National Bank of Serbia

2021

May

INFLATION REPORT

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NATIONAL BANK OF SERBIA
Belgrade, Kralja Petra 12
Tel: +381 11 3027-100

Belgrade, Nemanjina 17
Tel: +381 11 333-8000

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Introductory note

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

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

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

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

The May *Inflation Report* was considered and adopted by the NBS Executive Board at its meeting of 13 May 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 May.

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I Overview

Though the **global growth outlook** remains under the impact of the pandemic, it is encouraging that leading financial institutions are revising up their projections. For the second time since the start of the year, the IMF raised its global growth projection (this time to 6.0%), expecting the materialisation of effects of vaccination on global economic growth in H2 and the effects of additional fiscal stimuli of the largest world economies, notably the US. When it comes to the **euro area**, our most important trade partner, Q1 registered economic downturn again (-0.6% s-a, q-o-q), on the back of extension of restrictive containment measures due to the worsening of the epidemiological situation and temporary halts in supply chains, primarily in the car industry. However, leading euro area economic activity indicators, which are returning to expansion zone, suggest incipient economic recovery, supported by advances in the vaccination process.

Better than projected economic developments in most countries late last and early this year contributed to more optimistic global growth estimates for 2021.

In the period from the previous *Report*, the **international financial market** has seen a rise in long-term yields on government securities, spurred by the additional fiscal stimulus in the US. Such trends fuelled uncertainty as to further capital flows and the tightening of financing conditions in emerging economies. **Global primary commodity prices continued up**, led primarily by optimism that global economic growth will gather pace, which **pushed up global inflation**. However, for the time being estimates prevail that such inflation growth is temporary, and leading central banks continue to pursue monetary policies stimulating favourable financing conditions.

The international financial market features a rise in long-term yields on government securities, and the international commodity market has been experiencing a further rise in global primary commodity prices.

In the period from the previous *Report*, the NBS Executive Board **kept the key policy rate** at 1.0%, where it has stood since December. This is its lowest level in the inflation targeting regime, i.e. lower by 1.25 pp than before the pandemic. The Board's decision to keep the rate on hold was motivated primarily by the effects of past comprehensive monetary and fiscal policy measures targeting businesses and households, which can be expected in the coming period as well, including the announced third fiscal stimulus this year. In addition, economic recovery was expected to accelerate this year

In the period from the previous Report, the key policy rate has been kept at 1.0%, its lowest level in the inflation targeting regime.

on account of the continued successful vaccination process. Caution in monetary policy conduct was mandated by trends in the international commodity market, primarily the rising global prices of oil and primary agricultural commodities, and food prices in recent months. Caution was also needed in light of the developments in the international financial market, primarily due to rising long-term yield rates.

Past monetary policy easing resulted in favourable conditions of financing for businesses and households, and thus a rise in their disposable income.

Borrowing conditions in the domestic market remained favourable on account of past monetary policy easing. In January, interest rates on new dinar corporate loans fell to their new record low (2.2%), only to edge up in the following two months; nonetheless, they remained at a level lower than in late 2020 (3.1% in March). Under the impact of the high base from last year, early 2021 saw a slowdown in growth in lending to the non-monetary sector – to 7.7% y-o-y in March. The **structure of lending growth remained favourable** as since early 2021 the strongest growth was recorded for investment loans within corporate loans, and for housing loans within household loans. According to the **results of the April bank lending survey, in Q1 banks eased their credit standards** and loan demand continued up. Banks expect to continue easing credit standards in Q2 as well. In our estimate, the measures undertaken by the NBS, the extension of repayment deadlines and increased amounts of loans approved under the Guarantee Scheme and keeping relatively low interest rates in the domestic and international money market, will contribute to a continued rise in lending. The NPL share in total loans remains below the pre-crisis level. It measured 3.9% in March, meaning that the NBS and Government's measures were timely and prevented a major negative effect on businesses, households, and financial stability.

Owing to macroeconomic and fiscal stability achieved in the prior period, fiscal policy has the capacity to respond vigorously to the effects of the pandemic, without jeopardising the sustainability of public finances and other indicators of macroeconomic stability.

Q1 saw a **consolidated deficit of 0.9% of GDP, driven primarily by higher capital expenditure** (by around 12% in real y-o-y terms), while all key revenue categories recorded y-o-y growth. According to the Ministry of Finance's budget revision for this year, the general government deficit will equal 7.0% of GDP this year, which is more than initially planned late last year (3.0% of GDP). **The key elements of the budget revision are the new economic package of measures and significantly higher envisaged capital expenditure**. The third package of measures enacted to relieve the effects of the pandemic is worth around 4.3% of GDP, with a somewhat larger part of this amount pertaining to direct fiscal stimuli, and around RSD 120 bn is planned for the Guarantee Scheme (a half of which concerns the continued implementation of the previous Guarantee Scheme, which was extended until July). Envisaged within direct measures is the support to the most vulnerable sectors of the economy (companies

operating in tourism, catering and transport), and the support to households. Public debt of the central government stood at 55.7% of GDP at end-March. The new projection within the budget revision envisages until end-2021 a rise in public debt, but not above the Maastricht criterion of 60%, while as of 2022 public debt should be on a downward trajectory.

Faster recovery of exports than imports resulted in a current account surplus in Q1, for the first time at a quarterly level.

For the first time since 2007, a **current account surplus** (close to EUR 160 mn) was recorded in Q1. The surplus reflects the improvement of all current account components, primarily the deficit on trade in goods, including y-o-y growth in exports of 16.6% and a 0.2% reduction in imports. The expected rise in external demand, along with the effects of higher supply on account of past investment in export-oriented sectors, ought to support the two-digit growth in goods and services exports this year. Still, the expected increase in imports of equipment and intermediate goods for industrial needs, the continued investment cycle, and the recovery of consumption will drive up imports more than initially projected. As a result, the contribution of net exports to GDP will most probably be only slightly negative. Consistent with such estimate of net exports, the recovery of domestic demand, and somewhat more unfavourable terms of trade, due primarily to rising oil prices, we expect the share of the current account deficit to equal 4.6% of GDP this year. Movements since early 2021 indicate the probability of an even more favourable outcome. In the medium run, in view of the increased export capacities and the anticipated global economic recovery, we can expect a slight reduction in the share of the current account deficit in GDP (to around 4%). It will remain fully covered by net FDI inflows, as it has been the case in the past six years.

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

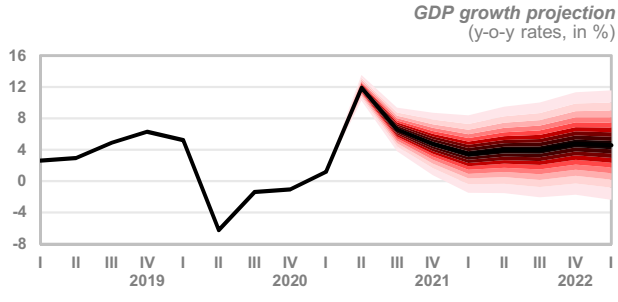
The successful issue of eurobonds in the international market worth EUR 1.0 bn on the hitherto longest 12-year term, at a coupon rate of 1.65% and yield rate of 1.92%, including demand which exceeded multiple times the planned amount of sale, led to a net inflow of portfolio investment worth EUR 945.2 mn in Q1. The capital inflow of close to EUR 946 mn (EUR 839 mn net), recorded based on FDI to Serbia, was higher than in the same period last year. Along with the current account surplus, capital inflows based on portfolio investment and FDI contributed to an **increase in FX reserves by EUR 784 mn since early 2021 to EUR 14.3 bn at end-March, and the continued stable movement of the dinar against the euro**. In March, Moody's upgraded Serbia's credit rating from Ba3 to Ba2. The agency highlighted low and stable inflation, relative stability of the exchange rate, reduced external imbalances and full coverage of the current account deficit by FDI inflows as the key factors

behind the increased resilience and a favourable economic outlook. As stated by the agency, the factors contributing to the upgrade also include the adequate level of FX reserves, increased economic diversification and reduced fiscal risks.

In our estimate, GDP reached its pre-crisis level in Q1 2021 and was higher by 2.5% in s-a, q-o-q terms.

Despite a deteriorating epidemiological situation and the need to re-introduce some of the restrictive containment measures, **economic activity stepped up significantly in Q1**. According to the SORS estimate, in Q1 real economic growth measured 1.2% y-o-y, which is above our expectations stated in the previous *Report*. On the production side, construction contributed to such an outturn, owing primarily to the accelerated implementation of infrastructure projects, as also indicated by rising government capital expenditure. A positive impulse also came from elevated industrial production, despite the overhaul of the oil industry in March (17 of 24 branches of manufacturing recorded growth), and from trade and freight transport. On the expenditure side, net exports were the major positive contributor. Owing to preserved investment and consumer confidence and implementation of infrastructure projects, fixed investment and consumption rallied as well.

Compared to the February projection, when we expected real GDP growth between 5% and 6% this year, we now estimate it at 6%.



We expect **GDP growth to reach 6%** this year, led by domestic demand and exports. The key contribution is expected from the normalisation of global economic flows amid mass vaccination, the timely and adequate response of economic policy makers in Serbia and the resulting favourable financing conditions, preserved production capacities and jobs, and expected recovery of external demand. We estimate that the same factors will ensure the return to a stable medium-term growth trajectory of around 4% p.a. in the coming years. Compared to the February projection, when we expected real GDP growth between 5% and 6% this year, we now estimate it at 6%, thanks to faster than expected recovery in Q1, higher planned capital investment and the adoption of the new economic package of measures. Overall, the risks to the projection associated with both international and domestic factors are judged to be symmetric, since risks from the previous projection have materialised in the meantime. Downside risks from the international environment materialised due to slower than anticipated euro area growth amid extended restrictive containment measures, and upside risks from the domestic environment materialised on account of a new package of economic measures and faster than expected economic growth in Q1 2021.

After a temporary fall in the first two months of 2021, y-o-y inflation in Serbia, as in other countries of the region, has been rising under the impact of transitory factors, primarily higher global primary commodity prices, whilst demand-side inflationary pressures remain subdued.

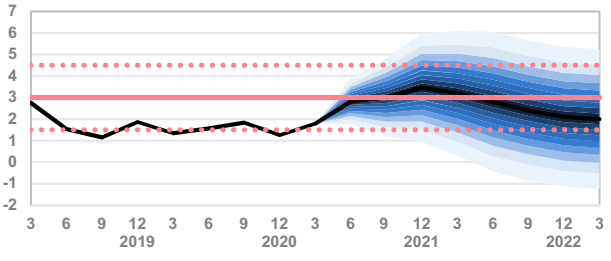
Y-o-y inflation remained below the lower bound of the target band (3±1.5%) in the first two months of 2021, due primarily to the lower than seasonal rise in fruit and vegetable prices early in the year. In March it returned within the target band and measured 1.8%, which reflects,

just like in other countries of the region, primarily the rising contribution of petroleum product prices over the global oil price hike. Further acceleration of inflation, to 2.8% in April, which is expected to continue in May, is estimated to be temporary and the consequence of the low base from last year, rising prices of primary commodities, and the cold weather in April, which pushed up the vegetable price growth. As the last year's increase in prices of fixed telephony services dropped out of calculation, core inflation slowed from 2.1% in January to 1.8% in February, where it stayed until April. That inflationary pressures are low is confirmed by short-term and medium-term inflation expectations of the financial and corporate sectors, which continue to move below the target midpoint.

Under the central May projection, y-o-y inflation will hover around the target midpoint until Q1 2022, under the impact of higher prices of primary commodities, notably oil and agricultural commodities, which will through cost-push pressures spill over, to a degree, onto higher prices of other food. It should slow thereafter as the impact of temporary factors wears off. **Core inflation, under the strongest impact of monetary policy measures, will remain relatively stable within the projection horizon**. Its moderate rise is expected only by the end of the projection horizon as domestic demand picks up further. A higher than expected rise in primary commodity prices is the key reason why the new inflation projection is higher than the projection published in February, in the short run, i.e. over the next twelve months. Uncertainty surrounding the inflation projection in the short run is mostly associated with the movement of global oil prices and fruit and vegetable prices. In the medium run, the key risks to the projection continue to emanate from the international environment, and concern primarily the speed of recovery of the euro area, global prices of primary commodities, and capital flows to emerging markets. The risks also partly relate to the new agricultural season, the speed of recovery of domestic demand and administered prices at home. Overall, the risks to the inflation projection are judged to be symmetric.

Under the central May projection, we expect y-o-y inflation to hover around the target midpoint over the next year under the impact of temporary factors, and to slow thereafter as the impact of these factors wears off.

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



The focus of monetary policy makers will stay on maintaining price and financial stability, while supporting as fast growth of our economy as possible, further growth in employment, strengthening of the export sector, and ensuring a favourable investment environment. The NBS will continue to watch closely the movement and impact of key factors from the domestic and international environment on inflation, financial stability and the pace of economic recovery, and will accordingly adjust its measures, acting in the best interest of our businesses and households.

Full coordination of monetary and fiscal policy measures will continue to underpin the achieved price and financial stability, and ensure sustainable economic recovery from the pandemic-induced crisis.

II Monetary policy since the February *Report*

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

The Board's decision to keep the rate on hold was motivated primarily by the effects of past comprehensive monetary and fiscal measures supporting citizens and corporates and their expected continuation in the period ahead. The decision also reflects the announcement of a third package of economic measures that will be implemented in the course of the year. As a result of successful vaccination process at home, as well as strong rebound in external demand, Serbia's GDP reached the pre-crisis level already in Q1 and is set to grow further in the period ahead.

Caution in monetary policy conduct was mandated by developments in the international commodity markets, notably rallying global prices of oil, primary agricultural commodities and food. Caution was also required because of developments in the international financial markets, and above all because of the surge in long-term yield rates, driven by additional fiscal stimulus in the US, which could have a negative impact on capital flows to emerging markets.

At the Executive Board meetings held since the February *Report*, **the key policy rate was kept unchanged at 1.0%.** The Executive Board decided to keep the rate at the lowest level in the inflation targeting regime, to which it was cut last December. In its decision-making, the Board was guided primarily by the anticipated further effects of past monetary and fiscal stimuli and the announced third package of measures supporting citizens and businesses this year that would additionally bolster Serbian economic growth. This means that monetary and fiscal policy measures will continue to have a positive effect on financing conditions for corporates and households and on their disposable income.[1] Robust monetary and fiscal support to the people and economy during the pandemic is owed to the responsible conduct of economic policy in the prior period, which improved the capacity of monetary and fiscal authorities to fight the ongoing crisis without threatening the achieved low and stable inflation, as well as other indicators of macroeconomic stability.

Keeping the rate on hold, the Executive Board stated that Serbia's economic results since the start of the year are favourable even against the backdrop of the globally deteriorating health situation and stepped-up containment measures, and that this can be attributed, among other things, to the adjustment of consumer habits and work processes to new conditions both at home and abroad. Favourable economic movements at home were indicated by the available monthly indicators, notably industrial production and retail trade turnover, which already exceeded their pre-crisis levels, growing in January and February at an average y-o-y rate of 2.6% and 3.0%, respectively. With further progress in the vaccination process, recovery is expected also in those service sectors that are still heavily affected by the ongoing pandemic (tourism, catering, transport, recreation and culture). This should result in dynamic GDP growth in the coming period, underpinned, inter alia, by the announced new fiscal stimulus.

The Executive Board repeatedly emphasised that the scope and timeliness of the response was critical in averting the collapse of business and consumer confidence, and hence, spillover of the negative effects of the pandemic on the labour market and production

[1] An overview of NBS measures is given in Table 1, p. 10.

capacities. Labour market data indicate that employment is rising and that unemployment has been kept at a single-digit rate. The maintained human and production capacities enabled a swift recovery of the export of goods, which reached pre-crisis levels already by the end of last summer. In addition to agriculture, manufacturing also provided a significant contribution to the growth of exports, which remain diversified in terms of geography and production. With continued relatively strong FDI inflow, notably to tradable sectors, and the gradual recovery of external demand, the export of goods is expected to record a double-digit growth rate this year.

The NBS is pursuing an accommodative monetary policy in the conditions of maintained price and financial stability. For the eighth year in a row, and notwithstanding the pandemic, the NBS has fulfilled its primary objective – delivering low and stable inflation. Consistent with the Executive Board expectations, after reaching 1.2% in February, inflation returned within the target tolerance band in March, measuring 1.8% y-o-y. Core inflation (CPI excluding food, energy, alcohol and cigarettes) was also at 1.8% and was unchanged relative to February. The Executive Board expects inflation to stay low and stable going forward and assesses that its higher level compared to last year is a consequence of temporary factors – surging global prices of primary commodities. The ensured relative stability of the exchange rate, as well as anchored inflation expectations of the financial and corporate sectors that attest to monetary policy credibility, remain an important pillar of low and stable inflation.

In keeping the key policy rate unchanged, the Executive Board took into account that the global economic growth prospects remain under the impact of the pandemic, but also the encouraging fact that projections are being revised upward. Early in April, for the second time since the start of the year, the IMF revised upward the global economic growth forecast, anticipating the effects of additional fiscal measures taken by the world's largest economies (primarily the US), as well as the impetus from vaccination to the global economic growth in the second part of the year. The IMF also raised its forecast for euro area growth for 2021 (from 4.2% in January to 4.4%), with the growth forecast for Italy, one of our key trade partners, being revised to 4.2% (from 3.0% in January) in anticipation of receiving the largest amount of funds under the Next Generation EU instrument. Germany's growth for this and the next year was also revised up, which should have a positive effect on our exports.

The pace of the recovery of the global economy will determine the movements in the international financial market and capital flows toward emerging economies, including Serbia, which increases the importance of maintaining caution in monetary policy conduct. Long-term interest rates rose on the back of expectations that the US economic growth would be stronger than previously hoped for, sparked by the adoption of an additional fiscal stimulus in the US. Interest rates in the euro area also rose somewhat at the start of the year, before the ECB eased its monetary policy further.

Caution in monetary policy-making is warranted also because of the uncertainties in the global commodity market, primarily those surrounding the rising trend of the prices of oil, primary agricultural commodities and food, which has been in place for some time already. Brent oil prices shot past USD 60 per barrel in February, largely under the impact of the expected global economic growth, notably the additional impetus anticipated from the new fiscal stimulus to the US economy, as the world's largest oil consumer. What also added to the upward pressure on global oil prices and took market participants by surprise was the early March decision of OPEC+ countries to cut output by April. Caution in monetary policy conduct was also needed in view of the possibly heightened volatility of global prices of primary agricultural commodities and food in an environment of the still present, albeit reduced, uncertainty over the course of the pandemic. The FAO index, as an indicator of global food prices, increased in March for the tenth consecutive month, to the highest level since June 2014.

The Board emphasised the strong resilience of our economy to external shocks, as a result of responsible economic policy conduct in the prior years and an adequate response to the current global crisis. During 2020, FX reserves increased by EUR 113.2 mn. As their growth continued into this year (by EUR 783.9 mn), they reached EUR 14.3 bn at end-March, reinforcing the resilience of the domestic financial system to shocks emanating from the international environment. Such FX reserves cover more than six months' worth of the import of goods and services, which is double the standard on the adequate coverage of FX reserves by the import of goods and services.

The Government and NBS's success in preserving macroeconomic and financial stability of the country and a favourable economic outlook is illustrated by the fact that Serbia managed not only to maintain, but also to improve its credit rating during the pandemic, when rating downgrades were at their historical peak. Namely, in March Moody's upgraded Serbia's rating from Ba3 to Ba2, citing as the key factors of resilience and favourable

economic prospects low and stable inflation, a relatively stable exchange rate, reduced external imbalances and a current account deficit fully covered by FDIs. The improved profile also reflects adequate FX reserves, increased economic diversification and lower fiscal risks.

Keeping the rate unchanged at its May meeting, the Executive Board stressed that our economy outperformed expectations early this year as well. It reached the pre-crisis level already in Q1 this year versus Q2 as initially forecast. According to the Serbian Statistical Office, Q1 saw GDP growth of 1.2% y-o-y. The major impetus, as assessed by the NBS, came from net exports. As investment and consumer confidence has been preserved and infrastructure projects are unfolding, fixed investment and consumption are also on the path of recovery. An additional impulse is expected from the third fiscal stimulus for businesses and households and higher planned government capital expenditure. Coupled with the continued successful vaccination process and the recovery of services still affected by the pandemic, this will help achieve GDP growth of 6% in 2021.

The Board underlines that the focus of monetary policy makers will stay on maintaining price and financial stability, while supporting as fast growth of our economy and employment as possible, further growth of the export sector, and a favourable investment environment. The NBS will continue to watch closely the movement and impact of key factors from the domestic and international environment on inflation, financial stability and the pace of economic recovery, and will accordingly adjust its measures, acting in the best interest of our businesses and households.

Table II.1 **NBS response to COVID-19**

	2020										2021			
	March	April	May	June	July	August	September	October	November	December	Janaury	February	March	April
Monetary policy measures														
Key policy rate														
	Cut by 0.5 pp, to 1.75%	Cut by 0.25 pp, to 1.5%		Cut by 0.25 pp, to 1.25%						Cut by 0.25 pp, to 1.00%				
	Rate corridor narrowed from ±1.25 pp to ±1.0 pp									Rate corridor narrowed from ±1.0 pp to ±0.9 pp				
Support to dinar liquidity														
	Additional swap auctions, 3M maturity								Additional swap auctions on a weekly basis (Mondays), 3M maturity					
		Lower interest rate on FX swaps												
	Auctions of repo purchase of government securities, 7D maturity													
	Auctions of repo purchase of government securities, 3M maturity								Additional auctions of repo purchase of government securities on a weekly basis (Thursdays), 3M maturity					
		Outright purchase of government securities in the secondary market												
			Corporate bonds included in the list of eligible collateral in NBS monetary operations											
More favourable conditions for Guarantee Scheme loans														
					Approval of dinar loans under the Guarantee Scheme at lower interest rates – minimum 50 bp reduction is compensated by the NBS through the higher remuneration rate on allocated required reserves								
Additional NBS measures														
Moratorium														
		Moratorium on debt payments				Moratorium on debt payments				Moratorium on debt payments for debtors unable to settle their liabilities due to the pandemic, with the extension of the repayment period so that the debtor's monthly liabilities are not higher than before the approval of facilities				
Housing loans														
						Reduction of mandatory downpayment for first-time home buyers from 20% to 10%								
						Reduction of the minimum degree of completion of a building eligible for financing via bank housing loans								
						Extension of repayment term for housing loans by up to five years								
Other loans														
					Extension of repayment term for household loans (except housing) by up to eight years									
						Until end-2021 banks allowed to extend household dinar loans (up to 90,000 dinars) by up to two years only based on signed statement on employment/pension								
Precautionary repo line with the ECB														
					A precautionary repo line with the ECB established to supply additional euro liquidity to local banks in case of need									

Source: NBS.

III Inflation movements

Y-o-y inflation remained below the lower bound of the target tolerance band (3±1.5%) in the first two months of 2021, primarily due to the lower than usual rise in fruit and vegetable prices at the beginning of the year, only to return within the band in March, settling at 1.8%. March acceleration of the y-o-y inflation was primarily a result of the rising contribution of the prices of petroleum products, as in other countries of the region, on account of increasing global oil prices. Core inflation reached the same level as headline inflation, decelerating from 2.1% in January to 1.8% in February and March, as the last year's increase in the prices of landline telephony dropped out of the calculation.

Low inflationary pressures are confirmed by short- and medium-term inflation expectations of the financial and corporate sectors, which remain below the target midpoint.

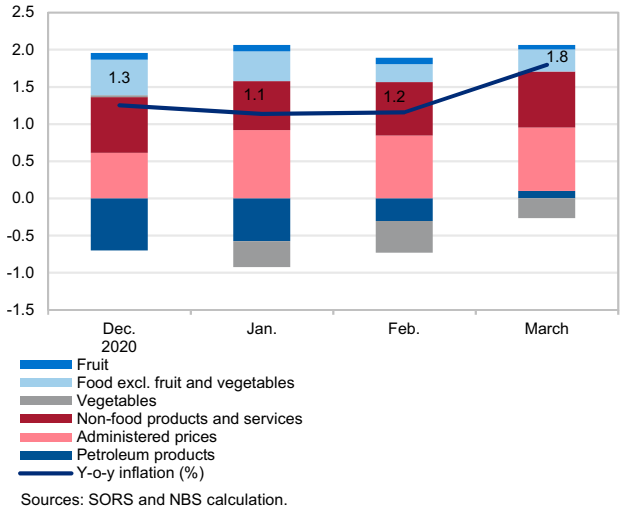
Inflation movements in Q1

Having hovered around the end-2020 level in January and February, **y-o-y inflation** returned within the target tolerance band at end-Q1 **(1.8% in March)** in the absence of the expected seasonal growth in the prices of unprocessed food (primarily vegetables). Y-o-y inflation acceleration to 1.8% in March is largely a result of the higher contribution of the petroleum product prices (from -0.6 pp in January and -0.3 pp in February to 0.1 pp in March), and the low base effect of these and vegetable prices from the same period last year. Other CPI components maintained relatively stable dynamics in Q1, with a similar contribution to y-o-y inflation. As the last year's increase in the prices of landline telephony dropped out of the calculation, **core inflation** (measured as change in CPI excluding energy, food, alcohol and cigarettes) decelerated from 2.1% in January to 1.8% in February and March, reaching the same level as headline inflation.

In Q1, consumer prices went up by 1.6%, largely driven by higher **energy prices** (6.7%, with 1.0 pp contribution to quarterly inflation). As for energy prices, in Q1 **petroleum products** became more expensive (10.6%, with 0.6 pp contribution to inflation) on account of continued rise in global oil prices from the beginning of the year. The increase in energy prices was additionally powered by the rise in the price of **electricity** in January and February (8.2%, with 0.4 pp contribution to inflation).

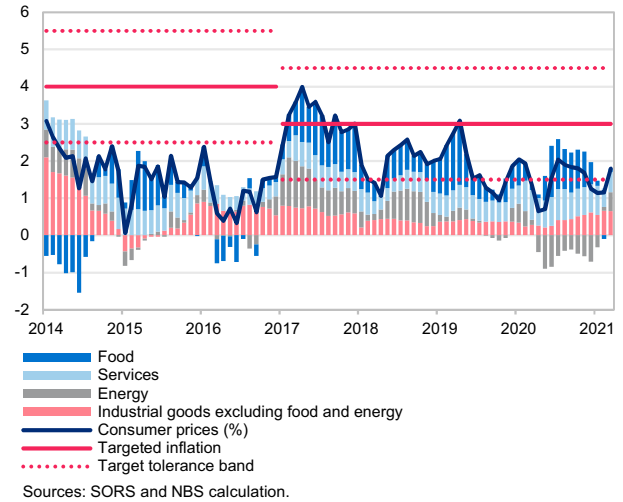
The prices of food and non-alcoholic beverages went up by 1.2 % in Q1, as a result of the higher prices of **unprocessed food** (2.9%, with 0.3 pp contribution to

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)



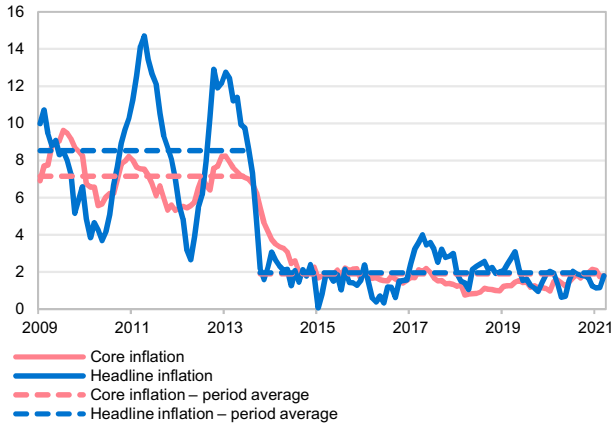
Sources: SORS and NBS calculation.

Table III.0.1 **Growth and contribution of components to consumer price growth in Q1 2021**
(quarterly rates)

	Growth rates (%)	Contribution (pp)
Consumer prices (CPI)	**1.6**	**1.6**
Unprocessed food	2.9	0.3
Processed food	0.5	0.1
Industrial products excluding food and energy	0.2	0.1
Energy	6.7	1.0
Services	0.4	0.1
CPI excluding energy, food, alcohol and cigarettes	0.0	0.0
Administered prices	3.5	0.7

Sources: SORS and NBS calculation.

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



Sources: SORS and NBS calculation.

Table III.0.2 **CPI weights by groups**

	Weights in 2020	Weights in 2021	Difference
Consumer prices (CPI)	**100.00**	**100.00**	**0.00**
Unprocessed food	10.37	10.43	0.06
Processed food	20.80	21.00	0.20
Industrial goods excluding food and energy	28.49	29.23	0.74
Energy	15.40	15.36	-0.04
Services	24.94	23.98	-0.96
CPI excluding energy, food, alcohol and tobacco	**46.62**	**46.03**	**-0.59**

Source: SORS.

inflation), and to a lesser extent, of **processed food** as well (0.5%, with 0.1 pp contribution to inflation). Even though the prices of food moved up, their contribution to inflation in Q1 was lower than projected, primarily on account of a slower than usual rise in the prices of fruits and vegetables in January and February. Their quarterly growth measured 4.5% cumulatively (with 0.3 pp contribution to inflation).

The prices of services increased by 0.4% in Q1 (with 0.1 pp contribution to quarterly inflation), mainly on account of the prices of utility services (2.5%), along with the prices of crafts and personal services, as well as rents. Lower prices of travel packages worked in the opposite direction. They edged down by 11.3%, due to the February cheapening and a sharper than expected drop in March.

Upward pressure on consumer prices in Q1 came from the February adjustment of cigarette prices (3.3%, with 0.15 pp contribution to inflation), as well as from the higher prices of alcoholic beverages and pharmaceuticals. As opposed to this, the prices of clothes and footwear recorded a seasonal decline of 2.8% (with –0.1 pp contribution to inflation). In total, the **prices of industrial products (excluding food and energy)** edged up by 0.2% (with 0.1 pp contribution to inflation).

The materialisation of the projected hikes in the prices of electricity, utility services and cigarettes in January and February pushed **administered prices** up by 3.5% in Q1 (with 0.7 pp contribution to inflation). The y-o-y increase in these prices accelerated from 3.3% in December to 4.6% in March.

Prices within core inflation stagnated during Q1, providing a negligible contribution to headline inflation.

SORS made certain adjustments to weights for inflation calculation in accordance with the regular review of CPI weights, acknowledging the pandemic trends from the previous year. Based on the available data from 2020 National Accounts on Consumption and certain estimates, in the weights for CPI calculation in 2021 the share of services was reduced (by 1.0 pp) on account of lower weights for transport, restaurant and hotel services, as well as travel packages, as the sectors most affected by the pandemic. This pushed down the weights for core inflation, while the share of weights for food inflation went slightly up. The said adjustments are in line with Eurostat guidance on honouring the changes in the habits of consumers brought about by the pandemic.

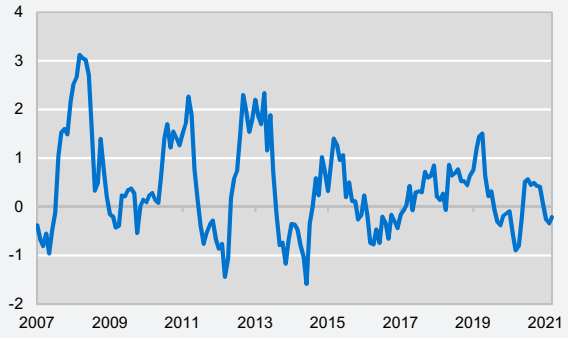
Text box 1: Fruit and vegetable prices in Serbia and their determinants

Fruit and vegetable prices are the most volatile component of the Serbian CPI. Though with a modest share in the consumer basket (6.6%), this group of prices is often the prevalent cause of short-term inflation oscillations, while the deviation of the actual from the projected inflation is in most cases a consequence of the departure of these prices from their seasonal pattern. For example, fruit and vegetable prices contributed to the inflation fall with 1.8 pp in the May–October 2019 period, and to its rise with 1.5 pp in the March–July 2020 period. In earlier years, the prices of this group of products were even more erratic and their contribution to headline inflation could change by over 3 pp in less than a year. So high oscillations, i.e., deviations from the seasonally expected movements make the projection of these prices difficult, just as they make difficult the explanation of the y-o-y headline inflation profile in the coming period given that the base effect in this group of prices is pronounced.

As for the price movements within a year, fruit and vegetable prices are usually on the rise from January until May, when the market supply is smaller, and then they usually decline in H2, with the onset of the new agricultural season. Seasonal trends of fruit and vegetable prices are not entirely the same. Vegetable prices usually start declining in June, only to rise again in the September–November period. Fruit prices are dropping from July until December, first with the new crops, and then on account of the import of relatively cheaper tropical fruits (with the exception of September when fruit prices are usually rising slightly).

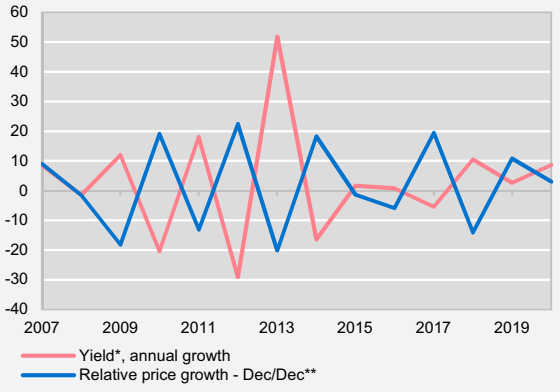
The yield of fruit and vegetable crops in the agricultural season which largely depends on the weather conditions stands out as the dominant factor of volatile fruit and vegetable prices in Serbia and of their deviation from seasonal trends. The (negative) correlation between fruit and vegetable yields in Serbia and their price movements in the year is clearly visible in Charts O.1.2 and O.1.3. It can also be observed that the correlation between yields and prices is somewhat stronger in case of fruit than in the case of vegetables, but that it is definitely strong in both cases. Simply put, the higher the yield of fruits and vegetables in a certain year, the lower their price, and vice versa. For example, the yield of vegetable crops was particularly hit by the droughts in 2007 and 2018, while the 2012 drought affected both fruits and vegetables boosting their prices in those years. In the years that followed, the yield was going up from the low base effect, pushing the prices down. Trade in fruits and vegetables between Serbia and the rest of the world has been on the rise in the past couple of years, particularly

Chart O.1.1 **Contribution of fruit and vegetable prices to y-o-y inflation**
(in pp)



Source: SORS.

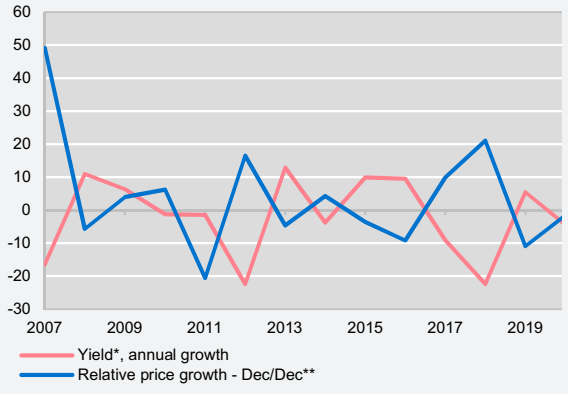
Chart O.1.2 **Impact of fruit supply on prices**
(in %)



Source: SORS.

* Fruit yield is calculated based on SORS data on individual crop yields at annual level, weighted by their shares in agricultural production.
** Calculated as the change in fruit prices relative to total CPI.

Chart O.1.3 **Impact of vegetable supply on prices**
(in %)



Source: SORS.

* Vegetable yield is calculated based on SORS data on individual crop yields annual level, weighted by their shares in agricultural production.
** Calculated as the change in vegetable prices relative to total CPI.

exports. This is a result of the liberalisation of foreign trade flows, primarily with the EU and the increased green-house production, leading to reduced volatility of fruit and vegetable prices compared to the period before 2010. Nevertheless, due to high storage and transport costs, non-tariff barriers, and non-standardised products, the global fruit and vegetable market is arguably less integrated compared to, for example, the market of primary agricultural commodities (corn, wheat, soybean), where prices are mainly driven by the global market conditions as the stock exchange of these crops virtually makes the world a single market. Hence, the lower stabilising effect of global fruit and vegetable prices on their counterparts in the domestic market.

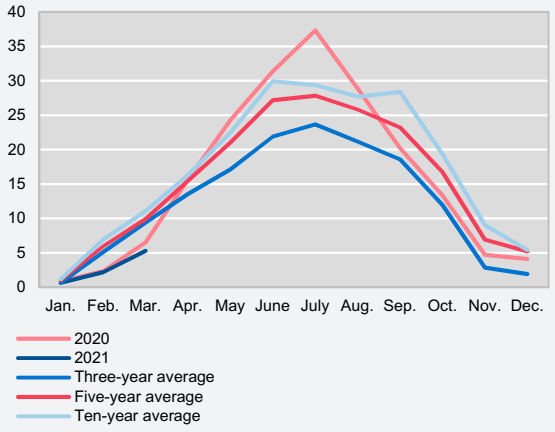
The susceptibility of production to weather conditions, as well as a strong link between fruit and vegetable production and their prices, along with the fact that only the annual data on production are available, and only after the data about prices, make this inflation component the most challenging to forecast. When projecting inflation, the NBS mainly assumes that the next agricultural season will be average. This means that if, for instance, the yield of fruits and vegetables was below-average in the previous agricultural season, having pushed the prices up, for the next season we can expect a rise in yield (from the low base) and a consequential drop in prices. The opposite holds true if the previous agricultural season was extraordinarily good.

Due to the unpredictability of the weather impact on the fruit and vegetable yield, short-term deviations from our projections of the prices of these products are common. That was the case in Q1 this year when vegetable prices recorded an unexpectedly low increase (4.0%), most probably owing to the mild winter which was conducive to green-house production. Such inflation movements were contrary to our expectations – acknowledging longer-term trends and the fact that the ten-year average growth in the prices of vegetables measured close to 15% in Q1 and that the yield of vegetables was lower in 2020, it was reasonable to expect that vegetable prices would go up.

In terms of individual products, tomato, peppers and onion primarily, recorded a lower rise in Q1 compared to the same period of the year before. The prices of potato, bean, lettuce and carrot (Chart O.1.6) saw a drop which was not typical for the season or which was sharper than last year, whereas the rise in the prices of cucumbers and cabbage was higher.

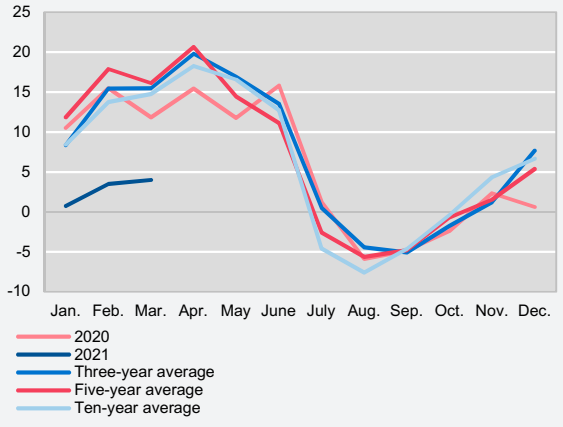
Fruit prices also recorded a rise lower than usual for the season (5.3%), while the ten-year average for this period measures around 11%. Compared to Q1 last year, for instance, a smaller rise was recorded primarily by the prices of tropical fruits (lemon, tangerine, while oranges were even cheaper).

Chart O.1.4 **Cumulative fruit price growth, January-December**
(in %)



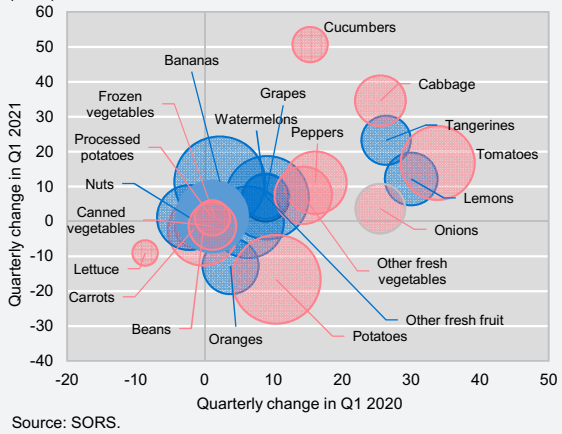
Source: SORS.

Chart O.1.5 **Cumulative vegetable price growth, January-December**
(in %)



Source: SORS.

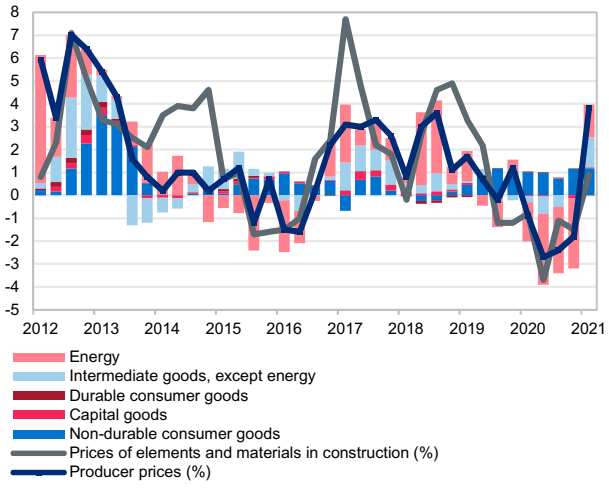
Chart O.1.6 **Quarterly growth in fruit and vegetable prices in Q1 2020 and Q1 2021**
(in %)



Source: SORS.
Note: Size of the bubble reflects the share of products in the structure of fruit and vegetable prices.

Lower than usual growth in the prices of fruits and vegetables pushed inflation, contrary to our expectations, below the lower bound of the target tolerance band in the first two months of the year. Inflation returned within the target tolerance band in March when the growth in fruit and vegetable prices slightly picked up. We expect that the seasonal drop in these prices – once the new agricultural season kicks in, will be softer. That these expectations are realistic is supported by the 2019 data, though the opposite trend was recorded then – the first months (January–April) saw a sharper than seasonal rise in fruit and vegetable prices, but this was offset in the following months with a stronger decline than usual in the period August–October. The decrease in fruit and vegetable prices could turn out smaller in the months when they are typically lower also due to the relatively unfavourable weather in April (spell of cold and frost), which could dampen the yield of early fruits this year, but also the supply of green-house vegetables. Together with the low base effect from last year, the vegetable price growth of over 15% in April already reflected on inflation, which accelerated to 2.8% y-o-y that month. Bearing all of the above in mind, fruit and vegetable prices represent a major upside risk in terms of the short-term inflation projection.

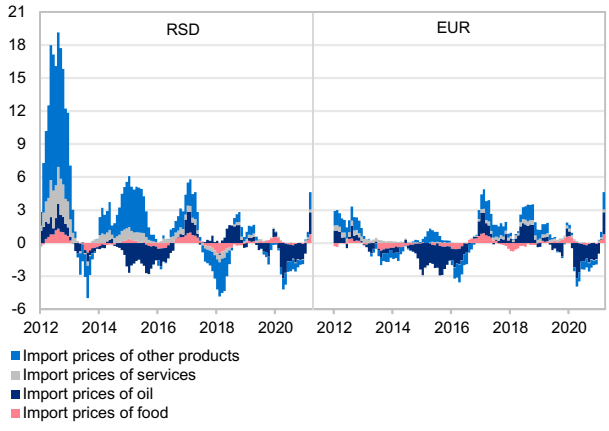
Chart III.0.4 **Contribution to y-o-y producer price growth***
(in pp)



Sources: SORS and NBS calculation.

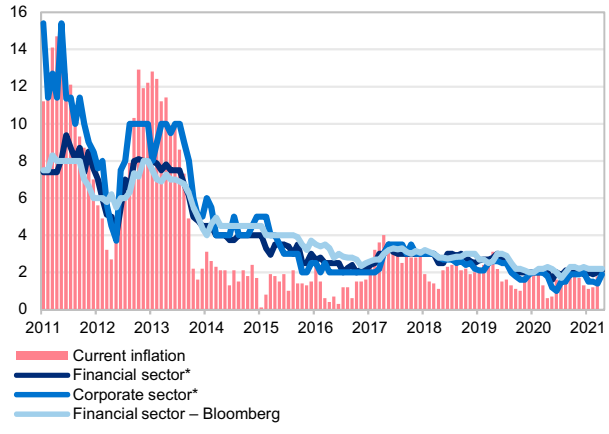
* Industrial producer prices for the domestic market.

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.

Producer and import prices

After a fall in 2020 (-1.8% y-o-y in December), **industrial producer prices in the domestic market** increased by 3.8% y-o-y in March, posting their highest y-o-y growth since Q2 2013. Almost every component of producer prices provided a positive contribution to their rise in Q1. The greatest contribution stemmed from **the prices in energy production** (domestic crude oil and petroleum products), **intermediate goods** (largely base metals and chemical products) and **non-durable consumer goods** (primarily in the production of food and beverages). The hike in the prices of capital goods in Q1 worked in the same direction, while the prices of durable consumer goods declined. The **prices of elements and materials incorporated in construction** also recovered in Q1, as they went up by 0.9% y-o-y in March after a 1.5% y-o-y drop in December. This has been their first rise in the past year and a half.

Similar to producer prices, **import prices expressed in dinars** recovered in Q1,[2] rising by 4.6% y-o-y in March (after a 1.9% y-o-y decline in December). The y-o-y rise in the prices of goods and services imported to Serbia was driven by all the components of import prices, primarily by the surging global oil price (2.0 pp contribution) and higher export prices of Germany, which are used for the approximation of the import prices of equipment and intermediate goods (1.6 pp contribution). At the same time, global food prices and euro area consumer prices (used for the approximation of the import prices of services) also went up, providing a 1.0 pp cumulative contribution to total import prices.

Inflation expectations

The financial and corporate sectors' expectations are that inflation will remain in the lower half of the target tolerance band over the short and medium term, in line with the NBS projection. Anchored inflation expectations suggest that the credibility of monetary policy is on the rise and they are one of the factors which brought the credit rating of Serbia closer to investment grade.

According to Ipsos survey, in the first four months of 2021 **one-year ahead inflation expectations of the financial sector** ranged between 1.9% and 2.1%. At the

[2] 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. Base year is 2010.

same time, Bloomberg survey suggests that short-term inflation expectations of the financial sector remained stable at 2.2%. Looking at a longer horizon (seven and a half years, i.e. from October 2013), inflation expectations of the financial sector have been anchored within the target tolerance band, confirming the adequacy of the monetary policy measures and trust in NBS activities.

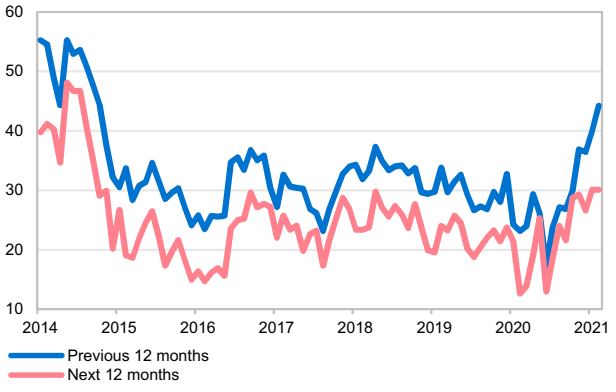
One-year ahead corporate inflation expectations moved in the lower half of the tolerance band. They were stable at 1.5% in January and February, edging down to 1.4% in March, only to increase to 1.9% in April, in parallel with the current inflation acceleration. The net percentage of corporates expecting a rise in the prices of their inputs in production and in the prices of final products/services in the coming year went slightly up from Q4 2020. Such a trend is in line with their expectation of the production/turnover increase in the coming 12 months and economic recovery.

Short-term **household inflation expectations** are usually higher than those of other sectors and they ranged between 9.0% and 10.0% in the first four months of the year. According to the survey, higher one-year ahead inflation expectations of households can be associated with the price hikes at the beginning of the year (electricity, petroleum products, utility services and cigarettes). On the other hand, the qualitative survey[3] shows that in 2021 the index of expected inflation continued to record lower values than the index of perceived inflation, indicating that households expect inflation to be lower in the next 12 months than in the past year.

Two-year ahead inflation expectations of the financial sector have been anchored within the NBS target tolerance band since their monitoring began (March 2014), averaging 2.3% in the first four months of 2021. **Medium-term corporate expectations** lowered gradually, from 1.9% in January to 1.8% in February and 1.7% in March, only to return to the January level in April. At the same time, household expectations ranged between 7% and 10%.

As of February 2021, the NBS has also been monitoring **three-year ahead inflation expectations of market participants** and they additionally confirm the expected preservation of price stability in the medium term. The

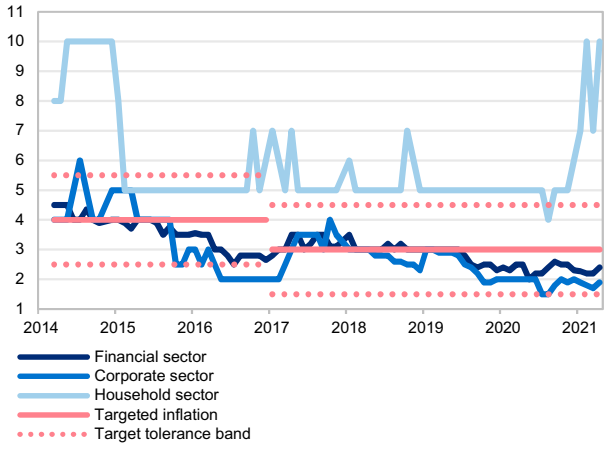
Chart III.0.7 **Household perceived and expected inflation***
(in index points)



Sources: Ipsos/Ninamedia and NBS calculation.

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

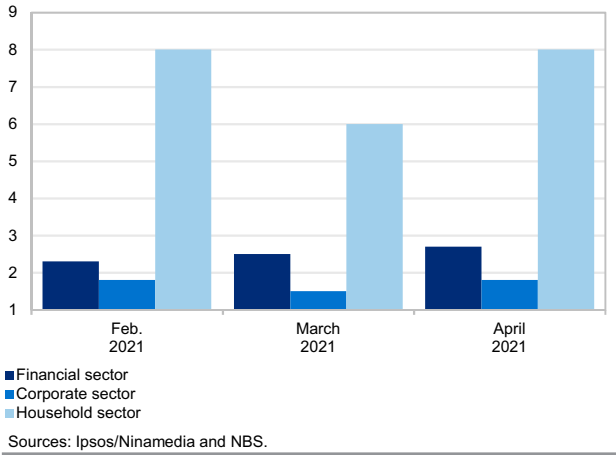
Chart III.0.8 **Two-year ahead inflation expectations***
(y-o-y rates, in %)



Sources: Ipsos/Ninamedia and NBS.

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

Chart III.0.9 **Three-year ahead inflation expectations**
(y-o-y rates, in %)



Sources: Ipsos/Ninamedia and NBS.

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

financial sector is of the opinion that y-o-y inflation in April 2024 will equal 2.7%, while **corporates and households** expect it to measure 1.8% and 8.0%, respectively.

IV Inflation determinants

1 Financial market trends

The interest rates in the interbank money market were stable in Q1, while yield rates on dinar government securities fell. Investor confidence in Serbia was reaffirmed in the international financial market, with a successful eurobond issue. Moreover, borrowing conditions for the private sector remained favourable.

Interest rates

The stock of sold repo securities at end-March stayed unchanged relative to end-December (RSD 30 bn), with the average repo rate in auctions also unchanged and almost equal to the deposit facility rate (0.1%) at end-March.

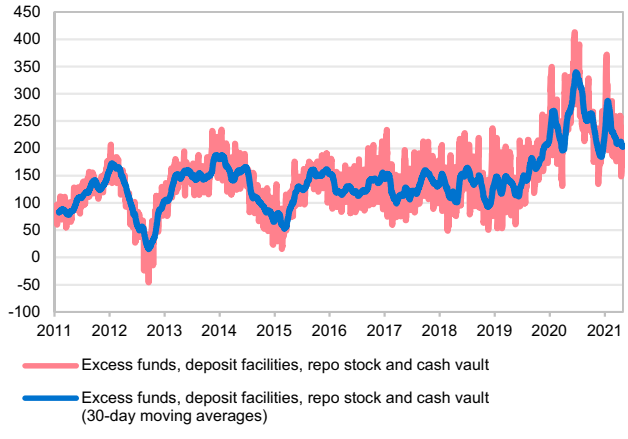
In Q1, the NBS continued to hold auctions of repo purchase of securities with a three-month maturity at a fixed rate, which equals the deposit facility rate. The stock of purchased securities in Q1 edged down negligibly (RSD 0.3 bn), to RSD 15.1 bn at end-March.

The activity in the **overnight interbank money market** picked up in March, thus increasing the average daily trading volume in quarterly terms from RSD 4.2 bn in Q4 2020 to RSD 5.7 bn in Q1. The increase in volume did not reflect on BEONIA interest rate movements, which for three months recorded an average monthly value of 0.12%, down by 8 bp relative to last December.

The weighted average rate on one-week interbank loans decreased considerably (13 bp) relative to December 2020 and measured 0.13% in March 2021. Moreover, BELIBOR rates of all maturities displayed minimum volatility in Q1. In March, they ranged on average between 0.3% for the shortest to 1.07% for six-month maturity, which is lower by around 6 bp compared to December.

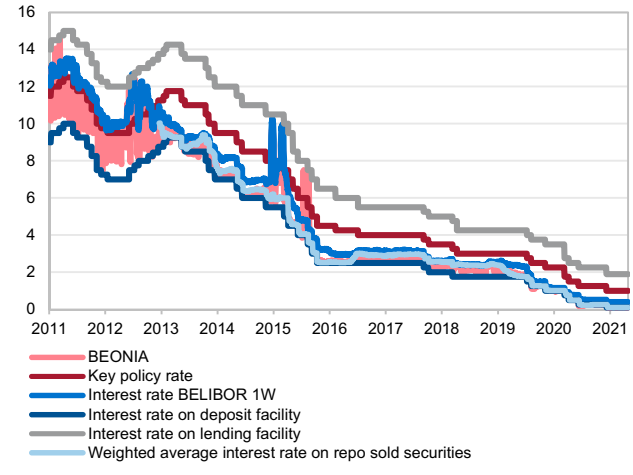
Interbank money market rates remained stable in April, recording on average the same values as in March.

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



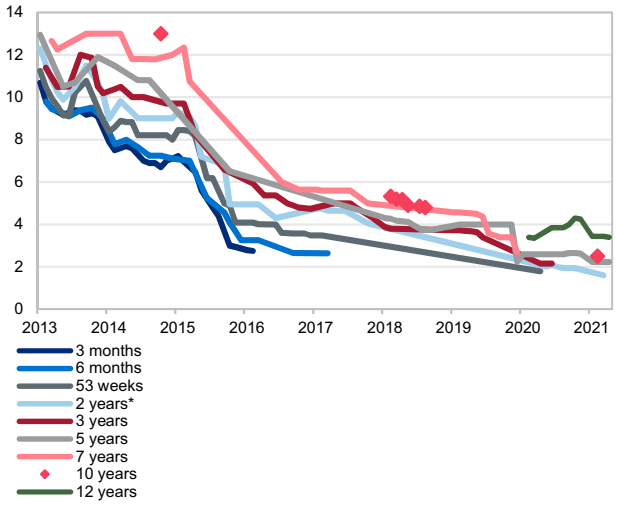
Source: NBS.

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



Sources: Thomson Reuters and NBS.

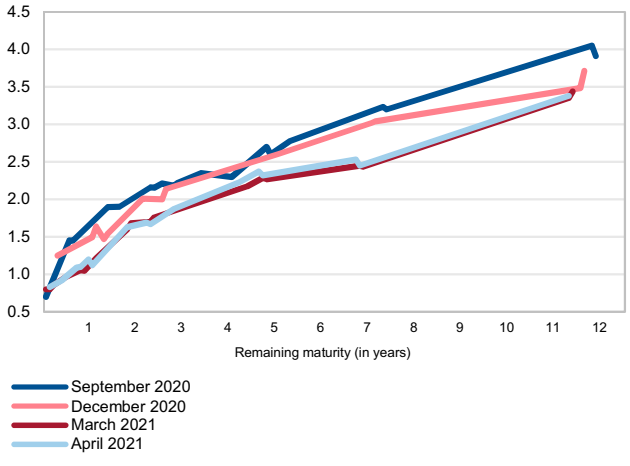
Chart IV.1.3 **Interest rates in the primary market of dinar government securities**
(p.a., in %)



Source: Ministry of Finance.

* Excluding coupon securities with the rate linked to the NBS key policy rate.

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



Source: Central Securities Depository and Clearing House.

In the **primary market of dinar government securities**, effective rates for all maturities decreased in Q1. The effective rates on 12-year benchmark bonds, which were first issued in February 2020, declined by 0.41 pp, to 3.44% in March relative to December 2020. In the January auction of five-year bonds, the effective rate achieved was 2.23%, down by 0.36 pp relative to November 2020, when they were last auctioned in 2020. In addition, a reopening auction of 10-year bonds issued in 2018 was held, at the effective rate of 2.5% (for the remaining seven-year maturity). March saw the issue of a new two-year bond, with an effective rate of 1.6%, down by 0.35 pp relative to October 2020, when the bonds of this maturity were last auctioned.

In primary auctions, as in the previous quarter, non-residents were mostly investing in 12-year dinar government securities. At the same time, non-residents were more active on the sale side in the secondary market. As a result, the stock of sold dinar securities owned by non-residents was almost unchanged in Q1, equalling RSD 232 bn at end-March.

Dinar securities worth nominal RSD 61.5 bn were sold during Q1. As dinar securities worth RSD 9.6 bn nominally fell due in the same period, the stock of sold dinar securities rose to RSD 999.7 bn at end-March.

Investors' activity picked up mildly in the **secondary market**, as testified by the higher turnover of dinar securities, which rose by 4% to RSD 129.5 bn in Q1. The yield rates for five-, seven- and 12-year maturities were almost equal to the rates in the primary market, measuring 2.3%, 2.4% and 3.4%, respectively. In March, the yield rates for shorter maturities ranged from 0.8% for the remaining one-month maturity to 1.8% for the remaining 29-month maturity, on average.

In the sale auction held in April, the effective rate on twelve-year dinar securities dropped by 5 bp, to 3.39%, while the rate on five-year securities stayed unchanged (2.23%). The increase in trading volume (RSD 61.5 bn in April) in the secondary market did not spill over to the yield rates, which remained broadly unchanged relative to March.

In Q1, two more **sale auctions for** 12- and 20-year **euro securities** were organised. Though the issue of the offered securities was not sold out, yield rates declined relative to previous auctions of the same maturities, held in early 2020. The effective rate on 20-year security dropped by 0.75 pp (last auction held in January 2020) to

2.25%, while the rate on 12-year security dropped by 0.15 pp (auctions held in February and March 2020) to 1.74%. Euro securities worth nominal EUR 55.2 mn were sold. Since maturing of euro-denominated securities was higher than their sale, the stock of those securities dropped by EUR 264.6 mn, to EUR 2,365.7 mn in Q1.

In February, Serbia issued a new 12-year euro-denominated eurobond in the **international financial market**. The bond was issued in the nominal amount of EUR 1 bn, at a rate of 1.92% (coupon rate of 1.65%). After the outbreak of the crisis due to the coronavirus pandemic, this was the third successful issue of bonds in the international capital market. In all these auctions, the demand registered was much higher than supply, testifying to investors' positive perception of Serbia's macroeconomic prospects.

The weighted average rate on **new dinar corporate loans** fell to its new minimum of 2.2% in January, supported by the approval of short-term loans to tobacco industry under very favourable conditions, only to rise to 3% and 3.1% in February and March, while still remaining lower than at end-2020. The rates on working capital loans dropped by 0.2 pp, to 3.2%, in March, and those on investment loans edged up by 0.2 pp, to 3.1%.

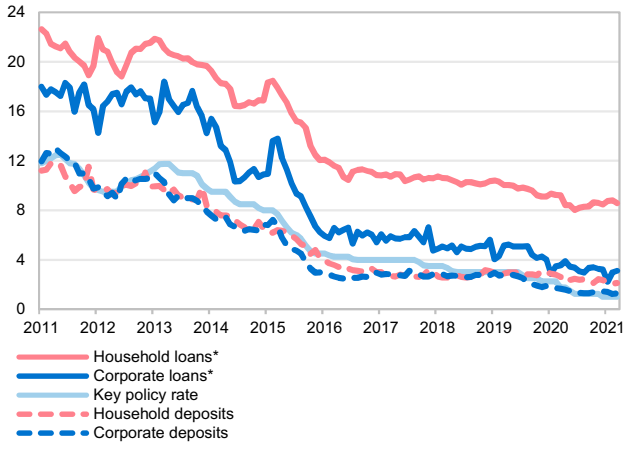
The weighted average interest rate on **new dinar household loans** remained stable in Q1. It was slightly revised up (0.1 pp) relative to December, equalling 8.6% in March. The average interest rate on dinar cash loans to households[4] edged down slightly in the same period (0.1 pp), to 9.1% in March.

The average rates on new **euro corporate loans** went down by 0.6 pp, to 2.4% in March, with the decrease recorded in all loan categories, especially in rates on investment loans, which slid by 0.7 pp, to 2.9%.

Also, rates on new **euro-indexed household loans** drifted down by 0.1 pp in Q1, to 3.2% in March, the same as rates on housing loans, which stood at 2.57% in March, their lowest level since comparative statistics are available.

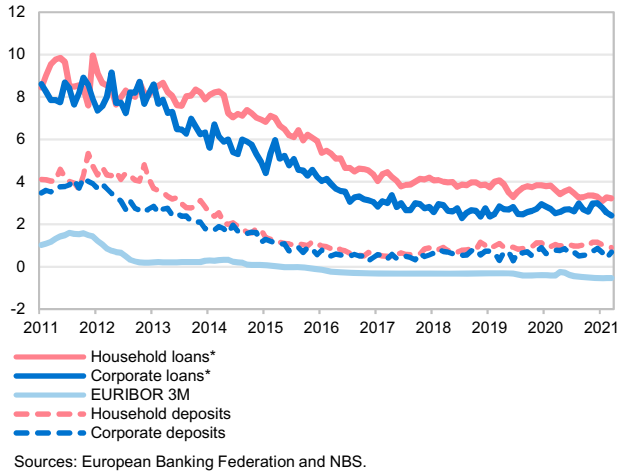
After rising mildly in Q4, interest rates on **time deposits of corporates and households** dropped in Q1. Rates on household savings experienced a somewhat sharper fall by 0.3 pp, to 0.9% for euro savings, and by 0.2 pp, to 2.1% for dinar savings. Rates on time dinar deposits of corporates declined by 0.1 pp, to 1.3%, while rates on time euro deposits declined by 0.2 pp, to 0.7%.

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.

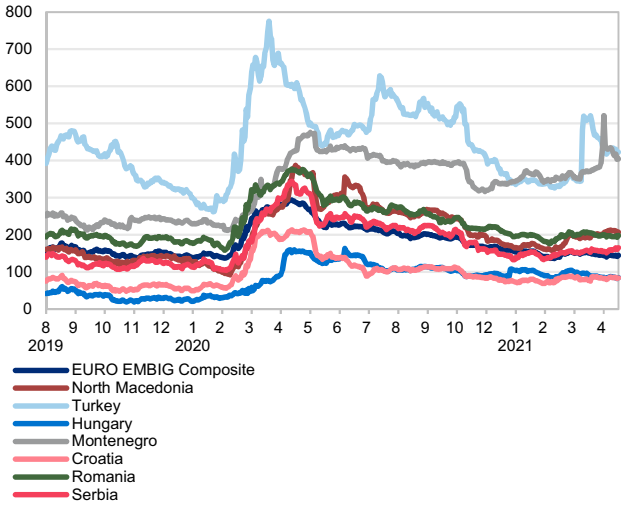
Chart IV.1.6 **Interest rates on new euro and euro-indexed loans and deposits**
(weighted average values, p.a., in %)



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

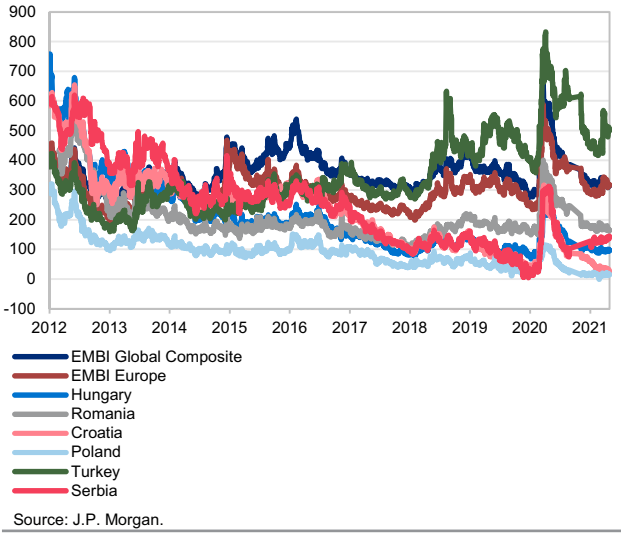
[4] The dominant category of dinar household loans.

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.

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.

Risk premium

After falling by 82 bp in Q4, EURO EMBIG for Serbia (risk premium for euro-denominated debt) increased by 19 bp to 163 bp in Q1 2021, staying however significantly lower than a year before (by 92 bp), i.e. after the outbreak of the pandemic. The risk premia for euro-denominated debt of many European emerging economies also went up in Q1, as a result of the changed investor sentiment toward emerging economies amid the rising yields on long-term US treasuries. On the other hand, EURO EMBIG Composite fell by 10 bp in Q1, to 149 bp, driven by the fall in the country risk premium for euro debt of some countries outside Europe, such as Mexico and China. Serbia's risk premium continued to benefit from domestic factors – a robust and timely package of monetary and fiscal measures and the continuation of a successful vaccination process. In addition, the risk premium was also influenced by the fact that Serbia achieved one of the best results in terms of economic growth in Europe in 2020. In April, EURO EMBIG for Serbia stayed broadly stable (up by 2 bp), the same as EURO EMBIG Composite (down by 4 bp).

With the inclusion of the 10-year eurobond in dollars (SRB 2030), issued in November 2020, in the calculation of EMBI for Serbia by J.P. Morgan, as of 31 December 2020 the data on the US-dollar EMBI for Serbia are again available (after being unavailable for several months due to the exclusion of eurobond SRB 2021 from the calculation). It remained largely unchanged in Q1 (up by 2 bp, to 130 bp), but still significantly below EMBI Global Composite, which was practically the same as at end-2020 (up by 1 bp, to 324 bp). On the other hand, EMBI Europe, as a composite measure for the dollar-denominated debt, went up by 40 bp in Q1, to 333 bp, mainly due to the rise in Turkey's risk premium. In April, EMBI Serbia edged up slightly, to 143 bp, while EMBI Global Composite went down, to 313 bp.

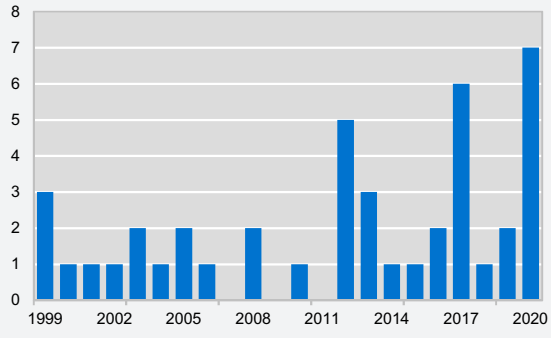
Despite the global crisis caused by the coronavirus pandemic, in March, Moody's improved Serbia's credit rating from Ba3 to Ba2, with a stable outlook for further rating upgrades. Fitch affirmed Serbia's BB+ rating and a stable outlook for further increase and improvement to investment grade). Both credit rating agencies emphasised the following as the key factors of resilience and favourable economic outlook: low and stable inflation, relative stability of the exchange rate, resilience of the financial sector, reduced external imbalances and full coverage of the current account deficit by the FDI inflow, adequate level of FX reserves, increased economic diversification and lower fiscal risks.

Text box 2: Credit ratings during the pandemic – Serbia and other countries

In times of global crises, particularly those of the scale of the ongoing pandemic, investors pay special attention to the moves of rating agencies, from which they expect an independent assessment of sovereign credit ratings, i.e. of the countries' ability and willingness to service debt to private creditors. Even though a sovereign credit rating sometimes does not match a country's ranking based on investor interest and the terms of borrowing achieved in the international financial market, it remains a useful and important element in assessing the country's investment quality.

News of credit rating changes have a special informative value for capital markets during the pandemic, when macroeconomic positions of many countries change quickly, and hence the risks of investing in their debt. It has been established that capital markets are much more sensitive to rating downgrades than to upgrades.[1] On the other hand, credit ratings are also important for countries, especially during the pandemic, which may have a procyclical effect on credit rating, i.e. exert strong downward pressure precisely at a time when the country needs additional financing at terms as favourable as they can get. A sovereign rating downgrade may induce investors to withdraw from a country's debt and increase its costs of financing, thereby spilling over to other assets and economically-linked countries.

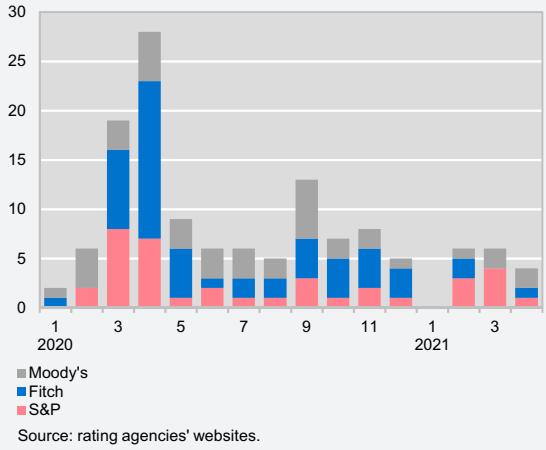
Chart O.2.1 **Number of defaults**
(on foreign currency sovereign debt)



Source: S&P Global Ratings.

The ongoing pandemic is a strong negative shock for credit ratings, given that it has affected the entire world and took a heavy toll on economic growth, employment, fiscal and external position of nearly all countries, these being precisely the macroeconomic indicators carefully monitored by rating agencies. No wonder then that we have seen a record number of credit rating downgrades during the pandemic, as a well as a record number of countries in the lowest spectrum of rating (default) in recent history. In 2020 there were seven cases of default by countries with B foreign currency debt ratings or lower, which were not able to adjust the settlement of their obligations to the pandemic-induced crisis.[2] Sovereign defaults appear likely in the period ahead as well, considering that the CCC+ and lower ratings ("very high levels of credit risk" and "near default") number seven countries more than pre-pandemic.

Chart O.2.2 **Number of downgrades**
(February 2020 - April 2021)



Source: rating agencies' websites.

The effect of the pandemic on credit ratings is best illustrated by the fact that from the start of February 2020, when the world began to feel the impact of the coronavirus[3], through April 2021 almost 60 sovereigns saw their foreign currency borrowing ratings cut by at least one of the three leading rating agencies that cover 90% of the market – Moody's, S&P and Fitch. At the same time, a great deal of these countries experienced more than one downgrade. The pace of rating downgrades was particularly sharp at the start of the pandemic, in March and April, though it remained significant in the period thereafter as well. Fitch was the most active in this respect, with 52 downgrade episodes, followed by Moody's with 39 and S&P with 37.

[1] Afonso, A., Furceri, D., Gomes, P. (2012), "Sovereign credit ratings and financial markets linkages: Application to European data", Journal of International Money and Finance, 31/6.

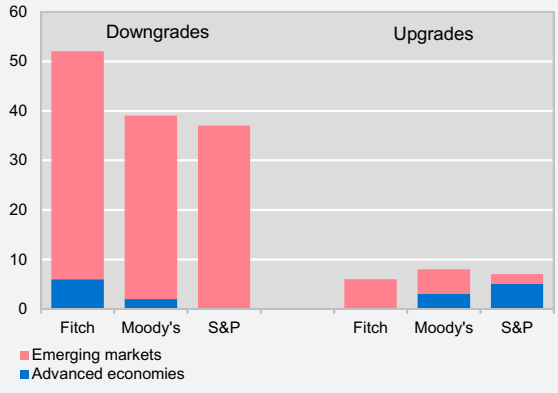
[2] Argentina, Belize, Ecuador, Lebanon, Zambia and Suriname (which slid into default twice during 2020).

[3] On 30 January 2020 the coronavirus outbreak was declared by the WHO a public health emergency of international concern, and on 11 March 2020 – a global pandemic.

The main reasons cited for rating cuts were the pandemic and the collapse of the global oil price, which only increased the vulnerabilities of some countries, such as high public and external debt, weak economic policy credibility, excessive reliance on the export of primary commodities or tourism, large external financing requirements, hot money inflows and low foreign exchange reserve buffers. The agencies state that these are countries with weaker pre-pandemic macroeconomic fundamentals and limited room for monetary and fiscal stimuli during the pandemic, which is why they will not be able to avoid long-term structural consequences.

Emerging markets (EM) were more exposed to rating downgrades, notably countries from Africa, Middle East and Latin America. Although the effects of the pandemic were more severe in advanced economies (AE), they experienced a much smaller number of downgrades.[4] One of the explanations for such agencies' behaviour is that AEs achieve lower interest rates, and thus, have a smaller burden on their public debt. However, some AEs did experience a downgrade during the pandemic. Except for the UK-downgrade by Moody's in October 2020, all other AE-downgrades were by Fitch (Canada, Italy, UK, Slovakia and Hong Kong). Meanwhile, S&P has not lowered any AE sovereign rating since 2017, but it did lower the rating outlook to negative for Australia, Slovakia and Spain.

Chart O.2.3 **Number of downgrades and upgrades**
(cumulative, February 2020 - April 2021)



Source: rating agencies' websites.

Rating upgrades, on the other hand, were rare, especially among EMs. AEs fared better, and S&P and Moody's even displayed net upgrades, i.e. more upgrades than downgrades for AEs. Namely, S&P upgraded Latvia, Lithuania, New Zealand and Greece, while Moody's upgraded Greece, Lithuania, and Slovenia.

The course of the pandemic and the pace of economic recovery will be the key factors of future rating agencies' actions. While the pace of downgrades is slower, downgrades are expected to outnumber upgrades this year again. However, as the agencies themselves state, in the coming period we should not expect comprehensive reviews of sovereign ratings as seen in the period March–May 2020, except in the case of a considerable change in circumstances, which would affect the present baseline macroeconomic scenarios.

Anyway, there were more credit rating downgrades during the pandemic than during the global financial crisis of 2008. Overall, the three rating agencies lowered a larger share of their rated portfolio during the pandemic than during the global financial crisis (20% vs. 16%). Looking at individual agencies, Fitch and Moody's took more negative actions than following the collapse of Lehman Brothers, while S&P did not.

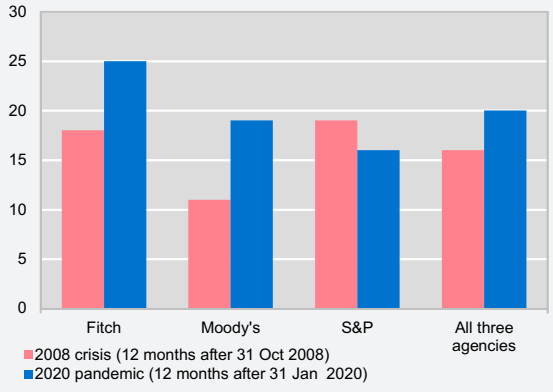
Against the backdrop of extreme downward pressure on credit ratings, **Serbia managed to maintain its long-term foreign currency borrowing rating with all three agencies during 2020, and even see its improvement in March 2021 (Moody's)**. Being a step away from investment grade, at BB+ (S&P and Fitch) and Ba2 (Moody's), Serbia was successful during the pandemic on this front too. Looking at regional peers, a rating increase was recorded also by Bulgaria, Croatia and Slovenia, while Slovakia and Turkey experienced a downgrade.

In their press releases on rating decisions, all three agencies emphasise Serbia's relative resilience to the global pandemic-induced crisis and solid economic growth prospects. The agencies particularly commend responsible economic policy in the prior period which created room for a large monetary and fiscal policy response that mitigated the effects of the pandemic and laid the groundwork for economic growth. Serbia is getting closer to investment grade countries as a result of fiscal metrics and public finance consolidation in the prior period which carved the scope for a comprehensive package of government support to businesses and citizens in fighting the economic fallout from the pandemic. No less important is the fact that rating agencies judge that the current increase in the fiscal deficit is temporary and justified.

[4] Moritz Kraemer, "Taking the pulse: sovereign ratings during the pandemic", CountryRisk.io, March 2021.

Serbia entered the pandemic in a much better macroeconomic position and with considerably smaller imbalances than ten years ago. The improvements all three agencies underline include primarily low and stable inflation, relative stability of the exchange rate, adequate level of foreign exchange reserves, stronger fiscal position, increased economic diversification, notably diversification of investment and exports by sector and geography, which facilitated more even growth. Furthermore, the agencies stress the reduced external imbalance and a current account deficit fully covered by FDI inflows, in contrast to the run-up to the global financial crisis of 2008, when portfolio investment, as the most volatile type of inflow, was the dominant source of financing for the twin deficit (fiscal and current account deficits).

Chart O.2.4 **Share of downgraded sovereigns in total rated portfolio**
(in %)

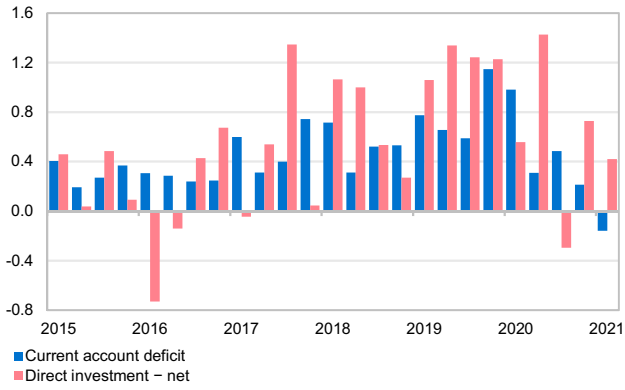


Source: CountryRisk.io, according to Reuters.

The enhanced monetary policy framework and stronger credibility of the NBS are also highlighted by the agencies. In fact, in their rating decisions they put special emphasis on the central bank's well-timed actions. In addition to the primary monetary policy objective – preservation of price stability, the agencies underline strengthened financial stability, as reflected in high capital adequacy of the banking sector, a reduced share of NPLs, relatively favourable terms of borrowing, higher dinarisation, vibrant lending activity, and relative stability of the exchange rate.

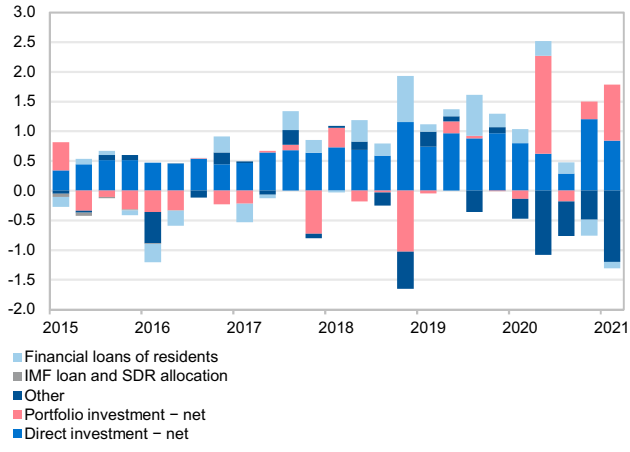
S&P states that upward pressure on Serbia's credit rating in the coming period could come from continued FDI inflows, supporting further growth in exports and foreign exchange reserves, while Moody's sees sound public finance as the key driver of a rating improvement. Similar is the assessment of Fitch. Having in mind the economic policy makers' firm commitment to keeping Serbia's strong economic growth on a sound footing, supported by continued FDI inflows notably into tradable sectors, as well as their determination not to allow large pandemic-related fiscal stimulus to jeopardise the sustainability of public finance, we expect that in the coming period Serbia will enter the investment grade spectrum. We are of the view that the effectiveness of monetary and fiscal policies in recent years, the consistency and continuity of economic reforms, the transformation of the Serbian economy and the confidence of local and international investors and institutions have laid the foundations for reaching investment grade in the period ahead and for formal entry into the group of countries where by numerous indicators we already belong, including above all investor interest and the terms of financing Serbia manages to achieve in the international financial market.

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



Source: NBS.
Note: Preliminary data for Q1 2021.

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



Source: NBS.
Note: Preliminary data for Q1 2021.

Foreign capital inflow

In Q1, the balance of payments financial account recorded a capital inflow under portfolio investment, owing to a successful eurobond issue in the international financial market, and under FDI. Capital inflow exceeded the outflow under banks' increased balances in accounts abroad, trade and financial loans. Along with the current account surplus (close to EUR 160 mn), which is a result of the improvement of all components, this helped FX reserves to rise since the beginning of the year by EUR 784 mn, to EUR 14.3 bn at end-Q1, and extended the stable movements of the EUR/RSD exchange rate.

Despite deteriorating epidemiological situation and extension of containment measures globally and at home, FDI inflow to Serbia amounted to EUR 959.7 mn in Q1, up by 18.7% from the same period the year before. Sector-wise, investment was channelled mainly into tradable sectors. As before, the bulk of FDI came from European[5] and Asian countries. At the same time, residents stepped up their investment in foreign companies, resulting in a **net FDI inflow** of EUR 839.0 mn in Q1 (according to preliminary data), up by 5.2% y-o-y.

Owing to a successful issue of 12-year eurobonds in the international market in February, **portfolio investment** generated a net inflow of EUR 945.2 mn in Q1. Serbia issued eurobonds worth EUR 1.0 bn with the longest maturity thus far, at a coupon rate of 1.65% and a yield rate of 1.92%. Non-residents increased their investment in dinar government securities in the primary market, primarily in securities with the longest maturities, which to a large degree compensated for the outflow on account of the maturity and net sale of securities in the secondary market.

Residents reduced their external borrowing under **financial loans**, leading to a net outflow of EUR 108.8 mn in Q1. As banks were the ones that repaid their debt the most, while reducing their external lending at the same time, banks' financial loans generated a net outflow of EUR 121.5 mn in Q1. Outflows were also recorded on account of corporate debt repayment (EUR 11.1 mn) and regular settlement of obligations by the NBS (EUR 3.9 mn), while the government borrowed EUR 27.7 mn. Banks increased their balances in accounts abroad, generating a net outflow under **currency and deposits** of EUR 779.8 mn. Outflow was also recorded under **trade loans** (EUR 385.7 mn) due to uncollected payments for export of goods.

[5] Mostly EU investments.

Trends in the FX market and exchange rate

January saw the prevalence of depreciation pressures, triggered primarily by the seasonal hike in FX demand of domestic energy importers, net sale of foreign cash to citizens and exchange dealers and the decrease in FX-indexed bank assets.[6] These pressures were alleviated by the FX sale by non-residents, who were also the majority buyers at the auction of 12-year dinar government securities in January. The sale of foreign currency by some domestic companies, mostly net exporters, fuelled appreciation pressures in February, and the increase in FX-indexed bank assets worked in the same direction. In addition, as of February we have again seen the net purchase of foreign cash from citizens and exchange dealers, which was usual before the pandemic. Throughout Q1, the strengthening of the dinar was also supported by the lengthening of the FX position of banks on account of the use of payment cards. The second half of March saw occasional depreciation pressures, driven by the decrease in FX- indexed bank assets and the sale of foreign currency to domestic companies and non-residents.

In Q1, the NBS was a net seller of foreign currency in the IFEM (EUR 50.0 mn in total). In order to maintain relative stability in the FX market, the NBS intervened by selling foreign currency in January, and by both buying and selling in February and March.

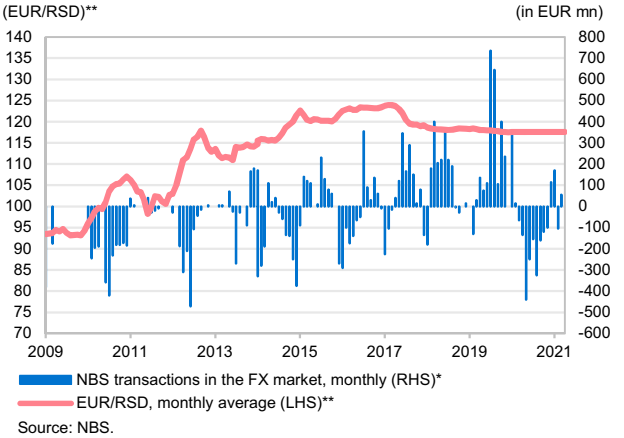
Relatively balanced FX demand and supply, with occasional interventions by the NBS on both the purchase and the sale side, resulted in the preservation of the relative stability of the dinar exchange rate against the euro at the level of around 117.6 dinars per euro. On the other hand, since the euro weakened against the dollar, the dinar weakened 4.7% against the dollar in Q1, to 100.4 dinars per dollar at end-March.

The average daily trading volume in the IFEM equalled EUR 25.4 mn in Q1, by EUR 1.4 mn lower than in Q4 2020.

The volume of turnover at two-week and three-month FX swap auctions organised by the NBS also went down in Q1. At regular two-week swap auctions, the NBS bought from and sold to banks EUR 20.0 mn each, while at regular three-month auctions, it bought and sold EUR 23.0 mn each. At additional swap auctions of foreign currency purchase, at fixed swap points, which continued

[6] Aiming to balance their short open FX positions and reduce the exposure to FX risk, banks buy foreign currency, which results in the weakening of the dinar.

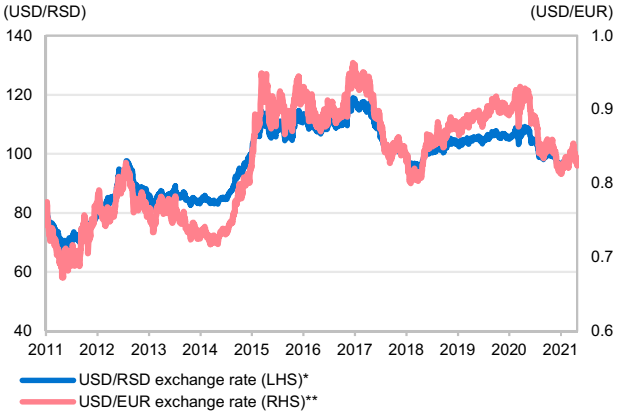
Chart IV.1.11 **Dinar exchange rate and NBS transactions in the FX market**



Source: NBS.

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

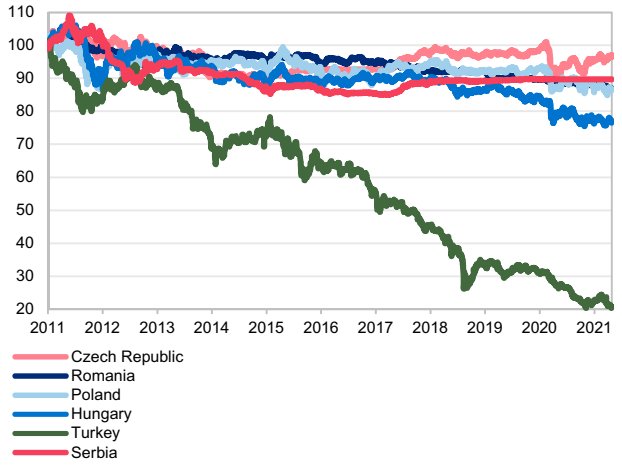
Chart IV.1.12 **Movements in USD/RSD and USD/EUR exchange rates**



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.

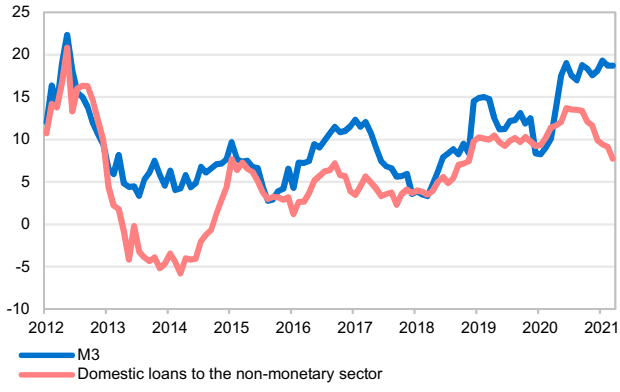
in Q1 ending with 8 March, the NBS swap bought from banks EUR 165.0 mn.

The currencies of inflation targeting countries in the region recorded divergent movements against the euro in Q1. The Turkish lira lost the most (7.8%), while the Romanian leu weakened by 1.1% and the Polish zloty by 1.0%. On the other hand, the Czech koruna and the Hungarian forint gained 0.4% each.

2 Money and loans

Consistent with our expectations, in Q1 monetary and credit aggregates gradually slowed down their y-o-y growth. The factors behind this trend were the reduction in direct government assistance and lifting of the moratorium on corporate and household loans, as well as the high base from last year as the seasonally expected contraction of money supply and the slowdown in lending failed to come about.

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

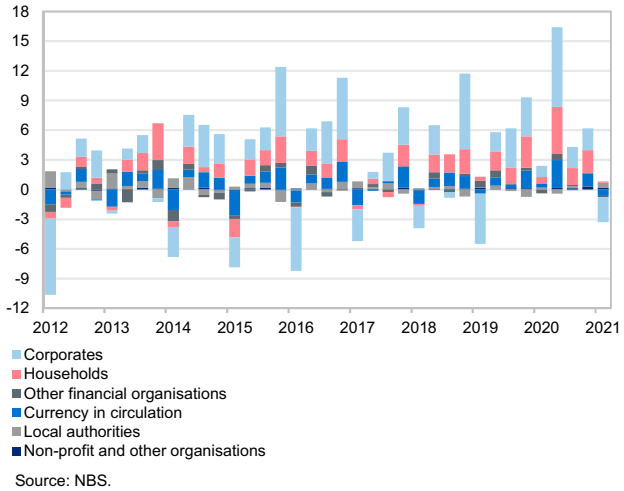


Source: NBS.

Monetary aggregates

In Q1, dinar monetary aggregates M1 and M2 decreased 2.8% and 2.5%, respectively, mainly reflecting the fall in the most liquid components, typical for the start of the year. On the other hand, thanks to the increase in FX deposits, the broadest monetary aggregate, M3, gained 1.5% in Q1.

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



Source: NBS.

In terms of individual categories, **sight deposits** recorded the sharpest fall in Q1, losing RSD 23.5 bn. The greatest decrease was recorded in corporate transaction accounts (RSD 25.8 bn), with almost equal contributions of company and public enterprise deposits. Households decreased their transaction account balances by RSD 1.7 bn, while the change in deposits of other sectors relative to end-2020 was relatively small.

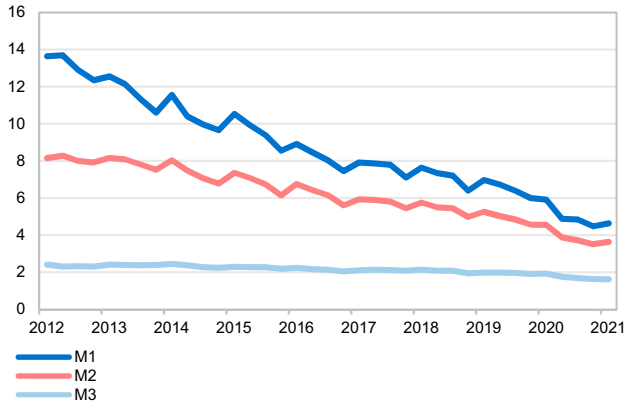
Time dinar deposits of non-monetary sectors declined by RSD 5.4 bn in Q1, mainly as a result of a decrease in corporate accounts (by RSD 13.6 bn). The decrease was also recorded in accounts of other financial organisations (RSD 1.3 bn), while other sectors raised the balances in their time dinar accounts. Dinar household savings (of residents) continued the trend of steady growth from the previous three years, rising in Q1 by RSD 3.4 bn (by 3.7%), to a new maximum level of RSD 96.0 bn in March. Such movement of dinar savings confirms

household confidence in the domestic currency and speaks in favour of the preservation of financial and price stability. The attractiveness of savings in the domestic currency relative to FX savings is also boosted by higher interest rates and a more favourable tax treatment.

In Q1, **FX deposits** increased by EUR 756.5 mn, thanks to the rising corporate and household deposits. Balances in FX corporate deposits increased in Q1 by EUR 433.2 mn on account of FX inflows from exports, FDI and corporate borrowing abroad. FX savings of households (residents) increased during three months of 2021 by EUR 337.2 mn, to the record high EUR 11.4 bn[7] in March. FX deposits of other sectors edged down mildly relative to the end of last year.

In y-o-y terms, growth in dinar monetary aggregates continued to gradually lose steam in Q1, as a consequence of the high base from last year and the fact that the pronounced expansion of money supply in 2020 was primarily connected with the Government and NBS measures aimed at boosting corporate liquidity and disposable income of households. Money supply also grew on the back of the increase in precautionary savings and change in consumer habits in pandemic conditions, the effects which are expected to weaken with the further recovery of economic activity, progress in vaccination and improvement of the epidemiological situation, while the adopted third package of economic measures is expected to work in the opposite direction. Monetary aggregate M1 slowed its growth to 27.2% in March (from 35.0% in December), and M2 to 25.2% (from 30.9% in December). On the other hand, thanks to the rise in corporate and household FX deposits, M3 growth accelerated to 18.7% y-o-y in March (from 18.1% in December).

Chart IV.2.3 **Velocity of money**
(nominal y-o-y rates, in %)

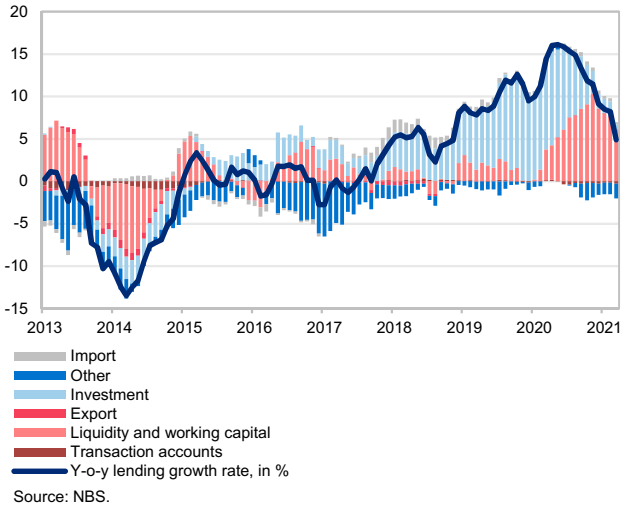


Source: NBS.

Loans

Domestic lending extended its rising trend in early 2021, supported by the NBS's past monetary policy easing, approval of loans under the Guarantee Scheme to micro, small and medium-sized enterprises and entrepreneurs, the effects of measures encouraging sustainable household lending and persisting low interest rates in the euro area money market. Consistent with our expectations, under the influence of the high base from the beginning of last year (especially in the corporate sector) and the maturing of higher loan amounts after the

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

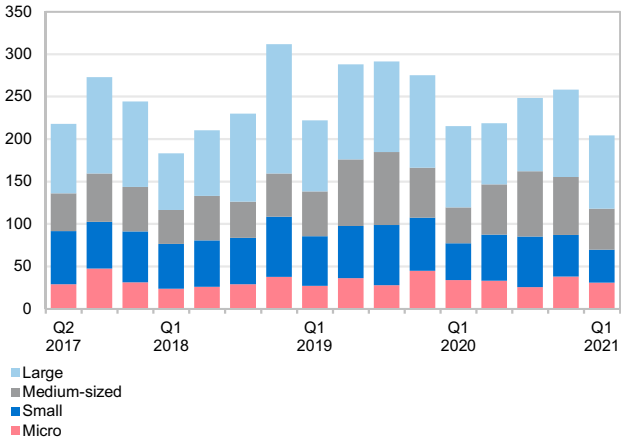


Source: NBS.

[7] Money supply M3 includes only resident funds. With non-resident funds included, at end-March dinar savings equalled RSD 96.5 bn and FX savings EUR 11.8 bn.

lifting of the second moratorium, credit activity slowed down y-o-y. In March, excluding the exchange rate effect, **total domestic loans** recorded y-o-y growth of 7.7% (9.9% in December 2020). The rise in **total domestic receivables** (which, apart from loan receivables, include also the receivables on account of investment in securities, interest and fees, as well as other receivables), amounted to 8.7% in March (10.7% in December 2020).

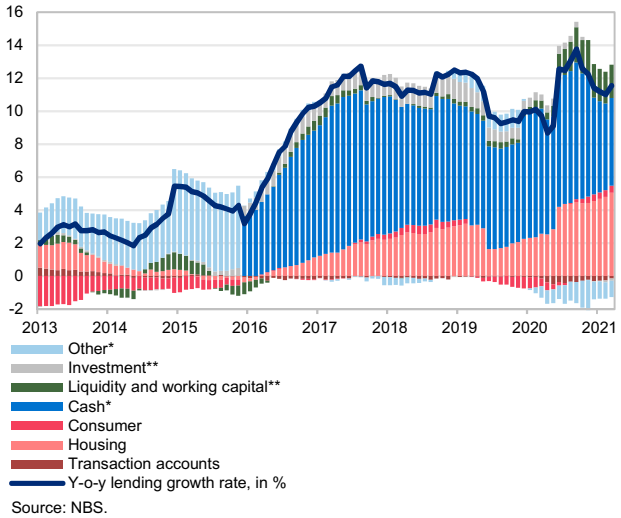
Chart IV.2.5 **Structure of new corporate loans, by enterprise size**
(in RSD bn)



Source: NBS.

Observed at Q1 level, **corporate loans**, excluding the exchange rate effect, rose by RSD 8.4 bn. This growth was driven by dinar lending, benefiting from the Guarantee Scheme loans approved under favourable terms and relaxation of NBS monetary policy thanks to which interest rates on new dinar corporate loans stood at similar levels[8] as on euro-indexed loans. In terms of purpose, the greatest increase in Q1 was recorded for investment loans (up by RSD 8.0 bn), whose share in total corporate loans in March stood at 43.3%. Against the background of growing liquidity needs, liquidity and working capital loans became the dominant category of corporate loans (43.6% in March), having risen[9] by RSD 2.8 bn in Q1. The stock of loans of companies in transport, trade and construction increased during Q1, while other sectors recorded a decrease. In terms of company size, loans approved to micro, small and medium-sized enterprises made up 68% of total corporate loans in March, posting y-o-y growth of 6.8%.

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.

The volume of new corporate loans in Q1 equalled RSD 204.1 bn, down by 5.1% compared to the same period last year. Liquidity and working capital loans accounted for 53.0% of corporate loans approved in Q1, with almost 60% of these loans having been absorbed by micro, small and medium-sized enterprises, which enjoyed more favourable financing terms under the Guarantee Scheme. Investment loans made up 29.2% of new corporate loans in Q1, and almost two thirds of loans approved were channelled to the segment of micro, small and medium-sized enterprises.

Excluding the exchange rate effect, **household loans** went up by RSD 22.5 bn. The growth was led by housing loans, which accounted for almost 75% of the household loan growth in Q1. Next were cash loans, which gained RSD 8.0 bn in Q1. In the same quarter, non-categorised household loans contracted by RSD 4.4 bn, while other loan categories recorded relatively smaller changes

[8] In some months, new dinar loans were approved at lower interest rates compared to euro-indexed loans.

[9] Debt on transaction accounts increased in Q1 by RSD 4.1 bn, while non-categorised loans decreased by RSD 4.8 bn and import loans by RSD 1.7 bn.

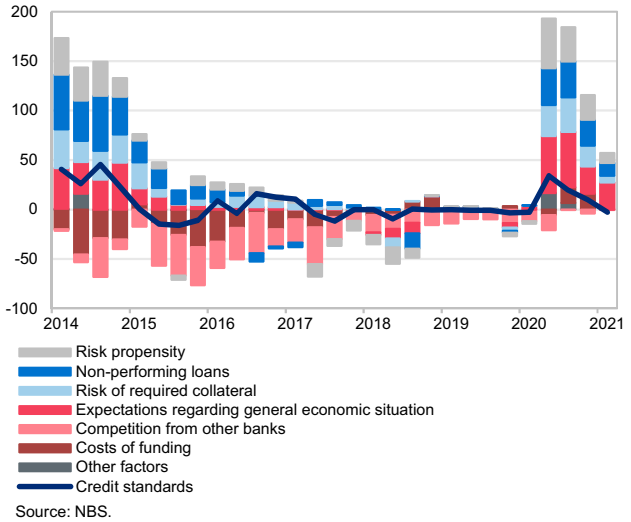
compared to the end of the last year. The composition of household loans in March was dominated by cash (44.3%) and housing loans (37.4%).

The volume of new household loans in Q1 amounted to RSD 126.2 bn, up by 22.1% relative to Q1 2020. Households predominantly used cash loans, which made up 58.5% of new loans in Q1. The next largest category were housing loans, with the share of 25.3%, while new housing loans in Q1 (RSD 31.9 bn) were by 62.4% higher y-o-y. Favourable terms of borrowing and higher disposable income, hand in hand with positive trends in the real estate market and a continuous rise in the number of apartments completed since 2016, have boosted household demand for housing loans.

The results of the **NBS bank lending survey in April**[10] show that in Q1, for the first time since the outbreak of the coronavirus pandemic, banks relaxed corporate loan standards. The relaxation concerned somewhat more dinar as opposed to FX-indexed loans, as well as small and medium-sized enterprises as opposed to large ones, which is partly also the effect of the NBS monetary policy easing and approval of loans under the Guarantee Scheme. After relaxation in the previous quarter, household credit standards, overall, remained unchanged in Q1. In banks' view, corporate and household loan demand increased in Q1, mainly for long-term dinar loans in the corporate segment and FX-indexed housing loans in the household segment. Real estate purchases and refinancing were the main factors driving household loan demand, while capital investment (apart from the need to finance working capital and debt restructuring) was again an important source of growth of corporate loan demand. Banks expect to see a relaxation of credit standards in Q2, both in the corporate and household segment. Loan demand of both sectors is expected to expand further, driven by the same needs as in Q1.

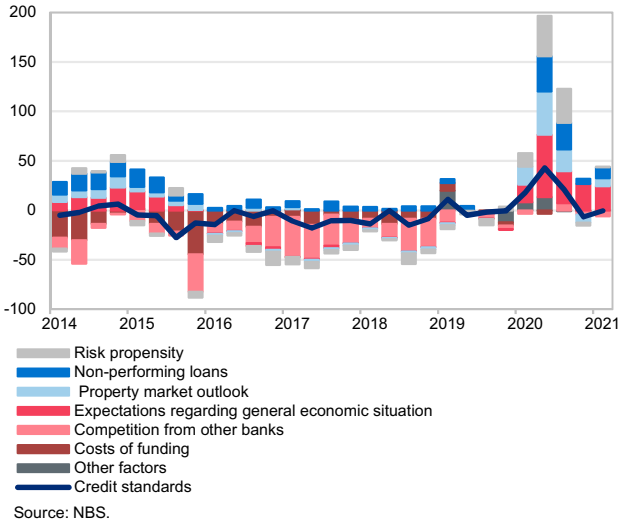
Dinarisation of corporate and household receivables, measured by the share of dinar in total receivables, increased in Q1 by 0.6 pp, to 37.9% in March, its new all-time high. The degree of dinarisation of corporate receivables edged up in Q1 by 1.3 pp, to 22.3% in March, thanks to the rise in dinar loans, supported by NBS monetary policy easing and corporate financing under the Guarantee Scheme. On the other hand, the share of dinar household receivables decreased in Q1 by 0.5 pp to 55.4% in March, due to faster growth of FX-indexed compared to dinar receivables, which is largely the result of housing loans rising more than cash ones.

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.

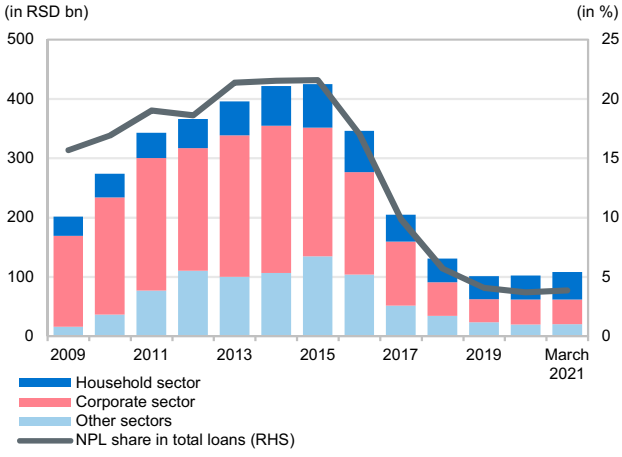
Chart IV.2.8 **Change in household credit standards and contributing factors**
(in net %)



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

[10] The NBS conducts the survey since the beginning of 2014.

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



Source: NBS.

Gross **NPL ratio** remained below the pre-crisis level, measuring 3.9% in March, which indicates that NBS and Government measures were timely, preventing stronger negative effects on corporates and households, and by extension, on financial stability as well. Compared to end-2020, this share edged up negligibly (by 0.2 pp), with growth recorded in the household sector[11] (by 0.4 pp to 4.1% in March), reflecting the completion of the second moratorium on repayment of borrowers' liabilities at end-September, while in the corporate sector[12] it remained unchanged at 3.1%. The results of the survey about the expectations of market participants show that the banking sector expects the **NPL** ratio to decrease to 3.0% at end-2021. NPL coverage remained high – allowances for impairment of total loans stood at 91.2% of NPLs in March, while allowances for impairment of NPLs equalled 58.8% of NPLs.

Capital adequacy ratio[13] measured 22.3% at end-Q1 2021, indicating high capitalisation (regulatory minimum at 8.0%) and resilience of the banking sector to external and domestic risks.

[11] With entrepreneurs and private households included, NPL share is also at the level of 4.1%.

[12] Includes companies and public enterprises. Looking at companies only, NPL share in total loans in March also equalled 3.1%.

[13] The regulatory framework of Basel III standard has been applied since 30 June 2017.

Text box 3: Estimate of corporate financial conditions

In an environment of an unprecedented crisis, such as the current pandemic, it was necessary to ensure that monetary policy easing also reflects on more favourable borrowing conditions for corporates and citizens, and to undertake additional economic policy measures to provide liquidity and lower operating costs, in order to ease the burden of the crisis. The extent to which corporate financial conditions remained favourable during the crisis can be estimated by constructing the Financial Conditions Index (FCI).

In theory, financial conditions imply a wide range of financial variables which impact future economic activity. The variables are shown as stocks and flows, and they indicate potential changes on the supply and demand side. The FCI is the composite index which sums up overall financial conditions. It helps analyse the strength of the link between financial conditions and economic activity. If the link between FCI and GDP is strong, FCI can be used as one of the leading indicators for the estimate of future economic activity.

Although financial conditions relate to a larger number of economic agents, this analysis is limited to the corporate sector. When choosing variables to calculate FCI, we were guided by the specificities of Serbia as a small and open economy, the structure and interconnections between financial markets, bearing in mind data availability and the length of time series. In constructing FCI, the following variables were used: corporate loans (stocks and flows), cost of corporate borrowing in the domestic and foreign markets, RSD/EUR exchange rate, country risk premium, price of petroleum products in the domestic market, as one of significant sources of cost-push pressures, index of stock prices on the Belgrade Stock Exchange, FDI, corporate NPLs, and credit standards of local banks.

Table O.3.1 **Variables used for FCI calculation**

Group	Variables
Interest rates in the domestic market	Weighted average rate on new dinar corporate loans, spread relative to six-month BELIBOR
	Weighted average rate on new euro corporate loans, spread relative to six-month EURIBOR
Domestic loans	Stock of corporate loans New dinar corporate loans New euro corporate loans
Capital market	BELEX
Oil price	Price of petroleum products in the domestic market
Risk premium	EMBI
Interest rates in the foreign market	Weighted average rate on foreign corporate borrowing, spread relative to six-month EURIBOR
Cross-border loans	Stock of corporate external debt
Exchange rate	Dinar exchange rate against the euro
Bank asset quality	NPL share in total corporate loans
FDI	Net FDI inflow
Corporate credit standards	Change in credit standards, NBS survey.

Sources: NBS, J.P. Morgan, BSE.

FCI can be presented as an average of selected financial variables:

$$FCI = \sum_{i=1}^{n} wix_i$$

where x_i means standardised values of financial variables used in the analysis, and w_i variable weights estimated by the Principal Component Analysis (PCA) method, which is one of the methods most frequently used to calculate this index.

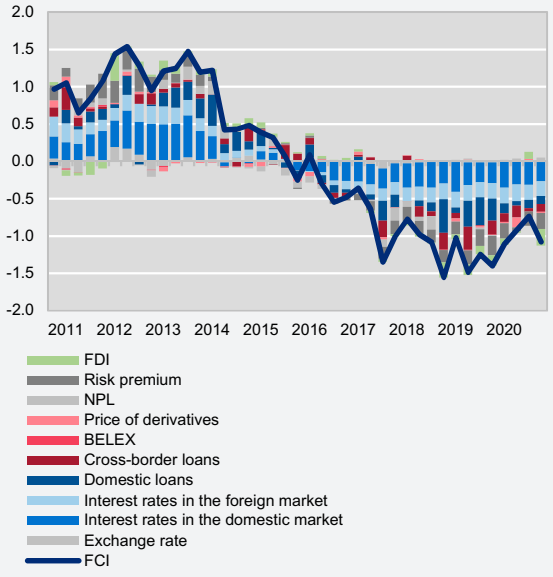
Before calculating FCI, it was necessary to ensure that all series be stationary, and to this effect, we applied differentiation to non-stationary series (stock of domestic loans, stock of external debt, BELEX, exchange rate, price of petroleum products and NPLs). The series were then standardised and the sign was changed for those variables whose rise

leads to the improvement of financial conditions (new loans, stock of domestic loans, stock of external debt, BELEX, exchange rate and FDI) as a decline in the FCI value indicates the improvement of financial conditions and vice versa. After calculation, the index was standardised again, which ensured its zero mean value in the observed period. An above-zero FCI can be interpreted as the tightening of financial conditions, which generally does not have a stimulating effect on economic growth. A below-zero FCI is interpreted as the easing of financial conditions and illustrates a financial environment supportive of economic growth.

Although all data are available at a monthly level, to make comparison with GDP movement, we constructed FCI based on quarterly data. Given the differences in the length of the selected series, we constructed the index twice – first time with 13 variables for the period Q4 2010 – Q4 2020, since when data are available for interest rates and amounts of new loans, and second time with 14 variables for the period Q1 2014 – Q4 2020, since when data are available for the change in banks' credit standards based on NBS bank lending surveys.

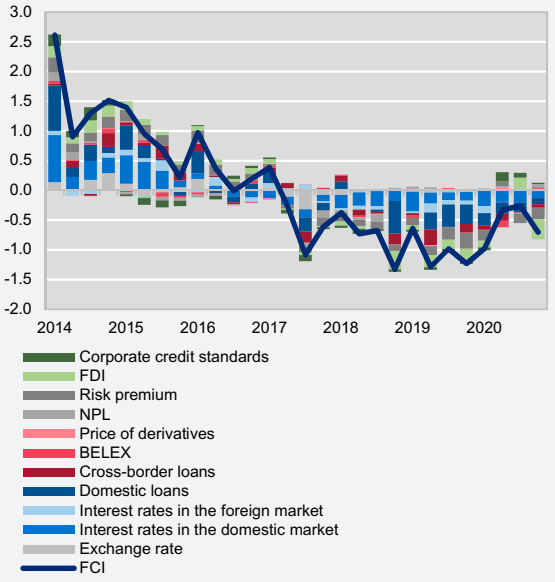
FCI is constructed based on the first main component as it explains over 50% of variability of the observed data set.

Chart O.3.1 **Decomposition of FCI, 13 variables, Q4 2010 – Q4 2020**
(in pp)



Source: NBS.

Chart O.3.2 **Decomposition of FCI, 14 variables, Q1 2014 – Q4 2020**
(in pp)



Source: NBS.

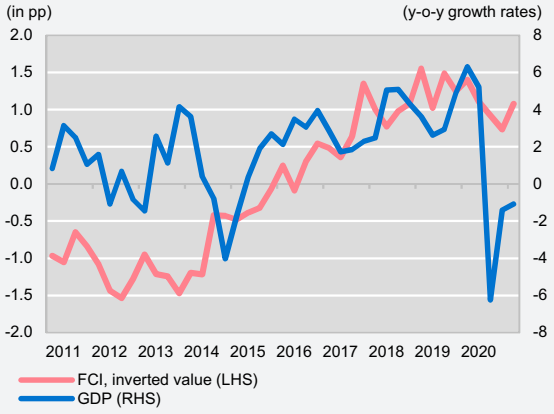
In the 2012– 2020 period, FCI for Serbia had a declining trend based on its estimated values. From Q2 2017 (from Q2 2016 for the longer data series and a smaller number of variables) it has been constantly in the negative zone. In terms of the FCI structure, trends in the domestic lending market, with the support of low euro area interest rates, gradually contributed to the easing of financial conditions and thus positively affected economic growth. Monetary policy easing by the NBS also provided a significant contribution – cuts in the key policy rate helped create favourable financial conditions in the market. Starting from May 2013, when the monetary policy easing cycle began, the key policy rate was lowered by 10.75 pp to 1.0% in December 2020, which is its lowest level in the inflation targeting regime. Monetary policy easing also reflected on a significant decline in interest rates on dinar corporate loans and their convergence to interest rates on euro-indexed loans (in some months dinar loans were approved at even lower rates compared to euro-indexed loans). Positive tendencies in the market of corporate loans were also reflected in the reduced share of NPLs in total loans, and the results of the bank lending survey, i.e. the easing of corporate credit standards through the major part of the observed period. Companies successfully borrowed at favourable conditions in the international market as well, which also helped ease financial conditions. Moreover, the achieved and preserved macroeconomic stability, reflected primarily in low and stable

inflation and relative stability of the exchange rate, created preconditions for attracting FDI and reducing the country risk premium, as also confirmed by the upgrade of Serbia's credit rating by rating agencies.

Although financial conditions were tightened in Q2 and Q3 2020 with the outbreak of the coronavirus pandemic and elevated global uncertainty, they continued to exert a stimulating effect on economic activity. The tightening of financial conditions was influenced primarily by the tightening of credit standards, a rising country risk premium and a temporary reduction in the FDI inflow amid a globally higher risk aversion. As containment measures were eased and economic flows gradually normalised, as of Q4 conditions became more favourable, i.e. financial conditions remained stimulating even in the crisis period. In 2020, most observed variables continued to exert a positive impact on corporate financial conditions, led by favourable terms of borrowing in the domestic credit market and lending growth, supported by anti-crisis measures of the NBS and the Government, including the loan repayment moratorium (whose effect is visible in the stock of loans).

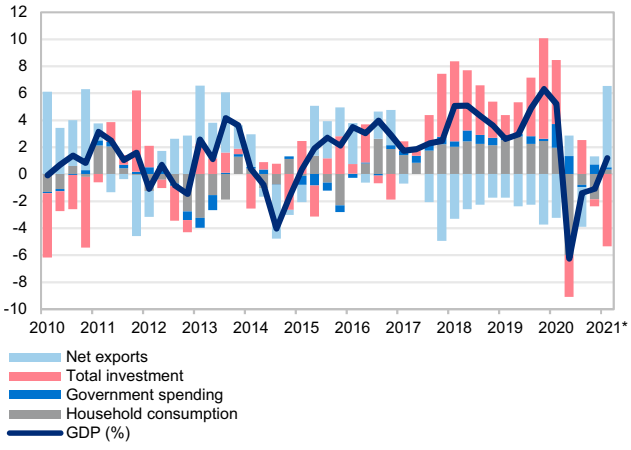
As there is a significant degree of correlation between the movement of corporate FCI and GDP (correlation coefficient is 0.5), this index can be used as one of the leading indicators of economic activity. Given the FCI dynamics in 2020, which suggests that corporate financial conditions remained favourable, we can expect a continued positive contribution to economic recovery on these grounds in the coming period as well.

Chart O.3.3 **FCI and GDP movements**



Sources: NBS and SORS.

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



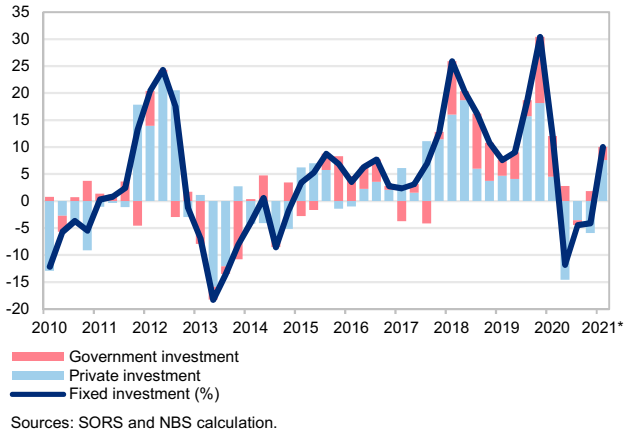
Sources: SORS and NBS calculation.
* NBS estimate for Q1 2021.

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

	2020			2021
	Q2	Q3	Q4	Q1
Household consumption	**-8.1**	**-1.2**	**-2.7**	**0.5***
Indicators				
Retail trade	0.0	5.6	2.5	3.9
Catering turnover	-44.6	-28,22	-32,27	-10.4**
Number of domestic tourists	-65.4	11.3	-36.0	-2.2
Number of overnight stays of domestic tourists	-60.8	13.0	-28.9	-8.1
Consumer goods imports (BEC classification), nominal	-3.1	13.6	13.2	3.4
Sources				
Total wage bill, nominal	12.1	14.1	14.2	10.4**
Net remittances inflow, nominal	-31.3	-10.3	2.4	9.8
Stock of loans intended for consumption, nominal	12.3	15.4	14.2	11.8

Sources: SORS and NBS calculation.
* NBS estimate.
** January-February.

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



Sources: SORS and NBS calculation.
* NBS estimate for Q1 2021.

3 Aggregate demand

Apart from the rise in net exports, economic activity in Q1 was also characterised by the recovery of consumption and fixed investment, which posted y-o-y growth for the first time after three quarters. On the other hand, strong export growth dented inventories, leading also to a fall in domestic demand in Q1.

Domestic demand

Household consumption is estimated to have increased 0.5% y-o-y in Q1. It should be borne in mind that containment measures remain a drag on consumption in some service sectors (tourism, catering, entertainment and recreation, transport), as evidenced by the fall in the number of overnight stays of domestic tourists of 8.1% y-o-y in Q1 and the contraction of real turnover in catering of 10.4% y-o-y in January and February, which is nonetheless a slowdown compared to Q4 2020. On the other hand, Q1 saw the continuation of positive trends in the trade sector, as indicated by the double-digit growth of imports of durable consumer goods, as well as the rise in retail trade turnover of 3.9% y-o-y.

A mild y-o-y rise in consumption, in conditions of a deteriorated epidemiological situation can largely be attributed to the measures for mitigating the negative effects of the crisis. As those measures were, inter alia, aimed at preserving employment, the wage bill increased in Q1 as well (10.4% y-o-y in the period January–February). Positive dynamics is present also in other sources of private consumption – loans intended for consumption posted a double-digit growth (11.8% y-o-y), and remittances went up by 9.8% y-o-y.

Government consumption is also estimated to have risen slightly in Q1 (1.0% y-o-y), which can primarily be associated with the higher healthcare spending.

Reduced uncertainty in doing business, thanks to, among other things, the anti-crisis measures adopted by the Government and the NBS and the growing optimism over the successful vaccination process reflected positively **on investment activity of the private sector**. Hence, in Q1, for the first time since the outbreak of the pandemic, fixed investment of the private sector posted growth, estimated at around 10% y-o-y. The largest share of private sector investment was financed from own sources owing to good business results in the previous year. Namely, in 2020 corporate profit increased (by RSD 74.3 bn to RSD 433.6 bn), owing primarily to Government and NBS measures, as can be illustrated by the fact that subsidies accounted

for the RSD 78 bn increase in corporate profit, while interest expenses dropped by RSD 5 bn. Also, net FDI inflow went up by 5.2% y-o-y, while investment loans recorded 3.7% y-o-y growth in Q1. The rise in investment activity in Q1 is indicated also by the increased volume of production of domestic equipment by 5.9% y-o-y and of capital products by 6.5% y-o-y.

Government investment, in our estimate, increased by 12% y-o-y in Q1 (with a 0.5 pp contribution to GDP), which helped boost investment in construction, primarily thanks to the implementation of infrastructure projects. Also, positive trends in housing construction continued, as signalled by the rise in the number of construction permits issued for the second quarter in a row and the higher production of construction material (11.6% y-o-y).

It is estimated that the strong export growth in Q1 was partly based also on reducing inventories, mainly of agricultural products, making them the only component of domestic demand which negatively impacted GDP in Q1.

In quarterly terms, for the third consecutive quarter aggregate demand extended its rise, which amounted to 2.5% s-a in Q1 and stemmed equally from the rise in domestic as well as in external demand. Within domestic demand, government investment growth was particularly pronounced in Q1 (26.3% s-a), while consumption also provided a positive contribution.

Table IV.3.2 **Investment indicators**

	2020			2021
	Q2	Q3	Q4	Q1
Real y-o-y growth rates (in %)				
Fixed investment (national accounts)	-11.8	-4.5	-4.1	10.0*
Construction (national accounts)	-2.0	-16.7	-9.1	20.5*
Government investment	14.6	-4.5	9.0	12.0
Number of construction permits issued	-21.0	-0.7	17.88	14.1
Production of construction material	-11.5	1.2	8.7	11.6
Value of works performed	-0.5	-16.0	-8.9	20.7
Imports of equipment, nominal	-11.7	12.5	-14.7	-12.3
Production of domestic machinery and equipment	-15.0	0.3	-8.5	5.9
Finished product inventories in industry	-1.2	0.0	6.9	0.5

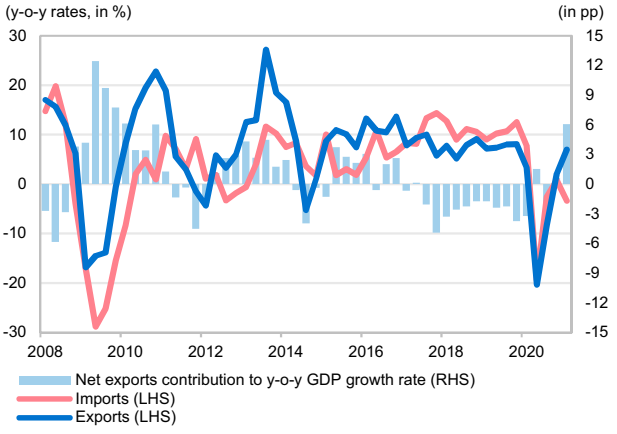
Sources: SORS and NBS calculation.
* NBS estimate.

Net external demand

Foreign trade continued its rebound in Q1, with goods and services exports posting real growth of 7.0% and imports declining by 3.4% y-o-y. As a result, net exports provided a positive contribution (6.0 pp) to GDP growth in Q1.

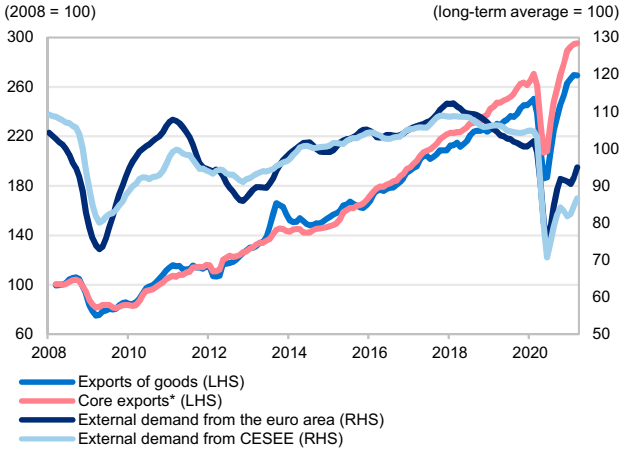
Supported by the recovery of external demand, commodity exports continued up in Q1. According to the balance of payments data, commodity exports in euro terms went up by 16.6% y-o-y in Q1, mainly reflecting the rise in manufacturing and agricultural product exports. Manufacturing exports rose by 11.3% y-o-y, with the y-o-y growth recorded in 14 branches (whose exports accounted for 84% of total manufacturing industry exports), among which stand out the exports of electrical equipment, chemical products, base metals, food and rubber and plastic products. Driven by cereals, agricultural product exports expanded by 30.6% y-o-y, which is why extended positive effects on this account may be expected until the next agricultural season. Export growth in Q1 was also supported by mining and energy.

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 Q1 2021.

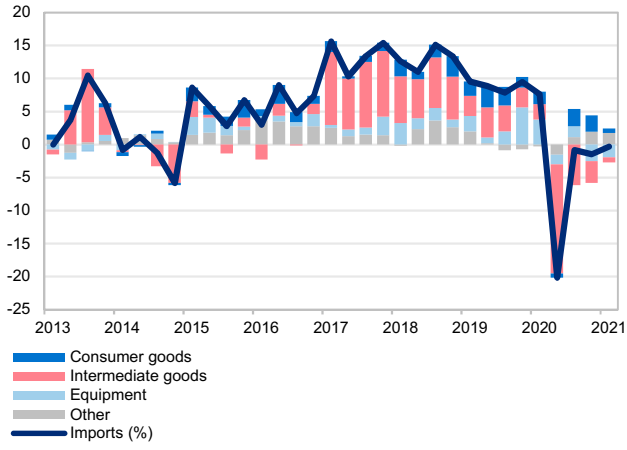
Chart IV.3.4 **Movement of indicators of external demand for Serbian exports**
(3M moving average, s-a)



Sources: European Commission, SORS and NBS.

* Core exports are total exports excluding exports of agricultural products, base metals, motor vehicles, petroleum products and electricity.

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



Sources: SORS and NBS calculation.

Commodity imports recovered at a slower pace than exports and, according to the balance of payments data, decreased by 0.2% y-o-y in Q1. In terms of the BEC classification (Classification by Broad Economic Categories), the decrease was determined by the lower imports of equipment (-12.3% y-o-y) and intermediate goods (-1.3% y-o-y), while consumer goods imports rose by 3.4% y-o-y. Classification of imports by EU methodology shows that imports contracted in Q1 due to lower imports of energy and capital goods. On the other hand, the imports of intermediate and consumer goods worked in the opposite direction.

Though on the path of a gradual recovery, trade in services still falls short of pre-crisis levels– in Q1 services exports were by 1.0% and imports by 14.3% lower than in the same period of the year before. A considerably sharper fall in services imports compared to that of exports led to the widening of the surplus in services trade by as much as 62.6% y-o-y. Trade in almost all types of services recorded a y-o-y fall in Q1, with exports receiving the strongest blow from transport services and imports – from tourism. At the same time, ICT services were the least affected by the crisis, as the surplus in this sector rose by as much as 9.6% y-o-y.

Commodity export/import coverage ratio[14] continued to increase in Q1, reaching 78.5% in March, or 87.4% with services included.

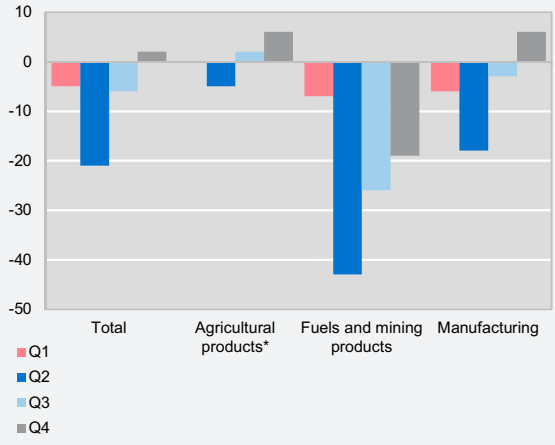
[14] Measured by 12-month moving average.

Text box 4: Resilience of Serbia's exports in a pandemic environment

After recording vibrant growth in the course of several years, in 2020 Serbia's total goods exports declined by 2.3% according to balance of payments data, in an environment of a drastic fall in global production, consumption and foreign trade, triggered by the pandemic, i.e. halts in production and supply chains and the introduction of containment measures across the world. Given the magnitude of the pandemic shock on international trade, and the fact that GDP of the euro area, our most important trade partner, measured almost 7%, it can be concluded that Serbia's exports proved to be relatively resilient to the negative effects of the pandemic.

In 2020 the volume and value of global trade are estimated to have declined by 5.3% and 7%, respectively.[1] At the same time, the impact of the pandemic was more or less pronounced, depending on products and regions. For instance, demand for agricultural products was less affected than demand for fuel, while demand for some products, such as medical products and protective equipment, electronics and computer equipment (due to work from home) even increased. Observed by region, EU demand, targeted by a considerable portion of Serbia's exports, was severely hit by the pandemic. In 2020 the value of EU imports and exports fell by 11.6% and 9.4%, respectively. Almost all important trade partners of Serbia lowered considerably their goods imports in 2020, which is not surprising given sharp contractions of their economic activity (in 2020 the average rate of a real GDP decline in our 20 most important trade partners, weighted by their share in our exports, equalled close to 6%).

Chart O.4.1 **Global trade in goods in 2020**
(y-o-y, in %, USD values)

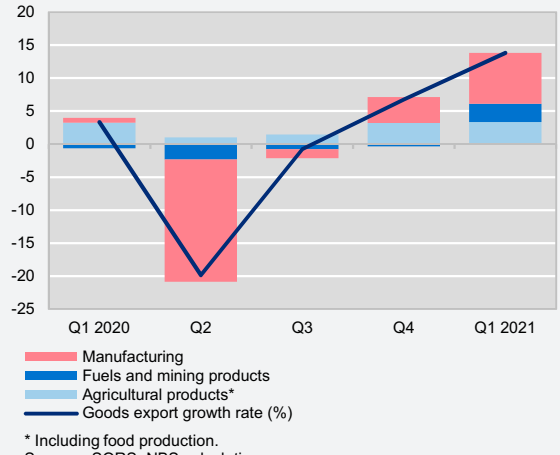


* Including food production.
Source: WTO, estimate (31 March 2021).

A reduction in external demand was particularly evident in Q2 2020, when the value of global trade contracted by more than 20%. The situation was better in H2, when gradual recovery began as containment measures were eased and many countries of the world introduced monetary and fiscal stimuli. The recovery was also propped by rising demand for goods amid reduced consumption of services, including gradual adjustment of business to containment measures and limited population mobility.

Serbian exporters adjusted relatively quickly to the new circumstances, supported by robust measures of the NBS and the Government, which prevented a sharper drop in business and consumer confidence and, thus, a stronger spillover of the negative effects of the pandemic on the labour market and production capacities. The preserved human and production capacities, along with increased diversification of production, both by product and region, contributed to the resilience of Serbia's goods exports and facilitated their fast recovery. According to the foreign trade methodology, Serbia's goods exports reached their pre-crisis level already in late summer, and in Q4 2020 were up 6.8% y-o-y, only to accelerate to 13.8% y-o-y in Q1 2021.

Chart O.4.2 **Contributions to y-o-y growth rate of Serbia's goods exports in 2020 and Q1 2021**
(in pp)



* Including food production.
Sources: SORS, NBS calculation.

The **exports of agricultural products, including food production**, did not experience a y-o-y fall even in Q2, when

[1] World Trade Organization, Press Release 876, 31 March 2021.

global demand for these products was reduced, but, instead, positively contributed to the rise in our exports in all quarters of 2020. In Q4 2020, having risen by as much as 16% y-o-y, the exports of agricultural products contributed 3.2 pp to the rise in total exports (in the same period, global demand rose by around 6%). At the level of 2020, these exports increased by 11.4%. Particularly significant was the increase in the exports of cereals, tobacco and tobacco products, fruits and vegetables, and oilseeds and oleaginous fruits. The vigorous rise in exports of agricultural products continued into Q1 2021 (15% y-o-y), adding 3.3 pp to total exports. Serbia's comparative advantages in the production of agricultural products and food, along with the development of production capacities and an above-average agricultural season, were the factors that contributed to the resilience of our exports in a pandemic environment. A contribution also came from a lesser influence of the pandemic on global demand for agricultural products and a rise in their prices in the global market, which highlighted their strategic importance.

On the other hand, the pandemic hit global demand for fuels and mining products particularly hard. In Q2 the market value of these goods fell by as much as 43% y-o-y globally, also on account of a decline in their prices, primarily of oil. H2 saw an increase in the prices of these products, notably the price of metals, but the value of global trade in this area continued to decline y-o-y until the year-end. This decline gradually weakened, settling nevertheless at 19% y-o-y in Q4 2020.

Although the **exports of fuels and mining products** declined significantly in Serbia as well, it seems that this decline was smaller than the fall in external demand – by 27.2% in Q2 and by 4.1% in Q4 (12.2% at the year-level). Within this group of products, the most important in Serbia's exports are non-ferrous metals, petroleum products and metal ores. The exports of non-ferrous metals contracted by 22.7% in 2020, which was partly due to the overhaul of the Zijin Copper Bor company in late 2020, while the exports of petroleum products fell by 28.0%. A positive exception in this group of products are the exports of metal ores, which at the year-level rose by as much as 50.0%, owing to the exceptional output growth in the Bor copper mines, in place since October. The rising output is driven by investment in the existing mines and the opening of a new mine, which increased production capacities. In Q1 2021, this group of products – fuels and ores, recorded particularly vigorous growth of as much as 40% y-o-y, led by elevated exports of non-ferrous metals and metal ores, which contributed 2.8 pp to the rise in total exports.

In terms of manufactures, which make up the major portion of Serbia's exports (70% in 2020), the impact of the pandemic was the most pronounced at its very start, during Q2, when the sharpest fall in external demand was registered as most of our trade partners introduced lockdowns. Observed by month, EU imports fell by 25.4%, 27.7% and 13.0% y-o-y in April, May and June, respectively. It is therefore not surprising that the exports of these goods from Serbia – notably of road vehicles, iron and steel, India rubber products etc. – declined by 27.2% in Q2. Still, even in Q2 Serbia exported more medical and pharmaceutical products (28.6%) and perfumes and toilet preparations (16.8%) than in the same period of 2019; therefore, at the level of 2020 these products recorded a significant rise (8.7% and 15.5%, respectively). The exports of most other products fell sharply in Q2, but recovered relatively quickly thereafter (electrical machinery, appliances and devices, plastic masses etc.), so in Q4 the exports of finished goods from Serbia increased by 5.5% y-o-y in Q4 2020 and by 11% y-o-y in Q1 2021, adding 7.7 pp to the export growth rate in that quarter.

These results are all the more important in the light of an exceptionally challenging year for exporters. The costs of international transport almost doubled when the pandemic broke out, primarily due to a smaller number of containers along the main maritime routes and slower movement of goods as it was necessary to comply with health measures. This increased the risk of delay in supply chains. The normalisation of the epidemiological situation is expected to lower these costs and risks. Moreover, at the start of the pandemic, trade barriers were reinforced, primarily in terms of additional controls of food and medical products, which aggravated access to many foreign markets.

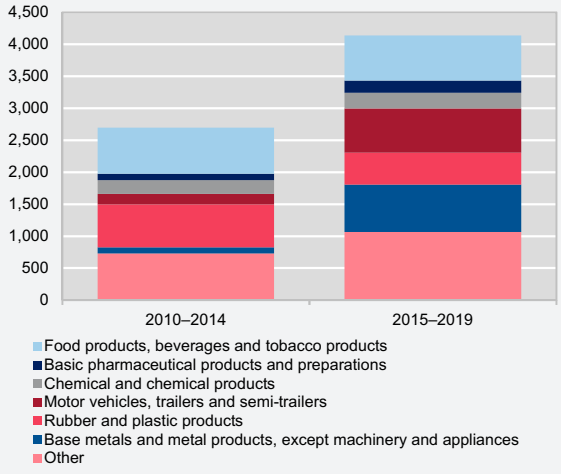
FDI was certainly one of the key factors behind the relatively fast recovery of Serbia's exports in an inauspicious global environment. In the course of five pre-pandemic years alone, the FDI inflow to manufacturing exceeded EUR 4 bn, of which, cumulatively, the highest amounts were channelled to the production of base metals and metal products, food products, beverages and tobacco products, including motor vehicles, rubber and plastic products, and chemical and pharmaceutical products. Moreover, the FDI inflow to manufacturing remained relatively high even during the pandemic and equalled additional EUR 792 mn. The importance of FDI in manufacturing is confirmed by its exports, which in 2020 declined moderately – by around 5%, whereas in nine of 23 branches of manufacturing exports were higher in 2020 than

in 2019 (making up around 40% of manufacturing exports in 2020). A positive contribution came particularly from the exports of electrical equipment, tobacco and food products, and chemical and pharmaceutical products.

Car components, whose exports recorded positive y-o-y growth rates as of September, and were by as much as 18% y-o-y higher in December, were a group of products influenced not only by supply-side factors, but also, quite strongly, by external demand. This is suggested by data on the number of new registered passenger vehicles in the EU, which recovered in June–September in y-o-y terms, only to moderately decline again in October and November in the second wave of the pandemic, but less so than in the first wave. Similar conclusions are suggested by data on the number of manufactured passenger vehicles in Germany (which participates with around 25% in car component exports from Serbia). In y-o-y terms, the decline in the number of manufactured passenger vehicles decelerated as of September. In November and December this number was even higher than in the same period of 2019.

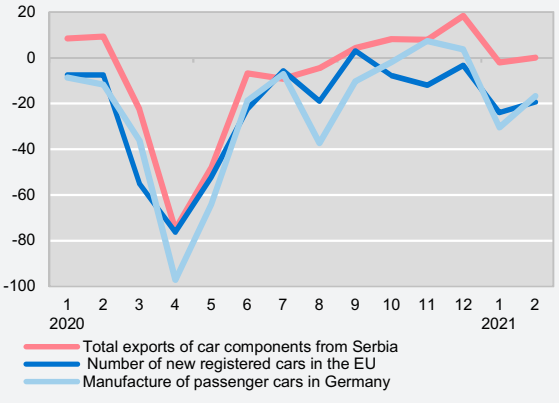
The Herfindahl-Hirschman Index (HHI), which measures the concentration of exports, also confirms that supply-side factors prevented a major spillover of dented external demand onto lower exports of Serbia. Observed by country, HHI was very low during the entire past decade. Since 2015 it has been continuously declining and in 2020 it stood at 0.225, suggesting the highest geographic distribution of exports thus far. This means that even amid the pandemic Serbia managed to further increase the degree of geographic distribution of its exports, which certainly contributed to the higher resilience of exports to external demand shocks, which were not even in all segments of the global market, and were not even for all product groups either. Observed by region, the share of Serbia's exports to the euro area, which was severely hit by the pandemic, has been declining year after year, while the exports to non-euro area EU member states have been rising. In 2020, close to 50% of lower exports to the euro area was compensated by higher exports to other EU countries, so overall exports to the EU were lower by 2.8%, whereas in the first two months of this year they were higher by 4.2% y-o-y. The major part of the reduced exports to the CEFTA region was offset by rising exports to China, the USA and Turkey, which in 2020 also recorded a more favourable result in terms of the GDP growth rate. Observed by individual countries, since 2019 Germany

Chart O.4.3 **FDI in manufacturing by branches**
(in EUR mn)



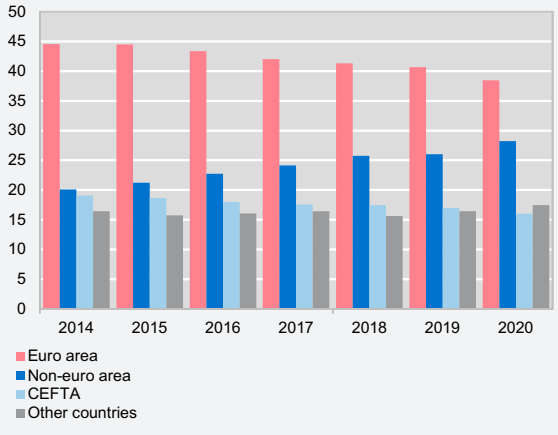
Source: NBS.

Chart O.4.4 **Dynamics of exports of car components from Serbia, manufacturing of cars in Germany, and number of registered passenger cars in the EU**
(y-o-y growth rates)



Sources: VDA, SORS and ACEA.

Chart O.4.5 **Serbia's exports to key regions**
(in % of Serbia's total exports)

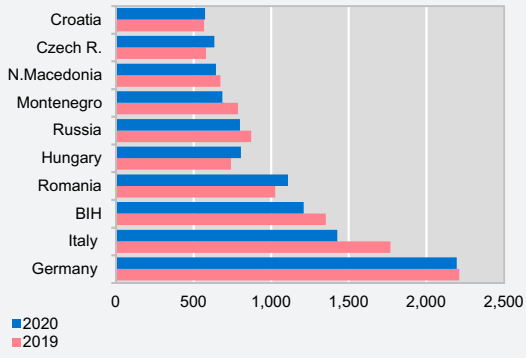


Source: SORS.

has been Serbia's largest trade partner (accounting for 12.9% of total exports in 2020), followed by Italy, with a declining share of exports (to 8.4% in 2020), which is mainly a consequence of the reduced exports of the car model produced in the Kragujevac plant. The most significant Serbian products exported to Germany (which is the third largest world importer, after the USA and China) in 2020 were electrical machinery, appliances and devices, power machines and devices, vegetables and fruits, metal products, medical and pharmaceutical products. Given that the German production sector recorded a much smaller decline than the service sector in 2020 and that in the second wave of the pandemic it continued to record relatively good results, and as Serbia exported to Germany mainly the products which were the least hit by the pandemic or were even in greater demand (fruits and vegetables, medical and pharmaceutical products), it is no wonder that exports to Germany were lower by only 0.7% than in 2019. On the other hand, exports to Italy fell by 19.3%, of which the major negative contribution came from lower exports of road vehicles and reduced exports of iron and steel, footwear and clothes etc. As regards other non-euro area EU countries, in 2020 exports to Hungary, the Czech Republic, Poland, Romania and Croatia went up. As for our important partners outside the EU and the CEFTA region, exports to Algeria, the USA, China and other countries increased. The situation is similar if we observe the degree of concentration measured by HHI by product[2] – it was very low in the past decade, and was lower in 2020 than in 2019, meaning that the product distribution of exports increased further.

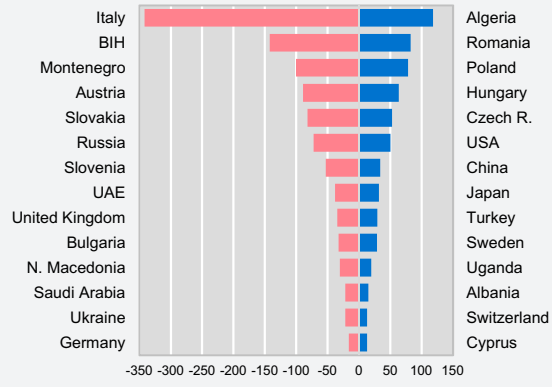
The pandemic exerted a much stronger impact on the exports of services than of goods. According to the WTO, after falling by almost 30% y-o-y in Q2, the global exports of commercial services did not recover until the end of the year, but recorded a significant decline of around 20% y-o-y even in Q4, which is also the amount of the fall at the year-level. Particularly pronounced was the fall in tourist and transport services – 63% and 19% in 2020, respectively. The services exports of Serbia also declined in 2020, but this decline amounted to 11%, which is much less than the global reduction, owing to the structure of the economy and the undertaken robust monetary and fiscal measures. The exports of tourist and transport services declined by almost 25% each, while other services either recorded a minimum decline in exports, such as construction services, or increased. The major positive contribution came from ICT

Chart O.4.6 **Serbia's goods exports, ten most important countries in 2020**
(in EUR mn)



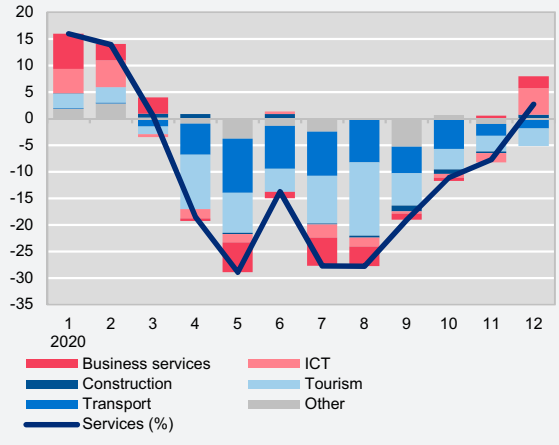
Source: SORS.

Chart O.4.7 **Significant decrease and increase in Serbia's goods exports in 2020 by country**
(in EUR mn)



Sources: SORS and NBS calculation.

Chart O.4.8 **Contributions to y-o-y growth rate of services exports in 2020**
(in pp)



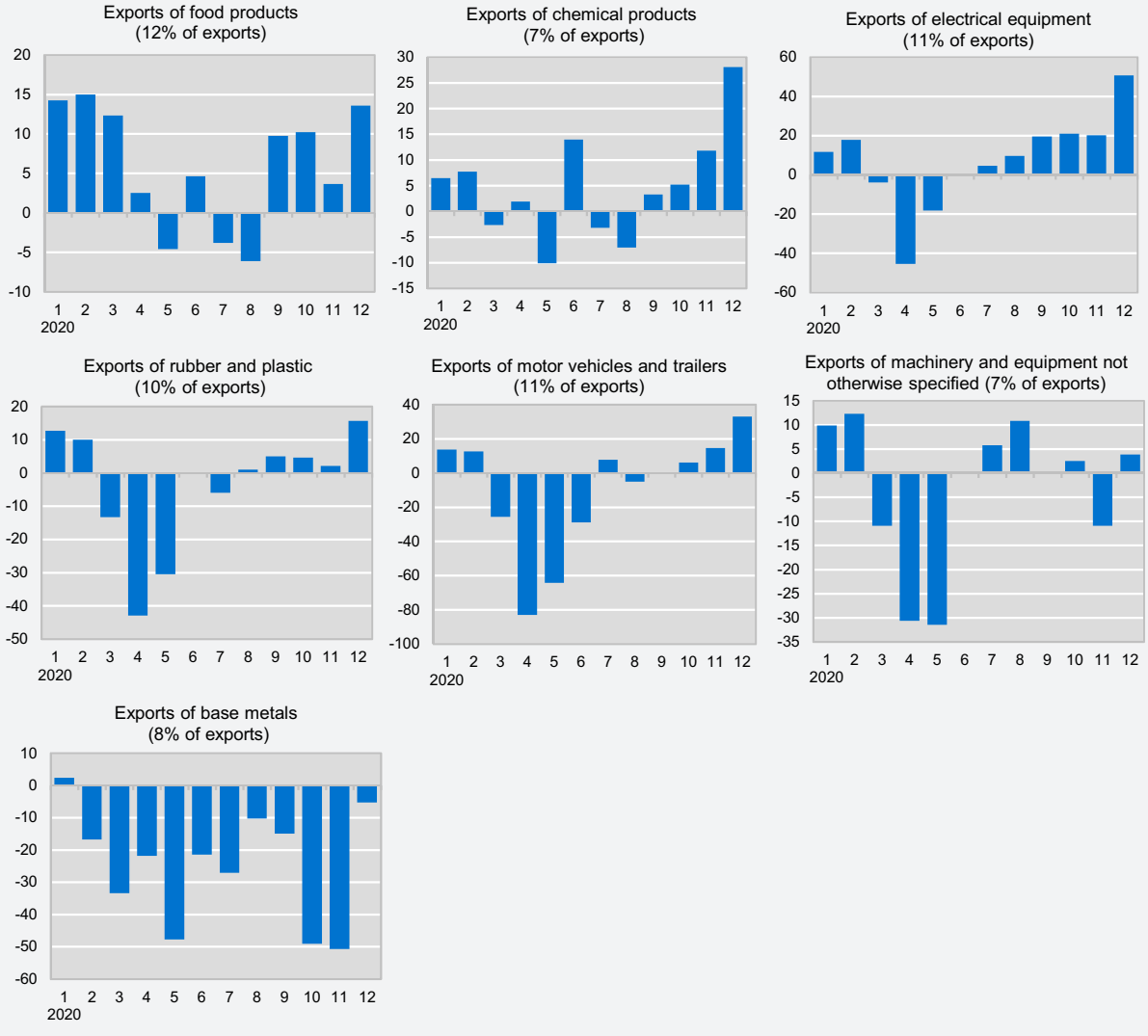
Source: NBS.

[2] According to the harmonised system of the classification of goods at a seven-digit degree of aggregation.

services. The major negative y-o-y growth rates of services exports were recorded in May, July and August. Services exports began to recover in September and in Q1 2021 were by only 1% lower than in the same period of 2020. Observed by country, the services exports to the USA and Italy increased the most. They mainly declined to other important partners, most notably Germany, United Kingdom and Bosnia and Herzegovina.

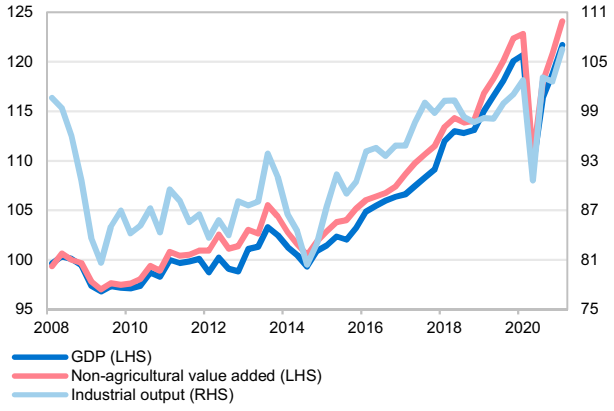
For the remainder of 2021 we expect further vigorous recovery of Serbia's goods exports, at a two-digit y-o-y growth rate. This trend will also be supported by supply-side factors, i.e. a further rise of investment in export-oriented sectors, continued recovery of external demand, and the expected successful process of vaccination across the world. In H2 vaccination should contribute to a much more favourable epidemiological situation and the creation of conditions for the recovery of services, notably tourist and transport ones.

Chart O.4.9 **Manufacturing exports by branches**
(y-o-y rates, in y %)



Source: NBS.

Chart IV.4.1 **Economic activity indicators**
(s-a, H1 2008 = 100)



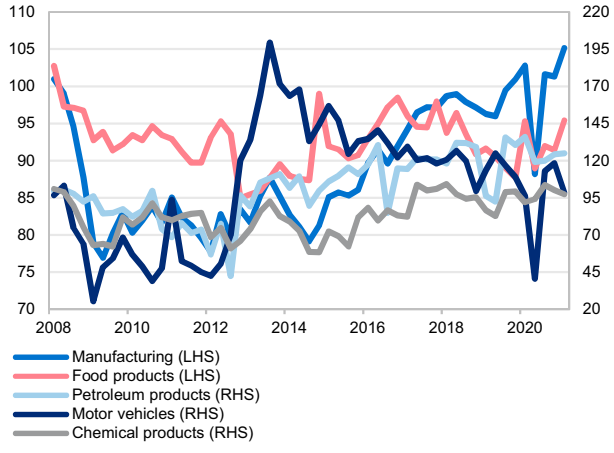
Sources: SORS and NBS calculation.

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

	2020				2021
	Q1	Q2	Q3	Q4	Q1*
GDP (in %, y-o-y)	**5.2**	**-6.2**	**-1.4**	**-1.1**	**1.2**
Agriculture	0.2	0.2	0.3	0.3	-0.2
Industry	0.9	-1.6	0.6	0.3	0.8
Construction	0.8	-0.1	-1.0	-0.6	0.9
Services	2.5	-3.8	-1.0	-0.7	-0.4
Net taxes	0.7	-1.2	-0.2	-0.3	0.2

Sources: SORS and NBS calculation.
* NBS estimate.

Chart IV.4.2 **Physical volume of production by branch of manufacturing**
(s-a, H1 2008 = 100)



Sources: SORS and NBS calculation.

4 Economic activity

As production capacities and employment were preserved owing to the measures taken to mitigate the impact of the crisis, economic recovery accelerated in Q1 despite the aggravated epidemiological situation and the necessity for the reintroduction of some containment measures. Thus, GDP growth came at 2.5% s-a, reaching the pre-crisis level of economic activity.

In y-o-y terms, GDP growth measured 1.2% in Q1 on account of the recovered construction sector and acceleration of industrial production increase. On the other hand, containment measures were limiting for the activity of some service industries in Q1, which brought about a cumulative decline in services of 0.7% y-o-y. In addition, with the assumption of an average agricultural season, the estimate is that a slight negative contribution to economic activity in Q1 stemmed from agriculture due to the high base from the previous year.

Industrial production growth in Q1 (0.8 pp contribution to GDP) was based on the continuous inflow of investments in export-oriented sectors which was not halted after the outbreak of the crisis. Furthermore, Government and NBS measures helped preserve the production capacities and employment and Q1 saw a rise in industrial production and exports despite the new wave of the pandemic.

Industrial growth is also evidenced by the increase in the physical volume of production of 3.8% y-o-y, driven by the rising volume of production in manufacturing and intensified activity in the energy sector. In manufacturing, 17 out of 24 branches recorded an increase in the volume of production, with the most prominent rise in the production of electrical equipment (which provided a 0.7 pp positive contribution), followed by the production of transport vehicles, base metals, metal products, machines, etc. On the other hand, the major negative contribution to industrial production came from the oil industry (-0.5 pp) as a result of the regular overhaul of oil plants in March.

Strong recovery of **construction** (over 20% y-o-y) in Q1 can be attributed primarily to the accelerated implementation of infrastructure projects, suggested also by the rise in government capital expenditures, particularly pronounced in March. Residential construction also boomed in Q1, as confirmed by the positive dynamics of construction indicators. The total number of issued construction permits was on the rise for the second consecutive quarter (14.1% y-o-y) and the envisaged square surface of apartments, based on the issued construction permits went up by 4.5% y-o-y. That

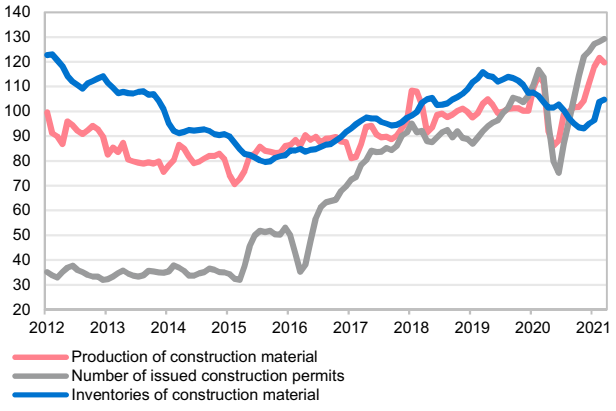
the construction sector is recovering is also indicated by the increased production and import of construction materials (11.6% and 7.7% y-o-y, respectively), as well as by the higher formal employment in construction (by 5.3% y-o-y).

Despite the tightening of health-related measures brought about by the new wave of the pandemic in Q1 and involving, *inter alia,* restrictions in tourism, catering, trade, recreation and entertainment, the decline in **services** decelerated from 1.4% y-o-y in Q4 2020 to 0.7% y-o-y in Q1 2021 (-0.4 pp contribution to GDP). In Q1, the drop in the number of overnight stays in the tourism sector slowed down in y-o-y terms (from 47.2% to 23.9%), with transport also recording a recovery, particularly freight transport, which can be linked with the rise in goods exports. The turnover in catering in the January–February period was lower by 10.4% in real y-o-y terms, which is also an improvement compared to the real y-o-y fall of 32.3% in Q4 2020. In Q1, the rise in trade continued and the real turnover increased by 3.9% y-o-y. Successful vaccination and the expected improvement of the epidemiological situation in the coming period will largely drive the rise in the service sectors, estimated at around 6% at the level of the year.

Our estimate of **agricultural production** this year rests on the assumption of an average agricultural season. Given the three prior consecutive years of above-average output, agricultural production is estimated to fall by 4% in 2021 and to have fallen by the same amount in Q1 2021.

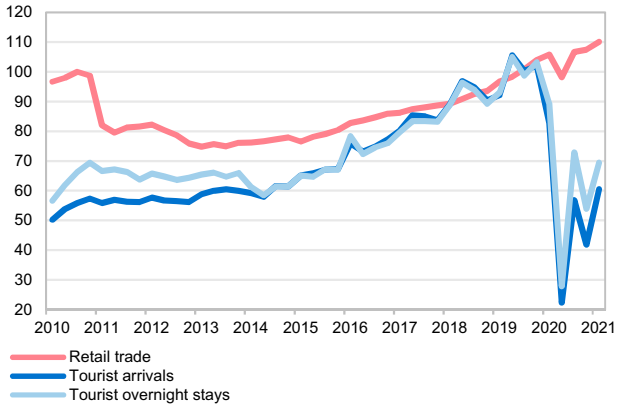
In quarterly terms, GDP recorded growth for the third quarter in a row, which, according to our estimate, accelerated to 2.5% s-a, driven almost equally by industry, construction, and services.

Chart IV.4.3 **Construction activity indicators**
(quarterly averages s-a, 2019 = 100)



Sources: SORS and NBS calculation.

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

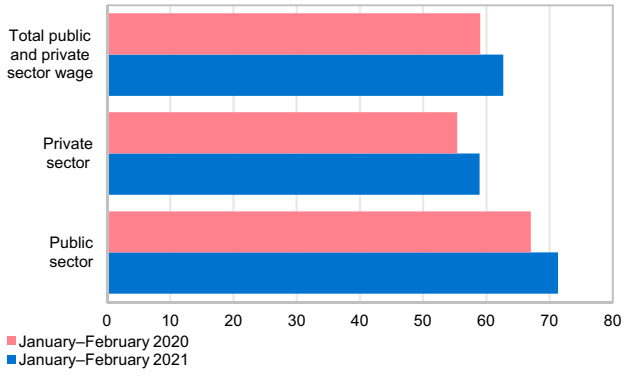


Sources: SORS and NBS calculation.

5 Labour market developments

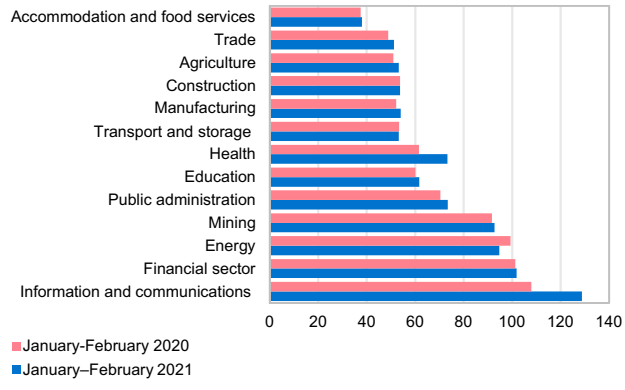
Strong economic support of the Government helped protect the labour market, which proved resilient in the most difficult period, avoiding more permanent consequences of the pandemic, as testified by the further wage and formal employment growth. In early 2021, with the new wave of the pandemic and tightened containment measures, unemployment rose slightly, notably in the sector of services which has been affected by the pandemic the most.

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



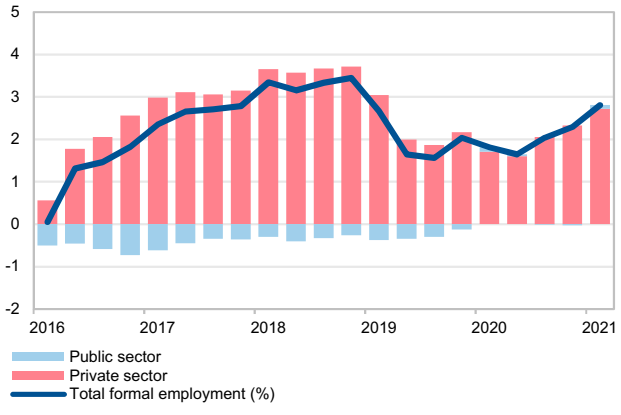
Source: SORS.

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



Source: SORS.

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



Sources: SORS and NBS calculation.

Wages and labour productivity

The increase in the average nominal net wage continued into this year, though at a somewhat slower pace. **Total nominal net wage in the January–February period rose to RSD 62,693 on average** (EUR 533), **which is a 6.2% y-o-y rise**, driven by higher wages in both the private and public sector (6.4% y-o-y each).

Industry-wise, **January and February saw a double-digit y-o-y wage rise in the ICT** (19.4%) **and health and social protection sectors** (19.2%), on account of the January wage increase in health and other public sector niches, as well as the rise in the average minimum wage to RSD 183.93 per hour. In the same period, y-o-y wage increase was recorded in most industries, dominantly in the private sector, primarily professional, scientific, innovation and technical industries (6.9%), retail and wholesale trade (4.8%), as well as manufacturing (3.6%). In addition, y-o-y wage growth was preserved in accommodation and food services (1.2%), largely owing to the timely economic support of the Government. On the other hand, compared to the same period last year, wages in the electricity supply sector went down (by 4.7%), and also slightly in the transport and storage sector (by 0.2%), while wages in the construction sector stagnated.

As the main source of consumer demand, **total nominal net wage bill** grew by 10.4% y-o-y in January and February. It was higher by 12.4% in the private and by 6.6% in the public sector.

Overall economic productivity went down by 1.6% y-o-y in Q1 (preliminary), chiefly on account of tightened containment measures aimed at curbing the consequences of the new spread of the coronavirus early this year more efficiently.

Employment

As total formal employment accelerated to 2.8% y-o-y in Q1 (from 2.3% in Q4), **employment rose by around 61 thousand from a year ago**. According to SORS data obtained from the Central Registry of Mandatory Social Insurance, such a y-o-y trend in formal employment in Q1 was driven by further employment with legal entities (by around 54 thousand employees on average) and entrepreneurs (by around 13.5 thousand employees), while the number of individual farmers dropped (by close to six thousand). This is evidence that despite the pandemic, job creation was sustained, which economic

policy makers continuously supported with a series of incentives.

As in the past period, **the private sector remained the major job generator**, recording in Q1 by around 59 thousand employees more than in the same period last year, on average. Of that number, **the majority belongs to manufacturing** (close to 20 thousand) and retail and wholesale trade (around 16 thousand), followed by the ICT sector (around nine thousand), construction and professional, scientific, innovation and technical industries (6 thousand each). In Q1, a y-o-y rise in employment was recorded in transport and storage (close to three thousand) and accommodation and food services (around one thousand), which maintained adequate employment levels with the government support despite the fact that they were affected by the pandemic the most. Compared to the same period last year, Q1 saw an increase in **public sector** employment (by around two thousand on average), owing to the relaxed ban on employment in public fund beneficiaries. The rise in employment was particularly prominent in health and social protection (almost five thousand) and education (around three thousand). The same period saw a decline in employment in administrative and support services and public administration (by one thousand each), as well as in mining (around 1.5 thousand).

Total registered unemployment reached 534,427 in March, whereby, after quite a while, unemployment rose by 21,369 (4.2%) y-o-y. On the one hand, this can be associated with the new wave of the pandemic, and on the other, with the announced aid for the unemployed under the third economic support package which induced a certain number of the unemployed to register with the National Employment Service and shift to the status of unemployed who are active job seekers. Y-o-y increase in unemployment in March this year was primarily recorded in service occupations related with administration, trade, catering and tourism, and this is why the Government Decree[15] envisaged that economic operators in catering and tourism can count on grants for two consecutive months on condition they do not reduce staff numbers by more than 10% three months after they had received the assistance.

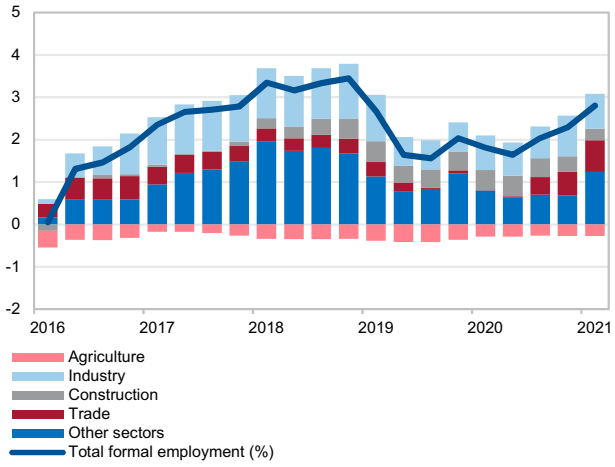
According to the available **Labour Force Survey**, covering both formal and informal labour market

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

	2020			2021
	Q2	Q3	Q4	Q1
Total number of formally employed	1.6	2.0	2.3	2.8
Employed with legal persons	2.2	2.3	2.5	3.1
Entrepreneurs and their employees	1.1	2.7	3.2	3.6
Individual farmers	-7.8	-7.6	-7.8	-8.6
Unemployed	-3.3	-0.4	-1.9	1.0
First-time job seekers	11.3	12.3	8.9	10.9
Used to be employed	-14.8	-11.4	-12.0	-8.7

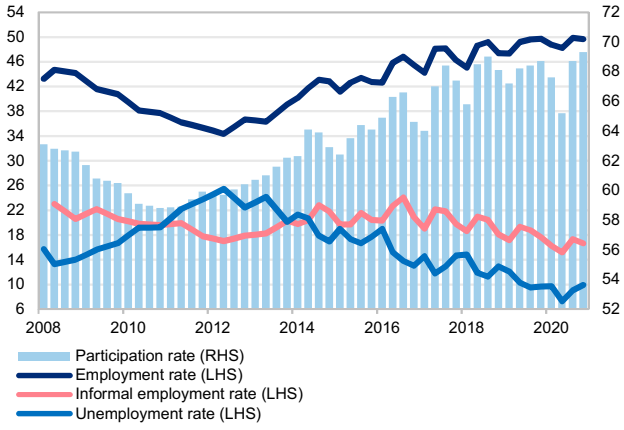
Sources: SORS and NES.

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



Sources: SORS and NBS calculation.

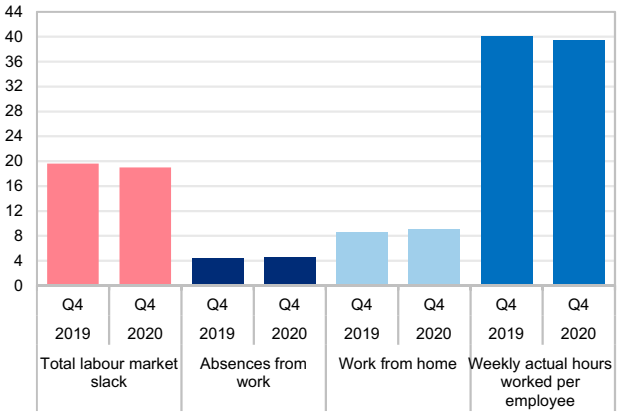
Chart IV.5.5 **Labour market indicators according to the Labour Force Survey**
(in %)



Source: SORS.

[15] Decree on determining the Programme of subsidies to support the work of the hospitality and tourism industry due to business difficulties caused by the COVID-19 epidemic caused by SARS-COV-2 virus. (RS Official Gazette, Nos 11/2021, 23/2021 and 38/2021).

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



Source: SORS.

segments, the activity rate of the working age population (15–64) went up to 69.3% in Q4, which is 0.6 pp above the pre-crisis level (Q4 2019), with the employment rate returning to the pre-crisis level (49.7%). Further, **in Q4 the unemployment rate was kept at a single-digit level (9.9%)**. It is discernible from additional Labour Force Survey indicators that the labour market slack[16] in Q4 was lowered to 19.0% (y-o-y fall of 0.6 pp), while actual hours worked per employee equalled 39.5 hours per week, which is almost the same as the year before. In the same period, the work from home indicator rose by 0.5 pp, to 9.2%, while the absences from work indicator[17] went slightly up, by 0.1 pp, to 4.6%, primarily due to the renewed spread of the coronavirus since October. Such trends indicate that labour market conditions normalised considerably by the end of last year.

6 International environment

At the end of last year and beginning of this, most countries saw more favourable economic developments than projected, therefore more optimistic estimates of global growth were made for 2021. When making the estimates, additional economic measures in leading global economies and the anticipated acceleration of the vaccine roll-out were taken into account. However, the pace of economic recovery is still accompanied by a high degree of uncertainty as to the further course of the pandemic, development of financial conditions, and the ability of economic policy makers to normalise the situation with the help of the vaccination. Therefore, according to estimates of the relevant international institutions, the expected recovery will differ by country and by sector.

Investor optimism in terms of the global economic recovery, which was additionally encouraged by a comprehensive fiscal package in the USA, led to the rise in long-term yields on government bonds of developed countries, causing apprehension about the tightening of global financial conditions. In contrast, though the increase in the global prices of primary commodities affected the rise in global inflation, it is believed that the inflation rise is temporary, hence

[16] **Labour market slack** is the share of: 1) the unemployed, 2) the employed working part time and 3) potential labour force in extended labour force, with extended labour force including all employed, unemployed, and potential labour force (those people available to work but not seeking and those seeking work but not immediately available.).

[17] **Absences from work** indicator is measured as the share of the employed absent from work in total employment, while **work from home** is measured as the share of the employed working from home in total employment.

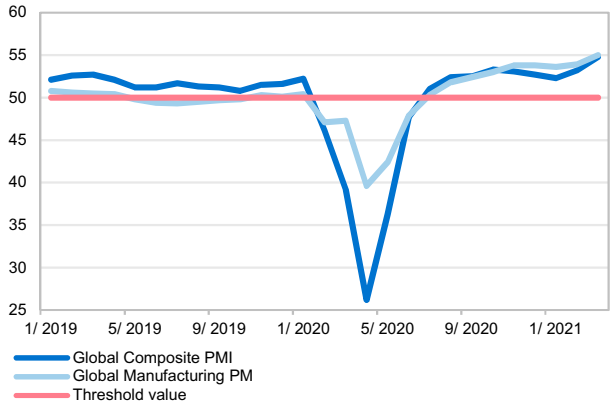
leading central banks continued to provide favourable financing conditions and to signal that their monetary policy will remain extremely accommodative over an extended period of time.

Economic activity

In its April WEO, the **IMF estimated that global economy dropped by 3.3% in the crisis year of 2020**, which is 0.2 pp more favourable than the January projection and 1.1 pp above the October 2020 projection, thanks to better accomplishments in H2 in the majority of countries due to the gradual lifting of containment measures and adjusting to the new conditions of work and doing business. Comprehensive monetary and fiscal policy measures were implemented in 2020 and, together with the nascent vaccine development and distribution, they prevented a deeper contraction in the global economy (up to three times, according to the IMF), which is why longer-term consequences of the global pandemic will most likely be lesser than after the global financial crisis of 2008. This is also indicated by the dynamics of global economic activity and production sector indices, which remained in the expansion zone during Q1 (starting from July 2020). Though economic recovery is still moving hand in hand with a high level of uncertainty, **the IMF projected a growth rate of 6.0% for the global economy in 2021**, bearing in mind the comprehensive fiscal measures in several large economies and the anticipated acceleration of vaccine roll-out in H2. In regard to this, the global economic activity will greatly depend on the further course of the pandemic, the effects of economic policies, development of financial conditions and prices of primary commodities, as well as the capacity of each economy to adjust to health-related restrictions and reduced mobility of the population. These factors, together with specificities of individual countries, affect the pace of economic recovery and of overcoming the consequences of the pandemic in the medium-term.

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

(in index points)

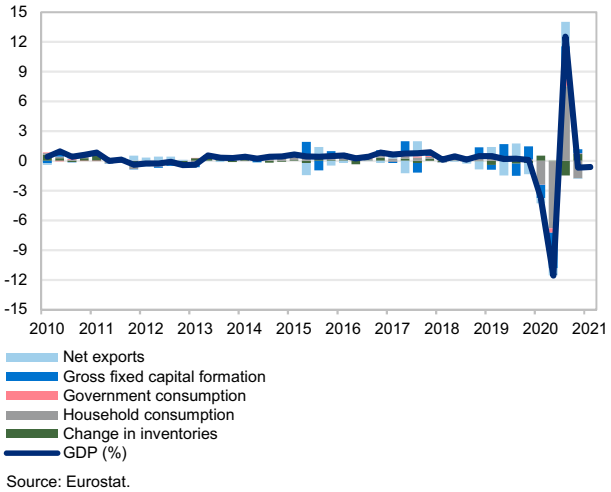


Sources: J.P. Morgan and Markit Group.

After robust growth of 12.5% s-a in Q3, the **euro area economy** posted a fall of 0.7% s-a in Q4 (much less than anticipated), dominantly because of subdued household consumption (with a negative contribution of 1.8 pp to GDP) and weaker net export. In contrast to this, Q4 saw a rise in fixed investments and inventories (with an aggregate contribution to GDP of 1.1 pp), as well as government spending, therefore at the level of 2020, the fall in the euro area GDP was estimated at 6.6%. In the same period, GDP of Germany and Italy, our key foreign trade partners in the euro area, declined by 4.8% and 8.9%, respectively. According to the ECB, euro area countries are characterised by different economic

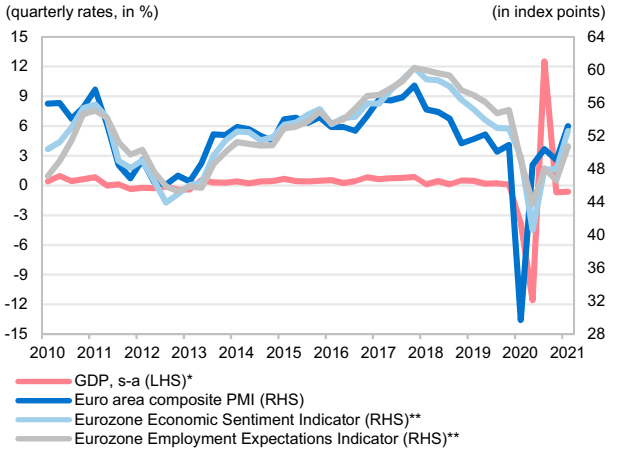
Chart IV.6.2 **Contributions to s-a GDP growth rate of the euro area**

(in pp)



Source: Eurostat.

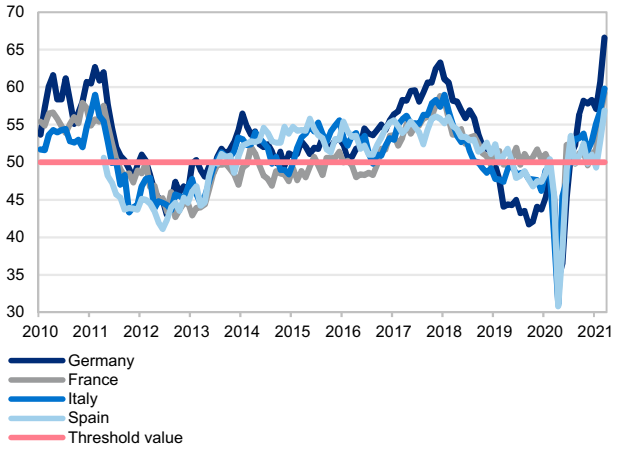
Chart IV.6.3 **Movements in GDP and economic activity and employment indicators of the euro area**



Sources: Eurostat, Markit Group and European Commission.

* Eurostat's preliminary flash estimate for Q1 2021.
** ESI and EEI are standardised relative to PMI.

Chart IV.6.4 **PMI Manufacturing for selected countries**
(in index points)



Source: Markit Group.

developments, given that they differed significantly in their response to the consequences of the pandemic. Compared to the euro area average, Germany and the Netherlands suffered the least economic losses, while Italy and Spain were hit the hardest. A common trait is that they are trying to extend additional support to corporates and households in order to preserve wages and employment, as well as an adequate level of private sector investments, despite weaker business results of corporates and elevated uncertainty.

In conditions of the faster spread of the coronavirus since the beginning of the year and the associated containment measures, **in March the ECB projected another fall in the euro area's economic activity in Q1**. According to the Eurostat's preliminary flash estimate, the fall equalled 0.6% s-a. However, the euro area is characterised by more favourable economic developments than at end-2020, as indicated by the leading Economic Sentiment Indicator[18] for the euro area which rose to 100.9 points in March (from 92.4 points in December), and for the first time since the outbreak of the pandemic it entered the expansion zone. It remained in the expansion zone in April (110.3 points), suggesting continued economic recovery. After six months, the Eurozone PMI Composite[19] index also returned to the expansion zone – 53.2 points in March (relative to 49.1 point in December), driven by strong growth in production activity, where the leading Manufacturing PMI climbed to 62.5 points in March. Unlike the production sector, the service sector remained in the contraction zone, with the leading Services PMI index at 49.6 points in March, indicating that the euro area's economic recovery is still uneven across sectors. Going forward, the vaccination process, accompanied by the loosening of containment measures, is expected to contribute to the resolution of the health crisis in the euro area and to mitigate uncertainty.

Thanks to the extensive economic support, **the euro area labour market was preserved during Q1 as well**, as confirmed by the unemployment rate remaining stable at 8.2% in January and February, and then edging down to 8.1% in March. Although as of October, there was a growing number of users of the short-time working scheme in countries that stepped-up containment measures, in January these persons accounted for around 6% of the workforce in the euro area, down by 20% from April 2020, when the schemes were introduced. In

[18] Index value above 100 points indicates improvement, and below 100 worsening of economic expectations.

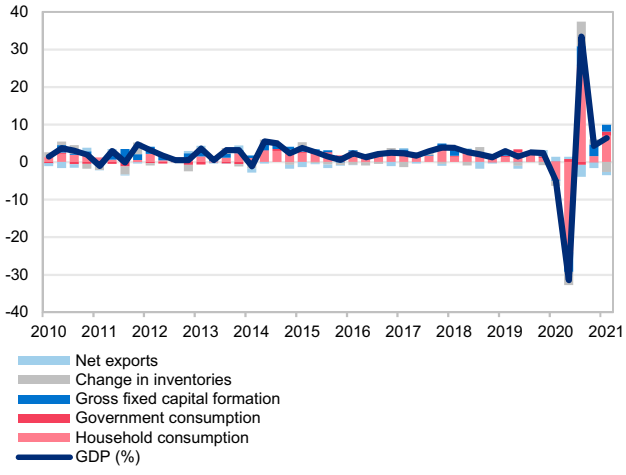
[19] Index value above 50 points indicates expansion, and below 50 a decline in economic activity.

addition, the leading euro area Employment Expectations Indicator[20] rose to 97.8 points in March (from 90.0 points in December), which is its highest level in the past year. In April, this indicator returned to the pre-crisis levels and entered the expansion zone (107.1 points). The reasons behind this were more favourable employment plans in all economic sectors, notably industry and construction.

The **US economy** in Q4 recorded growth of 1.1% s-a, i.e. 4.3% annualised, driven by fixed investments and investment in inventories (with an aggregate contribution to GDP of 4.4 pp), as well as by stepped-up household consumption (contribution 1.6 pp). A reduction in net export and government consumption acted in the opposite direction (with an aggregate negative contribution to GDP of 1.7 pp). At the level of 2020, the US economy recorded a fall of 3.5%, mostly due to the contraction in domestic demand. Yet, as of mid-2020, economic recovery kicked off, based on strong and sector-wide growth of the US production sector. In March this year, the US Congress adopted additional fiscal packages – the American Rescue Plan – whose effects exceeded the initial estimates, therefore the **Fed expects US economic growth to continue in Q1** and come close to the pre-crisis level. An important contribution to this will come from the parallel processes of vaccine roll-out and loosening of physical distancing measures. Within regard to this, the US Bureau of Economic Analysis gave a preliminary estimate of US GDP growth of 1.6% s-a in Q1 (i.e. 6.4% annualised). The ISM Manufacturing PMI also confirms the favourable tendencies, having reached the record-high 64.7 points in March, as well as the Consumer Confidence Index, which in March touched its highest level since the outbreak of the pandemic (109.0 points).

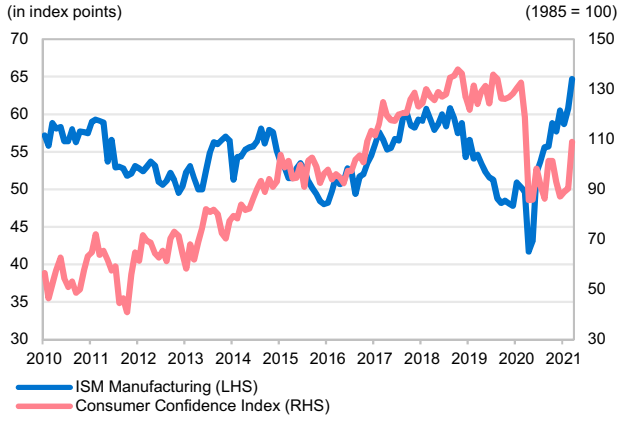
According to the Fed, **conditions in the US labour market improved further during Q1**, given that in March alone, the number of new non-farm payrolls was 916,000 higher than in February, which is the highest rise in seven months. The largest number of new jobs in March was created in the recreation and catering sectors (280,000), private and public education (190,000) and construction (110,000). Owing to this, the unemployment rate in the USA declined to 6.0% in March, its lowest level in 12 months. Also, the number of continued jobless claims has been declining since the start of the year. Going forward, the labour market is expected to continue recovering, propped by fiscal measures and fast-tracked vaccination.

Chart IV.6.5 **Contributions to the annual US GDP growth rate**
(quarterly, in pp)



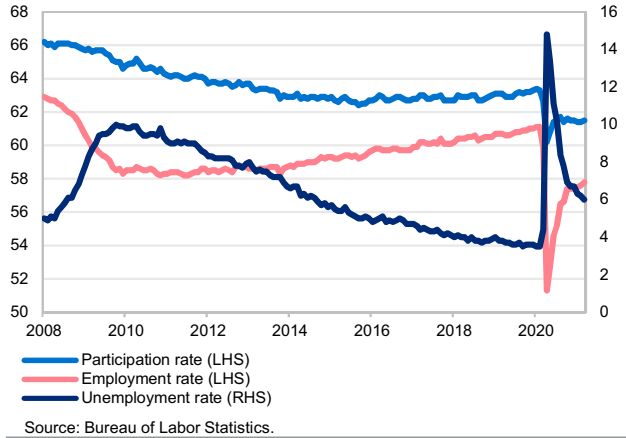
Source: Bureau of Economic Analysis.

Chart IV.6.6 **Leading economic indicators in the USA**
(in index points) (1985 = 100)



Sources: Institute for Supply Management and Conference Board.

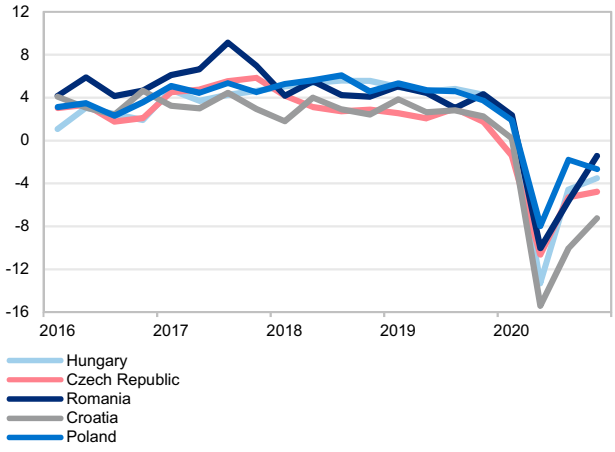
Chart IV.6.7 **US labour market developments**
(monthly rates, in %)



Source: Bureau of Labor Statistics.

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

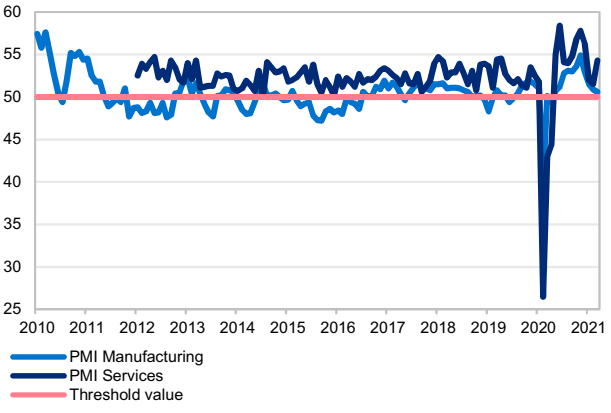
Chart IV.6.8 **Y-o-y GDP growth rates in CESEE countries**
(quarterly, in %)



Source: Eurostat.

In the **Central and South East European region** in Q4, the y-o-y drop in economic activity slowed down to 3.2% (from -3.8% in Q3) as a result of increased government spending and net export (with an aggregate contribution to GDP of 1.4 pp), while household consumption and fixed investments were on the decline (with an aggregate negative contribution to GDP of 4.9 pp). Due to the renewed spread of the virus at end-2020 and tightened containment measures, the y-o-y fall in economic activity in Q4 was recorded in all countries of the region, though of varying intensity – the lowest was recorded in Serbia (-1.1%) and Romania (-1.4%), and the highest in Croatia (-7.2%). The key challenges for the region are the further course of the pandemic and the speed of vaccine roll-out, given that the pace of economic recovery in 2021 is dependent on them (after the estimated fall of 4.1% in 2020). Leading analysts forecast a recovery of personal consumption and fixed investments going forward, which will be supported by fiscal and monetary stimuli. In addition, export activity of the entire region is expected to continue up, driven by increased demand in the EU.

Chart IV.6.9 **Leading activity indicators in China's production and services sectors**
(in index points)



Source: Markit Group.

The Chinese economy ended the previous year with a 2.3% growth rate. Growth was widely diversified across sectors and geographies, and supported by the development of a local coronavirus vaccine. According to the preliminary estimate of the National Bureau of Statistics of China, Q1 saw explosive y-o-y GDP growth of 18.3%, which can be attributed to last year's low base effect and increase in the number of working days during the spring festival, i.e. the Chinese New Year. In Q1, China's GDP posted s-a growth of 0.6%, as indicated by the Services PMI and the Manufacturing PMI. Namely, since the start of the year, both indices were in the expansion zone and in March equalled 54.3 points and 50.6 points, respectively.

According to preliminary estimates of the Bank of Russia, the **Russian economy** recorded a fall of 3.1% in 2020, and avoided a sharper drop thanks to the implemented anti-crisis fiscal and monetary measures, and the development of a local vaccine. During Q1, there was a rise in consumer and investment confidence, as suggested by leading activity indicators for Russia. It is estimated that the economic rebound will be mainly based on the recovery of domestic demand, followed by external demand, partly due to the termination of output restrictions within OPEC+, which will lead to a higher export of oil and gas.

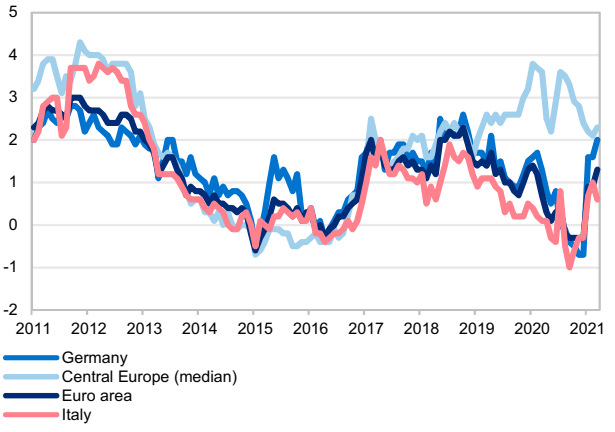
Inflation movements

After falling to -0.3% y-o-y in Q4, **euro area inflation** returned to the positive territory in Q1: it stood at 0.9% y-o-y in January and February, and then edged up to 1.3% in March, its highest level in more than one year. The rise in inflation is primarily attributable to temporary factors, such as the termination of the provisional VAT decrease in Germany, postponed sales in some countries, as well as the rise in energy prices which again recorded y-o-y growth in March. Also, inflation growth is partly a consequence of a significant change in the weights of the Harmonised Indices of Consumer Prices (HICP), whose goal is to take into account the changes in consumer habits during the pandemic. Namely, higher weights are now allocated to exactly those prices that were on the rise (food prices), and lower weights were given to those that posted a decline (recreation and transport services). Due to the statistical impact of altered weights, as well as under the influence of postponed winter sales, **core inflation** also rose – from 0.2% in December to 0.9% in March. Though core inflation went up, cost-push pressures on this account remained low in conditions of dampened economic activity and the still tepid recovery of demand. As for Serbia's key foreign trade partners, y-o-y inflation in **Germany**, measured by the change in HICP, returned to the positive zone in Q1 – after equalling -0.7% in December – primarily owing to the termination of the temporarily trimmed VAT rate and the higher energy prices, therefore, it reached 2.0% in March. After measuring -0.3% in December, inflation in **Italy**, driven by higher energy prices, also entered the positive zone in Q1 and equalled 0.6% in March.

Inflation in the **USA** also rose in Q1, under the impact of the rising prices of energy, but also other goods and services, as well as due to last year's low base. Headline y-o-y inflation in the **USA**, measured by the personal consumption expenditures index, rose from 1.2% in December to 2.3% in March, its highest level since July 2018. Inflation excluding the prices of food and energy – as the Fed's preferred measure – equalled 1.8% y-o-y in March, meaning it came close to the inflation target (2% on average).

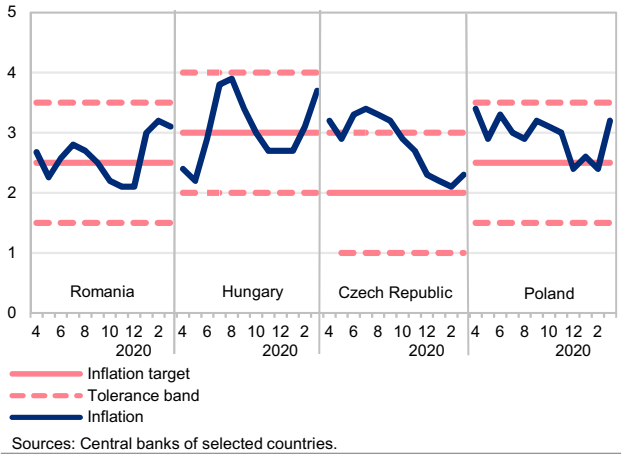
Inflation in observed **Central and South East European countries** was higher at end-Q1 than at end-2020, with the exception of the Czech Republic, where it remained unchanged. The prices of petroleum products had an inflationary effect in all observed countries, being under the impact of the rising oil prices in the global market, and in March also due to last year's extremely low base. The hike in petroleum product prices drove inflation in

Chart IV.6.10 **HICP for selected countries**
(y-o-y rates, in %)



Source: Eurostat.

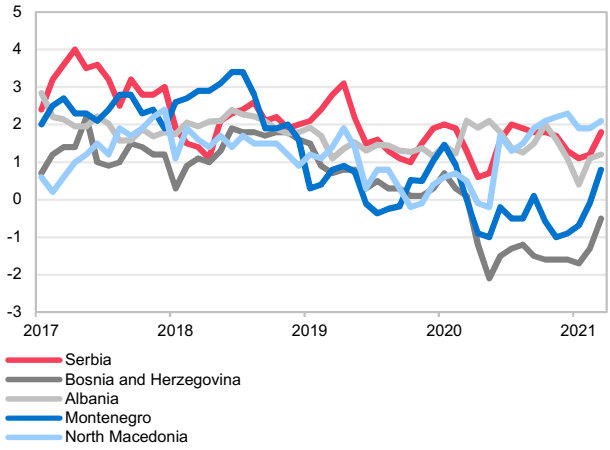
Chart IV.6.11 **CPI movements in selected CESEE countries in the previous year**
(y-o-y rates, in %)



Sources: Central banks of selected countries.

Hungary up from 2.7% in December to 3.7% in March. In Poland, inflation edged up from 2.4% in December to 3.2% in March which, in addition to petroleum product prices, was also attributable to the rise in core inflation. Increase in electricity prices in Romania, which as of this year are no longer among administered prices, gave an additional contribution to y-o-y inflation in this country rising from 2.1% in December to 3.1% in March. After decelerating for seven months, inflation in the Czech Republic rose in March, thus returning to the December level (2.3%). Relative to the target, inflation in the Czech Republic is slightly above the central midpoint, while in the remaining three countries it is closer to the upper bound.

Chart IV.6.12 **CPI movements in Western Balkans**
(y-o-y rates, in %)



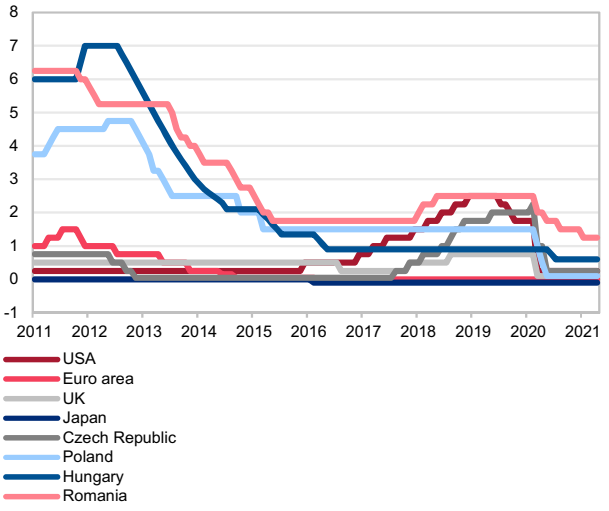
Sources: Statistical offices of selected countries.

Inflation in the majority of **Western Balkan** countries rose during Q1. The highest increase was recorded in **Montenegro**, by 1.7 pp relative to end-2020. In March, inflation in Montenegro left the negative territory and equalled 0.8% y-o-y. In **Bosnia and Herzegovina** inflation remained negative until end-Q3, though relative to December it rose 1.1 pp, to -0.5% y-o-y in March. After declining in January, y-o-y inflation in **Albania** returned to the upward path in February, reaching 1.2% in March – slightly above the December level (1.1%). Only **North Macedonia** recorded a decrease in inflation in Q1 – from 2.3% y-o-y in December to 2.1% y-o-y in March, though it was still the highest compared to all observed countries.

Inflation in **Turkey** continued up in Q1, from 14.6% y-o-y in December to 16.2% in March – its highest level since July 2019, due to the depreciation of the lira, rising prices of food products and high inflation expectations.

Monetary policy

Chart IV.6.13 **Policy rates across selected countries**
(p.a., in %)



Sources: Central banks of selected countries.

During Q1, the **ECB** kept its key interest rates unchanged – the main refinancing operations rate at 0%, lending facility rate at 0.25% and deposit facility rate at -0.50%. Interest rates are expected to remain at the current or lower levels until the ECB in its projections anticipates inflation of slightly below 2%. Thought it has not changed the volume of the Pandemic Emergency Purchase Programme (PEPP), which totals EUR 1,850 bn and will last at least until March 2022 (with reinvestments of matured principals continuing at least until end-2023), in March the ECB announced a much faster pace of asset purchases during Q2 than at the start of the year. It emphasized the programme's flexibility, hence the stated amount need not be utilised in full if favourable financing conditions can be secured by smaller volumes of purchases, though in an opposite situation – it may also be increased. Net asset purchases under the Asset Purchase

Programme (APP) will continue at a monthly pace of EUR 20 bn for as long as necessary, i.e. they will end slightly before the ECB starts raising its rates again, and as before, the principal amounts from maturing instruments will be reinvested for an extended period after the ECB starts lifting the rates. The ECB will continue to ensure favourable financing conditions via long-term lending to banks. In its communication, the ECB underlined that favourable financing conditions are its main goal during the pandemic and that they relate to the entire chain of monetary policy transmission, from yields on government bonds to yields of corporate sector bonds and conditions under which banks approve loans.

During Q1, **the Fed** also kept its federal funds target range unchanged (0–0.25%), where it will remain until the Fed estimates that maximum employment has been achieved, with inflation reaching 2% and a tendency to slightly overshoot that level for a while. Also, it kept the current dynamics of asset purchases within the quantitative easing programme (monthly purchase of Treasury bonds in the amount of USD 80 bn and agency mortgage-backed securities of USD 40 bn), and stood by the guidelines that the purchases will not slow down until substantial further progress has been made toward the achievement of the Committee's goals. Though in the coming months inflation is expected to rise temporarily due to the base effect, the Fed noted that the risk of a significant inflation rise under the comprehensive fiscal package and economic recovery is low, adding that there is no apprehension as to the robust growth of yields on Treasury bonds. It stated that for the time being, there is no intention to alter the structure of purchases within the quantitative easing programme, i.e. to limit the increase in the yield curve tilt.

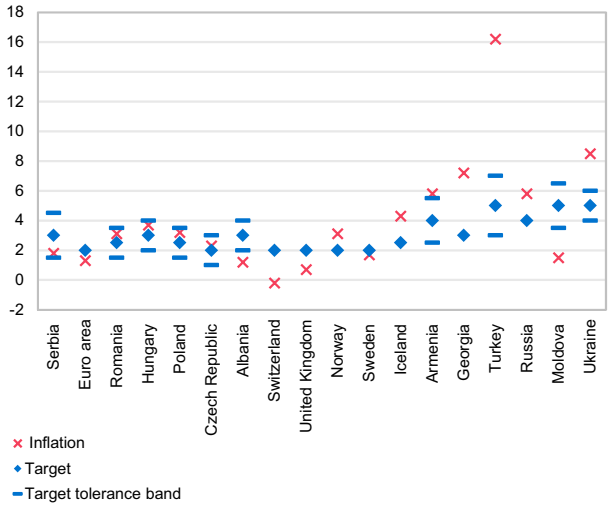
Of the observed Central and South East European countries, only the central bank of **Romania** reacted by trimming its policy rate during Q1, to 1.25% in January – its new lowest level – after which it was kept on hold until the end of the quarter. The central bank of **Hungary** kept its policy rate at 0.6%, though it expanded the government bond purchase programme to include securities with maturities below ten years, and at the same time increased the volume of securities within the Bond Funding for Growth Scheme, changing the Scheme's criterion under which exposure to a single issuer is increased, while the maturity of securities that may be included in the Scheme has been extended from 20 to 30 years. The central bank of **Poland** maintained its policy rate at 0.1%, and the central bank of the **Czech Republic** at 0.25%, also leaving other monetary policy instruments unchanged.

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

Central bank	Inflation*	Inflation target	Policy rate**
Serbia	1.8	3.0 ± 1.5	1.00
Poland	3.2	2.5 ± 1.0	0.10
Czech Republic	2.3	2.0 ± 1.0	0.25
Hungary	3.7	3.0 ± 1.0	0.60
Romania	3.1	2.5 ± 1.0	1.25
Turkey	16.2	5.0 ± 2.0	19.00

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

Chart IV.6.14 **Inflation and target by country in March 2021**
(p.a., in %)



Sources: Eurostat and websites of central banks.

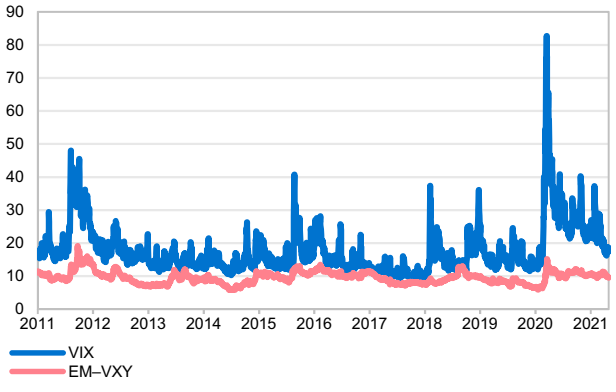
The central bank of **Turkey** did not change its policy rate in January and February meetings, but raised it by 200 bp to 19% in March, whereby it significantly exceeded expectations of the majority of analysists. Thus, from September 2020 onwards, the policy rate was raised by a total of 10.75 pp in conditions of heightened inflationary pressures, which was preceded by a sharp depreciation of the Turkish lira.

Financial and commodity markets

After the **implicit measure of financial market volatility** (VIX) jumped over 37% at end-January, prompted by speculative trading of some shares in the US stock exchange, it turned downward, mainly owing to optimistic expectations that the vaccination against the coronavirus and the planned USD 1,900 bn fiscal aid package in the USA will spur global recovery. Hence, at end-Q1 VIX was 3.4 pp lower than at end-2020, measuring 19.4%, after which it slid by additional 0.8 pp in April, to 18.6%, thus returning to pre-pandemic levels. Volatility of currencies of emerging economies, measured by EM–VXY, edged up slightly in Q1, by 0.3 pp to 11.0, only to decline to 9.5% by end-April.

Yields on **ten-year government securities** of advanced economies were on a rising path in Q1. US Treasury yields increased the most, by 0.8 pp to 1.7%, their 14-month high. The rise in yields is associated with investors' optimistic expectations of a strong rebound in economic activity this year and acceleration of inflation thanks to the successful rollout of vaccination in the USA and ample monetary and fiscal stimulus, as well as the indicators of labour market recovery. While the rise in yields signals investors' expectations that the Fed will start raising the federal funds rate range earlier than previously expected, according to Fed's March forecasts, the range will stay unchanged until the end of the projection horizon, i.e. by end-2023, despite the improved outlook for economic recovery. The yields on government securities of advanced European economies also went up. The yields on ten-year German bonds rose by 0.3 pp, while still remaining in the negative territory (-0.3%), as well as the yields on Austrian government bonds of the same maturity which gained 0.4 pp, rising to -0.1%. Though 0.3 pp growth in yields was recorded for ten-year government bonds of France (to 0.0%) and Spain (to 0.3%), these yields still remained considerably lower than those on Greek (0.9%) and Italian bonds (0.7%) of the same maturity. The yields on ten-year US Treasuries fell slightly in April, to 1.6%, while in other countries observed they continued rising, by around 0.2 pp on average.

Chart IV.6.15 **Implied volatility of the global financial market***



Source: Bloomberg.

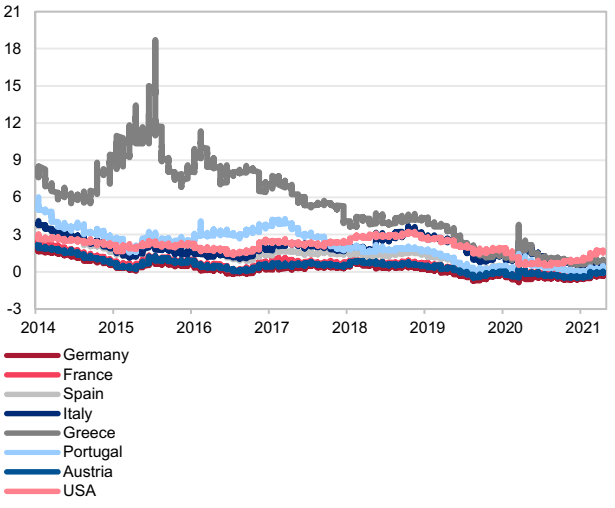
* VIX (Chicago Board Options Exchange Market Volatility Index) measures implied volatility of the S&P 500 index; EM–VXY (J.P. Morgan emerging markets implied volatility index) measures aggregate volatility of emerging market currencies based on three-month forward options.

After strengthening by 4.7% in Q4, **the euro** weakened by the same percent **against the dollar** in Q1 2021. In early January, the euro-dollar exchange rate reached the highest level since April 2018 (1.23 dollars per euro), which was followed by the gradual recovery of the dollar value. The dollar gained ground on the back of rising US Treasury yields and the expectations of a faster economic recovery, as well as the greater progress in vaccination rollout in the USA compared to the majority of other countries. An occasional strengthening of the euro against the dollar in February was the consequence of lower investors' risk aversion amid expectations that the US economic rebound would also trigger a global economic recovery. In March, the dollar continued to appreciate, not only against the euro, but also against the majority of other world currencies, due to the widening spread in yields between the US and other sovereign bonds. The fuelling of political tensions after Western countries imposed sanctions on Chinese officials, which provoked countersanctions by China, led to additional strengthening of the dollar, as the safe-haven currency, to USD 1.17 per euro at end-Q1. In April, the dollar again slid against the euro (by 3.7%), prompted by the fall in yields on US Treasuries and increased readiness of investors to put money in riskier assets.

Due to the dollar strengthening and the rising yields in the USA and other advanced economies, coupled with the Fed's signalling that inflation is no forthcoming threat, investors cut down investments in gold, redirecting their capital to long-term bonds. The acceleration of the vaccination process and favourable data from the US labour market additionally motivated investors to exit gold and invest in riskier asset classes, so the **price of gold** dropped by around 10% in Q1, to USD 1,691 per ounce. During April, the price of gold increased by 5%, to USD 1.768 per ounce, driven by the declining yields on US Treasuries and the fall in the value of the dollar, as well as in light of statements of Fed officials as to small chances of interest rate hikes before 2024.

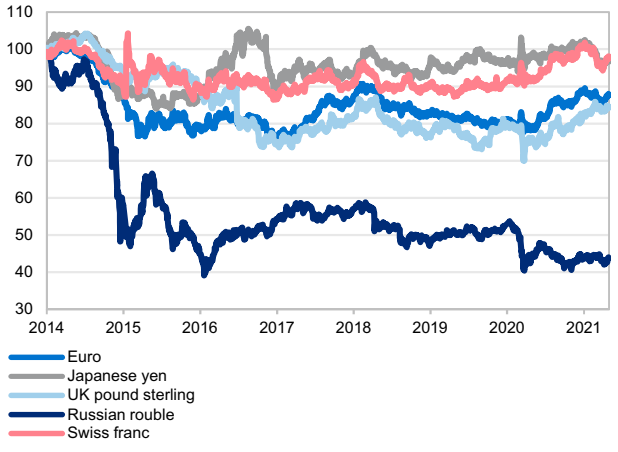
Saudi Arabia decided to unilaterally cut down oil output by 1 mn barrels a day during February and March, which reflected on the rise in **oil price** already in January, when the decision was made. Apart from the expected recovery of the oil demand owing to the improved epidemiological situation and announced fiscal stimulus in the USA, the oil price rise in February was also driven by the reports on depleting US oil inventories and bad weather conditions in the south of the USA, which caused a halt in oil drilling and the winding up of many refineries. The oil price extended its rise into early March, when it reached the

Chart IV.6.16 **Yields on ten-year bonds of selected countries**
(daily data, in %)



Source: Bloomberg.

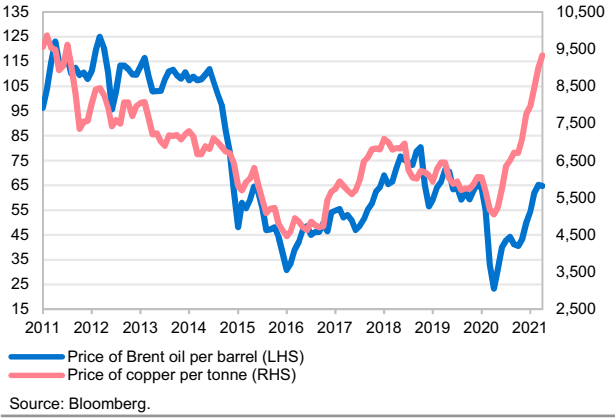
Chart IV.6.17 **Exchange rates of selected national currencies against the dollar***
(daily data, 31 December 2013 = 100)



Source: IMF.

* Growth indicates appreciation.

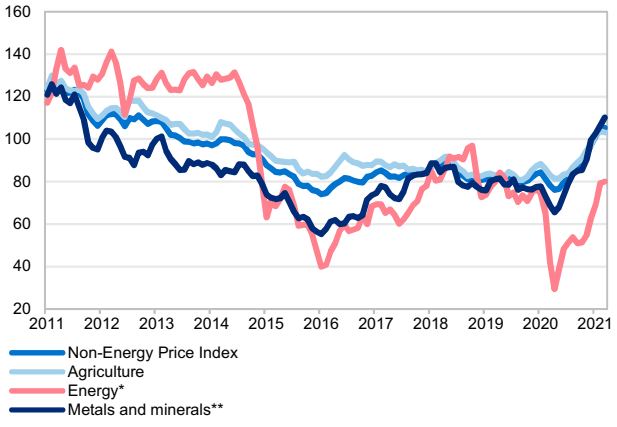
Chart IV.6.18 **Oil and copper price movements**
(average monthly prices, in USD)



Source: Bloomberg.

highest level since May 2019 (USD 69.4 per barrel), receiving tailwinds from the OPEC+ decision not to step up production until it is proved that the rise in demand will persist, as well as the decision of Saudi Arabia to extend the additional cap in production for another month. After that, the oil price edged down mildly, under the impact of the recovery in Iran oil exports, in spite of US sanctions, as well as under the influence of growth in crude oil inventories and increased utilisation of capacities of US refineries in the USA after the disruption in oil supply caused by the cold weather in February, and also the news of re-imposed lockdowns in some European economies (France). At end-Q1 the oil price equalled USD 62.4 per barrel, up by 22% from end-2020. In early April the OPEC+ announced it would start to gradually step up production from the beginning of May, and Saudi Arabia stated it would return to the production level before the voluntary cutdown. However, this put no downward pressure on oil price, because market participants interpreted those decisions as a signal that the demand would rise by the end of the year. By end-April the oil price increased to USD 66.5 per barrel, due to the weakening of the dollar, the decline of crude oil inventories in the USA, the data on the acceleration of China's economic growth and the rising expectations about the oil demand in 2021.

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



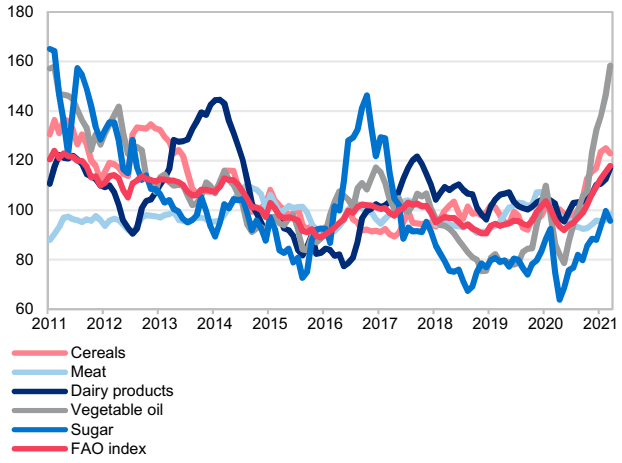
Source: World Bank.
* Crude oil, natural gas and coal.
** Copper, aluminium, iron ore, lead, nickel, zinc and tin.

The rise in the **prices of metals and minerals** continued into Q1 and, according to the World Bank index, measured 10.6%, reflecting the rebound of industrial activity in China and advanced economies, the optimism regarding the US fiscal stimulus, as well as the growing demand for materials used in the production of electrical vehicles. Copper price rose by 15.6%, to an almost ten-year high, the same as tin price, which gained 37.1% in Q1. Due to the strong imports of China, the iron ore climbed in January to its highest level since October 2011, remaining at the similar level at end-Q1, which is an increase of 8.2% from end-2020. The aluminium price also reached its multi-year maximum, having increased by 8.7% in Q1. On the other hand, Q1 saw a decrease in the price of lead by 3.6%, and nickel by 2.5%.

Global food prices, measured by the **FAO index,** also continued up – by 7.5% in Q1, with all index components recording an increase, many of them their multi-year maximums. The same as in previous quarters, the highest growth, of 19.5%, was recorded for vegetable oil prices, which in March trended at their ten-year highs. The increase in palm oil prices was driven by concerns over the level of inventories of exporting countries, which overlapped with the growing global demand. The prices of soybean oil were driven by the rising demand in the

biodiesel sector and of the sunflower oil by the depletion of inventories in Canada and the Black Sea region. In February, the sugar price rose to its highest level since mid-2017, reflecting the concerns over global inventories, only to mildly edge down in March thanks to the good outlook for India's exports, but still remaining 8.7% above the end-2020 level. The prices of cereals continued up in January, mostly due to the rise in corn price, attributable to a contraction in the global supply and the growing demand in China. After an additional mild rise in February, cereal prices reached their highest level in almost eight years. In March, after rising for eight months, these prices declined mildly. The March drop in the prices of cereals mainly reflected the lower price of wheat, thanks to relatively high inventories and favourable production outlook for 2021, while the prices of corn and rice also declined slightly. However, at end-Q1 cereal prices were still 4.9% higher than at end-2020. The prices of dairy products in Q1 rose by 5.9%, while meat prices were 2.6% higher than at end-2020, but still considerably below the levels recorded in H2 2019 and early 2020.

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



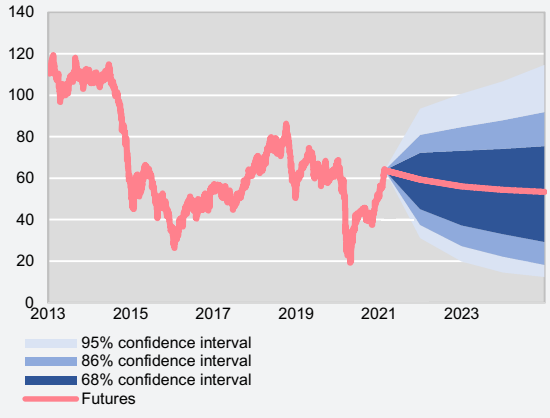
Source: UN FAO.

Text box 5: Expected macroeconomic effects of the rising primary commodity prices

After their collapse in the wake of the pandemic outbreak in early 2020, nearly all primary commodity prices recovered in the second half of the year and continued up during Q1 2021, prompting speculation over the sustainability of this rise and its consequences. While some analysts argue that the rise will continue in the years ahead, most of them, however, believe that this is a temporary phenomenon and that these prices are only returning to pre-pandemic levels.

Almost four times higher than its April 2020 low, the **global oil price** is currently at the level recorded in early 2020 (USD 67 per barrel at end-April), as a result of the extension of the OPEC+ agreement on production cuts, the adoption of US fiscal stimulus worth USD 1,900 bn, which spurred expectations of faster economic growth in the US, the world's largest oil consumer, as well as of a more favourable global economic growth outlook. Having in mind the current demand-supply disbalance and the reduced oil inventories, 2021 is likely to see a somewhat higher oil price. As stated by the IMF in the WEO April Update, although oil prices at the current level may induce a substantial production recovery of higher-cost producers in non-OPEC+ countries, most of them seem focused on balance sheet repair. The IMF judges that the risks to oil prices are slightly tilted to the upside due to the past cuts in oil upstream investments. After the latest improvement to the global economic recovery prospects, the International Energy Agency (IEA) revised up its projection for oil demand in 2021, estimating that it would be higher by 5.7 mn barrels a day (last year oil demand slumped by 8.7 mn barrels a day). The pandemic might have a more durable effect on oil consumption, changing consumer behaviour and habits. Consistent with end-April futures, we assume that the average oil price will be USD 63 per barrel this year, and that it will drift down to around USD 61 on average in 2022 and further down to around USD 59 in 2023.

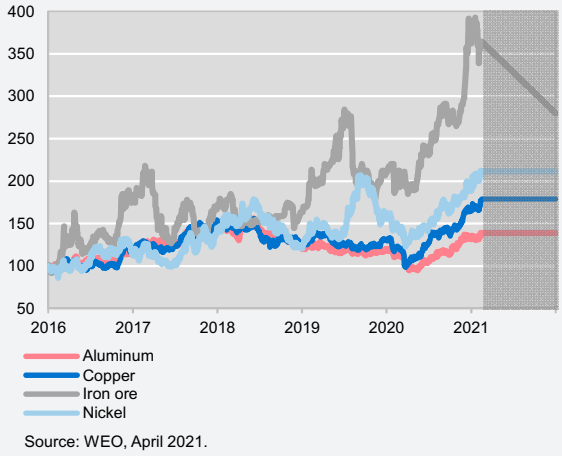
Chart O.5.1 **Oil price prospects**
(USD per barrel)



Source: WEO, April 2021.

Metal prices have also been rallying on the back of industrial production rebound in China and advanced economies and optimism over the US fiscal stimulus. The prices of copper and iron ore, used heavily in the construction and manufacturing sectors, have soared since April 2020 (by 78% and 98%, respectively, according to the World Bank's index), reflecting not only economic recovery, that of China in particular, but also the drop in supply, as a consequence of disrupted supply chains and mine shutdowns due to the infection of workers in South American mines which account for the largest part of copper supply. Growing demand also pushed the prices of nickel and cobalt, used in the production of electric vehicle batteries. The IMF forecasts that metal prices will increase by 32.1% in 2021 and decrease by 4.5% in 2022. The main risks to the forecast are uncertainty over the speed of the global economic recovery and potential production and trade disruptions due to the pandemic.

Chart O.5.2 **Metal price indices**
(1 January 2016 = 100)



Source: WEO, April 2021.

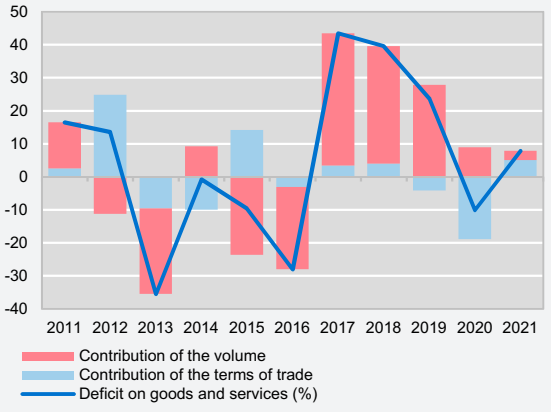
The second half of 2020 saw a surge in food prices, reversing an earlier trend of stable or declining prices over the first months of the pandemic when large global supplies and weaker demand weighed on prices. The surge continued into 2021. Food price growth is owed chiefly to vegetable oil and cereal prices, which increased since mid-2020 by real 81% and 26%, respectively, according to the FAO index.

Soybean and corn prices soared on the back of weaker-than-expected harvests in the US and South America, and strong demand from China, which is seeking to rebuild its hog population after an outbreak of African swine fever in 2019. According to the World Bank's index of primary commodity prices, the corn price went up by 66%, while the wheat price increased by 36% since June 2020, following unfavourable weather conditions during winter in the US, a small 2020 crop in the EU and strong stockpiling demand. Wheat prices received further support from a looming Russian export tax, scheduled between 15 February and 30 June this year and aimed at combating domestic food price inflation. Nevertheless, what speaks in favour of the stabilisation of global food prices is solid supply, as inferred from the stocks-to-use ratio, as a measure of supply relative to demand, which stayed at relatively high levels, as in the previous years.

Considering that Serbia is a net importer of oil and a net exporter of primary agricultural commodities and metals, a question arises as to what effects of the surging commodity prices we can reasonably expect this year in terms of our balance of payments, level of economic activity and inflation.

As regards the balance of payments, we expect that import prices in euro terms will be rising at a somewhat faster pace than export prices (4.7% vs. 4.1%), i.e. that the terms of trade will to an extent have a negative impact on the balance of the country's external economic relations. While most of this negative impact is not directly linked to primary commodity prices, as processed products hold a dominant share in both exports and imports (90% and 85%, respectively), it is linked indirectly because primary commodities are important inputs in the production of processed products. When it comes to primary agricultural commodities, as the key agricultural exports of Serbia, corn, wheat and soybean stand out in particular (holding around 6%, 2% and 1% respective shares in commodity exports), and, based on futures, we expect their prices to grow by around 35% on average this year (in dollar terms). Assuming that the average EUR/USD exchange rate (currently 1.2 dollars per euro) remains unchanged until the end of the projection horizon (as opposed to the average level of 1.14 dollars per euro last year), in euro terms this growth should amount to around 28%, and accordingly the value of exports, due to the effect of prices, should be higher by around EUR 150 mn. At the same time, for the major part of the year export growth will benefit from the good last year's agricultural season and the inventories built. It should be taken into account, though, that we assumed an average agricultural season this year, after an excellent season last year, which means that this year the exported quantity is expected to be lower than a year earlier.

Chart O.5.3 **Contribution to change in the deficit on goods and services**
(in pp)



Source: NBS.

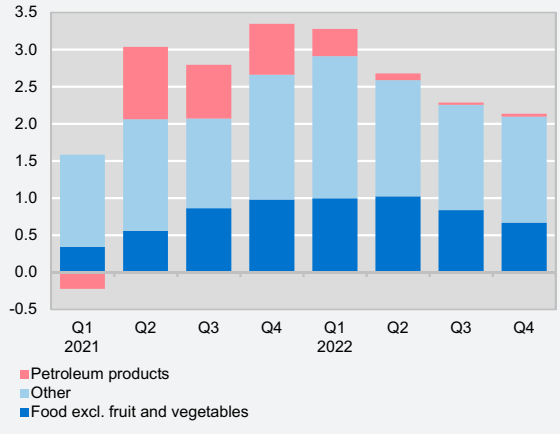
A positive effect on Serbia's external trade balance is also expected from the higher prices of base metals, notably copper. Being heavily used in industrial production and an important component of new technologies based on renewable energy sources, copper gives a significant comparative advantage to countries rich in its ore deposits. Among South East European countries, it is **Serbia** that boasts the largest reserves of copper ore - in the territory of Bor and Majdanpek. Copper exports amounted to EUR 426 mn (76.4 thousand tonnes) in 2020, with the company Zijin Copper Bor being the largest individual exporter of copper, but also one of the largest Serbian exporters in general. A new mine – Novo Cerovo was opened in 2020, while another copper mine called Čukaru Peki is planned to open in 2021. Having this in mind, as well as the expected recovery of external demand, we estimate that the volume of copper exports will expand further. Even if we assume no change in export volume, and this is highly unlikely, the value of copper exports will be by around EUR 100 mn higher this year solely on account of the projected higher prices. It should be taken into account, however, that the net effect on the external trade balance will be probably a half of the stated amount, given that copper products are imported as well. Besides, it is precisely the high import component in steel production and the rising iron ore price that should make sure that, in spite of the anticipated higher steel price, the net effect of steel on external trade balance is only slightly above zero.

On the other hand, the surging global oil price will lead to a higher value of crude oil and gas imports, which will rise also on account of the planned larger volume of imports driven by the stronger domestic industry needs amid expected economic recovery. Consistent with end-April oil futures, we assumed that the average oil price this year will be close to USD 63 per barrel, meaning that in euro terms it will go up by around 40% relative to 2020. As the share of oil in total commodity imports is around 6%, imports are likely to be higher by EUR 290 mn solely on account of its higher price. If we add to this the net effect on account of petroleum product imports, the total effect reaches EUR 310 mn. As regards the price of gas, it should not be forgotten that its growth lags behind that of oil price by around nine months, which is why we should expect a lower value of gas imports for quite some time following any prior subsiding of the global oil price. In our estimate, imports at year level could be higher by around EUR 80 mn on account of gas. Besides, the construction of the TurkStream and its opening will most probably push the import price of gas down.

Overall, we judge that the direct effects of the higher primary commodity prices on the deterioration of the external trade balance will amount to around EUR 200 mn.

As regards the impact of primary commodities on inflation, it is important to note that the global oil price has a direct impact on consumer prices through petroleum product prices, as well as indirect through production costs, while primary agricultural commodities and metals have an only indirect impact through producer prices. The global oil price currently accounts for around 40% of the price of petroleum products, whose share in the structure of the consumer basket is almost 6%. We expect that this year petroleum product prices will go up by around 9.5% on average, with the strongest effect on inflation in Q2 (1 pp contribution to y-o-y inflation) as opposed to -0.3 pp in Q1. Given that petroleum product prices will maintain high y-o-y growth rates in the remainder of the year (12.6% on average), their contribution to y-o-y inflation will stay relatively high, amounting to 0.7 pp. In 2022 the growth in petroleum product prices should soften significantly, i.e. be led by the regular excise tax increase, which is why due to the high base effect y-o-y inflation will slow down on this account. Such outcome is included in our new projection and is one of the key factors why average inflation this year is higher than a year earlier. When it comes to the indirect effect of petroleum product prices on other prices, it is by all means smaller, though difficult to quantify, because fuel costs have different shares in the prices of different groups of products and services (having probably the largest impact on agricultural production, transport and utility services). The pass-through effect on other consumer prices depends largely on how well anchored inflation expectations are. Having in mind that inflation expectations of the financial and corporate sectors are anchored within the target tolerance band and that they are below the target midpoint, we do not expect to see any major second round effect, i.e. spillover of the global oil price to other prices.

Chart O.5.4 **Contribution of inflation components to y-o-y headline inflation**
(in pp)



Source: NBS.

While the prices of primary agricultural commodities (wheat, corn, soybean) are not included directly in the consumer basket, they are an important input in food production. The projected growth in food prices (excluding fruits and vegetables) in the second half of the year (around 3.5%) should for its major part (3.3 pp) stem from the said rise in primary agricultural commodity prices, while its contribution to y-o-y inflation should amount to around 0.8 pp. Such outcome is also supported by the fact that the early 2021 rise in primary commodity prices has still not passed through to inflation, i.e. y-o-y food price growth in Q1 measured mere 1.3%. Over the next twelve months y-o-y inflation is expected to temporarily approach the target midpoint (3%) driven by the higher primary commodity prices (oil and primary agricultural commodities). However, once the effect of these temporary factors wears off, y-o-y inflation will reverse the trend and stay on a downward path until the end of the projection horizon.

When it comes to the impact of primary commodity prices on real GDP, it should be noted that this impact is not direct, but that it unfolds on the supply side via production costs and on the demand side via disposable income. This is evidenced

by the fact that a better financial result of the corporate sector in 2020 (net profit of RSD 433.6 bn) is in part owed to the around RSD 41 bn reduction in fuel and energy expenditure. Therefore, it seems reasonable to expect that higher oil prices will weigh down the disposable income of businesses and households, as well as corporate profitability because of higher production costs. At the same time, it is reasonable to expect that companies engaged in base metals production and oil processing will for the same reason step up their production and thus, partly neutralise the overall negative impact on the economy.

V Projection

GDP is expected to grow by 6% this year, led by domestic demand and exports. A key contribution to growth will come from the normalisation of global economic flows amid mass vaccination, timely and adequate response of economic policy makers at home, the resulting favourable terms of financing, preserved production capacities and jobs, and the expected rallying of external demand. In our estimate, the same factors will enable a return to a stable medium-term growth path of around 4% p.a. in the coming years.

Relative to our February projection when we anticipated real GDP growth to range between 5% and 6% this year, we have revised up our projection and now estimate growth at 6%, as a result of faster than expected growth in Q1, higher planned government capital expenditure and the adoption of a new package of economic measures. Overall, the risks associated with both international and domestic factors are judged to be symmetric, since risks from the previous projection have materialized in the meantime. Downside risks from the international environment materialized due to slower anticipated euro area growth amid extended restrictive containment measures, and upside risks from the domestic environment materialized on account of a new package of economic measures and faster than expected economic growth in Q1 2021.

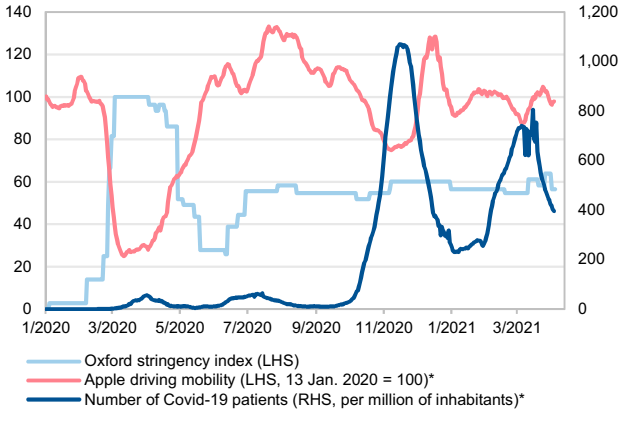
Under the central May projection, y-o-y inflation is expected to hover around the target midpoint over the next year under the impact of temporary factors and to slow thereafter as their effect wears off. Temporary factors refer to higher prices of primary commodities, most notably oil and agricultural commodities, which will, to some extent, spill over to higher prices of other food through cost-push pressures. Core inflation, which is particularly influenced by monetary policy measures, will remain relatively stable over the projection horizon. Its moderate growth is not expected until the end of the projection horizon as domestic demand accelerates further. Higher than expected growth in primary commodity prices is the key reason why the new inflation projection is higher in the short term, i.e. in the next year, than the projection we published in February. Uncertainties surrounding the short-term inflation projection refer primarily to movement in the global oil price and fruit and vegetable prices. In the medium term, the key risks continue to stem from the international environment, and relate primarily to the speed of recovery of the euro area, global prices of primary commodities and capital flows to emerging economies. In part, the risks to the projection are also associated with the new agricultural season, pace of recovery of domestic demand and movement in administered prices at home. Overall, the risks to the inflation projection are judged to be symmetric.

GDP projection

In our estimate, economic activity in Serbia gathered powerful momentum in Q1, despite a deteriorating epidemiological situation and tighter containment measures at home and globally. It gained 2.5% s-a q-o-q according to our estimate and 1.2% y-o-y according to the SORS estimate, thanks primarily to a rebound in net exports on the expenditure side. Owing to preserved investor confidence, favourable financial conditions and accelerated implementation of investment projects, a significant contribution also came from fixed investment and, to a smaller extent, private consumption.

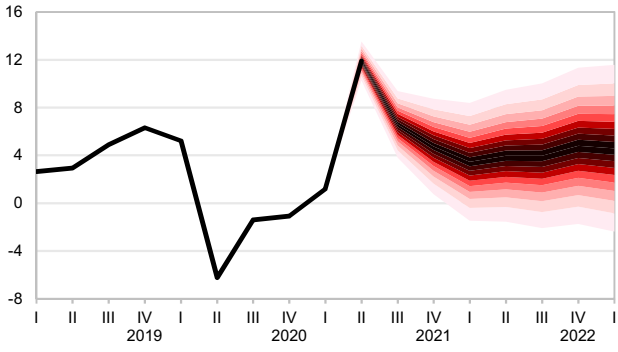
We expect activity to expand further in the remainder of the year in all quarters. Growth will be led mostly by domestic demand and supported by successful

Chart V.0.1 **Human mobility in Serbia depending on government measures and evolution of the pandemic**



Sources: OxCGRT, Apple mobility trends, ourworldindata.org/coronavirus.
* Seven-day moving average.

Chart V.0.2 **GDP growth projection**
(y-o-y rates, in %)

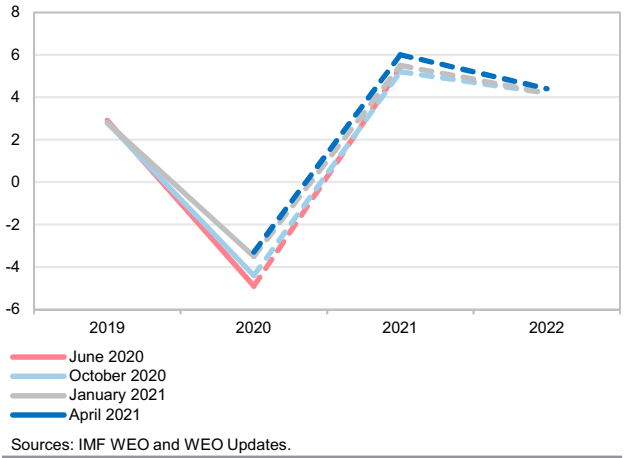


Source: NBS.

vaccination, anticipated improvement of the epidemiological situation and gradual lifting of restrictive containment measures. It will also be buttressed by the timely and adequate response of economic policy makers in Serbia, including the third package of economic measures and the resulting favourable terms of financing and preserved production capacities and jobs. Exports are also expected to give a significant positive contribution. Export growth will be supported by a rebound in external demand and a normalisation of commodity flows spurred by vaccination progress and accommodative fiscal and monetary policy measures taken by many countries which are our important trade partners. Export growth will also be influenced by supply-side factors, i.e. the increase in Serbia's export capacities resulting from continuous inflow of investment in export-oriented sectors. Y-o-y, due to the low base effect from the same period last year when the negative effects of the pandemic were at their peak, GDP is expected to speed up notably in Q2 (to around 11–13%) and to level off at around 5–6% on average in H2.

All of the above should result in an annual GDP growth rate of 6%. This will place us among the few European economies to exceed the pre-crisis level of economic activity this year – in our estimate, GDP reached its pre-crisis level already in Q1. We assess that continued growth in investment, consumption and exports will enable a return to a stable medium-term path of around 4% p.a. in the coming years. Relative to our February projection, when we expected real GDP growth to measure between 5% and 6% this year, we have revised up out projection and now estimate growth at 6%, as a result of faster than anticipated growth in Q1, higher capital investment and the adoption of a new package of economic measures worth around 4.3% of GDP.

Chart V.0.3 **IMF projections of real global economic growth for 2021 and 2022**
(in %)



Sources: IMF WEO and WEO Updates.

Going forward, the speed of recovery both at home and globally will depend primarily on the efficiency of winding down the pandemic. Though global economic recovery is expected to speed up, mostly in H2, according to the IMF, the number of deceased persons and the emergence of new virus strains give cause for concern. According to the IMF, after an estimated contraction by 3.3% in 2020, a higher than expected growth outturn reflecting faster recovery of most regions in H2 after containment measures were eased and economies adapted to new ways of working, the April projections of global macroeconomic trends in 2021 and 2022 improved further. **Global GDP growth projection has been revised up from January by 0.5 pp to 6.0% in 2021 and by 0.2 pp to 4.4% in 2022**. The key factors behind this upward revision are large-scale support packages in several larger economies (especially the United States)

and the expected accelerated vaccination. It is a general conclusion that recovery will be uneven across economies and that they will return to their pre-crisis GDP levels at different speed, with low-income countries and emerging economies expected to suffer longer-term consequences and recover more slowly. Another impending risk is that the visible recovery, especially in the United States (to 6.4% this year, according to the IMF), followed by a rise in yields, could lead to substantial capital outflows from emerging markets. This is a risk primarily for countries that rely more on external funding.

The pace of global growth will also greatly depend on **China's** economic activity, which is expected to see robust growth this year as a result of successful suppression of the pandemic and the response of economic policy makers. Compared to January expectations, Consensus Forecasts anticipates slightly faster growth of 8.7% this year and a slowdown to 5.7% in 2022, which is slightly higher than in the IMF's projections – 8.4% in 2021 and 5.6% in 2022.

The IMF slightly revised up its **euro area growth** projection to 4.4% for 2021 and 3.8% for 2022, up by 0.2 pp each relative to January. By individual euro area economy, the projection for Italy's 2021 growth increased most relative to January (to 4.2% from 3.0% in January), as Italy is expected to be the largest beneficiary under the Next Generation EU Fund programme. The growth projection for Germany, the largest euro area economy, increased only slightly (by 0.1 pp to 3.6%). The ECB and OECD came out with similar projections for euro area growth this year (4% and 3.9%, respectively), with the ECB expecting it to speed up further next year to 4.1% and the OECD anticipating it to slow moderately to 3.8%.

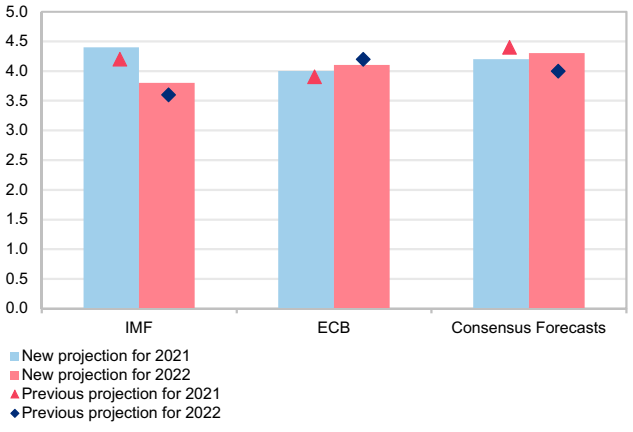
Consistent with the Consensus Forecasts projection, our new projection **assumes euro area GDP growth of around 4.2% this year**, led by domestic demand, i.e. the expected recovery in investment and consumption. Domestic demand will gain further momentum next year and result in GDP growth of 4.3%. Compared to our January expectations (which we used in our February GDP projection), we revised down euro area growth for this year because of slower than anticipated vaccination and continuing restrictive containment measures in most countries in Q1. The dynamics of leading economic activity indicators in Q1 signals that the production sector remained in the expansion phase and that activity gained further momentum thanks primarily to ECB's measures, fiscal support packages in most euro area countries and rebound in China's external demand. Activity in the service sector remained in the contraction phase, but less than in prior quarters. Consensus Forecasts expects

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

	2021		2022	
	Previous projection	New projection	Previous projection	New projection
World	5.5	6.0	4.2	4.4
Euro area	4.2	4.4	3.6	3.8
Germany	3.5	3.6	3.1	3.4
Italy	3.0	4.2	3.6	3.6
USA	5.1	6.4	2.5	3.5
Russia	3.0	3.8	3.9	3.8
China	8.1	8.4	5.6	5.6

Sources: IMF WEO Update (January 2021) and IMF WEO (April 2021).

Chart V.0.4 **Revisions of euro area GDP growth projections for 2021 and 2022**
(in %)



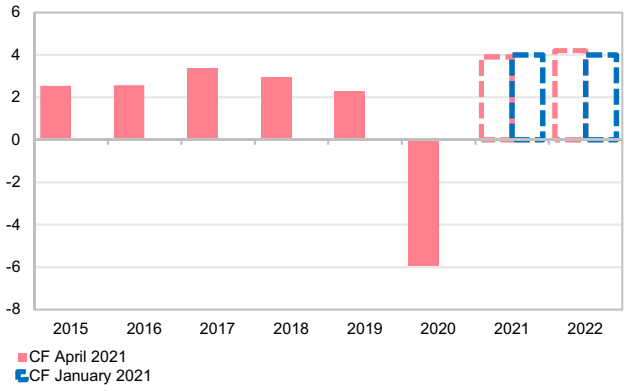
Sources: IMF, ECB and Consensus Forecasts.

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

	January 2021		April 2021	
	2021	2022	2021	2022
Poland	4.1	4.6	4.0	4.9
Czech Republic	3.6	4.9	3.3	4.6
Hungary	4.4	4.6	4.5	5.1
Romania	4.0	4.9	5.0	4.7
Slovakia	4.7	4.4	4.2	4.5
Slovenia	4.7	4.0	4.4	4.4
Croatia	4.7	5.0	4.9	4.8
Bulgaria	3.0	4.0	3.3	3.8
Albania	5.4	4.8	5.1	4.8
Bosnia and Herzegovina	3.8	4.2	3.0	4.0
North Macedonia	4.2	3.7	4.0	3.9

Source: Consensus Forecasts.

Chart V.0.5 **External demand indicator***
(in %)



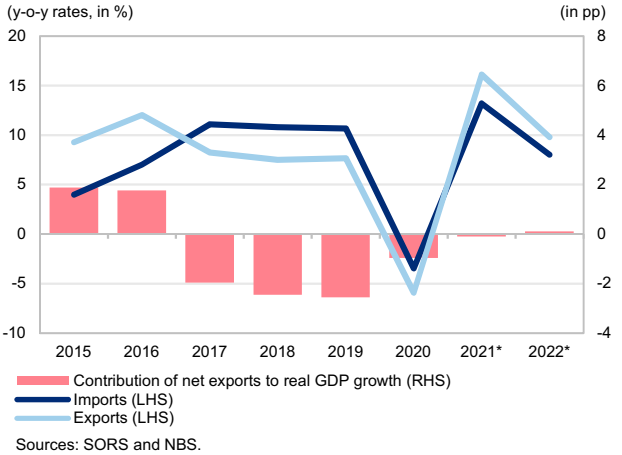
Source: Consensus Forecasts.
* Weighted GDP average of 20 countries to which Serbia exports most.

growth of our most important individual partners in the euro area, Germany and Italy, to measure 3.3% and 3.9%, respectively, this year, which is 0.4 pp and 0.6 pp, respectively, lower than expected in January.

Relative to our previous report, Consensus Forecasts revised down the 2021 GDP growth rates for the majority of **Central and South East European countries**, Serbia's important trade partners, estimating that most of them will not reach their pre-crisis levels. Going forward, the speed of recovery of this region will depend primarily on the availability of vaccines and their effectiveness in suppressing the coronavirus, the pace of recovery of the euro area, which is the most important trade partner of this group of countries, and the available scope for further fiscal and monetary stimuli.

The expected rise in external demand, coupled with the effects of higher supply on account of earlier investment in export sectors, ought to support two-digit growth in Serbia's exports of goods and services this year. However, the anticipated higher imports of equipment and intermediate goods for industrial purposes with the continuation of the investment cycle and the expected rebound in consumption will most likely result in somewhat faster than projected import growth, which means that the contribution of **net exports** to GDP will most likely be slightly negative, through less than in the previous projection. Compared to the previous projection, we estimate the volume of foreign trade to be higher this year, which should result in higher growth rates of both exports and imports of goods and services, as confirmed by movements recorded in Q1.

Chart V.0.6 **Real export and import growth**



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

Going forward, as export capacities go up and external demand rallies further, the contribution of net exports is expected to be neutral or even mildly positive. Consistent with such estimate of net exports and the recovery in domestic demand, and given somewhat less favourable terms of trade due mostly to the oil price rise, we expect the **share of the current account deficit** to measure 4.6% of GDP this year, though movements recorded since the start of the year signal a high probability of an even more favourable outturn. In the medium run, this share is expected to dip moderately (to around 4%) as export capacities go up and the global economy rallies, while remaining fully covered by net FDI inflow as in the past six years.

The process of vaccination in Serbia is among the most successful in Europe, as reflected in the fact that close to 30% of the population has received at least one vaccine dose so far. We estimate that this positive trend will continue, which will help improve the epidemiological

situation and enable the lifting of most restrictive measures which were in place in Q1.

The Ministry of Finance has drafted the budget revision for this year according to which **general government deficit will measure 7.0% of GDP in 2021**. This is higher than the initial plan set out in late-2020 (3.0% of GDP). The key elements of the budget revision include the new package of economic measures and much higher planned capital expenditures. The third package of measures to relieve the effects of the pandemic measures around 4.3% of GDP, the bulk of which refers to direct fiscal incentives (2.3% of GDP). Around RSD 120 bn has been planned for Guarantee Scheme implementation (a half referring to continuation of implementation of the previous Guarantee Scheme which has been extended until July). Direct measures will provide relief to the hardest hit economic sectors (companies in trade, catering and transport) and households (persons of legal age and, additionally, retired and unemployed persons).

Central government public debt measured 55.7% of GDP at end-March. Under the new projection in the budget revision, it is expected to increase until year-end, but still remain below the Maastricht criterion of 60%. It should resume a downward path from next year. Though it increased temporarily in 2020 under the impact of global factors, country risk premium is expected to continue down over the projection horizon, while credit rating could reach investment grade level.

Timely measures taken by the Government and the NBS, directed in particular at preserving the **labour market**, buttressed its relative resilience to the fallout from the pandemic. As all of the most significant indicators of unemployment and activity returned to their pre-pandemic levels, while formal employment and wages continued up in most sectors, positive trends in the labour market are expected to continue with the anticipated improvement of the epidemiological situation and enactment of the new package of direct assistance measures.

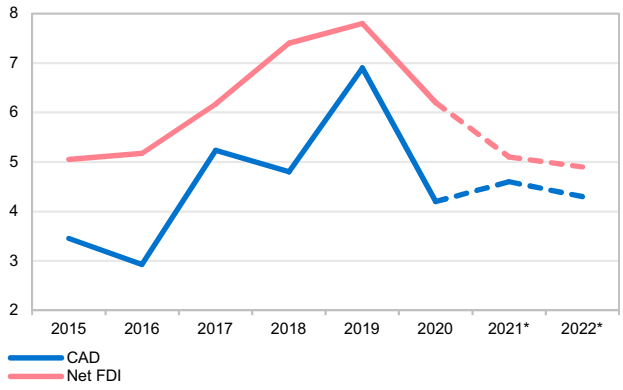
As a result, on the expenditure side, we expect **domestic demand** to provide a significant positive contribution to GDP growth this year and recover at an accelerated pace, helped by:

– weakening of the pandemic and normalisation of economic flows;

– continuation of the investment cycle after its slowdown during the pandemic;

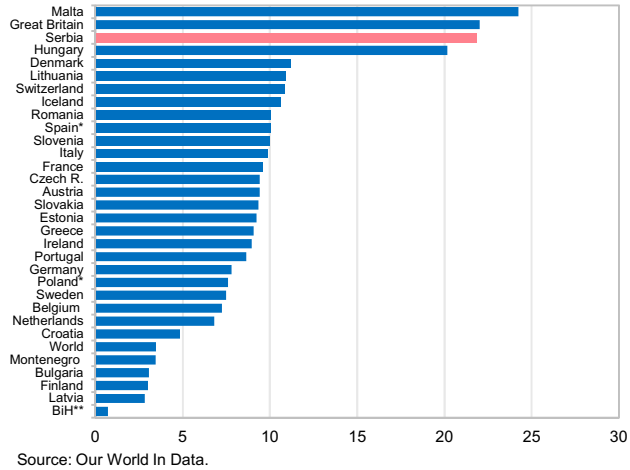
– higher disposable income of businesses and households, helped by the third package of economic measures;

Chart V.0.7 **Current account deficit and net FDI inflow**
(in % of GDP)



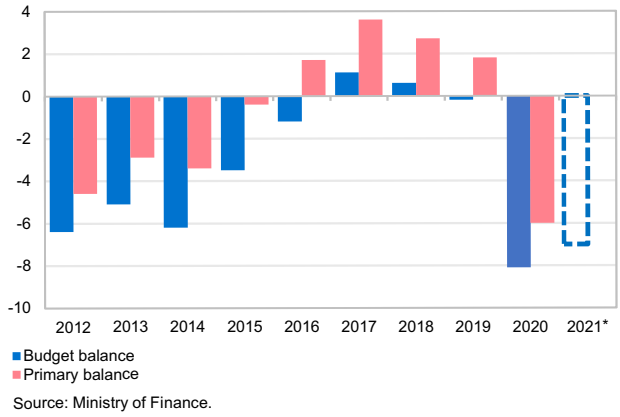
Source: NBS.
* NBS projection.

Chart V.0.8 **Number of fully vaccinated persons – 30 April 2021**
(per 100 inhabitants)



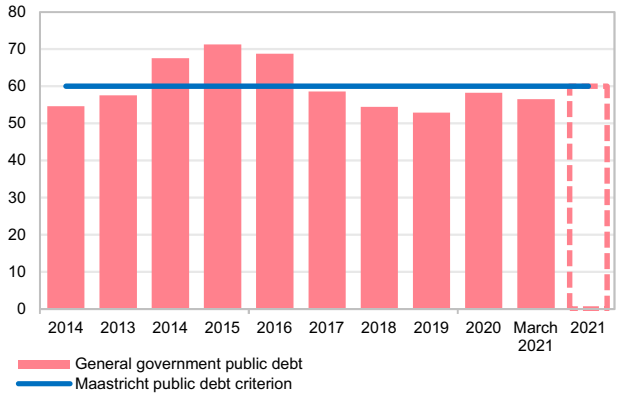
Source: Our World In Data.
* 29 April 2021.
** 27 April 2021.

Chart V.0.9 **General government fiscal and primary budget balance**
(in % of GDP)



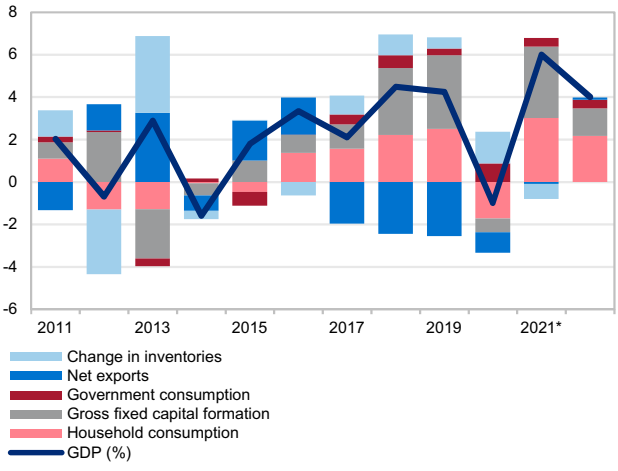
Source: Ministry of Finance.
* Projection from the explanation of the 2021 budget revision.

Chart V.0.10 **General government public debt**
(in % of GDP)



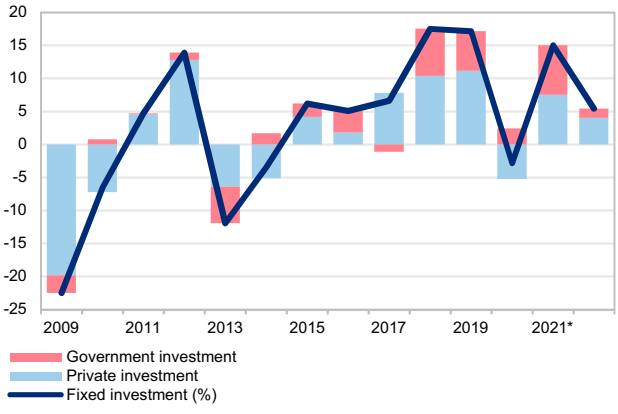
Source: Ministry of Finance.

Chart V.0.11 **Contributions to real GDP growth**
(in pp)



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

Chart V.0.12 **Fixed investment**
(y-o-y growth, in pp)



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

– preserved labour market due to the robust economic assistance package (including NBS's measures).

Private consumption is expected to contribute around 3 pp to GDP growth, thanks to continued wage and employment growth in most sectors, higher disposable income of households as a result of preserved favourable terms of taking new and repaying outstanding loans, direct fiscal stimuli, and increased consumer confidence as advances are made in ending the epidemic. Consumption growth is expected to continue in the coming years as well, buttressed by the expected end of the pandemic and reduced propensity for precautionary savings. Though slower than last year, **government consumption** is expected to provide a positive contribution to GDP this year as well (0.4 pp), due primarily to higher outlays for healthcare (vaccines, medical workers' wages and purchases of medical supplies).

Fixed investment is expected to provide a positive contribution to GDP growth over the projection horizon (3.4 pp this year, with almost equal contribution of private and government investment). The rebound in **private investment** is expected to be supported by the preserved macroeconomic stability, reduced risk aversion due to anticipated advances in vaccination and winding down the pandemic, maintained favourable terms of financing and global economic recovery. This should lead to continued solid FDI inflows to Serbia. A positive contribution is also expected from **planned government investment projects**, particularly in transport infrastructure. This is signalled by the planned growth in government capital expenditure which, according to our estimate, ought to reach around 7% of GDP this year in real terms and remain around that level in the medium term as well, contributing to a rise in potential output.

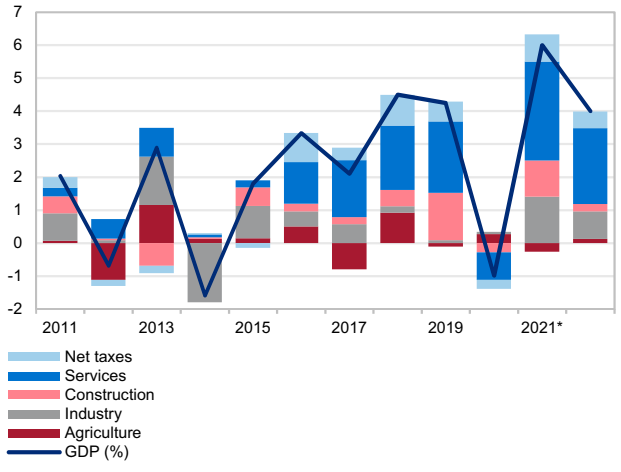
The only component of domestic demand estimated to provide a negative contribution this year are **inventories**, which have been rising for several years in a row. A negative contribution is expected to come primarily from lower inventories in agriculture, as this year's season is expected to be average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

On the **production side**, this year we expect full recovery of activity in service sectors and continued growth in production sectors, excluding agriculture. Manufacturing industry growth will be propped up by the activation of

new and expansion of existing capacities on the supply side, and by the gradual acceleration of economic growth of our main foreign trade partners on the demand side, particularly in H2. Stepped-up growth in activity in service sectors will be supported by the taken economic measures and the expected consumption growth. A positive contribution to GDP growth should also come from construction, given the planned further increase in government capital expenditure, most notably the current and planned projects in the area of transport infrastructure, and favourable trends in the real estate market. Assuming an average agricultural season after last year's excellent one, agriculture is expected to provide a mildly negative contribution to GDP growth this year.

On the whole, the risks to the GDP projection are judged to be symmetric. Uncertainty is still mostly associated with the course of the pandemic and the efficiency in winding it down, but it is less pronounced than in the previous projection, as economic consequences of the new wave of the pandemic have turned out to be weaker than in the first wave.

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



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

According to the IMF, **the pace of global recovery** will mostly depend on the extent to which new virus strains respond to vaccines. The baseline scenario assumes that virus transmission could be reduced to low levels by the end of 2022 as vaccines are expected to be available to most countries by mid-2022. Important factors behind the speed of global recovery include the efficiency of measures taken to repair the economic fallout from the pandemic and the scope for their further use, which differs from country to country. As a result, recovery of different countries and regions will be uneven. The speed of recovery will also hinge on the further course of global financial conditions and primary commodity price movements in the global market. Overall, the risks to the global growth projection are judged to be symmetric, and, in the long term, even mildly tilted to the upside.

Particularly relevant for Serbia is the epidemiological situation **in the euro area and countries of Central and South East Europe** and the speed of their recovery. Slower than expected vaccination and extended restrictive containment measures in many European countries so far in the year dampened the growth outlook of our important foreign trade partners, particularly in the short run, which is why we revised down our euro area growth forecast from February. Still, as the effects of the third wave of the pandemic were weaker than expected in most countries, thanks in particular to robust economic packages and the fact that many companies adapted to changed working

conditions, we now judge the risks to the projection associated with the recovery of the euro area and our other important foreign trade partners to be symmetric. Any sharper fall in economic activity in the euro area and the countries with which we have important trade ties would reflect on lower growth in Serbia's exports and weaker FDI, and, by extension, subdued output in manufacturing, while a faster recovery would have the opposite effect. Moreover, it is important to note that total exports were less affected by weaker external demand from the euro area, thanks to investment from prior period, mostly in the tradable sectors, and the achieved product and geographical diversification, as confirmed by movements in prior months. Another relatively favourable circumstance in the new wave of the pandemic is that the industrial sector in the euro area, to which our exports are also linked through global production chains, remained relatively resilient, despite the fact that Q1 saw renewed halts in production chains.

The pace of global economic recovery also greatly influences movements in the **international financial and commodity markets**. Slower than expected global growth would add to the uncertainty in the international financial market and reflect negatively on business confidence and investment decisions, which would probably dent the inflow of capital into emerging economies, including Serbia. On the other hand, faster than expected global recovery would further boost investor sentiment and their readiness to invest in emerging economies. Global financial conditions will largely hinge on the **monetary policies of leading central banks** which have expressed readiness to extend extreme monetary accommodation. In that case, liquidity in the international financial market would remain high over a longer time period, which would reflect positively on capital flows to emerging economies, including Serbia. At present, most analysts and international financial institutions believe that global inflation growth is temporary in character. If it, however, turns out not to be temporary, global financial conditions could tighten significantly, leading to weaker capital inflows to emerging economies. The adoption of an additional fiscal package in the USA has already led to a rise in long-term interest rates. According to international financial institutions, if this continues it could have a negative effect on capital flows and financial conditions in emerging economies.

The risks to the GDP projection are also associated with **movements in prices of primary commodities**. **Oil prices** were on the rise in the prior months, propped up mostly by increased optimism amid news of vaccine availability. Consistent with futures, we estimate that oil

prices will rise moderately this year and remain at a similar level next year as well. As Serbia is a net importer of oil, any fresh decline in the oil price would spill over to higher disposable income and lower operating expenses, while its growth would have the opposite effect. Prices of other primary commodities – **base metals and agricultural commodities**, were also on the rise in the prior months, some of them reaching their several years' highs. Moderate growth in prices of primary agricultural commodities is expected going forward as well, and expectations are similar for prices of base metals as a result of the expected global recovery and demand growth. At the same time, it is important to note that Serbia, as a net exporter of base metals (iron and copper in particular) and grains, would benefit from their higher than projected growth, while their decline would have the opposite effect.

We judge the risks from the domestic environment to be symmetric now, as upside risks associated with the third adopted package of measures and faster than expected economic recovery in Q1 have materialised in the meantime.

In our new projection, we assumed that the implementation of the **new package of Government economic assistance measures worth around 4.3% of GDP**, along with preserved production capacities, wages and employment in the major part of the economy, higher disposable income and preserved consumer and investment confidence, as well as anticipated progress in vaccination, would result in the recovery of personal consumption and fixed investment. Also, **growth in government capital expenditure** could be higher than projected, as in the past three years, particularly given their planned substantial growth at the level of the republic according to the budget revision for this year. The rise in government capital expenditure would spur investment growth on the expenditure side and construction growth on the production side, as the bulk of these investments are directed into transport infrastructure. **FDI inflows** are another upside risk to the GDP projection. In the past years, thanks to the preserved macroeconomic stability they exceeded our expectations and were diversified by project and geographical area, and mostly directed into tradable sectors. This could result in stepped up exports on the expenditure side and manufacturing growth on the production side.

In our baseline scenario, we assumed that activity and employment rates will continue to rise. If the pandemic continues, however, this could have deferred negative effects on the **labour market**, particularly in areas

powerfully hit by the pandemic (tourism, catering, transport, recreation and culture). We judge the risks on this account to be mildly tilted to the downside.

To a smaller extent, another risk to the GDP projection is associated with movements in **agricultural production**, which we assumed to be average this year and provide a negative contribution to GDP, given last year's excellent season. Shifts are possible in either direction here as well, as a better agricultural season would lead to stronger exports of primary and processed food products, especially since global food demand is not elastic and has not shrunk significantly even during the lockdown of economies.

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

Risk	Possible channels of influence on GDP in Serbia	Estimate of the risk effect relative to the baseline scenario
International environment		
Uncertainty regarding the course of the pandemic and the effect on global economic growth	Slower global recovery would lead to a slackening of external demand, lower Serbian exports and slower growth in manufacturing, and vice versa.	↕
Pace of euro area's recovery from the pandemic	Slower euro area growth would lead to lower Serbian exports and reduced investment which, on the production side, would lead to slower growth in manufacturing. Conversely, if the euro area recovers faster, exports and investment in Serbia would go up.	↕
Capital flows, relations of main currencies in the international financial market, monetary policies of leading central banks	Heightened/diminished uncertainty in the international financial market and the rise/fall in risk aversion would decrease/increase the inflow of investment and raise/lower the costs of borrowing. Accommodative monetary and fiscal policy measures of leading economies help diminish risk aversion and enhance investor sentiment.	↕
Prices of primary commodities: – crude oil (Serbia is net importer) – grains (Serbia is net exporter) – base metals (Serbia is net exporter)	A rise/fall in the price of oil would decrease/increase the disposable income and increase/decrease operating costs. A rise/fall in prices of base metals and grains would increase/decrease exports.	↕
Domestic environment		
Higher than projected growth in government capital expenditure	Higher growth in capital expenditure would lead to faster investment recovery on the expenditure side, and construction growth on the production side, as well as increased potential output, and vice versa.	↑
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.	↑
Deferred effects of the pandemic on the labour market	The pandemic could have a deferred effect on the labour market, especially in sectors hit particularly hard by the pandemic, which could slow the expected rebound in domestic demand and service sector. Conversely, a greater than expected increase in employment and decrease in unemployment would speed up domestic demand growth and service sector recovery.	↓
Agricultural season	Higher/lower than expected growth in agricultural production contributes to a rise/fall in exports and manufacturing.	↕

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

Inflation projection

Short-term inflation projection

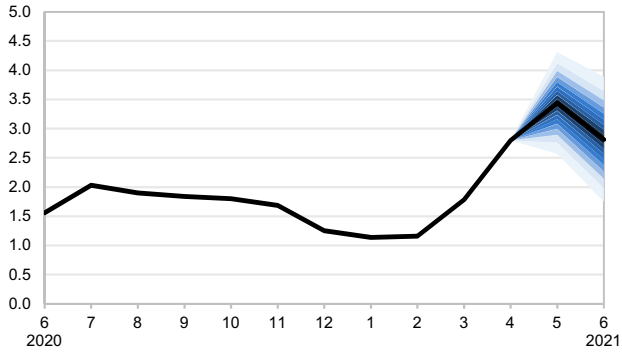
In the coming months, we expect inflation to continue to hover around the target midpoint. It will still be rising moderately in May, mostly as a result of the low base from last year (inflation was 0.7% in May 2020). It is then expected to slow in June and return to slightly below the target midpoint.

The acceleration of y-o-y inflation in May ought to result primarily from a higher y-o-y contribution of petroleum product prices (0.4 pp), as it is then that the effect of last year's low base will play out in particular. The anticipated slowing of inflation in June will be mostly due to fruit and vegetable prices and their high base from last year. As a result, their contribution to headline inflation should contract by around 0.6 pp.

In the coming months, we expect core inflation to be stable and move around its current level (1.8%). Its potential departures from the projection will to the greatest extent depend on the statistical coverage of prices of package travel arrangements.

In the short term, the risks to the projection are mostly associated with food prices, i.e. possible greater oscillations in fruit and vegetable prices with the arrival of the new season, speed of recovery of meat prices given the low base, on the one hand, and the persisting restrictions in the global service sector, on the other hand. Uncertainties are also associated with the extent to which higher cost-push pressures in food production will spill over to other prices.

Chart V.0.14 **Short-term inflation projection**
(y-o-y rates, in %)



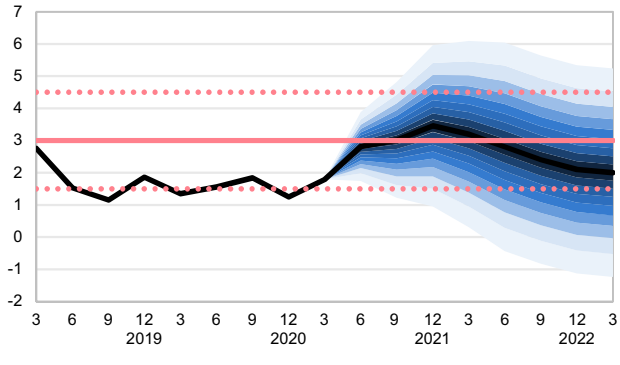
Source: NBS.

Medium-term inflation projection

Under the central May projection, as in our previous projections, we expect y-o-y inflation to remain within the bounds of the NBS's target tolerance band until the end of the projection horizon, i.e. in the next two years. In the year ahead, we expect inflation to hover around the target midpoint under the impact of temporary factors, higher prices of oil and primary agricultural commodities, and to slow thereafter as the impact of temporary factors wears off.

Core inflation, which is particularly influenced by monetary policy measures, will remain relatively stable over the projection horizon. It is expected to rise moderately only towards the end of the projection horizon as domestic demand speeds up further. Though the pandemic led to a weakening of both supply and demand, there were no major demand-side inflationary

Chart V.0.15 **Inflation projection**
(y-o-y rates, in %)

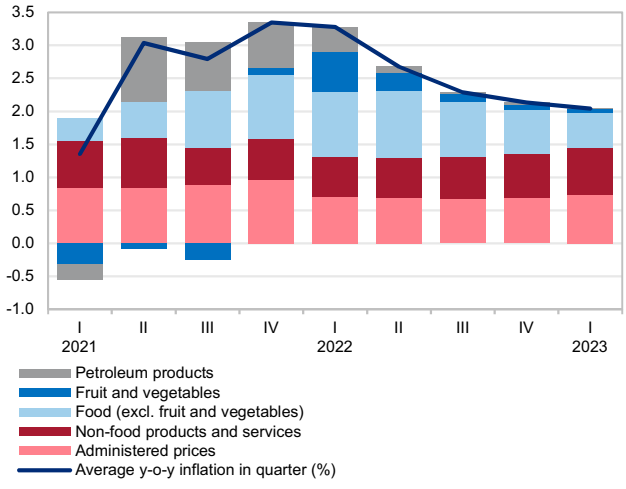


Source: NBS.

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%.

pressures as demand fell more sharply than supply. Going forward, supply is expected to rise further with advances in the vaccination process and the normalisation of doing business, particularly in the service sector which was hardest hit by the pandemic. On the other hand, as uncertainties and health risks subside, demand is expected to go up further, supported by additional fiscal measures. Hence, we expect supply and demand to become more or less balanced going forward. Companies will try to respond to elevated demand through increased use of existing and new resources, which will have a positive effect on the labour market and the acceleration of domestic demand towards the end of the projection horizon.

Chart V.0.16 **Contributions to y-o-y inflation by component**
(in pp)



Source: NBS.

In terms of individual components, temporary inflation growth this year will be determined mainly by **petroleum product prices**. Namely, as the global oil price has returned to its pre-crisis level after its pandemic-induced collapse last year, petroleum product prices at home are expected to increase and their contribution to go from negative to positive. This pressure should be temporary, however. In the second half of the projection horizon, i.e. from Q1 2021, petroleum product prices are expected to have a slight effect on inflation.

We also expect a temporary rise in **food prices (excluding fruit and vegetables)**, mostly due to the spill-over of higher global prices of primary agricultural commodities (corn, wheat, soybean) and oil. Namely, after food inflation fell to only 1.1% y-o-y in February due to extremely low fresh meat prices, which failed to record their seasonally expected growth last summer on account of subdued domestic and export demand amid the pandemic, it is now expected to rise gradually until Q1 2022. Cost-push pressures on food prices are expected to subside thereafter, as raw material costs are above their neutral level which customarily indicates their decline in the future. In the medium term, food price growth is expected to be moderate, guided mainly by a gradual rise in demand.

Table V.0.4 **Key projection assumptions**

	2021		2022		2023
External assumptions	Feb.	May	Feb.	May	May
Euro area GDP growth	4.4%	4.2%	4.0%	4.3%	1.9%
Euro area inflation (average)	1.0%	1.5%	1.1%	1.2%	1.3%
3M EURIBOR (December)	-0.6%	-0.5%	-0.5%	-0.5%	-0.4%
International prices of primary agricult. commodities (Q4 to Q4)*	1.6%	12.7%	-5.9%	-9.0%	/
Brent oil price per barrel (December, USD)	53	63	52	60	58
Internal assumptions					
Administered prices (Dec. to Dec.)	5.6%	5.4%	4.0%	4.0%	4.0%

* Composite index of soybean, wheat and corn prices.

Sources: ECB, Consensus Forecasts, Euronext, CBOT, Bloomberg and NBS.

When it comes to **fruit and vegetable prices**, which are the most volatile inflation component, vegetable prices did not record the seasonally expected increase in late-2020 and, particularly, in early 2021, while fruit prices also rose more slowly than usual for the season. As this lack of price growth was offset in April, we estimate food and vegetable prices to be slightly below their neutral level at present and expect them to rise only moderately going forward. We anticipate a positive contribution to inflation late this year, which will be particularly

important in Q1 2022 (due to the extremely low base in Q1 this year), but which will subside sharply thereafter until the end of the projection horizon.

We expect **administered price** growth to be somewhat higher this year (5.4%), mostly reflecting the adjustment in electricity prices and the inclusion of the fee for renewable energy sources in CPI calculation in January and February. We assumed higher administered price growth also because of the cigarette price hike recorded in February and expected in July, consistent with the planned increase in excises, as well as on account of higher prices of utility services. As so far, administered price growth for next year is expected to measure around 4%.

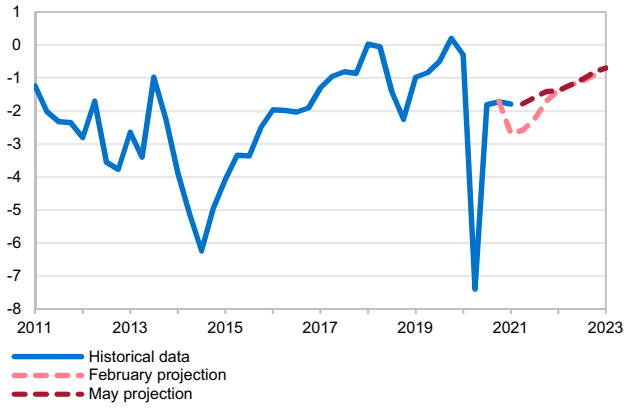
As in our previous projection, we expect growth in **prices of non-food products and services** to be moderate, consistent with a gradual recovery in demand. Though prices of this product category depend on the prices of numerous industrial components and raw materials as well as the functioning of global supply chains (where disruptions and shortages are already present due to the speed of rebound in global demand – container transport, semiconductors, plastic, lumber…) and consumer behaviour, somewhat faster growth in prices of individual products is possible. As the pandemic winds down, especially if growth outstrips expectations, there could be some unusual price movements, just as was the case at the start of the pandemic. Such price increases are, however, expected to be temporary in character and not reflect on the projected medium-term inflation trajectory.

In terms of inflation factors, like our projections in the past year, this inflation projection is also determined by the fact that **global supply and demand** remain under a powerful impact of the course of the pandemic. Many countries began this year with a tightening of containment measures, which will most probably restrain global growth in Q1. Growth will however be higher than expected three months ago, due to a weaker impact of containment measures on consumption and additional fiscal measures in some countries, particularly in the US. This, along with the vaccination process, instils optimism that the global economy is slowly exiting the crisis.

Growth outlooks vary from region to region – the USA is expected to see vibrant growth helped by further fiscal stimuli and the relatively successful vaccination process, while euro area growth will be more modest due to subdued fiscal stimuli and slower vaccination (the euro area is expected to reach the pre-crisis economic activity level in Q1 2022). Emerging economies' growth could

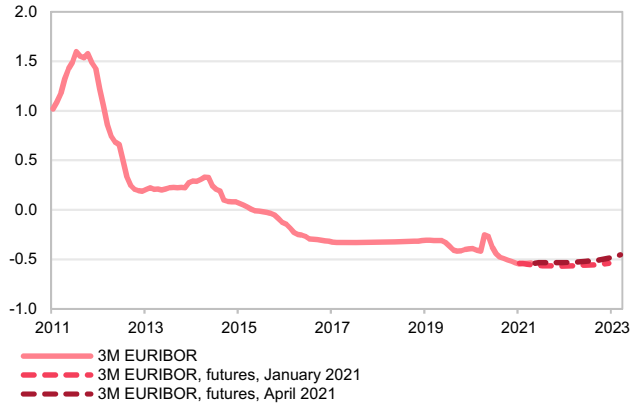
also be somewhat slower than expected due to the spread of the virus in some countries and an overall slower vaccination process.

Chart V.0.17 **Output gap projection**
(in % of potential output)



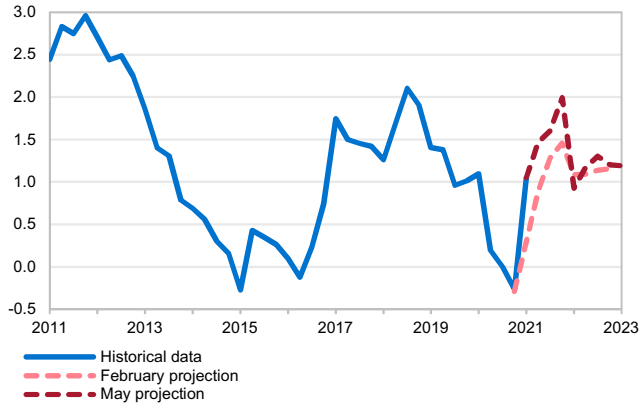
Sources. SORS and NBS.
* Output gap is estimated on the basis of NAVA.

Chart V.0.18 **Expected 3M EURIBOR**
(p.a., in %)



Source: Bloomberg.

Chart V.0.19 **Assumption for euro area inflation**
(y-o-y growth, in %)



Source: NBS calculation based on projections of relevant institutions.

In our projection, we assumed growth in the euro area, our most important trade partner, to measure 4.2% this year. This is somewhat less than in our previous projection (4.4%). Next year, we expect higher euro area growth (4.3%) than in our previous projection (4.0%). Though estimates of euro area output gap put forward by the European Commission and the IMF vary, both institutions judge it to be negative until end-2022 at least. Euro area output gap is not expected to reflect fully on **Serbia's output gap**, due to the concentration of the pandemic's negative effects in non-tradable sectors mostly. Our negative output gap will begin to contract gradually in H2, gradually softening the disinflationary impact of demand on inflation. We estimate that the output gap will come to around -1.4% late this year and contract to roughly -0.8% in late 2022, as domestic demand rallies and external demand goes gradually up. The rebound in domestic demand will be supported by the additional package of fiscal policy measures, accommodative monetary policy and the retained favourable terms of financing for businesses and households.

In addition to the positive effect of the NBS's monetary policy easing on domestic demand, another positive impulse ought to come from the continuing **extremely low interest rates in the euro area until the end of the projection horizon**. Futures indicate that the three-month EURIBOR will be negative until June 2025 (three months ago, it was expected to stay negative until end-2026).

Faster than expected economic recovery is still not enough for **most central banks worldwide** to lift their stimuli. Leading central banks have signalled their intention to pursue a highly accommodative monetary policy for as long possible, to ensure the fastest possible recovery from last year's recession, fuelling market expectations of their readiness to accept higher inflation growth as well. Central banks, by contrast, judge that the factors behind higher inflation rates early in the year are temporary and that accommodative monetary policies will continue.

Inflation should be somewhat higher in the USA due to robust fiscal spending and the extremely accommodative monetary policy in the conditions of accelerated economic activity rebound. **Euro area inflation is expected to be somewhat higher** than three months ago

(1.5% and 1.2% in 2021 and 2022, respectively) under the impact of temporary factors this year (primarily higher energy prices, return of the VAT rate in Germany, changes in inflation calculation weights, base effect) and somewhat faster economic recovery next year. Euro area producers expect their sales prices to go up in the coming months, reflecting suspensions in supply chains and higher prices of primary commodities. Analysts however assess that overheating of the euro area economy is still not in sight since wage growth continues to be modest, the effects of fiscal measures are gradually waning, and the economic growth outlook is weaker than in the USA. In **most countries of the region**, which are also our important trade partners, inflation growth this year is assessed as temporary. With this in mind, this year we expect slightly higher **inflationary pressures from dinar-denominated import prices, but this increase will be temporary and relatively low** inflationary pressures **may again be expected from next year** on this account until the end of the projection horizon.

Almost **all prices of primary commodities in the global market** have been rallying from mid-2020. As their growth continued early this year, around four-fifths of prices of these products were above their pre-pandemic levels at end-Q1 2021. The rise in primary commodity prices was spurred by the global recovery in the wake of last year's recession, improved outlook for further growth and specific supply-side factors, relating primarily to oil, copper and some agricultural products.

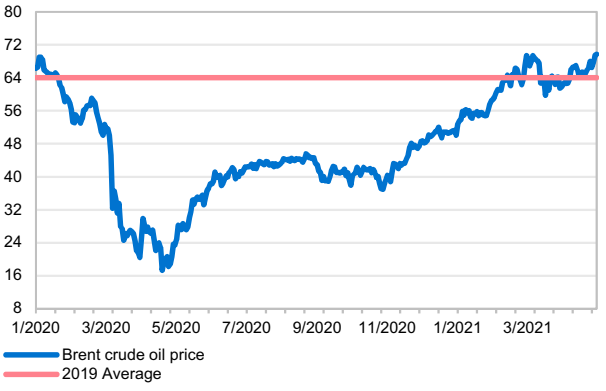
After recovering from last year's collapse sooner than expected, the **global oil price** returned to its pre-crisis level. The global oil price spiked notably despite the fact that demand is roughly 5% lower than in 2019, largely on account of a reduction in OPEC+ countries' output by more than the market expected. Because of the global oil price hike, we revised up our assumptions for oil price levels this and the next year relative to the projection three months ago. The global oil price is not, however, expected to rise much higher than its current level. Consistent with oil futures, in our new projection we assumed that the global oil price will measure USD 63 per barrel in December 2021 and USD 60 per barrel in December 2022. Therefore, after their expected increase in Q2, there should be no major changes in petroleum product prices at home going forward.

Metal prices are expected to be 30% higher in 2021 than in 2020, due to a powerful upswing in demand, and to subside by around 7% in 2022.

Chart V.0.20 **Assumption for Brent oil prices**
(USD/barrel)

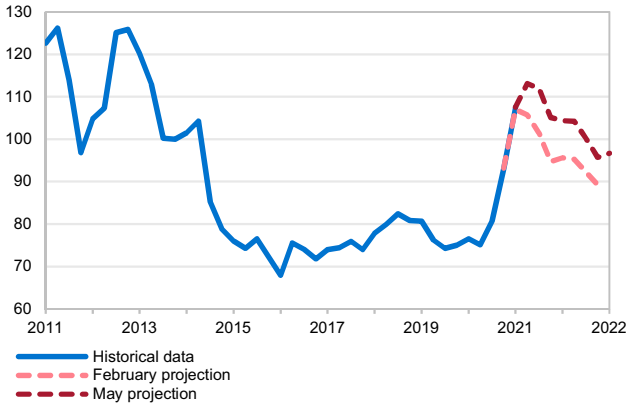
Source: Bloomberg.

Chart V.0.21 **Brent oil prices since the beginning of 2020**
(USD/barrel)



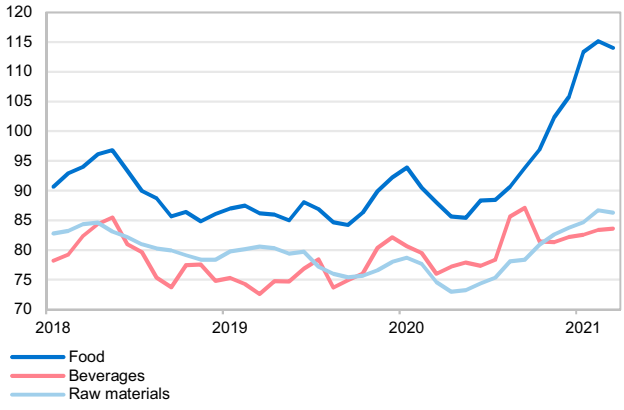
Source: Bloomberg.

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



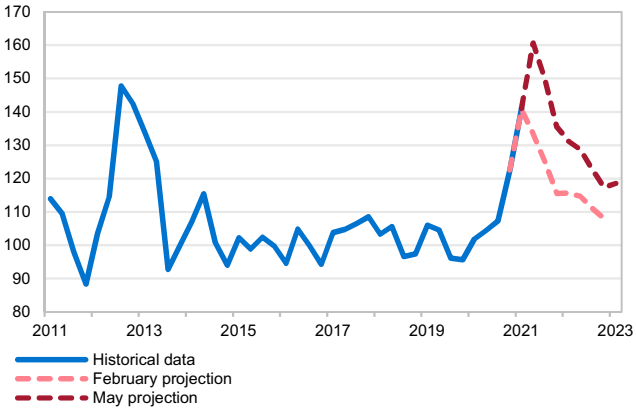
Sources: CBOT, Euronext and NBS calculation.

Chart V.0.23 **Agricultural commodity price indices in the global market**
(USD indices, 2010 = 100)



Sources: Bloomberg and World Bank.

Chart V.0.24 **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.

With regard to **global prices of primary agricultural commodities** relevant for us, they are expected to see robust growth in 2021 and level off thereafter. Our projection of these prices relies on futures data from global stock exchanges. Consistent with these data, we revised the assumption of growth in these prices up for 2021 (to 12.7% y-o-y in Q4 compared with 1.6% in our prior projection) and down for 2022 (to -9.0% y-o-y in Q4 compared with -5.9%). Consistent with this, **we expect prices of primary agricultural commodities in the domestic market**,[21] which mirror movements in their global counterparts, to display similar dynamics.

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

In the medium run, **the key risks to the projection remain associated with the international environment** and relate primarily to the speed of recovery of global trade and economic growth, most notably euro area growth, global prices of primary agricultural commodities and capital flows to emerging economies. The risks to the projection also relate to the new agricultural season, the speed of recovery of domestic demand and movement in administered prices at home. On the whole, the risks to the inflation projection are judged to be symmetric.

The speed of global economic recovery and, by extension, the pace at which our external demand rallies could be faster than expected if the vaccination process is quick, comprehensive and effective against new coronavirus strains, but also if the robust growth in the USA produces significant stimulating effects on the global economy. Many countries could reach a high level of immunization towards mid-year, which could help alleviate concerns sooner than expected. This could lead to stronger growth in consumption, particularly if households activate the savings accumulated during last year. This scenario could have inflationary effects worldwide, given the persisting restrictions on the supply-side and disruptions in supply chains. Conversely, slower vaccination, followed by the spread of the virus in large economies, such as now in India, and the emergence of new strains could extend the period of uncertainty and refrainment from spending, which could lead to slower than expected economic growth. Hence

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

the risks on account of global growth and euro area growth in the coming period are judged to be symmetric.

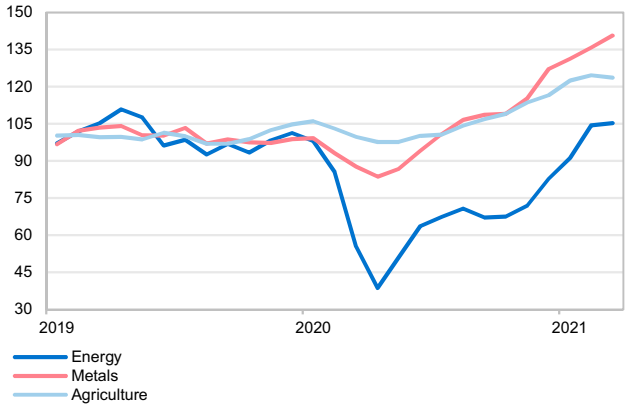
The outlook for global recovery will largely determine movements in the international commodity market, most notably **prices of oil and other primary commodities**. On the demand side, there is a risk that faster global economic growth could additionally fuel demand for primary commodities and vice versa. It should be noted that, over the medium and long run, oil demand growth will be contained by increasing orientation towards renewable energy sources.

Supply-side factors are specific for each primary commodity. Although market participants, according to futures, do not expect the **global oil price** to rise substantially in the coming period, shifts in either direction are possible. Any breach of the agreement of OPEC+ countries on output restrictions or sudden rise in global supply could result in a lower than expected oil price. Also, OPEC+ countries' agreement in April to gradually reduce output limits in the coming months remains in force regardless of what is going on in India, which could result in higher supply than demand growth. An additional risk relates to US producers' reaction to a higher global oil price. Faster recovery in US oil production would place downward pressure on prices (in 2019, the USA was a net exporter of oil, for the first time since 1973). On the other hand, just as the unilateral decision by Saudi Arabia to downsize its production unexpectedly curbed global supply and reflected on oil price growth early this year, similar episodes may be expected going forward as well and both upward and downward departures in the oil price are possible.

The risks associated with **global metal prices** are mostly associated with stimulating economic policy measures in China and the USA. Any early lifting of stimulating measures in China implies significant risks for demand, while the implementation of the proposed infrastructural spending in the USA, which could have larger than expected effects on growth in demand for some metals, most notably aluminium, copper and iron ore, would work in the opposite direction.

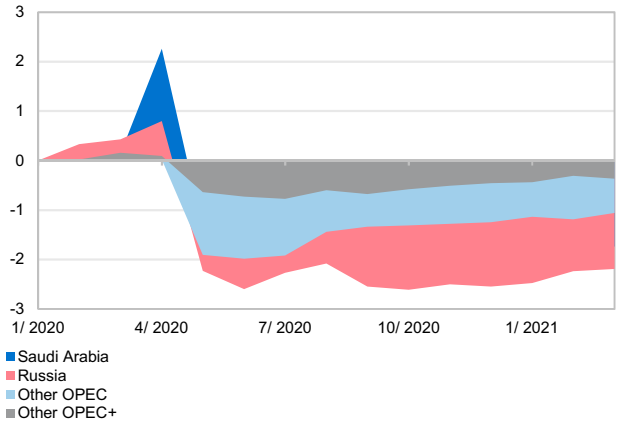
Global **prices of primary agricultural commodities** greatly depend on oil price movements, particularly through the costs in production. Also, energy prices impact demand for inputs in the production of ethanol and biofuels and, by extension, the prices of agricultural products such as corn, sugar and vegetable oil, which

Chart V.0.25 **Primary commodity price indices in the global market**
(2019 = 100)



Sources: USDA, World Bank, World Bureau of Metal Statistics.
Note: until and including 31 March 2021.

Chart V.0.26 **Change in oil production by OPEC+ countries**
(% of global production*)



* Change in production relative to January 2020, as share of global production in 2019.
Sources: IEA, OPEC, World Bank.

adds to uncertainty regarding their future movement. On the one hand, there is a possibility of occasional disruptions in the supply of some products amid continued demand growth, as was the case with corn early this year when its price spiked to its highest level since 2013. On the other hand, as the market of primary agricultural commodities is generally well-supplied, the new agricultural season could increase supply more than expected, leading to more moderate than assumed growth in these prices. In view of the uncertainty regarding movement in global prices of primary commodities, we judge the risks to the projection on this account to be symmetric.

Improved global growth outlook eased the **uncertainty in the international financial market**. Still, the recent rise in long-term interest rates in the USA triggered a repricing of global bond yields and, by extension, higher yields on ten-year sovereign bonds of emerging economies. Though financial conditions for emerging economies remain favourable, there is a possibility that global long-term interest rates will continue rising, which could substantially tighten the financial conditions for emerging economies. Conversely, emerging economies, including Serbia, could benefit from continuing very low policy rates in advanced economies. With this in mind, we estimate the risks to the inflation projection on this account to be symmetric.

Another risk to the projection is the **character of this year's agricultural season**, which we assumed to be around its long-term average, after the previous above-average season. As shifts in both directions are possible, primarily for prices of vegetables, fruit and meat, at this point we judge the risks on this account to be symmetric.

The risks to the projection are also associated with the **speed of recovery of domestic demand**. Any worsening of the epidemiological situation could slow the recovery in economic activity and have a deferred effect on the labour market. On the other hand, preserved production capacities and the rise in disposable income and favourable terms of financing thanks to the adopted monetary and fiscal policy measures, could result in faster than expected economic recovery, particularly in view of the successful vaccination strategy. Also, an additional package of fiscal measures to support the economy and households for this year, worth 4.3% of GDP, could provide a stronger than anticipated impetus to domestic demand. In addition, further growth in government capital expenditure could be higher than expected, as was the case in the prior two years, which would also contribute to faster economic recovery. With this in mind, we estimate that that the risks to the

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
Crude oil prices in the global market (Serbia is net importer)	A fall/rise in the global oil price spills over to a fall/rise in petroleum product prices and thereby produces a disinflationary/inflationary effect. This fall/rise also has secondary effects, as it spills over to an increase/decrease 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.	↕
Fruit and vegetable prices (Serbia is net exporter)	Departures directly affect inflation and are possible in either direction, as this is the most volatile inflation component.	↕
Pace of euro area recovery	– Slower euro area recovery leads to a slowdown in external demand growth, lower Serbian exports, higher supply in the domestic market and thereby produces disinflationary effects, and vice versa; – Slower/faster euro area recovery leads to a slowdown/acceleration in inflation growth in the euro area and, in the conditions of a relatively stable exchange rate, creates disinflationary/inflationary pressures at home on account of import prices; – Slower euro area recovery leads to higher expansiveness of the EBC's monetary policy, which leads to lower interest rates on euro loans and, by extension, through growth in credit and disposable income, to a rise in demand and inflationary pressures, and vice versa.	↕
Global prices of primary agricultural commodities (Serbia is net exporter)	Prices of primary agricultural commodities in the domestic market largely mirror the dynamics of these prices in the global market. Their rise/fall produces inflationary/disinflationary effects.	↕
Uncertainty in the international financial market and capital flows to emerging economies	Higher/lower uncertainty in the international financial market leads to 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, rise/fall in prices.	↕
New agricultural season	An above-average/below-average agricultural season results in higher/lower supply of agricultural products and may, therefore, produce disinflationary/inflationary effects.	↕
Pace of recovery of domestic demand	Deterioration of the epidemiological situation could slow the initiated recovery in economic activity, demand and the labour market, which would produce disinflationary effects. However, preserved production capacities, as well as higher disposable income and favourable terms of financing, diminish the negative effects of the pandemic on demand. In addition, further growth in government capital expenditure could be higher than expected, as could its impact on demand and inflationary pressures.	↕
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.

inflation projection on account of domestic demand are symmetric.

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

Overall, **the risks to the inflation projection are judged to be symmetric until the end of the projection horizon**.

Going forward, monetary policy priority will be to maintain price and financial stability, while supporting the fastest possible economic growth, further employment growth and strengthening of the export sector, as well as a favourable investment environment.

The NBS will continue to closely monitor movement and the impact of key factors from the domestic and international environment on inflation, financial stability and the speed of economic recovery and to adjust its measures in line therewith in the interest of our economy and households.

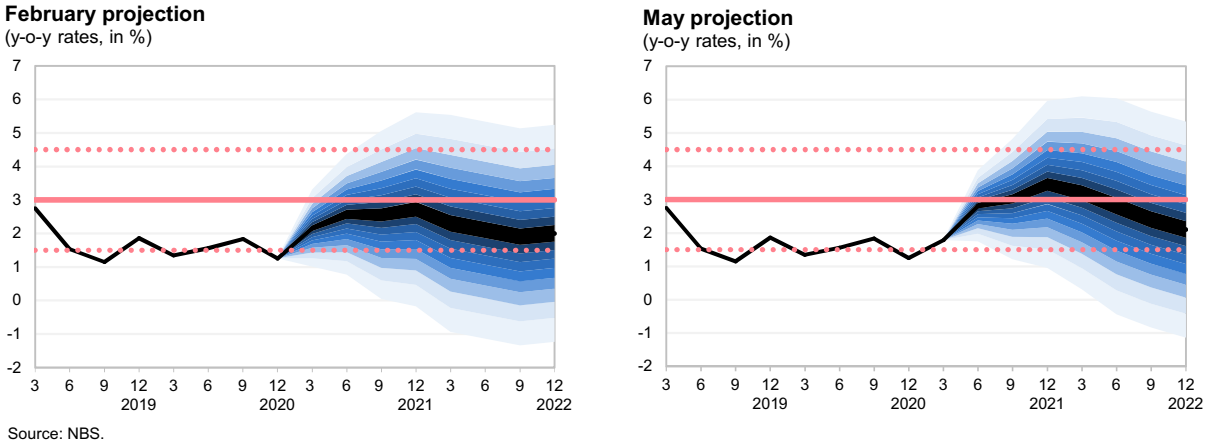
Current vs. previous inflation projection

Under the impact of temporary factors, the new medium-term inflation projection is somewhat higher this year than in February, but it will move within the bounds of the target tolerance band until the end of the projection horizon. The key reason for somewhat higher new projected inflation is the temporary stronger increase in global prices of primary commodities, notably oil and primary agricultural commodities, than we expected three months ago.

As global oil prices rose more than we anticipated three months ago, in our new projection we expect **petroleum product** prices to be higher and contribute more to inflation in the year ahead. As, consistent with current futures movements, we assumed no major increase in global oil prices relative to their current level, the contribution of petroleum product prices for the largest part of 2022 will be similar as in the February projection.

Also, our new projection assumes a stronger rise in global **prices of primary agricultural commodities** than we expected three months ago. This will reflect to a degree on **food prices (excluding fruit and vegetables)** at home. In line therewith, the contribution of food prices to inflation will be higher than we assumed in our previous projection.

Chart V.0.27 **Current vs. previous inflation projection**



Source: NBS.

Fruit and vegetable prices did not see the seasonally expected growth early in the year, which we assumed in our February projection. This has resulted in a low base for calculating inflation in Q1 next year, when they will provide a substantial positive contribution to inflation. For the remaining part of the projection horizon, there are no major differences compared to our projection three months ago.

Similarly as in our February projection, we expect **prices of non-food products and services** to rise moderately consistent with a gradual rebound in demand. Growth in these prices is anticipated to pick up slightly towards the end of the projection horizon, reflecting further acceleration in domestic demand.

Administered prices did not depart much from the previous projection either. After somewhat higher growth this year, **administered price** growth in the next two years should measure around 4%, which is our assumption from previous projections as well.

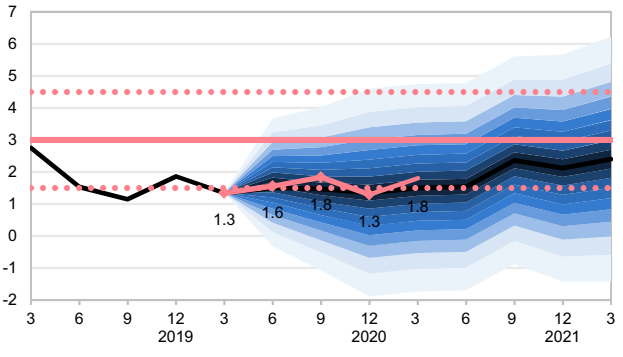
Outcome of the May 2020 inflation projection

Our May 2020 inflation projection was predominantly determined by the pandemic's impact on supply and demand which played out almost simultaneously across all countries of the world. At that time, we estimated that the pandemic would have a disinflationary impact through weaker demand, and inflationary impact through reduced supply. We had in mind that the single strongest disinflationary factor in 2020 would be the global oil price, which fell sharply over a pronounced imbalance between excess supply and drastically slashed demand. We also anticipated some modification of price relations as the pandemic-induced changes in supply and demand differed greatly across sectors. The most pronounced was the slump in demand for catering, tourism and transport services, where we anticipated somewhat stronger disinflationary pressures. When making the projection, we also took into account that timely and large-scale monetary and fiscal policy measures would greatly alleviate the negative impact of the pandemic on supply and demand, as well as the labour market.

In the past year, inflation moved in line with the projection we made and published in the *Inflation Report – May 2020*, which helps strengthen confidence in the NBS and anchor inflation expectations.

A year ago, we forecast that y-o-y inflation would return within the target tolerance band in mid-2020, supported

Chart V.0.28 **Achievement of May 2020 inflation projection**
(y-o-y rates, in %)



Source: NBS.

by the wearing off of the base effect for vegetable prices, and that it will continue to move around the lower bound of the target tolerance band until the end of the year due to low import prices, in particular a subdued global oil price and weaker aggregate demand. As economic activity strengthened and demand rallied, we expected y-o-y inflation to gradually approach the target midpoint during 2021, but remain below it until the end of the projection horizon.

Slight departures of inflation from our May 2020 projection (by 0.3 pp each) were only recorded in Q3 2020 and Q1 2021, due mostly to global oil prices which recovered sooner and more than we anticipated in May 2020. As a result, petroleum product prices provided a smaller than expected negative contribution to inflation in Q3 2020. In Q1 this year, this contribution turned positive, somewhat sooner than we anticipated.

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
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	6.6
FX reserves/short-term debt	177.0	265.1	250.6	162.6	220.6	191.2	299.9	237.3	268.6	294.0	256.4	234.0	202.1	210.9	279.8	242.8	
FX reserves /GDP	22.1	34.8	30.5	22.9	32.6	31.7	34.0	32.4	30.7	27.9	29.1	27.8	25.4	26.3	29.1	29.0	30.5
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	
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	12.1	
EXTERNAL SOLVENCY INDICATORS (in %)																	
External debt/GDP	56.2	55.2	55.1	58.8	68.6	74.5	68.1	76.1	70.4	72.4	73.4	72.0	65.1	62.2	61.5	66.3	
Short-term debt/GDP	12.5	13.1	12.2	14.1	14.8	16.6	11.3	13.7	11.4	9.5	11.3	11.9	12.6	12.4	10.4	12.0	
External debt/exports of goods and services	234.9	205.7	214.3	218.9	276.9	247.1	216.5	223.6	184.0	177.7	166.8	152.4	132.2	126.0	121.0	138.8	
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
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
OPENNESS OF ECONOMY (EXPORTS +IMPORTS)/GDP	67.1	73.0	74.7	78.0	65.1	75.3	78.0	84.5	87.1	91.8	96.2	100.6	106.2	108.2	111.6	104.5	112.4
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	45,967	46,467	11,433
External debt	12,520	14,291	17,382	20,982	22,272	23,509	24,123	25,645	25,644	25,679	26,234	26,494	25,526	26,662	28,254	30,813	
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	2,696	
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
Short-term debt [2]	951	968	1,044	1,832	1,852	1,758	612	455	196	99	303	672	844	1,401	1,925	1,616	
Current account balance	-1,778	-2,356	-5,474	-7,125	-2,032	-2,037	-3,656	-3,671	-2,098	-1,985	-1,234	-1,075	-2,051	-2,076	-3,161	-1,981	159
CREDIT RATING (change of rating and outlook)	2005 July/May	2006 Feb	2007 July	2008 March/ Dec	2009 Dec	2010 Nov	2011 March	2012 Aug	2013 July	2014 Jan	2015 Dec	2016 Jan/March/ June/Dec	2017 March/Dec	2018 Dec	2019 Sept/Dec	2020 May	2021 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 2020 is a sum of quarterly data published by SORS. Data for Q12021is 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
Real GDP growth (in %)[1]	5.5	5.1	6.4	5.7	-2.7	0.7	2.0	-0.7	2.9	-1.6	1.8	3.3	2.1	4.5	4.2	-1.0	1.2
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
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
Exports (in EUR million)[3]	5,329	6,948	8,110	9,583	8,043	9,515	11,145	11,469	13,937	14,451	15,728	17,385	19,312	21,166	23,349	22,196	6,187
- growth rate in % compared to a year earlier	19.1	30.4	-	18.2	-16.1	18.3	17.1	2.9	21.5	3.7	8.8	10.5	11.1	9.6	10.3	-4.9	11.5
Imports (in EUR million)[3]	9,612	11,970	15,468	18,267	13,099	14,244	16,487	16,992	17,782	18,096	18,643	19,597	22,343	25,257	27,960	26,346	6,662
- growth rate in % compared to a year earlier	0.7	24.5	-	18.1	-28.3	8.7	15.7	3.1	4.7	1.8	3.0	5.1	14.0	13.0	10.7	-5.8	-2.9
Current account balance[3]																	
(in EUR million)	-1,778	-2,356	-5,474	-7,125	-2,032	-2,037	-3,656	-3,671	-2,098	-1,985	-1,234	-1,075	-2,051	-2,076	-3,161	-1,981	159
as % of GDP	-8.0	-9.1	-17.3	-20.0	-6.3	-6.5	-10.3	-10.9	-5.8	-5.6	-3.5	-2.9	-5.2	-4.8	-6.9	-4.3	1.4
Unemployment according to the Survey (in %)[6]	20.8	20.9	18.1	13.6	16.1	19.2	23.0	23.9	22.1	19.2	17.7	15.3	13.5	12.7	10.4	9,0	
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	533.2
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	-8.4	-1.7
Consolidated fiscal result (in % of GDP)[4]	1.1	-1.4	-1.8	-2.5	-4.2	-4.3	-4.5	-6.4	-5.1	-6.2	-3.5	-1.2	1.1	0.6	-0.2	-8.1	-0.9
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	67.8	57.9	53.7	52.0	57.4	55.7
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
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
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
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
MEMORANDUM:																	
GDP (in EUR million)[5]	22,276	25,906	31,551	35,701	32,486	31,546	35,432	33,679	36,427	35,467	35,740	36,779	39,235	42,892	45,967	46,467	11,433

[1] At constant prices of previous year. Data for 2020. calculated as a sum of four quarters, according to SORS publications. Data for Q12021is SORS flash estimate.

[2] Retail prices until 2006.

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

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

[5] According to ESA 2010. Data for 2020. calculated as a sum of four quarters, according to SORS publications. Data for Q12021is NBS estimate.

[6] New methodology of Labour Force Survey since 2014.

[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 Q12021is the average of two months.

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

Notes:

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

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Executive Board meetings and changes in the key policy rate

2020

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

2021

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

Press releases from NBS Executive Board meetings

Press release from Executive Board meeting held on 11 March 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 by the continued stimulating effect of past monetary and fiscal policy measures and the announced third package of fiscal measures. This means that coordinated monetary and fiscal policy measures will continue to exert a positive impact on the conditions of financing of businesses and citizens and on their disposable income.

As stated by the Board, the economy contracted by 1% at year level, which is fully consistent with the projection emphasised by the NBS in the past several months. According to SORS, the GDP growth rate was -1.1% y-o-y in Q4 – it was revised up from initial -1.3%, meaning that the domestic economy demonstrated considerable resilience despite a deteriorating epidemiological situation as of October. The annual economic downturn of 1% is smaller than initially estimated. The available monthly indicators, notably industrial production and retail trade – which rose by 2.5% and 3.2% y-o-y in January, suggest that the economy continued to recover in 2021. The strong support that the NBS and the Government provided to our companies and citizens, including one of the most successful vaccination strategies in the world which is implemented by the Republic of Serbia, will help the economy reach its pre-crisis levels in Q2 this year. Industrial production, retail trade and exports have already reached their pre-crisis levels. With further progress in vaccination, the Executive Board expects other service sectors to fully recover as well. This year, the recovery of domestic demand will also be encouraged by the announced third fiscal assistance package for companies and citizens worth around EUR 2 bn. This package will accelerate economic rebound going forward. In addition, the Board expects the continuation of the relatively robust FDI inflow, mainly to tradable sectors, which should, along with expected recovery of external demand, contribute to two-digit export growth this year. For the eighth year in a row, the NBS continues to deliver on its primary objective – keeping inflation low and stable. In January, y-o-y inflation measured 1.1% and was lower than anticipated as the growth in vegetable prices turned out smaller than typical for the season. As expected, upward pressure on inflation came from the hike in electricity and petroleum product prices driven by the surge in global oil prices. Core inflation (inflation excluding food, energy, alcohol and cigarettes) remained stable and unchanged from December (2.1% y-o-y). The Executive Board expects inflation to stay stable and low and to move in the lower half of the target tolerance band in the coming period too. The ensured relative stability of the exchange rate, as well as anchored inflation expectations of the financial and corporate sectors that attest to monetary policy credibility, remain an important pillar of low and stable inflation.

The global economy and its growth outlook are still under the sway of the pandemic and the appertaining containment measures. However, despite deterioration in the epidemiological situation in our key trade partners during the winter, the economic fallout from the pandemic was much softer than at the start of the pandemic – the slump in service sectors was moderated by the solid results of industrial production. The Executive Board expects that the progress in vaccination and gradual easing of restrictive measures will kickstart a stronger economic recovery in our key trade partners and that this will exert a positive impact on our exports. The pace of global economic recovery will also determine movements in the international financial and commodity markets and capital flows to emerging economies, including Serbia, which is why caution is required in monetary policy conduct. Besides, the Executive Board took into account the uncertain outlook for oil prices, which have been on the rise since last November and are now at pre-pandemic levels. Furthermore, global food prices have been rising since mid-2020 and have reached their highest levels since 2014. Due to this, inflation abroad is likely to be higher this year compared to last year which saw extremely low inflation, or even deflation in some countries, reflecting dampened demand amid the pandemic.

The Board underlines that the focus of monetary policy makers will stay on maintaining price and financial stability, while supporting as fast growth of our economy and employment as possible, further growth of the export sector, and a favourable investment environment. The NBS will continue to watch closely the movement and impact of key factors from the domestic and international environment on inflation, financial stability and the pace of economic recovery, and will accordingly adjust its measures, acting in the best interest of our businesses and households.

The next rate-setting meeting will take place on 13 April.

Press release from Executive Board meeting held on 13 April 2021

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

In making the above decision, the Executive Board was primarily aware that the effects of past monetary and fiscal policy measures are also to be expected in the period ahead, as well as that the third package of measures for corporates and citizens has been announced. This means that the monetary and fiscal policy measures will continue to exert a positive impact on financing conditions for corporates and households, and on their disposable income.

As stated by the Board, Serbia's economic results since the start of the year are favourable even in conditions of the deteriorating global health situation and stepped-up containment measures, as indicated by the available monthly indicators of activity, foreign trade and labour market. Output growth in manufacturing is particularly emphasized, and was facilitated by the activation of new production capacities thanks to prior investments, the undertaken monetary and fiscal policy measures, as well as the gradual recovery of external demand. Besides agriculture, manufacturing is still at the forefront of our export activity, which remained diversified in terms of geography and production as a result of a strong inflow of FDI to Serbia in the previous years, notably to tradable sectors. Since May 2020, retail trade has continued to post positive trends, and with the successful vaccine roll-out, we expect to see recovery in other services sectors which are still considerably affected by the ongoing pandemic. Already in the months ahead, this should help GDP return to pre-crisis levels and then continue on a path of accelerated growth, which will be additionally facilitated by the announced new package of economic measures.

For the eighth year in a row, even in conditions of a pandemic, the NBS continues to deliver on its primary objective – keeping inflation low and stable. In accordance with the NBS's expectations, y-o-y inflation returned within the target tolerance band in March and measured 1.8%. Core inflation was also at 1.8% and was unchanged relative to February. The Executive Board expects inflation to stay stable and low going forward, and to move in the lower half of the target tolerance band. The ensured relative stability of the exchange rate, as well as anchored inflation expectations of the financial and corporate sectors that attest to monetary policy credibility, remain an important pillar of low and stable inflation.

The Executive Board took into account that the global economy and its growth prospects remain under the impact of the pandemic, but also the encouraging fact that projections are being revised upward. Early in April, for the second time since the start of the year, the IMF revised upward the global economic growth forecast, anticipating the effects of additional fiscal measures taken by the world's largest economies, as well as the impetus from vaccination to the global economic growth in the second part of the year. The euro area is also expected to post more robust growth, as well as Germany and Italy, our most important trade partners, which will reflect on domestic exports. The pace of the recovery of the global economy will determine the movements in the international financial market and capital flows towards emerging economies, including Serbia, which increases the importance of maintaining caution in monetary policy conduct. Caution is also warranted because of the uncertainties in the global commodity market, primarily those surrounding the rising trend of the prices of oil, primary agricultural commodities and food, which has been in place for some time already.

The Executive Board points out that the monetary policy will continue to prioritise price and financial stability, while supporting further growth of our economy and employment, as well as further growth in exports and favourable investment environment. The NBS will continue to carefully monitor movements and impact of the key factors in the domestic and international environment on inflation, financial stability and the pace of economic recovery and to adjust its measures accordingly, in the interest of our corporates and citizens.

The next rate-setting meeting will take place on 13 May 2021.

Press release from Executive Board meeting held on 13 May 2021

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

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

The Board stressed that our economy outperformed expectations early this year as well. It reached the pre-crisis level earlier than many world economies – already in Q1 this year versus Q2 as initially forecast. According to the Serbian Statistical Office, Q1 saw GDP growth of 1.2% y-o-y. The major impetus, as assessed by the NBS, came from net exports. As in the years before, exports remained diversified geographically and product-wise, reflecting a robust FDI

inflow mainly to tradable sectors. As investment and consumer confidence has been preserved and infrastructure projects are unfolding, fixed investment and consumption are also on the path of recovery. An additional impulse is expected from the third fiscal stimulus for businesses and households and higher planned government capital expenditure. We expect that the continued successful vaccination and the recovery of services still affected by the pandemic will help achieve GDP growth of 6%, which is above our initial projections owing to the GDP growth recorded in Q1.

Y-o-y inflation was low in Q1 (1.4% on average). The seasonal vegetable price rise did not take place in Q1, but this was offset in April, when y-o-y inflation was pushed to 2.8%. The Executive Board expects a somewhat higher inflation rate in May as well. This rise will be temporary and will reflect the low 2020 base, primarily for petroleum products, which is also the case in most other countries due to the last year's pandemic-related collapse of global oil prices. At the same time, low core inflation of 1.8% signals the absence of any major demand-side inflationary pressures and the Executive Board expects that its stable movement around the current level will persist in the period ahead. The ensured relative stability of the exchange rate remains an important factor of low and stable inflation, as do the anchored inflation expectations of the financial and corporate sectors, which confirm monetary policy credibility.

In making the rate decision, the Executive Board kept in mind that the movements in the international environment are still largely dependent on the course of the pandemic. While global growth slowed down in Q1 2021 due to the deterioration of the epidemiological situation, it turned out higher than previously expected. This is mainly the result of increasingly improved adjustment of company business and household consumption to containment measures and limited mobility, as well as of additional fiscal measures of some countries, primarily the USA. A faster than expected economic recovery and the pick-up in inflation have not, for the time being, softened the stimulus measures of the majority of central banks worldwide, because the factors which drove higher inflation rates early this year are assessed to be temporary in nature. Better growth outlook for the global economy has to some extent mitigated uncertainty in the international financial market and the recent increase in long-term interest rates in the USA has so far not had any significant impact on financing conditions of emerging economies, which remain favourable. The Executive Board emphasises the importance of cautious monetary policy conduct, mainly in view of uncertainty in the global commodity market – the rising trend in prices of oil, primary agricultural commodities and food, which has been in place for quite a while.

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

At today's meeting, the Executive Board adopted the May Inflation Report, to be published on 19 May. Apart from inflation and GDP projections, the Inflation Report offers detailed explanations of monetary policy decisions and the underlying macroeconomic movements.

The next rate-setting meeting is scheduled for 10 June.

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