National Bank of Serbia

Macroeconomic Developments in Serbia

November 2021

National Bank of Serbia

Sustained Macroeconomic Stability

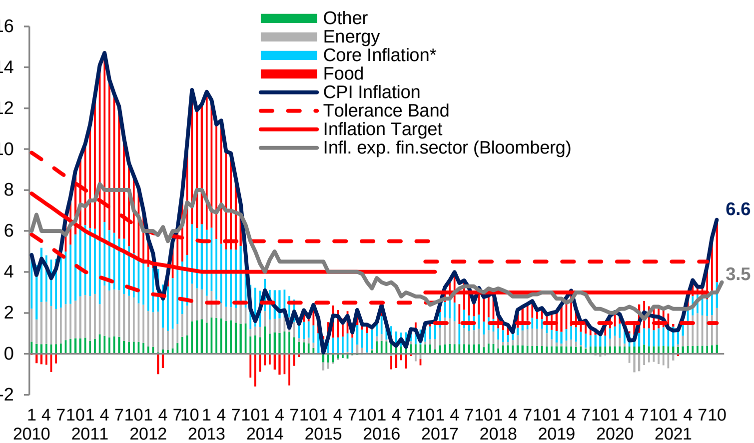
- COVID-19 and global slowdown, according to available data, had a less severe impact on Serbia compared to most European countries, due to achieved macroeconomic and financial stability, growth momentum, fiscal space created in previous years, large and timely monetary and fiscal package, and structure of the economy.
- GDP decline in 2020 amounted to just 0,9%; recovery to pre-crisis level was accomplished already in Q1 2021, while in Q2 GDP growth reached 13.7% y/y. According to SORS flash estimate growth in Q3 was at a level of 7.4%, surpassing our expectations third quarter in a row.
- Due to favorable outcome in Q3 2021, NBS additionally revised its GDP growth projection for 2021 from 6.5% to a range from 6.5% - 7,0%, with symmetrical risks. Also, having in mind new investment cycle, and planned infrastructure projects in following ten years, we revised upward the projection of medium-term growth from 4% to range from 4%-5%.
- The adopted economic policy measures (5.8 billion euros, about 13% of GDP in 2020) minimized the decline in GDP in 2020, while an additional package of 2.2 billion euros (4.3% of GDP) in 2021 will contribute to further GDP growth and its return to the path of sustainable growth in the medium term.
- According to our projection, inflation will return to the target tolerance band in mid-2022 and stabilize near the target midpoint in the second half of the year.
- In nine months of 2021, current account deficit of EUR 1.3 bn was recorded, with the continued high inflow of FDI (EUR 2.9 bn).
- Owing to product and geographic diversification and export oriented investments, goods exports in Jan-September 2021 increased by as much as 30.2% y/y.
- According to new LFS methodology unemployment rate stood at 11.1% in Q2 2021, with high participation rate and formal employment.
- During this year, Moody's has upgraded Serbia's credit rating (March 2021), while Fitch and S&P have confirmed a credit rating (September and June 2021), acknowledging the maintained macroeconomic stability and favourable outlook, as well as adequate economic policy response before and during the pandemic.
- As of June 30, 2021, RSD bonds of the Republic of Serbia have been included in the renowned bonds index - J.P. Morgan GBI-EM index. In September 2021 public debt of central government stood at the level of 56.5% of GDP.
- In November 2021, the NBS decided to keep the key policy rate unchanged at 1.0%, but to further raise average repo rate at reverse repo auction.
- Banking sector stability has been preserved and further reinforced. The share of NPLs stood at 3.55% in September 2021, still below pre-crisis level.

Inflation Above the Target Tolerance Band, Core Inflation Within the Target Band

Increase of inflation was led by temporary factors which is also indicated by…

Chart 1 **CPI developments**

(y/y rates, %) and contributions (pp)

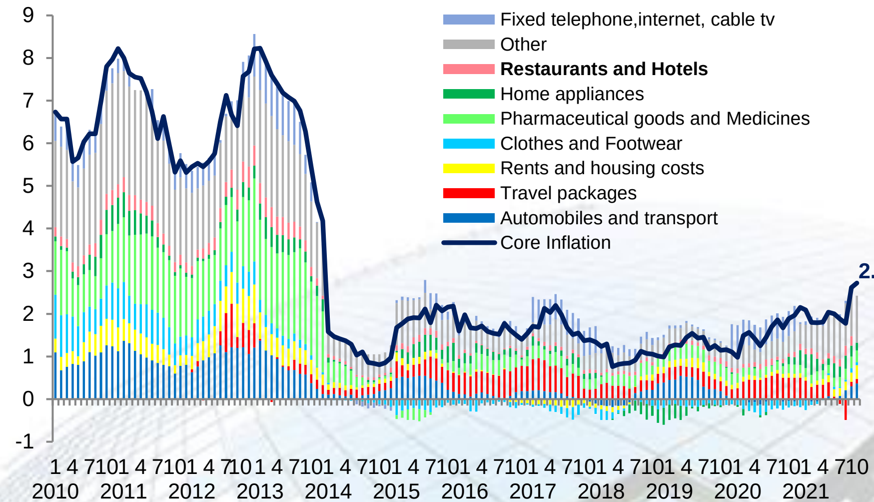


- Inflation was kept firmly in check in the past eight years, moving at level of around 2.0% on average.
- The absence of the higher inflation at the beginning of 2021 was the result of lower growth of food prices (primarily vegetables.
- Higher inflation since April is a consequence of temporary factors - rising vegetable and global oil prices, as well as the exceptionally low base from the same period last year.
- In October overall inflation stood at 6.6%. Almost 3/4 of y-o-y inflation was determined by factors that monetary policy cannot influence – the prices of food and energy.

…relatively stable movements of core inflation

Chart 2 **Contributions to y/y core inflation**

(pp)

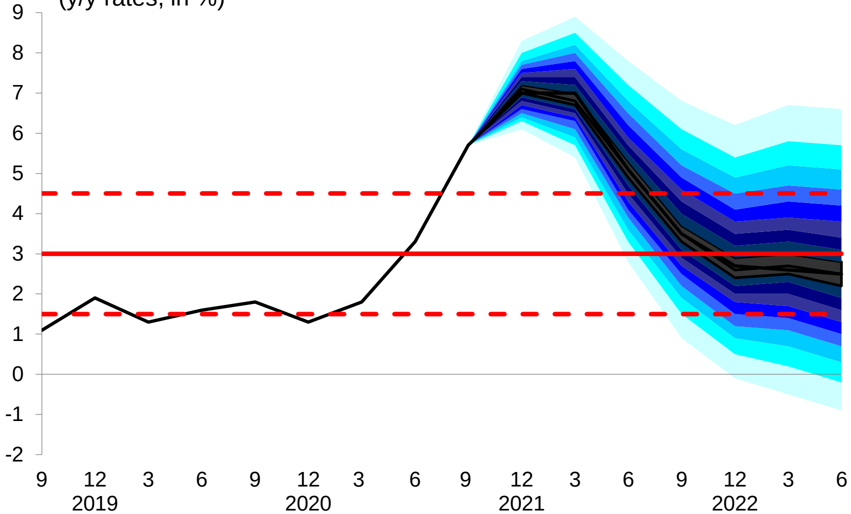


- Average core inflation in the last eight years stood at 1.6%, confirming price stability.
- Core inflation was again significantly lower than headline inflation in October, measuring 2.7%, and suggesting that inflationary pressures are temporary.
- According to Ipsos survey for October, one-year ahead inflation expectations of the financial sector increased to 4.0% (September 3.0%) while inflation expectations acording to Bloomberg survey in November were lower and amounted to 3.5%.

Inflation will Return to Target Band in mid-2022

Inflation is temporarily moving above the target tolerance band up to H1 2022 due to supply-side factors…

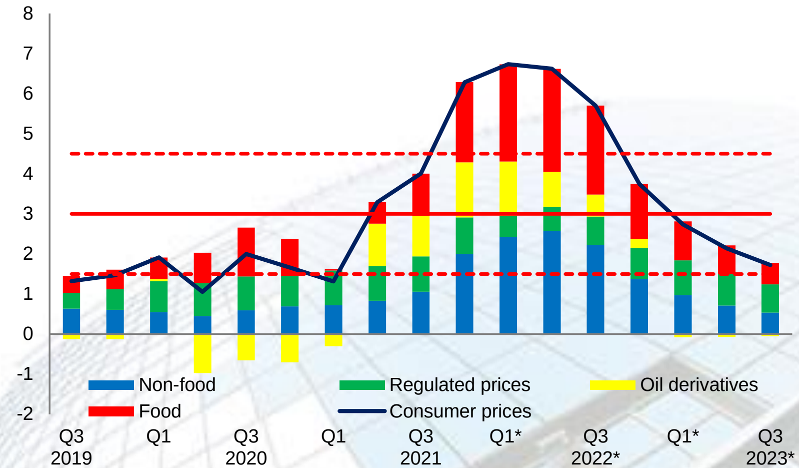
Chart 3 **Inflation projection** (November 2021 IR)
(y/y rates, in %)



- Inflation has been moving above the target band as of September, driven by food and fuels prices.
- Higher inflation outlook is a result **of temporary factors** - the growth in the global energy and agricultural products prices and supply chain bottlenecks, as well as local drought.
- With the waning of these factors, inflation will gradually decline as of Q2, and in H2 2022 return close to the mid-point of target tolerance band.
- Disinflationary pressures of subdued aggregate demand will gradually wane near the end the forecast horizon.

…whereby it will be on a downward trajectory from the second quarter of 2022

Chart 4 **Inflation projection** (from November 2021 IR)
(y/y rates in % and contributions in pp)



*NBS Forecast

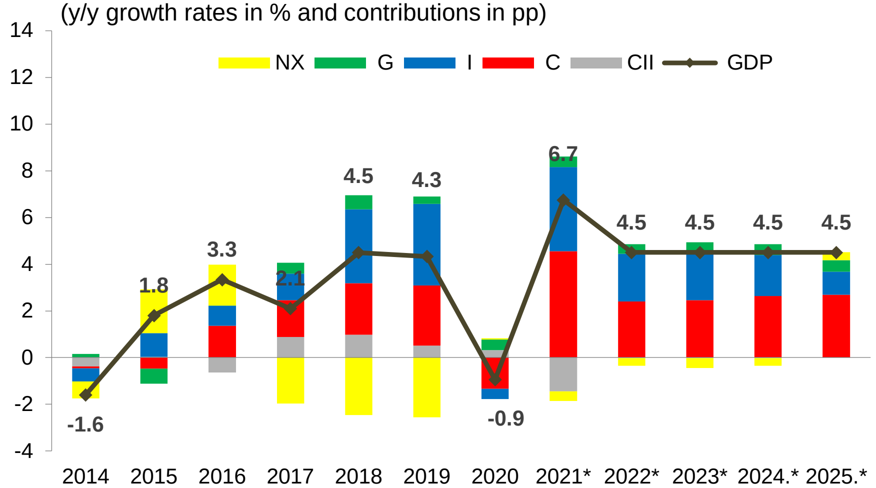
- Key risks of the projection are related to the coming agricultural season, the European energy crisis, global commodity prices and duration of supply chain bottlenecks.
- Risks also arise from the path of the pandemic, the pace of euro area recovery and capital flows to emerging economies.
- Overall risks to the inflation projection are elevated due to the uncertainty of the further course of the pandemic and the recovery of global supply chains.

GDP Growth in 2021 and Medium Term Revised Upward

Economic recovery in 2021 is driven by domestic and external demand

Chart 5 **GDP developments**

(y/y growth rates in % and contributions in pp)



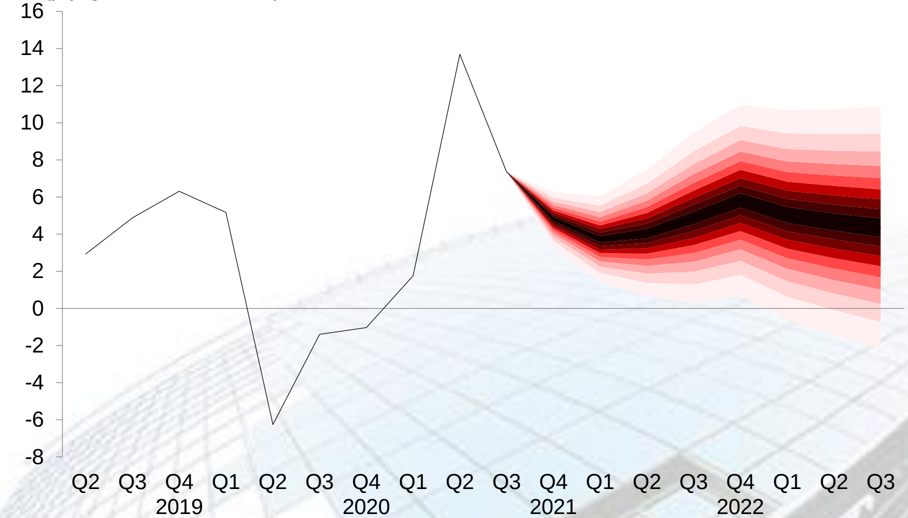
*NBS forecast

- SORS data for Serbia's GDP in 2020 show real decline of -0.9%, which is one of the best results in Europe and in line with NBS projection.
- Thanks to the economic measures taken, a greater decline in investment and consumer confidence has been prevented, and production capacities, labor force and favorable macroeconomic outlook have been preserved.
- After GDP growth of 1,8% y/y in Q1, and 13.7% in Q2, according to flash estimate, growth amounted to 7,4% in Q3, surpassing our expectations.
- Growth was driven by recovery in service sectors, as well as strong growth in construction.

In the coming years Serbia will maintain a strong, sustainable and broad-based growth

Chart 6 **GDP growth projection** (from November IR)

(y/y growth rates in %)



- GDP reached the pre-crisis level in 2021 Q1,one quarter earlier than expected, and, according to our estimate, is around 3% above the pre-crisis level.
- In line with growth in first three quarters, we revised upward GDP growth projection for 2021 from 6.5% to a range form 6.5% - 7.0% with symmetrical risks. For the medium term we expect growth to be in a range between 4%-5%, as a result of new investment cycle.
- Risks from the international environment refer to the recovery of the Eurozone, value chain disruption, energy crisis and prices of primary products, and domestic risks to a higher inflow of FDI and the pace of growth of public investments.

NBS Response to Covid-19

NBS response to COVID-19

	2020									2021	
March	April	May	June	July	August	September	October	November	December	I-IX	X-XI
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								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.

Programme of Economic Measures to Mitigate the Negative Effects Caused by the COVID-19 Pandemic and Support the Serbian Economy in 2020 and 2021

- Total value of economic measures in 2020 is estimated at around 13% of GDP, and additional package in the amount of 4,2% of GDP will be implemented in 2021.

Programme of Economic Measures to Mitigate the Negative Effects Caused by the COVID-19 Pandemic and Support the Serbian Economy

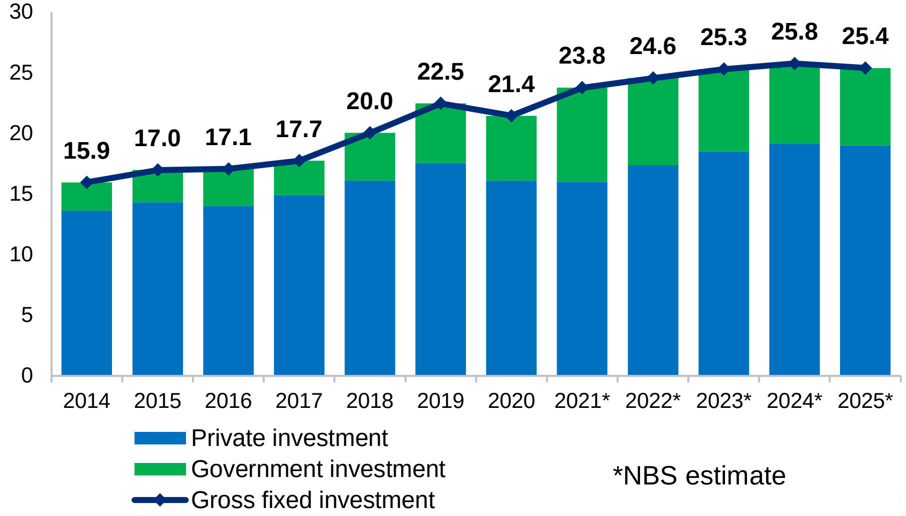
I Group – Tax policy measures
1. Deferred payment of payroll taxes and contributions in the private sector (during the state of emergency) with subsequent repayment of liabilities in instalments (starting from 2021 at the earliest)
2. Deferred payment on taxes and contributions on salaries for one month
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 companies
9. Wage increase measures and other direct financial assistance
10. Direct assistance to all adult Serbian citizens in the dinar equivalent of EUR 100
V Group – Additional package of measures (July/August 2020)
1. Payment od 60% of minimal wages to enterpreneurs, and to micro-,small- and medium-sized enterpises in the private sector
2. Deferred payment of income tax advances for one month
3. Direct support to the hotel sector - 350 € per bed, 150 € per room
Additional package of measures in 2021
1. Direct support to private sector - 3 months 50% minimal wage to all entrepreneurs, micro, small and medium enterprises
2. Targeted support for sectors that suffered the most (hotels, restaurants, passenger transport companies, tourist agencies artists etc.)
3. Measures to preserve liquidity (extension of previous and introduction of a new guarantee scheme)
4. Fiscal stimulus measures (direct payment to all adult citizen, and additional to pensioners and unemployed

Source: Ministry of Finance.

The Beginning of New Strong Investment Cycle

Preceded by achieved macroeconomic stability, new investment cycle began in 2015…

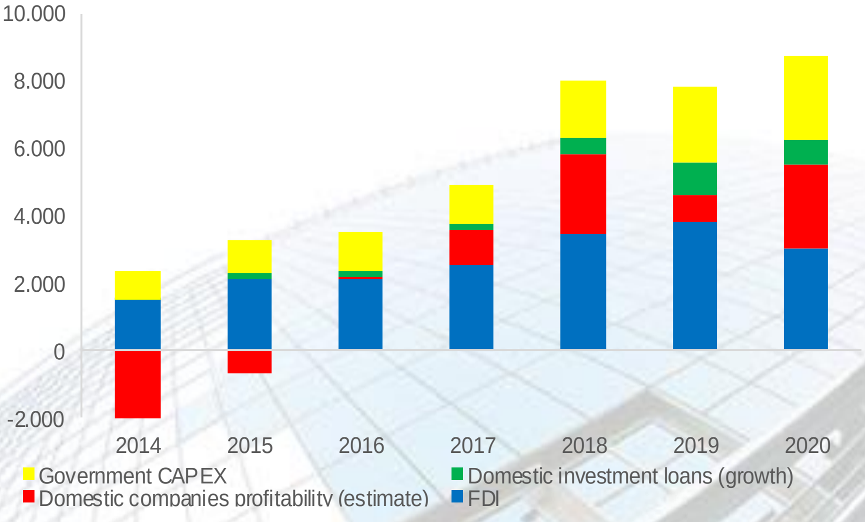
Chart 7 **Fixed investment share in GDP**
(nominal terms, in % of GDP)



- In 2015-2019, fixed investments grew at an average annual rate of about 10%, while their cumulative growth was about 64%. The share of fixed investment in GDP increased to 22.5% in 2019.
- Despite pandemic, fixed investments declined in 2020 by only 1.9% .
- Thanks to the new investment cycle, the share of fixed investments in nominal GDP should reach the level of around 26% as early as 2024 and move around that level in the medium term.
- Government investments grew in 2020, and are projected to exceed 7% of GDP in 2021.

…supported by diversified financing sources

Chart 8 **Key sources of investment financing**
(in EUR mln)

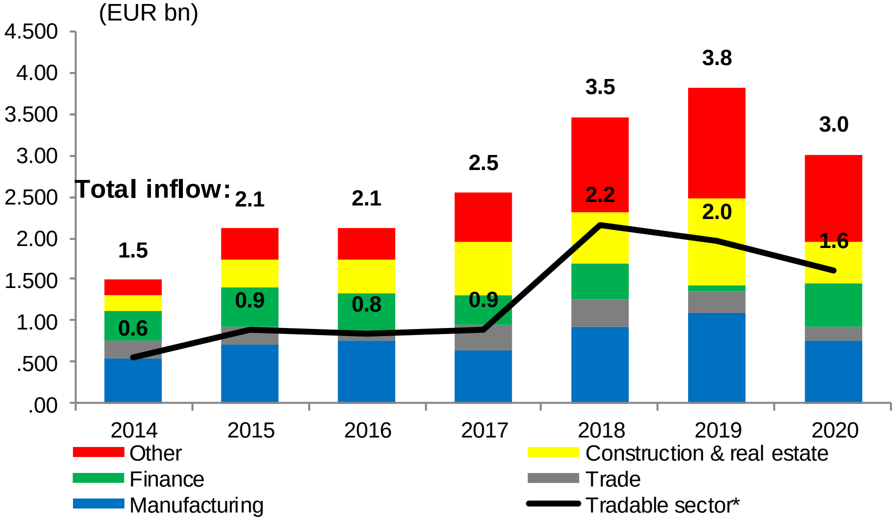


- In earlier years, investments have largely relied on FDI.
- Owing to maintained macroeconomic and financial stability, exchange rate stability, as well as fiscal consolidation, in recent years three more strong pillars for financing investments have been established: multiplied profitability of the economy, investment loans and doubled government investments.
- On top of that, FDI inflow reached record levels of around 8% of GDP.

Macroeconomic and Financial Stability Supported High FDI Inflow

Macroeconomic and financial stability combined with structural reforms has created a favourable climate for FDIs…

Chart 9 **FDI composition by sector**
(EUR bn)

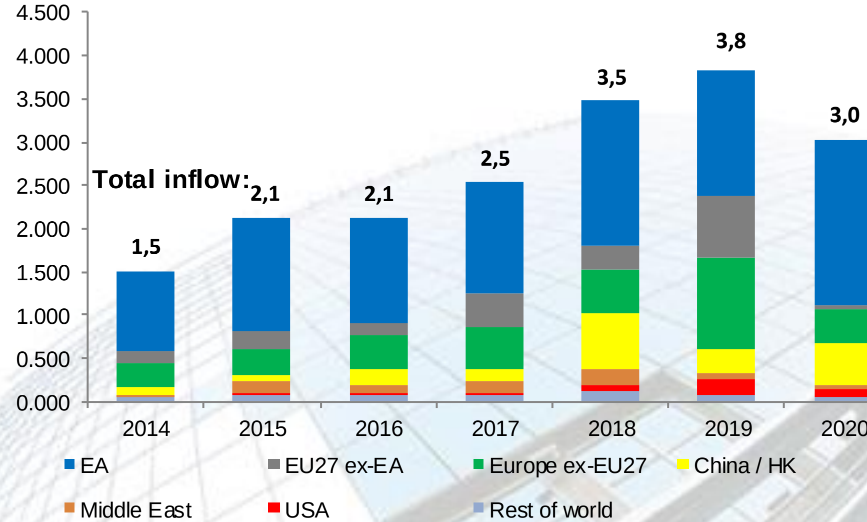


*industry, agriculture, transport & storage, accomodation and food svc.

- Out of a inflow of EUR 10.3 bn in past three years, EUR 5.6 bn has been directed into tradable sectors, most notably manufacturing (EUR 2.8 bn).
- Manufacturing sectors with the highest FDI inflows (metals, autos, food, tyres) recorded a high growth in employment, output and exports.
- Serbia has attracted about 60% of total FDI to the Western Balkans region.
- **During 2020 FDI remained robust despite the corona virus pandemic, with inflow of EUR 3.0 bn (net inflow EUR 2.9 bn).**

…which are diversified by sector and origin and contributing to the country's export potential

Chart 10 **FDI composition by geographic origin**
(EUR bn)

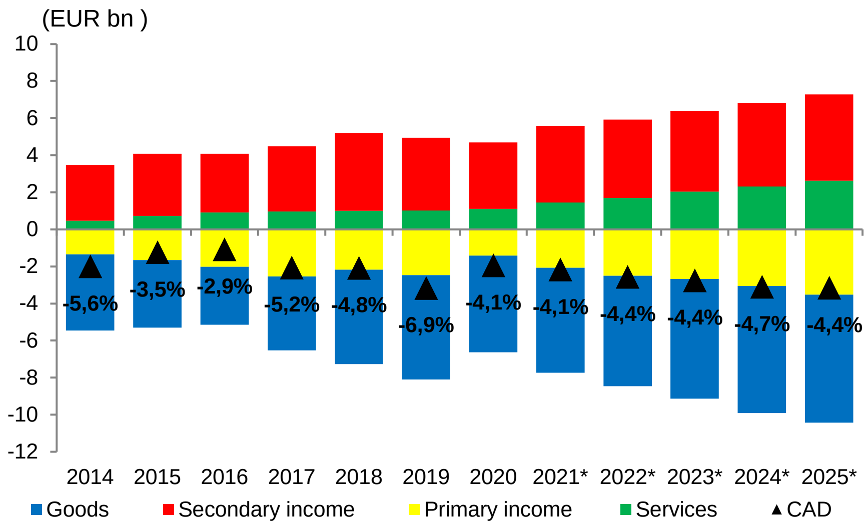


- **In the first nine months of 2021, FDI inflow amounted to EUR 2.9 bn.**
- FDI inflows are diversified by region of origin as well, with a greater share of countries from the Asia Pacific and Middle East regions, alongside Serbia's major investment partner - the European Union.
- During 2018 – 2020, the bulk of FDI inflows still came from EU countries (78%), but with an increasing share of Asian countries (18%) such as China/HK and the UAE, as well as USA and non-EU countries, such as Russia, Turkey and Switzerland.

CAD amounted to 3.5% of GDP in first three quarters of 2021, yearly projection amounts to 4.1% of GDP

Midterm current account deficit projection is at a range from -4.0% to -5.0% GDP

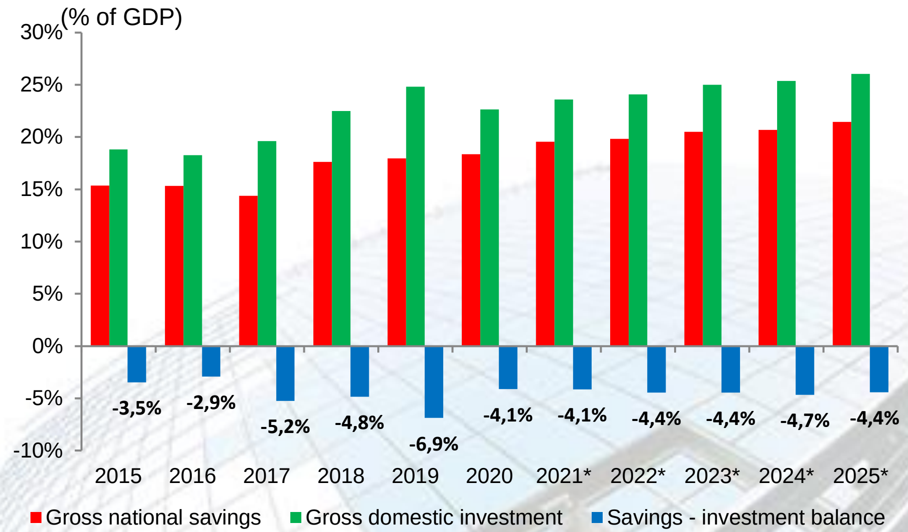
Chart 11 **Current account balance by component**



- **Smaller decrease in exports than imports and a lower primary income deficit in 2020** led to a lower CAD of -4,1% of GDP (EUR 1,9 bn), which was lower than the projected amount of -5,0% of GDP.
- **When considering the first nine months of 2021, current account deficit amounts to EUR 1.3 bn.** The contribution to the year-on-year improvement in the external position came from an increase in the trade surplus in services and the secondary income surplus.
- Since 2015 Serbia's current account deficit has been fully financed by which is expected in the following years as well (projected net FDI inflow of around 5% of GDP).

From a S-I perspective temporary CAD increase in medium term will be driven by higher investments due to investment cycle

Chart 12 **Savings and investment balance**



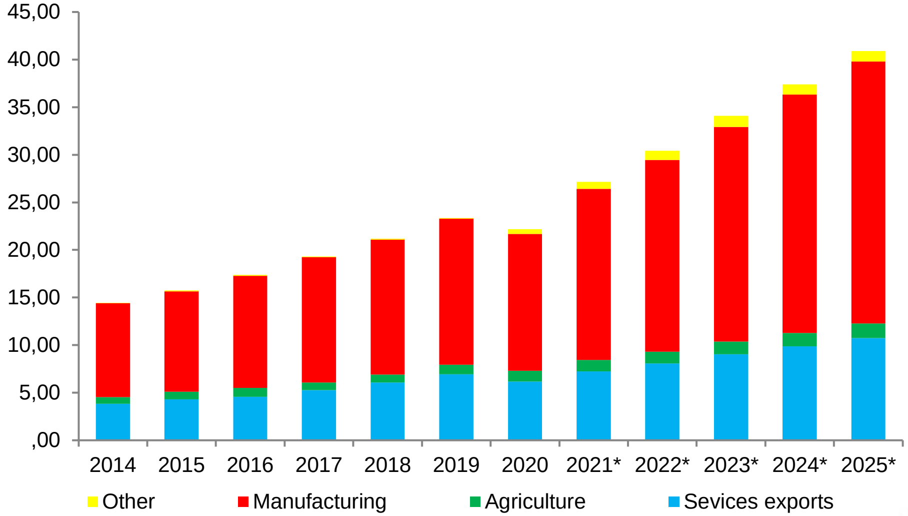
- In 2020 the decline in the S-I gap was driven by a faster reduction of private gap than public SI gap.
- Private sector savings increased in 2020 due to reduced domestic demand and lower energy prices.
- During 2020, the share of gross domestic investment in GDP decreased only slightly compared to 2019, due to the growing share of gross public sector investment.
- The S-I gap since 2017 is driven by the private sector, while government savings and investments were mainly neutral (a result of the fiscal consolidation) until the pandemic.

Demonstrated Exports Resilience in 2020 and Strong Growth in 2021

New investments and continued expansion of the export capacities will ensure high growth of exports in the medium term

Chart 13 **Exports of goods and services**

(EUR bn)



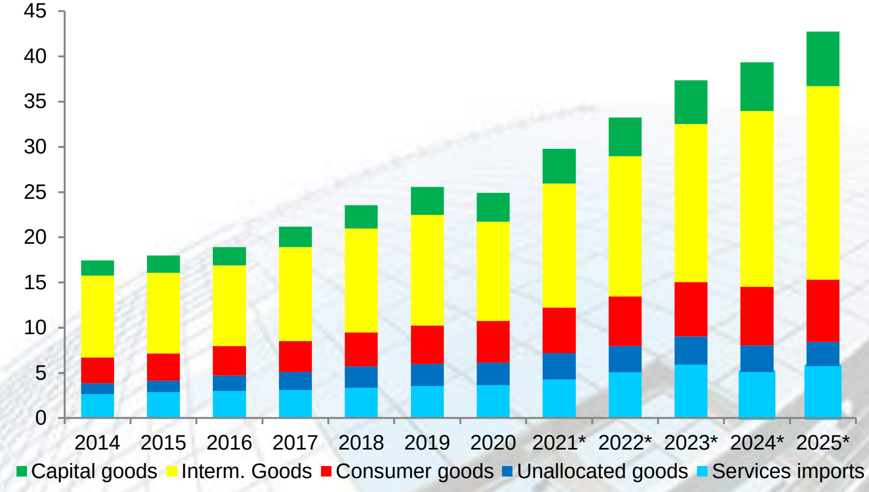
*NBS Forecast

- The slight decrease in goods exports in 2020 of 2.0% was driven by a decrease in manufacturing exports due to deterioration external demand and disruptions in value chains.
- This year we expect a complete recovery in exports of goods and services with a nominal growth of over 25%, driven by manufacturing, ICT and business services exports.
- In the Jan-September period, goods exports increased by 30.2% y/y, and so did goods imports, by 24.5% y/y.

The projection takes into account that the new investment cycle will reflect on the increased imports of equipment and intermediate good

Chart 14 **Imports of goods and services**

(EUR bn)



*NBS Forecastt

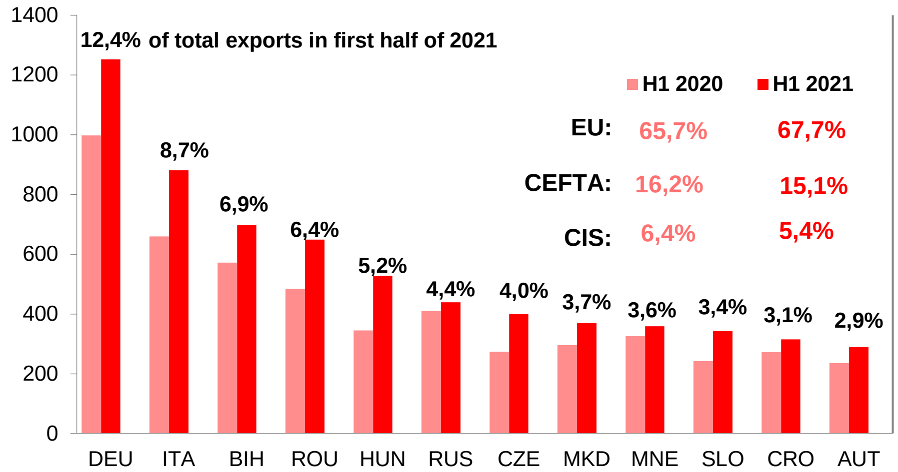
- Imports of goods decreased by 3.4% in 2020. The largest decrease in imports was recorded within the reproduction, of which more than half of that decrease was related to lower energy imports. On the other hand, imports of equipment and consumables continued to grow.
- The fall in oil prices in 2020 will have an additional delayed effect on the lower import price of gas during 2021.
- In 2021, we project a growth of imports of goods and services of around 23%, which will be driven by the growth of domestic demand.

Geographic Diversification Helped Foreign Trade Resilience During Pandemic

Exorts to all significant partners increases in the first half of 2021 compared to same period in 2020

Chart 15 **Goods exports by country in H1 2020 / H1 2021**

(EUR mn and % of total)

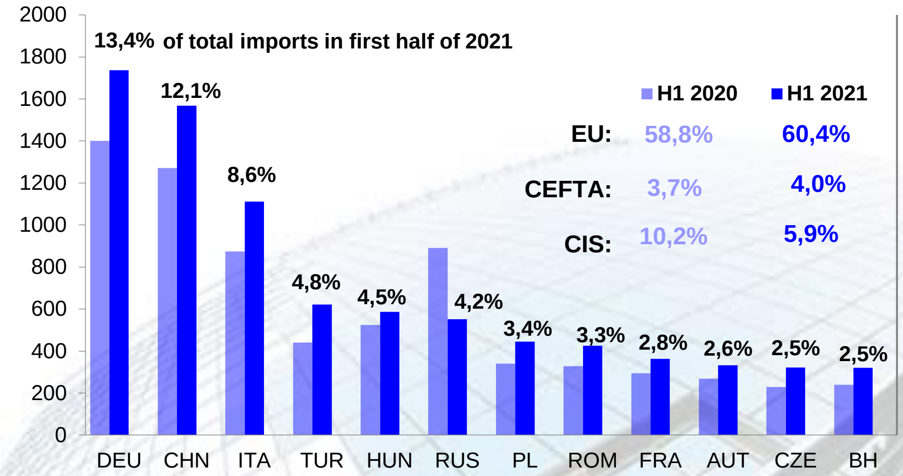


- Serbia's exports are largely directed towards EU and countries of the region, and reliant on demand in those countries which is currently lacking. In 2020, most of Serbian exports went to the EU, followed by CEFTA and CIS.
- By country, the largest share of exports went to Germany (12.4%), followed by Italy (8.7%), Bosnia and Herzegovina (6.9%), Romania (6.4%), Hungary (5.2%) and Russia (4.4%).
- In 2020 compared to 2019, the total volume of exports has decreased in most of the countries, but is coming back to its original amounts in the first half of 2021.
- As an exception, exports to China continued to grow in 2020 compared to 2019, and in the H1 2021 has more than doubled compared to same period in 2020.

China catches up to Germany in 2020 as the most important import partner, and in 2021 imports from China continue to increase

Chart 16 **Goods imports by country in H1 2020 / H1 2021**

(EUR mn and % of total)

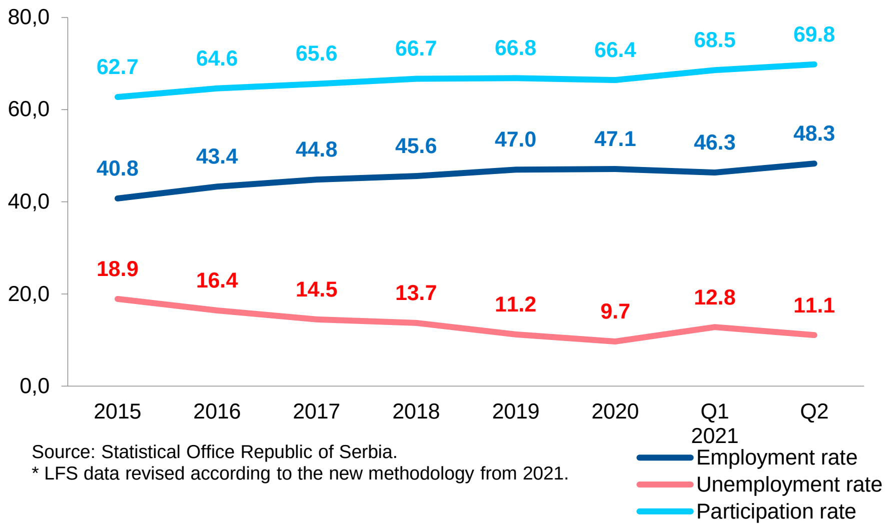


- Majority of imports (more than 60% in the first half of 2021) come from the EU, followed by CIS and CEFTA.
- By country, the largest shares of imports are from Germany (13.4%), whereas the share of imports from China increased from 9.0% in 2019 to 12.5% in 2020 and sits at 12.1% in the first half of 2021. Growth recorded in 2020 is mostly due to imports of medical equipment. Following Germany and China, third is Italy (8.6%) and then Turkey (4.8%).

Positive Trends in the Labour Market in Q2 Accompanied by Productivity Growth

According to the Labour Force Survey, quarterly decline in unemployment rate in Q2

Chart 17 **Labour market indicators according to the LFS*,** (in %)

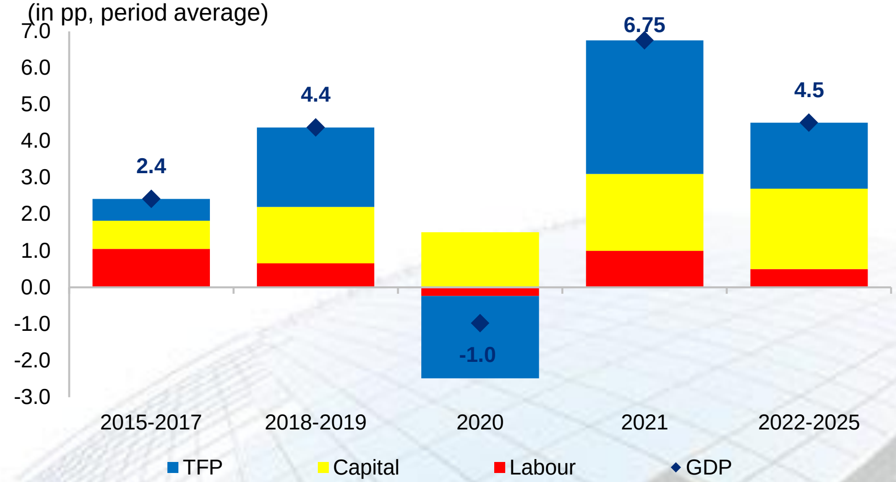


Source: Statistical Office Republic of Serbia.
* LFS data revised according to the new methodology from 2021.

- The Statistical Office Republic of Serbia published data from the Labour Force Survey for Q2 2021, as well as revised data from 2010 for the basic labour force contingents, calculated according to the new methodology.
- Unemployment rate in Q2 2021 was 11.1% and was by 1.7 percentage points lower than Q1.
- Employment rate in the same period was 48.3% and was higher by 2.0 p.p. Informal employment rate was 13.2% and was 2.3 p.p. higher on a quarterly basis due to the increased demand for seasonal workers.
- Participation rate in Q2 among the working age population (15-64) was 69.8% and was higher by 1.3 p.p.

Increasing contribution of total factor productivity to Serbian GDP growth

Chart 18 **Contribution of factors of production to GDP***
(in pp, period average)



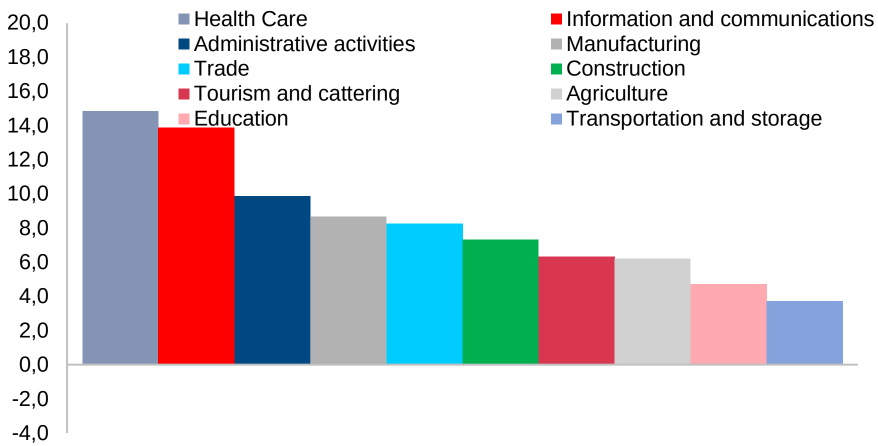
Sources: SORS, NBS calculation.
* NBS estimate.

- Economic growth acceleration in 2018-2019 was driven mainly by faster TFP growth. Labour contribution to growth declined compared to 2015-2017, compensated by a faster growth of the capital stock.
- In 2020, similar to other countries, there was a temporary decline in TFP and a negative contribution of labour due to a reduction in the participation rate due to the pandemic.
- In the medium term, we expect that TFP and capital will be the main drivers of GDP growth, while labour will have positive but declining contribution.

Continuation of Favourable Trends in the Formal Segment of the Labour Market

The average wage in the period January - August 2021 increased by 8.7% y/y

Chart 19 **Nominal net wages by economic sector** (y/y growth, in %)

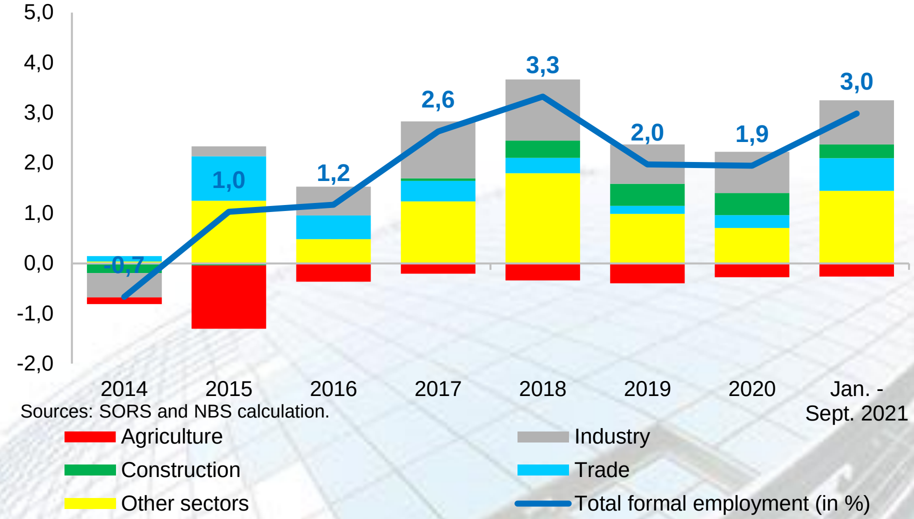


Sources: SORS.

- Average wages accelerated year-on-year growth to 10.5% in August (from 7.8% in July). Wage growth in the private sector was 11.7% y/y and in the public sector 8.5% y/y.
- Accelerated growth of wages was recorded in most activities of the economy, with the acceleration of growth compared to July particularly in the production sector (mining and manufacturing), agriculture, construction and most private sector services (trade, transport, accommodation and food services and the ICT sector).
- The average net wage in the period January - August 2021 amounted to 64,393 dinars and was 8.7% higher year-on-year, with growth present in almost all activities (except energy).

Dominant contribution of industry in formal employment

Chart 20 **Contribution to y-o-y growth in total formal employment by economic sector** (period average, in pp)



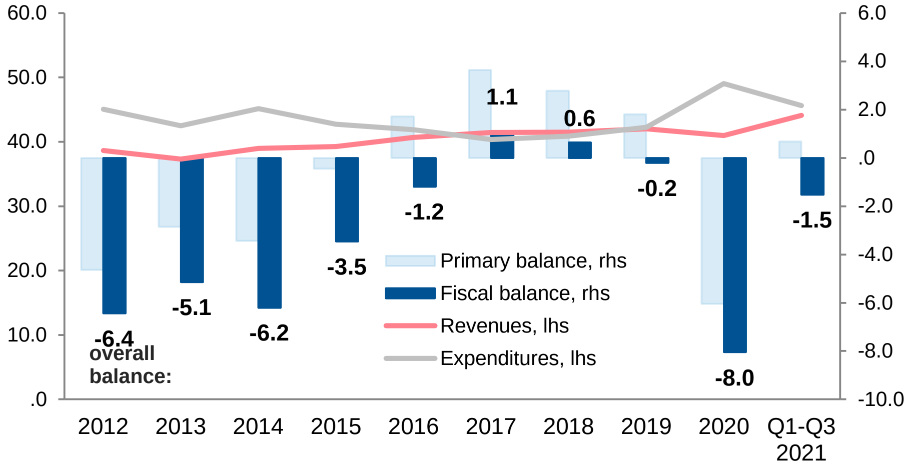
Sources: SORS and NBS calculation.

- Total formal employment in the period January – September 2021 y/y increased by about 66 thousand persons (3.0%), despite the pandemic.
- This growth was driven primarily by higher employment in the private sector, which increased by about 63 thousand persons (3.9% y/y).
- Observed by activities, y/y growth stands out in manufacturing, trade, ICT sector, as well as in professional and scientific activities and in construction.

Temporary Increase in Fiscal Deficit in 2020 and 2021; Public Debt Fully Under Control

Largest share of the fiscal deficit in 2020 was result of support measures

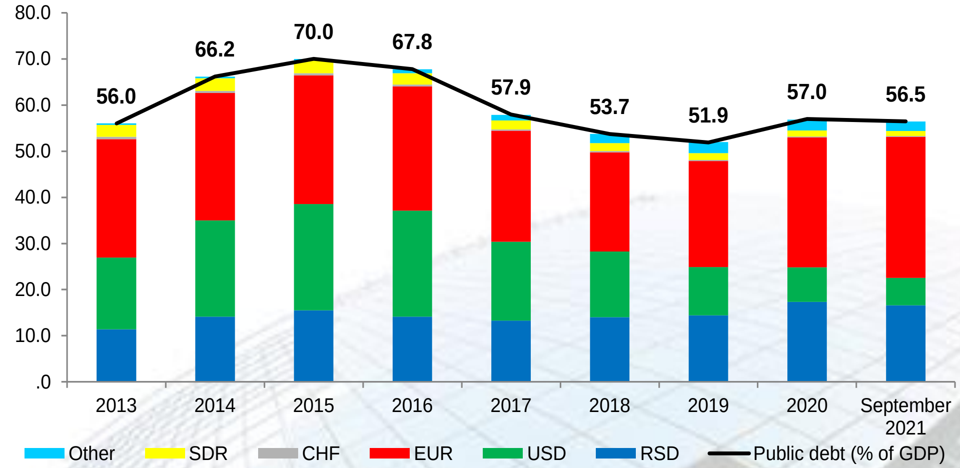
Chart 21 **Fiscal revenues, expenditures and outcome**
(% share in GDP)



- In the years before pandemic, Serbia eliminated fiscal deficit, with government investments reaching near 5% of GDP.
- Higher deficit in 2020 (8.0% of GDP) was a consequence of high expenditures for support measures and purchase of medical equipment and decrease in revenues. Despite this, CAPEX continued to rise, reaching the level of 5.4% of GDP and surpassing projections from the Fiscal strategy .
- Another fiscal stimulus package was introduced in 2021 in the amount of RSD 2.2 bn (4.2% of GDP), aimed at most affected sectors and citizens. CAPEX are projected to exceed 7% of GDP in 2021.
- This year, the deficit is so far lower than planned - it is expected to be less than 5% of GDP at the annual level.

Increase of public debt is one of the smallest in Europe due to support economic package

Chart 22 **Public debt (central government)**
(% share in GDP)

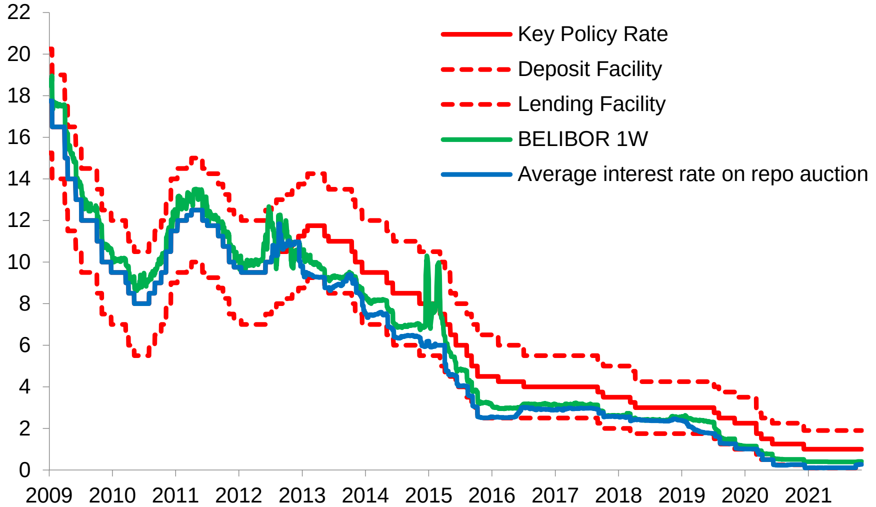


- In 2020 public debt increased to 57.0% of GDP (from 51.9% at the end of 2019), mainly due to a 7y Eurobond of EUR 2 bn, for covering increasing financing needs in light of the pandemic.
- In September 2021 public debt was at the level of 56.5% of GDP. Public debt will almost certainly remain below level of 60% in 2021. The increase compared to August is the result of the issue of two Eurobonds worth a total of EUR 1.75 bn: 7Y green bond worth EUR 1.0 bn and 15Y Eurobond worth EUR 750 million, part of which is aimed to repay the debt on the dollar bond of USD 700 million, matured in September.
- By further reliance on RSD and EUR denominated debt, the currency risk has decreased additionally.

The Key Policy Rate Kept Unchanged

In November 2021, the key policy rate remained unchanged at the level of 1.0%, but average repo rate was further increased

Chart 23 **Interest rates**
(in %)

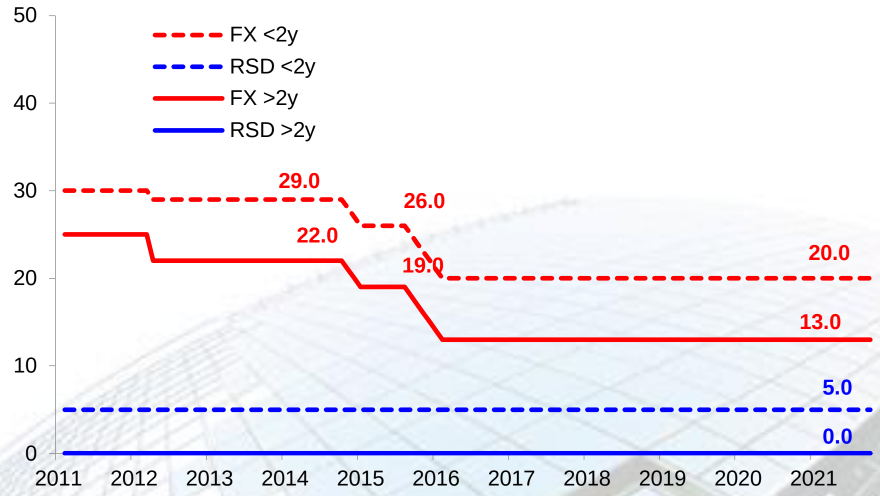


<u>**The decision takes into account the following factors:**</u>

- that hikes in the global prices of energy and other primary commodities, halts in supply and significantly higher prices of transportation globally, together with the effects of the low last year's base, have led to higher cost-push pressures in the global and local markets,
- that favorable financial conditions can be maintained with a somewhat lower degree of monetary policy expansion,
- and expectations that there could be reduction in the quantitative easing programs of leading central banks, and thus changes in capital flows to emerging economies.

FX required reserve ratio has remained unchanged since early 2016

Chart 24 **Reserve requirement ratios**
(in %)

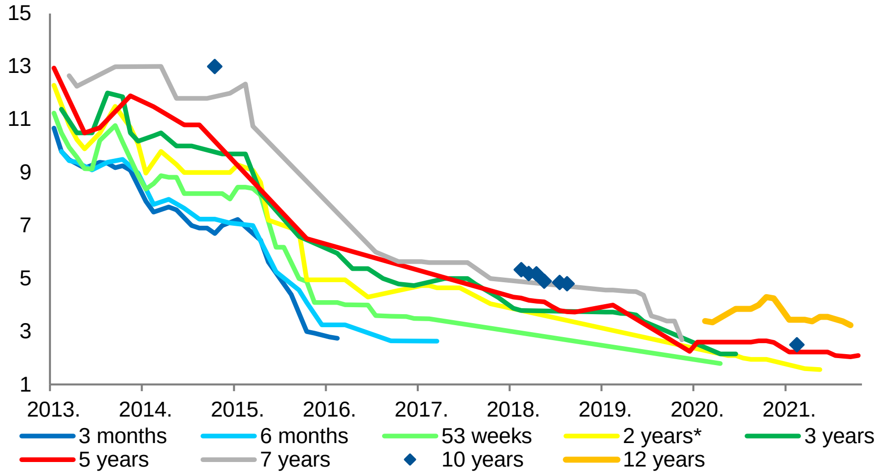


- Last time FX RR ratio was cut in 2016 aiming to support lending activity (to 20%/13%, for liabilities up to/over 2Y).
- RR is an important monetary policy tool (in October 2021 RR amounted to EUR 2.4 bn and RSD 242.2 bn), as well as an important macroprudential tool within dinarisation strategy:
  - by applying lower RR ratio on dinar vs FX sources,
  - by applying remuneration on dinar RR (i.e. „standard“ rate 0.10% and „beneficial“ rate of 0.60% under predefined conditions, on amount on dinar lending in line with State Loan Guarantee Scheme), while no remuneration is applied on FX RR.

Financing Conditions of Government and Private Sector Remained Favorable ...

Interest rates on dinar government securities are moving around their minimum levels…

Chart 25 **Interest rates in the primary market of government securities**
(p.a. in %)



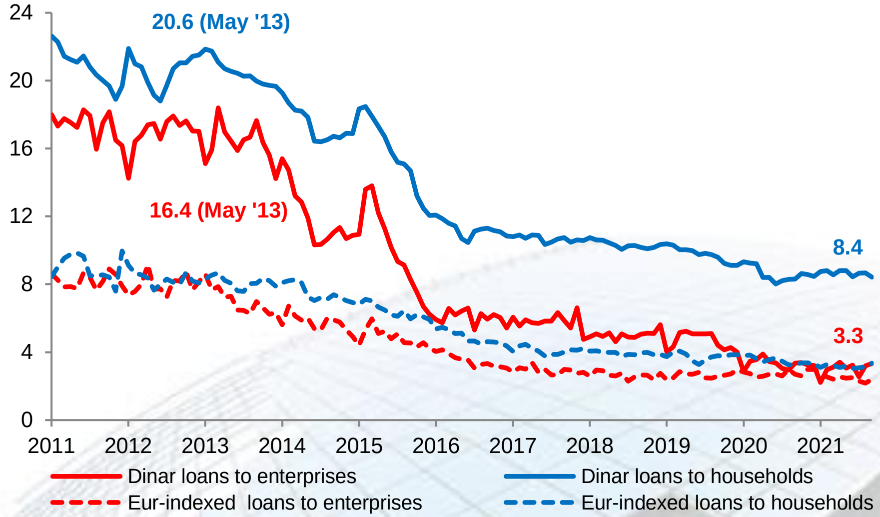
Source: Ministry of Finance.

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

- The share of long-term securities (5+ year maturity) increased from 2% in December 2012 to almost 80% in 2021, supported by the extension of the dinar yield rate curve up to 12 years in February 2020.
- Interest rates on dinar securities are around the lowest values (3.24% for a period of 12 years).
- J.P. Morgan announced its decision to include Serbia's dinar-denominated bonds in its renowned GBI-EM family of indices as of 30 June 2021, which should contribute to even greater recognition of Serbia as a safe and favorable investment destination.

… as well as interest rates on private sector loans

Chart 26 **Interest rates on loans – new business**
(p.a. in %)

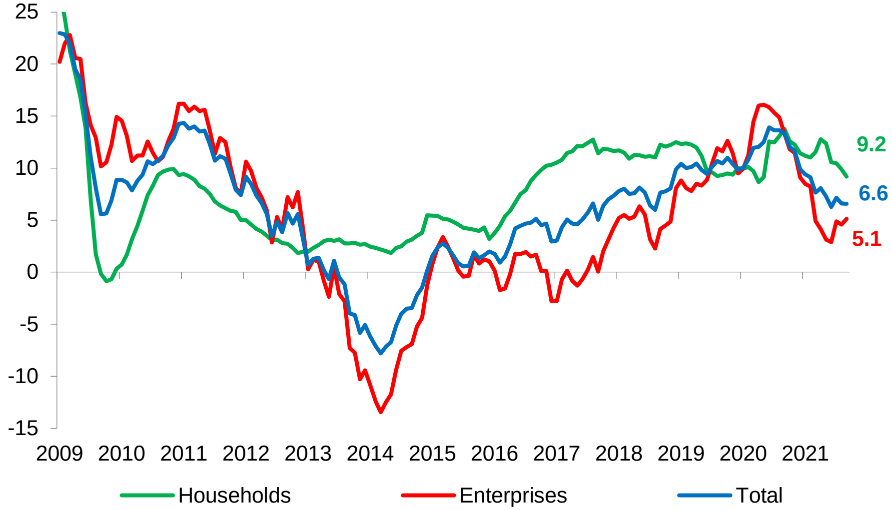


- The key policy rate reduction is fully reflected in **dinar lending interest rates** which fell sharply since the beginning of monetary policy relaxation cycle (May 2013), and in September 2021 they amounted to:
  - 3.3% for corporates (down by 13.1 pp),
  - 8.4% for households (down by 12.1 pp).
- The servicing costs of outstanding credit amounts have also been reduced, leading to higher disposable income for consumption and investments, of both households and corporates.
- In the observed period, a sharp fall in the country risk premium and the country's credit rating upgrade, as well as monetary easing by the ECB contributed to the fall in EUR-indexed lending rates.

… Providing Support to Credit Activity

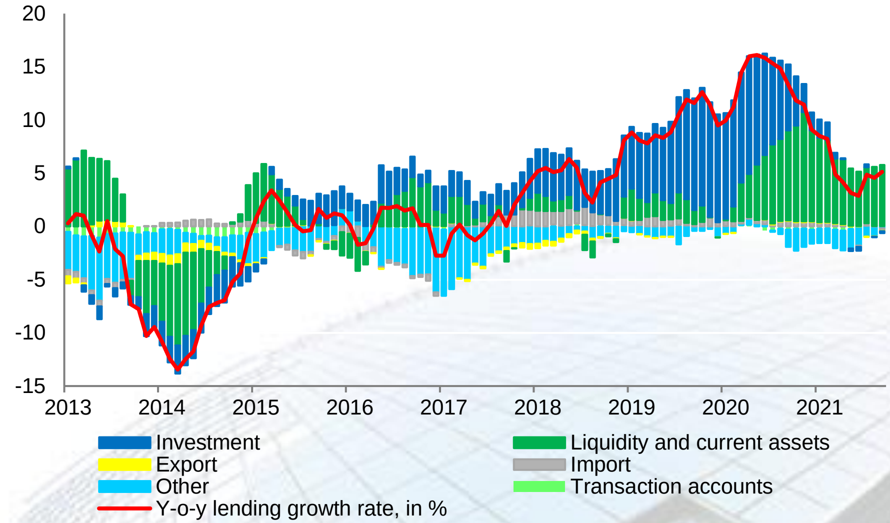
Lower costs of financing support domestic lending …

Chart 27 **Bank lending to enterprises and households**
(y/y rates, constant exchange rate 30 Sept 2014, in %)



… which supports the recovery of the economy from crisis caused by COVID-19 pandemic

Chart 28 **Contributions to y-o-y corporate lending growth**
(in pp, constant exchange rate 30 Sept 2014)



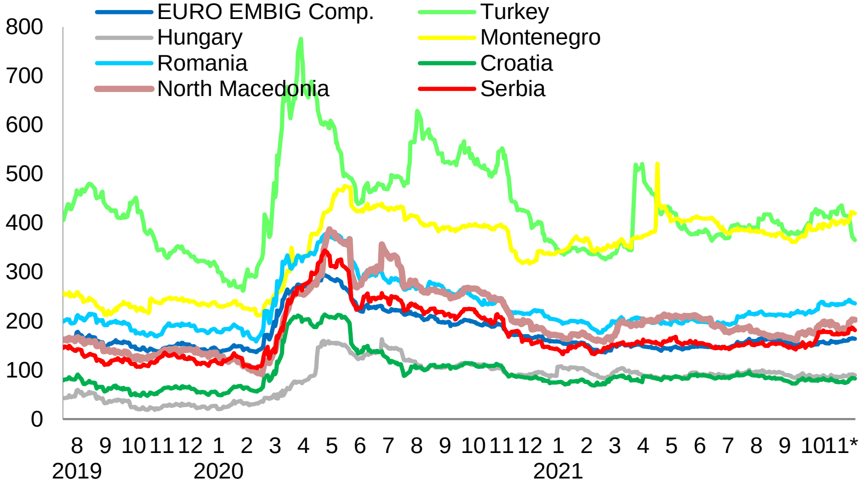
- **Credit activity kept in 2021 a favourable structure in terms of the contribution to economic recovery, as growth is led by**
  - – liquidity and current assets and investment loans within corporate loans,
  - – and housing loans within household loans.
- In September 2021, **total domestic loans** increased by 6.6% in y/y terms, while the slowdown of growth compared to 2020 is largely due to the high base from the previous year because of moratorium application.
  - – as this effect dissipated since October, y-o-y lending growth rates should gain additional momentum.

- **Corporate loans** provide significant support to domestic credit activity and impetus to the recovery of economic activity.
- In September, **investment loans** amounted to 41.6% of total corporate loans, while the share of **liquidity and current assets loans** equaled to 45.9%, supported by Guarantee Scheme loans.
- **Micro, small and medium-size enterprises loans** amounted to 67% of total corporate loans in September.

Increased Resilience of the Serbian Economy Confirmed by Rating Agencies

Serbia's risk premium on a downward path since May 2020 due to global and domestic factors

Chart 29 **Risk premium indicator for euro-denominated debt - EURO EMBIG**
(basis points, daily values)

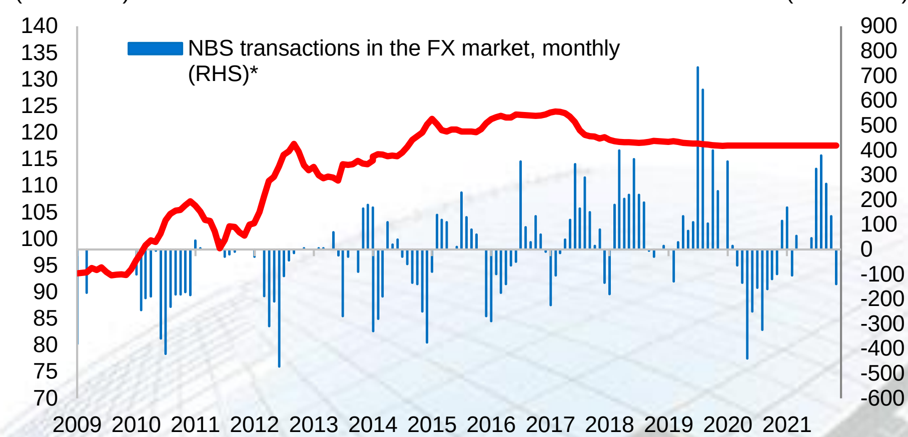


*Until November 8, 2021

- In addition to optimism regarding vaccines, the adopted economic policy measures in response to the crisis, as well as the recovery of domestic economic activity contributed to the low and relatively stable risk premium of Serbia from P2 2020. **Since the beginning of 2021, EURO EMBIG for Serbia has averaged around 155 bp.**
- Both S&P and Fitch affirmed Serbia's rating at BB+ during 2020, despite global crisis caused by COVID-19 pandemic. **In March 2021, Moody's upgraded Serbia's credit rating to Ba2 with a stable outlook and S&P confirmed rating at BB+, as well as Fitch in September** highlighting Serbia's credible macroeconomic policy framework, economic resilience to the pandemic shock, and confidence in Serbia's fiscal consolidation prospects.

The relative stability of the exchange rate is maintained, while FX reserves are at the highest level

Chart 30 **Exchange rate developments and NBS transactions in the FX market**



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

- Dinar cumulatively strengthened by 5% against the euro in the period 2017-2019, as a result of better Serbia's macroeconomic fundamentals which contributed to FX inflow of FDI and elevated non-resident investment in long-term dinar government securities and resulted in bolstering the FX reserves.
- The dinar stayed broadly unchanged against the euro in 2020, despite the rise in global uncertainty. The NBS contributed to this by providing needed FX liquidity to banks against the background of limited supply of foreign exchange and cash.
- In 2021, appreciation pressures prevail due to favorable balance of payments movements. From January to October, the NBS was a net buyer of EUR 960 mn in the FX market, which contributed to the increase of FX reserves (EUR 16.3 bn at the end of October), as well as to relative exchange rate stability.

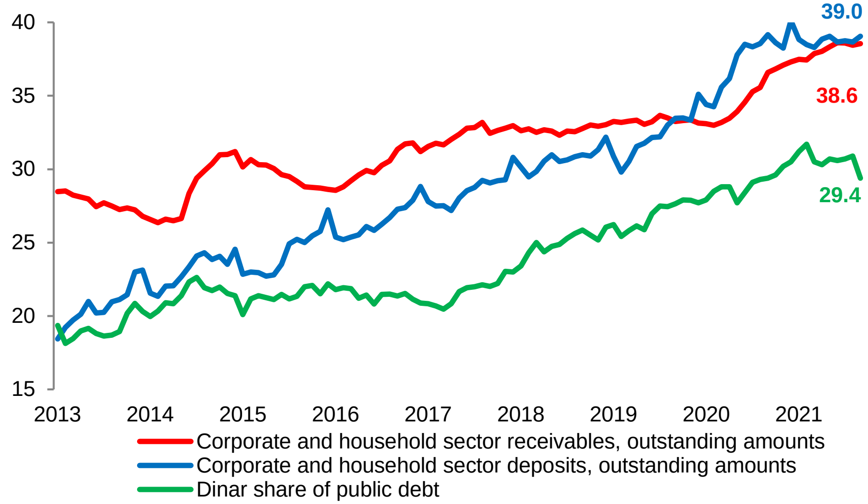
National Bank of Serbia

Indicators of Dinarisation are on the Rise

Macroeconomic stability contributing to dinarisation process

Chart 31 **Dinarisation of the corporate and household sector receivables and deposits, and dinar share of public debt**

(in %)

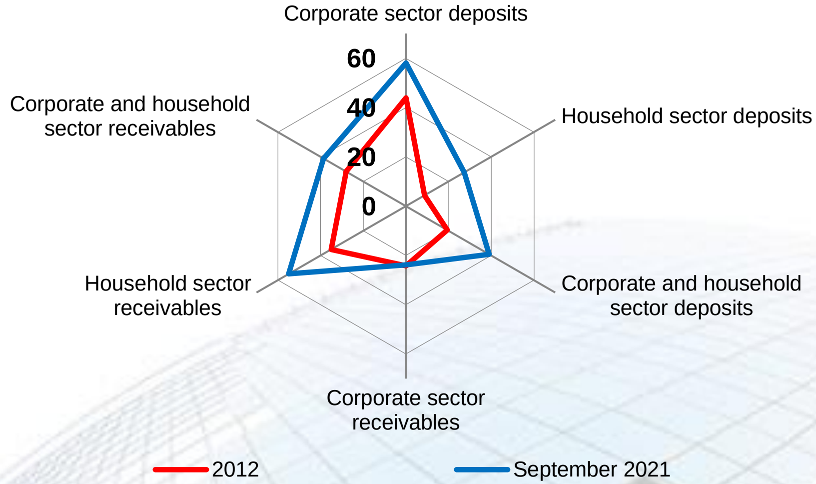


- NBS stimulates the dinarisation process by delivering low and stable inflation, preserving relative exchange rate stability, enhancing management of FX risks and exposures in the private sector, and using other measures.
- The Government contributes to dinarisation through tax policy, by developing the dinar securities market - dinar debt share rose from 2.5% in 2008 to 29.4% in September 2021.
- Dinarisation of corporate and household sector deposits rose by 19.7 pp compared to end-2012 to 39.0% (September 2021). Dinarisation of corporate and household sector claims amounted to 38.6% in September (up by 10.5 pp compared to end-2012).

The growth of dinar loans to households accompanied by higher dinar savings

Chart 32 **Dinarisation of corporate and household sector**

(outstanding amounts, in %)

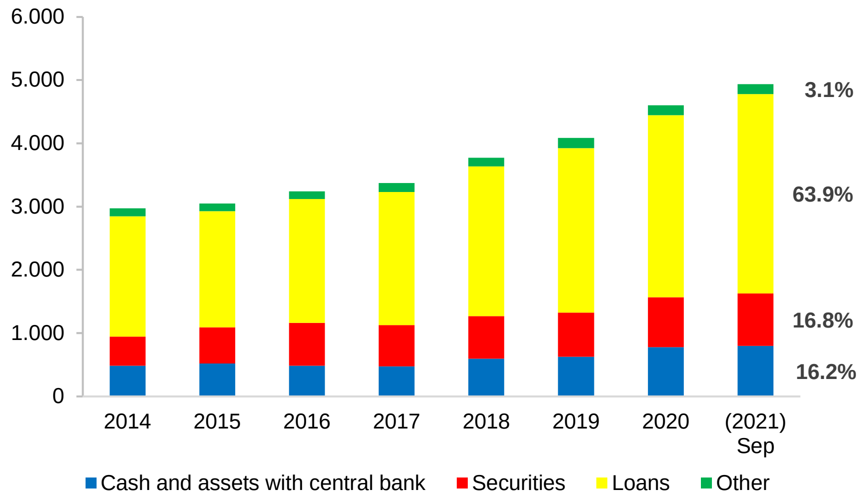


- Over the past years, dinarisation of household receivables had a firm upward trend as a result of a sharp drop in dinar interest rates, low and stable inflation as well as NBS measures aimed to support dinarisation – an upsurge from 35.1% (2012) to 55.0% (September 2021).
- Dinar savings of households (residents) recorded strong growth in past three years (22% in 2018, 31% in 2019, and 17% in 2020), which is also continued in the nine months of 2021 when it increased by RSD 8.4 bn (i.e. 9.1%) exceeding RSD 100 bn.
- This reflects citizens’ confidence in financial and price stability, given that savings growth was realised even in conditions of pandemic-induced crisis and increased risk aversion.

Traditional Banking
Mostly Financed by Domestic Deposits

Adequate structure of banking sector assets

Chart 33 **Structure of banking sector assets**
(RSD bn)

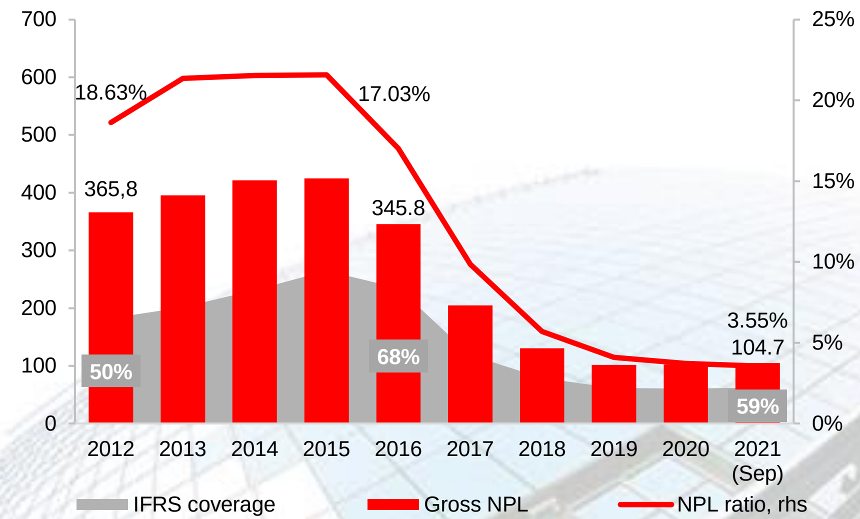


Source: NBS

- Risk aversion during the crisis led to intensified banks' investments in securities (predominantly low-risk government securities), the share of which stabilized since 2015 and amounts 16.8% of the total net banking sector assets at the end of September 2021.
- Despite historical low levels of deposit rates, stability of retail and corporate deposits in funding mix is present, with share in total liabilities of 45% and 29%, respectively at the end of September 2021.
- Despite high loan portfolio euroization, currency matching of assets and liabilities is present, with net open position of 1.8% of regulatory capital at end of September 2021.

Improving the quality of the banking sector assets

Chart 34 **Asset quality – Non-performing loans (NPL)**
(RSD bn, %)



Source: NBS

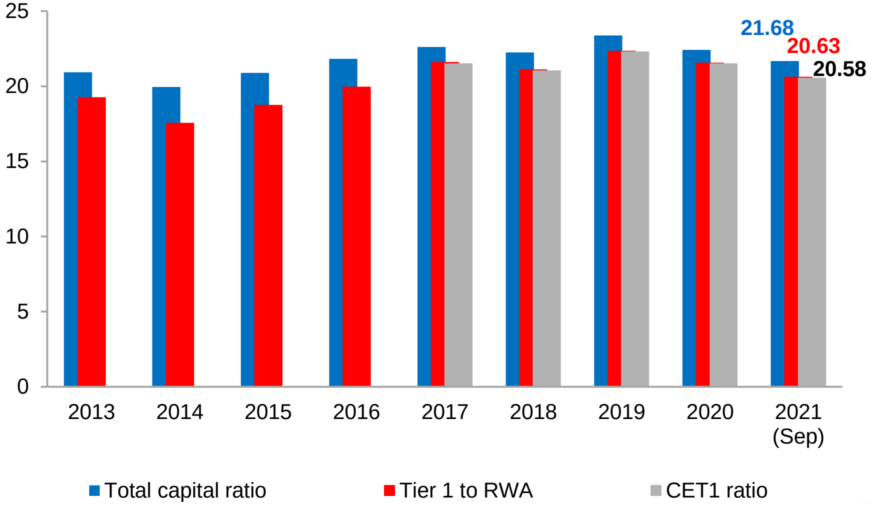
- Successful implementation of NPLs resolution activities, supported by strong credit growth led to a record low level of NPL ratio in 2020. The data for the first quarter of 2021 show a slight increase in NPL ratio, but still well below its pre-crisis level.
- At the end of September 2021, the NPL ratio was 3.6%, with the maintenance of relatively high coverage by IFRS provisions (59.3%).
- The main channels for the NPLs reduction were repayments, write-offs, and transfer (sale) to third parties.

Conservative Framework Contributed to the Banking Sector Resilience to Shocks

High banking sector capitalisation as a result of strong prudential measures

Chart 35 **Capitalization of the Serbian banking sector**

(%)

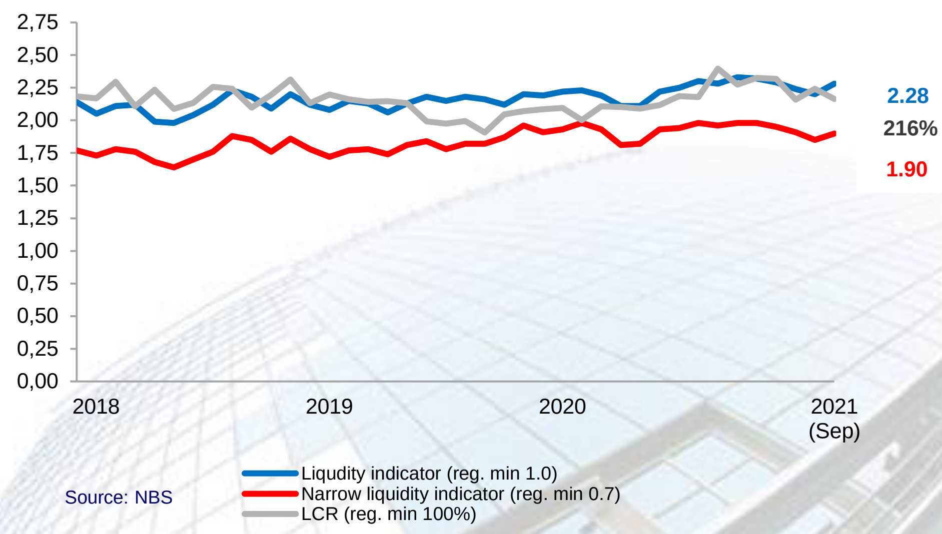


Source: NBS

- Banks possess significant capital reserves, which enable them to successfully deal with credit risk even in the case of worst-case stress scenario.
- In addition to the high level, the capitalization of the banking sector is characterized by a good structure, with CET1 around 95% of total capital.
- The high solvency of the banking sector is also indicated by the leverage ratio, introduced in regulatory framework of the Republic of Serbia with Basel III implementation, which at the end of September 2021 amounted to 11.5%.

Serbian banking sector is highly liquid

Chart 36 **Liquidity indicators of the Serbian banking sector**



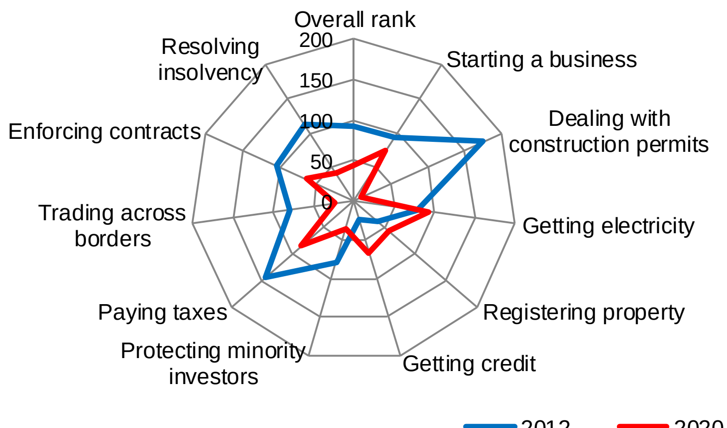
Source: NBS

- Liquidity ratios are constantly at levels significantly higher than the regulatory minimum.
- Liquid assets account for around 37.8% of the total assets of the banking sector in September 2021.
- The loan to deposit ratio that at the end of September 2021 amounted 84.5%, indicates stability of funding and in general the liquidity of the banking sector.

Structural slides

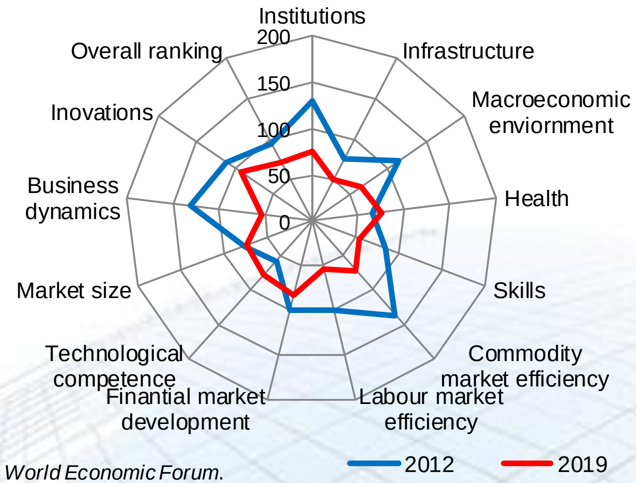
Improved Structural Competitiveness Provided Additional Boost to Overall Macroeconomic Performance

Chart 37 **Indicators on business regulation, Doing Business**
(rank, lower value means rank improvement)



Source: World bank, *Doing Business Report*.

Chart 38 **Global competitiveness indicators, WEF**
(rank, lower value means rank improvement)



Source: *World Economic Forum*.

<u>Key reform areas in the last four years:</u>

- Construction sector;
- Labor market;
- Tax administration;
- Financial sector;
- Contract enforcement and resolving insolvency.

In response to the COVID-19 pandemic, the NBS provided numerous relief to citizens and the economy

March 2020: first delay in repayment of liabilities (moratorium)

- ✓ included all debtors (households, farmers, entrepreneurs and corporates)
- ✓ lasted three months and was accepted by ca. 90% (more than 3 million) debtors

June 2020: Facilitated access to housing loans for first-home buyers

- ✓ the amount of housing loan that can be granted to first-home buyer increased to 90% of the value of the mortgaged real estate

July 2020: Extending the repayment and refinancing of consumer, cash and other non-purpose loans

- ✓ available to citizens who entered into loan contracts until 18 March 2020
- ✓ encouraged refinancing, i.e. change of the due date of the last installment (up to 10 years for car loans and 8 years for other consumer, cash and similar non-purpose loans)
- ✓ temporary measures facilitate banks' credit risk management during a pandemic for the loans in question

July 2020: second moratorium

- ✓ included all obligations of households and businesses due in August and September 2020, as well as outstanding liabilities due in July 2020
- ✓ accepted by ca. 79% (nearly 2.5 million) debtors

August 2020: Facilitated access to housing loans and short-term dinar loans

- ✓ reduced minimal level of completion for a building to be financed by a housing loan
- ✓ the possibility of extending the repayment period for five years
- ✓ simplified procedure for approving short-term dinar loans up to RSD 90,000
- ✓ valid until the end of 2021

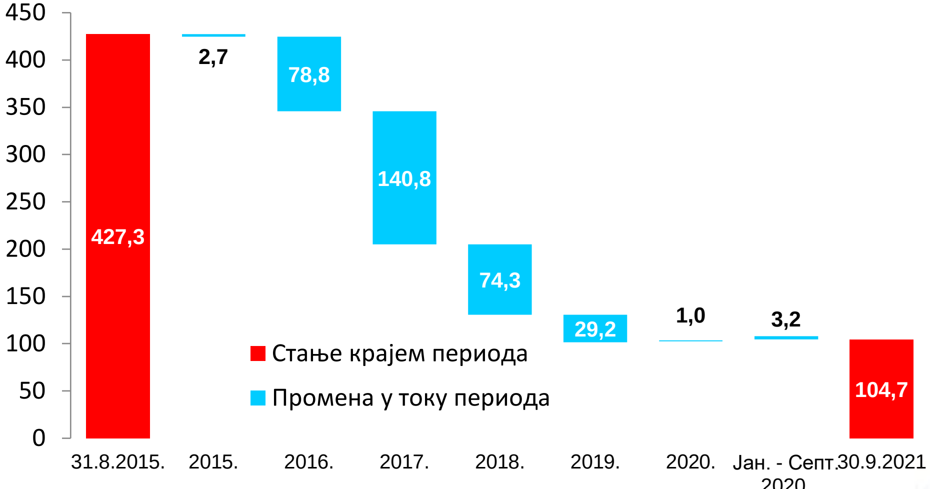
December 2020: new reliefs in repayment of obligations to debtors affected by pandemic

- ✓ targets the debtors affected by the pandemic (among other things: more than 30 days past-due; businesses – those who recorded a drop in operating income/turnover or a business interruption due to a pandemic; natural persons – unemployed or whose average monthly net income fell below average net earnings in the RS; etc.)
- ✓ possibility to reprogram or refinance the debt with a six-month grace period and an extension of the repayment period

The Amendment of NPL Resolution Strategy by Adoption of NPL Program for Period 2018 - 2020

Effect of strategy on NPL stock

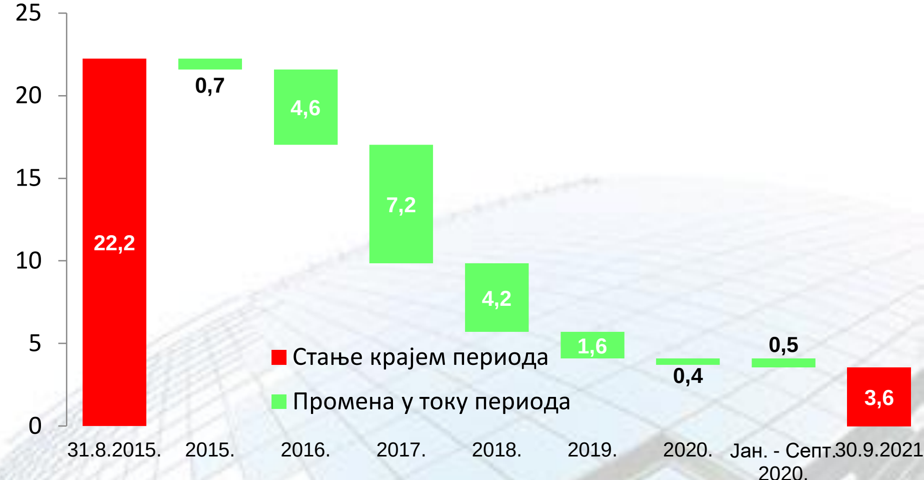
Chart 39 Gross NPL
(RSD bn)



Source: NBS

Effect of strategy on NPL ratio

Chart 40 **NPL Ratio**
(in %)



Source: NBS

- Aggregate decrease of NPL level in August 2015 – September 2021 amounts to RSD 322.6bn, while the effect of the NPL Strategy is mostly reflected through the lowest level of NPL ratio of 3.6% at end-September 2021. Compared with NPL ratio before the NPL Strategy entered into the force (22.25%) the decrease is clearly impressive at 18.70 p.p.
- Beside successful implementation of NPL Strategy, it is necessary to perform activities intended for resolution of remaining problems in order to provide the sustainability of achieved results. For that purpose, it is very important to create the ambient, which strives for early detection of sources and causes of NPLs, as well as, upgrading of existing institutes directed toward resolution of potentially new NPLs. Bearing that in mind, the Government of the Republic of Serbia on the December 27th, 2018 implemented a Program for NPL resolution for period of 2018 – 2020 (Program for NPL).
- As an integral part of Program for NPL, Action plan focuses on subjects of:
  - ➢ resolution of non-performing claims of state-owned financial creditors, through assignment of claims and eventually write-off of remaining part of portfolio;
  - ➢ improving bankruptcy framework, i.e. it`s upgrade as institute in non-performing claims resolution;
  - ➢ series of activities that are directed to the prevention of emerging and accumulating of new NPLs.

Capital Buffers – Implementation of Macroprudential Policy Measures

- Capital buffers increase the resilience of banks to losses, reduce excessive or underestimated exposures and restrict the distribution of capital.
- These macroprudential instruments should limit systemic risks in the financial system, which can be cyclical (capital conservation buffer and countercyclical capital buffer) or structural (capital buffer for a systemically important bank and systemic risk buffer).
- The following capital buffers are used in the Republic of Serbia:
  - Capital conservation buffer;
  - Countercyclical capital buffer, in order to mitigate and prevent excessive credit growth;
  - Capital buffer for a systemically important bank, with the objective to limit the systemic impact of misaligned incentives in terms of favoring certain financial institutions;
  - Systemic risk buffer, introduced to limit the risk of euroisation, one of the key structural non-cyclical systemic risks to the stability of the financial system of the Republic of Serbia.
- The capital conservation buffers may consist only of Common Equity Tier 1 capital equal to 2.5% risk-weighted assets for capital conservation buffer, 1% or 2% risk-weighted assets for capital buffer for systemically important banks, depending on the systemic importance level and 3% of total foreign currency and foreign currency-indexed placements of a bank approved to corporates and households in the Republic of Serbia for systemic risk buffer. Countercyclical buffer rate is set at 0%.
- Capital buffers apply as of 30 June 2017.

NPL Resolution Required a Systemic Approach – and, as Such, Gave Results

NPL data, September 2021	Gross loans (EUR bn)	Gross NPL (EUR bn)	NPL ratio (%)
Corporates	**10.9**	**0.3**	**3.0**
Natural persons	**11.5**	**0.4**	**3.9**
of which: households	***10.4***	***0.4***	***3.9***
Corporates in bankruptcy proceedings	**0.1**	**0.1**	**96.5**
Other	**2.6**	**0.1**	**3.8**
Total	**25.1**	**0.9**	**3.6**

- NPL development after the adoption of the NPL Resolution Strategy, especially in 2017, 2018 and 2019, confirmed the soundness of the inter-institutional and coordinated approach envisaged by the Strategy.
- After record low values of NPL ratio recorded in 2020, COVID-19 pandemic let to deceleration of this downwards trend, so in the first quarter of 2021 this ratio was slightly increased, but it is still well below its pre-crisis level.
- It is expected that further credit growth and anticipated economic recovery, supported by the measures taken by the NBS, will contribute to the continuation of the NPL ratio downwards trend.

National Bank of Serbia

Serbia's Economic Outlook

Serbia	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021*
Real GDP, y-o-y %	5.7	-2.7	0.7	2.0	-0.7	2.9	-1.6	1.8	3.3	2.1	4.5	4.3	-0.9	6.75
Private consumption, in %	4.5	-3.3	-0.6	1.4	-1.7	-1.7	-0.1	-0.6	1.9	2.2	3.1	3.7	-1.9	6.6
Private investment,[1] in %	13.2	-23.4	-7.6	6.9	14.9	-8.4	-5.2	5.2	2.1	9.5	12.3	13.9	-5.5	5.4
Government consumption, in %	3.5	-1.7	-0.1	1.6	0.4	-2.1	0.9	-3.7	0.0	2.9	3.8	2.0	2.9	2.8
Government investment, in %	-16.4	-16.6	0.0	-7.8	7.6	-35.8	13.6	14.0	21.2	-6.3	45.3	30.7	11.0	48.3
Exports, in %	12.6	-11.5	16.9	5.6	2.9	18.0	4.3	9.3	12.0	8.2	7.5	7.7	-4.2	18.9
Imports, in %	10.1	-21.9	-0.1	7.2	-0.6	6.5	5.1	4.0	7.0	11.1	10.8	10.7	-3.6	16.3
Unemployment Rate, in %[4]	-	-	20.9	24.9	25.9	24.0	20.6	18.9	16.4	14.5	13.7	11.2	9.7	12.0
Nominal Wages, in %[5]	18.0	9.0	7.6	11.2	9.0	6.2	1.4	-0.2	3.7	3.9	6.5	10.6	9.4	8.7
Money Supply (M3), in %	9.8	21.5	12.9	10.3	9.4	4.6	7.6	6.6	11.6	3.6	14.5	8.4	18.1	11.8
CPI,[2] in %	12.5	8.1	6.1	11.2	7.3	7.9	2.1	1.4	1.1	3.2	2.0	1.9	1.6	4.0
National Bank of Serbia Key Policy Rate,[3] in %	17.8	9.5	11.5	9.8	11.3	9.5	8.0	4.5	4.0	3.5	3.0	2.25	1.00	1.00
Current Account Deficit BPM-6 (% of GDP)	20.0	6.3	6.5	10.3	10.9	5.8	5.6	3.5	2.9	5.2	4.8	6.9	4.1	4.1

[1] Excluding the effect of change in inventories

[2] Average inflation in corresponding year. Projection for 2021 from November IR.

[3] Latest data

[4] Labour Force Survey. Data are revised according to the new LFS methodology from 2021. For 2021 are data for the first half of the year (H1).

[5] Since 2018, nominal w ages published according to the new methodology. For 2021 are data for the period January - August.

Banking Sector Overview

Serbia	2012	2013	2014	2015	2016	2017	2018	2019	2020	September 2021
Number of banks[1]	32	30	29	30	31	29	27	26	26	24
Employees	28,394	26,380	25,106	24,257	23,847	23,055	22,830	23,087	22,823	22.503
Branches	2,243	1,989	1,787	1,730	1,719	1,627	1,598	1,598	1,576	1.536
HHI Assets	678	741	794	796	813	813	779	800	786	869
Share of foreign banks, %	75.2	74.3	74.5	76.1	76.7	76.9	75.4	75.7	86.0	86.3
Assets (net), EUR m	25,322	24,827	24,545	25,059	26,253	28,440	31,931	34,731	39,177	41.98
Capital, EUR m	5,198	5,186	5,074	5,090	5,122	5,631	5,725	6,002	6,098	6.135
Loans (gross), EUR m	17,273	16,140	16,170	16,175	16,442	17,565	19,406	21,111	23,439	25.074
Of which gross NPL, EUR m	3,217	3,448	3,483	3,491	2,800	1,730	1,105	862	871	890
Gross NPL ratio, %	18.6	21.4	21.5	21.6	17.0	9.8	5.7	4.1	3.7	3.55
IFRS impairment of NPLs	50.0	50.9	54.9	62.3	67.8	58.1	60.2	61.5	59.0	59.3
Deposits, EUR m	14,936	15,067	15,637	16,523	18,242	19,926	23,115	25,197	28,984	31.038
Pretax Income[2], EUR m	102.5	-18.0	29.0	80.0	172.0	579.8	640.6	575.5	391.9	353.0
CAR[3], %	19.9	20.9	20.0	20.9	21.8	22.6	22.3	23.4	22.4	21.7
CET1 ratio %[3,4]	-	-	-	-	-	21.5	21.1	22.3	21.6	20.6
Leverage%[3,4]	-	-	-	-	-	11.1	12.6	13.6	12.4	11.5
Liquidity ratio	2.1	2.4	2.2	2.1	2.1	2.0	2.0	2.2	2.2	2.3
Liquidity coverage ratio[4], %	-	-	-	-	-	239.5	213.3	199.3	211.8	216.4
FX ratio, %	5.5	4.4	3.9	4.4	2.7	2.9	4.5	1.5	1.0	1.8
ROA[2], %	0.4	-0.1	0.1	0.3	0.7	2.1	2.1	1.7	1.1	1.2
ROE[2], %	2.0	-0.4	0.6	1.6	3.4	10.6	11.3	9.8	6.5	7.7
Net interest margin[5], %	4.3	4.2	4.3	4.3	3.9	3.7	3.6	3.3	3.0	2.7

[1] The NBS revoked operating licence from Nova Agrobanka on 27 October 2012, from Razvojna banka Vojvodine on 6 April 2013, from Privredna banka Beograd on 26 October 2013, from Univerzal banka Beograd on 31 January 2014 and from Jugobank Jugbank Kosovska Mitrovica on 2 April 2018. The NBS issued operating licence to Mirabank on 16 December 2014 and the bank started its operations in April 2015. The NBS issued operating licence to Bank of China Srbija on 20 December 2016. The Findomestic bank w as merged to Direktna bank on 1 July, 2017. Jubanka ad Beograd w as merged to AIK bank on 23 Decembar, 2017. Pireaus bank w as merged to Direktna bank on 26 October, 2018. Vojvođanska bank w as merged to OTP bank 25. April, 2019 (consolidated under Vojvođanska brand). OTP bank w as merged into Vojvođanska banka 29. April, 2021 (consolidated under OTP brand). mts bank w as merged to Banka Poštanska Štedionica on 30 June 2021.

[2] Without Razvojna banka Vojvodina at the end of 2012: Pretax profit € 230m; ROA 1.0; ROE 4.7

[3] The last available data of 30.09.2021

[4] Introduced by the implementation of Basel 3 and monitored from 30 June 2017

[5] Net interest margin to average total asset