34.4	4.9
Stock of loans intended for consumption, nominal	14.2	11.8	11.1	6.9

Sources: SORS and NBS calculation.
* NBS estimate.
** July-August. ***July

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



Sources: SORS and NBS calculation.
* NBS estimate for Q3 2021.

inventories, at a broadly unchanged level of production, was accompanied by a rise in the imports of construction equipment. The production of machinery and equipment also went up in Q3 (12.6% y-o-y), and so did the imports of equipment (12.3% y-o-y). That the investment environment is favourable is also indicated by the robust FDI inflow in Q3 (EUR 1.1 bn), which was almost four times higher than in the same period a year earlier. Besides, during Q3 a part of investments was financed by bank loans, the dynamics of their approval sustained at the high level from Q3 2020 (RSD 77 bn).

Change in inventories in Q3 is estimated to have had a neutral impact on economic activity. We expect that a somewhat weaker agricultural season will lead to a decrease in the inventories of autumn agricultural crops in the period ahead. At the same time, disruptions to global supply chains have depleted the inventories of final manufactured goods, but this was offset by the rise in inventories of metal ores amid their increased exploitation during Q3.

Net external demand

Relative to Q3 2020, when external trade began to recover with the gradual opening of economies, in Q3 2021 the exports and imports of goods and services were, in our estimate, higher in real terms by 23.0% and 21.0%, respectively. Given that imports have a larger share in external trade, the contribution of net exports to GDP growth in Q3 was negative and measured 1.6 pp.

Though the rebound in external demand continued, disruptions to global supply chains strained the growth in commodity exports. Led by manufacturing, with a positive contribution from mining and agriculture, commodity exports[12] increased in Q3, according to the balance of payments data, by 28.6% y-o-y, reflecting also the low base effect. With the growth recorded in 16 out of 23 branches, manufacturing exports climbed in Q3 by 22.3% y-o-y. The strongest impetus to such growth came from base metals, chemical and food products, petroleum products, electrical equipment, and rubber and plastic products.

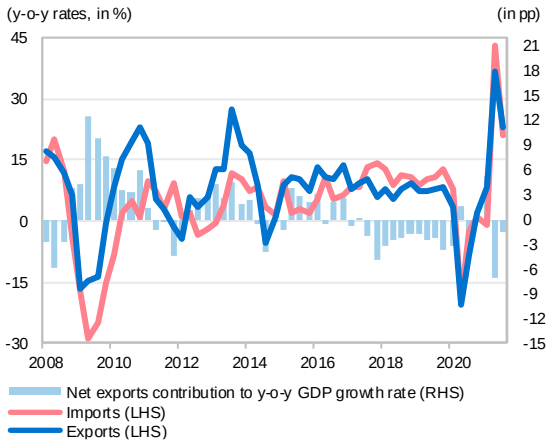
Commodity imports, in euro terms, increased in Q3 by 26.9% y-o-y, reflecting the low base effect, as well as the higher prices and quantities of imported energy. Imports classification by broad economic categories (BEC) reveals that the growth is mostly owed to the higher imports of intermediate goods (35.7% y-o-y), followed by imports of equipment (11.9% y-o-y) and consumer goods (4.5% y-o-y). Similar movements are indicated by the classification of imports by the EU methodology, showing that import growth stemmed mainly from intermediate goods and energy, followed

Table IV.3.2 **Investment indicators**

	2020	2021		
	Q4	Q1	Q2	Q3
Real y-o-y growth rates (in %)				
Fixed investment (national accounts)	-4.1	9.0	22.5	18.0*
Construction (national accounts)	-9.1	17.8	17.7	28.0*
Government investment	6.1	16.4	16.7	40.0
Number of construction permits issued	17.9	14.1	54.7	26.6**
Production of construction material	8.7	10.9	28.7	0.4
Value of works performed	-7.1	17.0	14.8	15.2
Imports of equipment, nominal	-14.3	-10.2	52.4	11.6
Production of domestic machinery and equipment	-8.5	6.3	26.4	12.6
Finished product inventories in industry	1.9	10.4	2.4	2.4

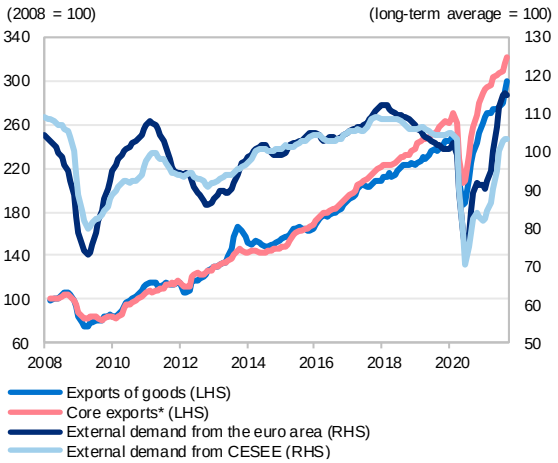
Sources: SORS and NBS calculation.
* NBS estimate.
**July-August.

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.

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.

[12] In euro terms.

by capital goods, while consumer goods provided the smallest contribution.

The rebound in foreign trade in services continued and Serbia's services exports and imports exceeded their pre-pandemic levels in Q3. In y-o-y terms, the increase in exports was supported by all categories of services, and particularly by tourist and ICT services, while the key drivers of import growth were tourist and transport services. Even though the y-o-y growth in imports was stronger than in exports (53.2% vs. 45.9%), due to the larger share of exports in foreign trade in services, the surplus (EUR 252.9 mn) was by 7.8% higher than a year ago.

Commodity export/import coverage ratio[13] was somewhat higher than at end-Q2, measuring 78.3% in September, or 87.3% with services included.

4 Economic activity

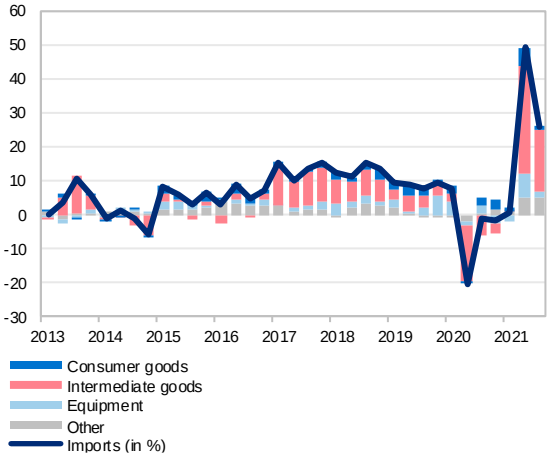
As a result of the measures taken to mitigate the effects of the crisis that have helped preserve investment and consumer confidence and ensure further employment gains, economic activity grew by 7.4% y-o-y in Q3, as estimated by the SORS, and thus outperformed our August expectations. The strongest positive contribution came from services, construction and mining, while manufacturing growth slowed down amid disrupted global supply chains and surging prices of primary commodities. On the other hand, after two consecutive record agricultural seasons, unfavourable weather conditions during the summer led to a fall in agricultural activity. The same factors shaped the quarterly GDP outcome, which, in our estimate, reached 0.5% s-a. Due to difficulties in the procurement of manufacturing inputs, the level of industrial activity remained unchanged in Q3.

According to our estimate, all sectors save agriculture provided a positive contribution to economic growth in Q3. The strongest growth in Q3 was recorded in **construction** (28% y-o-y), which can be associated with continued intensive implementation of government-financed capital projects, as well as with the rise in private sector investment, notably in residential building. This is confirmed by the further increase in the number of issued construction permits, which measured 26.6% y-o-y in the period July–August. The consumption of construction material also increased considerably during Q3, as seen in its imports (25.3% y-o-y) and inventory depletion (25.4% y-o-y), and to a lesser extent, domestic production (up by 0.4% y-o-y). The upswing in construction industry is suggested also by the y-o-y employment gains of 4.8%.

Due to disrupted global supply chains and bottlenecks in production processes, **manufacturing** recorded slower growth in Q3 than expected. However, as this was compensated for by the upturn in mining, overall

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

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



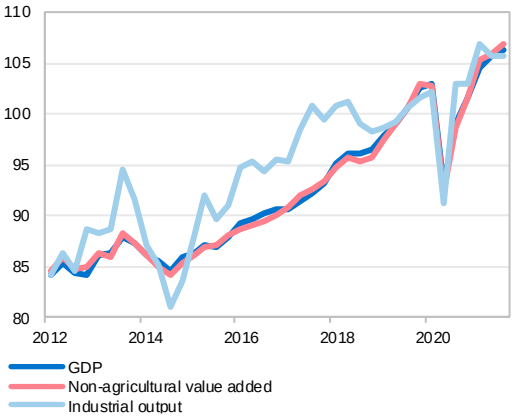
Sources: SORS and NBS calculation.

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

	2020		2021		
	Q3	Q4	Q1	Q2	Q3*
GDP (in %, y-o-y)	**-1.4**	**-1.0**	**1.8**	**13.7**	**7.4**
Agriculture	0.3	0.3	-0.1	-0.1	-0.4
Industry	0.6	0.3	0.9	2.7	0.6
Construction	-1.0	-0.6	0.7	0.9	1.5
Services	-1.0	-0.7	0.6	7.7	4.5
Net taxes	-0.2	-0.3	-0.2	2.8	1.3

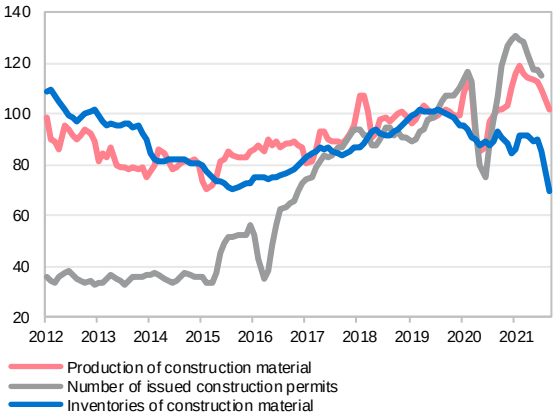
Sources: SORS and NBS calculation.
* NBS estimate.

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



Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

industrial production increased in Q3 by 2.7% y-o-y. This is confirmed also by the rise in the volume of industrial production, led chiefly by the stepped-up growth in mining (42.2% y-o-y, contributing 2.8 pp to the volume of industrial production). At the same time, the 0.4% y-o-y increase in the volume of manufacturing added 0.3 pp to overall industrial production, while the fall in electricity supply dragged it down by 0.6 pp.

In addition to disrupted global supply chains, a modest increase in the volume of manufacturing can be put down to the surging primary commodity prices, which scarred the most those activities that are heavily reliant on the import of raw materials. Thus Q3 saw a contraction in the volume of production of motor vehicles, rubber and plastic products, clothes, textile, computers and furniture, damping the volume of industrial production cumulatively by 1.8 pp. On the other hand, an increase in the volume of production was registered in nine out of 23 branches, the increase being particularly pronounced for other transport means, base metals, and machinery and equipment.

Further progress in the vaccination process was made in Q3, leading to the relaxation of containment measures that have taken the greatest toll on catering, entertainment and recreation. This created the room for further growth of **service sectors**, which, in our estimate, amounted to 9.0% y-o-y and boosted GDP growth by 4.5 pp in Q3. Continued rise in activity in the service sectors is signalled also by the positive trends of tourism and trade indicators, owed largely to the measures taken by the NBS and the Government in order to maintain consumer confidence. Thus in Q3, tourism turnover, measured by the number of overnight stays, increased by 33.2% and retail trade turnover by 7.7% y-o-y.

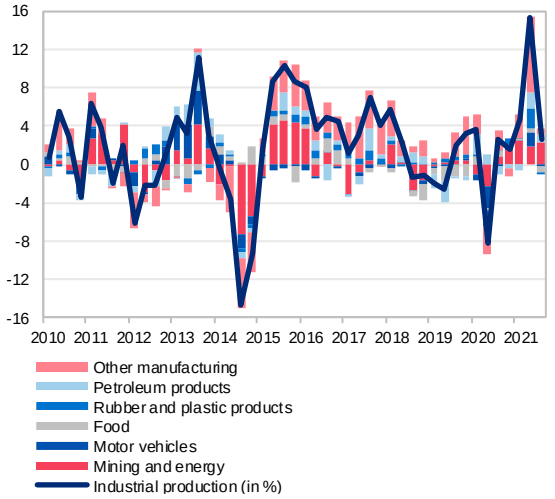
Given the record agricultural season last year and the dampening effect of unfavourable weather conditions on **agricultural activity** in Q3, agricultural production is estimated to have contracted by around 5% y-o-y. This is indicated primarily by the SORS preliminary estimates of autumn crop yields, according to which the production of corn, soybean and sunflower slumped (20.7%, 27.0% and 6.1%, respectively), while, judging by the first results, this year's wheat yields increased by 23%.

Despite deteriorating epidemiological situation, quarterly GDP growth of 0.5% s-a, in our estimate, did come about, outperforming our August expectations. Growth was led by the pick-up in services, and to a lesser degree, by construction as well.

5 Labour market developments

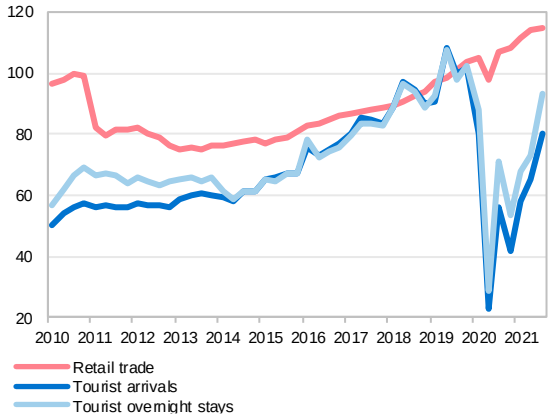
Q3 saw the continuation of wage and formal employment growth, as well as a cut in unemployment to below 500 thousand persons in September, an indication that the labour market has been preserved amid the pandemic.

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



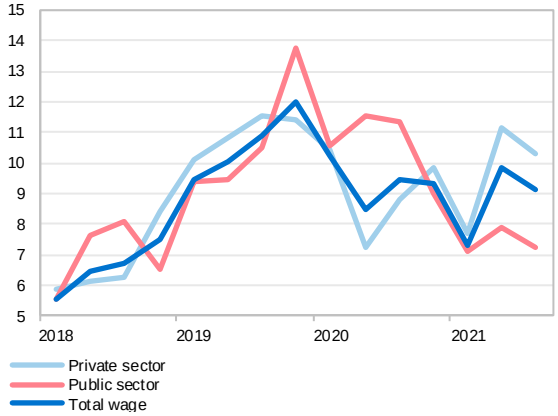
Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

Chart IV.5.1 **Movement of average nominal net wage**
(y-o-y growth rates, period average)

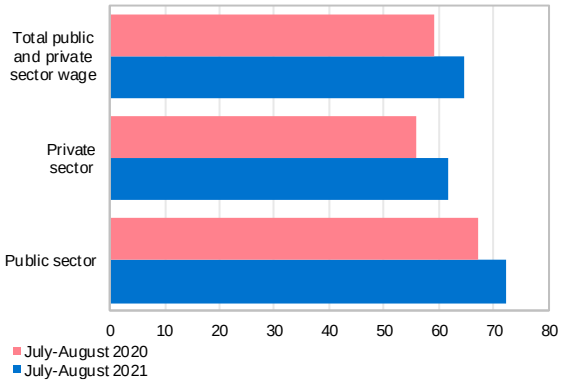


Sources: SORS and NBS calculation.
*Data for Q3 2021 is available for July and August.

Wages and labour productivity

Average nominal net wage equalled RSD 64,685 (EUR 550) **in July and August, having** risen by 9.1% y-o-y, somewhat less than in Q2 (9.8%) due to a slower y-o-y increase in wages in July when a mild s-a drop in both public and private sector wages was recorded. At the same time, **y-o-y wage growth has been faster in the private** (10.3% in the July–August period) **than in the public sector** (7.2%) since late last year, reflecting, inter alia, strong government economic support. Based on the Government decision to increase the minimum wage by 9.4%, to RSD 201.22 per hour (in net terms) as of next year, the monthly minimum wage in 2022 will equal around RSD 35 thousand (i.e. around EUR 300) whereby the coverage of the minimum consumer basket with the minimum wage will rise to around 90%.

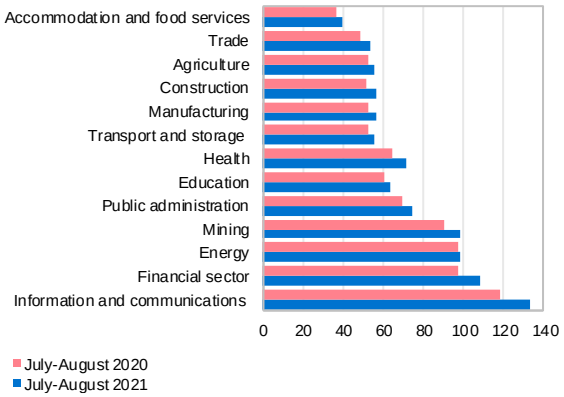
Chart IV.5.2 **Average nominal net wage**
(in RSD thousand)



Source: SORS.

Y-o-y rise in the average nominal net wage in the July–August period was widespread across economic sectors. Wage growth was the most pronounced in services – information and communication (13.0%), scientific, innovation and technical services (11.3%) and financial sector (10.8%). Higher July and August wages relative to the same period last year were recorded in other branches of the largely private sector, primarily construction (10.0%), retail and wholesale trade (9.1%) and manufacturing (8.7%), as well as in dominantly public sector health and social protection services (10.7%).

Chart IV.5.3 **Nominal net wage by economic sector**
(in RSD thousand)



Source: SORS.

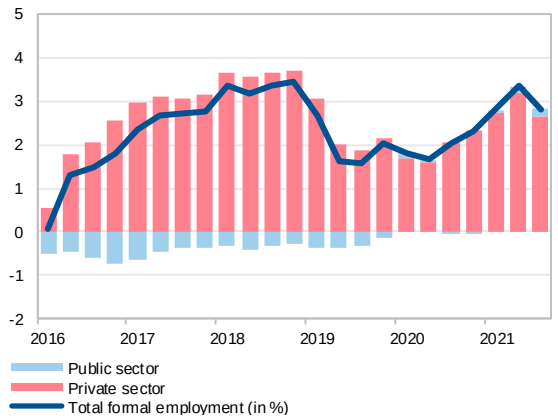
Total nominal net wage bill, the main source of consumer demand, recorded a 12.5% y-o-y increase in July and August, on account of a further rise in average wages and formal employment.

According to the preliminary assessment, **overall economic productivity** continued its y-o-y increase (4.5%) in Q3, but at a slower pace than in Q2 (10.0%) when a double-digit economic growth rate was posted.

Employment

According to the SORS data, obtained from the Central Registry of Compulsory Social Insurance and the Statistical Business Register, **total formal employment continued up in y-o-y terms in Q3** (2.8%, after 3.3% in Q2), **amounting to 2.30 mn in September**, which is its highest level since December 2014 when monitoring under comparable methodology began. In September, total formal employment rose by around 60 thousand y-o-y on account of continued process of employment with legal person and entrepreneurs (by around 65 thousand collectively), while the number of individual farmers dropped (by around five thousand).

Chart IV.5.4 **Structure of y-o-y growth in total formal employment**
(in pp, period average)



Sources: SORS and NBS calculation.

Private sector formal employment reached the record 1.69 mn in Q3 (close to 73% of total formal employment in Serbia), almost 54 thousand higher in September relative to a year earlier. Of that number, **the**

highest number of newly recruited persons was registered in manufacturing (over 30% of the total increase) and in most services, primarily retail and wholesale trade and ICT sector, followed by professional, scientific, innovation and technical services, as well as administrative and auxiliary services. The y-o-y employment rise in September was also registered in construction (around five thousand). **Public sector** also saw a y-o-y increase in employment (around six thousand in September), dominantly in education and health, mostly driven by a more flexible approach to employment with public funds beneficiaries compared to the period when fiscal consolidation was underway.

According to the National Employment Service records, **total unemployment** dropped for the fifth consecutive month, to 492,143 persons in September, **falling again to the level below 500 thousand** after December 2020. At the same time, September unemployment figure was around seven thousand lower than a year earlier, owing to the unemployment cuts in almost all occupation groups of industrial and services sectors.

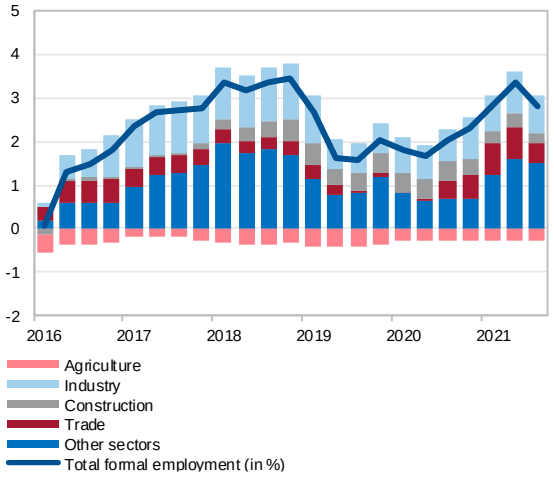
The available data from the revised **Labour Force Survey**[14] speak in favour of labour market preservation amid the pandemic, as the participation rate of working age population (15–64) touched 69.8% in Q2 (6.0 pp y-o-y growth) and employment rate 48.3% (2.0 pp y-o-y growth). The unemployment rate rose by 3.2 pp y-o-y, to 11.1% in Q2. However, this increase is attributable to the fact that in the same period last year unemployed persons who were prevented from seeking a job due to containment measures were classified as population outside the labour force. For that reason, y-o-y rise in the unemployment rate and a fall in the rate of the population outside the labour force (by 4.1 pp, to 45.7%) in Q2 2021 can be considered indicators of labour market recovery as they are returning to their pre-pandemic levels.

6 International environment

In the period since the previous Report, the dynamics of global economic recovery slowed down due to the worsening epidemiological situation, notably in developing countries, while advanced countries are suffering the most from the consequences of disrupted global value chains, which was the factor behind the slightly lower growth projections for 2021. At the same time, risks regarding the pace of economic recovery and the duration of the pandemic have become more pronounced under the impact of increased divergence between advanced and developing countries in terms of vaccine availability and possibilities for taking additional economic measures.

The rise in the global prices of primary agricultural commodities and energy continued, while issues on the

Chart IV.5.5 **Contribution to y-o-y growth in total formal employment by economic sector**
(in pp, period average)



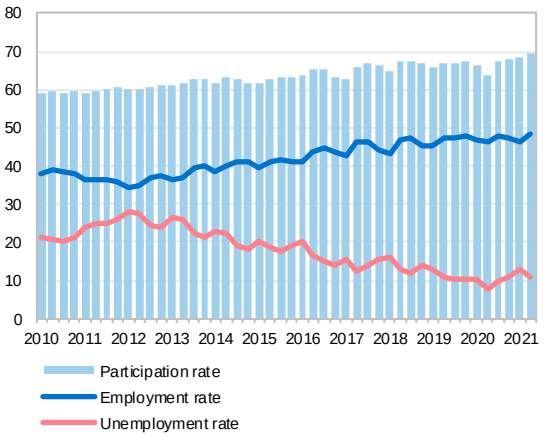
Sources: SORS and NBS calculation.

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

	2020	2021		
	Q4	Q1	Q2	Q3
Total number of formally employed	2.3	2.8	3.3	2.8
Employed with legal persons	2.5	3.1	3.5	3.2
Entrepreneurs and their employees	3.2	3.6	4.6	3.1
Individual farmers	-7.8	-8.6	-8.0	-8.1
Unemployed	-1.9	1.0	4.9	-0.5
First-time job seekers	8.9	10.9	14.2	5.1
Used to be employed	-12.0	-8.7	-4.7	-6.7

Sources: SORS and NES.

Chart IV.5.6 **Labour market indicators according to the Labour Force Survey**
(in %)



Source: SORS.

[14] According to the new SORS methodology implemented since January 2021, data on the key Labour Force Survey indicators were revised for the period since Q1 2010.

supply side are still having an impact on heightened inflationary pressures in the majority of countries. Inflationary pressures are expected to subside in mid-2022, though risks to the projection are estimated as skewed to the upside. Some central banks in the region embarked on the cycle of policy rate hikes, and the Fed made a decision to begin trimming the volume of asset purchases in November. So far, the ECB has not made any major changes to its monetary policy.

Economic activity

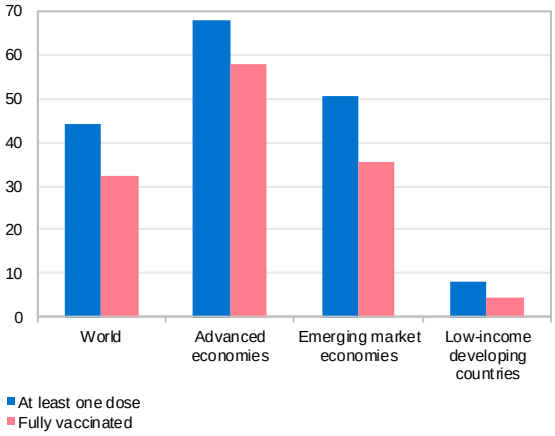
In conditions of the accelerated spread of new coronavirus strains, leading international institutions are forecasting a **slower pace of global economic recovery in H2** relative to H1 2021. Uneven availability of vaccines and limited room for future action of economic policies are additionally widening the gap between advanced and developing countries in terms of the speed of the recovery and overcoming the consequences of the pandemic. In the October WEO, the **IMF slightly revised down its global growth projections from July and April – from 6.0% to 5.9% in 2021**. Such decision was taken in light of the lower projections of economic growth in advanced countries (5.2% in October compared to 5.6% in July), which were faced with disruptions in global value chains, as well as lower growth projections in low-income developing countries (3.0% in October vs. 3.9% in July) due to the deteriorated epidemiological situation. Weaker forecasts for both groups of countries were partly compensated for by more favourable economic prospects in some countries that are net exporters of primary commodities, whose prices have been recording a sharp rise in the global market. **Short-term risks to the projection have remained skewed to the downside**, primarily due to heightened uncertainty over the further course of the pandemic and the successfulness of larger-scale vaccine rollout.

After contracting in the previous two quarters, the **euro area economy** rose 2.1% s-a in Q2, dominantly due to the increase in household consumption (contribution 1.8 pp) amid the loosening of strict containment measures, and to a lesser degree due to government consumption (contribution 0.3 pp). A boost to GDP that came from fixed investments (0.2 pp) was neutralised by the identical negative contribution of inventories, while euro area net exports stagnated in Q2. At the same time, GDP of **Italy** and **Germany**, our main foreign trade partners in the euro area, rose by 2.7% s-a and 1.9% s-a, also on the back of the rising household consumption.

According to the Eurostat preliminary estimate, euro area economic growth in Q3 amounted to 2.2% s-a, thus exceeding market expectations (2.0% s-a), wherefore the ECB still expects GDP to reach pre-crisis levels by the end of the year. However, the rise in the production and construction sectors' activity is hampered by bottlenecks in production, belated deliveries, the lack of workforce in some areas and a significant hike in the

Chart IV.6.1 **Uneven vaccination process by country group**

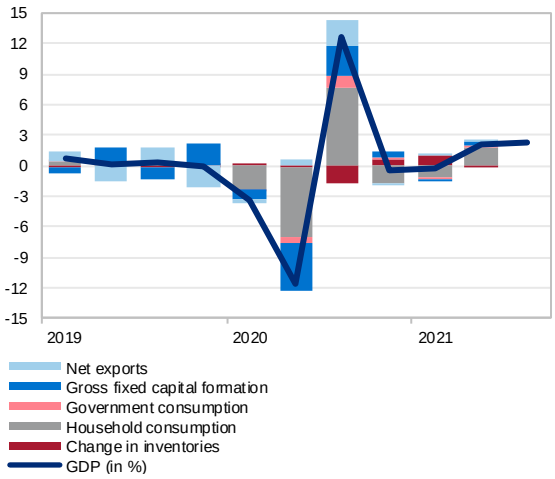
(проценат становништва)



Sources: *Our World in Data* and IMF calculation.
Note: Data concluding with 22 September 2021.

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

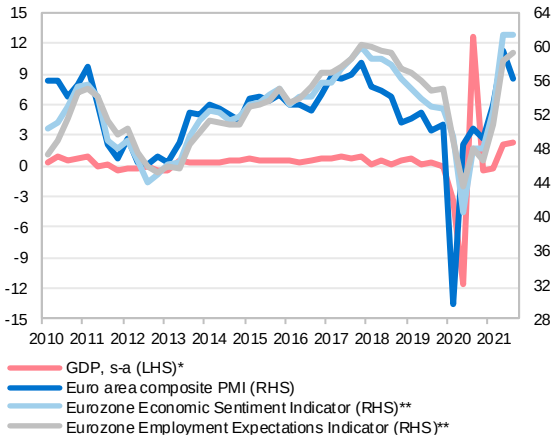
(in pp)



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 Q3 2021.
** ESI and EEI are standardised relative to PMI.

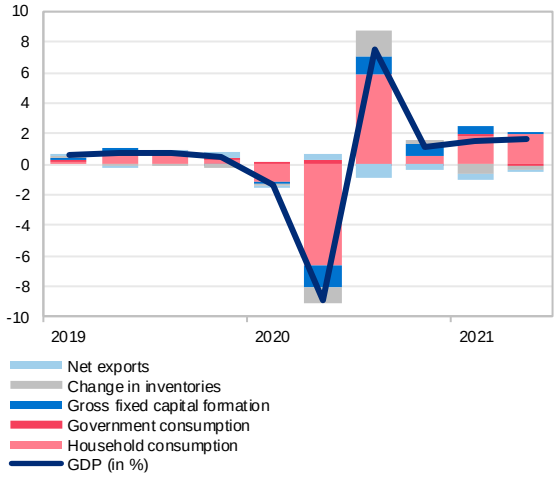
prices of raw and processed materials, affecting to a lesser extent the service sector, where activity recovered on the back of intensive vaccine rollout. With regard to this, in September the ECB stood by the **favourable prospects for euro area short-term growth**, revising up its June GDP growth projection in 2021 – by 0.4 pp to 5.0%, based on further growth in domestic demand (notably private consumption), the ongoing vaccine rollout, recovery of external demand, as well as the monetary and fiscal stimuli. In conditions of the further loosening of containment measures, these factors should help euro area GDP return to the pre-crisis level by end-2021.

The euro area labour market is characterised by a further fall in the unemployment rate (7.4% in September compared to 7.8% in June) and more favourable employment schemes in construction and service sectors, as indicated by the leading Employment Expectations Indicator (EEI)[15] for the euro area rising to its highest level in three years (113.4 points in September). Still, the number of employed persons in Q3 remains below the level from Q4 2019 (by around 2 mn persons). Since the outbreak of the pandemic, euro area countries saw a stepped-up trend of a decreasing number of working hours per employee due to altered working conditions and a series of structural changes.[16]

US economic growth picked up slightly in Q2 to 6.7% annualised, i.e. 1.6% s-a (from 1.5% s-a in Q1), with private consumption contributing the most (1.9 pp), and fixed investments to a lesser degree (0.2 pp). The depleting inventories and a reduction in government consumption and net exports acted in the opposite direction (aggregate contribution to GDP -0.5 pp). Though US manufacturing industry is expected to expand further (as indicated by the ISM PMI, which measured 61.1 points in September), the **Fed expects economic activity to decelerate in H2** due to greater difficulties in the resolution of halts in production chains compared to initial expectations, as well as a significant increase in the number of cases of new virus strains, reflecting negatively on personal consumption and workforce supply. According to a preliminary estimate of the US Bureau of Economic Analysis, economic growth in the USA in Q3 slowed down to 2.0% annualised, i.e. to 0.5% s-a. In September, the Fed revised down its June GDP growth projection for 2021 by 1.1 pp to 5.9%.

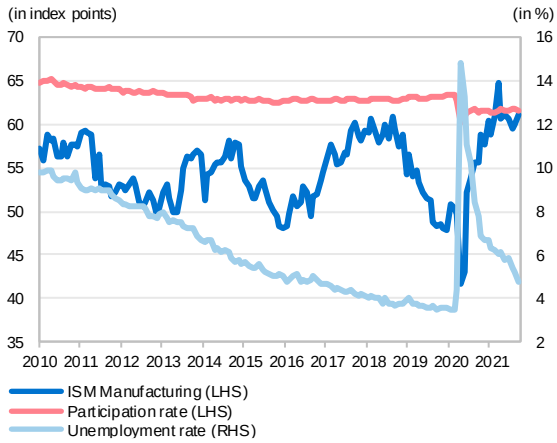
US labour market continued to record a fall in the unemployment rate, to 4.8% in September (from 5.9% in June), thus coming even closer to the pre-crisis level (3.5% in February 2020). The number of new non-farm payrolls in September rose by 194,000 persons from

Chart IV.6.4 **Contributions to s-a real GDP growth rate of the USA**
(quarterly, in pp)



Source: U.S. Bureau of Economic Analysis.

Chart IV.6.5 **US labour market and economic activity indicators**



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

[15] Index value above 100 points indicates managers' high employment expectations, while the opposite holds true for values below 100.

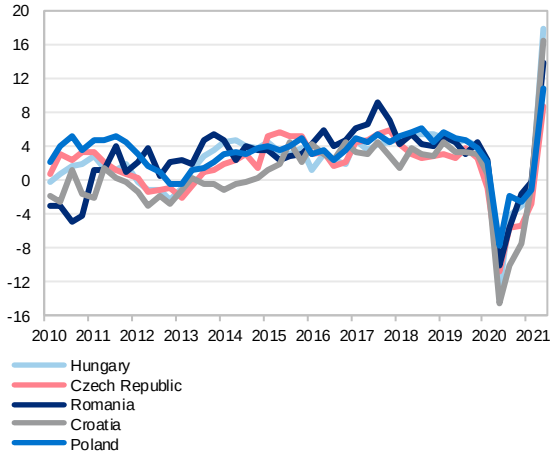
[16] Among structural factors, the ECB particularly stresses the impact of technological progress, shifting of employees to jobs in the service sector, an increased tendency to jobs with shorter working hours, as well as changes in labour and tax regulations.

August, which is the smallest monthly growth this year, with around 10 mn jobs still unoccupied in the USA. This suggests that workforce demand is much higher than the supply,[17] whose participation rate of 61.6% in September (the same as in June) is still significantly below the pre-crisis level (63.3% in February 2020). With this in mind, the Fed revised up the expected unemployment rate for the USA in 2021, from 4.5% in June to 4.8% in September.

After more than a year, the **Central and Southeast European region**[18] recorded y-o-y GDP growth of 11.8%, in Q2, mostly owing to the rising household consumption, while net exports posted a decline. Leading economic activity indicators suggest ongoing economic growth in the region in Q3, on account of the further growth in domestic demand, triggered by the vaccine rollout and the recovery of exports, supported by the recovery of external demand from Western European countries as key foreign trade partners. In addition, countries in the region also count on funds from the Next Generation EU fund, given the narrowed space for fiscal and monetary stimuli.

According to the National Bureau of Statistics, **the Chinese economy** slowed down its y-o-y growth to 4.9% in Q3 (from 7.9% in Q2), due to the decelerated industrial activity amid electricity cuts in September and subdued investments in real estate and road infrastructure, which is why in October the IMF slightly trimmed its July growth projection for 2021 (by 0.1 pp to 8.0%). On the other hand, also in October the IMF raised its July growth projection for **Russia's economy** in 2021 (by 0.3 pp to 4.7%), notably due to robust growth in global energy prices, of which Russia is among the leading net exporters.

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



Source: Eurostat.

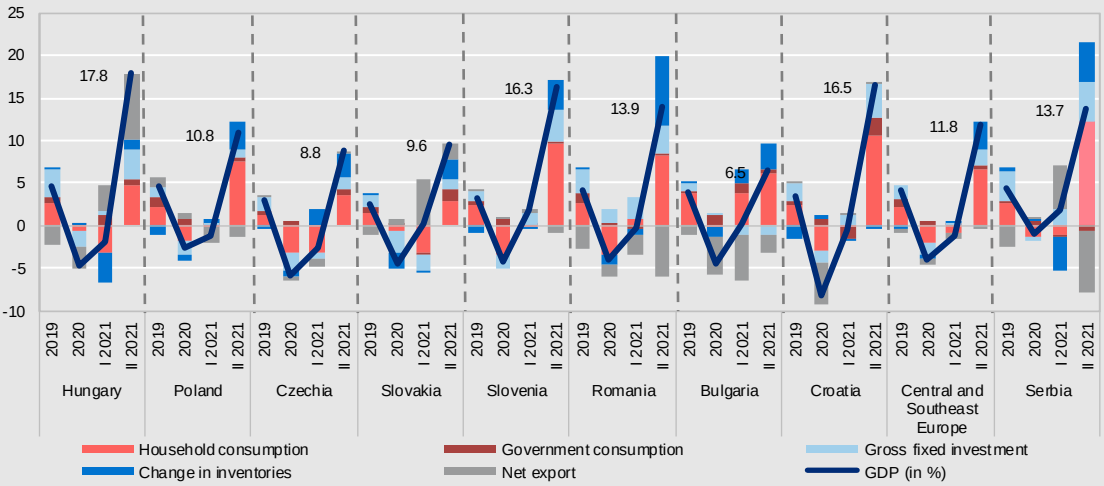
[17] The most common reasons for dampened activity in the US labour market are extended unemployment benefits, higher household savings, early retirement, etc.

[18] For more details on the economic recovery and growth prospects of the Central and Southeast European region see Text box 3, p. 44.

Text box 3: Economic recovery and prospects of Central and Southeast Europe

The NBS regularly monitors and analyses macroeconomic trends in Central and Southeast Europe, as the countries in the region[1] have much in common with Serbia – most of them are emerging markets, with experience of social and economic transition and focus on structural reforms, which resulted in increased openness and integration of these countries in global supply chains in the past decades. In addition, countries of the Central and Southeast Europe region are becoming our increasingly important trade partners, as indicated by the fact that they accounted for around 21% and 30% of Serbia's goods imports and exports in 2019, maintaining similar shares in 2020 as well. Serbia's surplus on trade in goods with the region went up to EUR 374.5 mn in the first nine months of 2021, which is a multiple times better result than for the entire 2020 (around EUR 126 mn) and 2019 (deficit of around EUR 24 mn).

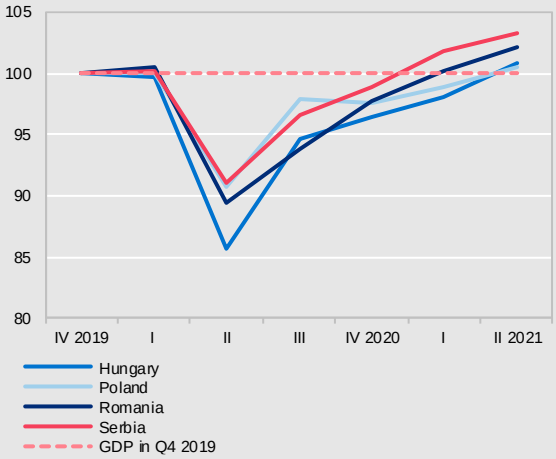
Chart O.3.1 **Contributions to y-o-y real GDP growth rate in countries of the CEE region, expenditure side**
(pp)



Sources: Eurostat and NBS calculation.

As for economic activity, economies of the region, similar as the global economy, are on the path of recovery, after a sharp contraction caused by the global coronavirus pandemic. This is testified by the 11.8% y-o-y GDP growth of the entire region in Q2 (compared to the 9.8% y-o-y drop in Q2 2020), driven by the rise in domestic demand – household and government consumption (with a 7.2 pp contribution to GDP) and overall investments (with a 5.1 pp contribution to GDP), while net exports remained below the pre-crisis level (with a negative 0.5 pp contribution to GDP). By country, the highest y-o-y GDP growth in Q2 was recorded in Hungary (17.8%), Croatia (16.5%) and Slovenia (16.3%), with Romania (13.9%) and Poland (10.8%) also posting two-digit growth rates, in addition to Serbia (13.7%). Thus, for the first time in the last year widespread economic growth was registered throughout the region (Chart O.3.1) mostly owing to the implemented economic measures and progress in the vaccination process, as well as to the low base from the previous year. One should mention that Slovenia, Slovakia, and Bulgaria, just like Serbia, had a positive y-o-y GDP growth rate already in Q1.

Chart O.3.2 **Economic activity in countries of the CEE region that reached the Q4 2019 level of real GDP growth**
(s-a data, Q4 2019 = 100)



Sources: Eurostat and NBS calculation.

In s-a terms, only Romania, Poland and Hungary reached in Q2 the level of real GDP from Q4 2019, beside Serbia who did it in Q1 already (Chart O.3.2), largely on account of a considerable rise in personal consumption due to the relaxation of containment measures and the effect of economic support, as well as the low base from the same period last year. Slovenia's GDP in Q2 was close to the level from Q4 2019, while other countries in the region are expected to reach it by the end of this or early next year, driven by the further recovery of domestic demand and continued vaccination.

Based on the 2020 outcomes and projections for 2021 in the Central and Southeast Europe region, including the Western

[1] The following countries belong to the Central and Southeast Europe region and are EU members at the same time: Hungary, the Czech Republic, Poland, Slovenia, Slovakia (Central Europe), and Romania, Bulgaria, and Croatia (Southeast Europe).

Table O.3.1 **Change in GDP by component in Q2 2021 relative to Q4 2019 in countries of the CEE region**
(s-a data, Q4 2019 = 100)

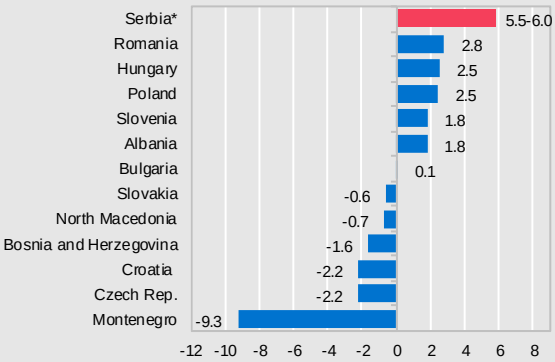
Q2 2021	GDP	Government consumption	Household consumption	Fixed investment	Goods and services exports	Goods and services imports
Bulgaria	95.8	108.0	104.9	97.8	95.0	100.0
Czech Rep.	95.2	105.0	95.7	94.2	101.2	106.2
Croatia	98.0	107.6	99.2	99.9	92.3	98.3
Hungary	100.8	100.1	99.1	102.9	102.0	102.1
Poland	100.5	106.1	100.6	89.8	109.9	113.0
Romania	102.2	98.2	94.6	112.9	99.5	107.7
Slovenia	99.8	104.5	97.7	103.1	101.1	105.5
Slovakia	98.3	103.6	99.6	85.2	101.1	101.8
Serbia	103.2	106.1	102.0	103.3	104.3	105.0

Sources: Eurostat and NBS calculation.

Balkans (Chart O.3.3), it is expected that Serbia will record the highest cumulative GDP growth (5.5–6.0%), followed by Romania (2.8%), Hungary and Poland (2.5% each), and then by Slovenia and Albania (1.8% each). An insignificant cumulative growth is anticipated for Bulgaria in both years, while other countries will probably record an economic fall, indicating that economic recovery this year will not be sufficient to cover the pandemic-induced losses after all.

Honouring the specificities of individual countries and taking into account the results achieved so far in 2021, in October the analysts of Consensus Economics revised up their July projections for 2021 economic growth for almost all countries of the region (Table O.3.2), except for the Czech Republic which is faced with the shortage of qualified labour, and Slovakia which is recording high long-term unemployment. At the same time, growth forecasts for 2022 were revised up for most of the region (except Slovenia and Slovakia). Overall, the main contributors to a more favourable economic outlook of the region over the projection horizon are continued vaccination, rising demand from Western Europe, as the key foreign trade partner, including access to the Next Generation EU funds and EU long-term budget (2021–2027), i.e. Multiannual Financial Framework, for EU members. In October, the IMF also revised up the growth projections for 2021 and 2022 for almost all Central and Southeast European countries (Table O.3.3) relative to April. It also emphasized that EU funds absorption will significantly support government investments in infrastructure projects and accelerate the digitalisation and green transition processes in these countries. However, Consensus Economics and the IMF are in agreement in their forecast that economic growth will lose momentum in 2022 relative to 2021 in most countries of the region, not only because 2021 growth was partly a result of the compensation for the lost consumption and investments last year, but also because of the expected withdrawal of economic incentives taken in response to the pandemic and the initiated and anticipated tightening of monetary policies of some central banks amid elevated inflationary pressures. Even though Central and Southeast Europe will record relatively solid economic growth rates in 2021 and 2022, the individual pace of this growth will depend on the vaccination progress and the room for fiscal and monetary stimuli.

Chart O.3.3 **Cumulative economic growth in countries of the region in 2020 and 2021**
(%)



Sources: NBS projection and IMF WEO (October 2021).
* NBS projection for 2021.

Table O.3.2 **Economic growth estimate by country of the CEE region, Consensus Forecasts**
(real growth, in %)

	July 2021		October 2021	
	2021	2022	2021	2022
Bulgaria	4.1	3.8	4.2	3.8
Czech Republic	3.7	4.7	3.3	4.8
Croatia	6.6	4.5	7.5	4.5
Hungary	6.3	5.0	7.1	5.2
Poland	4.8	5.1	5.2	5.1
Romania	6.9	4.6	7.4	4.7
Slovenia	4.7	4.5	5.5	4.2
Slovakia	4.3	4.8	4.2	4.6
Serbia	6.2	3.8	6.4	4.0

Source: Consensus Forecasts (July and October 2021).

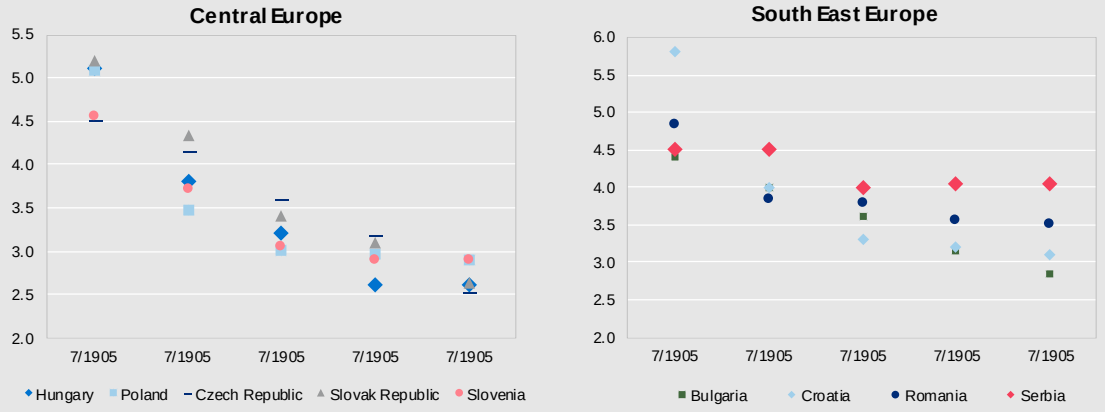
Table O.3.3 **Economic growth estimate by country of the CEE region, IMF**
(real growth, in %)

	April 2021		October 2021	
	2021	2022	2021	2022
Bulgaria	4.4	4.4	4.5	4.4
Czech Republic	4.2	4.3	3.8	4.5
Croatia	4.7	5.0	6.3	5.8
Hungary	4.3	5.9	7.6	5.1
Poland	3.5	4.5	5.1	5.1
Romania	6.0	4.8	7.0	4.8
Slovenia	3.7	4.5	6.3	4.6
Slovakia	4.7	4.4	4.4	5.2
Serbia	5.0	4.5	6.5	4.5

Source: IMF WEO (April and October 2021).

According to the IMF long-term forecasts, countries of the region will record economic growth beyond 2022 as well, (Chart O.3.4) because of continued implementation of structural reforms and convergence towards developed EU countries, but at a slower pace, considering the high base from 2021.

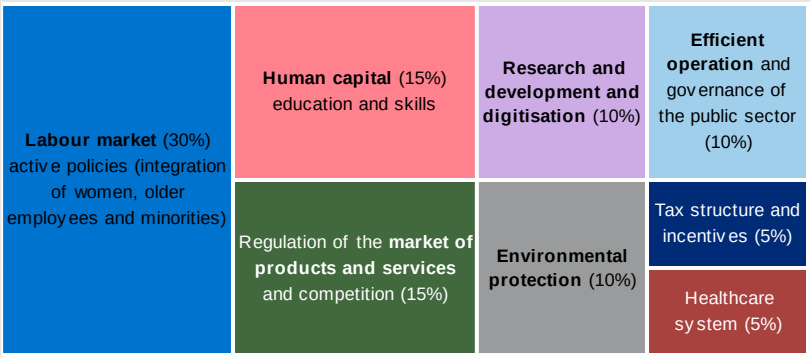
Chart O.3.4 **Economic growth projections in countries of the CEE region for 2022-2026**
(in %)



Source: IMF WEO (October 2021).

When it comes to structural reforms which should remain a priority of this region in the period ahead, in its annual economic outlook report by country, the OECD[2] points out that a large part of the remaining disparity in standard of living between economies of the Central and Southeast Europe region and developed economies is attributable to lower productivity. Productivity had been decelerating for many years before the pandemic and became more vulnerable in the new circumstances due to increased transaction costs, reduced mobility of people, goods and capital, as well as weaker possibility for the reallocation of resources by company, sector and country. Then there is a problem of a higher number of unproductive (so-called zombie) companies which use economic support inefficiently and for that reason, according to the IMF, state aid should target the most vulnerable sectors and companies in the period ahead. Parallel processes of digitalisation and automatisation should boost the efficiency and productivity of the region and hence overall economic activity, which is why increased productivity can be expected in the long run, as well as narrowing of the gap between the region and developed countries. Further, in the post-pandemic period, countries of the region, including Serbia, may benefit from the possible nearshoring process (return of production processes from distant, e.g. Asian countries to countries closer to the euro area) in view of the globalisation weaknesses that showed during the pandemic, manifesting in halted global supply chains and growing transportation costs. Such shifts are most frequently associated with strategically important industries that give a strong contribution to overall economic activity – the share of industry's gross value added measures between 20% and 30% of the total gross value added in most countries. The said processes, with increased investments in education, research and development, as well as green technology are what encourages knowledge-based, sustainable and innovative economic growth of the region of Central and Southeast Europe.

Table O.3.4 **Priority structural changes in some countries of the CEE region**
(Czech Republic, Hungary, Poland and Slovakia)



Source: OECD Going for Growth (2021).

[2] OECD report *Going for growth 2021: Shaping a vibrant recovery* (available at https://www.oecd.org/economy/going-for-growth/).

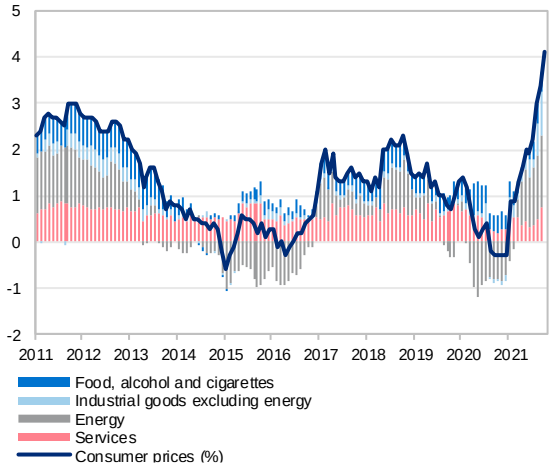
Inflation movements

Y-o-y inflation in the euro area continued on its upward path during Q3, measuring 3.4% in September, mostly due to accelerated growth in energy prices (17.6% y-o-y) and the effects of the low last year's base, as well as, to a lesser degree, the higher prices of food and services, while the prices of industrial products excluding energy slowed down their y-o-y growth. Driven by the rise in the prices of services, **y-o-y core inflation** also picked up, reaching 1.9% in September. Heightened inflationary pressures in the euro area amplify concerns over their duration, considering further growth in production prices amid the rising global prices of primary commodities and energy, and halts in production, as well as pressure on increasing wages of employees due to the lack of workforce. Measured by the change in HICP, y-o-y inflation in September accelerated growth in both **Germany** (to 4.1%) and **Italy** (to 2.9%), Serbia's key foreign trade partners within the euro area. In October, according to preliminary estimates, inflation in the euro area picked up further, to 4.1% y-o-y, notably due to higher energy prices.

According to the data of the US Bureau of Labor Statistics, **y-o-y inflation in the USA** (measured by the CPI) in September was at the same level as in June, 5.4%, while core inflation (excluding the prices of food and energy) slowed down its y-o-y growth to 4.0% in September (from 4.5% in June), mostly due to slower y-o-y growth in the prices of used vehicles. In addition to solid demand, pressure on inflation is still coming from extended halts in supply chains, which are raising the cost of basic inputs in production, as well as the mismatch between supply and demand in the labour market, thus exerting pressure on wages. The Fed's preferred inflation measure, measured by the personal consumption index, rose to 4.4% in September, mainly driven by robust growth in energy prices.

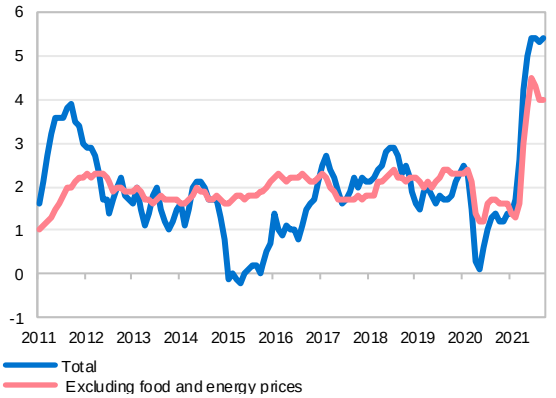
During Q3, observed countries in the **Central and Southeast European region** were characterised by accelerated growth in y-o-y inflation, which trended above the upper bound of the target tolerance band, reaching multiyear maximums in September in conditions of workforce shortages, halts in supply and considerable increase in energy prices (notably natural gas). Y-o-y inflation rose the most in Romania – to 6.3% in September, mainly due to the higher prices of vegetables and petroleum products. The same factors also dictated the increase in y-o-y inflation in Poland, to 5.9% in September. In Hungary, y-o-y inflation rose to 5.5% in September, and in the Czech Republic to 4.9%. In both countries, the pick-up in headline inflation was prompted by accelerated core inflation. Besides core inflation, higher y-o-y inflation in September in Hungary is attributable to food prices, while in the Czech Republic, higher prices of housing and material for housing maintenance had a particular inflationary

Chart IV.6.7 **Contributions of HICP components to y-o-y inflation in the euro area**
(in pp)



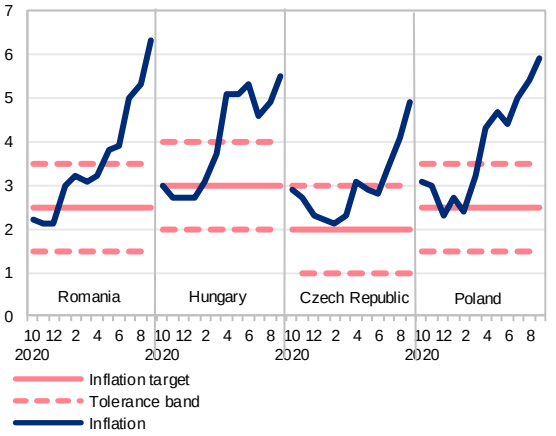
Sources: Eurostat and NBS calculation.

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



Source: U.S. Bureau of Labor Statistics.

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



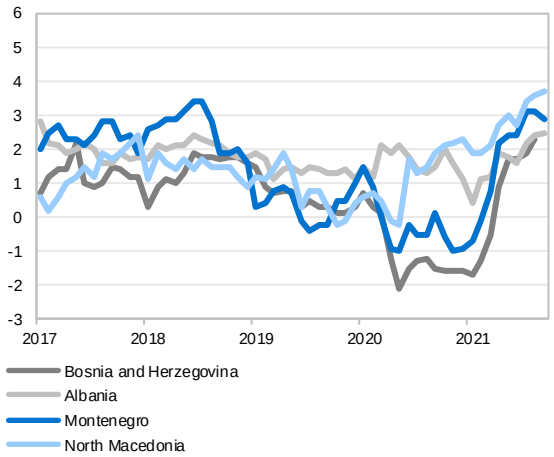
Sources: Central banks of selected countries.

effect. To a lesser degree, the inflationary effect came from the prices of automobiles and petroleum products.

During Q3, y-o-y inflation also picked up the pace in the majority of **Western Balkan** countries – in North Macedonia to 3.7% in September, in Albania to 2.5%, and in Bosnia and Herzegovina to 3.0%. In Montenegro, inflation slightly slowed down its y-o-y growth to 2.9% in September.

Inflation in Turkey also sped up during Q3 and reached 19.6% in September, on account of the depreciating lira and higher food prices.

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



Sources: Statistical offices of selected countries.

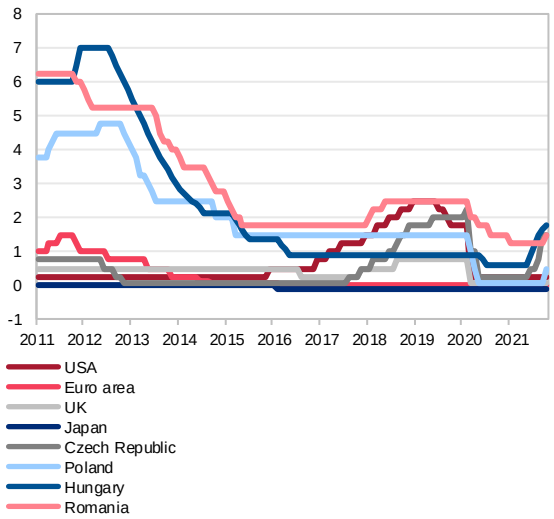
Monetary policy

The **ECB** did not change its main interest rates during Q3, though in its September meeting it noted, and then confirmed it in October, that favourable financing conditions in the euro area can be maintained going forward with a moderately lower volume of asset purchases within the PEPP programme relative to the previous two quarters. It stressed that the favourable financing conditions are crucial for the further economic rebound of the euro area economy. The ECB recalled the programme's flexibility, i.e. that it will adjust to the market conditions in the coming period as well, and at least until end-March 2022, that is, until it is estimated that the pandemic-induced crisis is over. Reinvestment of the principal amounts of matured securities will continue at least through 2023.

Moreover, the ECB confirmed it will continue to conduct asset purchases within the APP programme for as long as necessary, in order to step up the expansionary impact of interest rates, therefore the programme will end just before the rates begin to go up. As so far, the ECB stated that the funds from the maturing instruments purchased within the programme will be reinvested over a longer period of time after the interest rates start going up. The ECB also continues to ensure considerably liquidity via its targeted long-term refinancing operations (TLTROs). The third series of TLTROs will still be an attractive source of bank financing for the purpose of continued support to corporate and household lending.

The Fed did not change its federal funds rate range during Q3, or the announcement that it will remain at 0–0.25% until the Fed estimates that full employment has been reached, with inflation at 2% and a tendency to lightly overshoot that level for a while. However, while maintaining the current pace of asset purchases within the QE programme (monthly purchases of Treasury bonds in the amount of USD 80 bn and agency mortgage-backed securities of USD 40 bn), in its September meeting the Fed announced that a more moderate dynamics of asset purchases within the programme could be justified, if economic progress

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



Sources: Websites of central banks.

continues in accordance with expectations. The Fed's September projections regarding the federal funds rate indicate that a half of FOMC members (nine out of 18) expect the rate to go up in 2022 (previously expected by seven members). As expected, in its November meeting the Fed made the decision about the gradual narrowing of the asset purchase programme, where net purchases should end in mid-2022.

Amid rising inflationary pressures, stemming not only from the global factors, but from domestic ones as well, some central banks in Central and Southeast European countries continued with or embarked on policy rate hikes in Q3. As announced, the central bank of the **Czech Republic** continued with the cycle of policy rate increases that began this June. It raised the policy rate to 1.5% – in August by 25 bp and in September by 75 bp. Though inflation continued to move and shoot beyond the upper bound of the central bank's target tolerance bank (2±1%), the market anticipated a smaller increase in September. The central bank of **Hungary** also continued to raise its policy rate – by 30 bp in August and by 15 bp each in September and October, to 1.8%, its highest level since April 2015. The October increase is the fourth consecutive policy rate hike since June, with the announcement by monetary policy makers that the hikes will continue, though at a slower pace, until a sustainable convergence of inflation toward the central bank's target is ensured – which is expected to occur during H2 2022.

In conditions of inflation growth to 5.9% in September, its highest level since June 2001, the central bank of **Poland** raised its policy rate in October by 40 bp to 0.5%, for the first time since May 2012. In October, the central bank of **Romania** also opted for its first policy rate hike since May 2018, given that short-term inflation will be higher than expected, most notably the rise in energy prices. It raised its key policy rate by 25 bp to 1.5%.

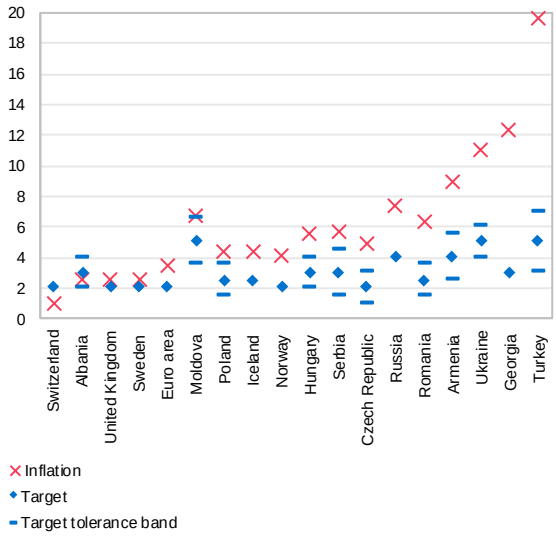
In contrast to this, the central bank of **Turkey** trimmed its policy rate to 16% during September and October, down from 19%, where it had stood since March this year, when it was raised due to high inflation. The decision to cut the policy rate was made primarily because of the assessment that inflationary pressures are temporary, caused by the rising food and import prices, and that the raised policy rate as of this March had a bigger contracting effect on banks' lending activity than anticipated.

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

Central bank	Inflation*	Inflation target	Policy rate**
Serbia	5.7	3.0 ± 1.5	1.00
Poland	4.4	2.5 ± 1.0	0.50
Czech Republic	4.9	2.0 ± 1.0	1.50
Hungary	5.5	3.0 ± 1.0	1.65
Romania	6.3	2.5 ± 1.0	1.50
Turkey	19.6	5.0 ± 2.0	18.00

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

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



Sources: Eurostat and websites of central banks.

Text box 4: Main challenges for monetary policies of emerging countries, Serbia included

The coronavirus pandemic drove central banks around the world to cut their policy rates considerably, in many cases down to the lowest levels to date. Also, a significant number of central banks in advanced countries, whose interest rates were already close to zero before the pandemic broke out, relied on refinancing operations, and on the purchase of government, as well as private securities within the QE programme. During the pandemic, some central banks in emerging countries also resorted to similar asset purchases, though at an incomparably lower level. The measures taken by central banks, together with governments' fiscal measures, are unprecedented countercyclical policy measures both in terms of their scope and the speed at which they were adopted. It is particularly important to note that for the first time in modern history, such policies were effective not only in advanced but also in emerging countries.[1] Upon the outbreak of the pandemic, emerging countries, including Serbia, were also able to implement economic stimuli to support citizens and corporates in extremely difficult circumstances.

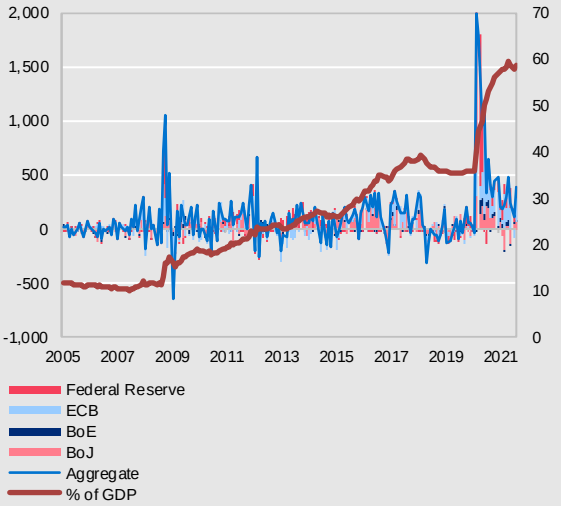
As the global economy embarked on a path of recovery, which was faster than anticipated as of the beginning of the year, and as inflationary pressures started to increase, market participants focused their attention on the anticipated transition of monetary policies from extremely accommodative to so-called post-pandemic policies. During the process, a key challenge for monetary policy makers will be the ways to avoid the unwanted tightening of financial conditions, i.e. the tightening that could act as a significant drag on economic activity, and at the same time to ensure control of inflationary pressures and financial stability.

The attention of market participants is primarily focused on the **issue of monetary policy normalisation of leading central banks in advanced countries**, because of the effects it has on the global economy. For quite some time now, leading central banks have indicated they would gradually decrease the level of monetary policy accommodation, first by narrowing the asset purchase volume within the QE programme. During the pandemic, central banks of advanced countries increased the assets in their balances to record high levels, to close to 60% of GDP, which is almost double the level from before the pandemic (Chart O.4.1). Central banks engage in asset purchases to mitigate financial conditions and encourage lending to corporates and households. Given the impact of the Fed and the ECB on liquidity and financing conditions at a global scale, uncertainty was particularly present in terms of the effects which monetary policy normalisation would have on asset prices, as well as fears that any sudden change in their monetary policies, not predicted by market participants, could cause an increase in volatility in the international financial market and a tightening of financial conditions for emerging countries, as was the case in 2013 (tap er tantrum).

For now, monetary policies of leading central banks are largely transparent and predictable, and key policy rates are not expected to be lifted in the near future, which gives us grounds to hope that the recovery of emerging countries should not be threatened. As of this June, the Fed increasingly signalled a reduction in the purchase volume within the QE programme at the end of the year, and in the November meeting such decision was indeed made.

For Serbia, considering the trade and financial ties, the ECB's monetary policy measures are particularly important, as the ECB announced that it will continue providing extremely favourable financial conditions in the euro area in order to support economic growth.

Chart O.4.1 **Changes in central bank balance sheets**
(monthly changes, in USD bn)



Source: *Financial Stability Report*, IMF, October 2021.

Chart O.4.2 **Global Financial Conditions Index**
(standard mean deviation)

Source: *Financial Stability Report*, IMF, October 2021.

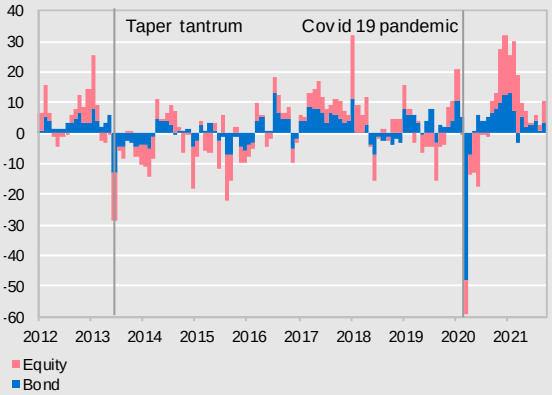
[1] "*Planning for the Post-COVID world: central bank policies in emerging economies*", LSE online public event, 7 October 2021.

Most investors expect the ECB to keep up with asset purchases for at least several more years, and that it will not raise its main interest rates from the record low level, given the change of strategy in June which lifted the upper threshold for inflation.

Still, it seems that the optimism that got the markets going in H1 this year subsided during summer. Investors became more cautious due to the renewed spread of the virus, halts in global value chains and elevated uncertainty in terms of the pace of global growth. Due to the turbulences in the energy market, concerns that inflationary pressures might be more persistent that initially predicted stepped up significantly at end-September. Rampant uncertainty as to economic developments going forward resulted in the high sensitivity of market participants to all news, especially those about inflation in the USA and the Fed's monetary policy.

Aware of all this, the IMF estimated that the overall image of financial conditions is still favourable (Chart O.4.2), and capital inflows to emerging countries generally stable.[2] After the initial shock caused by the pandemic, inflows on account of portfolio investment, primarily government securities in hard currency (Chart O.4.3) recovered significantly. A major recovery was also recorded by equity securities. It remains to be seen whether and to what extent the improved financial conditions for emerging countries will be questioned in the coming period. The Fed's monetary policy normalisation and the consequent tightening of global financing conditions could reflect on the rising investor risk aversion, lower capital inflows, risk premium growth and depreciation pressures on the currencies of emerging countries.

Chart O.4.3 **Net portfolio flows of investment funds to emerging market economies**
(in USD bn)

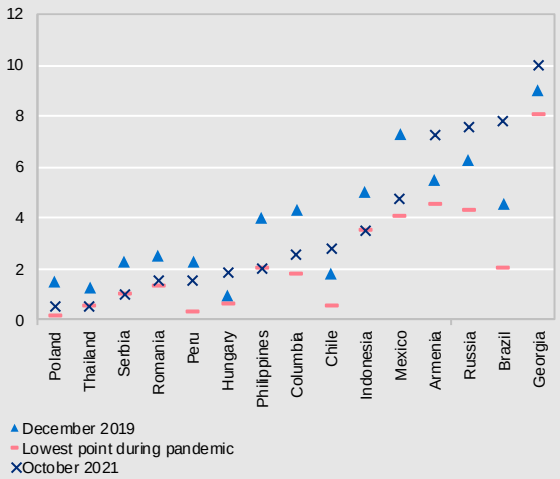


Sources: EPFR Global, according to IMF WEO, October 2019 and October 2021.

In addition to this challenge, central banks of emerging, as well as advanced countries are faced with **growing inflationary pressures**, amid significantly higher global prices of energy and food, as well as disruptions in global value chains. However, unlike in developed countries, the share of food in the consumer basket is much higher in emerging countries, hence the greater risk of rising inflationary expectations and spillover onto core inflation. The considerably higher energy prices and halts in supply chains are unfavourable for the majority of emerging countries and represent one of the key risks not only to inflation, but economic growth as well. The persistently high inflation would have an adverse effect on the disposable income of households and a part of corporates that are unable to shift the burden of increased expenses onto consumers. Therefore, many central banks of emerging countries are faced with the dilemma of whether to react to inflationary pressures or support short-term economic growth.

As in advanced countries, inflation growth in emerging countries is expected to be temporary for the most part. Yet, unlike central banks of advanced countries, by far a greater number of central banks in emerging countries has raised their policy rates (Chart O.4.4). As the IMF reports,[3] the reasons for this are several, notably concern that they could be perceived as central banks that have not taken any measures against inflationary pressures, and apprehension that they might see depreciation pressures and subdued portfolio inflows from government securities in the local currency due to the narrowing of the interest rate differential. Still, despite policy rate hikes, financial conditions in many emerging countries remain favourable, with real interest rates that are negative and still act as a driver of economic growth. The central banks of Brazil and Russia opted for a significant increase in policy rates (by 5.75 pp and 3.25 pp relative to the lowest level during the pandemic) and their rates are now higher than before the pandemic broke out. The policy rates of the Hungarian and Chilean central banks are higher than before the pandemic, though they are generally lower in the observed group. On the other hand, some **central banks of emerging countries, including Serbia, left an open door for a possible increase in the policy rate going forward, which will mostly depend on developments in the international environment**.

Chart O.4.4 **Policy rates across inflation targeting emerging countries**
(p.a., in %)



Sources: Websites of central banks.

[2] WEO, IMF, October 2021.
[3] *Financial Stability Report*, IMF, October 2021.

At the same time, the NBS took the first step towards narrowing monetary policy expansiveness by raising the average executive repo rate as of October. Also, it discontinued auctions of repo purchase of securities that were introduced upon the outbreak of the pandemic in order to ensure additional dinar liquidity to the economy under very favourable conditions.

Though policy rates of emerging countries are generally expected to continue on the upward path, which is in conformity with the anticipated monetary policy normalisation by leading central banks, in emerging countries central banks will continue to pursue their monetary policy in the coming period by considering the specific circumstances in the local market, including the course of the pandemic and the available room for monetary policy measures, inflation and economic growth prospects, risks of the spillover effects of shocks in the international environment and the state of financial stability. A pre-emptive monetary policy tightening may help prevent a possible rise in inflation expectations and strengthen the central bank's credibility. By contrast, excessive tightening of financial conditions at home could reflect negatively on the pace of economic growth which will be a key factor of success for emerging countries in overcoming the above challenges from the international environment.

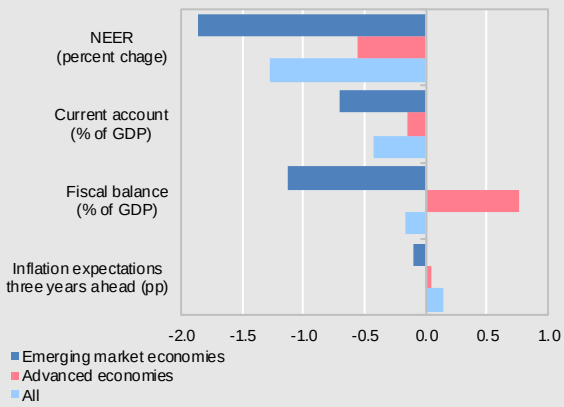
Faster economic growth relative to developed countries is a precondition for achieving relatively favourable financing conditions in the international capital market in the coming period as well, when monetary policy normalisation by leading central banks is anticipated. Analysts largely agree in their assessment that despite the pandemic, many emerging countries are now much better prepared than in 2013, when there was a mass exodus of investors from the assets of emerging countries. Meanwhile, many emerging countries, including Serbia, have achieved significant structural improvements and considerably narrowed their internal and external imbalances. **As a positive circumstance for emerging countries, Standard & Poor's[4] stated the fact that unlike advanced countries, many emerging countries have already reached their pre-pandemic economic levels.** Though lagging behind in terms of vaccine rollout, the spread of the virus in many countries does not have such detrimental effects on economic activity as immediately after the outbreak, because consumption, business and investments have largely adapted to pandemic conditions.

Serbia exceeded its pre-pandemic economic activity levels already in Q1 2021, sooner than many emerging countries and the majority of European ones. After it overshot the pre-crisis level, Serbia's GDP continued up, exceeding expectations, therefore the NBS lifted its growth projection for this year to 6.5%, with the possibility that it might even be higher. In the medium run, the NBS expects GDP growth to range between 4.0% and 5.0%. As in other countries, inflationary pressures in Serbia have increased, and the **anticipated growth in y-o-y inflation rates is largely assessed as temporary**, notably due to the current strong shocks in the global energy market, as well as the market of other primary commodities, and also low last year's base. The NBS cannot control shocks emanating from abroad, or low last year's base. What the **NBS can affect and what it is committed to with great resolve – together with the Serbian Government – is to not allow the creation of conditions leading to a more lasting acceleration of inflation, as was the case in the past. What is well known in Serbia, as well as other emerging countries, has also been shown by the IMF's analysis[5] that larger depreciations of the exchange rate** (the only factor statistically significant in the analysis) precede **episodes of high inflation.** The IMF analysed 55 episodes of high inflation (Chart O.4.5), evenly distributed in advanced and emerging countries, in order to find breaking points for accelerating inflation. On average for emerging countries, the nominal exchange rate depreciated by around 8% in the quarter when the high inflation episode began. Also, accelerated inflation was preceded by a hike in the fiscal deficit and current account deficit of emerging countries. More persistent episodes, defined as the ones when inflation remains elevated for six or more quarters, were associated with sharper growth in medium-term inflation expectations.

For a number of years, the NBS has emphasized that **safeguarding the relative stability of the exchange rate** is extremely important in the domestic economy and the achievement of the NBS's statutory objectives – the price and financial stability, in conditions of the still relatively high degree of euroisation of the Serbian economy. Another important factor of low and stable inflation are **inflation expectations of the financial and corporate sectors anchored** within the target band.

Despite challenges, the NBS has managed to **increase FX reserves to record high levels, as a guarantee of stability and resilience of the local economy** to shocks from the international environment. Thus, the NBS gross FX reserves since the start of the year were increased by EUR 3.3 bn, to EUR 16.8 bn at end-September, ensuring the coverage of the goods and services import by twice the adequacy standard. Net FX reserves (FX reserves less banks' FX balances on account of required reserves and other requirements) at end-September amounted to EUR 14.2 bn.

Chart O.4.5 **High inflation episodes**



Source: IMF WEO, October 2021.
Note: The chart shows the difference between the average value in the three quarters prior to the inflation pick-up episode (q-3 to q-1) and the average value in the past six quarters (q-9 to q-4).

[4] "*Pandemic Scars Will Linger as New Risks Emerge*", S&P Global, 28 September 2021.

[5] WEO, IMF, October 2021.

In the prior years, **the balance of payments current account and the country's fiscal position were improved significantly, remaining stable even during the pandemic**. The current account deficit in the nine months of the year was around 23% lower than in the corresponding period of 2020. We expect its share in GDP to be around 4% this year, and 4–5% in the medium term, with the preserved full coverage by net FDI inflows. As for the fiscal balance, the projected deficit of 4.9% of GDP this year is more favourable than expected, due to the faster economic growth and positive developments in the labour market, while in the upcoming year it is projected to narrow further, to 3%. Though substantial funds will remain channelled to infrastructure projects, the fiscal deficit is anticipated to continue to narrow in the medium run and turn into a primary surplus, ensuring a downward trajectory of public debt (which amounted to 57.1% of GDP at end-September, and is expected to be 58.2% annualised, which is below the Maastricht criterion).

With challenges abounding in the international environment, the NBS will continue to keep a close eye on developments abroad and will fine-tune its monetary policy measures with their assessed impact on the local economy. As before, it will make use of all available measures to keep inflation low and stable, which, together with the preservation of financial stability, is a precondition for accelerated and sustainable growth. The responsible fiscal policy pursued by the Serbian Government will also help mitigate shocks from the international environment, should there be any, while the ensured sustainability of public finances, a stimulating business and investment climate, and narrowed external imbalance will also lend a hand to this end.

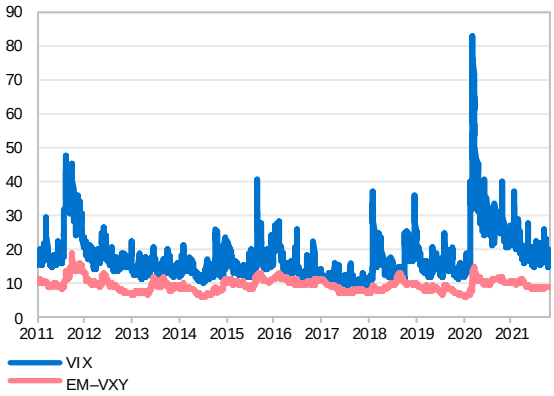
Financial and commodity markets

Investors' optimism that the vaccination progress would usher in a global recovery gave place to concerns in Q3 over a number of factors: a slowdown of China's real estate market, which could affect negatively the rest of the global economy, disputes over the US raising the debt ceiling, as well as the rising prices of primary commodities and inflationary pressures, which proved to be stronger and more durable than initially expected, prompting an increasing number of central banks worldwide into monetary tightening. This largely explains the increase in the implicit measure of **financial markets volatility** (VIX) during Q3, by 5.3 pp to 21.1%. The EM–VXY index, measuring volatility of emerging markets' currencies, edged up slightly in Q3 (by 0.4 pp to 8.9%). In October, VIX dipped to its pandemic minimum (15.0%), while rising to 16.3% at the month's end, thanks to the strong performance of S&P 500, largely reflecting the earning reports of a bulk of leading companies in Q3, which outperformed the expectations.

The yields on ten-year government securities of developed countries remained almost unchanged in Q3, as their initial fall was followed by a rise in September, mirroring the reaction of markets to central banks' signals that they are ready to respond to the rising inflationary pressures by reducing their monetary accommodation. In Europe, lower yields on ten-year government securities early in the quarter pushed the yields on French and Austrian government securities into the negative territory. However, after the September rise in yields, which extended into October, only German gilts kept the negative yields, though they also climbed to their highest level since May this year, consistent with markets' expectations that ECB monetary policy might shift due to the mounting inflationary pressures. Yields on ten-year US Treasuries also first dipped in Q3, reflecting markets' concerns that the economic rebound could be more moderate than initially expected. However, the rising inflation soon became the centre of attention, as well as the Fed's announcements that asset purchases might start in November and end in mid-2022, earlier than markets expected.

In parallel with the rise in yields on US Treasuries, the **dollar gained ground against the euro**, which can largely be attributed to the expected changes in the Fed's monetary policy. Having weakened slightly in July (0.1%), the dollar appreciated against the euro in August and September, by 0.5% and 2.2%, respectively. The dollar strengthening was in part prompted by the increased risk of heightened problems in the over-indebted real estate sector in China and potential transfer of negative effects on the global economy. In October, the dollar lost 0.6% against the euro.

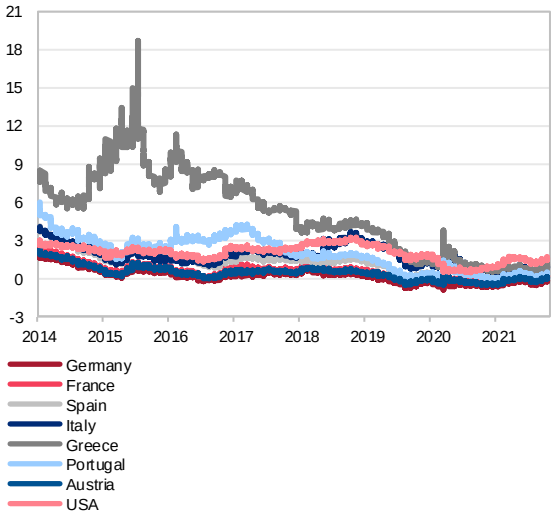
Chart IV.6.13 **Implied volatility of the global financial market***



Source: Bloomberg.

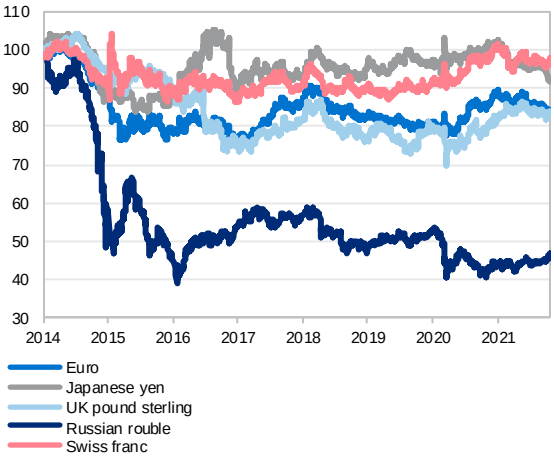
* VIX (Chicago Board Options Exchange Market Volatility Index) measures implied volatility of the S&P 500 index; EM–VXY (J.P. Morgan emerging markets implied volatility index) measures aggregate volatility of emerging market currencies based on three-month forward options.

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



Source: Bloomberg.

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



Source: IMF.

* Growth indicates appreciation.

Having increased in Q2, **the price of gold** dipped 1.2%, to USD 1,743 per ounce at end-September, with the rising yields on US Treasuries and strengthening of the dollar. Still, that fall was much milder than in Q1 this year, when the price of gold lost more than 10%. In October, in parallel with the dollar weakening, the price of gold edged up 1.5%.

After a relatively stable movement in July (around USD 75 per barrel), **global oil prices** trended at a lower level by 20 August (averaging USD 70 per barrel), on account of the deteriorated epidemiological situation which constrained global oil demand (primarily from Asia), the slowdown of economic activity in China, as the net oil importer, as well as the announced expansion of oil production at the meeting of OPEC+ members. However, until end-August and in September, oil price turned up again, affected by interruptions in oil production in the Gulf of Mexico after two hurricanes which depleted crude oil inventories in the US, difficulties faced by some OPEC+ members in their efforts to increase production up to the targeted level and more favourable IEA forecast about the rebound in oil supply by the end of the year. These factors drove oil price to around USD 79 per barrel at end-Q3, which was up by 4.9% q-o-q and an almost three-year maximum. In October, oil price continued up, reaching around USD 84 per barrel amid global gas shortage, mainly in Europe and China, due to which industry has oriented toward oil and coal, the prices of which also turned up.

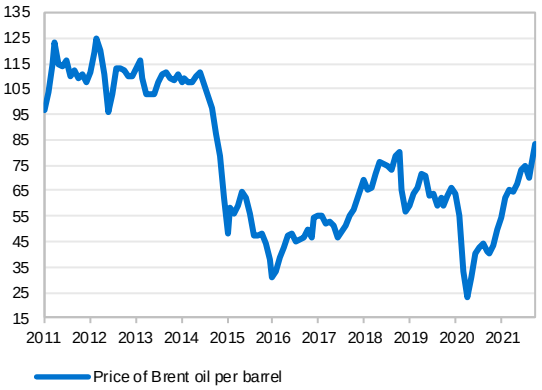
According to the World Bank data, **natural gas price in Europe** in Q3 reached USD 22.8 per million of British thermal units (121.7% above the Q2 level), which is a historical record since statistical monitoring of these prices began. A drastic fall of natural gas prices is largely the result of exhausted inventories after a severe winter in Europe and above-average temperatures in the Northern hemisphere during summer months, in parallel with the recovery of industrial activity. This limited the gas supply from Russia and Norway, and heightened the demand among European countries which are faced with the high prices of emission licences and weaker production of wind power plants. The major part of liquid gas supply is channelled to Asian countries, which witnessed an even sharper rise in the price of natural gas. The global energy sector has thus reoriented to purchasing the initially cheaper thermal **coal**, whose price, due to the increased needs of Asian power plants and reduced coal extraction in China, Australia and Indonesia, as well as Chinese caps on import of Australian coal, also reached record high levels – USD 185.7 per tonne in Q3 (an increase of 42.9% from Q2). Natural gas and coal prices continued up in October, putting an upward pressure on electricity prices.

According to the World Bank index, after a Q2 rise, the **prices of metals and minerals** recorded a 6.0% fall in Q3, driven by a strong slump in the price of iron ore in August and September (by 41.9%), as the lower steel

Chart IV.6.16 **World gold price movements**
(average monthly prices, in USD)

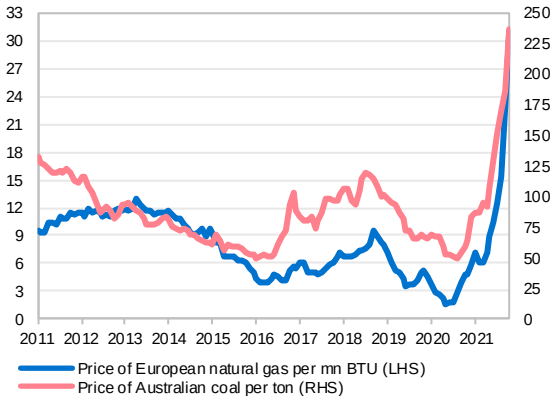
Source: Bloomberg.

Chart IV.6.17 **World oil price movements**
(average monthly prices, in USD)



Source: Bloomberg.

Chart IV.6.18 **Natural gas and thermal coal price movements**
(average monthly prices, in USD)

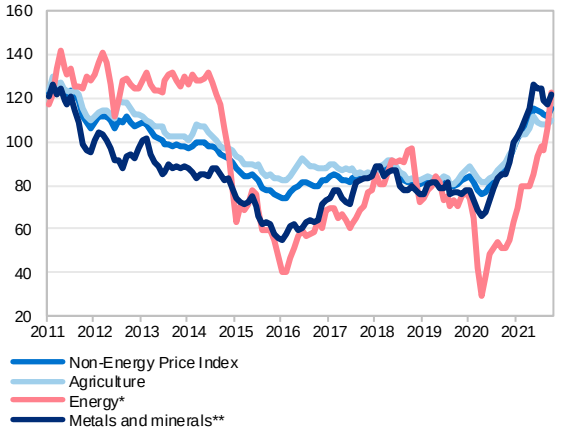


Source: World Bank.

output in China entailed a smaller demand for iron ore as the core raw material. **Copper price** also declined in Q3 (by 3.2%) on account of a rise in inventories in London Metal Exchange, though still remaining close to the record level from May. Conversely, the limited aluminium production in China pushed its price 15.9% up in Q3, while the prices of nickel, tin, zinc and lead grew at a slower pace. Compared to Q2, October saw the majority of metal and mineral prices going up, except nickel and iron ore, whose price turned downward due to a significant contraction of China's steel output.

After a mild adjustment in July, **global food prices,** measured by the FAO index, continued up in August and September, rising by 4.0% q-o-q (in real terms). The sharpest rise in Q3 was recorded for sugar prices (12.5%), reflecting unfavourable weather conditions in Brazil, the world's major sugar exporter. Higher coal prices in Q3 (6.9%) were driven by an increase in palm oil prices, which due to the lower output and workforce shortage in Malesia reached their ten-year high. The prices of rapeseed also went considerably up, while those of soybean oil decreased. A strong import demand of China for mutton and beef, and increased import of poultry in East Asia and Middle East triggered a rise in meat prices in Q3, amounting to 4.4%. At the same time, **global cereal prices**, which are particularly important for Serbia, gained 2.4%, primarily due to the wheat price rising over weaker harvest forecasts in major exporters, while a sharper rise in corn prices due to the delays in US ports was avoided thanks to the improved harvest conditions in the USA and Ukraine. As opposed to that, dairy product prices edged down 1.7% in Q3 – primarily the prices of skimmed milk powder, which was less traded in the Northern hemisphere during summer months.

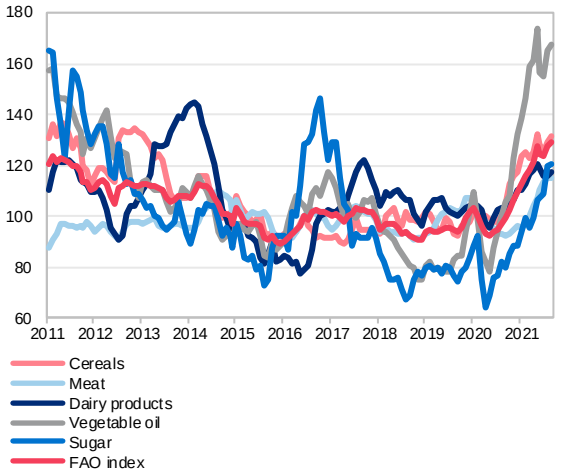
Chart IV.6.19 **World Primary Commodity Price Index**
(2010 = 100)



Source: World Bank.

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

Chart IV.6.20 **World Food Price Index**
(in real terms, 2014−2016 = 100)



Source: UN FAO.

V Projection

The NBS revised up its GDP projection for 2021 from 6.5% to the range of 6.5% to 7%, taking into account more favourable trends in all three quarters. In 2022 and in the medium term, we expect GDP growth to range between 4% and 5%. A more favourable medium-term outlook will be supported by preserved investment and consumer confidence, higher production capacities and more jobs, as well as by the announced implementation of large projects mostly in the area of road, railway and utility infrastructure. The risks to the projection remain associated with the path of the pandemic and its impact on economic activity and inflation globally, including movements in commodity and financial markets. Overall, the risks to the projection are judged to be symmetric, with those from the international environment mildly tilted to the downside and those from the domestic environment slightly skewed to the upside.

Under the central November projection, inflation is expected to hover temporarily above the upper bound of the target tolerance band (3±1.5%) until the middle of the next year when, as a result of the anticipated slowdown from Q2 2022, it will first retreat within the target tolerance band and then settle in its lower half until the end of 2022, where it will stay in 2023 as well. Such inflation movements reflect elevated global prices of oil and primary agricultural commodities, disruptions in global supply chains, much higher transport costs and the base effect for vegetable prices. As the impact of these transitory factors weakens and wears off altogether, y-o-y inflation will fall to its pre-pandemic levels in H2 2022. Uncertainties surrounding the inflation projection are still mostly associated with the international environment, most notably the pace of global economic recovery and the duration of disruptions in global supply chains, movement in world prices of energy and primary agricultural commodities, and the normalisation of monetary policies of leading central banks. In part, the risks to the projection are also associated with the domestic market – the agricultural season, speed of recovery of demand and movement in administered prices. Overall, the risks to the inflation projection are judged to be slightly skewed to the upside.

Initial conditions and assumptions

Though **global economic growth** continued in Q3, its dynamics slackened as revealed by the available monthly indicators of economic activity. This was mostly due to a worsening epidemiological situation amid new virus strains, and disruptions in global supply chains. The IMF revised its global growth forecast for this year down relative to July to 5.9% (6% in the previous projection), while keeping it at 4.9% for the next year. Though this is only a slight revision, reflecting stronger outlook among some net-primary commodity exporting countries, the risks associated with the pace of global economic recovery and the duration of the pandemic have become more pronounced. The divergence between advanced and developing economies has widened further in favour of advanced economies amid uneven vaccine availability and rollout.

As evident from the available indicators for the **euro area,** our most important trade partner, the euro area was in the expansion phase in both Q3 and early Q4, thanks primarily to service sector activity, while global supply chain disruptions and shortages of some inputs in production, mostly in the automotive industry, dampened activity growth in the production sector. In October, the IMF revised up its euro area growth forecast relative to July (by 0.4 pp to 5%), mostly because growth in Q2 outstripped expectations amid advances in the vaccination process and the easing of epidemiological measures, as well as continued

Table V.0.1 **Key projection assumptions**

	2021		2022		2023	
External assumptions	Aug	Nov	Aug	Nov	Aug	Nov
Euro area GDP growth	4.6%	5.1%	4.4%	4.4%	2.0%	1.9%
Euro area inflation (average)	1.9%	2.3%	1.5%	2.0%	1.4%	1.5%
3M EURIBOR (December)	-0.5%	-0.5%	-0.5%	-0.3%	-0.4%	0.0%
International prices of primary agricult. commodities (Q4 to Q4)*	21.7%	23.5%	-10.9%	-8.6%	-6.5%	-5.8%
Brent oil price per barrel (December, USD)	71	85	66	76	63	71
Internal assumptions						
Administered prices (Dec. to Dec.)	5.4%	5.0%	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.

favourable financial conditions and funding under the Next Generation EU Fund programme. Euro area is expected to grow by 4.3% next year, the same as in July. In October, Consensus Forecasts came out with a similar estimate, expecting euro area growth to measure 5.1% and 4.4% this and the next year, respectively, which are the assumptions we used in our current projection. Growth for this year has been revised up for leading economies as well, other than Germany, which has been particularly affected by bottlenecks and shortages of some inputs in production given its high share of industry in GDP. Consensus Forecasts expects German growth to measure 2.8% this year instead of the 3.4% projected three months ago. Relative to July, Italy's growth forecast was revised up the most (to 5.9%) thanks to rising consumer and investment confidence amid advances in vaccination and a more favourable public finance outlook.

Relative to the previous *Report*, Consensus Forecasts also revised up its 2021 and 2022 GDP growth projections for **most countries of Central and South East Europe**. Going forward, the speed of recovery of this region will depend primarily on the pace of vaccination and its efficiency in suppressing the spread of new virus strains, the speed of recovery of the euro area, which is the most important trade partner of this group of countries, possibility to use EU funds, and monetary policy measures taken in the face of mounting inflationary pressures.

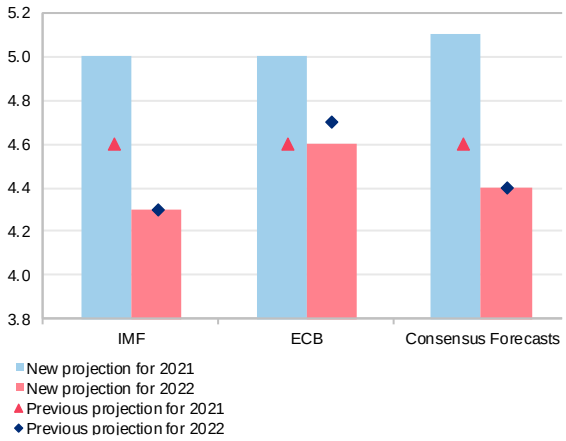
Over the past few months, almost all countries revised up their **inflation** projections (except China which revised its projection down). Supply disruptions amid renewed spread of the virus and adverse weather conditions in many countries caused shortages of key inputs in production. Problems in logistics and labour force shortages continue to place pressure on transport prices, despite their constant growth since mid-2020. Together with elevated demand and the leap in global prices of primary commodities, this induced a notable rise in consumer prices in most countries. Thus, in September, consumer price growth in the USA and the euro area reached its peak since 2007 and 2009, and in Germany – since 1993. Inflation growth is, however, mostly assessed as temporary and price pressures are expected to subside next year, with inflation likely to return to pre-pandemic levels by mid-2022 in most countries, including both advanced and developing economies.[19] The IMF estimates that most countries have not yet seen a substantial widespread price increase that would put pressure on wage growth. Great uncertainty surrounds inflation prospects, primarily stemming from the uncertain path of the pandemic, the duration of supply disruptions and how inflation expectations may evolve in this environment. As a result, the risks are judged to be tilted to the upside.

Table V.0.2 **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	5.9	4.9	4.9
Euro area	4.6	5.0	4.3	4.3
Germany	3.6	3.1	4.1	4.6
Italy	4.9	5.8	4.2	4.2
USA	7.0	6.0	4.9	5.2
Russia	4.4	4.7	3.1	2.9
China	8.1	8.0	5.7	5.6

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

Chart V.0.1 **Revisions of euro area GDP growth projections for 2021 and 2022**
(in %)



Sources: IMF, ECB and Consensus Forecasts.

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

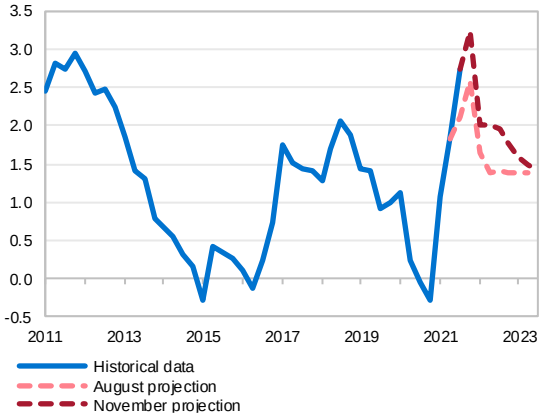
	July 2021		October 2021	
	2021	2022	2021	2022
Poland	4.8	5.1	5.2	5.1
Czech Republic	3.7	4.7	3.3	4.8
Hungary	6.3	5.0	7.1	5.2
Romania	6.9	4.6	7.4	4.7
Slovakia	4.3	4.8	4.2	4.6
Slovenia	4.7	4.5	5.5	4.2
Croatia	6.6	4.5	7.5	4.5
Bulgaria	4.1	3.8	4.2	3.8
Albania	5.1	4.1	6.7	4.1
Bosnia and Herzegovina	3.3	4.0	4.8	4.2
North Macedonia	3.8	3.8	4.0	4.1

Source: Consensus Forecasts.

[19] IMF WEO, October 2021.

Inflation in the **euro area** is again expected to be somewhat higher than three months ago: 2.3% on average in 2021. As the effect of temporary factors wears off early next year, inflation is likely to fall to 2.0% on average in 2022 and further down to 1.5% in 2023. The temporary leap in inflation was due primarily to three factors: energy prices, particularly the sharp upturn in oil, gas and electricity prices; surging demand which, after the opening of economies, exceeded supply; and the low base effect due to temporary VAT reduction in Germany in H2 2020. As the effects of these factors are moderated or drop out of the calculation of y-o-y inflation in 2022, inflation will first decrease in H1 2022 and rise gradually thereafter.

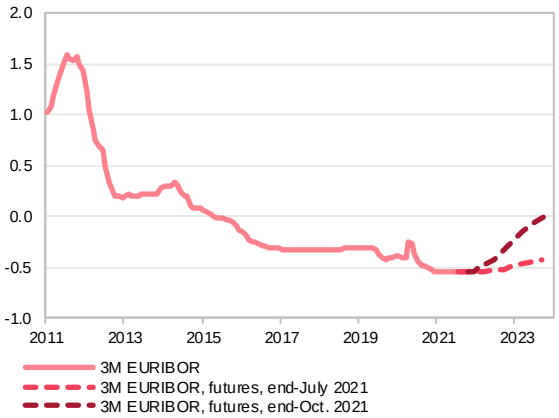
Chart V.0.2 **Assumption for euro area inflation**
(y-o-y growth, in %)



Source: NBS calculation based on projections of relevant institutions.

Over the past few months, a number of central banks, mostly in emerging economies, responded to elevated inflation by raising their key policy rates. Advanced economies' central banks mostly responded by announcing a downsizing of their quantitative easing programmes. In early November, the **Fed** thus decided to begin reducing, late in the month, the volume of its asset purchases under the QE programme set to be wound down in mid-2022. The **ECB,** on the other hand, continues to stress the temporary character of further inflation growth this year, while at the same time noting that supply chain bottlenecks will probably continue into next year as well and that inflation will take longer to decline than previously expected. The ECB is confident that inflation will fall below the 2% target by 2023. For this reason, in its October meeting the ECB did not support market expectations of a rise in its main policy rates next year to contain mounting inflationary pressures. As planned, the Pandemic Emergency Purchase Programme (PEPP) will be maintained with a moderately lower pace until March 2022. Consistent with futures, our projection assumes that the three-month EURIBOR will be higher but remain negative for most of the projection horizon, and that it will turn positive towards the end of 2023.

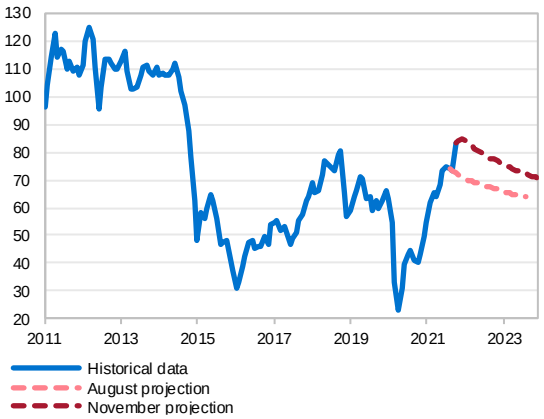
Chart V.0.3 **Expected 3M EURIBOR**
(p.a., in %)



Source: Bloomberg.

Global oil prices saw a renewed spike from September as oil demand swelled and oil output was slower than expected. The surge in natural gas prices in Europe and Asia triggered still higher demand for oil as a substitute for gas in electricity and heating production. Oil supply remains significantly constrained by the decisions of OPEC+ countries which confirmed, in early October, their intention to stick to plans on raising output agreed when pressures on global oil price growth were much weaker. The global oil price is therefore expected to remain relatively high in the coming months as well, and to start falling in H2 2022 as constraints on the supply side are eased. Our assumptions regarding the global oil price have therefore been revised up relative to three months ago. Consistent with oil futures, our new projection assumes the global oil price to measure USD 85 per barrel in December 2021, USD 76 per barrel in December 2022 and USD 71 per barrel in 2023. This is consistent with the projections of leading

Chart V.0.4 **Assumption for Brent oil prices**
(USD/barrel)



Source: Bloomberg.

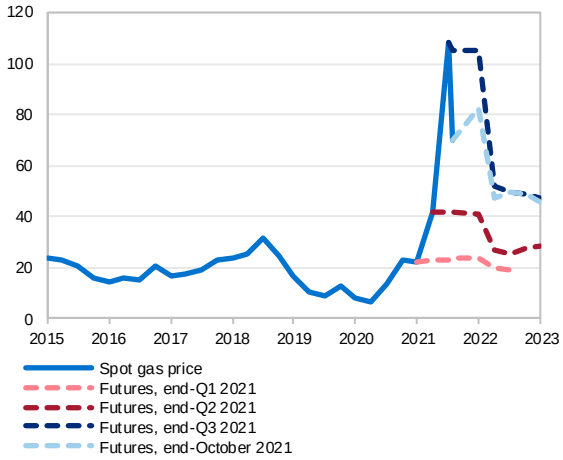
international institutions which do not expect the global oil price to rise much above its current level.

Global **natural gas prices** increased notably this year to record-high levels under the impact of numerous supply- and demand-side factors. Demand for gas expanded since late last year under the impact of economic recovery from the pandemic, adverse weather conditions during the previous winter and summer which at the same time reduced the production of renewable energy, transition to less-carbon intensive production, as well as problems with Russian gas imports into the rest of Europe amid disputes over the new pipeline. The effects of the so-called energy crisis affected Europe in particular, as it is highly import-dependent on gas. Natural gas inventories have been depleted to a minimum, which is why its price spiked by more than 600% relative to 2020. This also spurred a hefty increase in **electricity** prices, but also in the price of **coal** as an alternative source of energy, though greater use of coal is limited by decarbonisation policies. As demand for natural gas for heating purposes is expected to spike further in winter months, analysts do not expect gas prices to subside before spring. This will most likely result in lower production of construction materials, chemical and pharmaceutical products, base metals and other energy-intensive areas of manufacturing in Q4. Energy consumption caps in China have already led to reduced output of steel and aluminium, slashing their supply in the global market and placing pressure on further growth in their prices.

Thanks to the underground storage facility in Banatski Dvor and the launch of the TurkStream pipeline, Serbia has improved its natural gas supply to the domestic market. Based on contracts signed earlier with Russia which are in effect until the end of this year, Serbia is paying a much lower natural gas price compared to market prices in the rest of Europe, so no major disruptions to the domestic economy are expected. Though it is anticipated to rise from next year, the gas price in Serbia will probably remain lower than in other countries. As the decision on raising the electricity price for households is taken by the Government, while the price for corporates is market-determined, the global price increase will reflect directly on production costs in the domestic economy.

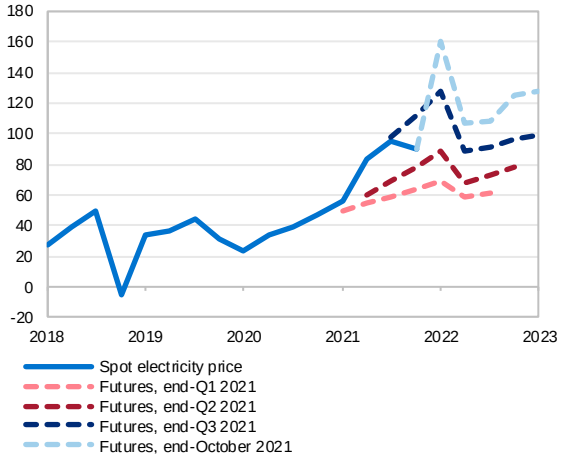
Our projection assumes that, going forward, global prices of natural gas and electricity will move in line with futures. Consistent with futures, natural gas prices are expected to decline next year, though they will probably remain higher than expected three months ago until the end of the projection horizon. It should also be noted the natural gas price in Serbia will probably be lower than the stock market price in the future period as well, and that it will partly be determined also on the basis of movement in global oil prices, as was the case so far.

Chart V.0.5 **Benchmark natural gas price for Europe, Dutch TTF hub**
(EUR/MWh)



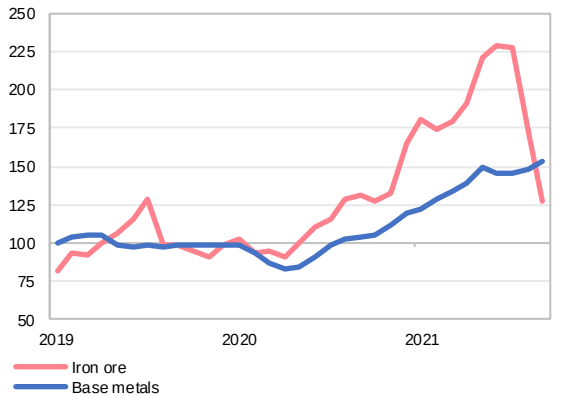
Source: Reuters.

Chart V.0.6 **Benchmark electricity price for Europe, German power baseload**
(EUR/MWh)



Source. Reuters.

Chart V.0.7 **Iron ore and base metal prices in the global market**
(index points, 2019 = 100)



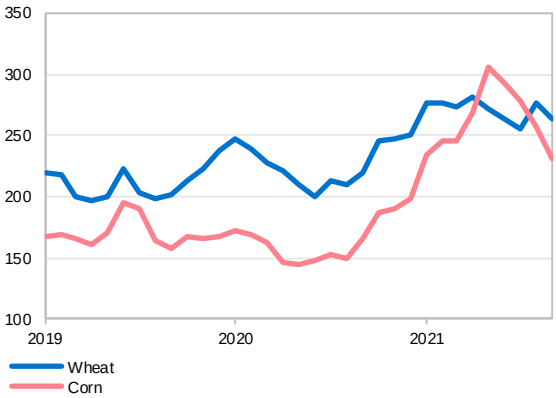
Source: *Commodity Markets Outlook*, World Bank, October 2021.

Global prices of base metals continued up, guided by the global economic rebound in an environment where supply was burdened by elevated gas and coal prices, and supply shortages and disruptions. Prices of aluminium and zinc increased amid higher energy prices, prompting some metal manufacturers to downsize or even suspend their production. Conversely, after reaching record-high levels in July, **the iron ore price** fell sharply reflecting downsized steel production in China to meet targets set for this year. As global growth stabilizes and supply disruptions are removed, metal prices are expected to decrease slightly in 2022, after rising by probably close to 50% this year.

Though global prices of **primary agricultural commodities** levelled off over the past months, they remained at their highest level since 2013. After their anticipated growth by more than 20% this year, prices of primary agricultural commodities are projected to decline moderately next year as supply conditions improve and energy prices stabilize. Our projection of these prices relies on futures data from global stock exchanges. Consistent with these data, we revised up the assumption of growth in these prices for 2021 (to 23.5% y-o-y in Q4 compared with 21.7% in our prior projection) and for 2022 (to -8.6% y-o-y in Q4 compared with -10.9%). Consistent with this, we expect prices of primary agricultural commodities in the domestic market, which mirror movements in their global counterparts, to display similar dynamics.

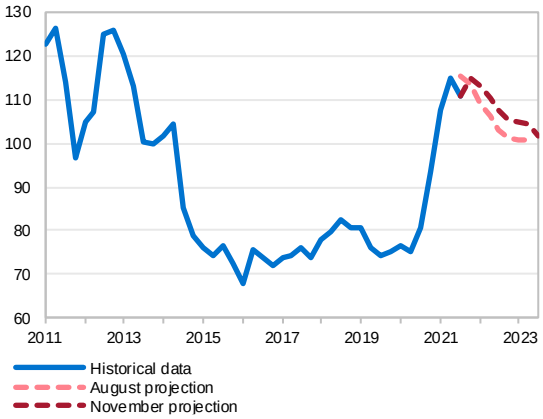
When it comes to factors from the domestic environment, **fiscal policy** continued to support domestic demand in Q3 as the third package of fiscal assistance measures was implemented and the execution of capital expenditures gathered speed. As revenues increased more than planned on the back of faster than expected economic growth and positive trends in the labour market, the fiscal deficit was lower than projected since the start of the year. This created further scope for higher government capital expenditure for projects in the area of transport infrastructure and healthcare, which is the key reason behind the correction of expenditures in the supplementary budget which projected a deficit of 4.9% of GDP at republic level and at general government level. A lower than planned deficit will also support a reduced share of public debt, projected to measure 58.2% of GDP at year-end, i.e. below the Maastricht criterion. Though a substantial amount of funds will continue to be directed into infrastructure projects (with a roughly 7% share of capital expenditures in GDP per annum), the fiscal deficit is projected to subside further in the medium term and turn into a primary surplus, ensuring a return of public debt to a downward trajectory. This should also support a favourable **credit rating** assessment and the attainment of investment-grade level expected in the projection horizon, as well as a lower **country risk premium.**

Chart V.0.8 **Wheat and corn prices in the global market**
(US$/mt)



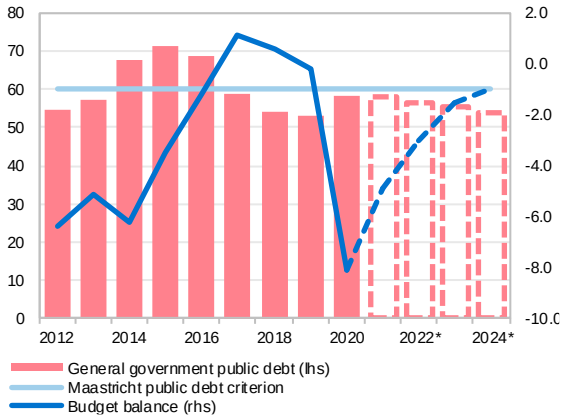
Source: *Commodity Price Data*, World Bank.

Chart V.0.9 **Assumption for international prices of primary agricultural commodities**
(Q4 2013 = 100)



Sources: CBOT, Euronext and NBS calculation.

Chart V.0.10 **Budget balance and general government public debt**
(in % of GDP)



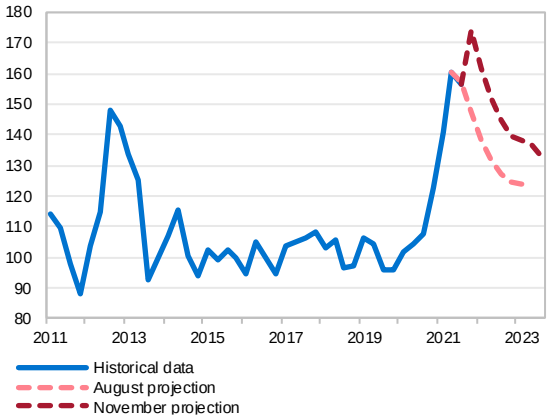
Source: Ministry of Finance.

* Projection from the revised Fiscal Strategy for 2022 with Projections for 2023 and 2024.

Thanks to the monetary and fiscal stimuli undertaken during the pandemic, **the labour market** avoided a sharper fallout. Since early 2021, it was characterised by maintained growth in wages and formal employment, which is expected in the coming period as well. In our projection, we assumed public sector wage growth next year to be consistent with the revised Fiscal Strategy for 2022 with Projections for 2023 and 2024, while wage growth in the private sector will be faster, sustained also by a higher minimum wage (RSD 201.22 per hour), which will result in 10% higher total wages. Similar dynamics are expected in the medium term as well.

Data released by the SORS on this year's crops of wheat and industrial plants, which account for close to 40% of total **agricultural production,** indicate that wheat output was stronger and autumn cultures' output weaker than last year. For this reason, we kept our assumption of a roughly 5% lower agricultural production this year. Though data on overall production of fruit and vegetables are still not available, we assume that it decreased as well, given the drought in summer months and the fact that these prices did not decline in Q3 as usual for the season. This is a slightly weaker outturn relative to our expectations based on the assumption of an average agricultural season. We kept the same assumption for the coming years as well, which ought to result in slight agriculture activity growth in 2022.

Chart V.0.11 **Assumption for domestic prices of primary agricultural commodities***
(Q4 2013 = 100)

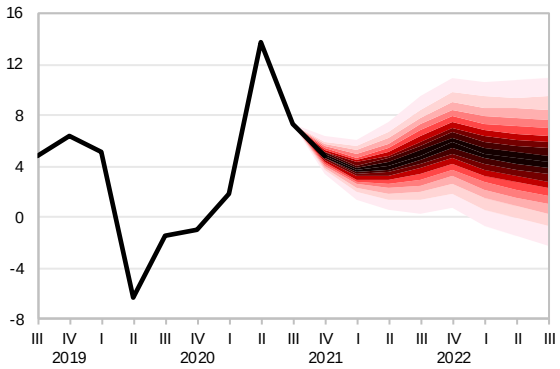


Sources: Commodity Exchange Novi Sad, CBOT, Euronext and NBS calculation.
* Measured by the composite index of wheat, corn and soybean prices.

GDP projection

According to the initial SORS estimate, GDP grew by 7.4% y-o-y in Q3, which is higher than the NBS's projection from the August *Report*. Somewhat lower than expected growth in manufacturing in Q3, amid continuing disruptions in global supply chains and a further increase in global prices of primary commodities, was more than offset by the faster than anticipated rise in activity in mining, service sector and construction. Economic activity growth, which outstripped our expectations in all three quarters of the year, was supported by the preserved consumer and investor confidence, as well as production capacities and jobs, along with maintained favourable terms of financing and accelerated execution of government capital expenditure in Q3.

Chart V.0.12 **GDP growth projection**
(y-o-y rates, in %)



Source: NBS.

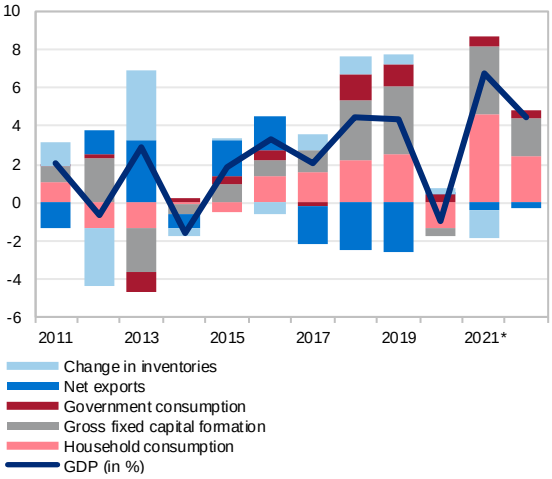
In view of the above trends and our relatively conservative estimate that, due to problems in global production and transport chains, worsened epidemiological situation during autumn and a tightening of containment measures, quarterly growth in Q4 would measure only 0.3% s-a, **according to our new estimate, GDP growth this year should measure between 6.5% and 7%.** When it comes to the projection for Q4, it should also be noted that the domestic economy has to a major degree adapted to changed conditions of doing business and that, during the previous waves of the pandemic, it recorded better than anticipated results. In 2022, and in the medium

term, we expect GDP growth to range between 4% and 5%. The more favourable medium-term outlook is also supported by the expected implementation of new planned projects, primarily in the area of road, railway and utility infrastructure. These include over forty identified projects planned to be implemented in the next ten years, the total value of which is estimated at around EUR 25 bn (gross added value of around EUR 5 bn). This should result in a roughly 0.5 pp higher real GDP growth[20] at annual level.

The largest contribution to GDP growth this year will come from private consumption (4.6 pp), which was hit the hardest by the pandemic last year. Consumption growth was supported primarily by continued wage and employment growth, favourable terms of taking new and repaying existing loans, direct fiscal stimuli and reduced propensity to save amid preserved consumer confidence. A positive contribution of around 2.5 pp next year (which is also the medium-term estimate) will result from the anticipated continuation in wage and employment growth. Pensions will increase (by 5.5%) due to the application of the so-called Swiss formula and represent another important source for consumption. In February, pensioners will also receive a one-off payment of RSD 20 thousand, while continuation of other direct fiscal stimuli has not been planned for now given the anticipated improvement of the epidemiological situation. We expect that a better epidemiological situation will also lead to reduced propensity for so-called precautionary savings, spurring consumption growth.

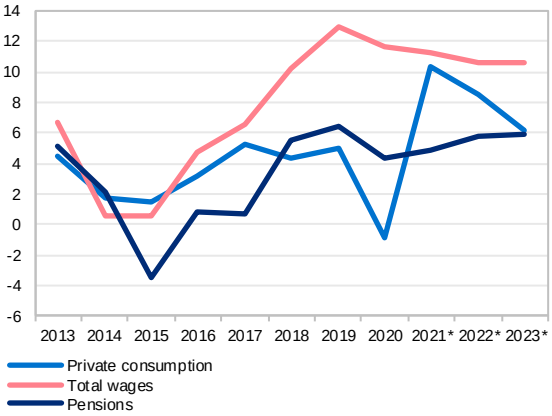
A notable positive contribution to GDP growth this year will come from fixed investment (3.6 pp), which decreased much less than consumption last year. Private investment growth is supported by the preserved macroeconomic stability and continued relatively high FDI inflow projected at around EUR 3.4 bn this year. This is more than we expected in August, though we noted at the time that the projection will most probably be outstripped. FDI remained diversified by project and mostly directed into tradable sectors. Important factors behind investment growth include preserved investment confidence, diminished investor risk aversion amid progress in vaccine rollout and the opening of the global economy, as well as the rise in disposable income as a result of fiscal stimuli and favourable terms of financing supported by the NBS's measures. **Government investment** increased further this year under the supplementary budget (to 7.8% of GDP from 7% of GDP), as did its contribution to GDP. Given the announced new infrastructure projects, anticipated continuation of relatively strong FDI inflows and the share of government capital expenditures in GDP of around 7%, we expect the contribution of fixed investment to economic growth to stay relatively high both next year and in the medium term (close to 2 pp on

Chart V.0.13 **Contributions to real GDP growth**
(in pp)



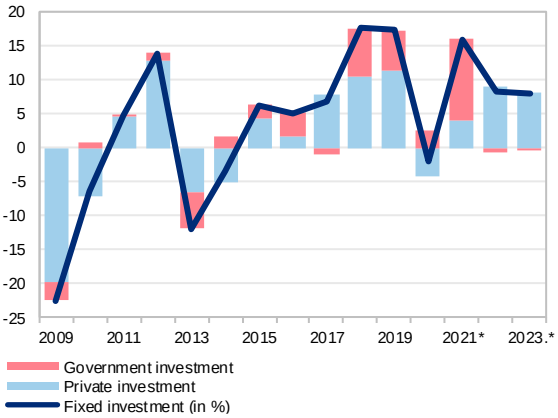
Sources: SORS and NBS.
* NBS estimate.

Chart V.0.14 **Rate of growth in private consumption and its sources**
(y-o-y rates , in %)



Sources: SORS and NBS calculation.
* NBS estimate

Chart V.0.15 **Fixed investment**
(y-o-y growth, in pp)



Sources: SORS and NBS calculation.
* NBS estimate.

[20] For more details, see Text box 2, *Inflation Report* – August 2021.

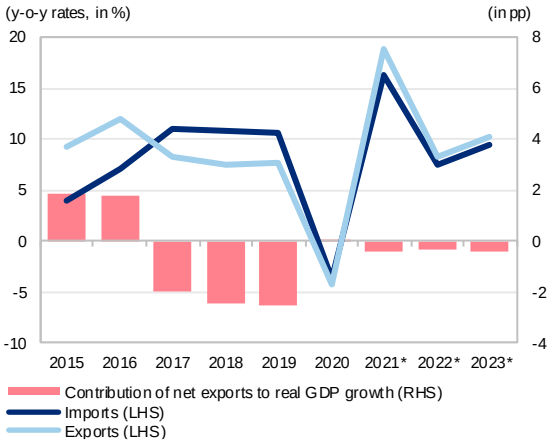
average per annum), while its share in GDP is anticipated to exceed 25% in 2023 and continue up.

A positive contribution to GDP in this and the coming years is also expected to come from **government consumption** (0.5 pp) amid substantial outlays for healthcare (vaccines, health workers' salaries and purchases of medical supplies).

In our assessment, a negative contribution in this and the coming years will come from a partial depletion of **inventories** accumulated over the previous years. We expect inventories of agricultural products to decrease most in 2021, given this year's lower volume of production relative to 2020 and the fact that export of agricultural products is supported by their higher global prices. Inventories of finished industrial products will also decrease but to a smaller degree, due to relatively high global demand and increased production costs amid higher prices of raw materials, including energy costs.

Growth in export supply thanks to investment from the prior period, normalisation of global economic flows and the recovery in external demand will support **double-digit growth in export of goods and services this year.** This will also be sustained by a further improvement in the growth outlook of our major foreign trade partners relative to expectations from the preceding report. As of Q2, import of equipment and intermediate goods gathered notable speed as the investment cycle continued. Consumer goods import also picked up, though to a smaller degree, in response to a rebound in domestic demand. As a result, we expect the contribution of **net export** to GDP to be negative this year (-0.4 pp). It will stay slightly negative in the coming years as well amid expected accelerated implementation of infrastructure projects and the resulting higher import of equipment.

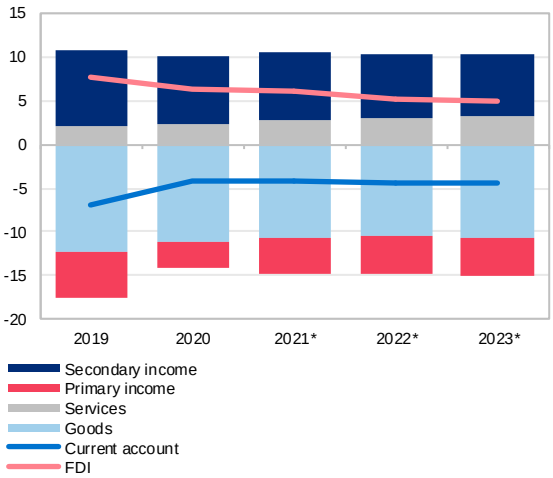
Chart V.0.16 **Real export and import growth**



Sources: SORS and NBS.
* NBS estimate.

It is our estimate that the **share of the current account deficit in GDP this year will be even lower than in 2020 and measure around 4%.** In addition to the lower deficit on trade in goods and services, this will also be supported by a higher secondary income surplus, primarily on account of a recovery in foreign remittances and higher deliveries of goods and services to Kosovo and Metohija. In the medium term, the current account deficit will range between 4% and 5% of GDP, while remaining fully covered by net FDI inflows as in the past six years. The external position will improve further thanks to expanding export capacities of the domestic economy and the anticipated global economic growth, while planned large investments in infrastructure will spur growth in equipment import.

Chart V.0.17 **Current account and FDI projection**
(in % of GDP)

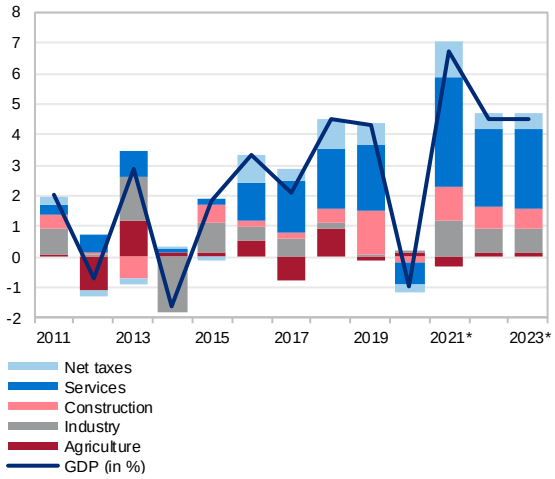


Source: NBS.
* NBS projection.

On the **production side,** a positive contribution to GDP growth this year is expected to come from all sectors, other than agriculture which most probably declined by

around 5% due to the drought. Stepped-up growth in activity in service sectors, which is higher than in the previous projection and particularly notable in sectors that were hit the hardest by the pandemic, will be supported by rising consumption amid higher disposable income due to all key sources, primarily the preserved labour market. A positive contribution will also come from manufacturing, though it will be somewhat lower than previously expected due to limitations on the supply side and elevated production costs. Manufacturing industry growth will be propped up by the activation of new and expansion of existing capacities on the supply side, and by the economic growth rebound of our main foreign trade partners on the demand side. Activity growth in the mining sector is faster than anticipated, primarily due to rising exploitation of copper ore. A similar contribution as that of industry is expected to come from construction, supported by higher government spending on infrastructure projects and favourable trends in the real estate market. As of next year, a positive contribution is expected to come from all sectors, but primarily from service sectors due to their high share in GDP. The announced implementation of large infrastructure projects will provide an additional contribution to construction growth, and indirectly also to industry, transport, trade, catering, and other activities.

Chart V.0.18 **Contributions to real GDP growth, production side**
(in pp)



Sources: SORS and NBS.
* NBS estimate.

Overall, the risks to the GDP projection are judged to be symmetric.

The risks to the projection associated with the **international environment are judged to be skewed to the downside.** The IMF estimates that the **global economic recovery** remains uneven across sectors and countries and that its outlook greatly depends on the pace of vaccination. The risks are estimated to be more pronounced than three months ago and tilted to the downside. **Euro area's** growth outlook has improved, but a negative impact could come primarily from problems with natural gas experienced by euro area countries at the moment. Coupled with the effects of continuing bottlenecks in production due to shortages of some raw materials, this could additionally slow recovery and lead to lower demand for production inputs from Serbia, which would partly be offset by higher demand for finished products. Continued disruptions in global supply chains in the next year would pose a downside risk for our manufacturing industry and exports, as normalisation in most areas is expected.

If disruptions in global supply chains and the energy crisis are extended, inflationary pressures could become more durable. This could lead to a **tightening of monetary policies worldwide** sooner than expected, which would negatively affect global financial conditions and capital flows to emerging economies, including Serbia. On the other hand, slower global economic growth would mean that the Fed and the ECB

ought to continue to pursue a highly accommodative monetary policy going forward as well. Liquidity in the international financial market would in that case remain high for a longer period of time, which would reflect positively on capital flows to emerging economies, including Serbia.

Uncertainty surrounding the projection still largely stems from **global prices of primary commodities,** which are affected by numerous supply- and demand-side factors. Serbia is a net importer of oil and natural gas and exporter of metal and cereals. Therefore, higher global prices of primary commodities would lead to

Table V.0.4. **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	The spread of new virus strains and the worsening of the epidemiological situation dampen the global growth outlook, while speedier vaccine rollout would work in the opposite direction. Temporary global production chain disruptions and the resulting higher production and distribution costs 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.	↓
Gas and electricity prices in the global market (Serbia is a net importer of gas and a net exporter of electricity)	A fall/rise in the global price of gas and electricity would decrease/increase production costs, leading to lower/higher production volumes.	↓
Capital flows, relations of main currencies in the international financial market, monetary policies of leading central banks	Slower global economic growth would mean that the Fed and the ECB should continue to pursue an extremely expansionary monetary policy going forward as well. Conversely, if global supply chain disruptions and the energy crisis are extended, global inflationary pressures could become more durable, leading to sooner than anticipated tightening of the Fed's and the ECB's monetary policies.	↕
Prices of primary commodities: – crude oil (Serbia is a net importer) – cereals (Serbia is a net exporter) – base metals (Serbia is a net exporter)	A rise/fall in oil prices 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.	↑
Higher fiscal support (tax facilities/increased outlays)	Stronger fiscal support to corporates and households (either through higher tax facilities or increased outlays), together with a preserved labour market, would lead to higher disposable income and, by extension, investment and consumption. Capital expenditures growth in particular could be higher than anticipated.	↑
Agricultural season	Higher/lower than expected growth in agricultural production contributes to a rise/fall in exports and manufacturing.	↕
Bank losses in respect of citizens' lawsuits over the charging of loan processing fees	Losses which banks may incur as a result of lost lawsuits filed by citizens over the charging of loan processing fees would result in a tightening of credit standards and higher lending rates, inducing a fall in lending activity and domestic demand. Credit rating could also be lowered on this account, affecting negatively total costs of financing for corporates, households and the government.	↓

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.

higher production costs and lower disposable income for investment on the one hand, and higher export of agricultural products and metals on the other hand. We judge the risks on this account to be equally pronounced in both directions. Lower global growth could induce a fall in prices of primary commodities, while unfavourable meteorological conditions would result in reduced supply of these products and lead to further price growth.

In our assessment, **the risks from the domestic environment are** mildly **tilted to the upside,** primarily as FDI inflows could be higher than anticipated thanks to the favourable macroeconomic outlook of the country, as was the case in prior years. Since higher than expected FDI growth would support a further expansion of production capacities, manufacturing industry output and export could record stronger growth on that account.

Though the need for fiscal stimuli diminishes in the conditions of full recovery from the pandemic, **if revenues,** which in our view have been quite conservatively projected for the coming period, **performed better than expected,** this would create additional scope for domestic demand growth. This refers primarily to government investment, given the need for further infrastructure development and the implementation of green economy projects.

Another risk to the projection is **agricultural production,** which we assumed to be average next year. Given their great dependence on meteorological conditions, shifts in agricultural production and exports are possible in either direction.

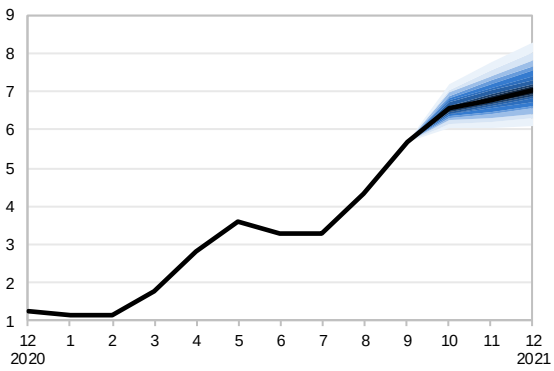
Inflation projection

Short-term inflation projection

Under the central projection, headline inflation will hover above the upper bound of the target tolerance band in Q4 and average around 6.5%, while core inflation will remain stable until the end of the year and continue moving around its current level (around 2.6%). The anticipated increase in headline inflation will continue to be led by the rising contribution of petroleum product prices and fruit and vegetable prices.

In the short term, the risks to the projection are associated with unprocessed food prices and movement in global prices of oil and other primary commodities.

Chart V.0.19 **Short-term inflation projection**
(y-o-y rates, in %)



Source: NBS.

Medium-term inflation projection

Under the central November projection, we expect y-o-y inflation to hover temporarily above the upper bound of the target tolerance band (3±1.5%) until the middle

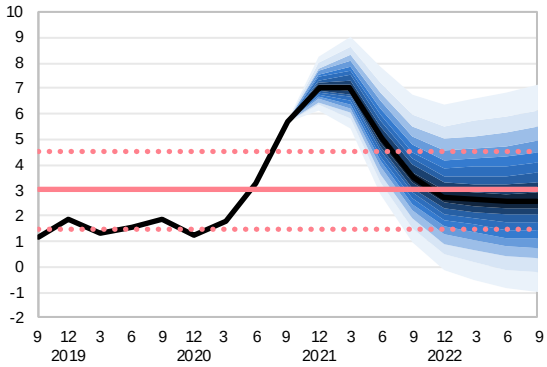
of the next year when, as a result of the anticipated slowdown from Q2 2022, it will first retreat within the target tolerance band and then settle in its lower half until the end of 2022, where it will stay in 2023 as well.

While the key factors behind inflation growth continue to be mostly temporary in character, their effect has proved to be more inflationary than anticipated in the prior projection.[21] Firstly, the inflation recorded in Q3 was higher than expected due to the seasonally unusual rise in unprocessed food prices, primarily vegetable prices. For this reason, around two-thirds of the departure relative to the previous projection for this year referred to unprocessed food prices. The rest of the departure referred to processed food and, to a smaller extent, petroleum products and non-food products and services. The departure of the current relative to the projection three months ago for the next year resulted primarily from higher current and assumed prices of oil and other energy in the global market. In addition, assumed global prices of primary agricultural commodities are also higher, as are other costs in food production, most notably the price of agricultural fertilisers. To a smaller extent, additional pressure on prices is exerted by persisting global supply disruptions and a lack of logistics capacities, primarily in major world ports.

However, though a range of factors have exerted a more inflationary effect than three months ago, they are mostly temporary and their impact ought to wane gradually and disappear until end-2022.

By individual component, anticipated inflation growth in the coming months will be largely affected by higher **food prices (excluding fruit and vegetables).** After extremely low food inflation early this year, costs in food production saw a major upturn. Elevated global prices of oil and primary agricultural commodities (corn, wheat, soybean) pushed up food production costs at home. Surging global prices of natural gas and coal indirectly induced a rise in prices of mineral fertilisers. According to our estimate, the indicator of cost-push pressures in food production – the real marginal costs gap (measured by deviation from trend of the ratio of input prices to prices of final food products) – is at its highest level since 2013 and has made a key contribution to projected growth in food product prices. Notable departure of this indicator from its neutral level customarily signals its expected decline in the future and a lessening of cost-push pressures on food prices. This is why we expect quarterly growth in food prices (excluding fruit and vegetables) to accelerate in Q4 this year and then slow from next year. Y-o-y, the contribution of food prices to inflation should be the highest in the first two quarters of 2022 and then decline until the end of the projection horizon. In the medium

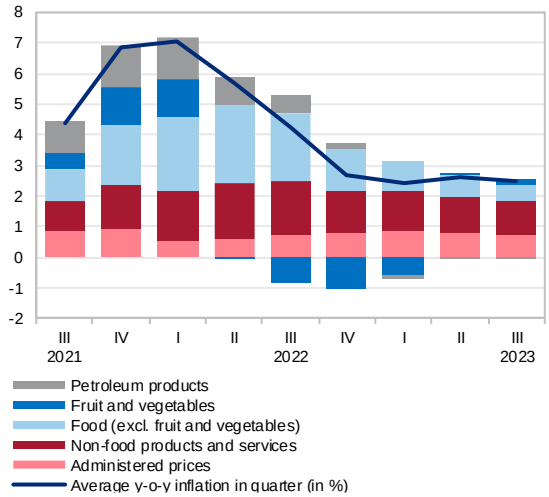
Chart V.0.20 **Inflation projection**
(y-o-y rates, in %)



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%.

Chart V.0.21 **Contributions to y-o-y inflation by component**
(in pp)



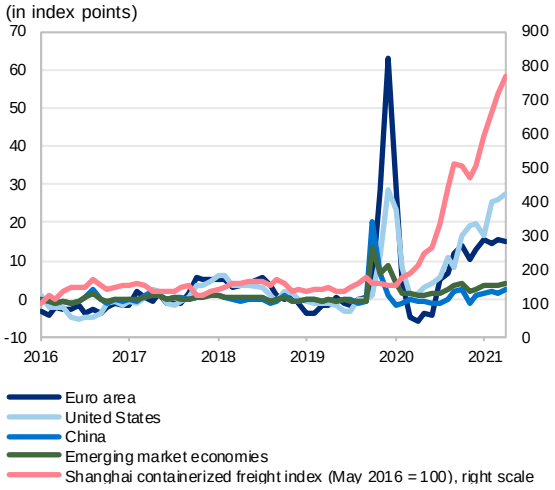
Source: NBS.

[21] For more details, see Text box 1, p. 16.

term, we expect food price growth to be moderate and determined primarily by a gradual increase in demand.

Fruit and vegetable prices have greatly deviated from their seasonally usual movement over the past months. In addition to cost-push pressures, fruit and vegetable prices were also affected by drought and high summer temperatures, which is why they failed to decrease as usual for the season. This led to a further rise in y-o-y inflation. We expect prices of fruit and vegetables to remain relatively high in the next two quarters and provide a substantial positive contribution to temporary y-o-y inflation growth. A contribution will also come from the base effect for vegetable prices which were either declining in the same period last year (December 2020) or their growth was smaller than usual for the season (January and February 2021). Conversely, in H2 next year fruit and vegetable prices ought to provide a negative contribution, thereby inducing a slowdown in y-o-y inflation and supporting its movement within the lower part of the target tolerance band.

Chart V.0.22 **Supply chain disruptions**
(in index points)

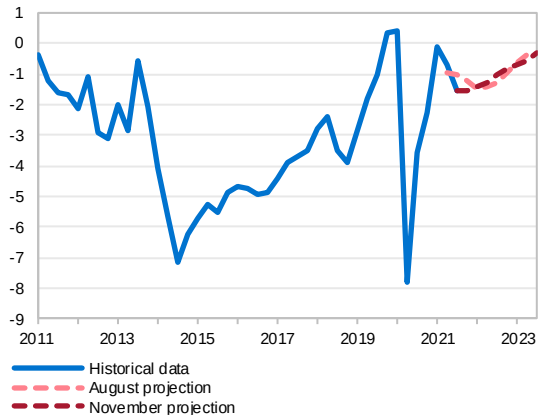


Source: WEO, IMF, October 2021.

The anticipated temporary inflation growth in the coming months will also be influenced by elevated **petroleum product prices.** We expect higher petroleum product prices at home, reflecting notable growth in global oil prices, and their somewhat stronger positive contribution to inflation in the next few quarters. Thereafter, the impact of petroleum product prices on inflation ought to lessen and wear off until the end of the projection horizon.

When it comes to the inflation component closest to core inflation – **non-food products and services,** we expect their price growth to accelerate temporarily until Q2 2022 and then slacken gradually until the end of the projection horizon. Their contribution to y-o-y inflation will accordingly diminish from around 1.8 pp and level off at around 1 pp. The prices of this product category also depend on the prices of numerous import components and raw materials and the functioning of global supply chains. For this reason, we expect their growth to accelerate temporarily amid higher imported inflation and input shortages, as well as elevated oil and transport prices. A moderation of these challenges facing a large number of businesses both at home and globally is expected next year and ought to help relieve pressures on domestic prices of non-food products.

Chart V.0.23 **Output gap projection***
(in % of potential output)

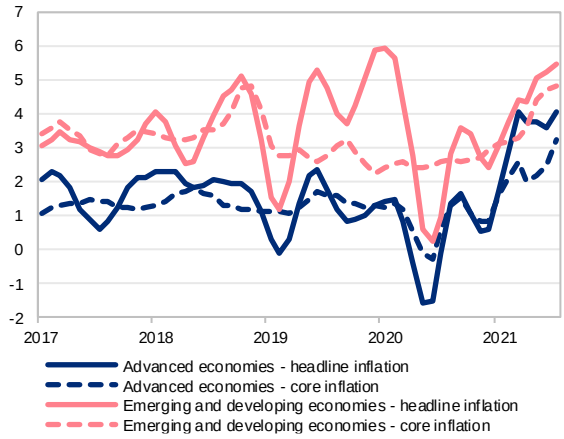


Sources. SORS and NBS.
* Output gap is estimated on the basis of NAVA.

Like in our previous projection, we expect **administered price** growth this year to be somewhat higher than last year (5.0%) primarily on account of the already made electricity price adjustments and the inclusion of the renewable energy sources fee in CPI calculation in January and February, as well as the adjustment of cigarette prices (in February and July). Next year we expect administered prices to rise by around 4%, due to anticipated adjustment in prices of natural gas, electricity, utility services and cigarettes, in line with the excise duty calendar.

In terms of inflation factors, this inflation projection is also determined by the fact that **global supply and demand** remain predominantly under the impact of the course of the pandemic. Still, the impact of the pandemic on economic activity has greatly weakened thanks to continued vaccination and better adjustment of production and consumption. In addition, despite announcements of reductions in the volume of quantitative easing, leading central banks will continue to pursue an accommodative monetary policy for some time yet, which ought to support sustainable global recovery. On the other hand, the leap in energy prices, particularly in the euro area, gives cause for concern as it could have substantial negative effects on disposable income, consumption and economic activity in the coming months. This is compounded by material, equipment and labour force shortages, and rising transport costs. These supply-side problems are anticipated to improve next year.

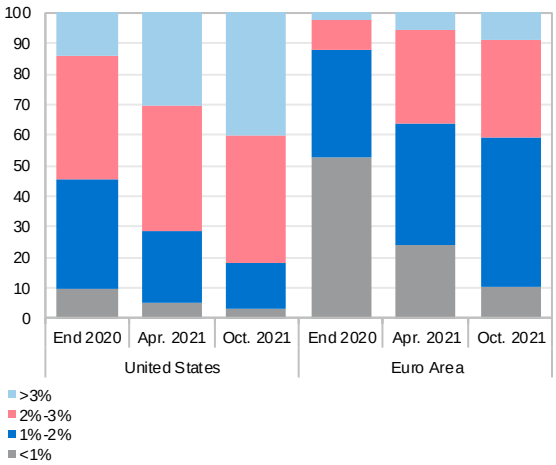
Chart V.0.24 **Headline and core inflation in the world**
(quarterly moving average, annual percentage change)



Source: WEO, IMF, October 2021.

For the time being, no major inflationary pressures are expected from **aggregate demand.** The current inflation and GDP projection is consistent with a gradual narrowing of **Serbia's** negative **output gap,** which is estimated to remain mildly negative until the end of the projection horizon. Growth in potential GDP is expected to go hand in hand with GDP growth. The output gap ought to narrow from around -1.6% late this to around -0.8% and -0.3% in late 2022 and 2023, respectively, gradually softening the disinflationary impact of demand on inflation during the projection horizon. **Domestic demand growth is supported by fiscal policy measures taken so far, and the monetary policy** of the NBS, as well as the anticipated preservation of favourable terms of financing of corporates and households. Another positive effect on domestic demand ought to come from **continuing extremely low interest rates in the euro area** until the end of the projection horizon, through their impact on the price of euro-indexed loans. The closing of the output gap will also be supported by higher external demand and continued relatively favourable financial conditions in the international environment for some time to come.[22]

Chart V.0.25 **Market-implied probability of inflation in the USA and the euro area**
(in %, during five years)



Source: *Financial Stability Report*, IMF, October 2021.

Still the increase in both headline and core inflation in the USA and the euro area has fuelled **market participants' expectations that central banks would normalise their monetary policy sooner than initially expected.** This refers primarily to the Fed, as the USA is expected to see higher inflation on account of robust fiscal spending and an extremely accommodative monetary policy amid accelerated economic rebound.

In most countries of the region, which are also our important trade partners, current inflation growth is assessed as temporary and expected to slacken from mid-2022. Inflation slowdown should also be supported

[22] For more details, see Text box 4, p. 51.

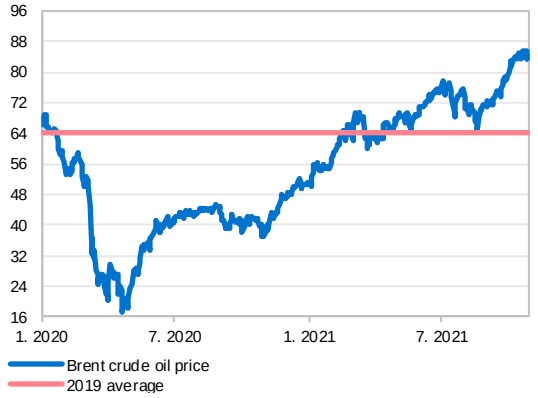
by the response of many central banks of the region towards reducing their monetary accommodation. With this in mind, we expect somewhat higher **inflationary pressures from dinar-denominated import prices, but this impact ought to be temporary.** Pressure on this account is, therefore, likely to soften from mid-2022 until the end of the projection horizon.

Growth in prices of **primary commodities in the global market** is much faster than anticipated three months ago, which has created substantial pressures on domestic prices. Energy prices saw a drastic upturn in the past several months, particularly **prices of natural gas and coal** which have nearly hit their all-time highs since early October. Tensions are persisting in the global **oil** market as well, especially since production was reduced in August and September amid growing oil demand. In addition to hurricane-caused disruptions in US production, the output of OPEC+ countries was also below the target, due in part to overhauls and suspended production in some countries amid pandemic-induced restrictions, and in part to persistently weak investment in some member countries which produce near or close to full spare capacity. Energy prices are almost certain to stay relatively high during winter. With a gradual relaxation of supply-side constraints, oil prices are expected to fall in H2 2022 and their pressure on domestic prices to wane. Similar movement is expected in prices of other primary commodities, including **metals and agricultural commodities.** When it comes to Serbia, it is concerning that the leap in global energy prices, particularly of gas and coal, has pushed up input costs in agriculture, including **global prices of mineral fertilisers,** which gained more than 55% since January this year. The easing of tensions in the energy market, and the relatively strong global cereal production this year, ought to help calm agricultural commodity and food prices.

Uncertainties surrounding the inflation projection are still mostly associated with the international environment and refer primarily to the intensity and duration of cost-push pressures from the international environment. They will depend on a range of factors which are beyond the control of the NBS's monetary policy, including primarily the further path of the pandemic and its impact on global economic growth, supply disruptions, energy crisis, movement in prices of primary commodities and normalisation of monetary policies of leading central banks. To a smaller extent, uncertainty also refers to the domestic market. **Overall, the risks to the inflation projection are judged to be slightly tilted to the upside.**

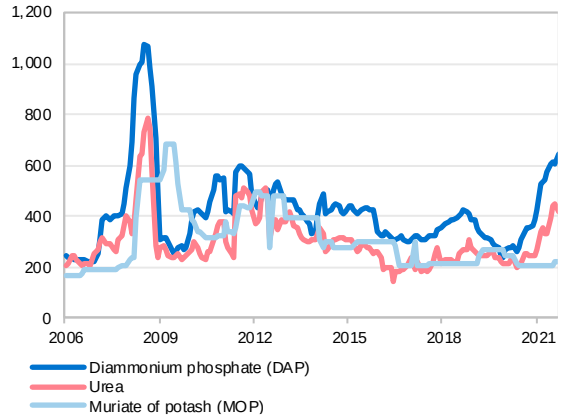
As periods of improvement and worsening of the epidemiological situation continue to alternate, **uneven and slow global recovery** could heighten **imbalances in global commodity markets, shortages, labour force shortfalls and supply disruptions,** producing more persistent pressures on price growth. However,

Chart V.0.26 **Brent oil prices since the beginning of 2020**
(USD/barrel)



Source: Bloomberg.

Chart V.0.27 **Global prices of agricultural fertilisers**
(USD/mt)



Sources: Bloomberg, General Administration of Customs of the People's Republic of China; as in: *Commodity Markets Outlook*, World Bank, October 2021.

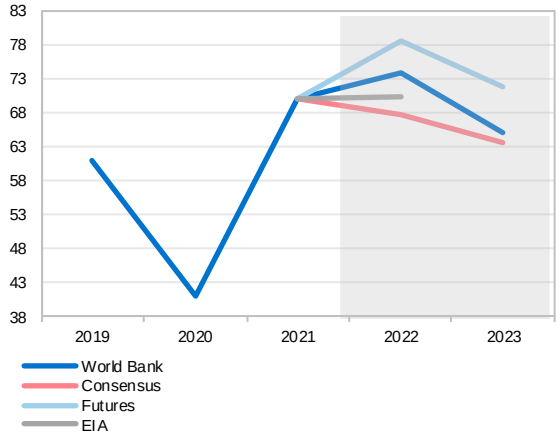
slower global growth would produce the opposite effect on domestic inflation through a slowdown in primary commodity price growth. Also, subdued external demand for Serbian exports would bolster supply in the domestic market and induce a slowdown in inflation. Conversely, if vaccines and efficient therapy are distributed more equitably across countries, the global economic recovery could be more even and faster than anticipated, helping remove the above supply-side problems and alleviate cost-push pressures on prices. More robust demand growth in this respect, particularly as savings accumulated during the pandemic are activated, could lead to stronger price growth globally and spill over to domestic prices. As **global logistics supply problems have particularly intensified,** we judge the risks to the projection on this account to be mildly tilted to the upside.

Uncertainties surrounding the projection are also to a major part associated with **global energy prices** which will be affected by global demand growth, but also by numerous supply-side factors specific for each primary commodity. Insufficient **oil** supply has led to a constant decline in oil inventories since mid-last year and their movement below the five-year average, heightening tensions in this market. In view of numerous factors affecting the global oil price, we estimate that its shifts in either direction are possible, so risks to the inflation projection on this account are symmetric.

Gas and electricity prices influence prices of other primary commodities and therefore pose a significant risk for inflation. The gas price is currently the greatest risk for global oil price growth, since oil is used as a substitute for natural gas. The same as oil inventories, gas inventories have fallen below their several years' average, while the drastic surge in gas prices in the EU was spurred by powerful demand growth guided by record-high prices of emission permits. Though Russia has promised to alleviate gas shortages in the EU, supply is unlikely to increase before the launch of Nord Stream II. For this reason, we judge the risks to the inflation projection on account of global gas and electricity prices to be slightly skewed to the upside.

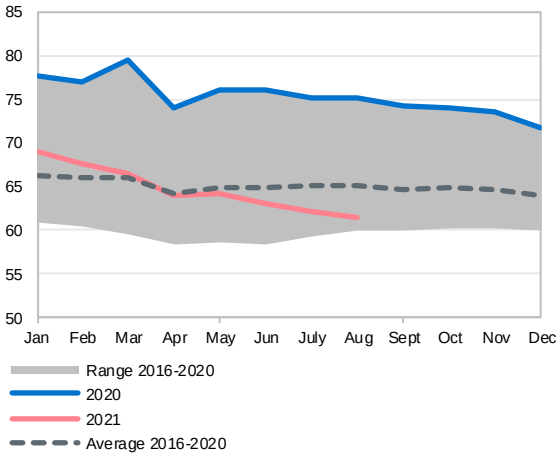
Global **prices of primary agricultural commodities** greatly depend on energy prices, which adds to uncertainty regarding their future movement. Rising input costs, together with La Niña hurricane, pose a substantial risk for growth in agriculture prices, as do ambitious biofuel targets which could spur a rise in prices of cereals and oil crops in the coming period. On the other hand, it is estimated that global cereals supply chains have recovered quite well and that, after being lower than average for several years, cereals supply growth would be at its several years' average, inducing a more moderate rise in global agricultural commodity prices than assumed. We estimate that departures of global primary agricultural commodity prices are possible in either direction.

Chart V.0.28 **Global oil price projections**
(USD/bbl)



Sources: *Commodity Markets Outlook*, World Bank, October 2021.
Note: The shaded area denotes the projection (equivalent to World Bank average). Consensus and EIA projections from October.

Chart V.0.29 **Global oil inventories**
(in % of global demand)



Source: International Energy Agency; as in: *Commodity Markets Outlook*, World Bank, October 2021.

Mounting inflationary pressures have fuelled market expectations that central banks will lift their stimuli sooner than anticipated. If leading central banks assess inflation growth as more persistent and therefore revise their monetary policy stance in the coming period, **global financial conditions** could tighten sooner.

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
Uncertainty regarding the course of the pandemic and the effect on global economic growth	– 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 produces disinflationary/inflationary effects; – Slower/faster global economic recovery leads to a slowing/acceleration of inflation growth in the international environment and 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.	↕
Uncertainty over the duration and intensity of imbalances in global commodity markets, supply shortages and disruptions	Worsening/moderation of supply shortages and disruptions may spur/contain price growth in these markets, affecting prices at home, i.e. producing inflationary/disinflationary effects.	↑
Crude oil price in the global market (Serbia is a net importer)	A fall/rise in the global oil price spills over to a fall/rise in petroleum product prices and 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.	↕
Gas and electricity prices in the global market (Serbia is a net importer of gas and a net exporter of electricity)	A fall/rise in global gas and electricity prices produces secondary effects as it decreases/increases production costs of many domestic industrial products (primarily metals, construction materials, chemical products, processed food, etc.) and can spill over to a decrease/increase in their prices, thereby producing disinflationary/inflationary effects.	↑
Global prices of primary agricultural commodities (Serbia is a 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.	↕
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 growth in domestic demand	Deterioration of the epidemiological situation could slacken growth in economic activity, demand and the labour market, producing disinflationary effects. However, increased production capacities, in respect of FDI and other sources of investment funding, and stronger fiscal support to corporates and households (either through higher tax facilities or increased outlays), together with a preserved labour market, would contribute to faster growth in domestic demand. Losses which banks may incur as a result of lost lawsuits filed by citizens over the charging of loan processing fees would result in a tightening of credit standards and higher lending rates, inducing a fall in lending activity and domestic 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.

Conversely, if inflation returns to relatively low levels in advanced economies next year, as before the pandemic, 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, the **character of the agricultural season** is a risk to the inflation projection. We have assumed it to be at the level of several years' average after last year's above-average season. Given its great dependence on meteorological conditions, departures are possible in either direction and we judge the risks to the inflation projection on this account to be symmetric.

The risks to the inflation projection are also associated with **the pace of domestic demand growth.** If the epidemiological situation gets worse, economic activity and demand could slow and the situation in the labour market deteriorate, producing disinflationary effects. However, higher production capacities in respect of FDI and other sources of investment funding, and stronger fiscal support to corporates and households (either through higher tax facilities or increased outlays), together with more favourable trends in the labour market, would contribute to faster growth in domestic demand. Further FDI growth could be stronger than expected, as was the case in the prior period, which would also contribute to quicker potential output growth, and not induce a faster closing of the output gap in this respect, i.e. the generating of demand-side inflationary pressures. It should also be noted that **potential operating losses faced by banks as a result of households' lawsuits over the charging of loan processing fees** could lead to a tightening of credit standards and higher lending rates, which would induce a decline in lending activity and domestic demand. In view of the above, we judge the risks to the inflation projection on account of domestic demand to be symmetric.

As **administered price growth** at home could be either somewhat lower or somewhat higher than anticipated, the risks to the projection on this account are symmetric as well.

Going forward, the NBS's monetary policy priority will be to maintain price and financial stability, while supporting the fastest possible economic and employment growth and, by extension, higher living standards for households. Monetary policy measures will be adjusted in line therewith in the coming period.

Text box 5: Role of the banking sector in financing economic growth and potential implications of disputes concerning bank fees for financial and macroeconomic stability

Owing to the stabilisation of inflation and the exchange rate, the achieved and preserved overall macroeconomic and financial stability, and the implemented structural reforms and fiscal consolidation, since 2013 Serbia has been recording, year after year, increasingly better economic results, with a temporary slowdown observed in 2020 due to the coronavirus pandemic. Since early 2015 to date, GDP growth has accelerated, led by exports and investment, as well as personal consumption, which also underpins growth in all countries. In parallel with economic growth, over a seven-year period the number of persons working in the private sector increased by over 300 thousand (by 24%), while the average private sector wage went up by around 56% in nominal and around 37% in real terms. In 2014, the average private sector wage was below RSD 40 thousand, and in the eight months of 2021 it exceeded RSD 60 thousand on average.

At the same time, Serbia is becoming increasingly integrated in global production and service chains, as seen in a rise in the share of goods and services exports in GDP from 32.1% in 2012 to around 52% in 2021. The share of total foreign trade (the sum of goods and services exports and imports) in GDP went up from 84.5% in 2012 to around 112% in 2021. The share of total fixed investment in GDP rose from below 16% in 2014 to around 24% in 2021. Owing primarily to elevated investment and exports, the cumulative real GDP growth rate will reach close to 24% in 2015–2021. In 2021, nominal euro-denominated GDP will certainly touch EUR 52 bn (around EUR 7.5 thousand per capita), which is much above the 2014 figure of EUR 35.5 bn in absolute terms (around EUR 5 thousand per capita). Under the NBS baseline macroeconomic scenario, the share of fixed investment in GDP is likely to reach 25% already next year, and stay there over a longer period, resulting in the real GDP growth rate of 4% to 5% in the years to come.

However, less frequently mentioned in macroeconomic analyses is that economic growth must be supported by financing sources – domestic savings, own profit of the corporate sector, external loans or FDI. An increasingly important role in the financing of Serbia's economic growth is also played by the banking sector, through the lending channel. These are dominantly investment loans and other loans intended for businesses, as well as housing, cash and consumer loans for households.

Table O.5.1 **Key banking sector indicators in 2008-2021**
(%)

	Dec. 2008	Dec. 2009	Dec. 2010	Dec. 2011	Dec. 2012	Dec. 2013	Dec. 2014	Dec. 2015	Dec. 2016	Dec. 2017	Dec. 2018	Dec. 2019	Dec. 2020	Sept. 2021
ROE	9.3	4.6	5.4	0.24	2.1	-0.4	0.58	1.6	3.4	10.6	11.3	9.8	6.5	7.7
CAR	21.9	21.4	19.9	19.1	19.9	20.9	20.0	20.9	21.8	22.6	22.3	23.4	22.4	21.7
Gross NPLs to total loans	11.2	15.7	16.9	19.0	18.6	21.4	21.5	21.6	17.0	9.8	5.7	4.1	3.7	3.6
Corporate NPLs	15.0	20.9	21.8	24.6	21.2	27.1	26.7	23.6	17.6	10.8	5.2	3.3	3.1	3.0
Household NPLs	7.3	8.1	7.9	7.9	8.5	9.4	10.3	10.9	9.3	5.6	4.4	3.9	3.6	3.9

Source: NBS.

After it faced problems caused by inadequate operation of some state-owned banks – notably in 2008–2012, which soon culminated in the bankruptcy of four banks and soaring costs for taxpayers – the Serbian banking sector has been continuously growing stronger, recording a positive net result since 2014. Its pre-tax net financial result stood at RSD 46.1 bn at end-2020, while in the pre-pandemic year of 2019 it was RSD 67.7 bn. That overall financial stability is becoming stronger is confirmed by the increasingly better capital adequacy ratios, as well as liquidity and FX risk indicators, and the NPL ratio. Since late 2008, when its monitoring began, the NPL ratio was going up each year, only to exceed 20%[1] in 2013–2015 , while the NPL ratio of the corporate sector surpassed 25%[2] , i.e. more than a fourth of all corporate loans were bad assets (uncollectible in most cases). The problem was particularly pronounced in construction, with over 50% of NPLs. A similar problem plagued the real estate business, whilst NPLs in manufacturing, the key export sector, accounted for around a fourth. In the meantime, owing to the implementation of the comprehensive NPL Resolution Strategy and Action Plans of the NBS and the Government, the NPL ratio was cut to 3.55%, with the NPL ratio in the corporate sector going down to 2.9%. Owing to initial stabilisation and later continuous strengthening, the banking sector, through the lending channel, began to support economic growth to an increasingly higher degree, year after year – primarily in terms of investment and final consumption. Owing to a reduction in interest rates and a rebound in lending activity, among other things, in 2018 and 2019 economic growth stepped up to 4.5% and 4.2%, while in the two pandemic years (2020 and 2021) cumulative GDP growth will equal between 5.5% and 6%, i.e. around or close to 3% on average (a 0.9% drop in 2020 and a rise of 6.5–7% in 2021).

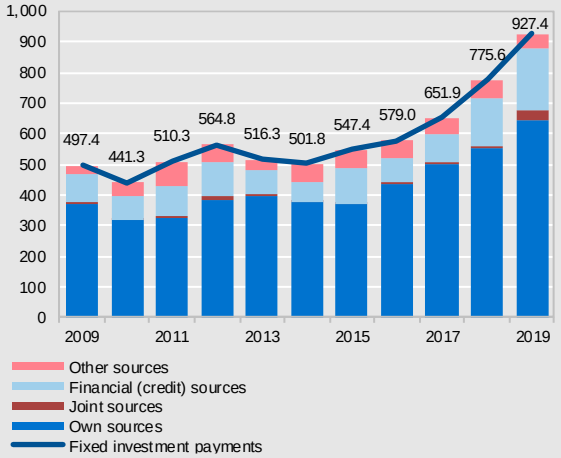
[1] The highest level was recorded in May 2014 and May 2015, when the NPL ratio stood at 23.2%.
[2] The highest level was recorded in May 2014, when the NPL ratio in the corporate sector stood at 30.8%.

Sources of investment financing

According to the SORS statistical classification, investment payments can be financed from own sources, financial (credit) sources, joint sources and other sources. A dominant source are certainly own funds, but investment financing from credit sources is also important. According to the analytical overview, often used by the NBS, the key sources of investment financing are corporate profitability, FDI, consolidated government capital expenditure, and domestic investment loans, which, over the past years, have become an equally important pillar of investment financing.

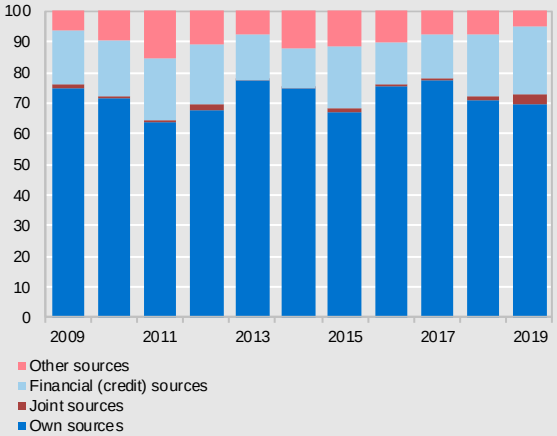
According to SORS data, in 2013 total sources classified as financial[3] (credit) made up only 15% of fixed investment payments, while in 2014 their share fell to 12.5% only. Moreover, as a result of inadequate economic policy pursued in the earlier period, the inherited bad business environment and problems in the banking sector, in 2014 fixed investment was at its ten-year low of RSD 663.6 bn, i.e. merely 15.9% of GDP. In regard to investment loans[4], in 2013, during which problems with four state-owned banks culminated, the increase in investment loans was negative, while a year later it accounted for only a minimum portion of fixed investment. Owing to the achieved macroeconomic and financial stability and initiated fiscal consolidation and structural reforms, since 2015 investment in Serbia has been going up. Investment loans swelled, reaching close to 10% of total investment financing sources in 2019, according to the NBS estimate. Total sources classified as financial (credit), which are monitored by the SORS, are exceeding 22% of all fixed investment payments, suggesting a multiple-times greater importance of the Serbian banking sector for economic growth – particularly as the level of fixed investment increased significantly, reaching RSD 1,218 bn in 2019 (22.5% of GDP). In 2021 we expect fixed investment to equal between RSD 1,450 bn and RSD 1,500 bn (around 24% of GDP). Own sources should most certainly remain the dominant source of a further rise in investment, but financial (credit) sources should also continue to play an important role.

Chart O.5.1 **Fixed investment payments by financing source**
(in RSD bn)



Source: SORS.

Chart O.5.2 **Structure of sources of fixed investment financing**
(share in total payments, in %)



Source: SORS.

Sources of personal consumption financing

Due to the inadequate response of the then economic policy makers in Serbia, the recovery from the global economic crisis, which erupted in H2 2008, lasted for four years and a half. Serbia reached the pre-crisis level of its GDP only in H1 2013. In that period, as well as two and a half years later, personal consumption, as the largest individual component of GDP, was on an almost uninterrupted decline. From the outbreak of the crisis through 2015, personal consumption in Serbia fell by 6.5% in real terms, and loans intended for consumption[5] made up merely 0.6% of total consumption sources.

Owing to the achieved macroeconomic and financial stability, fiscal consolidation and economic rebound, personal consumption went into a recovery mode – each year it was insignificantly slower than total GDP growth, opening room for higher investment. Since 2016 to date, personal consumption in Serbia has increased by around 17% in real terms, mirroring wages and employment in the private sector, pensions and wages in the public sector, but also a rise in loans intended for consumption, which are gradually becoming one of the important pillars of consumption financing. In 2017–2020, loans intended for consumption accounted for around 2% of personal consumption sources, which is three times more compared to the 2010–2015 period.

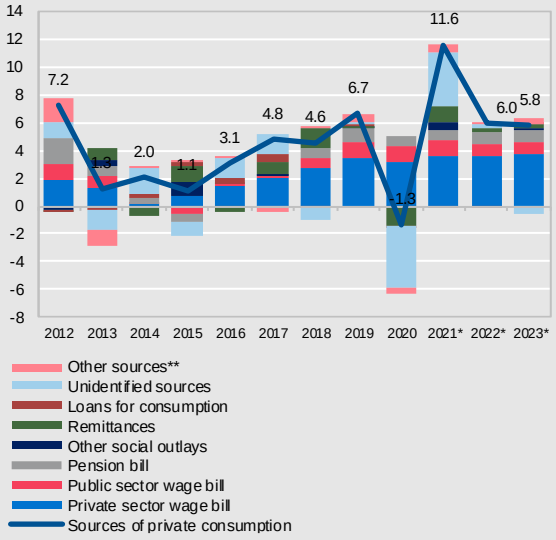
[3] Press release HP21 – Fixed investment, representing the results of the survey on fixed investment, carried out by the SORS at the annual level. In the analyses of the NBS and other central banks, the synonym most often used for fixed investment is gross fixed capital formation.

[4] When calculating total investment financing sources, the annual increase (change in stock) of investment loans with domestic banks was used. The amount of new investment loans was not used because it also includes the refinancing of current investment loans, which, in macroeconomic terms, do not represent a new source of investment financing.

[5] Just as for investment loans, when calculating total sources of personal consumption financing, we used the annual increase (change in stock) of consumer loans. Under the term "loans intended for consumption" we imply the sum of loans shown in monetary and financial statistics as consumer loans and cash loans.

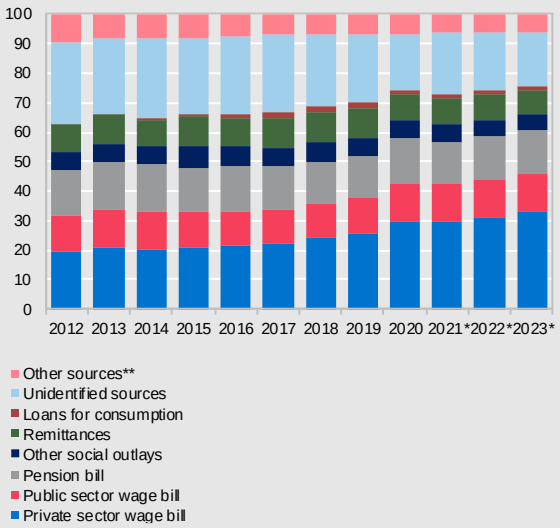
Under the NBS projection, personal consumption will continue up at the rates of 3.5% to 4.0% in the years to come, with the strongest impetus lent by rising private sector wages and employment. Loans intended for consumption are likely to constitute around 2% of total consumption sources in the coming period as well.

Chart O.5.3 **Contributions to nominal growth in consumption sources**
(in pp)



Sources: SORS and NBS estimate.
* NBS estimate.
** Includes: capital revenue, natural consumption and change in savings.

Chart O.5.4 **Structure of consumption sources**
(in %)



Sources: SORS and NBS estimate.
* NBS estimate.
** Includes: capital revenue, natural consumption and change in savings.

Disputes concerning bank fees – a potential magnitude of the problem

Under NBS estimates, in 2015– 2019, the amount of loan application fees stood at around RSD 8.5 bn on average a year. Given that the amount of default interest and court costs could be around twice higher than the fee subject to the disputes, in the observed five-year period alone, cumulative potential costs of the banking sector on these grounds could reach between RSD 140 bn and RSD 150 bn. A potential problem could also extend onto a much earlier time period. **If we include into the analysis a much longer earlier period, as well as 2020 and 2021, potential costs of the banking sector could be multiple times higher than the above amount**. If we take the last 15 years, one quarter of the total amount of estimated potential costs would be related to the fees concerned, one fourth to the default interest, while as much as around a half of potential costs would concern court costs.

Potential financial and macroeconomic effects

If any of the above scenarios materialised, either during a single or several years, the amount of potential banking sector costs would certainly jeopardise overall financial stability. As the minimum regulatory capital requirement is 8%, if the loss under any of the above scenarios materialised, the banking sector as a whole would certainly face undercapitalisation, with a significant damage also suffered by all other banking sector indicators.

During the years when it was recording the poorest results (2009–2014), the Serbian banking sector operated either at a minimum gain or a small loss, which was recorded in 2013, but it never operated at a loss of the magnitude of a potential loss caused by the escalation of fee-related disputes. Doubtless for many other reasons, but also due to the weakness of the banking sector, during the years observed, Serbia's GDP equalled only around EUR 34 bn on average, while the share of fixed investment was below 18% of GDP on average. Apart from the period when loan subsidy programmes were in force, lending activity either stagnated or deteriorated, and did not give sufficient support either to corporate investment or household consumption. The entire period, also partly due to banking sector issues, was marked by pronounced macroeconomic instability, balance of payment imbalances, and precarious public finance sustainability. This brought about the episodes of sudden depreciation of the dinar and spiralling inflation, which in 2008–2012 was 9% p.a., touching at one point almost 15%. The materialisation of the scenario under which the banking sector would record a loss of several hundred billions of dinars, either during one or several years, would also imply a serious threat to financial and macroeconomic stability of the country, with unprecedented consequences for the country's risk premium, business environment, investment, exports, consumption, etc. Economic activity, measured by nominal GDP, could fall from the current around EUR 52 bn to the levels from the 2009–2014 period, or even below. A potential decline in domestic demand, which would take place in such scenario, both on account of smaller investment and lower consumption, would also certainly affect industrial production, the services sector and the construction sector, which in the worst case, could trigger the

spiral of falling consumption and production. It should also be borne in mind that these are the indicators that international financial institutions and rating agencies use for their estimates. Therefore, in case of the materialisation of one such scenario, the country's credit rating would also be jeopardised.

Hypothetically, **if the increase in investment loans failed to take place, and we have been recording it year after year, fixed investment would contract by around 10%, and GDP growth by around 2.5 pp**. Given that overall credit funds used by corporates for investment are twice higher than loans explicitly classified as investment, **fixed investment could fall by even up to 20%, which could push down GDP growth by as much as 5 pp**. It should be borne in mind that this is the estimate of effects in the event of the absence of an increase, and the increase can also be negative.

When it comes to consumption, **the absence of an increase in loans intended for consumption would lower personal consumption by around 2% and GDP growth by around 1.5 pp**. This estimate was also made only under the assumption of the absence of an increase – the increase in these loans could also be negative.

The implications for the balance of payments and public finance of the country could also be exceptionally negative. Over the past five years, Serbia has been recording a current account deficit worth around EUR 2 bn on average, with more than full coverage by FDI, and the NBS was therefore able to boost FX reserves by around EUR 1 bn a year on average through IFEM interventions only (net FX purchases). Instead of this, in the event of materialisation of the above described unfavourable scenario in the banking sector, **Serbia would probably face a higher current account deficit, which would be far from covered by FDI, and this would generate strong depreciation and inflationary pressures.** The balance of payment problems of such intensity would force the NBS to choose between significant weakening of the dinar and sizeable spending of FX reserves in order to defend the exchange rate, while **public finances would certainly face an unsustainable position due to a sharp economic contraction, reduction in tax revenue and rising interest rates on government bonds**. In such case, the government would have to issue securities at multiple times higher interest rates, which is something that happened in 2010–2012, when the government issued bonds at exceptionally high interest rates, attracting speculative capital, which in itself poses a high risk. In such circumstances, it is highly likely that credit standards would tighten significantly in a relatively short time, reflecting on a far smaller volume of corporate and household borrowing, and on interest rates on such loans.

All the above suggests that this scenario is potentially highly unfavourable. Finally, when it comes to complaints concerning bank fees, we wish to remind once again that the initial Legal Position of the Supreme Court of Cassation brought about absurd requests that banks should provide a specification and structure of their costs to the finest detail, which in practice is not required from any other participant in any segment of the goods and services market in a market economy. The specification of processing costs is subject to the internal analysis of each bank and its internal cost allocation and price policy. This does not mean that a bank is obliged – just as any other participant in the country's economic life is not obliged – to give such an analysis to those who use its services. Moreover, regardless of the type of costs, it is not impossible to determine such cost for each individual client, but these amounts are made average at the level of a bank's portfolio. There is no regulation forbidding a bank, or any other economic agent, to disclose two-component prices for the services it renders. Finally, the fact that the requests to prove costs have been made absurd was also confirmed by the Supreme Court of Cassation. As the institution authorised to propose the Law on the Protection of Financial Services Consumers, which defines and regulates the effective interest rate, and as the institution that adopted the regulation governing the manner of calculation of the effective interest rate, we wish to underline once again that it is not true that loan costs were collected in double the amount by withholding the one-off nominal amount from the approved loan and their simultaneous inclusion in the effective interest rate. Given all the above stated concerning the indispensability to preserve macroeconomic and financial stability of the country, and given the NBS's stance, repeated on several occasions, that a bank, in addition to interest, has the right to collect fees and costs, provided they are included in the calculation of the effective interest rate, i.e. in the total price of the loan, the NBS calls once again for consistent and common sense application of the Amendment to the Legal Position of the Supreme Court of Cassation.

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	Q3 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	5.8	6.5
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	275.6	242.8	266.3	281.6	
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	28.8	30.4	28.7	33.2
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	5.8	6.7	9.7	
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	12.2	12.4	18.4	
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	61.4	65.8	68.9	65.8	
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	10.6	11.9	11.4	10.2	
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	138.2	141.1	128.8	
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	149.5
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	184.8
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	111.5	103.9	112.1	115.8	120.4
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	46,005	46,796	11,577	12,959	13,429
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	30,787	32,334	32,291	
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	2,710	773	1,258	
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	16,803
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	1,585	1,427	1,341	
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	-1,929	88	-652	-748
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 services during last 12 months.
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 during period under review.
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 Q3 2021 is 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 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	Q3 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	4.3	-0.9	1.8	13.7	7.4
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	5.7
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	16,803
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	22,271	6,222	6,852	7,470
- 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	-4.6	11.4	46.3	33.1
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	26,370	6,756	8,152	8,698
- 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	-5.7	-1.7	48.8	31.8
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	-1,929	88	-652	-748
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	-4.1	0.8	-5.0	-5.6
Unemployment according to the Survey (in %)[6]						20.9	24.9	25.9	24.0	20.6	18.9	16.4	14.5	13.7	11.2	9.7	12.8	11.1	
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	553.0	550.2
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	-8.3	-1.7	-3.4	-1.1
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	-8.0	-0.9	-1.7	-1.9
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	51.9	57.0	53.7	53.9	56.5
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	99.71
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	101.29
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	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	117.56
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	46,005	46,796	11,577	12,959	13,429

[1] At constant prices of previous year. Data for Q3 2021 is 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, exports and imports growth rates for 2007 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 Q3 2021 is NBS estimate.

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

[7] Until 2018, wages are shown according to the old methodology. Since 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 Q3 2021 is 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 2015-2017, 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-Apr	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.apr	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	1.00	0
7 October	1.00	0
9 November	1.00	0
9 December		

Press releases from NBS Executive Board meetings

Press release from Executive Board meeting held on 9 September 2021

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

In making the decision, the Board was guided primarily by favourable economic developments at home and the fact that real GDP growth of 7.6% in H1 exceeded initial expectations. The high rate of real economic growth partly reflects the low last year's base, but also favourable current trends. Contributing factors include, in particular, the effects of adopted monetary and fiscal policy measures, and, by extension, the preserved investment and consumer confidence, as well as production capacities and jobs. Faster than expected economic growth suggests that the NBS's projected GDP growth rate of 6.5% for this year could even be exceeded. More than a half of economic growth should result from higher fixed investment, followed by personal consumption. A positive impetus is also expected from net exports, owing to faster growth in goods and services exports than imports. The improvement of the external position will continue to be driven by rising export capacities, encouraged by robust FDI inflows, as well as anticipated global recovery. The Executive Board also took into account the upward adjustment of the medium-term growth projection from 4.0% to the 4–5% range, in light of the announced numerous infrastructure projects and their expected direct and indirect effects on GDP.

While analysing the inflation profile, the Board had in mind that inflation is moving within the target band (3±1.5%) and that, consistent with expectations, it stood at 3.3% y-o-y in June and July. Somewhat higher inflation compared to the start of the year reflects temporary factors, notably the low last year's base, elevated global prices of oil and other primary commodities over the past months, which, along with halts in global supply chains, generated stronger cost-push pressures in the world and domestic markets. In addition, since April domestic vegetable prices have been on a somewhat sharper upturn. Conversely, despite the vigorous growth of our economy, there are no significant demand-side inflationary pressures. Their absence is also indicated by the continued low and stable core inflation (around 2%), and short- and medium-term inflation expectations, which are around the midpoint in the financial sector and are even lower in the corporate sector. The Executive Board expects inflation to continue to move within the target band in the coming period – in the upper half of the band until Q2 2022, only to decelerate towards the midpoint with the waning of the effects of this year's rise in global primary commodity prices and cost-push pressures in production and transport. In H2 2022, inflation is expected to move in the lower part of the target band.

Should inflationary pressures gather momentum, the NBS stands ready to respond promptly even between Executive Board meetings by fine-tuning dinar liquidity conditions and by directing the average repo rate appropriately. The domestic monetary framework, i.e. the model of main repo operations, gives the NBS greater flexibility in the conduct of monetary policy, enabling the Executive Board to respond appropriately and timely, even without changing the main interest rates.

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 economic policy support of leading economies. 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. Economic activity indicators of the euro area, our key economic partner, have stayed in the positive territory, supported by the rise in new orders driven by stronger demand. So far, accelerated growth in the euro area, as well as higher inflation since the start of the year, has not driven the ECB to lower the degree of monetary policy accommodation, because higher inflation factors are judged to be temporary. While the Fed will most likely not raise its interest rates any time soon, it could decide to scale down by the end of the year its asset purchases within the quantitative easing programme, which could affect capital flows to emerging countries, Serbia included, and therefore calls for caution in monetary policy conduct. The Executive Board also took into account that oil and other primary commodity prices remain significantly volatile and their movement dependent on a number of factors.

Though led mostly by temporary factors, the inflation surge is seen in advanced and developing countries alike. Looking at the region and developing countries pursuing the inflation targeting regime, almost all countries, except Serbia, have had their inflation targets overshot. For this reason, many central banks announced or began the process of monetary policy tightening. As so far, the NBS Executive Board will keep a close eye on developments in the domestic and international environment, standing ready to use, if needed, all available instruments and to act timely, with a view to maintaining price stability in the medium run.

Delivering 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 to 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 is scheduled for 7 October 2021.

Press release from Executive Board meeting held on 7 October 2021

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

The rates on deposit and lending facilities also remained unchanged (0.10% and 1.90%, respectively). However, the first measure to tighten monetary conditions was undertaken – at yesterday's reverse repo auction, the average repo rate was raised by 13 bp to 0.24%.

In its decision-making, the Executive Board was guided by the fact that the higher level of inflation compared to the start of the year, similarly to other countries, is largely due to last year's low base and supply-side factors that monetary policy cannot affect. The factors include primarily the rising global prices of oil and other primary commodities over the past months, which, along with halts in global supply chains, generated stronger cost-push pressures globally and at home. Moreover, since April the domestic market has experienced a more pronounced rise in vegetable prices due to the drought, pushing inflation to 4.3% y-o-y in August. That these are mainly supply-side pressures is suggested by the continued low and stable core inflation (1.8% y-o-y in August) and short- and medium-term inflation expectations, which the financial and corporate sectors place at around the target midpoint.

The Executive Board expects that y-o-y inflation will most probably trend higher in the next several months than in August and, similarly to other neighbouring countries, above the upper bound of the target corridor. With the waning of the effect of this year's rise in global primary commodity prices and cost-push pressures in production and transport in H2 2022, inflation is expected first to return within the target band and then go below the midpoint.

As stated by the Board, in line with the announced readiness to respond even between two Board meetings, the NBS began to adjust monetary conditions to current and expected monetary trends. In the period from the previous meeting, the NBS exercised a proactive approach and undertook several measures to maintain monetary stability:

It made the decision to terminate repo securities purchase auctions as of October, through which banks were provided with three-month dinar liquidity under highly favourable conditions (0.10%).

At yesterday's first reverse repo auction in October, it raised the average executive repo rate by 13 bp – from 0.11% (on average since the start of the year) to 0.24%.

Monetary conditions were thus tightened without changing the key policy rate and the interest rate corridor. The NBS effectively exercised a flexible approach to monetary policy conduct, as it announced and as allowed by the monetary framework.

As so far, the NBS will keep a close eye on developments in the domestic and international environment, ready to respond, if needed, by all monetary policy instruments on hand, with a view to maintaining monetary and financial stability.

Having analysed economic activity indicators, the Executive Board stressed that GDP exceeded the pre-crisis level already in Q1 this year as a result of the concurrent growth in economic activity and potential output, and that available indicators for Q3 are supportive of the 6.5% GDP growth forecast for this year, with a possibility of an even higher outcome. Positive trends are strongly underpinned by the effects of past monetary and fiscal policy measures and the consequently preserved investment and consumer confidence, production capacities and jobs. The Executive Board therefore expects that the largest contribution to GDP growth at the year level will come from fixed investment and personal consumption. A positive impulse is also expected from net exports, owing to faster growth in export than in import of goods and services. Further expansion of export capacities, spurred by high FDI inflows, will continue to work towards improving the country's external position, and so will the expected global economic recovery. In terms of medium-term economic growth, the Board was mindful of the fact that the NBS projection was recently

raised from 4% to the 4–5% range, in light of the announced numerous infrastructure projects and their direct and indirect effects on GDP.

Though movements in the international environment still greatly hinge on the course of the pandemic, global economic recovery is picking up the pace thanks to vaccine rollout and the economic policy support of leading economies. 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. Economic activity indicators of the euro area, our key economic partner, have stayed in the positive territory, supported by the rise in new orders driven by stronger demand despite persistent halts in global production chains. While the ECB is not likely to raise its interest rates any time soon, the accelerated euro area growth and higher inflation since the beginning of the year fuel expectations that it might consider changes to its asset purchase programme in December. The Fed is not likely to raise its interest rates this year either, while the rate hike next year remains uncertain as well. Nevertheless, the Fed might decide in November to downsize its asset purchases within the quantitative easing programme, which could dampen capital inflows to emerging markets, Serbia included, and therefore calls for increased caution in monetary policy conduct. The Executive Board also took into account that oil and other primary commodity prices remain significantly volatile and dependent on a number of supply- and demand-side factors, as well as that their growth persisted through September.

Delivering price and financial stability will remain a priority of the monetary policy, together with supporting faster growth of our economy and employment, a further rise in the export sector, as well as a favourable investment environment.

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

Press release from Executive Board meeting held on 9 November 2021

At its meeting today, the NBS Executive Board voted to keep the key policy rate on hold, at 1.0%, and to continue with monetary policy tightening via the repo rate and withdrawal of a larger amount of excess liquidity from the banking sector.

In making such decision, the Executive Board was guided by the fact that the current monetary policy framework gives room to the NBS to reduce the level of monetary policy accommodation amid heightened inflationary pressures both at home and abroad without changing the main interest rates. The NBS has been gradually moving in this direction for the past two months. After it stopped holding securities purchase repo auctions since the beginning of October, by way of which banks were provided with dinar liquidity in the previous period, under very favourable conditions, during the same month the NBS began a cycle of raising the weighted average rate at repo sales of securities. The rate was raised in October by 16 bp from the previous level of 0.11% (which had been its average since the start of the year), to 0.27%, where it stood for the past two reverse repo auctions (by way of which the NBS withdraws excess dinar liquidity from the banking system).

Tightening monetary conditions effectively, without changing the key policy rate and the interest rate corridor, the Executive Board noted that it is important to impact inflation expectations in conditions of cost-push pressures that are stronger than anticipated.

Hikes in the global prices of energy and other primary commodities, halts in supply and significantly higher prices of transportation globally, together with the effects of the low last year's base, have led to higher cost-push pressures in the global and local markets. Also, in Q3 the seasonally usual fall in vegetable prices in the local market was missing due to draught, and this was what mostly drove y-o-y inflation (5.7% in September) above the NBS's expectations. Still, the Executive Board stressed that, unlike the majority of other inflation targeting countries in the region, core inflation, which monetary policy measures affect the most, is still in the lower half of the target tolerance band for headline inflation in Serbia (2.6% y-o-y in September), which is mostly attributable to the preserved stability of the exchange rate.

Like most other central banks, the NBS expects that the factors of higher headline inflation will for their major part be temporary in character and that their effect will dissipate next year. Consistent with that, the NBS expects inflation to slow down from Q2 2022, return within the bounds of the target around mid-year and retreat to the lower half of the band before the year's end. The NBS stands ready to respond promptly by using all monetary policy instruments on hand should any of the risks that would keep inflation above the upper bound of the target band for a prolonged period of time materialise.

In its decision-making, the Executive Board also had in mind that the positive effects of past large-scale monetary and fiscal measures on economic activity, including the third support package for businesses and households, could be expected going forward and that the favourable financing conditions could be sustained at a somewhat lower degree of monetary accommodation. The Board particularly stressed the importance of Serbia's strong growth dynamics, which outperformed expectations this year, quarter after quarter. As a result, Serbia's GDP, in NBS estimate, is now by over 3% higher than before the pandemic. As estimated by the SORS, economic activity grew by 7.4% y-o-y in Q3, on the back of the maintained investment and consumer confidence, as well as production capacities and jobs, and the sustained favourable financing conditions and stepped-up execution of government capital expenditure. In light of economic developments since the beginning of the year that proved better than anticipated, the NBS raised its GDP growth projection for 2021 from 6.5% to the range of 6.5–7%. In the medium term, the NBS expects GDP growth within the 4–5% range, which will facilitate further convergence towards EU countries.

The international environment continues to abound in challenges, notably tensions in commodity markets, especially energy and other primary commodity markets, but also persistent logistics problems, imbalances in the labour market and disrupted supply chains, which fuel inflationary pressures in almost all countries of the world. Halts in global supply chains and shortages of some inputs, above all those in the automotive industry, strongly affect the production sector of the euro area, which is our key economic partner. Nevertheless, an encouraging signal s coming from the improvement of economic prospects for the euro area and countries in the region, which are also Serbia's important trade partners, as this should have a positive impact on our exports and economic activity. Although the ECB is not likely to raise its interest rates any time soon, the accelerated euro area growth and higher inflation since the beginning of the year fuel expectations that it might reduce the volume of its asset purchase programme. As the Fed made such decision in early November, this calls for increased caution in the NBS's monetary policy making.

As so far, the NBS will keep a close eye on developments in the local and international environment. The Board emphasizes that delivering price and financial stability in the medium term will remain a priority of the monetary policy, together with supporting faster growth of our economy and employment, a further rise in the export sector, as well as a favourable investment environment.

In today's meeting, the Board adopted the November Inflation Report along with new macroeconomic projections, which will be presented to the public in more detail at a press conference on 17 November.

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