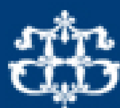
ANNUAL MONETARY POLICY REPORT



National Bank of Serbia

2020

ANNUAL MONETARY POLICY REPORT

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Introductory note

The National Bank of Serbia is required to submit to the Parliament its annual and semi-annual monetary policy reports, explaining all the factors that affected the implementation of monetary policy in the period under review. The annual report must be submitted by 30 June of the following year and the semi-annual by 30 September of the year under review.[1]

Pursuant to the Statute of the National Bank of Serbia,[2] the above reports must present and analyse the monetary policy strategy, macroeconomic developments (international environment, balance of payments, the country's international investment position, movements in monetary aggregates, prices, wages and employment, and other macroeconomic movements), monetary policy defined and monetary policy implemented (defined vs. achieved monetary policy objectives, monetary policy instruments and measures applied, and other monetary policy-related issues), as well as outline the monetary policy planned.

The Annual Monetary Policy Report 2020 was reviewed and adopted by the National Bank of Serbia's Executive Board on 10 June 2021.

Monetary policy reports are available on the National Bank of Serbia's website (http://www.nbs.rs).

Executive Board of the National Bank of Serbia:

Jorgovanka Tabaković, PhD, Governor

Željko Jović, PhD, Vice Governor

Ana Ivković, PhD, Vice Governor

Dragana Stanić, MA, Vice Governor

[1] Law on the National Bank of Serbia (RS Official Gazette, Nos 72/2003, 55/2004, 85/2005 – other law, 44/2010, 76/2012, 106/2012, 14/2015 – CC decision and 44/2018.

[2] RS Official Gazette, Nos 12/2013, 18/2015, 72/2015 and 50/2018.

ABBREVIATIONS

GDP – gross domestic product
bp – basis point
s-a – seasonally-adjusted
EMBI – Emerging Markets Bond Index
ECB – European Central Bank
CPI – Consumer Price Index
y-o-y – year-on-year
IFEM – Interbank Foreign Exchange Market
mn – million
bn – billion
IMF – International Monetary Fund
NPL – non-performing loan
OPEC – Organisation of the Petroleum Exporting Countries
H – half-year
pp – percentage point
SORS – Statistical Office of the Republic of Serbia
FDI – foreign direct investment
SDR – Special Drawing Rights
Q – quarter
FAO – UN Food and Agriculture Organization
Fed – Federal Reserve System

Other generally accepted abbreviations are not cited.

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Overview

The year behind us was marked by the coronavirus pandemic, which caused an unprecedented health and economic crisis. To suppress the adverse effects of the pandemic, the great lockdown was enforced across the world, along with restrictive containment measures, particularly in the second quarter. This led to a contraction in the **global economy** and pushed the majority of countries into recession, with significant consequences for the global commodity and financial markets. Also, unlike the previous crises, this one had a very negative effect on the flow of people and services. In the initial stage of the pandemic, global prices of primary commodities, notably of oil, were slashed, and the global financial market saw a surge of uncertainty due to investors' rising risk aversion. With the gradual opening of economies, loosening of containment measures and introduction of accommodative fiscal and monetary policy measures in a number of countries, the global economy began to recover. However, the second wave of the pandemic came in October, followed by a tightening of containment measures and a new slowdown in global recovery. Still, partly due to the global adjustment of consumer habits and work processes in new conditions, the negative effects in the second wave of the pandemic turned out to be less strong than in the first one. Such developments were supported by positive news about vaccine development, which spurred investors' optimism and led to a rise in the prices of primary commodities and increased readiness to invest in emerging countries. Though uncertainty as to the course of the global pandemic going forward is still present, expectations are that global economic recovery will begin this year, especially in the second half, owing to the launched vaccination process.

Responsible economic policy conduct and undertaken structural reforms, maintained price stability and fortified financial stability, as well as narrowed fiscal and external imbalances, and record high FX reserves, have been the foundations of Serbia's macroeconomic stability over the past eight years. The same factors contributed to the continuation of favourable macroeconomic developments at the start of 2020, increased resilience of the domestic economy to shocks emanating from the international environment, as well as the creation of room for monetary and fiscal policies to react strongly when the pandemic broke out in order to support the economy in overcoming the adverse effects of the pandemic.

Even before the introduction of the state of emergency, in an unscheduled meeting on 11 March, and several days after the first confirmed case of the coronavirus in Serbia, the NBS Executive Board passed a decision on **lowering the key policy rate** by 50 bp to 1.75%. In terms of the speed of its response to the pandemic, the NBS was among the first institutions in the country and among the first central banks in the world. Also, in April, June and December meetings the key policy rate was trimmed by 25 bp each time, to 1.0%, given that the scope of the pandemic-induced crisis globally required additional monetary policy support. Lowering the key policy rate was possible in conditions of low inflationary pressures and preserved financial stability. The main interest rate corridor was narrowed on two occasions, first from ±1.25% to ±1.0%, and then to ±0.9%.

The NBS also took **additional measures to support the real sector** – it secured a **significant amount of dinar and FX liquidity to banks via direct repo operations, swap auctions and bilateral purchase of dinar government securities from banks**. Also, it introduced a **moratorium in the repayment of liabilities under loans and financial leasing** for all debtors who wanted

this, first by 90 days, and then by an additional 60 days, whereby the burden of the crisis was eased for citizens and corporates. In addition, in July the Executive Board introduced **stimulus measures within the Serbian Government's Guarantee Scheme, thus contributing to even better conditions for dinar corporate lending**, and in turn to the rise in the degree of dinarisation and additional strengthening of financial stability. All of the above helped mitigate the negative effects of the crisis and enable the smooth functioning of the credit channel, contributing to the recovery of our economy.

Monetary policy accommodation translated entirely onto a further fall in interest rates in the interbank money market, as well as on the decrease in rates on dinar corporate and household loans to their lowest levels on record. Of particular importance was the fact that interest rates on dinar corporate loans came close to euro-indexed rates, resulting in greater utilisation of dinar loans. With measures encouraging sustainable household lending, the moratorium on loan repayment, approval of loans under the Guarantee Scheme to micro-, small- and medium-sized enterprises and entrepreneurs, as well as the retained low interest rates in the euro area money market, the NBS's monetary policy accommodation resulted in almost two-digit growth of **domestic lending to the non-monetary sector** for the third year in a row (9.9%, excluding the exchange rate effect). The composition of loans remained favourable in terms of contribution to sustainable growth in economic activity, with household and corporate loans providing an almost equal contribution to overall loan growth. Greater utilisation of dinar corporate loans resulted in an increase in the **degree of dinarisation** of receivables to their highest level to date – 37.3% at end-2020. Results in terms of the dinarisation strategy, implemented by the NBS and the Serbian Government, are also reflected in the growth of the share of dinar deposits in total deposits to around 40%, which is also their highest level so far, and in the increase in the dinar share of public debt to 30.5% at the end of the year.

By securing the needed FX liquidity to banks in conditions of dampened supply of foreign currency and foreign cash, the **NBS also contributed to the continuation of the dinar's stable movements vis-à-vis the euro** even amid elevated uncertainty due to the crisis caused by the coronavirus pandemic. The value of the dinar against the euro remained relatively unchanged in 2020, while on the other hand, due to the dollar depreciating against the euro, the dinar gained 9.7% against the dollar in 2020. During 2020, in its activities in the IFEM, the NBS net sold EUR 1,450.0 mn, with the highest amount of net sale recorded in April (EUR 440.0 mn), when the effects of uncertainty were the most pronounced. In contrast, during November and December the NBS intervened mostly on the purchase side, with total net purchases of EUR 285.0 mn, which was facilitated by the growing optimism due to vaccine development and investors' increased readiness to invest in emerging countries.

In late March, the Programme of Economic Measures to Mitigate the Negative Effects of the COVID-19 Pandemic and Support the Serbian Economy was adopted and then additionally expanded in July, hence the total volume of assistance, including loans under the Guarantee Scheme, was planned at around 13% of GDP. The key measures of the Programme were: deferred payment of payroll taxes and contributions in the private sector, direct assistance to the private sector by paying three whole minimum wages or part of the wages, enabling favourable loans to corporates under the Guarantee Scheme, as well as direct assistance to households. Adopting a timely and comprehensive package of economic aid to corporates in response to the pandemic, with increased healthcare costs for citizens, drove the **fiscal deficit** up to 8.1% of GDP, from practically a zero in 2019. Still, owing primarily to higher than expected revenue (real drop in revenue was only 2.5%), consolidated fiscal deficit was lower than the 8.9% of GDP projected in the Fiscal Strategy for 2021 with Projections for 2022 and 2023. The measures prevented a major fall in economic activity and preserved production capacity and jobs, but it must also be stressed that government capital expenditures increased in 2020 (8.5% in real terms) and were mainly directed to infrastructure projects, which helps raise potential output and improve economic growth outlook going forward.

The increase in general government **public debt** in 2020 by 5.3 pp to 58.2%, or in central government debt to 57.4% of GDP, temporarily halted the downward trajectory of public debt. However, the debt remained below the Maastricht criterion of 60% of GDP, and thanks to the lesser fall in economic activity compared to the majority of other countries in Europe, as well as the preserved favourable financing conditions, the rise in the share of public debt in GDP was smaller than in most countries, especially those which undertook fiscal measures in a similar scope as Serbia. At the same time, these are the factors that will help the share of public debt in GDP to resume the downward path from 2022 as anticipated, despite the fact that fiscal support will continue in the coming period, though to a lesser degree than in 2020.

As in the past seven years, in conditions of ensured relative stability of the exchange rate and anchored inflation expectations, **inflation** remained low and stable in 2020, averaging 1.6%. Its y-o-y dynamics was mostly dictated by the prices of food and energy, which dominantly kept up with the movement of these prices in the global market, with the prices of fruit and vegetables being significantly affected by local weather conditions. After measuring 2.0% in January, y-o-y inflation slowed down, and in March, April and May trended below the lower bound of the target tolerance band, mostly under the impact of the high base for vegetable prices, as well as lower prices of petroleum products amid a drastic fall in global oil prices. In June, inflation returned within the target tolerance band, where it remained until December, when it fell to 1.3% y-o-y in the absence of the seasonal rise in vegetable prices, with an atypical decrease in the price of fresh meat and slower growth of fruit prices than usual for the season. Subdued inflationary pressures were also confirmed by **core inflation** (excluding the prices of food, petroleum products, alcohol and cigarettes), which also averaged 1.6% in 2020. A mild acceleration of y-o-y core inflation at the end of the year (to 2.1% in December) is attributable to the rise in demand for medical products and items enabling work from home (computers, telephones, etc.).

The NBS expects **this year's y-o-y inflation to rise gradually and move around the target midpoint of 3% in the second half of the year. Such movements will be primarily the result of** an increase in the prices of oil and primary agricultural commodities, as well as adjustment of the electricity price, while demand-side inflationary pressures will remain low, despite the anticipated recovery of domestic demand. The base effect from the prices of food and energy will drive inflation in 2022 to a lower level than this year.

In conditions of lower external demand, closing of economies and implementation of containment measures, Serbia's **foreign trade** decreased from March onwards as expected, and in annualised terms it recorded a larger fall in the import (-5.8%) than export (-4.9%) of goods and services. With lower expenditures on account of revenues from FDIs, the above-mentioned reduction in foreign trade deficit resulted in the **current account deficit** 37.3% lower than in the prior year and measuring 4.3% of GDP in 2020. At the same time, it is important to note that the goods export, despite a drastic cut in external demand, remained relatively resilient (2.3% fall) thanks to an increase in capacities resulting from investments into export-oriented sectors in the prior period. In August, goods export returned to the pre-crisis level and then continued to rise in the following months, despite the aggravated global epidemiological situation as of October.

Though the pandemic exerted a strong impact on capital flows to emerging countries, the inflow of capital to Serbia remained relatively high even under such conditions. The **FDI** inflow to Serbia in 2020 reached EUR 3.0 bn, which is a net inflow of EUR 2.9 bn, whereby FDIs were sufficient to fully cover the current account deficit for the sixth year straight. At the same time, a net inflow of EUR 1.6 bn was recorded under **portfolio investments**, mostly as a result of the successful issuance of eurobonds in the international financial market in order to ensure adequate fiscal support to the economy struggling with the pandemic, as well as for the purpose of the early repayment of a portion of debt on account of previously issued eurobonds under considerably more unfavourable conditions.

High demand for eurobonds and more favourable financing conditions confirm investors' readiness to invest in Serbia and their confidence in Serbia's macroeconomic stability and bright growth prospects going forward. This is supported by the fact that Serbia managed to maintain its credit rating even in emergency circumstances, when **credit rating** cuts were more pronounced than during the global financial crisis of 2008/2009, as well as to improve it further in March this year (by Moody's). It is important to note that, as a result of the committed work of the Government and the NBS, as of 30 June this year J.P. Morgan will include Serbian dinar bonds into its renowned J.P. Morgan GBI–EM family of indices. This is another strong signal to international investors that Serbia is a safe and attractive investment destination, and that it will remain so in the coming years.

Significant resilience of the Serbian economy to adverse impacts from the international environment was ensured by **FX reserves**, which were preserved at an adequate and stable level (EUR 13.5 bn at the end of the year) even in 2020. Their level ensures the coverage of six months' worth of the import of goods and services, which is twice the standard on the adequacy of FX reserves. Consistent with the principles of safety and liquidity, the funds were invested in highly-liquid securities whose issuers are the most advanced countries in the world and international financial institutions, as well as top-tier institutions (central banks, international financial institutions and prime foreign banks).

In early 2020, **economic activity indicators continued to post positive tendencies**, and some of them even

exceeded our expectations. However, when the coronavirus pandemic was declared, economies around the world went into lockdown, external demand dropped and supply chains were disrupted, therefore, after robust economic growth of 5.2% in Q1, Serbia posted a 6.3% fall y-o-y in Q2. With the loosening of containment measures as of May, economic activity struck a path of recovery, hence in y-o-y terms the fall in GDP slowed down to 1.4% in Q3, and then to 1.0% in Q4, despite the worsening health situation in the world and at home. Thus, against the backdrop of a global pandemic in 2020, economic activity contracted by 1%, which is one of the best outcomes in Europe and is fully aligned with the NBS's October projections. The contraction in economic activity is almost entirely attributable to dampened activity in the services sector, reflecting mainly the measures aimed at preserving the health of the population, which weighed down on some service activities, particularly in the second quarter. On the other hand, a positive contribution came from agriculture, as it recorded an above-average season for the third year in a row, and from industry, which avoided a fall, despite subdued external demand. On the expenditure side, the biggest negative contribution came from private consumption and, to a lesser degree, from private investments and net exports, while public investments and government spending exerted a positive contribution.

Timely and ample economic support to the Serbian economy during the pandemic enabled the preservation of wages, continued private sector employment and a further fall in unemployment numbers, helping the **domestic labour market avert more serious consequences of the global crisis in 2020**. This is also indicated by the unemployment rate remaining single-digit during 2020 (9.0% on average), formal employment in the private sector rising by almost 42,000 on average, and the 9.4% annual rise in the nominal net wage to RSD 66,092 in December.

This year we expect a full recovery from the crisis, **with a GDP growth rate of 6%**. This growth will be driven by domestic demand and exports, which will be facilitated by the mass vaccine rollout in Serbia and abroad, as well as the recovery of external demand. The timely and adequate response of economic policy makers in Serbia will also be a factor of growth, including the favourable financing conditions secured on this account, and the preserved production capacities and jobs. We estimate that the same factors will ensure a return to stable medium-term growth trajectory of around 4% annually in the years ahead.

The full coordination of monetary and fiscal policy measures will continue going forward, which will mitigate any further negative impacts from the international environment and ensure dynamic economic growth in Serbia in the period ahead. Along with one of the most successful vaccination strategies in the world implemented by Serbia, the Executive Board emphasizes the importance of the support offered to the economy by the monetary and fiscal policies, which will continue into 2021 as well, including a new, third package of fiscal measures to corporates and households, and further growth of capital investments. The NBS will continue to carefully monitor developments at home and abroad, continuously assessing all the measures taken so far in order to support further economic recovery, without prejudice to price and financial stability.

I Strategic monetary policy framework

The NBS has been implementing a **fully-fledged inflation targeting regime** since early 2009, with elements of the regime gradually introduced into practice since 2006. In December 2008, the NBS Monetary Policy Committee[1] adopted the Memorandum on Inflation Targeting as a Monetary Strategy, defining formal implementation of the inflation targeting regime from 1 January 2009. The Memorandum was drafted along the lines of the Agreement on Inflation Targeting between the NBS and the Government of the Republic of Serbia, adopted at the Government session of 19 December 2008. In the best collective judgement of the NBS and the Government, this was the most appropriate monetary policy regime under the circumstances prevailing at the time.

The inflation targeting regime is pursued by a significant number of central banks worldwide as a pragmatic response to deficiencies of other monetary policy regimes. The choice of the regime was strengthened by the awareness that high rates of inflation dampen economic growth and employment and that the monetary policy focus should therefore be shifted from short-term demand management to medium-term price stability which lies at the core of inflation targeting. More of a framework than a set of rigid monetary policy rules, this regime is based on a numerical target for inflation in the medium term and a discretionary right to respond to economic shocks in the short term.

The NBS inflation target is defined in terms of the headline inflation rate (with a tolerance band) measured as the annual percentage change in the Consumer Price Index (CPI). In order to define the framework for medium-term monetary policy decision-making and to anchor and stabilise inflation expectations, inflation target is set in advance. In the case of Serbia, inflation target is set for three years ahead until the process of nominal, real, and structural convergence to the EU is completed. As the process is ongoing, inflation target is slightly above the quantitative definition of price stability and the target inflation level in advanced countries (2.0% or 2.5%). Thus, at end-2020, **inflation target was set at 3.0% until December 2023, with the tolerance band of ±1.5 pp**.[2]

For the sake of reminder, inflation target was trimmed since 2017 by 1 pp to 3.0±1.5%,[3] confirming the commitment of economic policy makers to keeping inflation low, stable and predictable in the medium term. In cooperation with the Government, the NBS made this decision thanks to the achieved and maintained low and stable inflation – at the time, for three years in a row – and the significantly improved macroeconomic fundamentals and our economy's prospects, underpinned by the successful coordination of monetary and fiscal policies and excellent results of the fiscal consolidation. Inflation expectations of the financial sector and corporates for one and two years ahead have been low and relatively stable for a longer period already, confirming the higher credibility of the NBS's monetary policy.

The width of the target tolerance band was kept at ±1.5 pp, which diminishes the need for frequent monetary policy interventions and contributes to higher predictability of monetary conditions. Being a small and open economy, Serbia is exposed to developments in the international commodity and financial markets, which may cause **temporary** volatility of headline inflation. The target band leaves to the NBS broader room to work on

[1] In line with the Law Amending the Law on the National Bank of Serbia (RS Official Gazette, No 44/2010), the NBS Executive Board assumed all powers of the Monetary Policy Committee.

[2] The NBS's Memorandum on Inflation Targets until 2023 was adopted at the meeting of the NBS Executive Board of 10 December 2020.

[3] The NBS's Memorandum on Inflation Targets until 2018.

the achievement of its second objective – financial stability, and to support the Government's economic policy which encourages sustainable economic growth.

The inflation target is a medium-term objective, which means that inflation can deviate from the target in the short term due to exogenous shocks. The NBS will allow temporary deviations from the target if bringing inflation back to the target in the short term warrants monetary changes that would cause disruptions to macroeconomic processes. This also applies to sudden shocks in primary commodity prices or deviations from the planned growth in prices under direct or indirect government regulation.

The NBS strives to achieve the targeted rate of inflation by **changing its key policy rate, i.e. the interest rate applied in the main open market operations**. This interest rate is the key monetary policy instrument and the decisions on its level are based on the analysis of economic circumstances, assessment of future developments and the medium-term inflation projection.

Other monetary policy instruments play a supporting role – they contribute to the smooth transmission of the impact of the key policy rate on the market, as well as to the development of the financial market, without jeopardising financial stability.

The NBS implements a **managed float exchange rate regime**. Interventions in the FX market aim to ease excessive short-term volatility of the exchange rate, safeguard price and financial stability, and maintain an adequate level of FX reserves.

To strengthen the transparency of its monetary policy and the effectiveness of communication with the public, the NBS Executive Board makes monetary policy decisions in line with the agreed schedule of meetings and regularly informs the public about the implementation of inflation targets and measures taken to achieve them. Also, when publishing the Inflation Report, monetary policy decisions and macroeconomic projections are explained in detail.

II Monetary policy and achievement of the inflation target

1 Monetary policy in 2020

During 2020, monetary policy was pursued in accordance with t**he NBS Monetary Policy Programme in 2020,**[4] **taking into account the new circumstances caused by the coronavirus pandemic**. The Monetary Policy Programme, adopted in December 2019, envisaged that the NBS would aim to achieve the inflation target through consistent and predictable changes in the key policy rate, taking into account the inflation projection, economic developments in the domestic and international environment, and the impact on financial stability. As highlighted in the Programme, vigorous fiscal adjustment, implementation of structural reforms and full coordination of monetary and fiscal policies helped strengthen macroeconomic stability and increase the resilience of the domestic economy to potentially adverse effects from the international environment, making the economic outlook more favourable. In addition, the Programme stipulated that during 2020 the NBS would continue to maintain the necessary caution in making monetary policy decisions in light of uncertainties arising from the international environment.

In January and February 2020, the key policy rate was kept on hold at 2.25%, its lowest level in the inflation targeting regime at the time. In making such decision, the NBS Executive Board was aware of the fact that domestic factors still contributed to low and stable inflation, while developments in the international environment warranted caution in the conduct of monetary policy. It was also kept in mind that the full effects of past monetary policy easing in July, August and November 2019 by a total of 75 bp to 2.25% were expected in the period ahead.

The start of 2020 was characterised by favourable macroeconomic conditions for implementing the NBS's monetary policy. For the seventh year in a row, inflation was low, which was expected to continue going forward. According to the projection, y-o-y inflation was expected to move around the lower bound of the target tolerance band by mid-2020, whereafter it would gradually approach the target midpoint. Such movements should be driven by the low base effect from vegetable and administered prices in the short term, and by the rising aggregate demand in the medium term.

As in previous projections, growth in domestic demand was the main factor that was to contribute to inflation approaching the central midpoint over the medium-term. The Executive Board estimated that such growth was to fully compensate for the negative effects of the anticipated weaker external demand in 2020. Available monthly indicators of economic activity during the first two months of 2020 suggested strong growth of GDP on the back of investments, spending and exports. The Executive Board expected GDP growth in 2020 to measure around 4% and maintain a similar dynamics in the medium term as well.

Unlike favourable macroeconomic conditions at home, the developments in the international environment still mandated caution in the conduct of monetary policy. Though tensions surrounding the trade policies of leading world economies somewhat subsided, uncertainty largely stemmed from geopolitical tensions.

[4] RS Official Gazette, No 88/2019.

Monetary policies of leading central banks provided support to the global economy, which was supposed to continue to have a favourable effect on conditions in the international financial market and capital flows to emerging markets, Serbia included. However, it remained uncertain as to what extent the monetary policies of leading central banks would differ from market expectations in the coming period, which could affect capital flows towards emerging economies. Monetary policy decisions of the Executive Board also called for caution over the uncertain pace of the prices of oil and primary agricultural commodities in the global market, considering the intricate impact of numerous factors on both the supply and demand side.

However, because of the unprecedented crisis in recent history – caused by the coronavirus pandemic, the **NBS eased its monetary policy from March to June. Namely, on 11 March 2020 the World Health Organisation declared a global pandemic of the coronavirus, and on the very same day, in an unscheduled meeting, the NBS Executive Board reacted by trimming the key policy rate by 50 bp**. In addition to cutting the key policy rate, in the March meeting the Executive Board also decided to **narrow the interest rate corridor from ±1.25 pp to ±1pp** relative to the key policy rate. In terms of the promptness of its reaction to the effects of the pandemic, the NBS was among the first institutions in the country and among the first central banks in the world. In its **April and June meetings, the Executive Board again trimmed the key policy rate by 25 bp each time, to 1.25%**, in light of the fact that the scale of the pandemic-induced crisis in the world required additional monetary policy support to mitigate the adverse effects of the pandemic and trigger economic recovery. Key policy rate cuts translated onto a further decline in interest rates in the interbank money and dinar loan markets, which enabled the continuation of lending growth.

In the period March–June, the NBS also passed decisions about **additional measures of support to the real sector**. By way of direct repo operations, swap auctions and bilateral purchase of dinar government securities from banks, a significant amount of dinar and FX liquidity was ensured. Also, dinar corporate bonds were included in the list of securities which banks may use in monetary operations. In addition, a **moratorium on the repayment of liabilities under loans and financial leasing** was prescribed for all debtors who wanted it, first for 90 days and then for an additional 60 days, whereby the burden on households and corporates was relieved.

Moreover, in July the Executive Board introduced **stimulus measures within the Serbian Government's Guarantee Scheme, which contribute to even better conditions of dinar corporate lending**, and in turn to the rise in the degree of dinarisation and additional strengthening of financial stability. Namely, banks that approve dinar loans to their clients under the Guarantee Scheme at interest rates lower by at least 50 bp than the maximum rate (which is one-month BELIBOR + 2.5 pp), have a 50 bp higher remuneration rate on the amount of reserve requirements in dinars, specifically on the amount of loans approved under more favourable conditions. These, as well as other measures adopted by the NBS[5] because of the pandemic, have considerably mitigated the impact of the first wave of the crisis on banks, corporates and households and ensured faster economic recovery from its consequences.

In a situation of global uncertainty caused by the pandemic, in July the NBS set up a **precautionary repo line with the ECB**, which, if the need should arise, could enable additional euro liquidity to the domestic financial system. At the same time, it must be noted that neither dinar nor FX liquidity of the domestic banking sector were threatened in any moment, and the high level of Serbia's FX reserves was more than sufficient to respond to any disturbances in FX liquidity. Establishing the precautionary repo line with the ECB should be seen as another form of security which indicates that the NBS is taking all the necessary activities within its remit and acting pro-actively in order to support the domestic economy and maintain macroeconomic stability in conditions of elevated global uncertainty due to the pandemic.

The NBS was in a position to react with the above-mentioned measures and, in coordination with the Serbian Government, contribute to the alleviation of the negative effects of the pandemic and offer full support to the country's economic recovery owing to the responsible economic policy conduct over the past eight years. **Serbia entered this crisis in a much better macroeconomic position than previous crises** – with a 4.3% economic growth rate on average in the past two years, low and stable inflation for the seventh year straight, a strong banking sector, decreased public debt, eliminated fiscal imbalance and significantly narrowed

[5] An overview of NBS measures is given in Table II.1.1, p. 12.

external imbalance, as well as record high FX reserves. Such position of Serbia enabled a **strong response of the monetary and fiscal authorities in accordance with the best international practice, in a way that does not threaten macroeconomic stability and the country's fiscal position**.

To minimise the negative effects of the pandemic, the Serbian Government reacted during 2020 by adopting two comprehensive packages of fiscal measures,[6] which contributed to the preservation of business and consumer confidence, production capacities and jobs in the majority of economic sectors. With rising costs of healthcare provision, this led to a temporary increase in the fiscal deficit at the consolidated level to 8.1% of GDP in 2020. Particularly important is the continued rise in government capital expenditures, which speeds up the implementation of infrastructure projects and boosts potential output. Though the share of public debt in GDP also temporarily increased in 2020 (by 5.3 pp to 58.2% of GDP), it remained below the Maastricht criterion of 60%. Also, its increase was among the smallest in Europe, thanks to the secured favourable financing conditions of the government on the one hand, and the fall in economic activity of only 1% on the other.

The timely and well-coordinated measures of the Government and the NBS prevented a major fall in economic activity at the onset of the pandemic. As in most European countries, it was certain that the greatest effects of the crisis in Serbia would be felt in April, but also that there would be a recovery in the following months, driven by the implemented monetary and fiscal policy measures aimed at stimulating growth and preserving the country's encouraging medium-term prospects by enabling favourable financing conditions for corporates and households.

Decisions to lower the key policy rate were determined by the fact that it was becoming increasingly evident that the opening of the global economy would be gradual, and thus its recovery as well, which drastically reduced economic growth projections for many advanced and emerging countries, and the fact that the global oil price dropped to its historic minimum. The subdued economic activity was under the impact of hampered operations in many service activities – a complete halt, and in some cases a disruption to global value chains, as well as the fall in consumer and business confidence. In such conditions, uncertainty in the international commodity and financial markets increased, and investors preferred investing in safe assets, which resulted in a fall in indices in world stock exchange markets and a rise in the price of gold and the prices of government securities of advanced countries.

To mitigate the negative effects of the crisis, numerous central banks across the world responded by significantly easing their monetary policies and by a number of unconventional measures. Thus, the Fed narrowed its federal funds target range to almost zero and adopted a quantitative easing programme which represents the largest central bank intervention in its history. Monetary measures in the USA were accompanied by extremely strong fiscal measures. Recovery of the euro area, which is of particular importance to us, was triggered by the ECB's expansionary measures, as well as the gradual loosening of containment measures which, after the initial stage of the pandemic, started from May onwards. In addition, governments of many countries reacted by comprehensive packages of fiscal aid, and measures were taken at the EU level as well. In making the decision on monetary policy easing, the Executive Board was aware that coordinated activities of the monetary and fiscal policies in the largest world economies should contribute to favourable financing conditions in the international market in the newly-emerged situation. Also, the Executive Board bore in mind that due to the sluggish global growth outlook, the prices of primary commodities in the global market were expected to stay relatively low going forward, notably oil prices.

After the initial strong and comprehensive response to the ongoing global crisis caused by the pandemic, the Executive Board kept the key policy rate on hold until December. In making such decision, the Board was primarily guided by the achieved and anticipated effects of past monetary and fiscal policy measures aimed at mitigating the adverse effects of the pandemic and bolstering economic growth. The results in the majority of production and service activities exceeded expectations. When data for the majority of economic indicators for August were published in late September, it became completely certain that at the level of 2020 GDP growth rate would be higher than the originally estimated -1.5%, therefore the NBS revised its projection to -1%. The Executive Board took this into account when deciding about the key policy rate in October. The Board underlined that the pre-crisis level in industry and retail trade had already been reached, that export was on the

[6] Additional, third package of fiscal measures will be implemented during 2021 and it should total around EUR 2.0 bn.

path to normalisation, and that the current GDP projection for 2020 also reflected better results in agriculture. The favourable outlook was also mirrored in the FDI inflow, which remained solid despite the pandemic and the contracted economic activity of our major foreign trade partners, and which still fully covered the current account deficit.

Though global economic activity recovered gradually, partly thanks to fiscal stimuli, as well as monetary policies of leading central banks, prospects were for the most part dependent on the course of the pandemic. The recovery of the euro area, our key foreign trade and financial partner, was better than previously expected, owing to the ECB's stimulus measures, which increased liquidity and supported lending and economic activity. When making the decision to keep the key policy rate unchanged, the Executive Board also bore in mind the developments in the international commodity and financial markets, which were volatile largely due to the uncertainty as to the course of the pandemic.

Though the Executive Board did not change the key policy rate in the November meeting, apprehension over the accelerated spread of the virus as of October drove it to make a decision about the **possibility for banks to use additional cheap dinar liquidity** – via additional FX purchase swap auctions and auctions of repo purchase of securities. By organising swap and repo auctions on a regular weekly basis (Mondays – swap, and Thursdays – repo auctions), the NBS gave an opportunity to banks to obtain the needed dinar liquidity for a three-month period under favourable conditions, using FX and dinar securities as collateral. In this manner, the NBS sought to make sure that the level of available and cheap liquidity in the banking, and in turn in the corporate sector, is maintained high enough to ensure the continuation of the stimulative effect on economic activity.

The December decision of the Executive Board to trim the key policy rate by an additional 25 bp to 1.0% was primarily motivated by the assessment that low inflationary pressures allowed for additional support to the domestic economy amid a deteriorating epidemiological situation and slackening economic recovery at the global level, particularly in the euro area, where containment measures were tightened. Though vaccine-related news was encouraging, there was still uncertainty present as to the pace of vaccine production and rollout, as well as the course of vaccination globally.

In December, by bringing the key policy rate to its new low in the inflation targeting regime, the key policy rate was 1.25 pp lower than before the global crisis caused by the pandemic. At the same time, the NBS decided to **narrow the corridor of its main interest rates** from ±1.0 pp to ±0.9 pp relative to the key policy rate. The deposit facility rate was thus lowered by 15 bp to 0.1%, and the lending facility rate by 35 bp to 1.9%. Also, in its December meeting, the Executive Board adopted a decision on **loan repayment facilities for borrowers** unable to settle their liabilities due to the circumstances caused by the pandemic.[7]

Strong NBS support to businesses and households during the pandemic is owed to the responsible conduct of economic policy in the prior period, which improved the capacity of the Serbian monetary and fiscal authorities to fight the ongoing crisis without jeopardising the achieved macroeconomic stability. The NBS implemented an accommodative monetary policy in an environment of maintained price and financial stability, underpinned primarily by the relative stability of the exchange rate and fully supplied markets even in times of crisis, as well as by the anchored inflation expectations which confirm the credibility of monetary policy. As in the past seven years, inflation was firmly under control and averaged 1.6% in 2020. Average core inflation in 2020 was at the same level, which suggests that demand-side pressures remained relatively low despite the continuing rise in wages and employment in the majority of sectors. The Executive Board expected inflation to move in the lower part of the target tolerance band in the coming period as well, and that its mild rise in the short term would be driven by the expected adjustment in some administered prices and the low base effect from the prices of petroleum products and food.

The measures taken by the NBS and the Government are largely to be credited for the better economic outcome in 2020 than what was hoped for at the start of the pandemic. According to the SORS estimate, GDP growth rate in 2020 came at -1%, which is one of the best outcomes in Europe and better than forecast at the onset of the pandemic. A better result reflects primarily the preserved production capacities and employment during

[7] The facilities include loan rescheduling and refinancing, with the approval of a six-month grace period and an appropriate extension of the repayment term, so that the borrower's monthly liabilities are not higher than those envisaged by the initial repayment schedule.

Table II.1.1 **NBS response to COVID-19 in 2020**

	March	April	May	June	July	August	September	October	November	December
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) 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.

the pandemic, but also a fast recovery of investment, most notably the accelerated implementation of infrastructure projects, more favourable financing conditions and FDI inflow that remained relatively high and project-diversified. Labour market data on the rising employment rate and the maintained single-digit unemployment rate attest to the significance of the package of economic measures, which helped sustain favourable trends despite the challenges imposed by the pandemic. The Executive Board underlined that the country's maintained favourable medium-term prospects and the measures taken by the Government and the NBS will contribute to the recovery of domestic demand. This, along with the gradual normalisation of external demand, will result in a more than complete recovery of our economy in H1 2021.

The Executive Board stressed that our economy's significant resilience to shocks from the international environment was also secured by FX reserves, which were kept at an adequate and stable level during 2020 as well (EUR 13.5 bn at year-end). 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 during the pandemic, as well as a favourable economic outlook, is illustrated by the fact that Serbia managed to maintain its credit rating even during these extraordinary circumstances, when rating downgrades were more widespread than during the 2008/2009 crisis.[8] This success found its way into figures in November 2020, when Serbia achieved the lowest price of financing in the international financial market thus far. Also, in January 2021, the IMF Executive Board made a decision on the successful completion of the fifth, last review of the programme supported by the Policy Coordination Instrument (PCI).[9] The IMF assessed that the programme was successfully implemented throughout its duration and that the measures taken during the pandemic were well-designed and appropriately aimed at providing lifelines to households, preserving jobs, boosting healthcare spending, and providing sufficient liquidity to the banking system and relief to borrowers.

Looking ahead, full coordination of monetary and fiscal policy measures will be maintained, easing potential further negative effects from the international environment and ensuring vibrant growth of the Serbian economy. Along with one of the most successful vaccination strategies in the world carried out in Serbia, the Executive Board emphasized the importance of monetary and fiscal policy support to the economy, which will continue into 2021, including a new, third package of fiscal measures to corporates and households, and further growth in capital investments. The NBS will continue to carefully monitor developments at home and abroad, continuously assessing all the measures taken so far in order to support further economic recovery, without prejudice to price and financial stability.

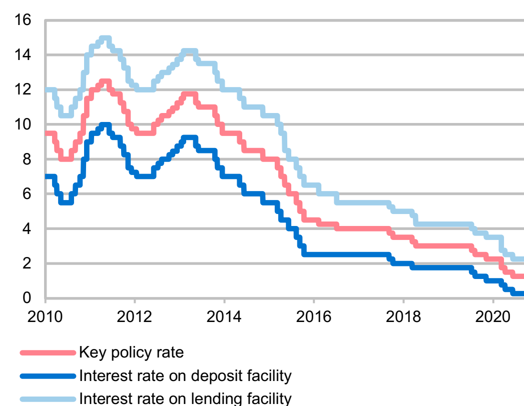
2 Monetary policy instruments

The main monetary policy instrument of the NBS is the **key policy rate, i.e. the interest rate on the main open market operations**. The role of the key policy rate is supported by the **corridor of interest rates on deposit and lending facilities and by other open market operations**. In addition to the key policy rate, the NBS uses other instruments of monetary regulation, **notably reserve requirements and operations in the FX market**.

Open market operations

One-week reverse repo transactions, i.e. repo sale of securities (liquidity absorbing) remained the main open market operations of the NBS in 2020.

Chart II.2.1 **Key policy rate and interest rate corridor**
(daily data, p.a, %)



Source: NBS.

[8] Moreover, Moody's raised Serbia's credit rating in March 2021.

[9] The programme supported by the PCI, approved to Serbia in July 2018 for a period of 30 months, was advisory in nature and did not involve any disbursement of funds.

The NBS implemented repo transactions through own securities. For the purposes of repo sale, in 2020 the NBS issued one series of T-bills in the nominal amount of RSD 500.0 bn. This is consistent with practice from earlier years which enables more adequate management of securities within the same series and facilitates liquidity management for banks.

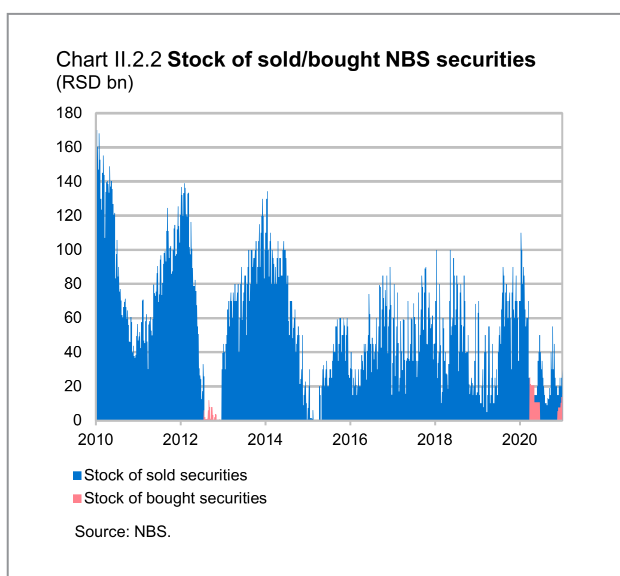
In 2020, 52 repo sale auctions were organised. They were held once a week, after the model of the variable multiple interest rate. The volume of securities sale in 2020 (RSD 1,748.5 bn) was lower than in 2019 (RSD 2,521.0 bn).

The stock of NBS bills in banks' portfolios averaged RSD 34.4 bn in 2020, down by RSD 12.5 bn from 2019. Relative to end-2019, the stock of these securities decreased by RSD 40.0 bn, to RSD 30.0 bn at end-2020.

To support the domestic financial system and overall economic flows in recovering from the pandemic-induced crisis, the NBS ensured additional dinar liquidity to the banking system, inter alia, by way of direct repo operations (one-week and three-month maturity), under very favourable interest rates equal to the current deposit facility rate. This measure is still in force. At end-March and during November and December 2020, the NBS provided the banking sector with additional dinar liquidity in the total amount of RSD 41.6 bn, by way of auctions of repo purchase of government and corporate securities.

Still, the increase in liquidity in 2020 was for the most part achieved via transactions of bilateral purchase of dinar government securities from banks, which helped finance the government and ensured the normal functioning of the secondary market of dinar government securities (maintaining interest rates at the current level). In April and May 2020, the NBS purchased dinar government bonds of the Republic of Serbia in the secondary market, thus ensuring additional liquidity to the banking sector in the amount of RSD 97.0 bn.

Chart II.2.2 **Stock of sold/bought NBS securities**
(RSD bn)



Source: NBS.

To extend additional support to the development of the market of corporate bonds and speed up the recovery of the economy from the consequences of the coronavirus pandemic, in May 2020 the NBS decided to include dinar corporate bonds issued by domestic companies in its monetary operations, provided that they meet the solvency requirements (the lowest solvency rating according to the methodology of the Business Registers Agency – "acceptable solvency (DD)", issued before the end of 2020, with the longest original maturity of ten years).

Deposit and lending facilities

In 2020, banks continued to place overnight deposits with the NBS (deposit facility). The average daily stock of bank deposits with the NBS in 2020 came at RSD 134.5 bn, which is RSD 94.9 bn more than in 2019. The highest average monthly stock was recorded in June (RSD 209.4 bn) and the lowest in March (RSD 75.7 bn).

The Decision on the Conditions and Manner of Extending Daily Liquidity Loans to Banks against the Collateral of Securities, which regulates NBS lending facilities, was amended in May and July 2020. Thanks to amendments to the Decision, the list of securities that may serve as collateral has been expanded to include securities of prescribed maturity, issued by a domestic company with adequate solvency rating (corporate bonds). This way, the NBS provided support to the domestic financial and economic system amid the coronavirus pandemic, and encouraged the development of the corporate bond market in Serbia.

Required reserves

At end-2020, the calculated reserve requirements allocated in dinars increased by RSD 28.9 bn relative to end-2019 and equalled RSD 220.4 bn. This increase reflects growth in dinar required reserves (by RSD 14.9

bn) and FX required reserves allocated in dinars (by RSD 14.0 bn).

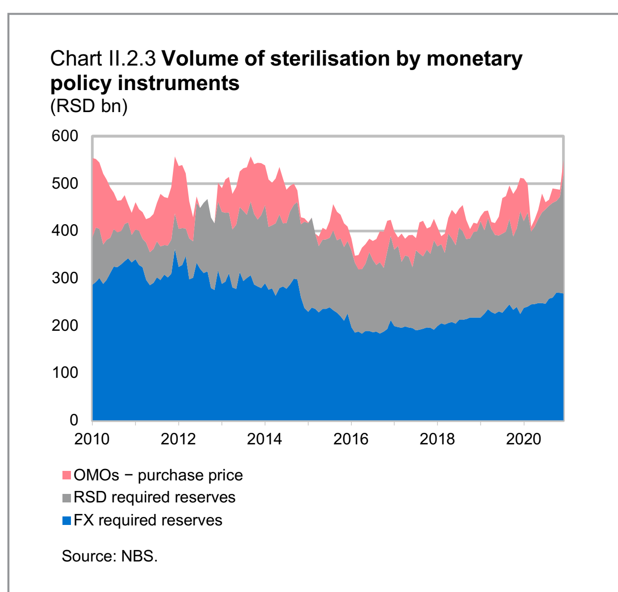
In the same period, the amount of calculated reserve requirements allocated in foreign currency increased by EUR 201.7 mn, standing at EUR 2.2 bn. This was driven by the EUR 1.6 bn increase in the FX base, of which EUR 1.4 bn relates to FX liabilities with the maturity of up to two years and EUR 0.2 bn to liabilities with the maturity of over two years. Looking at the FX base composition, most of the increase relates to FX deposits of corporates (EUR 0.6 bn) and FX savings (EUR 0.6 bn).

Foreign exchange market operations

Under the 2020 Monetary Policy Programme, the NBS continued implementing the managed float exchange rate regime, with the possibility to intervene in the FX market with a view to easing excessive short-term volatility of the dinar against the euro, and maintaining price and financial stability and an adequate level of FX reserves.

At end-2020, relative to end-2019, the value of the dinar vis-à-vis the euro was almost unchanged. During 2020, in conditions of heightened depreciation pressures amid the coronavirus pandemic, thanks to its timely and well-measured response the NBS preserved the relative stability of the FX market which, just like the stability of the overall financial system, was not threatened at any point as the effects of the pandemic on global and national financial and economic flows played out. After depreciation pressures were caused by the effect of temporary seasonal factors, which is usual for the start of the year – stepped-up FX demand of energy importers, due to the increasing uncertainty in international financial markets, depreciation pressures increased in Q2, when they were the most pronounced as well. During Q3 and Q4 they subsided gradually, and November and December saw a change in the trend, when appreciation pressures prevailed. Depreciation pressures weakened and turned into appreciation pressures in Q4 due mainly to the reduced FX purchases (in October and November), and the net sale by domestic companies (in December), net FX sale by non-residents (primarily in order to invest in long-term dinar government securities) and net purchase of foreign cash by citizens and exchange dealers after two consecutive quarters of net sale.

Chart II.2.3 **Volume of sterilisation by monetary policy instruments**
(RSD bn)



Source: NBS.

In 2020, the NBS net sold EUR 1,450.0 mn in the IFEM (selling EUR 1,950.0 mn and buying EUR 500.0 mn).

Such developments in the domestic FX market certainly indicate the adequacy and timeliness of measures implemented by the Government and the NBS in order to mitigate the negative effects of the pandemic on economic activity and preserve the macroeconomic and financial stability of the country.

Interest rates

In 2020, the NBS Executive Board trimmed the key policy rate four times – by 50 bp in an unscheduled meeting in March, and by 25 bp in each regular meeting in April, June and December, therefore the rate equalled 1.0% at end-2020.

In addition, amendments to the Decision on Interest Rates Applied by the National Bank of Serbia in the Implementation of Monetary Policy narrowed the interest rate corridor on two occasions, from ±1.25 pp at the start of the year to ±1 pp in March 2020 and then to ±0.90 pp in December, relative to the key policy rate, whereby rates on deposit and lending facilities were also trimmed to 0.10% and 1.90%.

In H1 2020, there was a gradual decrease in the interest rate at which the NBS calculates and pays interest on the amount of realised daily stock of the dinar reserve requirements, from 0.75%, where it stood in January 2020, to 0.50% in March, and then to 0.25% in April and 0.10% in June that year.

To support the anti-crisis measures and encourage dinar lending, the NBS amended the Decision in July 2020 and established that, by way of exception, banks that met the prescribed conditions will be paid interest at the rate established by the Decision, increased by 0.50 pp annually, on the part of the amount of the realised average daily stock of dinar reserve requirements.

FX swap auctions of the National Bank of Serbia

In 2020, the NBS continued to hold its regular three-month and two-week auctions of FX swap purchase and sale (EUR/RSD) in order to encourage the development of interbank swap trading and facilitate more efficient liquidity management for banks. During 2020, 102 regular three-month swap auctions were held, at which the NBS swap sold EUR 429.0 mn and bought EUR 387.0 mn, as well as 100 regular two-week swap auctions, at which it swap sold EUR 371.5 mn and bought EUR 235.0 mn. The largest performance in 2020 was recorded in April, when the NBS swap sold EUR 218.5 mn and bought EUR 131.0 mn. At end-2020, the stock of FX receivables and FX liabilities of the NBS in respect of regular three-month swap auctions equalled EUR 55.0 mn each, while in respect of two-week swap auctions the NBS had no FX receivables or liabilities to banks.

Within measures to facilitate dinar and FX liquidity management for banks in extraordinary conditions in Serbia caused by the coronavirus pandemic, from 31 March until 31 May 2020 the NBS held regular swap FX auctions at fixed swap points under favourable rates on euros and dinars (0% on euros, while for dinars – the deposit facility rate plus 10 bp), instead at variable multiple swap points. Also, the execution principle was changed, so that swap purchase and sale of foreign currency did not have to be identical in terms of the executed amount. This way, the NBS's role was not solely mediating, but it also involved the provision of the sufficient amount of dinar and FX liquidity to banks, at favourable interest rates, in order to prevent potential disturbances in the domestic money and financial markets. Since June, after the abolition of the state of emergency in our country and the assessment that there was no longer a need to apply the altered practice when it comes to regular FX swap auctions, the NBS went back to organising these auctions according to the method of variable multiple swap points, based on the application of the usual principle of identical executed amounts at FX swap purchase and sale auctions.

Also, in order to support the domestic financial system and economy, on 23 March 2020, the NBS organised an additional three-month swap auction of FX purchase (euros) for dinars, providing dinar liquidity to banks in the equivalent of EUR 127.0 mn at a favourable interest rate of 0.85% (the then applicable deposit facility rate increased by 10 bp) and at the rate of 0% for euros.

In an environment where the health situation in the country was again exacerbated, the NBS decided to organise additional three-month FX purchase swap auctions on a weekly basis, starting from mid-November, in order to offer banks an opportunity to obtain additional, cheap dinar liquidity (interest rate on dinars is equal to the deposit facility rate plus 10 bp). By way of additional swap auctions, the NBS sought to maintain the level of available and cheap liquidity in the banking sector, and in turn in the corporate sector, at a sufficiently high level to ensure the continuation of the stimulus effect. At additional swap auctions, from mid-November until end-2020, the NBS swap bought EUR 207.0 mn, thus ensuring additional dinar liquidity for banks in the amount of RSD 24.3 bn, for a three-month period.

3 Achievement of inflation target in 2020

Despite the coronavirus pandemic, **headline inflation remained low and stable in 2020, averaging 1.6%**,[10] which is the same as the average core inflation.

Similarly as in 2019, **the inflation dynamics during 2020 was mostly dictated by the prices of food and energy**, which dominantly stayed abreast with movements of these prices in the global market.

In accordance with the NBS's expectations, in early 2020 y-o-y inflation slowed down – from 1.9% at end-2019 to 1.3% in March, and additionally to 0.6% in April, mostly owing to the significant drop in the prices of petroleum products and the high base effect from the prices of vegetables from the previous year. Then, from May to July y-o-y inflation sped-up due to the waning of the base effect from the prices of vegetables and higher prices of fruit, only to stabilise at an average of 1.8% from August to

[10] The average annual CPI is derived as the simple arithmetic mean of 12 published monthly CPIs (month on last year average). Hence the average annual rate reflects not only the change in prices, but also the effect of the change in weights.

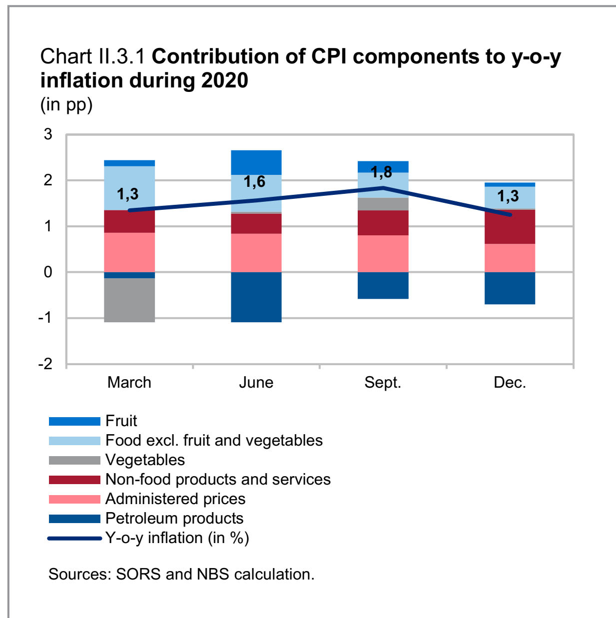


Chart II.3.1 **Contribution of CPI components to y-o-y inflation during 2020**
(in pp)

Sources: SORS and NBS calculation.

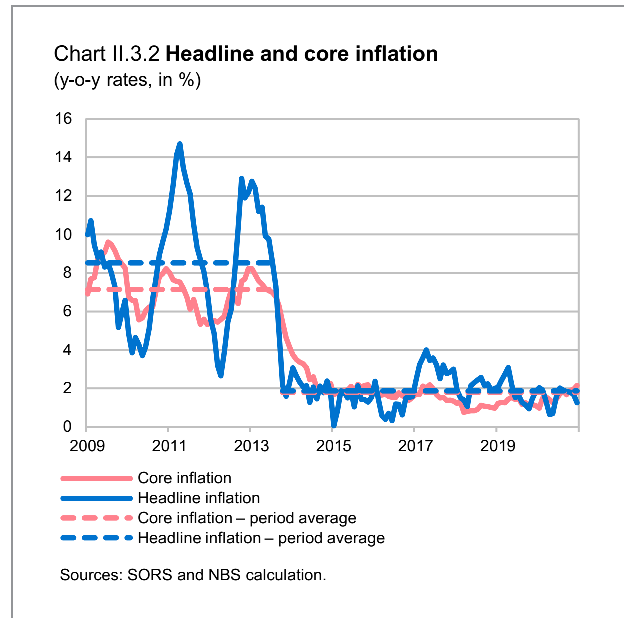


Chart II.3.2 **Headline and core inflation**
(y-o-y rates, in %)

Sources: SORS and NBS calculation.

November. At the end of the year, y-o-y inflation slowed down to 1.3% in December, mainly owing to the lower prices of unprocessed food (vegetables and fresh meat).

By components of headline inflation in 2020, the **prices of processed food** rose by 3.3% (with a 0.7 pp contribution to inflation), while at the same time **unprocessed food prices** edged down by 0.9% (with a -0.1 pp contribution to inflation). It was the decrease of the positive contribution of the base effect and the absence of the seasonal rise in vegetable prices in December, together with an atypical decrease in the prices of fresh meat and slower than usual growth in fruit prices, that slowed down y-o-y inflation at the end of the year.

Inflation movements in 2020 were also under a significant impact of **energy prices**, which decreased by 4.6% y-o-y in December, contributing -0.7 pp to headline inflation. This is almost entirely owed to the sharp drop in the **prices of petroleum products** in the domestic market (-12.0% y-o-y in December), onto which the drastic fall of the global oil price spilled over.

In contrast, the **prices of services** in 2020 recorded a rise of 3.0% (with a 0.8 pp contribution to headline inflation), driven by the increase in the prices of landline telephony services (13.8%) and travel package arrangements (30.5%).[11] Also, the prices of most of the other services were increased in 2020.

The prices of industrial products excluding food and energy were 2.1% higher in December in y-o-y terms, contributing 0.6 pp to headline inflation. This is mostly attributable to the higher price of equipment needed for work at home (computers, mobile phones) which went up 9.8%, as well as the higher price of cigarettes (by 7.0%) on account of the annual adjustment of the excise tax. The 1.7% y-o-y decrease in the prices of clothes and footwear in December acted in the opposite direction.

Table II.3.1 **Growth and contribution of components to consumer price growth in 2020**

	Growth rates (in %)	Contribution (in pp)
Consumer prices (CPI)	**1,3**	**1,3**
Unprocessed food	-0,9	-0,1
Processed food	3,3	0,7
Industrial products excluding food and energy	2,1	0,6
Energy	-4,6	-0,7
Services	3,0	0,8
Core inflation indicators		
CPI excluding energy	2,3	2,0
CPI excluding energy and unprocessed food	2,8	2,1
CPI excluding energy, food, alcohol and cigarettes	2,1	1,0
Administered prices	3,3	0,6

Sources: SORS and NBS calculation.

[11] Because of the inability to ensure a full coverage during 2020 in conditions of the coronavirus pandemic, for this type of services the SORS used the growth rate from the same period of the prior year.

Administered prices, which are under direct or indirect control of the state, rose 3.3% in 2020 (with an 0.6 pp contribution to headline inflation), though in December, relative to previous months, their y-o-y rise slowed down, dominantly due to the hike in electricity prices from December 2019 exiting the y-o-y calculation.

The prices within core inflation (measured by CPI excluding energy, food, alcohol and cigarettes) went up by 1.6% on average in 2020. In December core inflation slightly picked up to 2.1% y-o-y, notably due to increased demand for medical products and items enabling work at home.

Even in conditions of the unprecedented global crisis, **headline and core inflation remained low and stable, as in the previous seven years**, which was greatly facilitated by the preserved relative stability of the exchange rate and anchored inflation expectations of market participants.

III Macroeconomic environment

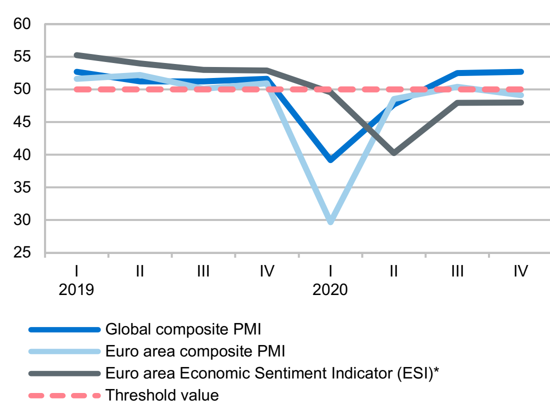
1 International environment

Economic activity and inflation

The year behind us was marked by the coronavirus pandemic, which caused an unprecedented health and economic crisis. To suppress the negative effects of the pandemic, **the "great lockdown" was enforced in H1** as well as containment measures, resulting in a global economic contraction. **In mid-2020 the majority of economies gradually opened up**, with a loosening of strict measures, which reflected positively on global economic activity – the leading Global Composite PMI rose from 39.2 points in March to 52.7 points in December, returning to the economic expansion zone.

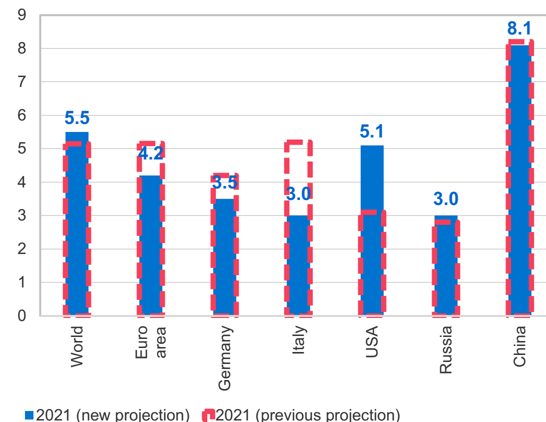
According to the IMF's estimate from April 2021, **the global economic growth rate in 2020 equalled -3.3%** (compared to 2.8% in 2019), which is higher than initially forecast, mostly due to better than expected results in H2 in the majority of countries, after the loosening of containment measures and adjustments to new working and business conditions. Though uncertainty as to the course of the pandemic was still present, in April this year the IMF forecast a 6.0% global growth rate for 2021, supported by fiscal measures in several large economies and the anticipated acceleration of vaccine rollout in the second half of the year. In regard to this, the prospects for global economic recovery will depend on the further course of the pandemic, effects of economic policies, movements in financial conditions and prices of primary commodities, as well as each economy's capacity to adapt to health restrictions. These factors, together with the country specificities, affect the pace of economic activity and of overcoming the consequences of the pandemic in the medium term.

Chart III.1.1 **Leading economic activity indicators in the world and the euro area in 2019 and 2020**
(in index points)



Source: Eurostat, Markit Group, JP Morgan *and* European Commission.
* ESI is standardised relative to PMI.

Chart III.1.2 **Revisions of real GDP growth forecasts for 2021 by the IMF**
(in %)



Sources: WEO Update (January 2021) and WEO (October 2020).

Table III.1.1 **Economic growth estimate by country for 2020**
(real growth, in %)

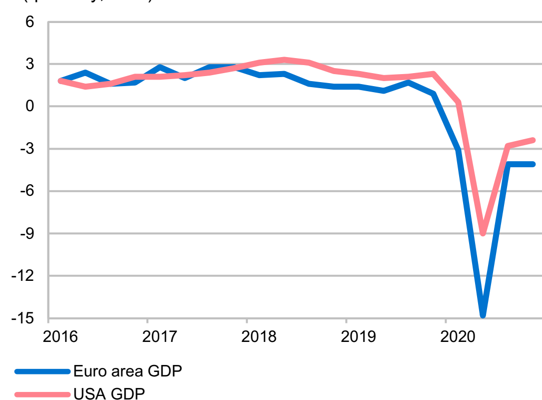
	2020
World	-3.3
Euro area	-6.5
Germany	-4.8
Italy	-8.9
CIE region	-4.1
USA	-3.5
Russia	-3.0
China	2.3

Sources: WEO Update (January 2021), Eurostat, U.S. Bureau of Economic Analysis, Bank of Russia and National Bureau of Statistics of China

In conditions of the pandemic, the **euro area economy ended 2020 with the economic growth rate of -6.5%** (compared to 1.3% in 2019), with the highest negative contribution stemming from household consumption (-4.3 pp) and gross investments (-2.1 pp). The negative contribution also came from net exports (-0.4 pp), while government consumption exerted a positive contribution (0.3 pp). **Comprehensive measures of monetary and fiscal policy buffered the fall in the economic activity of the euro area** and its leading economies, and helped lessen the economic consequences of the second wave of the pandemic relative to the first one. Leading economic indicators for the euro area suggested this as well – Economic Sentiment Indicator[12] and Eurozone PMI Composite,[13] which trended at a much higher level during Q4 than in Q2, came close to exiting the contraction stage. Also, **as of mid-2020, activity in the production sector has been in the expansion stage** (PMI Manufacturing above 50 points), while activity in the services sector is still slowly recovering (PMI Services below 50 points) due to the enforced containment measures. Situation in the euro area **labour market** is gradually stabilising, which is confirmed by the decrease in the unemployment rate (8.2% in December) and increase in the employment rate in H2.

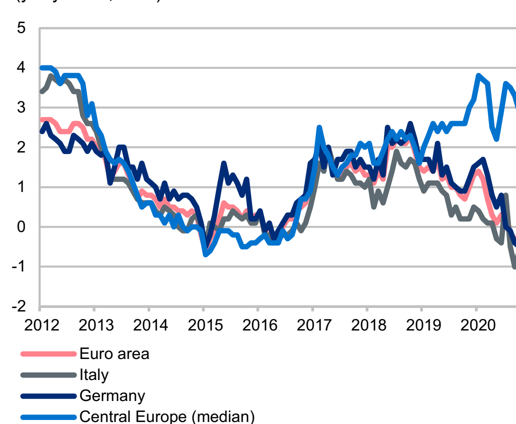
After **inflation in the euro area** accelerated mildly to 1.4% y-o-y in January, a sharp fall in energy prices led to its slowdown, all the way to 0.1% y-o-y in May, with a positive contribution to inflation coming from food prices, which accelerated their y-o-y growth until May amid rising demand for basic foodstuffs and the panic caused by the coronavirus. With the recovery of global oil prices, the negative contribution of energy prices to inflation was reduced, therefore it posted a mild rise in June, to 0.3% y-o-y, and then in July to 0.4% y-o-y. Stepped-up growth in the prices of industrial products excluding energy also contributed to this. Though the negative contribution of energy prices continued to shrink in August, other inflation components had a disinflationary effect, therefore inflation entered the negative territory (-0.2% y-o-y). Y-o-y inflation continued to fall in September, coming down to -0.3%, where it remained until end-2020, reflecting the slowdown in the y-o-y growth in food inflation and a fall in energy prices by the end of the year. Lower prices of services and industrial products drove **core inflation** down from 1.3% y-o-y at end-2019 to 0.2% in September, which is the lowest value of this indicator since Eurostat began tracking it. It remained unchanged in the remainder of the year.

Chart III.1.3 **Y-o-y GDP growth rate of the euro area and the USA**
(quarterly, in %)



Sources: Eurostat, U.S. Bureau of Economic Analysis.

Chart III.1.4 **HICP across selected countries**
(y-o-y rates, in %)



Source: Eurostat.

[12] Index value above 100 points indicates improvement, and below 100 worsening economic activity.

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

Similar economic movements during 2020 were present in **Germany** and **Italy**, our key trade partners in the euro area. According to preliminary estimates, the German economy posted a fall of 4.8% in 2020 (after 0.6% growth in 2019), while in Italy the fall in GDP was 8.9% (after growth of 0.3% in 2019). Graver economic consequences were avoided primarily thanks to the **recovery of the production sector in both countries**, while the services sector is still under a strong impact of the course of the pandemic.

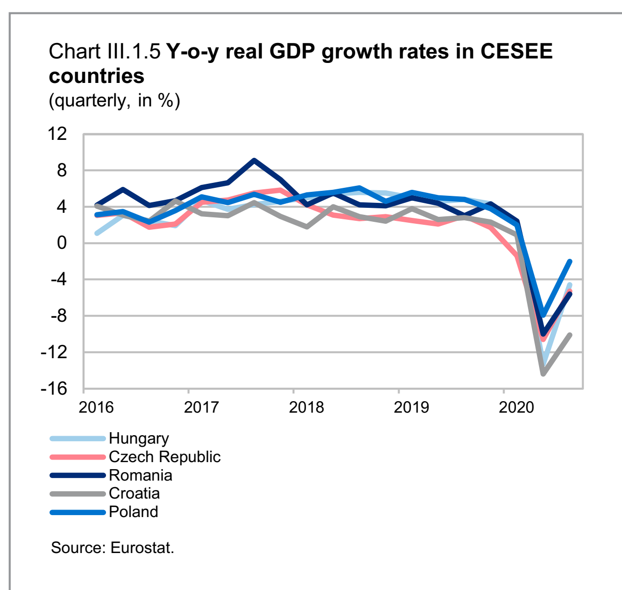
Inflation in **Germany**, measured by the harmonised CPI, had a similar y-o-y dynamics as the euro area – after a slowdown to 0.5% in May, it edged up slightly in June, to 0.8%, only to strike a downward path until it reached -0.7% in December. The biggest negative contribution to inflation came from the cuts in the VAT rate from July to December 2020, as part of the package of fiscal measures during the pandemic. Y-o-y inflation in **Italy**, measured by the harmonised CPI, slowed down until end-H1, with prices recording a y-o-y fall as of May (-0.4% in June). After temporarily venturing into the positive territory in July (0.8%), inflation fell back into the negative zone in August, and in September it went down further, to -1.0%, due to the lower prices of energy and transport services. Until December, the y-o-y fall in prices slowed down (to -0.3%), notably due to the lower negative contribution of energy prices.

The US economy recorded a 3.5% fall in economic activity in 2020 (compared to 2.2% growth in 2019), on account of subdued household consumption (-2.6 pp contribution to GDP), lower gross investments (-0.9 pp contribution), as well as a fall in net exports (-0.1 pp contribution), while government spending rose mildly (0.2 pp contribution). After a sharp fall in economic activity in H1 upon the outbreak of the pandemic, the **US economy began to recover in H2**, based on intensive production activity – the leading ISM PMI Manufacturing returned to the expansion zone already in June and reached 60.5 points in December. At the same time, **the situation in the US labour market also brightened**, with the unemployment rate falling from the record high 14.8% in April to 6.7% in December. According to the Fed's latest forecast, the USA expects economic growth of 6.5% in 2021%, triggered by the new package of government aid and mass-scale vaccine rollout.

Headline **y-o-y inflation in the USA**, measured by the personal consumption index, slowed down significantly during H1, from 1.6% at end-2019 to 0.5% in May, amid low aggregate demand and low energy prices. As of June, the recovering energy prices prompted its mild growth (to 1.4% y-o-y in September). Despite this, until the end of the year (1.3% in December) inflation remained lower than at the start of 2020, while inflation excluding the prices of food and energy, as the Fed's preferred measure, was below the target (1.4% in December).

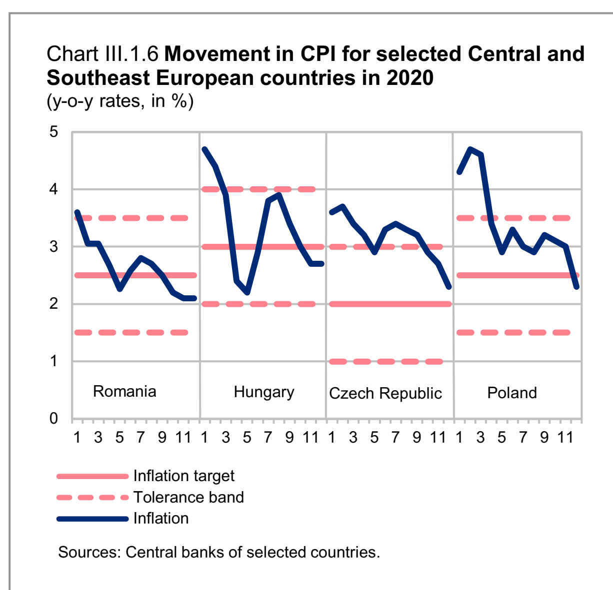
In the region of Central and Southeast Europe[14] **a 4.1% fall in GDP was recorded in 2020** (after growth of 3.9% in 2019), dominantly as a consequence of subdued

Chart III.1.5 **Y-o-y real GDP growth rates in CESEE countries**
(quarterly, in %)



Source: Eurostat.

Chart III.1.6 **Movement in CPI for selected Central and Southeast European countries in 2020**
(y-o-y rates, in %)



Sources: Central banks of selected countries.

[14] The region includes Romania, Hungary, the Czech Republic, Slovenia, Bulgaria, Croatia, Slovakia and Poland.

household consumption and gross investments (with an aggregate contribution to the region's GDP of -4.2 pp), and to a lesser extent due to the lower net exports (contribution of -0.4 pp). The opposite effect came from increased government spending (0.5 pp contribution). Of the countries in the region, **the smallest fall in GDP was recorded by Serbia (-1.0%) and Poland (-2.7%)**, while Croatia posted the biggest fall (-8.0%). Against the backdrop of the renewed spread of the coronavirus and the anticipated progress in the vaccination process, **a different pace of economic recovery of countries in the region** is projected for 2021, conditioned by the announced economic support measures, resilience of domestic demand and export possibilities, as well as the pace of the recovery of the euro area as the region's key foreign trade partner.

Inflation in the majority of observed countries of **Central and Southeast Europe** rose in January 2020, driven by the increase in energy prices and the low base from the previous year, as well as the rising food prices, with Hungary, Poland and the Czech Republic posting the highest levels in eight years. Inflation continued up in February in Poland and the Czech Republic on the back of the rising domestic demand, while in Hungary and Romania it was slower, and then for the next three months it decelerated in all of the observed countries. In June, these countries again saw inflation accelerate, continuing up in most of the countries in July, owing to the gradual recovery of demand, as well as the less disinflationary effect of energy prices. In the following months until the end of the year, inflation in the observed countries slowed down, with the disinflationary effect attributable to lower food prices, while in accordance with movements in the global oil price, the y-o-y fall in the prices of petroleum products slowed down. Thus, at end-2020, y-o-y inflation rates in the observed countries were below the level from end-2019, and in December measured 2.3% y-o-y in the Czech Republic and Poland, 2.7% in Hungary and 2.1% in Romania. With the exception of the Czech Republic, at end-2020 inflation in other observed countries trended below the target midpoint. Core inflation in all observed countries was still significantly above headline inflation, and in December it ranged from 3.3% in Romania to 4.0% in Hungary.

According to the preliminary assessment of the central bank of Russia, the **Russian economy ended 2020 with a 3.0% fall in GDP** (after a 2.0% rise in 2019). Under the impact of the pandemic, domestic demand and exports contracted amid subdued external demand and limitations in oil production. The response to this was a comprehensive set of fiscal measures and encouragement of government spending, as well as the development of the local vaccine. Though estimates indicate that the nascent economic recovery in Russia will be uneven across economic sectors, 2021 is expected to see GDP growth range from 3% to 4%, and reach the pre-crisis level by the year's end.

According to the preliminary estimate of China's National Bureau of Statistics, **in 2020 the Chinese economy managed to record growth of 2.3%** (after 6.0% in 2019), thanks to the efficient suppression of the consequences of the coronavirus pandemic and the launched investments in fixed assets (with a 2.2 pp contribution to GDP). Unlike other countries, China's economic rebound began already in Q2 2020, owing for the most part to the robust recovery of the service sector and, to a lesser degree, the production sector, where stepped-up activity was supported by coordinated monetary and fiscal policy measures, coupled with the development of a local vaccine. With this in mind, the IMF forecast 8.1% growth for the Chinese economy in 2021.

Monetary policy

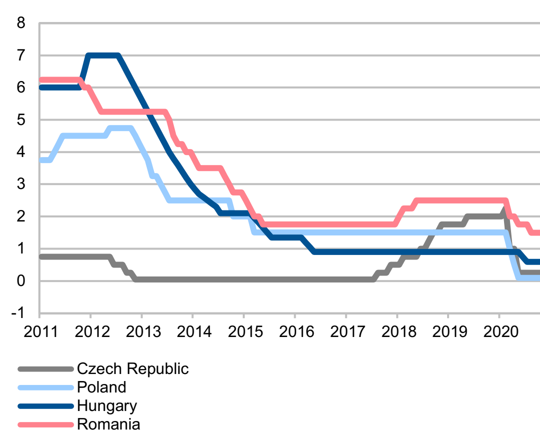
Though it did not change its key rates, during 2020 the **ECB** adopted a comprehensive package of other stimuli to ensure favourable financing conditions during the pandemic, as well as support to economic recovery and price stability in the medium-term. The ECB continued with the **Asset Purchase Programme (APP)** at a monthly pace of EUR 20 bn, which will continue for as long as necessary, i.e. it will be concluded a little before the ECB starts raising its rates again, and the assets from the maturing instruments purchased within the programme will be reinvested over a longer period after the ECB starts raising the rates again. In early March, the ECB launched a purchase of additional EUR 120 bn until end-2020 to restrict the tightening of financial conditions in the euro area. In March it also introduced the **Pandemic Emergency Purchase Programme (PEPP)**, which was expanded in the June meeting by an additional EUR 600 bn, and then in December by another EUR 500 bn, to a total of EUR 1,850 bn. This amount does not have to be used in full for asset purchases if the financial situation improves, but in the opposite scenario it may even be increased. The PEPP implementation timeframe was originally extended by six months in June, by at least end-June 2021, and then in December to at least end-March 2022, i.e. until the ECB estimates that the crisis caused by the coronavirus has ended. The period for reinvestment of principal amounts of maturing securities within the programme was also extended at least until end-2023 (previously end-2022). The ECB also mitigated the conditions in terms of the volume and interest rates for

participation in the **targeted long-term refinancing operations programme (TLTRO III)**, where interest rate on these loans, for banks meeting certain conditions, can even be -1.0%. The duration of the more favourable conditions within this programme was extended in December until June 2022 (previously June 2021). The base for eligible collateral was also expanded within the **corporate sector purchase programme (CSPP)** and the criteria were relaxed in terms of collateral when implementing refinancing operations (main refinancing operations, LTROs, TLTROs). As of May, banks were able to use new **non-targeted pandemic emergency longer-term refinancing operations (PELTROs)**, introduced to provide sufficient liquidity and additionally mitigate financial conditions in the euro area during the pandemic. It was decided in December to continue this programme during 2021. Around mid-year, repo auctions were also introduced to ensure euro liquidity to central banks outside the euro area and then in December extended by nine months, until end-March 2022.

In March 2020, the **Fed** lowered its federal funds target range twice, by a total of 150 bp, to 0.0–0.25%, and kept it on hold until end-2020. It relaunched the **quantitative easing through purchases of Treasury and mortgage-backed securities, and began conducting repo operations in a greater volume** to support the smooth functioning of the market and efficient monetary policy transmission. It also introduced **temporary international repo transactions** which supply dollar liquidity to foreign central banks and other monetary authorities, and activated dollar swap lines with central banks of other advanced countries (including the ECB) and several central banks of emerging countries. The Fed also launched support programmes such as the Commercial Paper Funding Facility (CPFF), the more favourable Primary Dealer Credit Facility (PDCF), facilities to support the corporate bond market in the USA (PMCCF and SMCCF), the Money Market Mutual Fund Liquidity Facility (MMLF), support lending to small and medium-sized businesses (MSLP) and many others. At end-July the Fed decided to extend the package of assistance to corporates (adopted in March) until the end of the year, including temporary dollar liquidity lines to other central banks by way of FX swaps and repo transactions until 31 March 2021. In August, the Fed adopted changes to its long-term monetary policy goals and strategy, whereby it increased flexibility in its monetary policy conduct and sent a signal to the market that increase in the federal funds rates is not to be expected for a longer time. In accordance with its changed monetary strategy, the Fed intends to keep its federal funds target range at the current level until it estimates that maximum employment has been reached, with inflation reaching 2% and showing a tendency to exceed that figure slightly for some time. Also, it continued to invest in Treasury bonds and mortgage-backed securities in unchanged amounts of USD 80 bn and USD 40 bn a month, respectively, though in September it announced that it will no longer reinvest the maturing principals of commercial mortgage-backed securities. Moreover, in the December meeting, it changed its communication on quantitative easing. Hence, instead of the phrase “in the coming months”, it noted that bond purchases will continue until substantial further progress has been made toward the Committee’s maximum employment and inflation goal, whereby it signalled readiness to increase bond purchases should the need arise.

Central banks of CESEE countries also responded to the new situation caused by the pandemic by accommodating their monetary policies during 2020. After raising its policy rate by 25 bp in February, the central bank of the **Czech Republic** trimmed it twice in March, by a total of 125 bp, and then in May by an additional 75 bp to 0.25%, where it remained until the end of the year. The central bank of **Poland** first cut its policy rate by 50 bp in an unscheduled meeting in March, thus changing it for the first time since March 2015, and then on two more occasions, in April and May, by a total of 90 bp, to a record low 0.1%. In addition, it launched an asset purchase programme in the secondary market. The **Romanian** central bank also embarked on a programme of government bond purchase in the secondary market in April, and after trimming the policy rate by 50 bp in an emergency meeting in March, it cut the rate by another 25 bp to 1.75% at end-May and then to 1.5% in August. Though it kept its policy rate on hold for the remainder of the year, it trimmed the FX reserve requirement rate,

Chart III.1.7 **Policy rates across selected Central and Southeast European countries**
(p.a., in %)



Sources: Central banks of selected countries.

whereby it secured additional liquidity to the market. At the start of the year, the central bank of **Hungary** secured unlimited liquidity to banks by introducing a new instrument of the collateralised loan with a fixed interest rate. It also drove liquidity up by abolishing the reserve requirement for domestic banks and increasing the volume of FX swap transactions. In June, for the first time since May 2016, the central bank of Hungary reacted via the policy rate, trimming it by 15 bp and then by another 15 bp in July, to 0.6%, after which it kept it unchanged until the end of the year, though it increased the government and corporate bond purchase programmes. In addition, at the end of the year the Hungarian central bank revised its government bond purchase programme in the local currency by increasing the volume of bonds that may be bought under the programme. Also, a decision was made to boost the support programme to the sector of micro, small and medium-sized enterprises, which was introduced to mitigate the adverse effects of the coronavirus pandemic by ensuring cheap sources of bank financing.

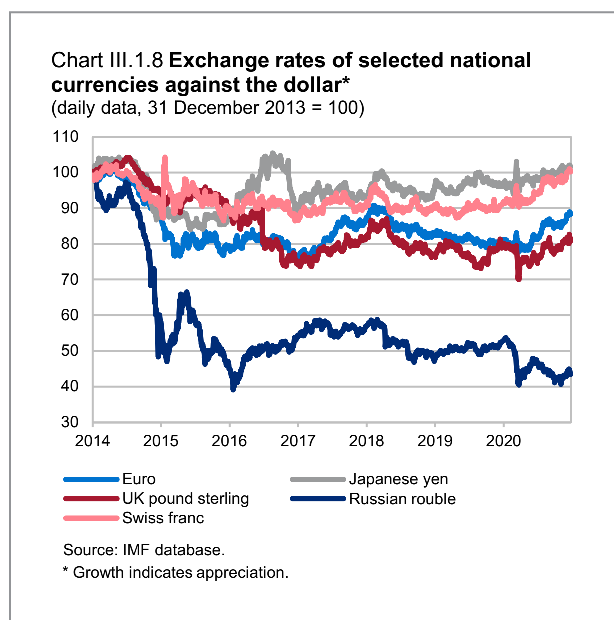
During H1, the central bank of **Turkey** continued trimming its policy rate by a total of 375 bp to 8.25%, in conditions of dampened demand and cost-push pressures. In conditions of the depreciating lira, which reached its lowest level against the dollar, during August market participants were redirected towards a more expensive instrument (Late Liquidity Window), i.e. borrowing at the rate of 11.25%. Afterwards, the policy rate was increased in September, for the first time since 2018, by 200 bp to 10.25%, and then, in the October meeting, the lending facilities rate (Late Liquidity Window) was also raised, to 14.75%, whereby the central bank effectively expanded the interest rate corridor. Then, in November, it raised the policy rate by 475 bp to 15% and in December to 17%, aiming to stabilise inflation and inflation expectations, which bore the brunt of the lira's plunge against the dollar in the prior period. Also, a decision was made to provide liquidity to banks solely at the policy rate (at regular repo auctions) in the coming period.

Financial and commodity markets

Movements in financial markets during 2020 were dominantly under the influence of news and developments in relation to the spread of the coronavirus. As the pandemic broke out, investors fled from shares and corporate bonds in order to buy safer assets, as well as because of the need for more liquid assets, hence the leading global stock exchanges recorded the sharpest slumps since the global financial crisis and the implied measure of **financial market volatility** (VIX) reached its historic maximum in mid-March. After leading central banks applied their measures to stabilise the financial system and calm the markets thanks to extensive measures of governments around the world aimed at mitigating the effects of the pandemic worldwide, the volatility in global financial markets subsided considerably. Frequent changes in investors' risk propensity in the market characterised H2 as well. On the one hand, investors' risk propensity was affected by the exacerbating global epidemiological situation which drove some countries to introduce new containment measures, as well as by fears that the lack of adequate fiscal support would act as an additional drag, slowing down the pace of the USA's economic recovery. In contrast, global optimism rose on the back of positive news about coronavirus vaccine development, as well as expectations of a solid global economic recovery. Thanks to the agreement about the package of fiscal aid in the USA, which was reached after several months of negotiations, and the deal between the United Kingdom and the EU about their relations going forward, optimism in the market began to rise anew at the end of the year, as did investors' risk propensity. Still, in late 2020 VIX (22.8%) remained much higher than at end-2019 (13.8%), as did the volatility of the currencies of emerging economies, measured by EM–VXY (10.7% vs. 6.6%), due to the persisting uncertainty with regard to the pace of global economic recovery and further course of the pandemic.

As the virus continued to spread, leading to a rise in risk aversion, investors increasingly sought security in government bonds of advanced countries, therefore **yields on ten-year US and German sovereign bonds** posted record low values in early March. The whole yield curve

Chart III.1.8 **Exchange rates of selected national currencies against the dollar***
(daily data, 31 December 2013 = 100)



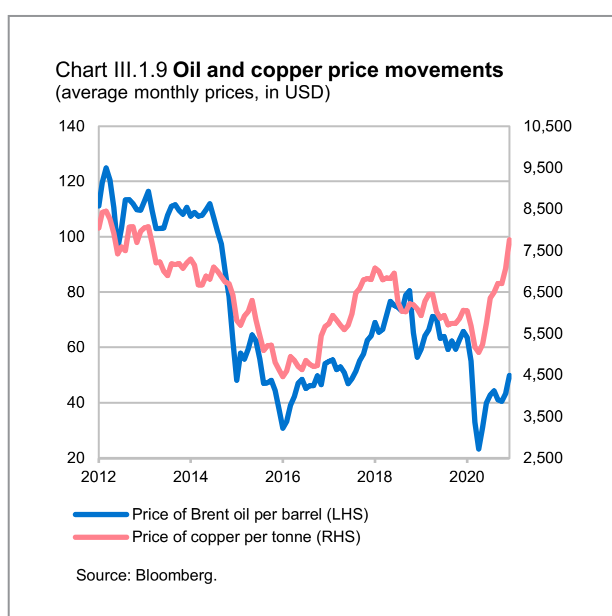
Source: IMF database.
* Growth indicates appreciation.

of US Treasuries went below 1% for the first time ever, and the yield curve on German government bonds went deeper into the negative territory. The drop was largely prompted by the launch of the new asset purchase programme (PEPP), with the lifting of some restrictions previously applied in asset purchases. Afterwards, the volatility of the yield on government bonds of advanced countries declined, hence at end-H1 yields on ten-year US and German bonds stood at levels similar to those from end-Q1, i.e. 0.7% and -0.5%, respectively, and did not change significantly until end-Q3. Due to stepped-up demand for safe assets, yields on ten-year government bonds of the majority of advanced European countries declined further in Q4, though the fall was for the most part mitigated by the rising optimism in the market at end-2020. On the other hand, yields on ten-year US Treasuries rose mildly in Q4 (by 0.2 pp to 0.9%), which was additionally facilitated by the rising optimism over the adoption of the new package of fiscal aid, though they remained significantly lower (by 1.0 pp) than at end-2019. Of advanced European countries, yields that decreased the most during 2020 were those on ten-year Italian government bonds (by 0.9 pp to 0.5%), though they still remained positive, as well as yields on benchmark Greek bonds (0.6%), while yields on Spanish and Portuguese government bonds of identical maturities decreased to almost zero. Yields on ten-year German bonds were 0.4 pp lower from end-2019 and measured -0.6%, while yields on Austrian and French bonds of the same maturity also went into the negative territory (-0.4% and -0.3%, respectively).

Movements in FX markets also reflected higher risk aversion, with the leading world currencies turning highly volatile against the **dollar** during 2020. In the second half of February, the dollar reached its highest value **against the euro** since April 2017 (1.08 EUR/USD), only to touch the lowest value in more than 12 months in early March (1.15 EUR/USD), reflecting concerns about the coronavirus impact on the US economy. As the health situation exacerbated, the dollar, as the most liquid and the world's primary reserve currency, gained strength again, reaching 1.07 EUR/USD. Additional measures of leading central banks, aimed at boosting dollar liquidity, to some degree satisfied a huge demand for this currency, therefore the dollar again lost steam. The euro's significant rise against the dollar was recorded after the European Commission presented the details of the EU recovery fund (Next Generation EU), implying assistance to the most vulnerable member states. During June the euro continued to appreciate (the average monthly exchange rate was 1.13 dollars per euro) amid the hints of economic recovery in the leading economies, the ECB's decision to step up asset purchases within the PEPP programme, and Germany's decision to support the economy by an additional assistance package worth EUR 130 bn. Despite all of these factors, at end-H1 the euro was only slightly stronger than the dollar compared to end-2019 (0.3%). Positive news about vaccine development gave rise to optimism in the market and increased risk propensity, which contributed to the euro gaining further vis-à-vis the dollar during H2. The weakening of the dollar was also attributable to the Fed's decision to change the monetary policy strategy, which implies a longer period of low interest rates in the USA. This drove market participants to exit dollar assets and seek yields in other currencies and classes of assets. During December, the euro reached its highest level since April 2018 (1.23 EUR/USD), and at end-H2 it was 9.4% stronger than the dollar relative to end-H1, i.e. by 9.7% from end-2019. Throughout 2020 other leading world currencies also recorded significant volatility vis-à-vis the dollar. Thus, besides the euro, also appreciating against the dollar were the Swiss franc, Japanese yen and pound sterling, while the Russian rouble depreciated.

The **global oil price** plummeted, coming down from USD 66.4 per barrel at end-2019 to USD 17.3 per barrel in the second half of April, when oil futures entered the negative territory for the first time in history. The drop in the oil price was prompted by the lower demand due to the newly introduced counter-pandemic measures which directly affected the transport sector. In the ensuing period, oil prices recovered, mainly owing to the unprecedented cut in production by OPEC+ members – to the lowest level in almost 30 years, applied as of 1 May

Chart III.1.9 **Oil and copper price movements**
(average monthly prices, in USD)

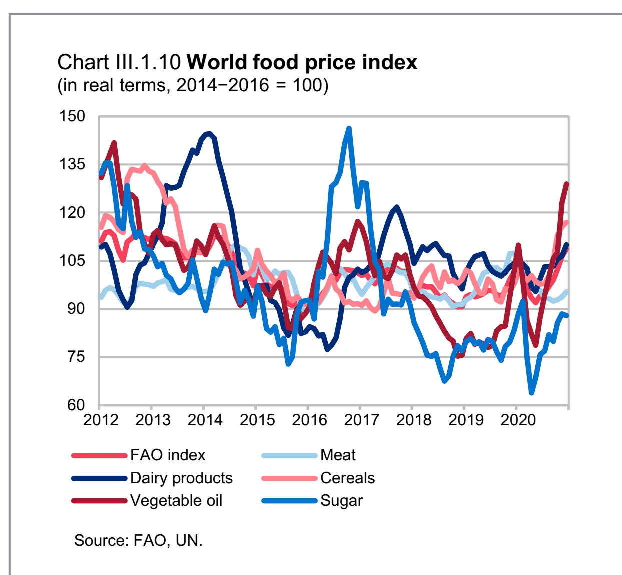


Source: Bloomberg.

with a view to alleviating market saturation. The oil price was also driven up during summer by the optimism that the demand might start recovering as economies open up, as well as by a significantly stronger import demand from China and the dollar's weakening, including demand-side factors, such as depleting crude oil inventories in the USA, difficulties with oil export from Venezuela, subdued production in Iraq and tropical storms that threatened to shut down production in the Gulf of Mexico. After reaching USD 46 per barrel at end-August, the global oil price declined due to concerns over oil demand amid the worsening global epidemiological situation, rising inventories, and reduced crude oil import by China due to large inventories in Chinese refineries and stepped-up production in Libya and Iraq, hence until end-October the oil price declined to USD 36.9 per barrel. It then again returned to the upward path, on the back of the positive sentiment in the market, the weakening of the dollar, data about depleting US inventories, expanded sanctions to Iraq and introduced sanctions to Venezuela, as well as the agreement of OPEC countries and Russia in early December to step up production by 500,000 barrels a day as of 1 January 2021, which is less than originally agreed upon (2 mn barrels a day). At end-2020 the price of oil was USD 51.2 per barrel, which was still 23% lower than at end-2019.

Global food prices, measured by the **FAO index**, decreased by 7.3% in H1, recovering slightly only in June. The prices of all types of vegetable oil were

Chart III.1.10 **World food price index**
(in real terms, 2014−2016 = 100)



Source: FAO, UN.

reduced the most, by 14.2%, mainly due to the fall in the price of palm oil. Meat prices were 10.7% lower than at end-2019, first due to China's decreased import of ovine and bovine meat, caused by halts in transport and the consequent piling up of inventories in exporting countries during Q1, and then by the lower import of meat from other regions, as well as by increased export capacities of leading producers. The price of sugar also fell in H1 (by 9.3%), initially because of the health measures adopted by some countries, which dampened import demand, and then because of a sharp fall in energy prices, when sugar cane was redirected from biofuel to sugar production. In H1, the prices of dairy declined by 4.6%, in conditions of lower demand and growing export capacities and inventories, while only the price of cereals remained almost unchanged. Unlike H1, H2 saw a rise in global food prices. Measured by FAO, they went up 16.5% in H2, with some components of the index touching their multiple-year maximums. The price of vegetable oil recorded the highest rise (51.3%), and in December reached its maximum level in more than eight years. This was mainly the result of the increase in the price of palm oil amid depleting inventories of chief producers and a sudden rise in export tariffs in Indonesia, the world's leading palm oil producer. The prices of cereals rose 19.9% in H2, and in December touched their highest level since July 2013. The rise in the price of wheat is attributable to depleting inventories in main exporting countries, poorer production prospects in the USA and Russia, and introduction of export restrictions by Russia. The price of corn went up amid bleaker harvest outlook in South America, as well as due to the rise in the price of soybean which spilled over onto the rise in the demand for corn. The price of sugar went up 16.3% due to adverse weather conditions in the EU and on Thailand, the world's second largest sugar producer, and then under the impact of strong import growth from China, which is the second largest sugar importer in the world, as well as due to the rise in import demand from Indonesia. Dairy prices also rose, by 11.0%, and only the prices of meat remained almost unchanged in H2. During Q3 they initially continued the downward trend that began in January, which was partly facilitated by China's ban on pork import from Germany in September, due to the outburst of African plague in wild boars, as well as the seasonally high supply of ovine meat from Australia, only to go up in Q4. However, at end-2020 they were still much lower than at end-2019 (by 10.6%).

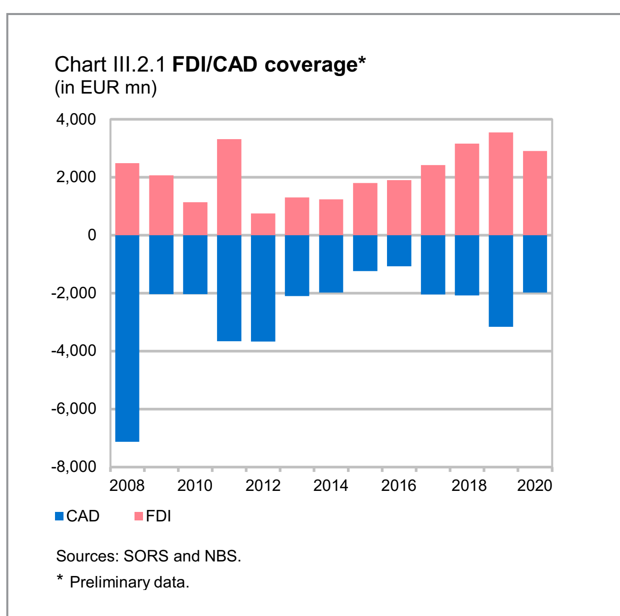
2 International transactions

Balance of payments and FX reserves

During 2020, current account dynamics were under a powerful sway of the coronavirus pandemic and the adopted containment measures. According to preliminary data, **the current account deficit** measured EUR 2.0 bn in 2020 (4.3% of GDP), down by EUR 1.2 bn relative to 2019. This decrease was due to a narrowing of the trade deficit as imports fell more than exports, contraction of the primary income account deficit amid lower FDI expenditures and a slight improvement in the balance of services, while subdued inflow of remittances worked in the opposite direction. Even in the conditions of the pandemic-induced global crisis, the current account deficit was more than fully covered by net FDI inflow (146.5%) which measured EUR 2.9 bn in 2020. Net inflow in respect of portfolio investments equalled EUR 1.6 bn and resulted primarily from the eurobond issue in the international financial market in May. This boosted FX reserves, further increasing our economy's resilience to potential shocks from the international environment.

In the first two months of the year, Serbia's foreign trade recorded growth, but entered a decline as the new crisis unravelled. The adverse effects of the crisis were particularly felt in April. With the relaxation of containment measures and the gradual opening of economies, both exports and imports began to rally as of May. As a result, foreign trade developments in 2020 were V-shaped. At the annual level, the fall in goods import (-3.5%) was more pronounced than in export (-2.3%), leading to a decrease in **the deficit on trade in goods** (by EUR 399.0 mn) to EUR 5.2 bn. **Goods export** (EUR 16.0 bn) was subdued in 2020, almost entirely due to manufacturing exports which lost 5.0%, while agricultural exports increased by 20.2% even in crisis conditions. In H2, the export of most sectors reached or came close to their pre-crisis levels,[15] with the export of electrical equipment, food, tobacco, pharmaceutical and chemical products even rising at annual level. **Goods import** (which decreased to EUR 21.3 bn) reflected movements in economic activity too – the import of intermediate and capital goods for industry purposes was subdued, as was energy import due to reduced industry needs and a lower oil price, particularly in H1. As economic activity rallied from May onwards, the import of intermediate and capital goods picked up as well. Though import of consumer goods also decreased with the outbreak of the pandemic, it recovered during the

Chart III.2.1 **FDI/CAD coverage***
(in EUR mn)



Sources: SORS and NBS.
* Preliminary data.

Table III.2.1 **Serbia's balance of payments**
(in EUR mn)

	2019	2020
I CURRENT ACCOUNT	-3,160.9	-1,981.5
1. Goods	-5,623.4	-5,224.5
1.1. Credit	16,414.9	16,032.5
1.2. Debit	-22,038.3	-21,256.9
2. Services	1,011.8	1,074.6
2.1. Credit	6,933.7	6,163.4
2.2. Debit	-5,921.9	-5,088.8
3.Goods and services	-4,611.6	-4,149.8
3.1. Credit	23,348.6	22,195.9
3.2. Debit	-27,960.2	-26,345.7
4. Primary income	-2,478.5	-1,403.6
5. Secondary income	3,929.3	3,571.9
II CAPITAL ACCOUNT	-112.1	-30.0
III FINANCIAL ACCOUNT (excluding reserve assets)	4,977.0	2,441.3
1. Direct investment, net	3,551.1	2,902.3
2. Portfolio investment, net	188.4	1,623.6
3. Financial derivates, net	-0.5	-87.3
4. Other investment, net	1,238.0	-1,997.3
4.1. Trade credit and advances, net	-219.2	-1,684.7
4.2. Financial loans, net	1,163.0	405.9
4.3.Currency and deposits, net	302.3	-717.9
4.4. Other, net	-8.0	-0.5
IV Reserve assets	-1,872.8	-270.4
V NET ERRORS AND OMISSIONS	168.8	-159.4
VI OVERALL BALANCE	1,872.8	270.4

Source: NBS.
Note: Preliminary data.
[1)] BPM6 methodology, except sign convention.

[15] January-February 2020 average, s-a.

year, providing a positive annual contribution to imports. By SITC group, the decline in imports in 2020 was mainly due to the lower import of energy (-34.1%), road vehicles (-21.5%), metal ores (-45.8%) and iron and steel (-26.1%), while stronger import of chemical products (9.7%), most notably pharmaceuticals, worked in the opposite direction.

External **trade in services** was also powerfully affected by the pandemic. The sharper fall in services import (-14.1%) than export (-11.1%) led to a 6.2% rise in the surplus on trade in services in 2020 to EUR 1.1 bn. The largest negative contribution to both services export and import came from tourism and transport, which were hardest hit by the pandemic. On the other hand, ICT services provided a positive contribution to export growth, and business and other services – to import growth.

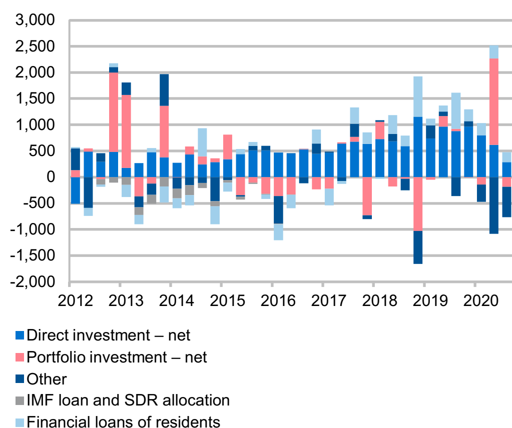
The deficit in the **primary income account** decreased notably (by 43.4% to EUR 1.4 bn), mostly on account of lower FDI expenditures (which decreased by EUR 1.1 bn to EUR 1.3 bn). This was mainly due to lower estimated reinvested earnings amid subdued profitability of foreign-owned companies on account of the pandemic. Thanks to borrowing on more favourable terms in the prior period, expenditures in respect of portfolio investments also decreased (by EUR 61.1 mn to EUR 250.6 mn).

The surplus in the **secondary income account** contracted in 2020 by 9.1% to EUR 3.6 bn, mostly on account of subdued inflow of foreign remittances which, amid the global economic downturn and reduced labour mobility, decreased by 12.9% to EUR 2.9 bn (a similar decrease was recorded by other countries which traditionally have high inflows on this account).

The inflow to the **balance of payments financial account** equalled EUR 2.4 bn[16] in 2020. FDI and portfolio investments made up the bulk of capital inflows. Inflow was also recorded in respect of higher foreign borrowing by banks and corporates. Outflow was, on the other hand, recorded in respect of trade loans and higher amounts of cash and deposits held by banks abroad.

Despite increased uncertainty in the international financial market, **FDI** inflow to Serbia continued and measured EUR 3.0 bn (EUR 2.9 bn net, or 6.2% of GDP). Net FDI inflow was by slightly less than a fifth lower than in 2019, a decline smaller than average for the Southeast European region.[17] It should also be noted that Serbia saw record high FDI inflows of EUR 3.8 bn (EUR 3.6 bn, net) in 2019 and that FDI inflows contracted mostly on account of subdued reinvested earnings, as expected in the conditions of crisis-induced lower profitability of corporates. By sector, more than a quarter of FDI was directed to manufacturing (26%), followed by the financial sector (18%), transportation and warehousing (15%), and construction (12%). The bulk of investments came from European (71%)[18] and Asian countries (20%).

Chart III.2.2 **Structure of the financial account***
(in EUR mn)



Source: NBS.
* Preliminary data.

Net inflow of **portfolio investments** came at EUR 1.6 bn in 2020. For the most part, it was the result of a EUR 2 bn-worth issue of seven-year bonds in May in order to provide adequate fiscal support to the corporate sector in countering the pandemic. Non-resident investment in government securities in the domestic market subsided in early 2020, particularly in February–April, and again in July, when the epidemiological situation worsened. Towards year-end, in response to rising optimism with regard to global economic recovery amid news of widespread vaccine use, the share of non-residents in the domestic primary market of dinar government securities went up. Moreover, late in the year Serbia issued a ten-year eurobond worth USD 1.2 bn on the most favourable terms so far (1.066%[19] in euros) and the proceeds of this issue were mostly used for the early repayment of a part of debt under costly dollar eurobonds issued in 2011.

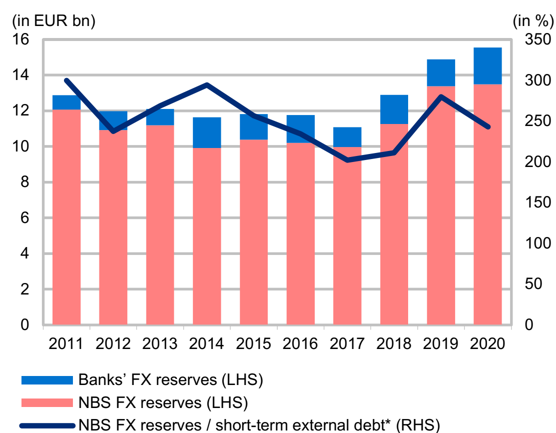
[16] Excluding change in FX reserves.

[17] Based on data from January 2021 UNCTAD Investment Trends Monitor. See: Inflation Report – February 2021, Text box 2, p. 28.

[18] Mostly investments from the EU.

[19] Dollar bonds were issued at a coupon rate of 2.125%, after which liabilities under this bond were exchanged from the dollar to the euro, achieving a de facto coupon rate for euro financing of 1.066%.

Chart III.2.3 **FX reserves and coverage of short-term external debt**



Source: NBS.
* Short-term debt by remaining maturity.

By contrast to 2019, when **other investment** provided an inflow of EUR 1.2 bn, 2020 saw an outflow of EUR 2.0 bn on this account. This was due to net outflow in respect of trade loans (EUR 1.7 bn), as the value of advance paid imported goods by companies exceeded the value of goods exported to foreign markets and not yet paid for, and net outflow due to higher cash and deposits held by banks abroad (EUR 717.9 mn). Net inflow of EUR 405.9 mn was recorded in respect of **financial loans** in 2020, supported by higher borrowing by banks (EUR 455.5 mn) and corporates (EUR 267.2 mn). By contrast, the Government reduced its obligations by EUR 308.5 mn, net, and the NBS by EUR 8.4 mn.

The above flows in the current and financial accounts pushed up **Serbia's FX reserves** (according to the balance of payments methodology)[20] by EUR 270.4 mn in 2020.

As at end-December 2020, gross FX reserves of the NBS were at their highest level on record (since 2000). As at 31 December 2020, gross FX reserves of the NBS measured EUR 13,491.7 mn, up by EUR 113.2 mn from end-2019. Such level of FX reserves covered 130% of money supply M1 and more than six months of the import of goods and services, which is twice the standard on the adequate level of FX reserves.

At the same time, net FX reserves equalled EUR 11,130.7 mn, and were EUR 310.1 mn lower than at end-2019.

Consistent with fundamental principles of security and liquidity, funds were invested in highly liquid securities issued by the world's most advanced countries and international financial institutions, as well as placed with prime institutions (central banks, international financial institutions and top tier foreign banks). As at 31 December 2020, foreign securities accounted for the bulk of FX reserves (49.7%), followed by FX balances in accounts abroad (21.9%), foreign cash (14.8%), gold (13.1%) and SDRs with the IMF (0.5%).

The largest foreign exchange inflows in 2020 came from two issues of RS eurobonds in the international financial market worth a total of EUR 2,951.6 mn. The proceeds from the seven-year eurobonds issued in May (EUR 1,968.6 mn) were used for implementing the Programme of Economic Measures to Mitigate the Negative Effects of the COVID-19 Pandemic and Support the Serbian Economy. Ten-year dollar eurobonds worth USD 1.2 bn were issued in December, and liabilities under these securities were converted into euros in a swap transaction. Inflow of EUR 366.4 mn was recorded from the sale of euro-denominated government securities in the domestic financial market (twenty-year securities in euros worth EUR 161.2 mn were issued for the first time in January). Inflow of EUR 395.0 mn also came from the privatisation of Komercijalna banka. Banks allocated EUR 286.3 mn, net, in respect of FX required reserves. FX inflow also came from grants (EUR 276.4 mn), temporary payment transactions with Kosovo and Metohija[21] (EUR 261.1 mn) and the disbursement of loans for the RS (EUR 222.1 mn). In 2020, the NBS also earned income from investment in foreign securities and interest rates on FX funds in the total amount of EUR 54.8 mn, net.

The largest outflow from NBS FX reserves came from matured eurobonds and securities issued in euros in the domestic market worth a total of EUR 1,508.8 mn, of which EUR 1,003.7 mn in the international financial market (EUR 198.6 mn in February in respect of remaining repayment of a portion of the dollar eurobond issued in 2013 and EUR 805.1 mn in December in respect of early repayment of a portion of the dollar eurobond) and EUR 505.1 mn in the domestic financial market. In

[20] Excluding currency changes, changes in the market value of securities and the price of gold.

[21] Under the Law on Temporary Execution of Certain Payment Operations in the FRY (FRY Official Gazette, No 9/01).

respect of NBS activities in the IFEM, net FX outflow of EUR 1,303.0 mn was recorded (including spot and swap transactions).[22] Obligations to foreign creditors (principal and interest) were settled regularly and measured EUR 1,226.3 mn. Pursuant to the Law on the Settlement of the Public Debt of the RS Arising from Unpaid Foreign Exchange Savings of Citizens, EUR 23.8 mn was paid out (including unpaid FX savings of citizens of former SFRY republics in the amount of EUR 20.8 mn).

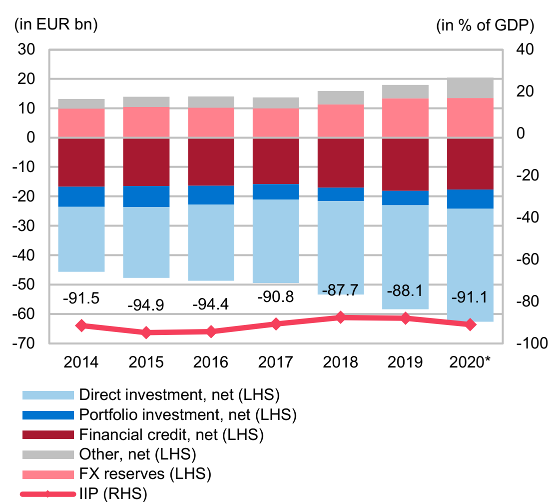
International investment position

At end-2020, Serbia's net international investment position, i.e. the difference between Serbian residents' assets and liabilities, measured EUR 42.4 bn, with assets equalling EUR 28.5 bn and liabilities EUR 70.9 bn. Relative to end-2019, **Serbia's international investment position of a net debtor increased by EUR 1.9 bn**, mostly on account of increased resident liabilities in respect of FDI and portfolio investments. The year 2020, **though marked by the pandemic, saw substantial inflow of the most desirable foreign investment – FDI**, which is important from the aspect of sustainability of the country's external position. Substantial FDI inflow was supported by a conducive environment reflecting the country's favourable economic outlook, low inflation and relative stability of the exchange rate. At end-2020, net FDI reached 90.9% of the country's net investment position, up by 3.4 pp from end-2019. The **share of net portfolio investments** increased as much, **measuring** 15.4% of the net international investment position, as the government successfully issued eurobonds in the international financial market in the conditions of the pandemic-induced global economic crisis. **The high inflow of FDI and portfolio investments led to an increase in the share of Serbia's net international investment position in estimated GDP to 91.1% in 2020**, up by 3.1 pp from end-2019.

Serbia's foreign financial assets gained EUR 1.9 bn in 2020 due to balance of payments transactions worth EUR 2.1 bn, while currency and other changes led to its decline by EUR 0.2 bn. Within financial assets, other resident investment abroad increased most (by EUR 1.5 bn to EUR 10.8 bn) owing to higher trade loans and advance payments to non-residents (by EUR 0.9 bn) and resident cash and deposits abroad (by EUR 0.6 bn). **FX reserves continue to account for the bulk, i.e. almost a half, of total assets (47.3%).** As resident FDI and portfolio investment abroad increased slightly, claims on this account measured EUR 3.7 bn and EUR 0.4 bn, respectively, at end-2020.

Serbia's foreign financial liabilities rose in 2020 by EUR 3.7 bn, mostly as a result of executed transactions worth EUR 4.2 bn, while currency and other changes worked in the direction of their decrease by EUR 0.5 bn. The composition of financial liabilities reveals a continuation of the positive trend from prior years – in 2020 as well, the rise in foreign liabilities of residents resulted to a significant degree from an increase in **FDI**, which rose to EUR 42.2 bn. Thanks to continued growth in FDI, resident liabilities in this respect much exceed a half of total foreign liabilities (59.5% at end-2020). The rise in total liabilities was also facilitated by the increase in **portfolio investments** by EUR 1.8 bn in 2020 to EUR 7.0 bn, mostly as a result of successful issues of eurobonds in the international financial market in order to provide adequate fiscal support to the economy during the pandemic, and the early repayment of a part of debt in respect of eurobonds previously issued on much less favourable terms. As a result, the share of resident liabilities in respect of portfolio investments climbed to 9.8% of total foreign liabilities. Resident liabilities in respect of other investments contracted by EUR 1.3 bn to

Chart III.2.4 **International investment position**



Source: NBS.
* Preliminary data.

[22] In accordance with accounting rules, transactions in respect of NBS interventions in the IFEM are disclosed on the execution day and not on the trading day.

EUR 21.2 bn at end-2020, or 29.8% of total liabilities. Within **other investments**, resident liabilities in respect of trade loans and advance payments decreased most (by EUR 0.8 bn), followed by liabilities in respect of financial loans (by EUR 0.4 bn).

3 Financial market trends

Interest rates

In regular repo auctions for the purchase of seven-day securities, **the average repo rate** reflected cuts in the NBS key policy rate. Throughout the year, the average repo rate was almost equal to the deposit facility rate, measuring 0.1% at year-end, down by 0.9 pp from end-2019.

In the **overnight interbank money market**, BEONIA also mirrored movements in the deposit facility rate, declining by 1 pp at annual level to 0.08%, while the average daily turnover in the overnight money marked contracted from RSD 3.5 bn in 2019 to RSD 2.9 bn in 2020. BELIBOR rates of all maturities also decreased due to cuts in the NBS key policy rate, but their decline was somewhat sharper for shorter maturities (0.8 pp compared to 0.7 pp for longer maturities). Late in the year, BELIBOR rates ranged between 0.3% for the shortest maturity and 1.08% for the six-month maturity.

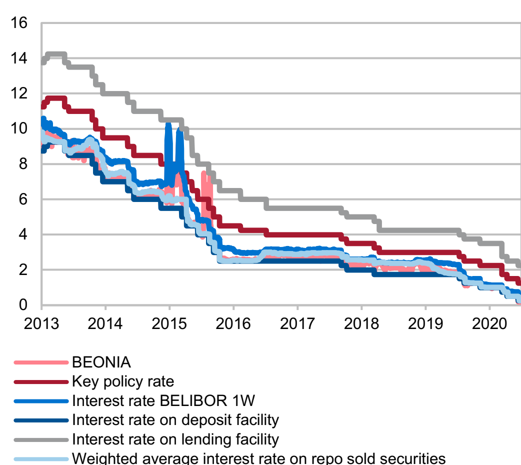
In early 2020, 12-year dinar bonds were issued for the first time in the **primary market of dinar securities**, with a coupon rate of 4.5%. In the first two auctions held in February and early March, demand was several times higher than the planned sale, resulting in an effective rate of 3.35%. As the coronavirus pandemic fuelled uncertainties in the financial markets, the share of non-residents in dinar securities purchases decreased, while the interest rate on 12-year bonds climbed to 4.3% in September. Still, non-resident demand for dinar securities expanded before year-end, bringing the interest rate on these securities down to 3.85% in December.

Auctions for the sale of five-year dinar securities were also regularly held in 2020. The effective rate in almost all auctions measured 2.6%.

After the coronavirus pandemic broke out, in Q2 the government organised auctions for the sale of 53-week treasury bills and three-year bonds, at effective rates of 1.79% and 2.15, respectively. As of April, the government also held five auctions for the sale of two-year bonds, with the yield rate dipping from 2.1% in June to 1.95% in October 2020.

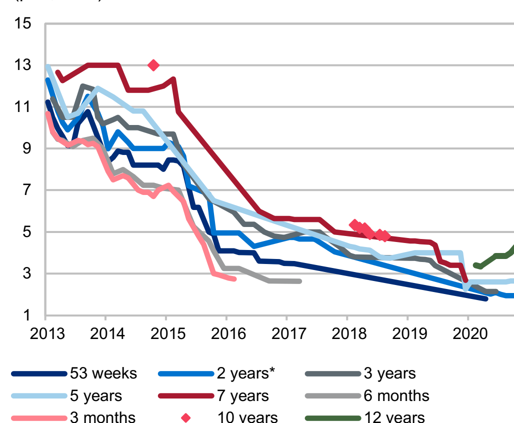
Dinar securities in the nominal amount of RSD 284.9 bn were sold in the primary market, of which RSD 83.3 bn refers to 12-year benchmark bonds. After the maturing of

Chart III.3.1 **Interest rate movements**
(daily data, p.a., in %)



Sources: Thomson Reuters and NBS.

Chart III.3.2 **Interest rates in the primary market of government securities**
(p.a., in %)



Source: Ministry of Finance.

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

previously sold government securities and early bought-back securities (RSD 10.2 bn in Q1), the stock of dinar securities sold during the year increased by RSD 173.7 bn to RSD 947.7 bn in late 2020.

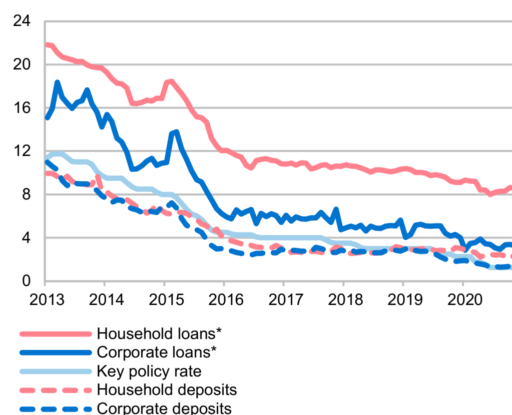
Early in the year, 20-year **euro-denominated securities** were for the first time issued in the primary market. The entire issue worth EUR 150 mn was sold at a rate of 3% (coupon rate of 3.5%). From January to April, two-, five- and 12-year euro-denominated securities were also issued, at effective rates of 0.5%, 1.1% and 1.9%, respectively, while only one other auction sale of euro-denominated securities in the domestic market was held in H2, of five-year securities, at which the rate dipped by 0.1 pp to 1.0%.

Euro-denominated securities worth EUR 354.0 mn in the nominal amount were sold in the primary market, which is less than the amount of securities falling due. The stock of sold euro-denominated securities thus decreased in 2020 by EUR 121.2 mn, to EUR 2,616.6 mn in late December.

The need to raise money in the domestic market in euros diminished as a result of successful eurobond issues in the international financial market in May and November. After the coronavirus pandemic broke out and uncertainty in the international financial markets soared, Serbia was among the first European economies to successfully issue seven-year eurobonds in euros, in the nominal amount of EUR 2 bn, at a rate of 3.375% (coupon rate of 3.125%). The proceeds were used to finance the programme of support to the real sector to moderate the consequences of the pandemic-induced economic crisis. US dollar eurobonds were issued in November, worth a total of USD 1.2 bn. These were ten-year eurobonds, at a yield rate of 2.35% and a coupon rate of 2.125%. To hedge public debt against FX risk, the RS engaged in a hedging transaction, achieving a coupon rate of 1.066% for euro financing, which is the lowest rate for euro financing ever recorded by our country. The proceeds were for the most part used for early repayment of a portion of debt in respect of bonds issued in 2011 (USD 900 mn).

In the **secondary market,** total trade in dinar government securities measured RSD 416.5 bn, a decrease by 3.4% from a year earlier. The yield rates mostly mirrored movement in effective rates in the primary market and ranged on average between 1.25% for four-month maturity and 3.7% for 12-year maturity in December.

Chart III.3.3 **Interest rates on new dinar loans and deposits**
(weighted average values, p.a., in %)



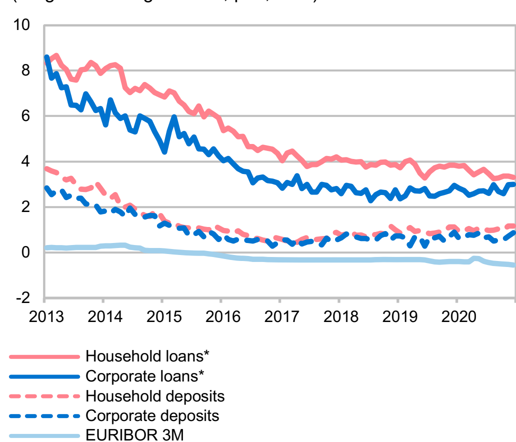
Source: NBS.

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

Interest rates on dinar loans to corporates and households decreased further, reflecting key policy rate cuts. The weighted average interest rate on dinar corporate loans decreased by 0.8 pp in 2020 to 3.2% in December. Interest rates on loans of all purposes subsided, but the fall was somewhat more pronounced for investment loans (decrease by 1.5 pp to 2.9% in December) and working capital loans (decrease by 1 pp to 3.4% in December), while interest rates on other unclassified loans fell by 0.4 pp to 3.0% in December 2020. The weighted average interest rate on new dinar loans to households decreased in 2020 by 0.65 pp to 8.5% in December. Observed by loan purpose, interest rates on all dinar loan categories subsided. As a result, they ranged between 2.1% for consumer and 9.2% for cash loans in December.

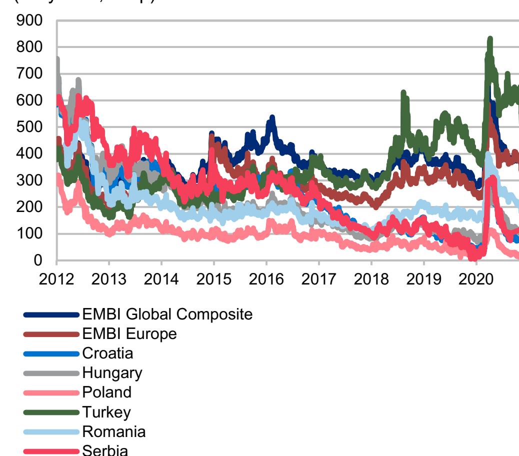
Interest rates on euro-indexed loans to corporates saw minimal oscillations in 2020, measuring 3.0% in December 2020, almost unchanged from December 2019. Interest rates on working capital loans also remained flat (2.7%), while rates on investment loans went slightly up (3.6%), as did rates on other unclassified loans (2.5%). By contrast to interest rates on euro-indexed corporate loans, the weighted average interest rate on euro-indexed household loans was on a decline throughout the year, losing 0.5 pp at annual level to 3.3%, with interest rates on euro-indexed housing loans declining somewhat less (0.1 pp) to 2.6% in December.

Chart III.3.4 **Interest rates on new euro and euro-indexed loans and deposits**
(weighted average values, p.a., in %)



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

Chart III.3.5 **Risk premium indicator on the dollar debt – EMBI by country**
(daily data, in bp)



Source: JP Morgan.

Interest rates on household **savings** in euros remained unchanged from end-2019, measuring 1.2% in December 2020, while interest rates on dinar savings decreased in the same period by 0.7 pp to 2.35%. Similar trends were recorded for interest rates on time corporate deposits – rates on euro deposits remained unchanged in 2020 (0.9% in December), while rates on dinar deposits lost 0.4 pp to 1.4% in December 2020.

Risk premium

Serbia's risk premium for dollar-denominated debt (as measured by the EMBI) was relatively stable in early 2020 until the declaration of the pandemic which in late February and during March spurred higher risk aversion, flight to safe assets and a rise in the risk premia of emerging economies, including Serbia. EMBI Serbia thus increased from 19 bp in late 2019 to close to 300 bp in late Q1, remaining at that level in April. Large-scale fiscal measures and the measures taken by leading central banks which earmarked hefty funds to ensure liquidity in response to the crisis, together with the relaxation of physical distancing measures, encouraged renewed investor interest in emerging economies, bringing down Serbia's risk premium for dollar-denominated debt. From end-April until 28 August (when it temporarily stopped being published as the SRB 2021 eurobond dropped out of calculation), it decreased by 206 bp, the sharpest decline among regional peers, to 103 bp, well below EMBI Global Composite (383 bp). After the new eurobond in dollars (SRB 30) was included in the calculation of EMBI Serbia by J. P. Morgan, as of 31 December 2020 data on Serbia's dollar risk premium are available again. On that day, it measured 128 bp, which is well below EMBI Global Composite, which equalled 323 bp.

After relatively stable movement in the first two months of 2020, Serbia's risk premium for euro-denominated debt began to rise in March and April due to global factors, from 109 bp at end-2019 to 344 bp in early May. After this, EURO EMBIG[23] for Serbia began to decline amid large-scale measures of leading central banks, relaxation of containment measures and the first signals of an incipient global recovery, but also due to economic policy measures taken at home in response to the crisis and a better than expected performance of the domestic economy. This decline intensified late in the year supported by global

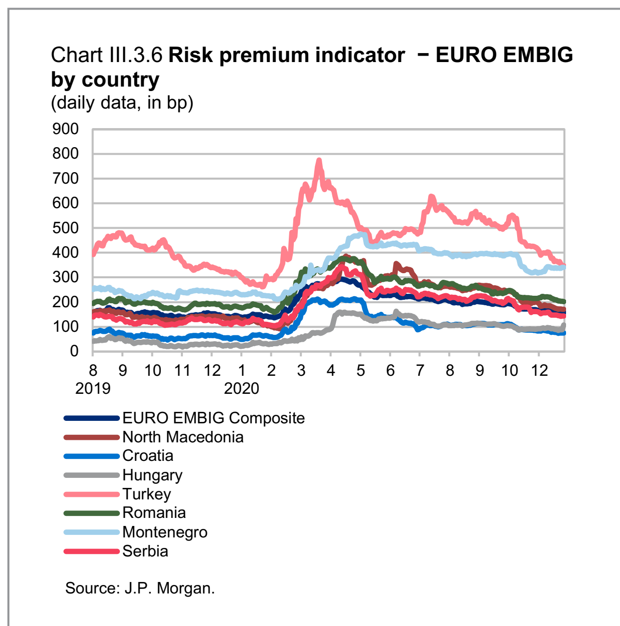
Table III.3.1 **Credit rating**
(change of rating and outlook)

	2017	2018	2019	2020
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)]	

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

[23] For more on EURO EMBIG risk premium see: *Inflation Report – February 2020.*

Chart III.3.6 **Risk premium indicator – EURO EMBIG by country**
(daily data, in bp)



Source: J.P. Morgan.

factors such as rising optimism over vaccine development, despite rising numbers of cases and reinstated containment measures, but it was also buttressed by the rebound in economic activity at home and the anticipated more than complete recovery from the crisis in 2021. Due to the above factors, Serbia's risk premium for euro-denominated debt measured 143 bp in late 2020, which was again below EURO EMBIG Composite (158 bp). Still, the risk premiums for euro-denominated debt of all countries of the region, and the composite measure, were higher than at end-2019, i.e. before the coronavirus pandemic broke out.

Thanks to Serbia's sound economic indicators preserved even during the pandemic, Fitch retained Serbia's credit rating at BB+, a step away from investment grade, with a stable outlook. In September, Fitch underscored that Serbia had a better macroeconomic performance compared with peers, thanks in part to the robust package of economic measures contributing to a faster recovery from the pandemic shock. Also noted was the economic policy credibility built up over recent years, with special focus on the preserved low and stable inflation, higher FX reserves and sound public finances. In May, Standard&Poor's affirmed Serbia's credit rating at BB+. The outlook was revised to stable from positive due to the outbreak of the coronavirus epidemic and its impact on the world economy and financial flows. Standard&Poor's did not change Serbia's rating or outlook after that, stating in its December report that Serbia's rating is the result of the fact that Serbia had much better overall macroeconomic indicators when the pandemic-induced crisis began. Similarly as Fitch, Standard&Poor's underlined as a key factor the preservation of price, financial and fiscal stability by the NBS and the Serbian Government in the prior period, as well as the relative stability of the dinar exchange rate against the euro. Orderly public finances and higher FX reserves provided ample space for Serbian institutions to take adequate measures supporting the economy during the pandemic. In March 2021, Moody's upgraded Serbia's rating from Ba3 to Ba2, noting that increased resilience and the favourable economic outlook rest on low and stable inflation, relative stability of the exchange rate, limited external vulnerability and a current account deficit fully covered by FDI.

Trends in the FX market and exchange rate

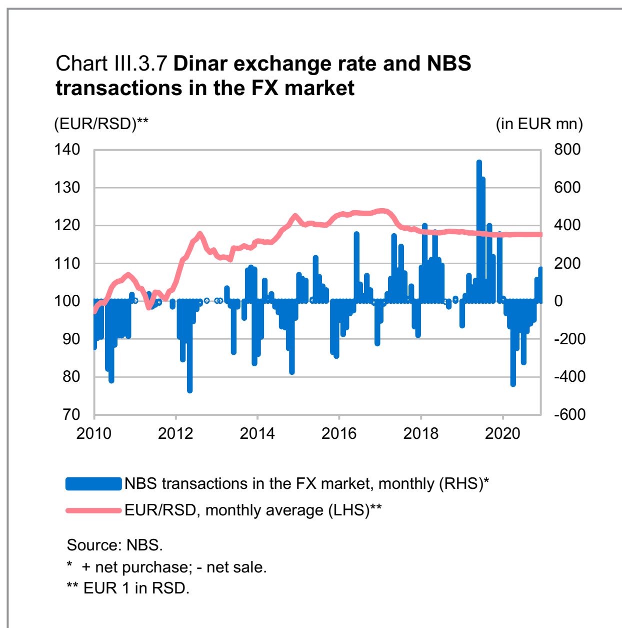
The dinar remained stable against the euro even in the conditions of heightened uncertainty amid the pandemic-induced crisis, and its value against the euro remained almost unchanged in 2020. It strengthened against the dollar by 9.7%, however, due to the weakening of the dollar against the euro.

Depreciation pressures present since February due to the pandemic softened gradually from August onwards. In November and December, appreciation pressures prevailed.

For the largest part of 2020, domestic companies were a significant factor on the FX demand side. Early in the year this was due to increased energy import and later to reduced FX supply amid the global economic downturn. Uncertainty in the international financial market reflected on higher FX purchases by non-residents, particularly in March and April. In addition, April–August period saw net sale of foreign cash to citizens and exchange dealers, owing to reduced inflow of remittances and lack of tourist visits due to the pandemic. On the other hand, the lengthening of banks' FX positions on account of non-resident payment card use pushed up the supply of foreign currency. This was more pronounced in H2 and can be attributed to the opening of economies and the relaxation of epidemiological measures. For the largest part of the year, the rise in FX-indexed assets of banks worked on the FX supply side.[24] Late in the year appreciation pressures prevailed. In part, this was due to companies which sold

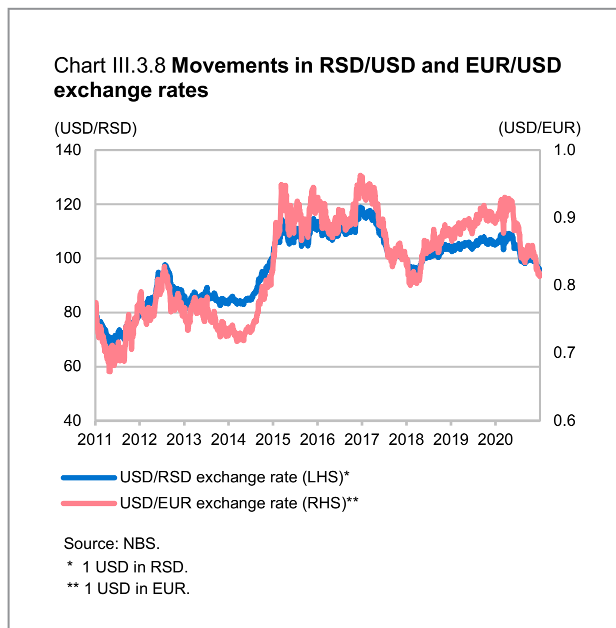
[24] Aiming to balance their long open foreign currency positions, and reduce their exposure to foreign exchange risk, banks sell foreign currency, which results in the strengthening of the dinar.

Chart III.3.7 **Dinar exchange rate and NBS transactions in the FX market**



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

Chart III.3.8 **Movements in RSD/USD and EUR/USD exchange rates**



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

foreign exchange to banks in December, instead of buying it as usual, as well as to non-residents who, in November and December auctions, were the majority buyers of 12-year dinar government securities.

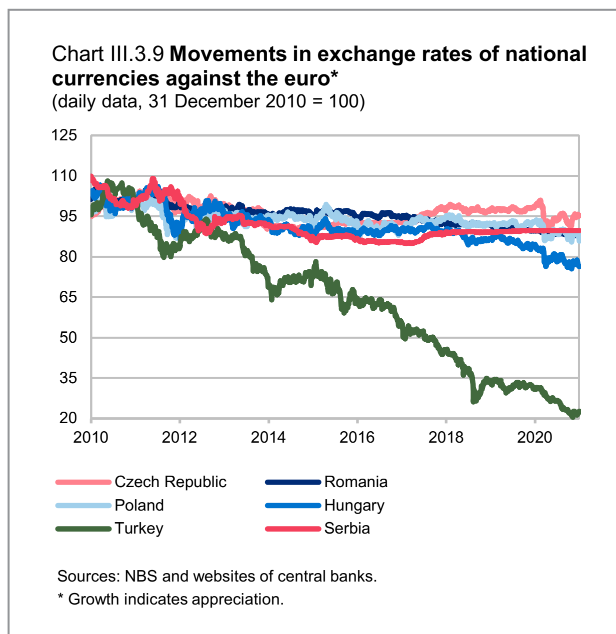
To maintain relative stability of the dinar vis-à-vis the euro amid much increased global uncertainty, the NBS net sold EUR 1,450.0 mn in its IFEM activities in 2020. The highest net sale was recorded in April (EUR 440.0 mn), when the effects of uncertainty were the most pronounced, while in November and December the NBS mostly intervened on the buying side, with total net purchase measuring EUR 285.0 mn.

The average daily interbank trading volumes[25] in the IFEM in 2020 reached EUR 25.8 mn, up by EUR 0.8 mn from 2019. The highest turnover was recorded in March (daily average of EUR 35.2 mn).

In July 2020, the NBS and the ECB agreed to set up a repo line arrangement to provide additional euro liquidity to the Serbian financial system in the presence of market dysfunctions due to the pandemic shock. The precautionary repo facility was extended in February 2021 and will remain in place until March 2022. Under the repo line, the NBS will be able to borrow up to EUR 1 bn in exchange for appropriate collateral. The maximum maturity of each drawing will be three months. As FX liquidity of the domestic banking sector was not threatened at any point and FX reserves are more than sufficient to respond to any potential disruptions in FX liquidity, this repo line has not been used so far.

Unlike the dinar, which remained flat against the euro in 2020, currencies of other inflation targeting countries of the region weakened amid increased global uncertainty. In late 2020, the Romanian leu weakened the least (1.9%) and the Turkish lira the most (26.2%) against the euro.

Chart III.3.9 **Movements in exchange rates of national currencies against the euro***
(daily data, 31 December 2010 = 100)



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

[25] Excluding the NBS.

4 Money and loans

Monetary aggregates M1, M2 and M3

Monetary aggregates recorded high y-o-y growth rates in 2020. Accelerated money supply growth, particularly in H1, reflected to a great extent the increased government spending under the Programme of Economic Measures to Mitigate the Negative Effects Caused by the COVID-19 Pandemic and Support the Serbian Economy. Moreover, lending activity supported by NBS and Serbian Government measures continued to make a positive contribution to growth in monetary aggregates. The expansion of money supply did not generate inflationary pressures, though, as it was mostly linked with increased corporate liquidity and households' refrainment from consumption amid the pandemic. In line with NBS expectations, money supply growth began to slow gradually from H2.

Table III.4.1 **Monetary survey**
(in RSD bn)

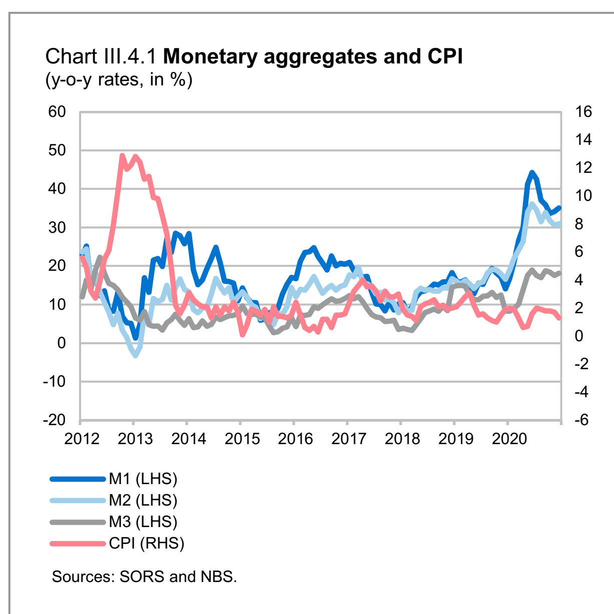
	Dec. 2019	Dec. 2020	Changes in 2020
Net foreign assets	**1,287,399**	**1,347,165**	**59,766**
Bank net foreign assets	-295,486	-250,497	44,989
Net domestic assets of the banking sector	**1,536,147**	**1,987,585**	**451,438**
Net domestic loans	2,692,633	3,139,612	446,979
Net claims on government	225,087	379,204	154,117
Government loans	677,272	840,014	162,743
Government deposits	-452,185	-460,810	-8,626
Loans to other resident sectors	2,467,546	2,760,408	292,862
Loans to households	1,112,000	1,243,622	131,622
Loans to the corporate sector	1,291,149	1,452,691	161,541
Loans to other financial corporations	31,471	33,656	2,185
Loans to local authorities	30,961	29,857	-1,104
Loans to non-profit and other organisations	1,964	582	-1,382
Other net assets	-1,156,486	-1,152,027	4,459
Money supply M3	**2,823,546**	**3,334,750**	**511,204**
Money supply M2	1,186,596	1,553,798	367,202
Money supply M1	903,603	1,220,083	316,480
Currency in circulation	209,568	266,726	57,158
Sight deposits	694,035	953,357	259,322
Dinar savings and term deposits	282,994	333,715	50,722
FX deposits	1,636,949	1,780,952	144,002

Source: NBS.

At annual level, the broadest monetary aggregate M3 expanded by 18.1%, with almost three-quarters of this increase due to the dinar component.[26] By component, **sight deposits** increased most, by RSD 259.3 bn. The rise in the most liquid deposits was buttressed primarily by Government and NBS measures aimed at increasing the liquidity of corporates and households – such as deferred payment of tax obligations, assistance to corporates in the form of minimum wage payment to employees, loans under the Guarantee Scheme, moratorium on loan repayment for corporates and households, and similar. Corporate transaction deposits gained RSD 136.2 bn, mostly for companies in trade, transport and manufacturing. Household deposits increased by RSD 108.8 bn, with all other sectors recording an increase as well.

Time dinar deposits expanded by RSD 50.7 bn, of which 70% refers to corporate deposits. Growth was recorded in accounts of all other sectors, except local government accounts which decreased marginally in 2020. **Dinar household savings** continued dynamic growth for the third year in a row despite the coronavirus pandemic. As households increased their dinar savings deposits by RSD 13.5 bn, i.e. 17.1%, dinar savings reached their historical

Chart III.4.1 **Monetary aggregates and CPI**
(y-o-y rates, in %)



Sources: SORS and NBS.

[26] Dinar aggregates M1 and M2 increased by 35.0% and 30.9%, respectively, in 2020.

maximum of RSD 92.5 bn[27] in late December. Continued growth in dinar savings even in the period of crisis reflects households' confidence in the banking system and the domestic currency, and is the result of preserved macroeconomic and price stability as well as more favourable interest rates and tax treatment of dinar relative to FX savings.

FX deposits increased by EUR 1.2 bn, led by a rise in FX household savings (by EUR 601.1 mn) to a historical high of EUR 11.1 bn.[28] Corporate FX deposits went up by EUR 539.3 mn, supported by inflows from exports, FDI and corporate borrowing abroad.

Loans

The trend of stable growth in domestic lending continued in 2020 as well. In December, lending growth measured 9.9%, y-o-y, excluding the exchange rate effect,[29] and was among the highest in the region.

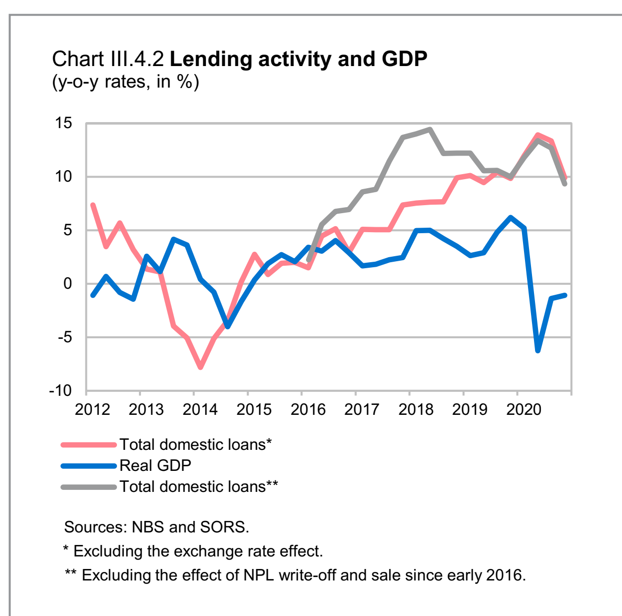
Almost two-digit growth recorded for the third year in a row, despite the COVID-19 crisis, resulted from the NBS's monetary policy easing and the measures taken to stimulate sustainable lending to households. Lending activity growth was also supported by the moratorium on corporate and household loan repayment, approval of loans under the Guarantee Scheme to micro, small and medium-sized enterprises and entrepreneurs,[30] and the continuing low interest rates in the euro area money market.

The composition of loans remained favourable from the aspect of contribution to sustainable economic activity growth, with household and corporate loans making an almost equal contribution to overall loan growth. The gradual deceleration of y-o-y loan growth late in the year was anticipated and resulted mostly from last year's high base, as well as the maturing of higher loan amounts after the lifting of the second moratorium.

Banks mostly relied on domestic sources to finance their lending activity, in particular on non-monetary sector deposits. On the other hand, the increase in banks' reserves with the NBS, higher net bank receivables from the government and abroad and the reduction in banks' capital worked in the opposite direction.

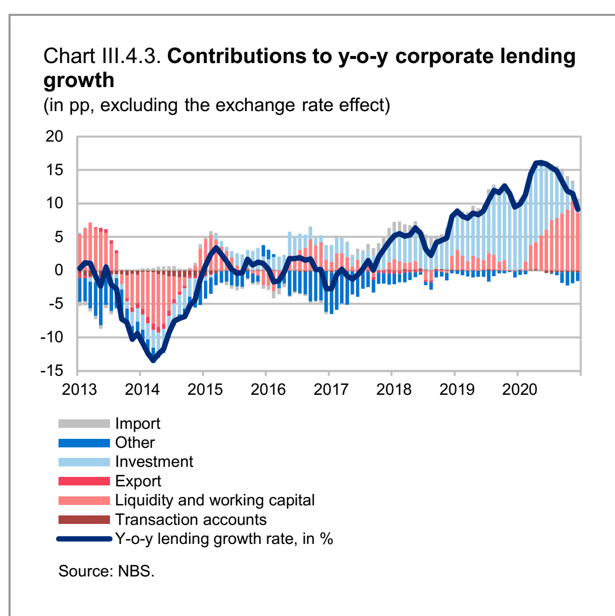
Corporate loans, excluding the exchange rate effect, increased by RSD 114.4 bn or 9.1% in 2020. Corporate loan growth was fuelled by liquidity and working capital loans (higher by RSD 107.3 bn) which from November became the dominant corporate loan category due to rising liquidity needs of the corporate sector, with a share

Chart III.4.2 **Lending activity and GDP**
(y-o-y rates, in %)



Sources: NBS and SORS.
* Excluding the exchange rate effect.
** Excluding the effect of NPL write-off and sale since early 2016.

Chart III.4.3. **Contributions to y-o-y corporate lending growth**
(in pp, excluding the exchange rate effect)



Source: NBS.

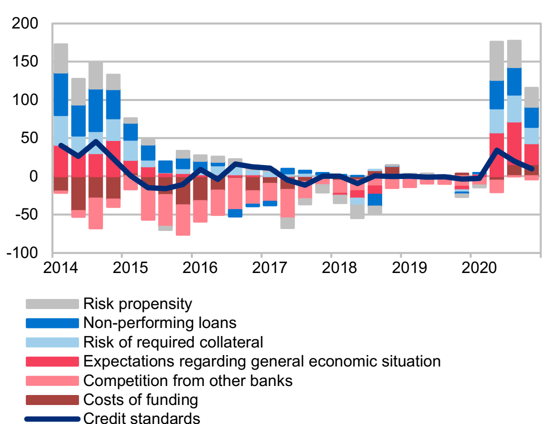
[27] Includes only residents' funds. With non-residents' funds included, dinar savings equalled RSD 93.1 bn at end-2020.

[28] Including non-residents' funds, to EUR 11.4 bn.

[29] Calculated at the dinar exchange rate against the euro, Swiss franc and dollar as at 30 September 2014, taking into account the currency composition of loan receivables.

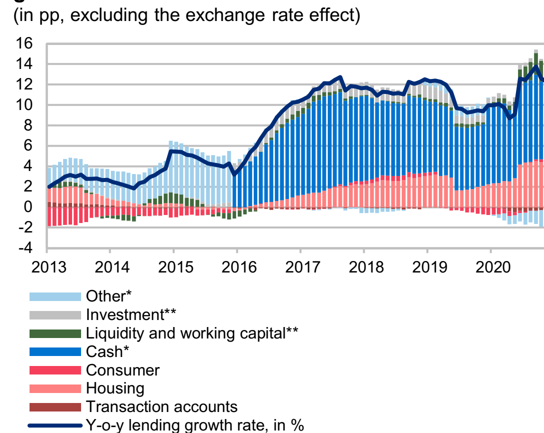
[30] Pursuant to the Decree and later on Law Establishing the Guarantee Scheme as a Measure of Support to the Economy to Mitigate the Impact of the COVID-19 Pandemic Caused by the SARS-CoV-2 Virus, RS Official Gazette, No 57/20 and No 153/20, respectively.

Chart III.4.4 **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 III.4.5 **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.

of 43.7% in December. They were followed by investment loans with a share of 43.0%; the stock of these loans gained RSD 21.1 bn during 2020. Import and export loans also went up (by RSD 5.4 bn and RSD 0.7 bn, respectively). The stock of other unclassified loans decreased (by RSD 16.5 bn), as did borrowing under current accounts (by RSD 3.6 bn). Lending to corporates in all sectors increased, most notably in real estate, transport and construction.

The volume of new corporate loans in 2020 (RSD 939.9 bn) declined by 12.7% relative to 2019. Approval of all loan categories decreased, other than liquidity and working capital loans. The share of liquidity and working capital loans in new corporate loans measured 56.9% in 2020, thanks to the approval of loans under the Guarantee Scheme on favourable terms.[31] Investment loans made up 28.0% of new corporate loans, while unclassified loans accounted for 13.7% new loans. Micro, small and medium-sized enterprises were beneficiaries of two-thirds of liquidity and working capital loans, as well as investment loans.

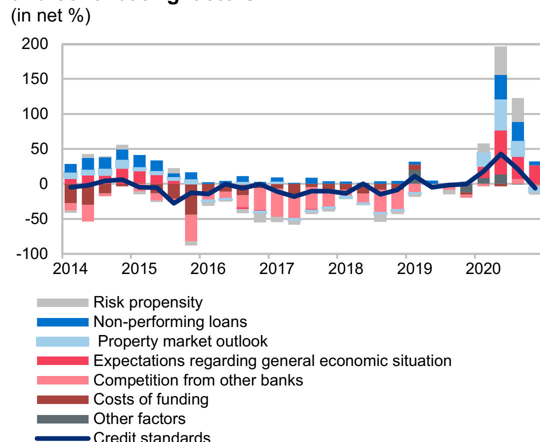
The results of the **NBS bank lending survey**[32] indicate that banks tightened their corporate loan standards from Q2 onwards amid rising uncertainty and increased risk aversion in the conditions of the COVID-19 crisis. As the year progressed, however, tightening was present in a dwindling number of banks and related primarily to non-price loan conditions – collateral requirements were tightened, and maximum loan amount and maturity were reduced. On the other hand, monetary policy accommodation by the NBS and the approval of Guarantee Scheme loans reflected on lower interest rate margins on dinar loans to small and medium-sized enterprises in H2. Corporate demand for loans was stable throughout the year, led by the need to finance working capital and restructure existing obligations. Small and medium-sized enterprises, followed by large enterprises, were the drivers of growth in corporate loan demand from Q3.

Household loans, excluding the exchange rate effect, increased by RSD 127.0 bn or 11.4% in 2020, led by a rise in cash and housing loans. Cash loans gained RSD 65.1 bn in 2020, and housing loans –RSD 50.5 bn. The share of these loan categories in total household loans measured 44.4% and 36.8%, respectively, in December. During 2020, the NBS adopted a set of proactive measures to moderate the consequences of the crisis and create conditions for sustainable growth in household consumption. Regulations were adopted to facilitate terms of repayment of cash, consumer or other loans to households (except housing loans and current account overdrafts). As of the day of their entry into force, banks were encouraged to offer to households the refinancing or change of due date of the above loans approved by 18 March 2020, by two years relative to the current repayment period regime (which entails a maximum repayment period of seven years in 2020 and/or six years in 2021, and eight years for consumer loans approved for

[31] For more detail on loans under the Guarantee Scheme, see: *Inflation Report – August 2020*, Text box 2, pp. 31–33.

[32] The NBS conducts the survey on a quarterly basis, since the start of 2014. Participation is voluntary and the response rate almost 100%.

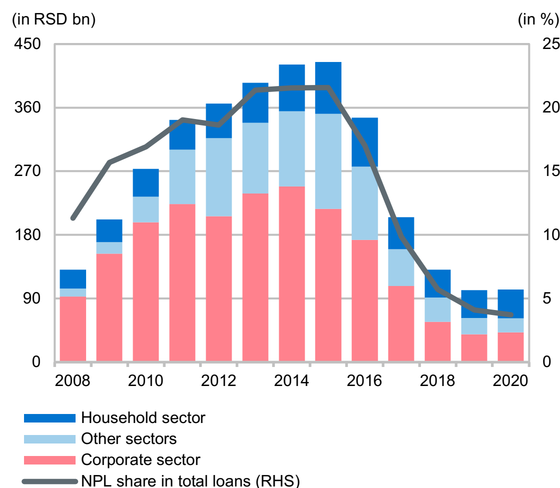
Chart III.4.6 **Change in household credit standards and contributing factors**
(in net %)



Source: NBS.

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

Chart III.4.7 **NPL share in total loans, gross principle**



Source: NBS.

the purchase of motor vehicles regardless of the year). In addition, a decision was adopted allowing banks to extend the repayment period for housing loans by up to five years. Decisions were taken to lower the minimum downpayment required in first-time home purchases to 10% and to reduce the minimum degree of completion of a residential facility required in order for its purchase to be financed from a bank housing loan. Banks were also allowed to approve dinar loans to employed and retired persons (up to RSD 90,000) based on a signed certificate of employment and/or pension only.

The volume of new household loans in 2020 (RSD 430.0 bn) was 19.7% lower than in 2019. The most dominant category were cash loans (57.2%), followed by housing loans (21.4%).

The results of the **bank lending survey** indicate that banks tightened their household credit standards in the first three quarters amid heightened risk perception in pandemic conditions, only to ease them in Q4.[33] Overall, households borrowed at somewhat tighter terms, but the measures taken by the NBS led to an extension of maximum household loan repayment periods from H2. Household loan demand rallied from Q3 and was directed mostly at dinar cash loans and refinancing loans, as well as FX-indexed housing loans.

The gross NPL ratio decreased in 2020 by 0.4 pp to 3.7% in December. Relative to the period immediately before the adoption of the NPL Resolution Strategy, the absolute amount of gross NPLs fell by RSD 327.2 bn (or 76.2%), while the share of NPLs in total loans decreased by 18.7 pp. NPL ratios of the corporate and household sectors decreased by 0.1 pp to 3.1%,[34] and by 0.3 pp to 3.6%,[35] respectively. NPL coverage remained high – allowances for impairment of total loans measured 93.2% of NPLs in December, while allowances for impairment of NPLs equalled 58.5% of NPLs.

High capitalisation and resilience of the banking sector are confirmed by the capital adequacy ratio[36] which equalled 22.4% at end-Q4 2020 (regulatory minimum of 8.0%).

5 Dinarisation

In 2020, the NBS continued to implement activities aimed at promoting the use of the dinar in the Serbian financial system.

Monetary policy measures implemented by the NBS helped preserve price stability, relative stability of the EUR/RSD exchange rate and stability of the financial system, this being the key precondition for further build-up of confidence in the dinar.

[33] For the most dominant loan categories – dinar cash loans and refinancing loans and FX-indexed housing loans.

[34] Includes companies and public enterprises. Looking at companies only, the share of NPLs in total loans came at 3.1% in December, down by 0.2 pp from December 2019.

[35] Including entrepreneurs and private households, this share contracted by 0.3 pp to 3.6%.

[36] Basel III regulatory standard has been applied since 30 June 2017.

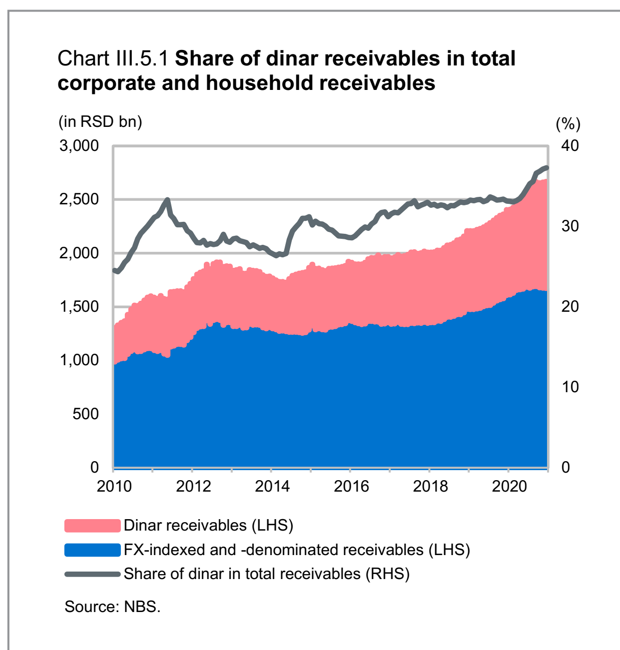


Chart III.5.1 **Share of dinar receivables in total corporate and household receivables**

Source: NBS.

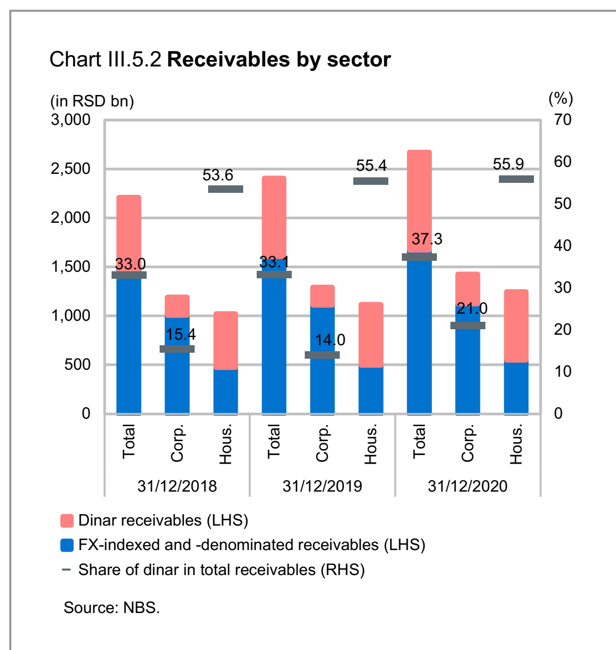


Chart III.5.2 **Receivables by sector**

Source: NBS.

The reserve requirement policy continued to stimulate banks to rely more on dinar sources of funding. Namely, the required reserve ratios on dinar sources of funding are still significantly lower than those on FX sources, and the NBS remunerates required reserves allocated in dinars, and not in foreign currency.

The NBS continued to work on the development of basic FX hedging instruments. In 2020, regular two-week and three-month FX swap auctions were organised, encouraging interbank swap trading and the development of instruments for liquidity management and FX hedging.

With regard to prudential measures contributing to a downsizing of the FX risk and higher dinarisation of the financial system, in July 2020 the NBS adopted a decision according to which banks approving dinar loans under the Law on Establishing the Guarantee Scheme as a Measure of Support to the Economy to Mitigate the Impact of the COVID-19 Pandemic are allowed facilities in the form of higher remuneration rate on dinar required reserves. If a bank approves loans under the Guarantee Scheme at interest rates at least 50 bp lower than the maximum rate prescribed by the above law (1M BELIBOR + 2.5 pp), the NBS will pay to such bank a remuneration rate 50 bp higher than the standard remuneration rate[37] on allocated dinar required reserves in the amount of such loans. In this way, within the existing required reserves system, the NBS supported the anti-crisis measures of the Serbian Government and further encouraged the approval of dinar corporate loans.

The NBS also adopted the measure subject to which the list of collateral eligible for monetary operations of the NBS is expanded to include dinar bonds of companies with acceptable solvency. Over the long term, this measure is expected to contribute to the development of the capital market as it will encourage banks to hold in their portfolios the dinar securities issued by corporates in the domestic capital market as well.

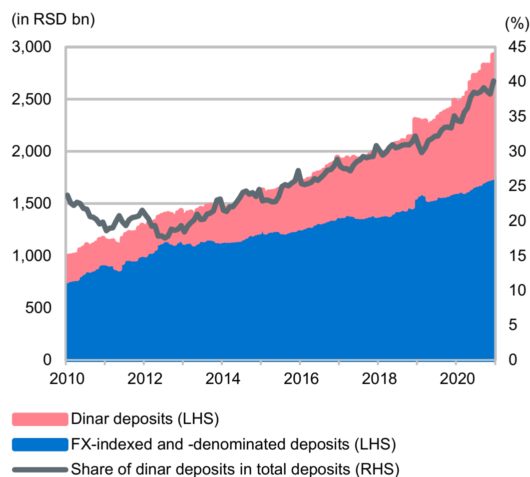
The degree of dinarisation, **measured as the share of dinar receivables** in total corporate and household receivables, increased by 4.2 pp in 2020, to 37.3% at end-December.

Increased dinarisation of receivables in 2020 reflects the rise in dinar corporate lending, mostly under the RS Guarantee Scheme. The Guarantee Scheme provided for lending on relatively favourable terms to entrepreneurs as well as micro, small and medium-sized enterprises, and loans were for a large part disbursed in dinars. As FX-indexed and FX loans to corporates increased much less than dinar loans, the degree of dinarisation of corporate receivables increased by 7.0 pp to 21.0% in late 2020.

The dinarisation of household receivables also increased in 2020, mostly as a result of continued growth in cash loans which are, as a rule, approved almost entirely in dinars. FX-indexed household receivables increased to a relatively smaller degree, on account of continued growth in housing loans. In addition to favourable terms of borrowing and higher disposable income, housing loans

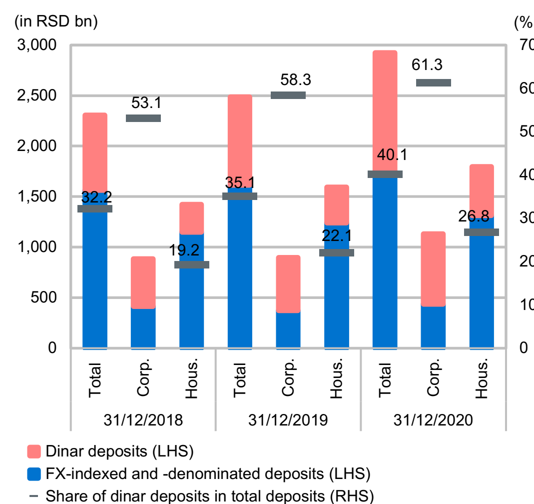
[37] The standard remuneration rate on allocated required reserves currently equals 0.10%.

Chart III.5.3 **Share of dinar deposits in total corporate and household deposits**



Source: NBS.

Chart III.5.4 **Deposits by sector**



Source: NBS.

expanded also thanks to previously adopted measures aimed at facilitating access to housing loans. Stronger growth in dinar than FX-indexed household loans led to a further increase in the dinarisation of household receivables in 2020 (by 0.5 pp) to 55.9% late in the year. This is the highest level of this indicator since its monitoring began (June 2008).

The dinarisation of corporate and household deposits recorded the most significant progress, of key importance for further dinarisation growth. In 2020, this indicator gained 5.0 pp to a record high level of 40.1% at year-end. As the degree of dinarisation of both household and corporate deposits increased, these indicators climbed to record high levels late in the year (26.8% and 61.3%, respectively). Increased dinarisation of corporate and household deposits resulted to a substantial degree from the implementation of the large-scale government assistance package for households and corporates to mitigate the negative economic effects caused by the coronavirus.

Increased deposit dinarisation is still under the favourable impact of continued growth in dinar savings, which reached new all-time highs. Namely, after posting extremely dynamic growth in prior years, dinar savings continued rising dynamically (by 17%) in 2020 as well, despite the coronavirus pandemic, reaching a record high level of RSD 92.5 bn at year-end.[38]

6 Real estate market

Trends in the real estate market indicate that the **COVID-19 crisis did not have a significant negative impact on supply and demand in this market** in 2020.

According to the Republic Geodetic Authority, the **number of traded real estate** equalled 110,758, up by 2.7% relative to 2019. Flats were traded the most (29% share in the total number of traded real estate properties), followed by construction (18%) and agricultural land (16%). The volume of trade in vacation homes increased the most relative to 2019, by as much as 63.2%.

According to the Republic Geodetic Authority, **the average price of** old-build **flats** in the Republic of Serbia was 5.5% higher in 2020 than in 2019, measuring EUR 1,000 per metre square. According to SORS, **the average price of new-build flats** increased by 1.8% y-o-y in 2020 to RSD 166,433 per metre square (i.e. EUR 1,415.5 per metre square). As in 2019, flat prices were the highest in Belgrade, followed by Novi Sad, Čajetina (Zlatibor), Vrnjačka Banja, Kragujevac and Niš.

In the entire real estate market, 14% of total registered contracts were financed from **loans**, while **cash** was used for the payment of the remaining 86%. Land in particular was paid for in cash, while loans were mostly used to finance flat purchases, 33% of which were financed by

[38] Money supply M3 includes only residents' funds. Including non-residents' funds, dinar savings reached RSD 93.1 bn and FX savings – EUR 11.4 bn at end-2020.

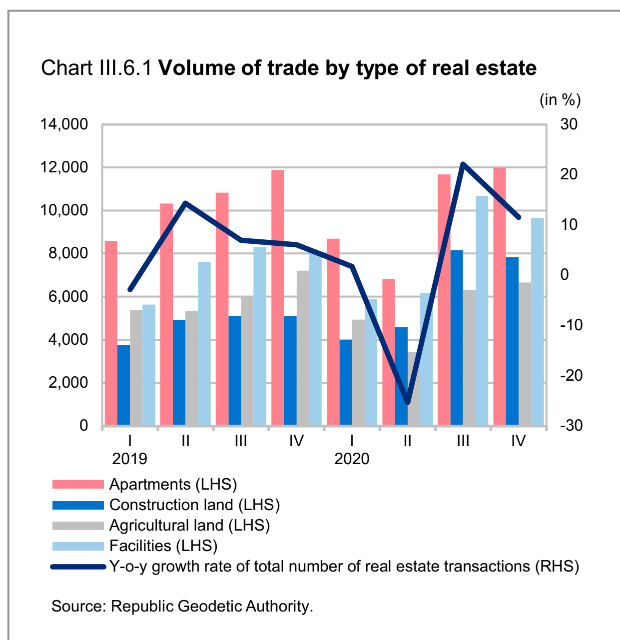


Chart III.6.1 **Volume of trade by type of real estate**

Source: Republic Geodetic Authority.

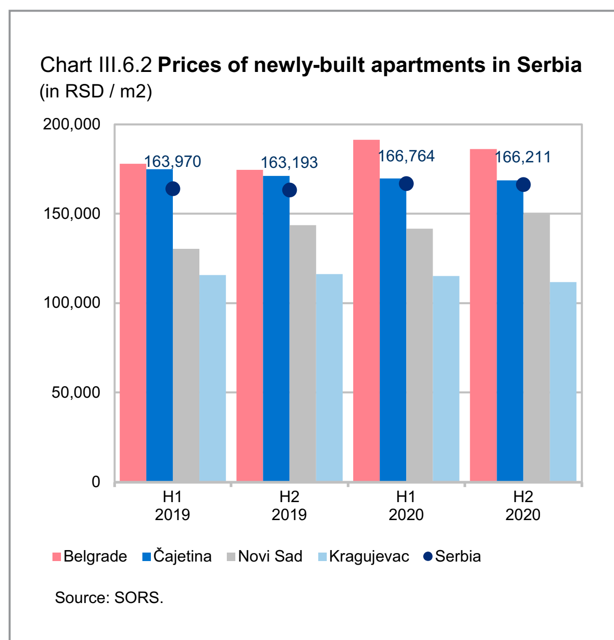


Chart III.6.2 **Prices of newly-built apartments in Serbia**
(in RSD / m2)

Source: SORS.

loans (a higher share than in 2019, when 28% of flat purchases were financed in this way).

When it comes to supply side factors, **the number of issued construction permits** for residential buildings increased by 14.6% y-o-y, while the number of issued permits for flats rose by 6.8% y-o-y. The supply of flats can therefore be expected to increase going forward as well. Continued growth in the number of completed flats since 2016, which in 2019 peaked at 24,803, reflected positively on the increase in supply.

In 2020, the NBS adopted the decision on lowering the minimum degree of completion of a residential facility the purchase of which can be financed from a bank housing loan. This will spur construction activity and push up the supply of flats going forward.

A significant factor behind higher demand for real estate is the **increase in households' disposable income**, supported in 2020 by preserved jobs and wages thanks to the economic assistance package. This is reflected in data on 1.9% employment growth in 2020 and the rise in the average nominal net wage by around 9.4%. Higher disposable income was also supported by lower costs of loan repayment amid reduced interest rates even on outstanding loans. Higher disposable income was further buttressed by the NBS decision to offer the option of extending the repayment period for housing loans by maximum five years. As **interest rates on housing loans** touched a new low in 2020, the interest rate on new euro-indexed housing loans measured 2.63% in December, its lowest level on record.

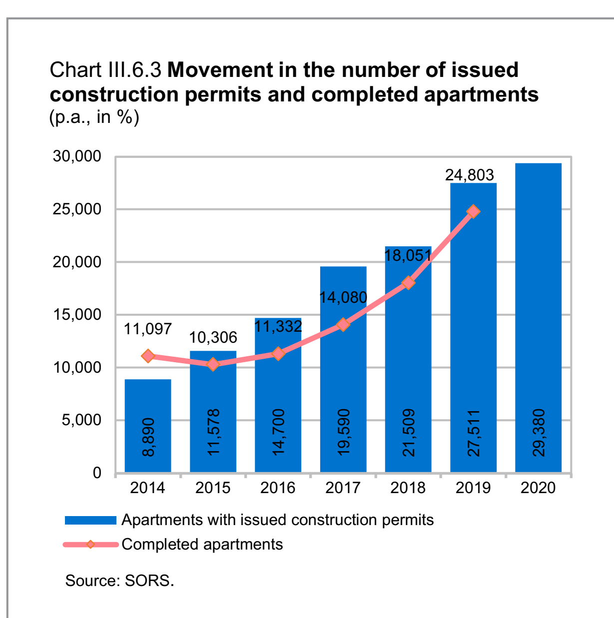


Chart III.6.3 **Movement in the number of issued construction permits and completed apartments**
(p.a., in %)

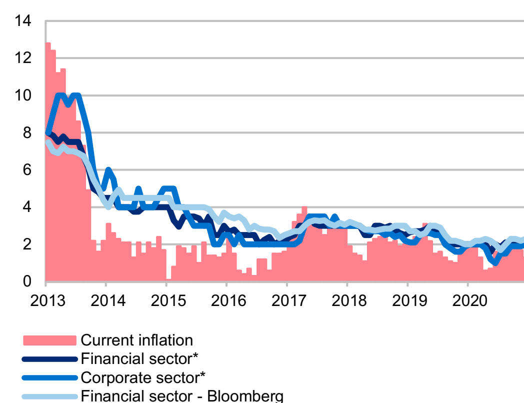
Source: SORS.

7 Inflation expectations

Inflation expectations of the financial and corporate sectors remained low and stable throughout 2020, indicating high credibility of the NBS's monetary policy and signalling that price stability will be maintained over the short and medium run.

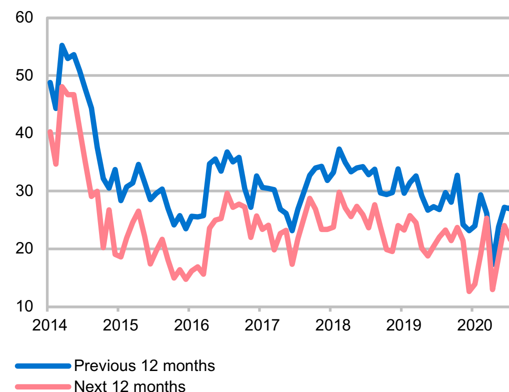
The results of the Ipsos survey reveal that **one-year ahead inflation expectations of the financial sector** moved between 1.6% and 2.1%, and averaged 2.0%, i.e. that they were anchored within the bounds of the target

Chart III.7.1 **Current inflation and one-year ahead inflation expectations***
(y-o-y rates, in %)



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

Chart III.7.2 **Inflation perceived and expected by households***
(in index points)



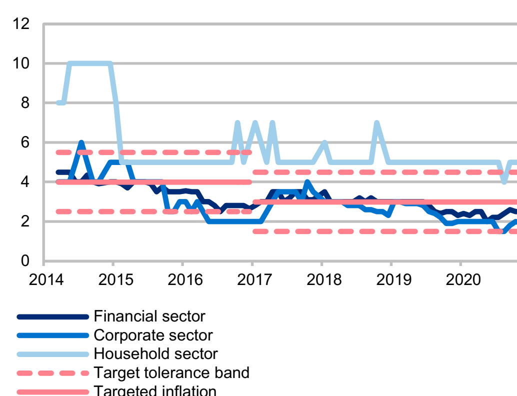
Sources: Ipsos/Ninamedia and NBS.
* Ipsos until December 2014, Ninamedia since December 2014, and Ipsos since January 2018.

tolerance band. Bloomberg survey results signal somewhat higher short-term expectations of the financial sector, which anticipates inflation to range between 1.7% and 2.3% in 2021. Looking at a longer time period, the financial sector has expected price stability and inflation moving within the NBS's target band since 2013.

One-year ahead inflation expectations of the corporate sector moved within the lower bound of the target tolerance band for the largest part of the year. They declined temporarily in Q2, probably reflecting a subdued price of oil and expectations that the pandemic will dent consumer demand. In H2, short-term inflation expectations of corporates increased gradually as economic activity rallied faster than anticipated. In December, they measured 2.0%, while the annual average was 1.7%.

Short-term inflation expectations of households are customarily higher than those of other sectors. In 2020, they ranged between 5% and 8%. The temporary increase in households' inflation expectations largely reflected the impact of the coronavirus pandemic and the psychological effect amid uncertainty over the pandemic's duration. The results of the qualitative **survey of household inflation expectations**[39] indicate that the index of expected inflation continued to record lower values than the index of perceived inflation. Such movements signal that households believe inflation will be lower in the coming 12 months than in the prior year.

Chart III.7.3 **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.

Two-year ahead inflation expectations of the financial sector have been anchored within the NBS target tolerance band since they are monitored (March 2014). In 2020, they ranged between 2.0% and 2.6%. Medium-term expectations of the corporate sector were stable at 2.0% in H1, but fell to 1.5% in July and August. Later in the year, they approached 2.0%, which is how much they measured in December. Medium-term inflation expectations of households were stable at 5.0% almost throughout the year (except in August and December when they measured 4.0% and 6.0%, respectively).

[39] For more detail on qualitative household expectations see: *Inflation Report – February 2016*, Text box 2, p. 15.

8 Fiscal trends

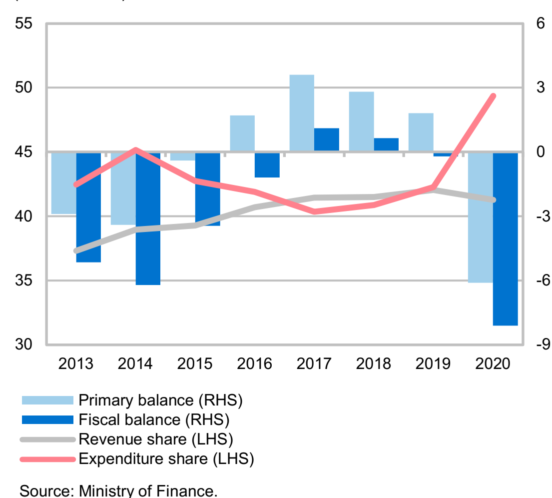
Thanks to the macroeconomic and fiscal stability achieved in prior years, there was ample scope for a powerful fiscal policy response to the COVID-19 pandemic. The adoption of a timely and robust economic assistance package in response to the pandemic, together with increased healthcare expenses, pushed the **fiscal deficit** up to 8.1% of GDP from nearly zero in 2019. The primary deficit, which excludes interest expenses, also increased in 2020 to RSD 332.5 bn, or 6.1% of GDP. Still, as revenue outperformed expectations, the consolidated fiscal deficit was lower than that projected in the Fiscal Strategy for 2021 with Projections for 2022 and 2023 (8.9% of GDP).

In early April 2020, the Government adopted the Programme of Economic Measures to Mitigate the Negative Effects of the COVID-19 Pandemic and Support the Serbian Economy which defined the measures the Government intends to take in order to preserve employment, maintain liquidity of corporate and household sectors and alleviate the negative effects of the pandemic on economic growth. It included tax policy measures, i.e. deferral of payroll taxes and social insurance contributions in the private sector, direct assistance to the private sector through payment of minimum wage in full or in part, and preservation of liquidity and direct assistance to households. The programme was expanded further in July. Including loans under the Guarantee Scheme, it is estimated that the entire programme was worth around 13% of GDP.

The real fall in **consolidated revenue** in 2020 by 2.5% relative to 2019 (to 41.3% of GDP) reflects the introduction of necessary epidemiological measures and subdued consumption, as well as the effect of automatic stabilizers amid diminished economic activity. The decline in revenue was also due to the deferral of payroll taxes and social insurance contributions in the private sector for 2021, as part of the fiscal assistance package to help the corporate sector counter the pandemic. After decreasing in H1, revenue rallied in H2, even faster than anticipated in the Fiscal Strategy for 2021 with Projections for 2022 and 2023.

Within tax revenue, which lost 1.7% in real terms p.a. (contributing 1.5 pp to the real decline in consolidated revenue), revenue from profit tax decreased the most (4.5% in real terms), reflecting the anticipated lower corporate profitability during the pandemic. Revenue from excise tax fell by 1.7% in real terms, as reduced population

Chart III.8.1 **General government fiscal and primary budget balance**
(in % of GDP)



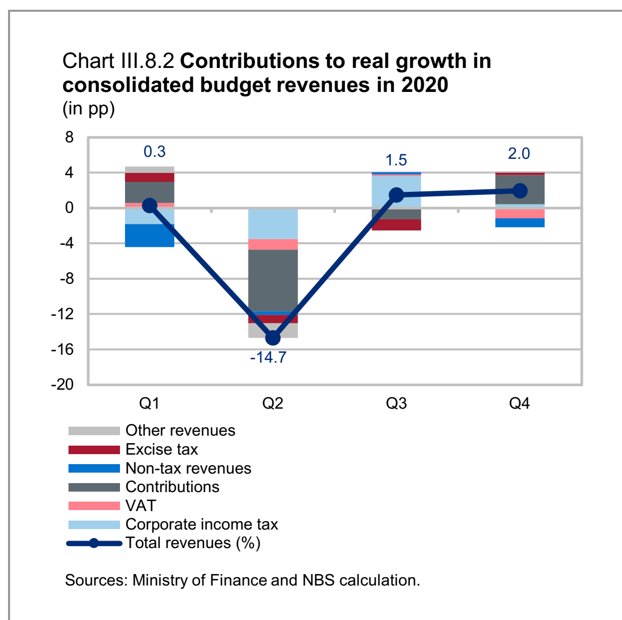
Source: Ministry of Finance.

Table III.8.1 **Programme of Economic Measures to Mitigate the Negative Effects Caused by the COVID-19 Pandemic and Support the Serbian Economy**

First package of measures (March 2020)
I Group – Tax policy measures
1. Deferred payment of payroll taxes and contributions in the private sector with subsequent repayment of liabilities in instalments (starting from 2021 at the earliest)
2. Deferred payment of income tax advances in Q2 2020
3. Exemption of donors from the obligation to pay VAT
II Group – Direct assistance to the private sector
4. Payment of three minimum wages to entrepreneurs that are subject to the flat rate tax and pay tax on actual income, and to micro-, small- and medium-sized enterprises in the private sector
5. Payment of assistance to large private sector enterprises in the amount of 50% of net minimum wage for employees on paid temporary leave on employer's decision
III Group – Measures to preserve liquidity
6. Financial support to the corporate sector through the Development Fund
7. Corporate support guarantee scheme
IV Group – Other measures
8. Moratorium on dividend payments until the end of 2020, except for public enterprises
9. Direct assistance to all adult Serbian citizens in the dinar equivalent of EUR 100
Additional package of measures (July 2020)
1. Payment of aid equalling 60% of the minimum wage to entrepreneurs, micro, small and medium-sized enterprises
2. Deferred payment of tax and contributions for one month
3. Direct support to hotel owners - EUR 350 per bed, EUR 150 per person

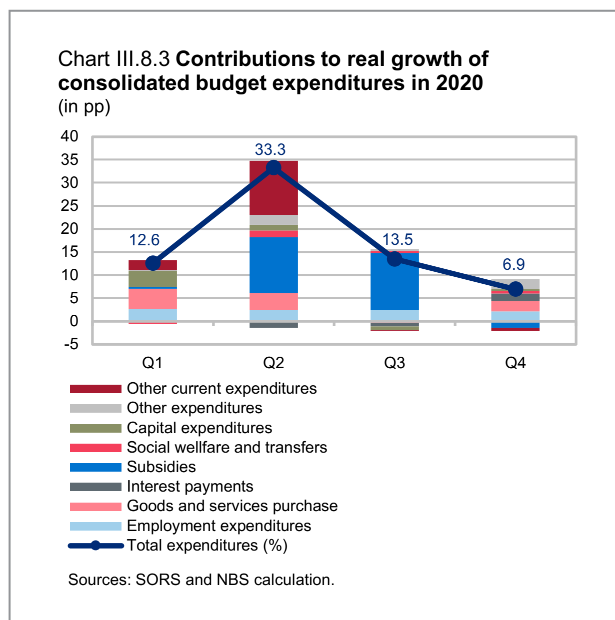
Source: Ministry of Finance.

Chart III.8.2 **Contributions to real growth in consolidated budget revenues in 2020**
(in pp)



Sources: Ministry of Finance and NBS calculation.

Chart III.8.3 **Contributions to real growth of consolidated budget expenditures in 2020**
(in pp)

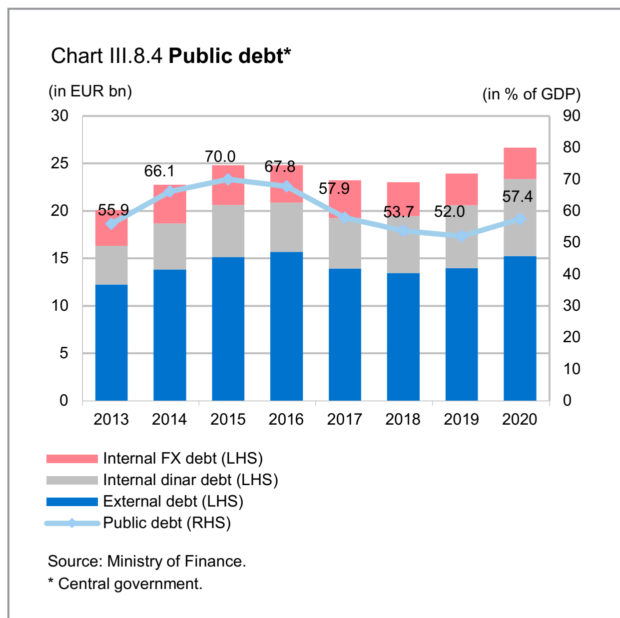


Sources: SORS and NBS calculation.

mobility and lack of transit transport in the summer months resulted in lower revenue from excise tax on petroleum products. Value added tax decreased by as much, with VAT in the country higher by around RSD 21 bn relative to 2019, and VAT from imports down by almost the same amount. VAT revenue decreased on account lower turnover in service activities amid a slackening of personal consumption and fewer foreign tourists. Revenue from payroll taxes and contributions decreased by 1.3% and 1.8%, respectively, as a result of the allowed deferral of tax obligations. Only customs duties recorded real growth of 6.3% relative to 2019. Subdued economic activity and limited population mobility brought non-tax revenues down by 7.7% in real terms (contributing 0.9 pp to a real fall in consolidated revenue), with grants lower by 26.1% in real terms relative to 2019 (contributing 0.2 pp to the reduction in total revenue).

Relative to 2019, **consolidated expenditure** expanded by 16% in real terms in 2020 to 49.4% of GDP, due to the implementation of the assistance package by the Government in order to contain the fallout from the pandemic. The real increase in consolidated expenditure was mostly guided by higher subsidies (contributing 5.5 pp to consolidated expenditure growth), other current expenditure (3.0 pp), procurement of goods and services (2.4 pp) and employee expenses (2.4 pp). The payment of direct assistance to entrepreneurs and corporates, and later also higher subsidies for agriculture, doubled the subsidy expenditure to RSD 251.5 bn in 2020, while one-off financial assistance to all citizens of legal age pushed up other current expenditure by RSD 72 bn. Employee expenses gained 10.4% in real terms (RSD 62.6 bn) due to higher public sector wages, primarily in healthcare, and increased employment in sectors engaged in controlling the epidemiological situation. Expenses for procurement of goods and services went up by real 14.5% (RSD 61.7 bn) relative to 2019 on account of purchases of medical supplies. Capital expenditure climbed by 8.5% in real terms (RSD 27 bn), spurred by investment in new healthcare capacities and equipment and larger-scale investment in infrastructure projects, which helps raise potential output and improve economic growth outlook going forward.

Investors preserved their confidence in the sustainability of Serbia's public finances even in the year of the pandemic. When **eurobonds were issued** in the international financial market, investor demand exceeded the offered value of the issue, enabling favourable terms of borrowing. In May 2020, a seven-year bond worth EUR 2 bn was issued, in order to finance the programme of financial support to the economy. Ten-year bonds, issued in dollars in November 2020, were mostly used for buyback of costlier bonds issued in 2011. At the same time, in order to hedge against the FX risk, liabilities under the issued eurobonds in dollars were converted into euros in a swap transaction. The mentioned swap transaction and early buyback of a part of dollar debt, together with currency changes, i.e. the strengthening of the euro against the dollar, resulted in the lowering of the share of dollar debt in total central government public debt from 20.1% in 2019 to 13.2% in 2020. At the same time, the share of euro debt increased from 44.2% to 49.6% in 2020, while the share of dinar debt gained 2.8 pp to 30.5% at end-2020.



The downward trend **in the share of public debt in GDP** in place since 2016, buttressed by the synergy of fiscal consolidation, favourable terms of financing, stable exchange rate, low and stable inflation and economic growth, created substantial fiscal space for the Serbian Government's response at the outbreak of the pandemic. This space was used efficiently, resulting in the adoption of a robust package of measures to preserve production capacities and jobs in the majority of sectors. The increase in general government public debt in 2020 by 5.3 pp to 58.2%, and in central government public debt to 57.4% of GDP, temporarily halted the downward trajectory of the share of public debt in GDP. Debt still remained below the Maastricht criterion of 60% of GDP, as GDP declined less than in most other European economies and terms of financing remained favourable. The share of public debt in GDP increased less than in most countries, particularly those which took similar-scale fiscal measures as Serbia. All of this will help the share of public debt in GDP to resume the downward path from 2022 as anticipated, despite the fact that fiscal support will continue in the coming period as well, though on a smaller scale than in 2020.

9 Aggregate demand

Private consumption and investment saw robust growth in Q1, but slowed with the outbreak of the COVID-19 pandemic. Government consumption and investment maintained positive dynamics throughout the year and, together with a build-up of inventories, resulted in unchanged domestic demand in 2020. Net exports provided a negative contribution to GDP, which declined by 1% in real terms at annual level.

Domestic demand

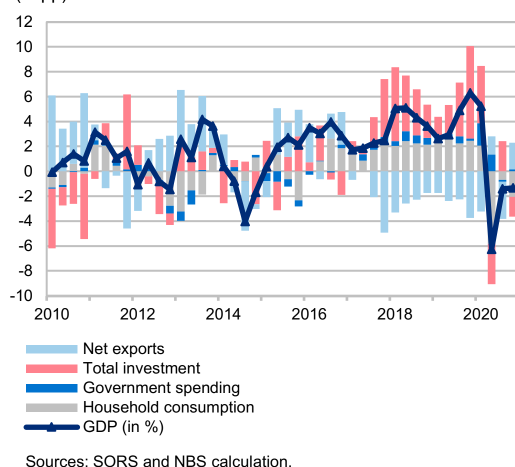
According to our estimate, the outbreak of the COVID-19 pandemic and the resulting containment measures induced a 2.5% fall in **private consumption** in 2020 (contributing -1.7 pp to GDP). The decline in private consumption is signalled by activity indicators in service sectors. Tourism and catering were hardest hit by the crisis, as evident from an 18.6% slump in the number of overnight stays in 2020 and a 25.8% turnover decline in catering. Containment measures also limited population mobility, directly affecting activity in passenger transport which, according to the SORS, dwindled by 49.3% in 2020. Also, consumption directed at recreation, cultural and sports events slumped notably during the year. On the other hand, retail trade turnover, the least affected by the crisis, began to record y-o-y growth as of May already, its annual growth equalling 4.5%.

The sources of private consumption did not diminish during the pandemic thanks to the measures of the Serbian Government and the NBS. Measures to preserve employment through wage subsidies up to minimum wage amount were taken several times during the year and had a decisive effect on the continuation of positive dynamics in the labour market in 2020, as reflected in real growth in total wages by 11.8%. Higher disposable income of households was also supported by the decision of the National Bank of Serbia allowing suspension of loan repayment from April until June and from August until October, which further bolstered consumption. The lowering of the key policy rate from 2.25% to 1% at year-end spurred a rise in loans intended for consumption. On the other hand, economic activity slowdown abroad and reduced labour force mobility on account of more difficult cross-border travels resulted in a lower inflow of remittances by 17.2% in 2020.

Government consumption gained 5.6% in 2020 (contributing 0.9 pp to GDP). In addition to higher outlays for public sector wages, this can also be associated with increased purchases of medical supplies during the pandemic.

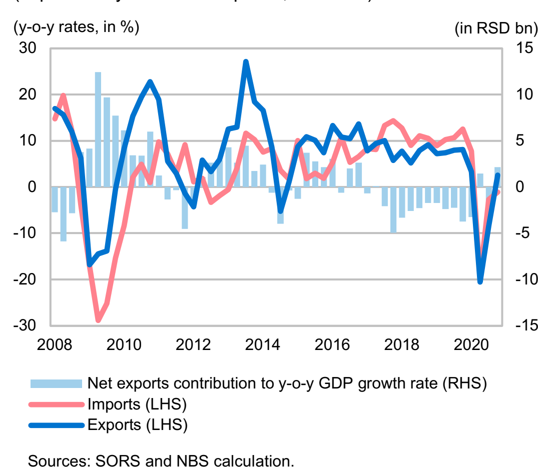
Private sector investment in fixed funds decreased by 6.7% (contributing -1.2 pp to GDP) on account of increased uncertainty due to the pandemic. Fewer investments were financed from own sources in 2020 as it was more difficult for corporates to do business during the crisis and future financial and business results became more uncertain. The amount of new investment loans was down by 27.1% from last year. FDI slowed as well amid the global COVID-19 crisis, though remaining significant – inflow measured EUR 3.0 bn in 2020 after

Chart III.9.1 **Contributions to y-o-y GDP growth rate – expenditure side**
(in pp)



Sources: SORS and NBS calculation.

Chart III.9.2 **Exports and imports of goods and services**
(in previous-year constant prices, ref. 2010)



Sources: SORS and NBS calculation.

the record high level of EUR 3.8 bn in 2019. Subdued investment activity is also signalled by the production of machinery and equipment which slumped by 6.1% each in 2020.

Intense implementation of government-financed infrastructure projects in the areas of transport and energy, continued in 2020. Investment in the healthcare sector increased substantially, on account of equipment purchases and hospital construction. As a result, total **government investment** gained 8.6% in 2020 (contributing 0.5 pp to GDP). Consequently, total fixed investment decreased by only 2.8% in 2020.

A positive contribution to GDP growth also came from a rise in **inventories** (contributing 1.5 pp to GDP), as confirmed by movement in inventories of finished industrial products which, late in the year, increased by 1.8% y-o-y.

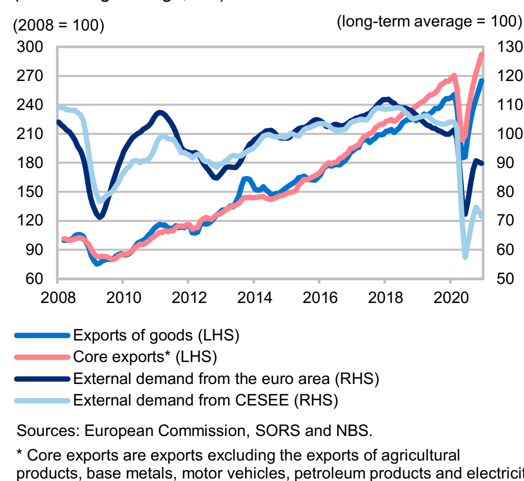
Net external demand

After a sharp slump caused by the pandemic, Serbia's foreign trade recovered from May onwards, displaying V-shaped movement in 2020. The contribution of net exports to GDP was negative at annual level, in real terms, measuring -1.0 pp in 2020.

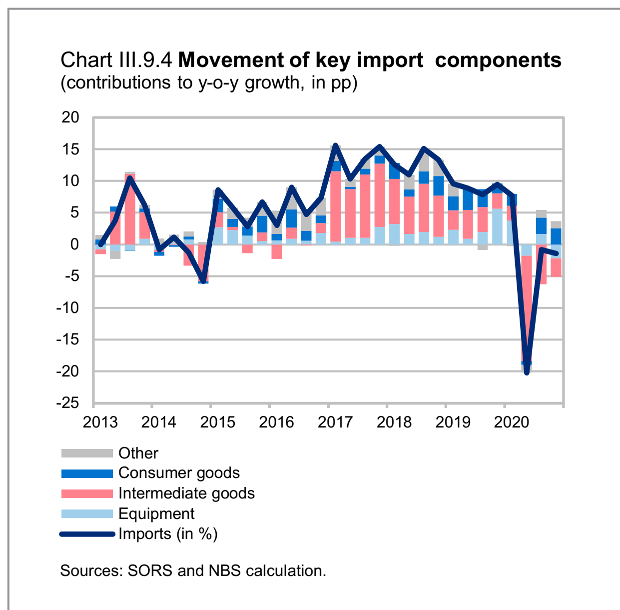
Despite the recovery in H2, containment measures and a sharp drop in external demand triggered by the pandemic led to a 2.3% decline in **commodity exports in euro terms** in 2020, according to balance payments data. The drop was due to lower manufacturing exports (by 5.0%), whereas agricultural exports went up by 20.2% thanks to several consecutive excellent seasons. The negative effects of the crisis on export began to show in March, but were particularly pronounced in April. With a gradual easing of containment measures and the opening of economies, recovery began in May. The export of most sectors thus either reached or approached their pre-crisis levels in H2 (the average value recorded in the January-February period, s-a). At the level of the year, exports increased in 9 out of 23 manufacturing sectors, including the production of electrical equipment, food, tobacco, pharmaceutical and chemical products.

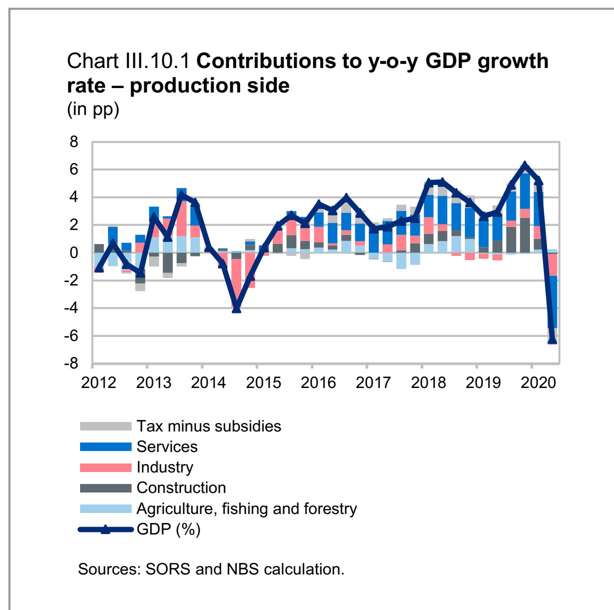
As the economy contracted, **commodity imports** in euro terms declined by 3.5% in 2020. According to EU classification, this was due primarily to reduced import of energy (-34.2%), reflecting both diminished industry

Chart III.9.3 **Movement of indicators of external demand for Serbian exports**
(3m moving avarage, s-a)



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





needs and lower oil prices. Despite the recovery begun in late Q2, the import of intermediate goods (-4.5%) and capital goods (-2.7%) also decreased in 2020. The import of consumer goods, though subdued in April and May, recovered fully, providing a positive contribution to annual import growth. Similar trends are suggested by the BEC classification – imports declined primarily on account of the lower import of intermediate goods (-10.6%), while higher import of equipment (1.6%) and consumer goods (8.3%) worked in the opposite direction.

The pandemic also bore down on **foreign trade in services**. Owing to somewhat faster recovery after the easing of containment measures, the decline in exports in 2020 (-11.1%) was smaller than in imports (-14.1%). Tourism and transport services were the hardest hit by the new crisis, with the import of these services being affected more than their export. At the same time, ICT services contributed to export growth, and business and other services to import growth.

Commodity export-to-import ratio increased by 0.8 pp in 2020 to 75.5%. Including services, it rose by 0.6 pp to 84.3%.

10 Economic activity

Economic activity contracted by 1% in 2020 in the conditions of the pandemic. This is among the best outturns in Europe, entirely in line with the projections the NBS published in October. The economic activity downturn in 2020 is almost entirely due to subdued activity in the service sectors, mostly on account of public health measures which restricted the activity of some service sectors, particularly in Q2. Industry gross value added gained 0.3% in 2020 despite more difficult business conditions due to the pandemic, while agriculture recorded somewhat stronger growth (4.5%).

On a quarterly level, following the robust 5.2% y-o-y economic activity growth in Q1, the spread of the coronavirus pandemic caused the shutting down of economies, lowering of external demand and disruptions to supply chains. As a result, the economic activity declined by 6.3% y-o-y in Q2. Recovery began in Q3, when the decline slowed to 1.4% and then to 1.0% y-o-y in Q4.

Industrial production (contributing 0.1 pp to GDP in 2020) returned to its pre-crisis level in May, and its growth was led by increased activity in mining and energy sectors. Manufacturing did not decline either

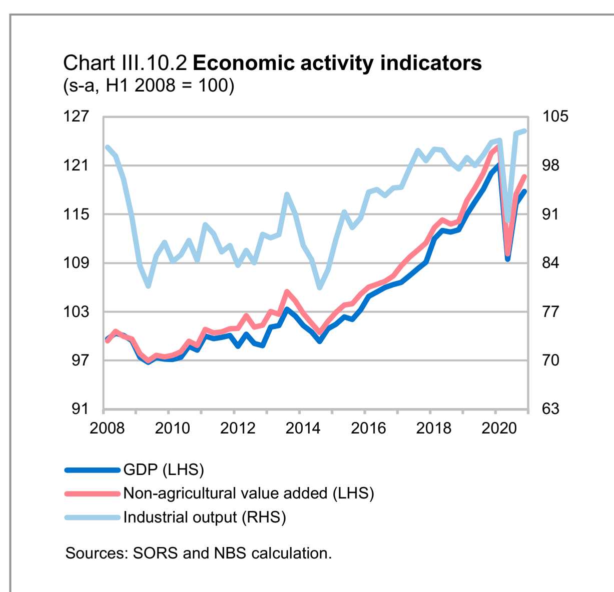
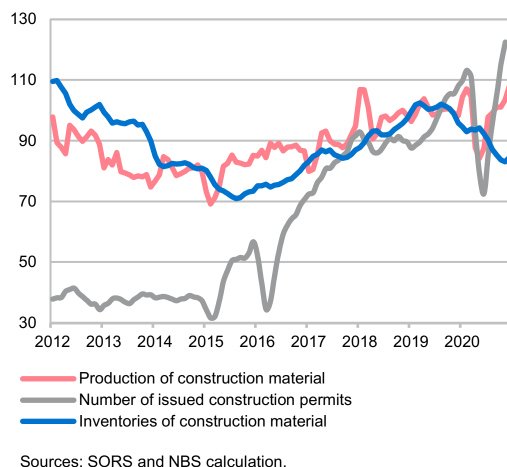
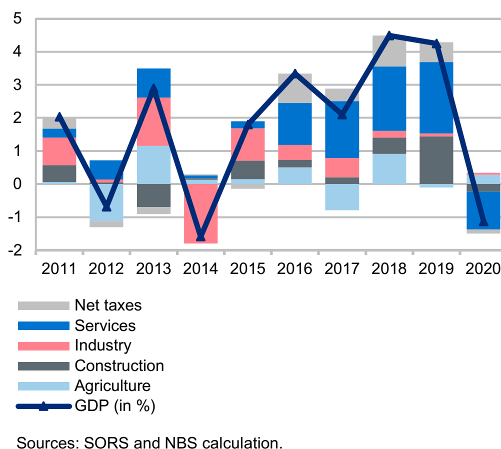


Chart III.10.3 **Construction activity indicators**
(quarterly averages s-a, 2019 = 100)



Sources: SORS and NBS calculation.

Chart III.10.4 **Contributions to annual GDP growth rate – production side**
(in pp)



Sources: SORS and NBS calculation.

(annual growth measured 0.1%), despite the hefty fall in external demand.

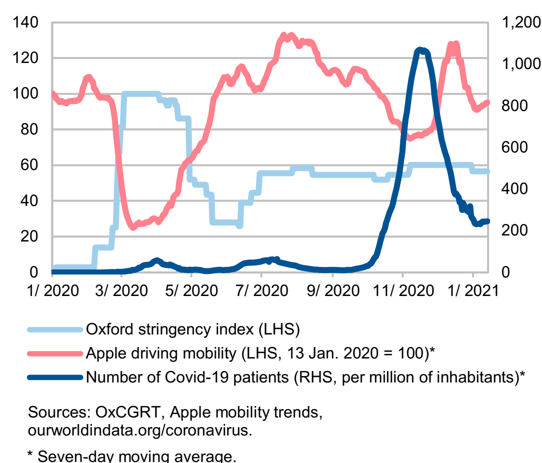
This is confirmed by the physical volume of production in manufacturing, where export-oriented activities, which decreased the most in Q2, provided the largest negative annual contribution (production of motor vehicles, rubber and plastic products and production of base metals). It should be noted that most sectors reached their pre-crisis production levels in Q3 already, while Q4 saw further growth. At annual level, 11 sectors recorded activity growth, with the largest positive contribution coming from higher production of food products, petroleum products, electrical equipment and metal products.

Despite the coronavirus pandemic, intense implementation of infrastructure projects continued. Along with sustained **construction** of flats, this triggered modest construction sector growth in H1. However, construction activity slowed y-o-y in H2 due to the high base effect, declining by 5.1% at annual level according to the SORS estimate (contributing -0.3 pp to GDP). Construction industry indicators also signal that no major changes occurred in 2020, as the production of construction material remained unchanged from a year earlier, while the number of issued construction permits gained 3.5% relative to 2019.

The largest negative contribution to economic activity in 2020 came from the **service sectors** (a decline by 1.6% aggregately, contributing -0.8 pp to GDP), as activity in some service sectors plummeted with the introduction of containment measures. The decline was particularly sharp in tourism, where the number of overnight stays slumped by 38.9%, mostly due to an over 75% decline in the number of foreign tourist arrivals in 2020. **Catering and passenger transport** also suffered substantial losses after the pandemic broke out, as did **entertainment, recreation and culture**. Conversely, activity in trade went up, with real turnover rising by 4.3% in 2020. **Retail trade** returned to its pre-crisis level in May and continued to rally in the coming months despite the tightening of epidemiological measures late in the year. At annual level, its growth measured 4.5%.

According to the SORS estimate, **agricultural activity** increased by 4.2% in 2020 (contributing 0.3 pp to GDP). The agricultural season was better than average for the third year in a row, thanks primarily to higher production of wheat, corn and soybean.

Chart III.10.5 **Population mobility in Serbia depending on government measures and course of the epidemic**



Sources: OxCGRT, Apple mobility trends, ourworldindata.org/coronavirus.

* Seven-day moving average.

Smaller tax revenue due to the COVID-19 crisis, along with a simultaneous increase in agricultural subsidies, caused a decline in **net taxes** by 1.6% at annual level, providing a negative contribution of -0.3 pp to GDP.

11 Wages and employment

Timely and ample economic support to the Serbian economy during the pandemic enabled the preservation of wages, continued private sector employment and a further fall in unemployment, helping **the domestic labour market avert more serious consequences of the global crisis in 2020**. The unemployment rate remained single digit in 2020 (9.0% on average,), while formal employment in the private sector increased by close to 42,000 persons on average. The **average nominal net wage climbed to RSD 66,092 in December** (i.e. EUR 562).

In 2020, the average nominal net wage was RSD 60,073, up by 9.4% from a year earlier. **The average wage increased in both private** (9.1%) **and public sectors** (10.6%). By sector, the ICT sector recorded the largest relative wage increase (22.8%), as did health and social protection (17.8%), mostly reflecting higher wages of health workers who bore the heaviest burden of the pandemic. Though somewhat more slowly than in the earlier period, average wages increased across other sectors of the economy as well – agriculture (10.2%), industry (8.4% aggregately) and trade (7.5%), where the private sector is dominant. **Wages of persons employed in catering and tourism also increased** (7.3%). These sectors, which were the hardest hit by the pandemic, were paid another (sixth) minimum wage in December based on a decision of the Serbian Government. A higher average wage was also recorded in government administration (8.1%) and education (7.1%), where the public sector is dominant.

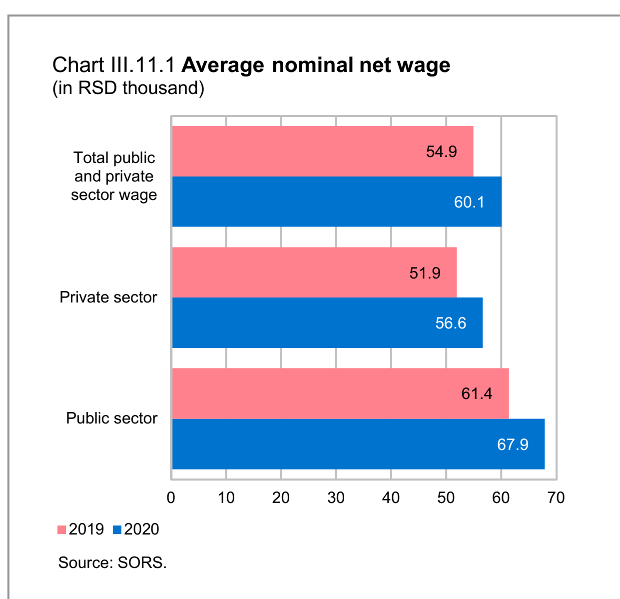
Considering the projected economic recovery, in September the Serbian Government decided to **raise the minimum labour price from RSD 172.54 per hour to RSD 183.93 per hour** (starting from 1 January 2021), which will push the average minimum wage this year up by 6.6% (i.e. by around RSD 2,000) relative to 2020. The anticipated further increase in the public sector average wage, along with a higher minimum wage, will additionally spur the rebound in domestic demand and help preserve households' living standards.

Guided by higher wages and employment, the **total nominal net wage bill**, as a dominant source of consumer demand, **increased by 13.6% in 2020**, mostly on the back of the rise in the nominal net wage bill in the private (15.3%) and the public sector (10.4%).

Amid tighter containment measures, overall economic productivity decreased by 2.9%, according to our estimate. **The fall in productivity was**, however, **much relieved** by the timely taken monetary and fiscal stimuli.

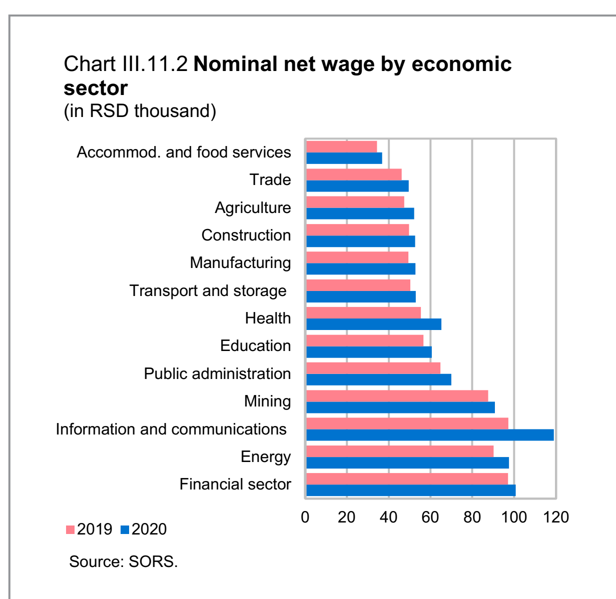
The resilience of the domestic labour market in new circumstances is also signalled by the **1.9% average increase in total formal employment in 2020**, which is slightly less than in 2019 (2.0%). According to the SORS data, obtained from the database of the Central Register of Compulsory Social Insurance, employment with legal persons and entrepreneurs increased on average in 2020 (by around 40,000 persons and 7.500 persons,

Chart III.11.1 **Average nominal net wage**
(in RSD thousand)



Source: SORS.

Chart III.11.2 **Nominal net wage by economic sector**
(in RSD thousand)



Source: SORS.

respectively), while the number of individual agricultural **producers decreased (by around 5.500 persons). The recorded increase in formal employment,** therefore, **took place almost entirely in the private sector**, which employed 1.65 mn persons at end-2020, while the number of public sector employees remained almost unchanged from 2019 (around 600,000 persons). Control of public sector employment will be relaxed in early 2021, as new legal regulations prescribe that public institutions, establishments and enterprises may employ up to 70% of the number of persons whose employment was terminated in the prior year, subject to no special permits or consents.

The largest number of new recruits in 2020 were in manufacturing (around 16,000 persons), construction (around 10,000 persons), ICT sector (around 6,000 persons) and trade (around 5,000 persons). It is encouraging that jobs were also created in transport and warehousing (close to 4,000 persons), and catering and tourism (around 3,000 persons). This was supported by the gradual easing of containment measures from May and government assistance to employers and employees.

According to the National Employment Service, **total registered unemployment fell below half a million for the first time in September 2020**, measuring 491,347 persons in December, which is around 15.500 unemployed persons less than a year earlier. Though it declined more slowly in 2020 due to the pandemic, unemployment decreased on average in all occupation groups, primarily those in industry (by around 8,000 persons) and trade, catering and tourism (by around 2,000 persons). They were followed by occupation groups in agriculture, construction and transport where unemployment fell by a total of around 3,000 persons in 2020.

Table III.11.1 **Formal employment and unemployment**
(y-o-y growth rates, period average)

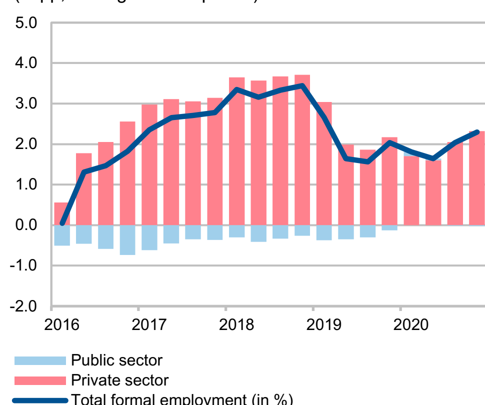
	2020			
	Q1	Q2	Q3	Q4
Total number of formally employed	1.8	1.6	2.0	2.3
Employed with legal persons	2.4	2.2	2.3	2.5
Entrepreneurs and their employees	1.0	1.1	2.7	3.2
Individual farmers	-7.4	-7.8	-7.6	-7.8
Unemployed	-9.1	-3.3	-0.4	-1.9
First-time job seekers	26.3	11.3	12.3	8.9
Used to be employed	-28.5	-14.8	-11.4	-12.0

Sources: SORS and NES.

The available results of the Labour Force Survey, referring to formal and informal labour market segments, **confirm labour market resilience** despite the fallout from the pandemic. The participation rate of working age population reached 69.3% in Q4 2020, which is above the pre-crisis level (Q4 2019), while the employment rate returned to its pre-crisis level measuring 49.7%. This offset the fall in these indicators in Q2, caused primarily by the fact that job seeking was more difficult during the state of emergency and by reduced participation of informally employed persons. On average, participation and employment rates measured 67.7% and 49.1%, respectively, in 2020, similarly as in 2019. The **unemployment rate** decreased by 1.4 pp in 2020 to 9.0% on average, and **remained single digit throughout the year, equalling 9.9% in Q4**.

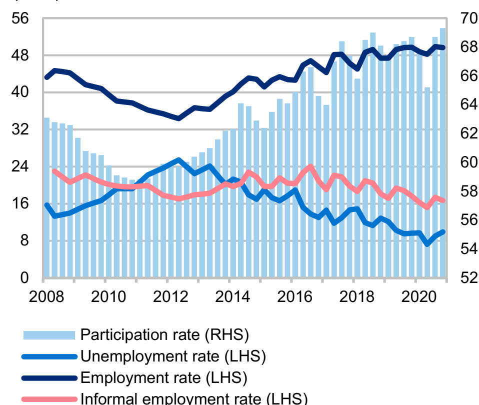
In addition to main indicators, the survey also monitors **additional indicators** to ensure a more comprehensive coverage of labour market developments during the

Chart III.11.3 **Composition of y-o-y growth in formal employment**
(in pp, average for the period)



Sources: SORS and NBS calculation.

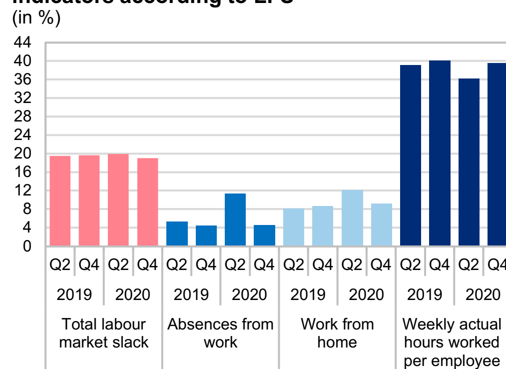
Chart III.11.4 **Labour market indicators under the Labour Force Survey**
(in %)



Source: SORS.

pandemic.[40] Though the above indicators confirm the occurrence of a short-term exogenous disruption in Q2, most of the consequences of the **labour market slack**,[41] which equalled 19.0% in Q4, down by 0.6 pp from a year earlier, were removed in Q3 and Q4 already, with the gradual easing of containment measures. In the same period, **absence from work** and **work from home indicators**[42] increased slightly by 0.1 pp and 0.5 pp to 4.6% and 9.2%, respectively, in Q4. **Hours actually worked per employee** equalled 39.5 hours per week, which is almost unchanged from a year earlier. All of the above indicates that the conditions and activities in the labour market stabilised in late 2020 and for the most part returned to their pre-crisis levels, thanks primarily to comprehensive government support.

Chart III.11.5 **Additional labour market indicators according to LFS**
(in %)



Source: SORS.

[40] For more information, see: *Inflation Report – February 2021*, Text box 4, p. 49.

[41] **Labour market slack** represents the participation of 1) the unemployed, 2) employees who work less than full time and 3) potential labour force in extended labour force, where the extended labour force includes all employed and unemployed persons together with potential labour force (those who can work but do not look for job and those who are looking for a job but cannot start working immediately).

[42] **Absence from work** is measured as the share of employed persons who are absent from work in the total number of employed persons, while work for home is measured as the share of employed persons who worked from home in the total number of employed persons.

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