National Bank of Serbia

Macroeconomic Developments in Serbia

June 2022

Sustained Macroeconomic Stability

- COVID-19 and Ukraine conflict, 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.
- The adopted economic policy measures (EUR 5.8 bn, about 13% of GDP in 2020) minimized the decline in GDP in 2020, while an additional package of EUR 2.2 bn (4.2% of GDP) in 2021 contributed to further GDP growth and its return to the path of sustainable growth in the medium term.
- GDP recovery to pre-crisis level was accomplished already in Q1 2021, while according to the SORS data real GDP growth in 2021 stood at 7.4%. Such developments are the result of growing activity in industry, construction and the service sectors. According to SORS data, GDP growth in Q1 was at a level of 4.4% y/y which is in line with our projection.
- Due to negative effect of conflict between Russia and Ukraine, and the uncertainty regarding its duration and economic effect of further EU sanctions towards Russia and Russia's counter-measures towards EU, we have revised downward our projection of GDP growth for 2022 by 0.5 pp (from a range of 4-5, to a range of 3.5-4.5%).
- For the same reasons, the new average inflation forecast (May) is on a higher path (9.2% 2022). After peaking in the middle of the year, inflation will be on a declining path and return to the target tolerance band in H2 2023.
- In 2021, current account deficit of EUR 2.34 bn (-4.4% of GDP) was recorded, with the record inflow of FDI (EUR 3.9 bn). In 2022, we expect the current account deficit to increase, but to remain within sustainable limits.
- Owing to product and geographic diversification and export oriented investments, goods exports in 2021 increased by as much as 29.1% y/y.
- According to LFS unemployment rate stood at 10.6% in Q1 2022, followed by the high participation rate (71.0%) and the employment rate at the level of 49.3%.
- In April 2022 public debt of central government stood at the level of 52.8% of GDP.
- In June 2022, the NBS decided, third month in a row, to increase the key policy rate by 0.5 pp to 2.5%, as the continuation of the Ukraine conflict resulted in deepening of the energy crisis globally, a further spike in the prices of primary agricultural commodities and industrial raw materials well as deepening problems with global supply chains..
- Banking sector stability has been preserved and further reinforced. The share of NPLs stood at 3.33% in April 2022.

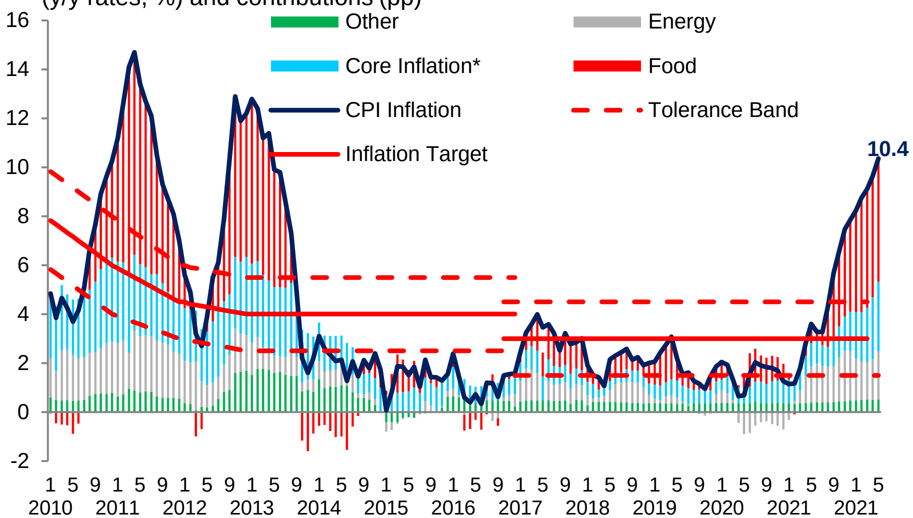
Inflation is Driven by Food and Energy Prices; Core Inflation Lower than Headline

National Bank of Serbia

Increase of inflation was led by supply-side factors which is also indicated by…

Chart 1 **CPI developments**

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

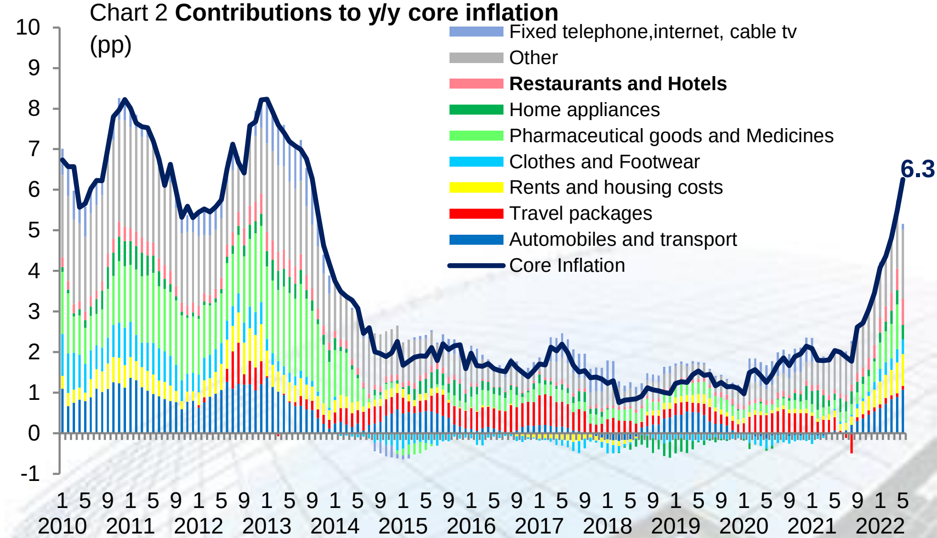


- In the past eight years inflation was moving at level of around 2.0% on average.
- Higher inflation from H2 2021 is a consequence of rising food and global oil prices, as well as the exceptionally low base from the 2020.
- Average inflation in 2021 stood at 4.0%.
- In May overall inflation stood at 10.4%. Almost 2/3 of y-o-y inflation was determined by factors that monetary policy cannot influence to a large degree – the prices of food and energy.

…lower level of core inflation compared to the headline

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

(pp)



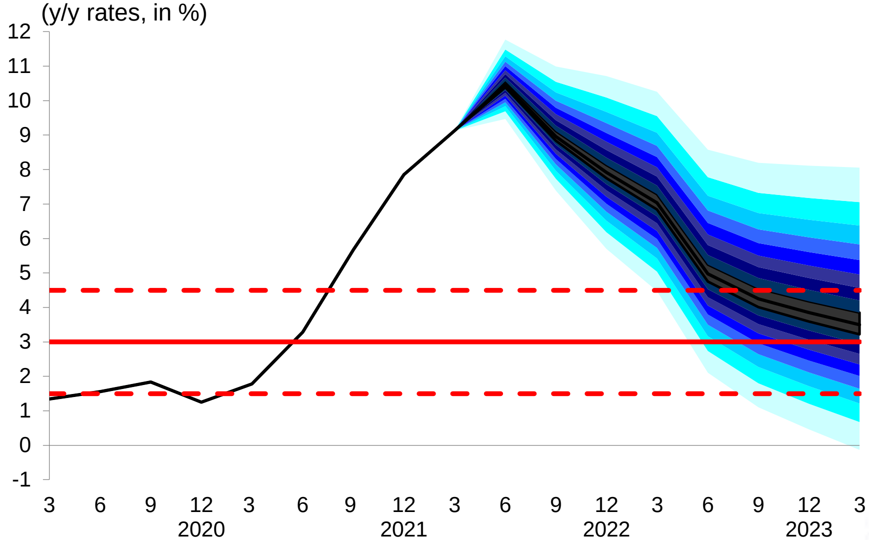
- On the other hand, owing to preserved FX and macroeconomic stability, core inflation remained stable.
- For the past eight years core inflation averaged 1.8%.
- Core inflation in May 2022 was lower than overall inflation and amounted to 6.3%, which was contributed by the preserved relative stability of the exchange rate and preserved business and consumer confidence.
- Short-term inflation expectations of the financial sector increased to 6.0% (Ipsos May survey) and 5.5% (Bloomberg June survey). Medium-term inflation expectations of the finacial sector ranged between 3.5% and 4.0%.

Higher Inflation Forecast due to Conflict in Ukraine

After it reaches its peak in mid-2022, inflation will gradually decline throughout the projection horizon…

Chart 3 **Inflation projection** (May 2022 IR)

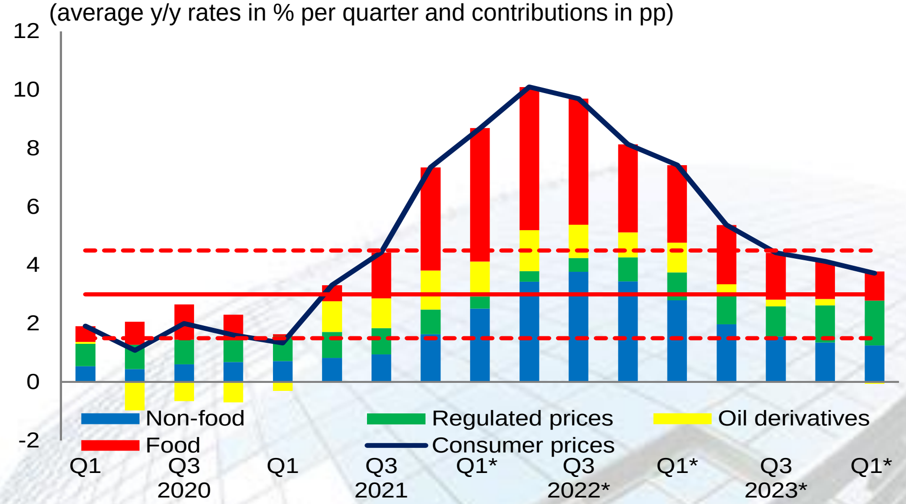
(y/y rates, in %)



…and approach the target midpoint towards the end of the projection horizon.

Chart 4 **Inflation projection** (from May 2022 IR)

(average y/y rates in % per quarter and contributions in pp)



*NBS Forecast

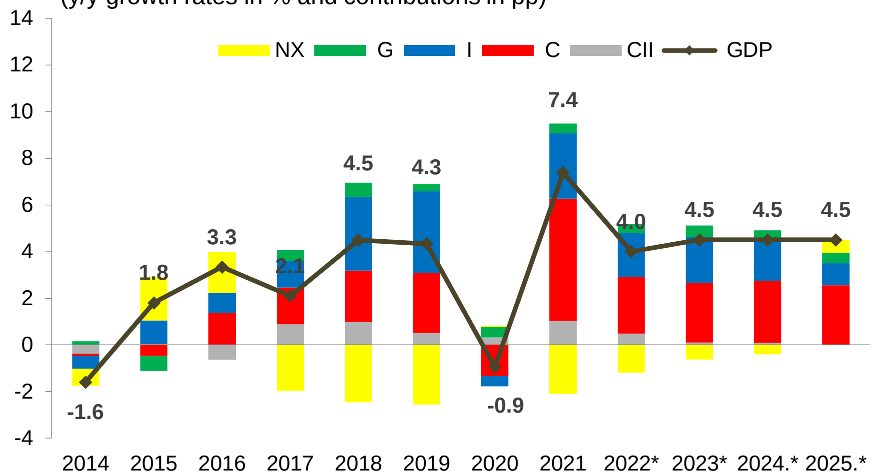
- Inflation has been moving above the target band as of September 2021.
- Our new projection is revised up due to additional cost pressures in world energy prices, grains and other commodities, a result of the war in Ukraine.
- Measures to limit exports of grains, price cap on essential food items and reduction in excise tax on fuels contribute to reducing the effects of rising world prices on the domestic market.
- The expected return of inflation to the target band in H2 2023, will be driven by the weakening of cost pressures and the effects of the current tightening of monetary conditions.

- The key uncertainties of the projection stem from the ongoing conflict in Ukraine and its effect on prices of energy, grains and other commodities going forward.
- Risks also arise from its impact on global economic recovery and duration of disruptions in global supply chains;
- Risks are also associated with the domestic market – the agricultural season and movement in administered prices.
- Overall, risks of the projection are elevated and tilted to the upside.

GDP Growth in 2022 Revised to Range 3.5%-4.5%; Medium Term Growth Between 4%-5%

Economic recovery in 2021 is driven by domestic and external demand

Chart 5 **GDP developments**
(y/y growth rates in % and contributions in pp)

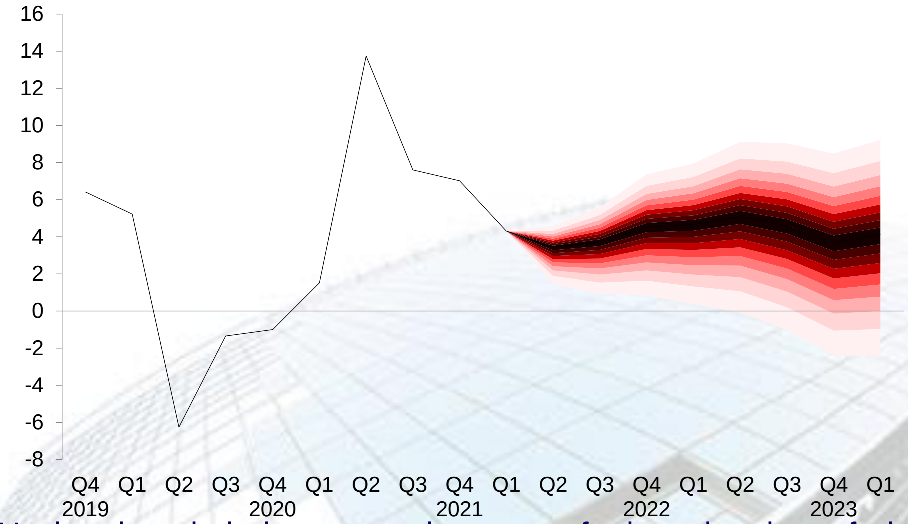


*NBS forecast

- Thanks to the preserved macroeconomic and financial stability and the timely and comprehensive package of economic measures adopted by the National Bank of Serbia and the RS Government, Serbia recorded a cumulative growth of real GDP of 6.4% in two pandemic years.
- According to the SORS data, in 2021, Serbia achieved a real GDP growth of 7.4% driven by recovery in service sectors, as well as growth in construction and industrial production.
- GDP growth in Q1 2022 according to SORS data stood at 4.4% y/y, driven by service sectors and industrial production, despite the conflict between Russia and Ukraine, which had negative effect on supply chains as well as commodity prices.

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

Chart 6 **GDP growth projection** (from May IR)
(y/y growth rates in %)

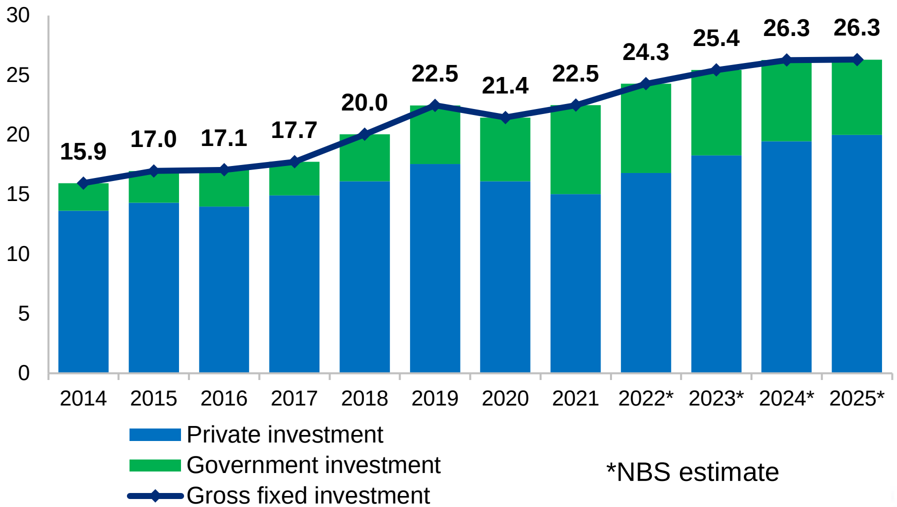


- Having in mind the uncertainty over further duration of the conflict, and the economic effect of growth in energy, food and commodity prices in world markets, we revised downward our projection of GDP growth for 2022 form the range of 4-5% to a range of 3,5-4,5%.
- We expect growth to be driven by higher growth in service sectors, as well as construction and industrial production.
- In conditions of the conflict between Russia and Ukraine, we assess risks of the projection to be tilted to the downside. These are particularly related to supply chain disruption, energy crisis and prices of primary products, as well as pace of normalization of monetary policy of major central banks.

The Beginning of New Strong Investment Cycle

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

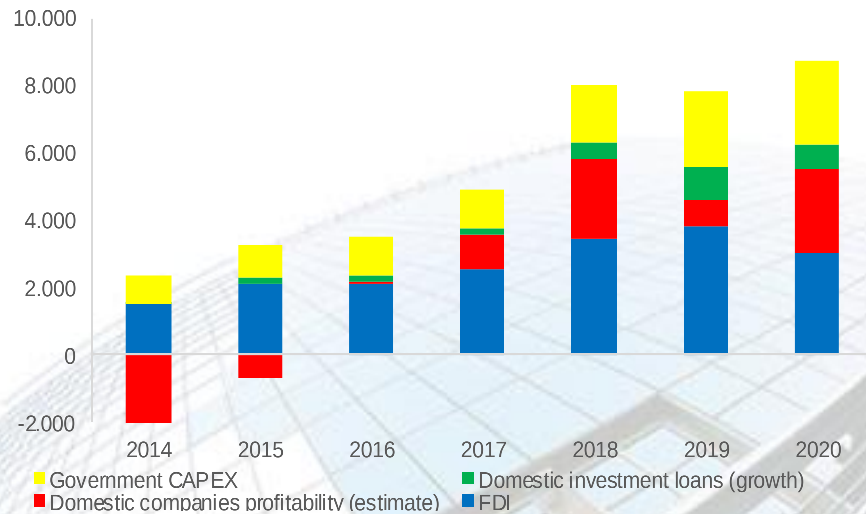
Chart 7 **Fixed investment share in GDP**
(nominal terms, in % of GDP)



- 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 cumulativly increased during 2020 and 2021 for around 12% .
- 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 reached level of over 7% of GDP and should remain around that level in the medium term.

…supported by diversified financing sources

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

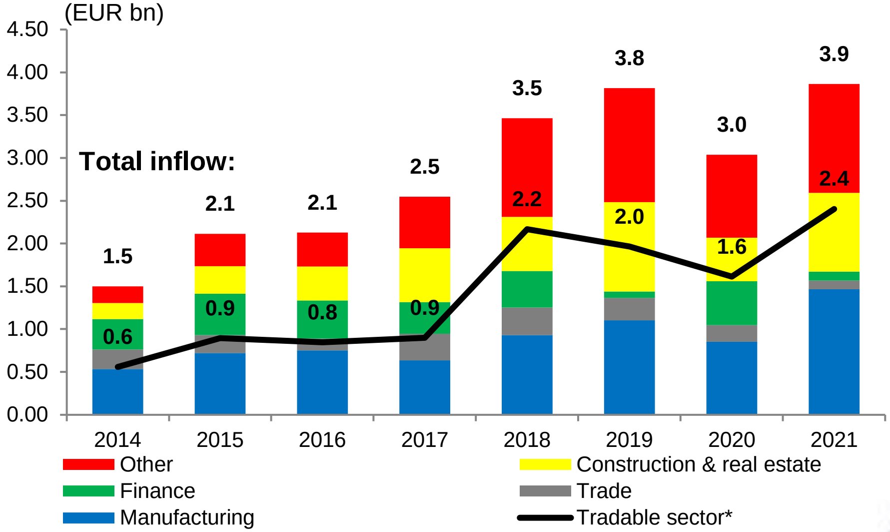


- In earlier years, investments have largely relied on FDI.
- Owing to maintained macroeconomic and financial stability, exchange rate stability, as well as fiscal consolidation, in recent years three more strong pillars for financing investments have been established: multiplied profitability of the 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**

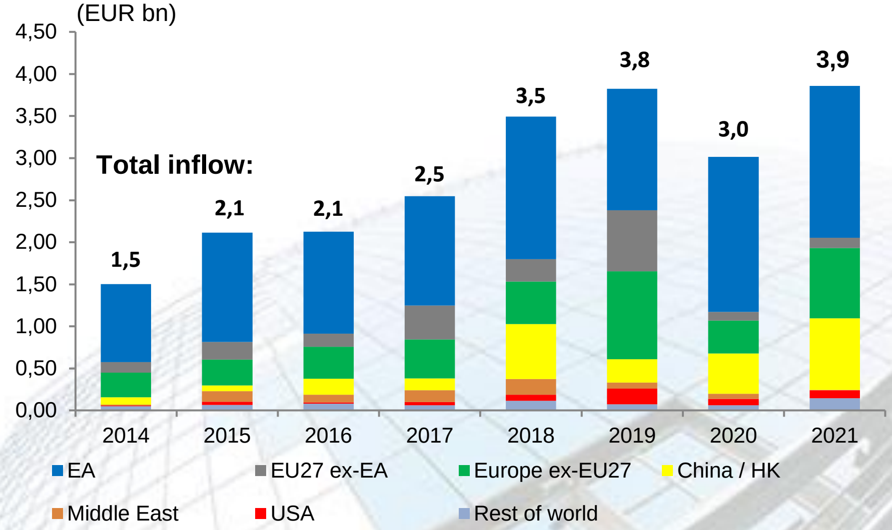


*industry, agriculture, transport & storage, accomodation and food svc.

- Out of an inflow of EUR 14.2 bn in past four years (2018-2021), EUR 8.1 bn has been directed into tradable sectors, most notably manufacturing (EUR 4.3 bn).
- Manufacturing sectors with the highest FDI inflows (metals, autos, food, rubber and plastic) recorded a high growth in employment, output and exports.
- Serbia has attracted about 60% of total FDI to the Western Balkans region.
- **In 2021, FDI inflow amounted to record high amount of EUR 3.9 bn (net inflow EUR 3.6 bn).**

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

Chart 10 **FDI composition by geographic origin**



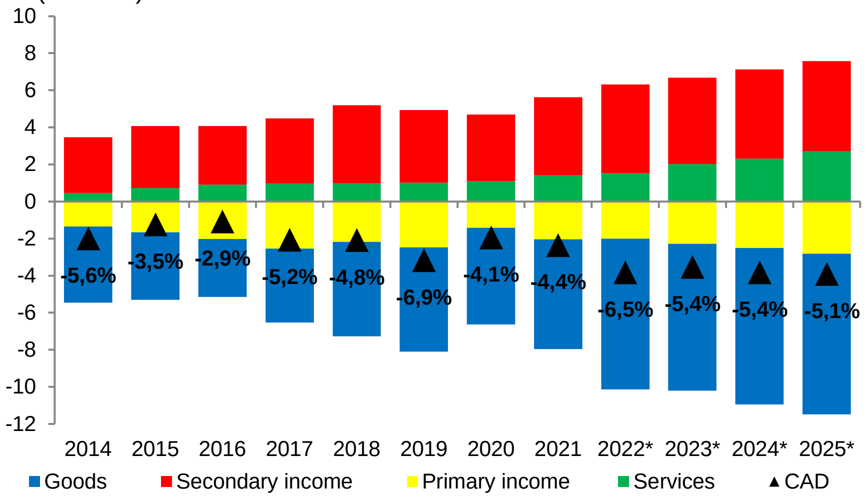
- **During the period January-April 2022, FDI inflow amounted to EUR 768 mln (net inflow EUR 698 mln) , while in May, according to operational data, a complete recovery of FDI inflows was recorded.**
- FDI inflows are diversified by region of origin as well, with a greater share of countries from the Asia Pacific, alongside Serbia's major investment partner - the European Union.
- During 2019 – 2021, the bulk of FDI inflows still came from EU countries (57%), but with an increasing share of Asian countries such as China/HK (15%), as well as USA and non-EU countries, such as Russia, Turkey and Switzerland.

Short Term CAD Under the Influence of the Energy Crisis, Medium Term CAD Under the Influence of the New Investment Cycle

CAD projection for 2022 increased to 6.5% of GDP due to rising world energy prices and the conflict in Ukraine

Chart 11 **Current account balance by component**

(EUR bn)

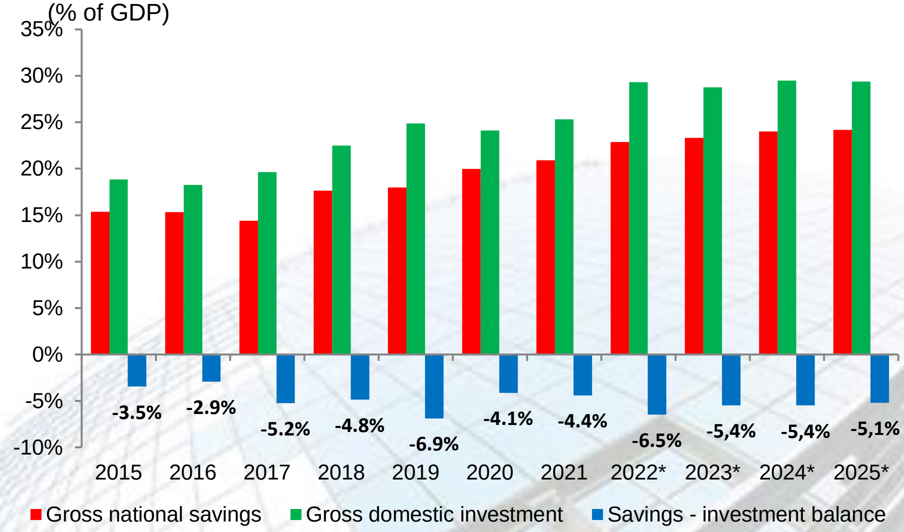


- In 2021, a CAD of -4,4% of GDP was recorded. **Current account deficit amounted to EUR 2.3 bn,** driven by an increase in the goods deficit, despite faster export than import growth, and the primary income deficit.
- Since 2015 Serbia's current account deficit has been fully financed by FDI which is expected in the following years as well (projected net FDI inflow of around 5% of GDP).
- **In the first four months of 2022, CAD amounted to EUR 1.8 bn.**
- Taking into account CAD in Q1, as well as the increase in prices of energy, food, processed products, metals and industrial raw materials, we revised the projection of the CAD in 2022 to 6.5% 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**

(% of GDP)



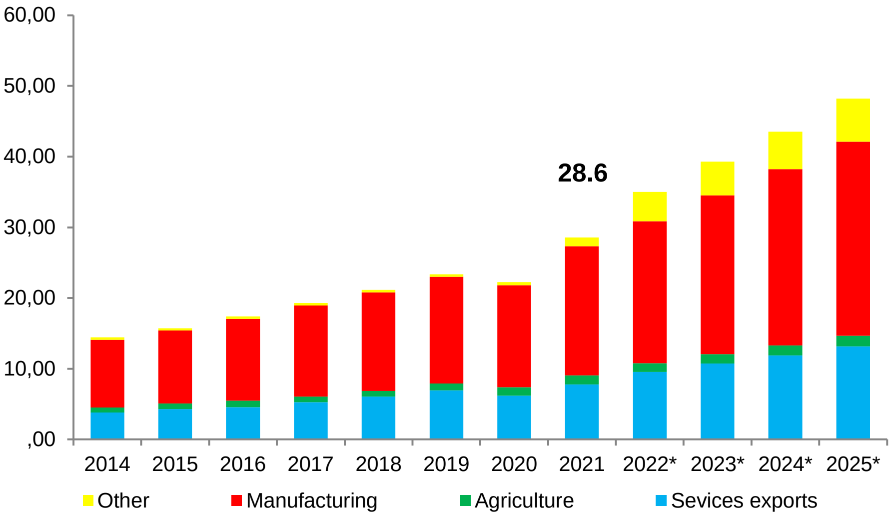
- Private sector savings increased in 2020 due to reduced domestic demand and lower energy prices.
- During 2020, the share of gross domestic investment in GDP decreased only slightly compared to 2019, due to the growing share of gross public sector investment.
- In 2021, there was no deepening of the S-I gap, despite the increase in the share of public sector investments due to recovery of domestic demand, but also domestic savings.
- The temporary increase in the S-I gap in 2022 was driven by global price increases, and on the other hand, by the growth of savings in conditions of increased uncertainty.

Demonstrated Exports Resilience During Both the Pandemic and the Crisis in Ukraine

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)



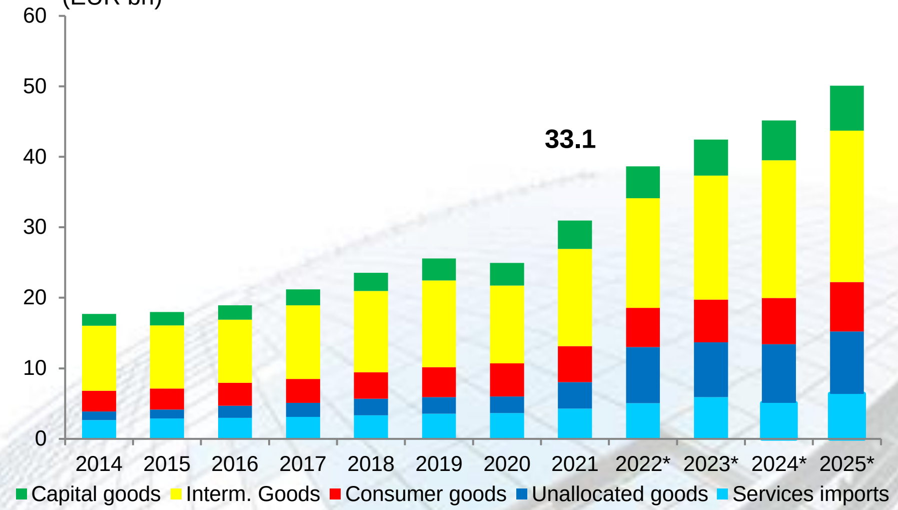
*NBS Forecast

- In 2021, there was an intensive growth of exports of goods of 29.1%, driven by the recovery of exports of the manufacturing industry, which would have been even faster if there were no disruptions in global chains.
- The growth of exports of services in 2021 amounted to 26.0% and was driven by exports of ICT services, as well as tourism services, which fully recovered in 2021.
- **During Jan-April of 2022 an increase in goods exports of 29.3% y/y was recorded, driven by growth in exports of manufacturing and mining. Exports of services increased by 31.8% y/y.**

The projection reflects 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)



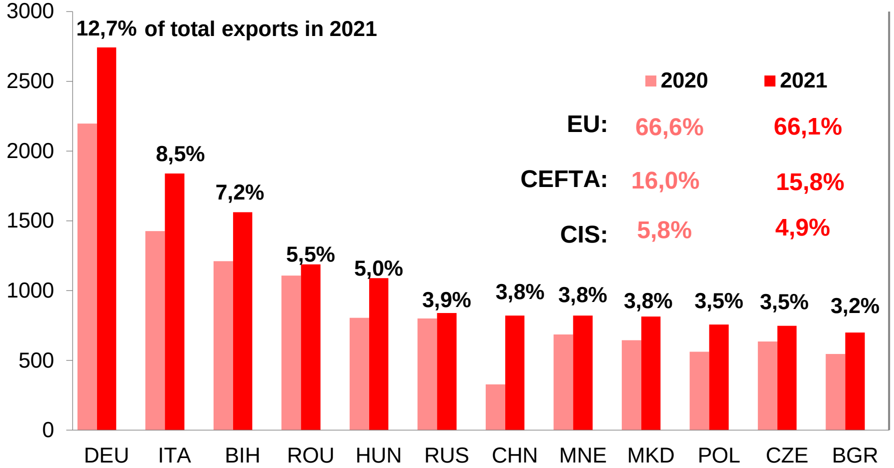
*NBS Forecastt

- Goods imports increased by 25.4% in 2021, driven by intermediate products, of which a significant part relates to energy imports. Imports of equipment and consumer goods continued to grow.
- **Imports of goods increased by 44.8% y/y during the first four months of 2022. The biggest contribution came from intermediate goods, partly due to the growth of energy prices. Imports of services increased by 42.8% y/y.**

Geographic Diversification Helped Foreign Trade Resilience During Pandemic and Ukrain Crisis

Exports to all significant partners increases in 2021 compared to 2020

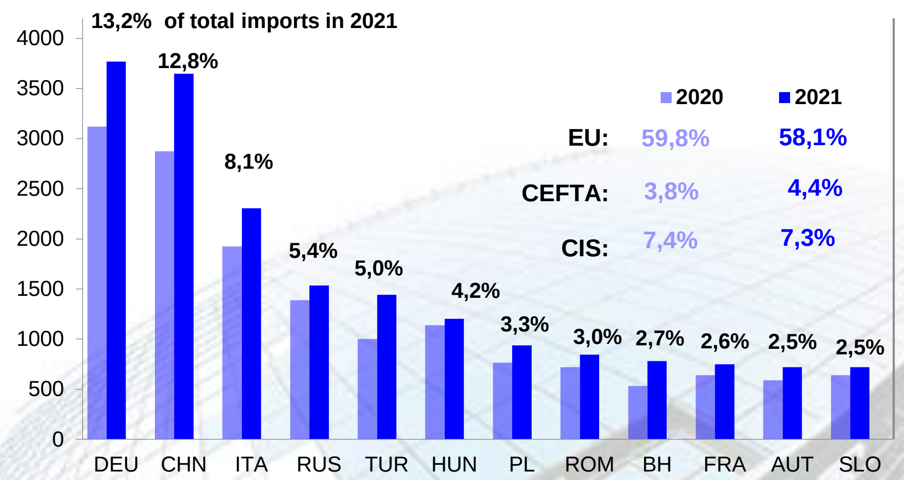
Chart 15 **Goods exports by country in 2020 / 2021**
(EUR mn and % of total)



- Serbia's exports are largely directed towards EU and countries of the region, and reliant on demand in those countries which were recovering during 2021. 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 (12.7%), followed by Italy (8.5%), Bosnia and Herzegovina (7.2%), Romania (5.5%), Hungary (5.0%) and Russia (3.9%).
- Exports to China in 2021 continued to grow compared to 2020, while recording growth even in 2020, so China is highly positioned on the list of Serbian export partners.

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 2020 / 2021**
(EUR mn and % of total)

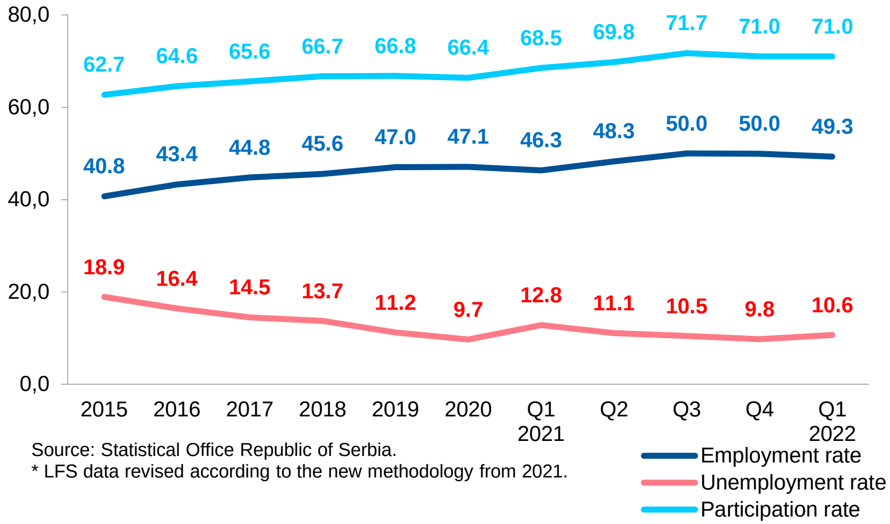


- Majority of imports (more than 58% in 2021) come from the EU, followed by CIS and CEFTA.
- In 2021, compared to 2020, imports (as well as exports) in absolute terms increased in most significant countries.
- By country, the largest shares of imports are from Germany (13.2%), whereas the share of imports from China increased from 9.0% in 2019 to 12.5% in 2020 and sits at 12.8% in 2021.

Positive Trends in the Labour Market in Q1 2022 Accompanied by Productivity Growth

According to the LFS, high employment and participation rates in Q1 2022

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

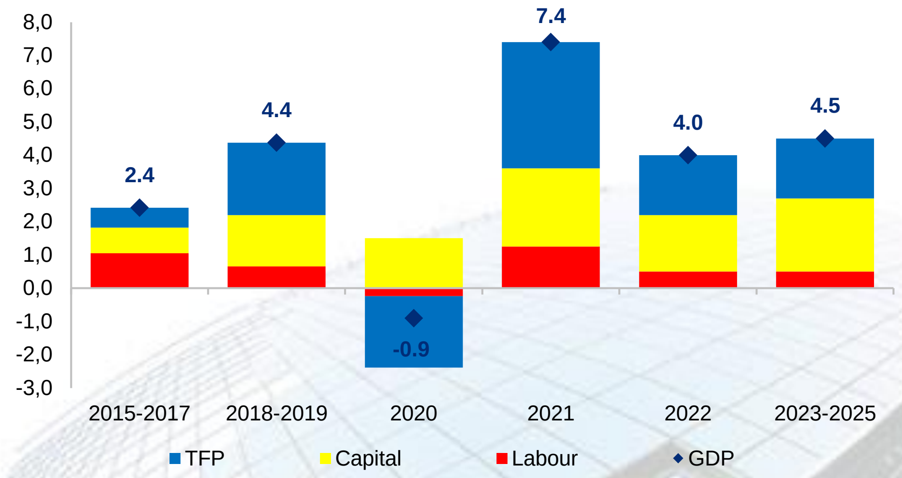


Source: Statistical Office Republic of Serbia.
* LFS data revised according to the new methodology from 2021.

- According to the Labour Force Survey (LFS), the unemployment rate in Q1 2022 was reduced by 2.2 p.p. compared to Q1 2021 and amounted to 10.6%, which is below the average for the whole 2021 of 11.0%.
- The employment rate in Q1 2022 was 49.3%, an increase of 3.0 p.p. compared to the same quarter of the previous year, with an increase in the informal employment rate from 10.9% to 13.3%.
- The participation rate (activity rate of persons aged 15 to 64) in Q1 2022 was 71.0%, which is an increase of 2.5 p.p. compared to Q1 2021 (when it was 68.5%), which continued to move above 70%.

Increasing contribution of total factor productivity to Serbian GDP growth

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



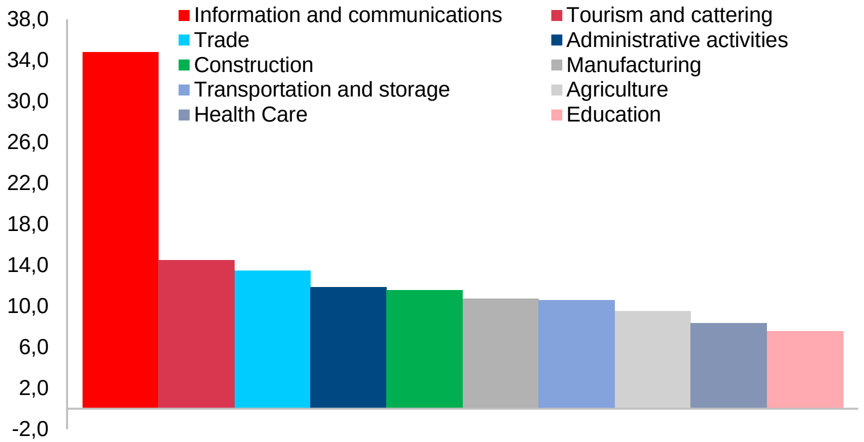
Sources: SORS, NBS calculation.
* NBS estimate.

- 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 2021 productivity recorded growth again and was a main driver of growth, together with strong investments.
- 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

In March 2022, the average wage increased by 14.4% in nominal terms and 4.9% in real terms

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

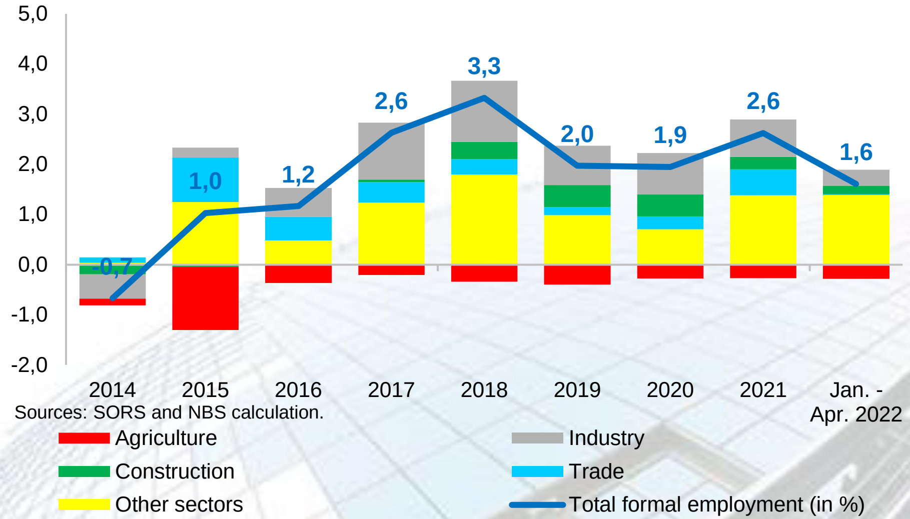


Sources: SORS.

- Year-on-year growth in average wages was 14.4% in March, with wage growth still driven by faster growth in the private sector (16.9% y/y) than in the public sector (9.4% y/y).
- Y/y wage growth in March stands out in manufacturing, construction, agriculture and most private sector services (ICT, trade, accommodation and food services, transport).
- Nominal wages continued to grow faster than year-on-year inflation in March, thus continuing the real growth of wages and preserving disposable income and purchasing power of the population. The real growth of the average net wage in March 2022 is 4.9%.

Growth of formal employment during four months 2022, although at a slower pace

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



Sources: SORS and NBS calculation.

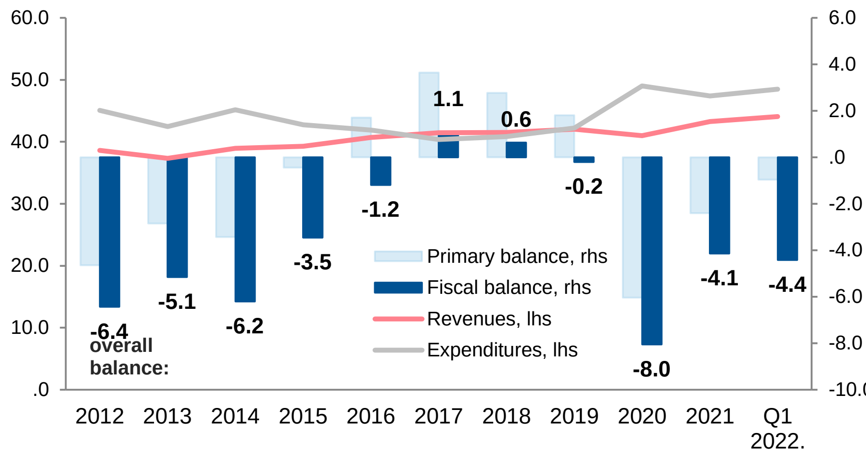
- In the period January-April 2022, the total formal employment increased by about 36 thousand persons (1.6% y/y).
- Growth comes almost entirely from the private sector (an increase of about 32 thousand persons, i.e. 1.9% y/y) and to a lesser extent from the public sector (higher employment by about 4.5 thousand persons, i.e. 0.8% y/y).
- Observed by activities, y/y growth is present in ICT, administrative and support service activities, manufacturing, professional and scientific activities, as well as in construction and accommodation and food services. On the other hand, y/y decline was recorded in the financial sector and agriculture.

Fiscal Deficit in 2021 Lower Than Planned; Public Debt returns to a downward trajectory

Fiscal deficit in Q1 2022 driven by capital expenditures and fiscal support to the population

Chart 21 **Fiscal revenues, expenditures and outcome**

(% share in GDP)

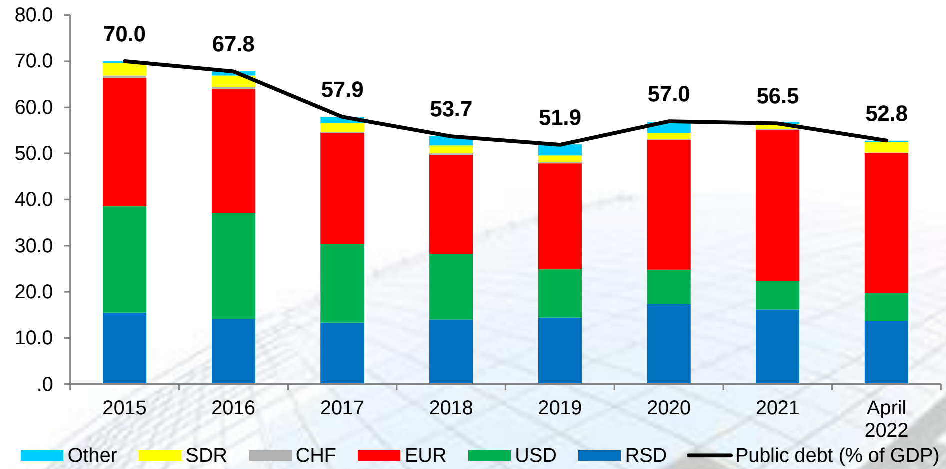


- In the years before pandemic, Serbia eliminated fiscal deficit, with government investments reaching near 5% of GDP. Higher deficit in 2020 (8.0% of GDP) was a consequence of high expenditures for support measures and purchase of medical equipment.
- In 2021 a fiscal deficit was RSD 259.4 bn (4.1% of GDP), which is significantly lower than the level projected in th Fiscal strategy (4.9% of GDP).
- The deficit in 2021 was mostly influenced by the new stimulus package in the amount of EUR 2.2 bn (4.2% of GDP). In addition, CAPEX amounted to 7.4% in 2021 and are expected to remain at a similar level in the coming years.
- In 2022 a deficit of 3.0% of GDP is projected, and its return to 1.0% of GDP in the medium run.

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)



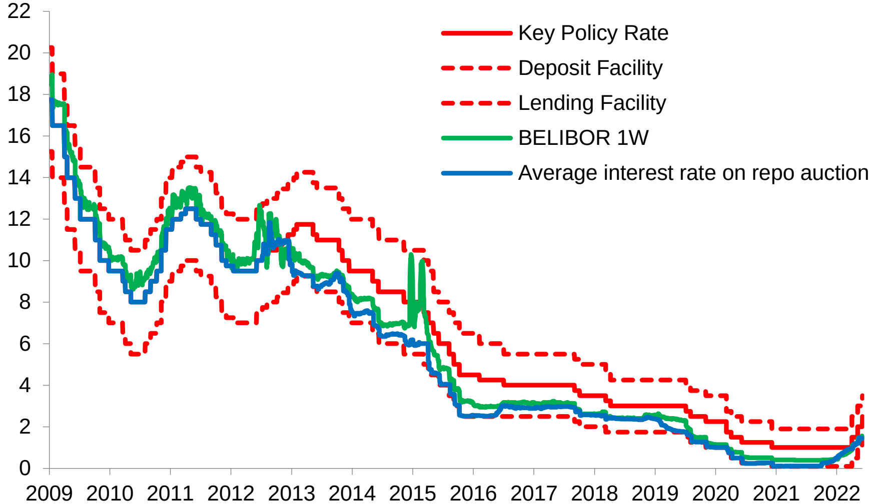
- In 2021 public debt was reduced to 56.5% of GDP, despite the issuance of three Eurobonds worth of total EUR 2.75 bn during the year, which were intended to cover the growing financial needs due to the pandemic. Also, it is significantly lower than the level projected by the Fiscal strategy (57.3%).
- At the end of April 2022, the share of public debt in GDP was 52.8% and thus increased compared to March, primarily due to the foreign exchange differences, largely due to strengthening dollar against the euro..
- Public debt is expected to return to a downward trajectory in the coming years with further reliance on RSD and EUR denominated debt and reduction of currency risk.

The key policy rate raised to 2.5%

In June 2022, the key policy rate is increased by 0.5 pp to 2.5%

Chart 23 **Interest rates**

(in %)



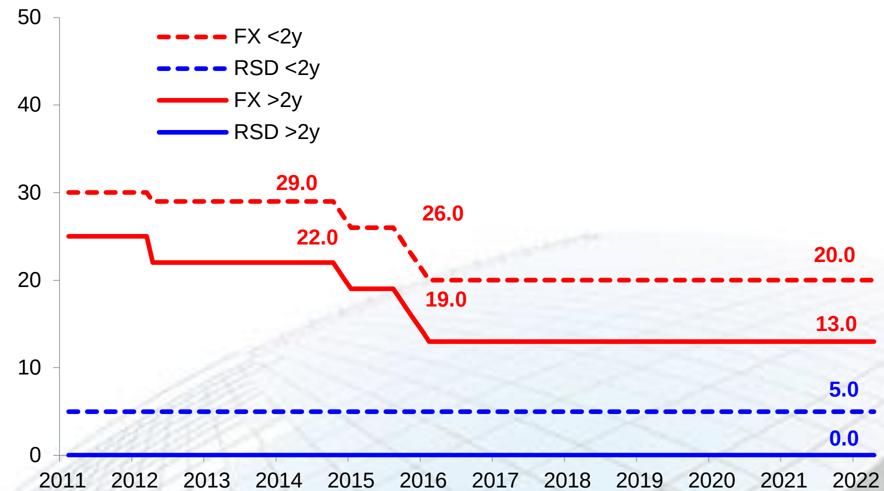
The decision takes into account the following factors:

- the continuation of the Ukraine conflict, which resulted in deepening of the energy crisis globally, a further spike in the prices of primary agricultural commodities and industrial raw materials, and the continued aggravated functioning of international supply chains,
- The limitations of the second-round effects on inflation expectations and preempt a further hike in domestic inflation as the NBS invests considerable effort to this end, including, among other measures, maintaining relative stability of the dinar exchange rate against the euro.

FX required reserve ratio has remained unchanged since early 2016

Chart 24 **Reserve requirement ratios**

(in %)

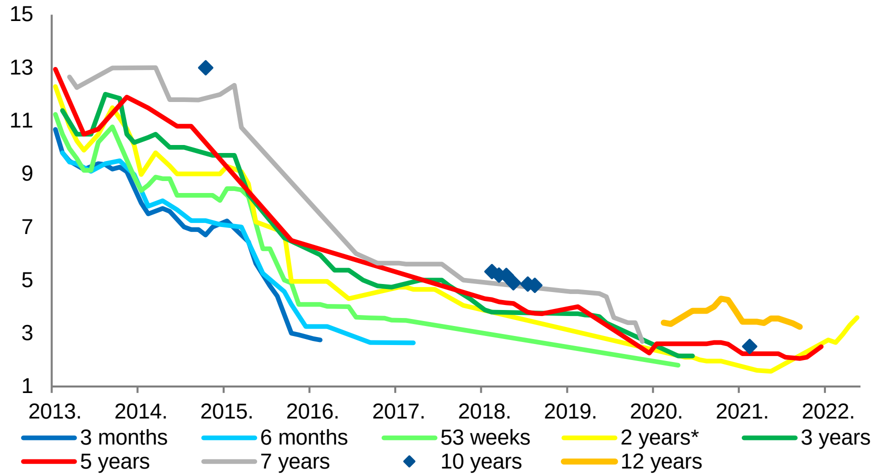


- Last time FX RR ratio was cut in 2016 aiming to support lending activity (to 20%/13%, for liabilities up to/over 2Y).
- RR is an important monetary policy tool (in June 2022 RR amounted to EUR 2.6 bn and RSD 251.1 bn), as well as an important macroprudential tool within dinarisation strategy:
  - by applying lower RR ratio on dinar vs FX sources,
  - by applying remuneration on dinar RR (i.e. „standard“ rate 0.75% and „beneficial“ rate of 1.25% 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 still relatively low…

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



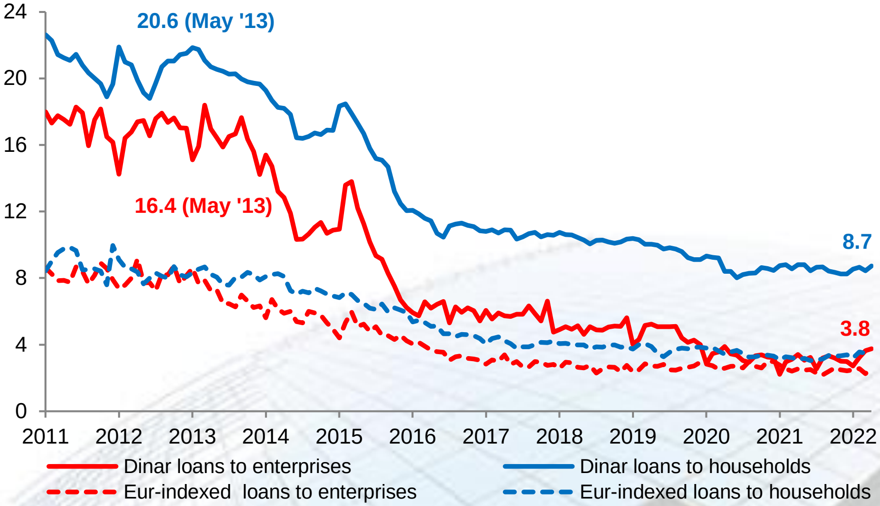
Source: Ministry of Finance.

* 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 2012 to over 80% in 2022, supported by the extension of the dinar yield rate curve up to 12 years in February 2020.
- Interest rates on dinar securities are still relatively low and close to their lowest values.
- Serbia's dinar-denominated bonds are included in renowned J.P. Morgan GBI-EM family of indices as of 30 June 2021, which 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 %)

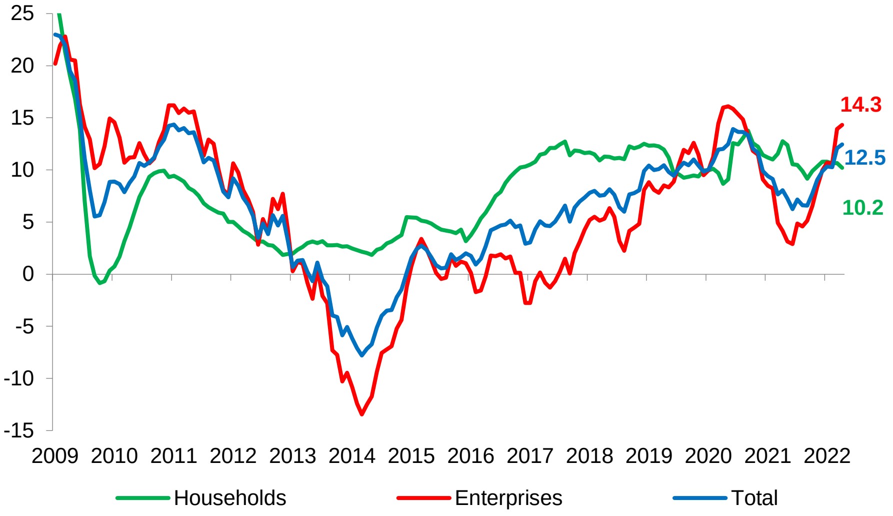


- Despite the tightening of monetary conditions from October 2021, the borrowing conditions for corporate and household sector in the domestic market remained favorable. **Dinar lending interest rates** are moving around their average levels from 2021 and in April 2022 they amounted to:
  - 3.8% for corporates,
  - 8.7% for households.
- Interest rates on euro-indexed loans on the domestic market are also recording values close to their averages from 2021.

… Providing Support to Credit Activity

Lower costs of financing support domestic lending …

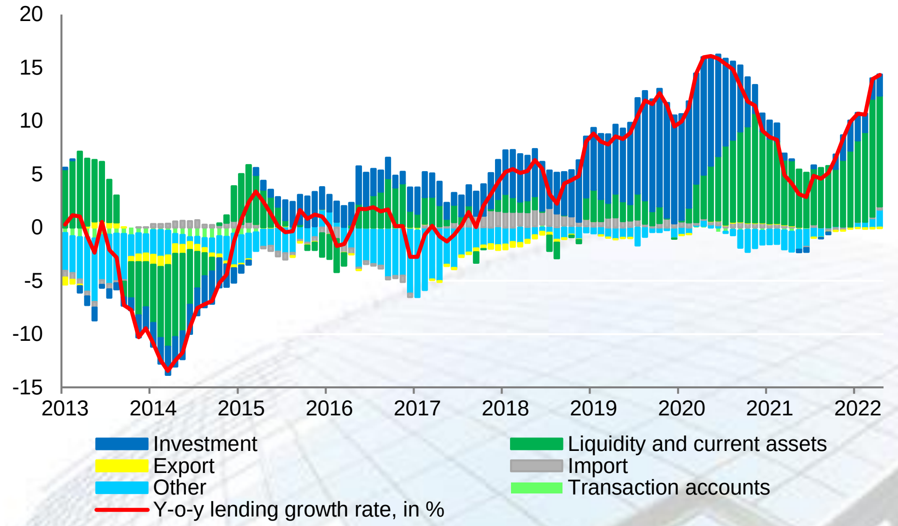
Chart 27 **Bank lending to enterprises and households**
(y/y rates, constant exchange rate 30 Sept 2014, in %)



- **Domestic credit activity continued its strong growth in 2022.**
- Total domestic loans accelerated y/y growth rate to 12.5% in April, supported by corporate and household loans.
- **Structure of loans remained a favourable in terms of the contribution to economic recovery, as growth was led by**
  - liquidity and current assets and investment loans within corporate loans,
  - and housing loans within household loans.

… 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)

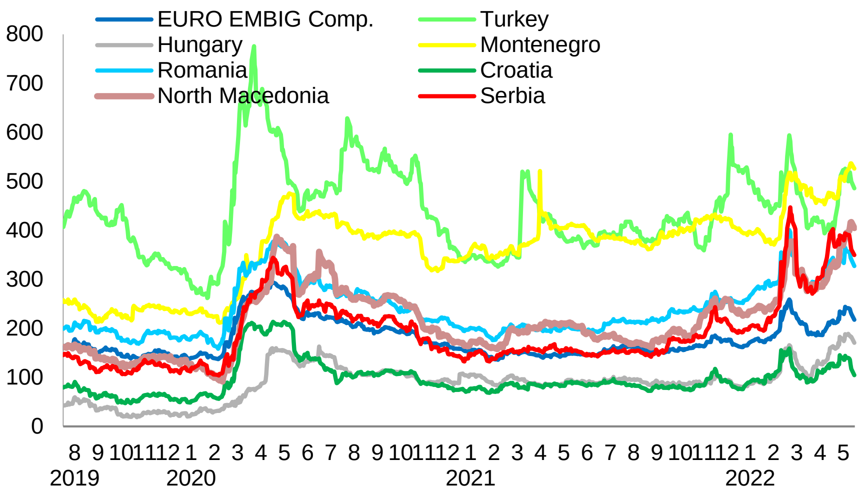


- **A larger contribution to the total lending activity in the begging of 2022 came from corporate loans compared to household loans.**
- In April, **investment loans** amounted to 39% of total corporate loans, while the share of **liquidity and current assets loans** equaled to 48%, supported by Guarantee Scheme loans.
- **Micro, small and medium-size enterprises loans** amounted to 63% of total corporate loans in April.

Relative stability of exchange rate is maintained even in the circumstances of intensified global uncertainty

Serbia's risk premium in 2022 is influenced by factors from international environment

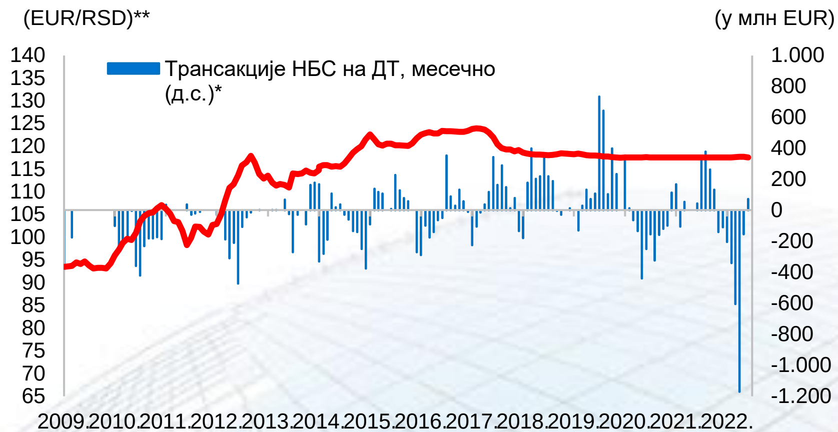
Chart 29 **Risk premium indicator for euro-denominated debt - EURO EMBIG**
(basis points, daily values)



- The movement of the risk premium during 2022 is mostly influenced by the escalation of geopolitical tensions, which resulted in a sharp jump in the global perception of since February, with a partial downward correction during March.
- Fitch and S&P **confirmed Serbia rating at BB+,** while in the conditions of intensified geopolitical tensions S&P in June changed outlook to stable.

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

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



* + нето куповина; - нето продаја.
** 1 EUR у RSD.

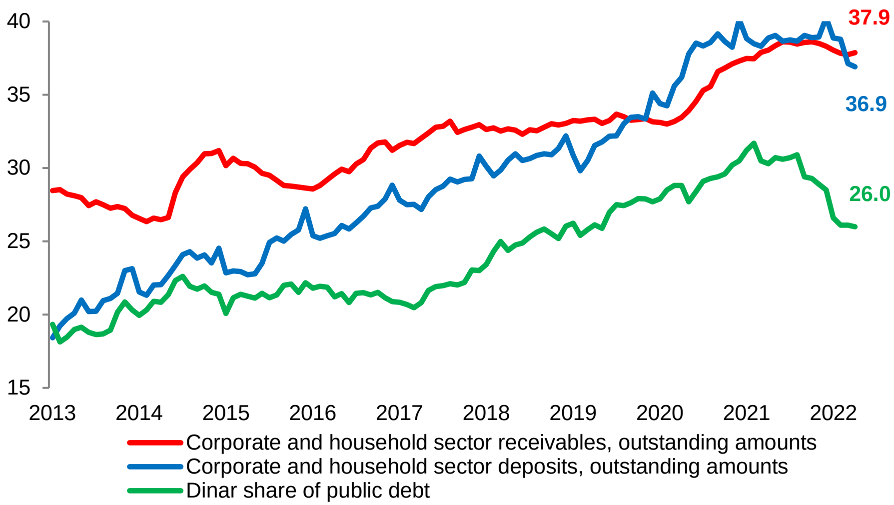
- The dinar remained broadly unchanged against the euro in 2021 and in 2022 (dinar lost 0.1% in five months of 2022).
- The strengthening of depreciation pressures as of Q4 2021 was influenced by increased energy imports, and from the end-February by increased risk aversion on the international financial market and significantly increased citizens' demand for FX in the first weeks after the outbreak of the conflict in Ukraine.
- Depreciation pressures weakened in April, while in May the FX supply outstripped FX demand. Despite NBS interventions, mostly on the sales side, foreign exchange reserves remained high (€ 13.9 billion at the end-May), well above the standard for determining their adequacy.

Since the Adoption of the Strategy, Significant Progress Has Been Made in the Field of Dinarization

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 %)

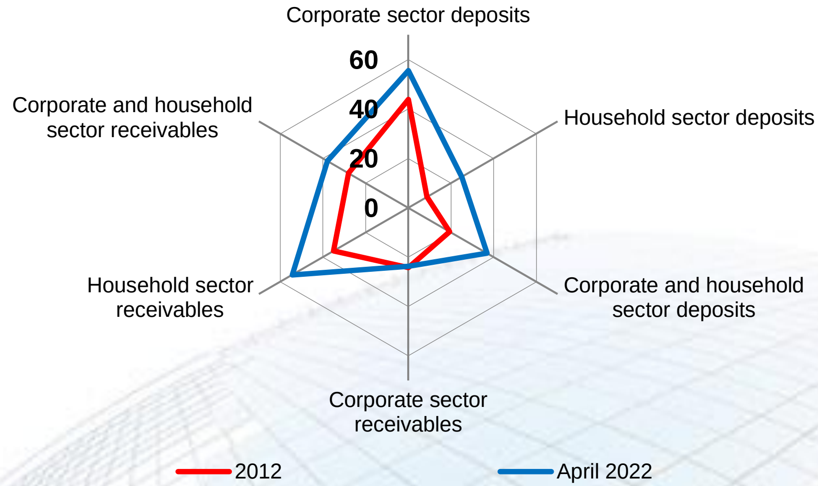


- NBS stimulates the dinarisation process by delivering low and stable inflation, preserving relative exchange rate stability, enhancing management of FX risks and exposures in the private sector, and using other measures.
- The Government contributes to dinarisation through tax policy, by developing the dinar securities market - dinar debt share rose from 2.5% in 2008 to 26.0% in April 2022.
- Dinarisation of corporate and household sector deposits rose by 17.6 pp compared to end-2012 to 36.9% (April 2022). Dinarisation of corporate and household sector claims amounted to 37.9% in April 2022 (up by 9.8 pp compared to end-2012).

Households are predominantly indebted in dinars and dinar savings have a growing trend

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

(outstanding amounts, in %)

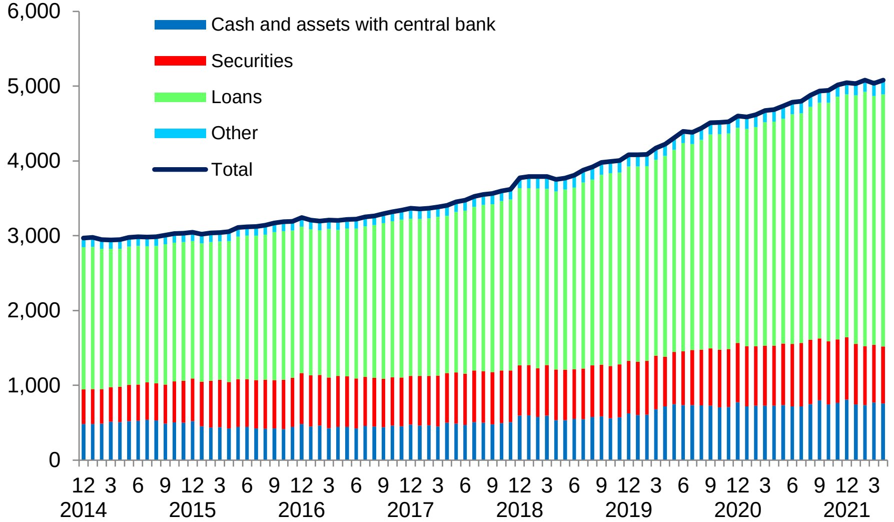


- Over the past years, dinarisation of household receivables had a firm upward trend as a result of a sharp drop in dinar interest rates, low and stable inflation as well as NBS measures aimed to support dinarisation – an upsurge from 35.1% (2012) to 54.4% (April 2022).
- Dinar savings of households (residents) recorded strong growth in past four years (22% in 2018, 31% in 2019, 17% in 2020, and 12.0% in 2021).
- Since end-February 2022, dinar savings recorded a temporary decline amid growing uncertainty caused by escalating geopolitical tensions internationally.

Traditional Banking Mostly Financed by Domestic Deposits

Adequate structure of banking sector assets

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

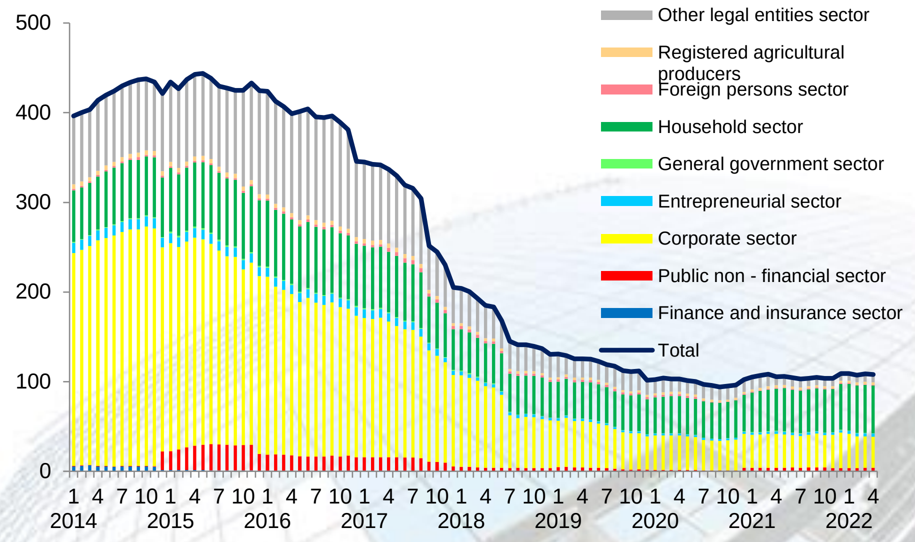


Source: NBS

- 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 15.1% of the total net banking sector assets at the end of April 2022.
- 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 April 2022.
- Despite high loan portfolio euroization, currency matching of assets and liabilities is present, with net open position of 2.2% of regulatory capital at end of April 2021.

Improving the quality of the banking sector assets

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



Source: NBS

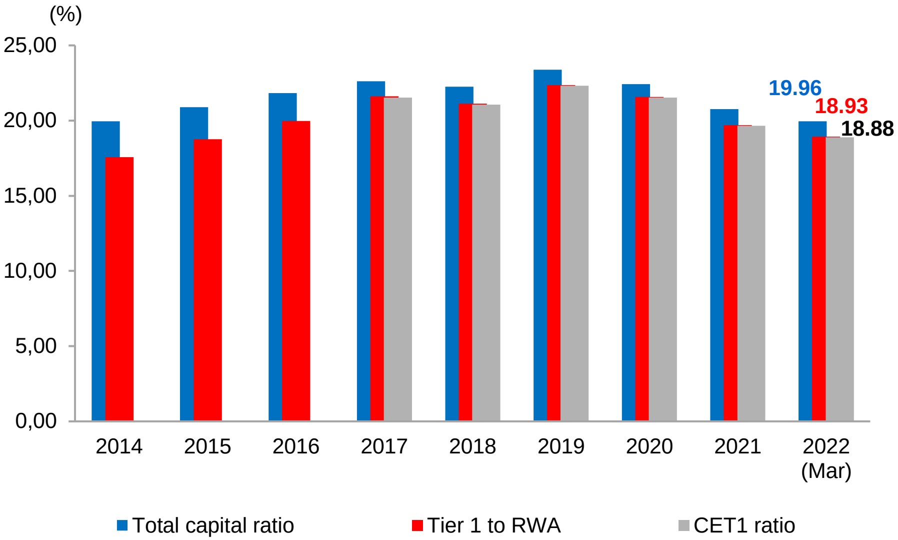
- Successful implementation of NPLs resolution activities, led to a record low level of NPL amounts. The amounts of NPL for the second quarter continued to stand still, and are still well below its pre-crisis level.
- The main channels for the NPLs reduction were repayments, write-offs, and transfer (sale) to third parties.
- At the end of April 2022, the largest share in non-performing loans was made by the household sectors (49.3%) and corporate (32.3%).

National Bank of Serbia

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**

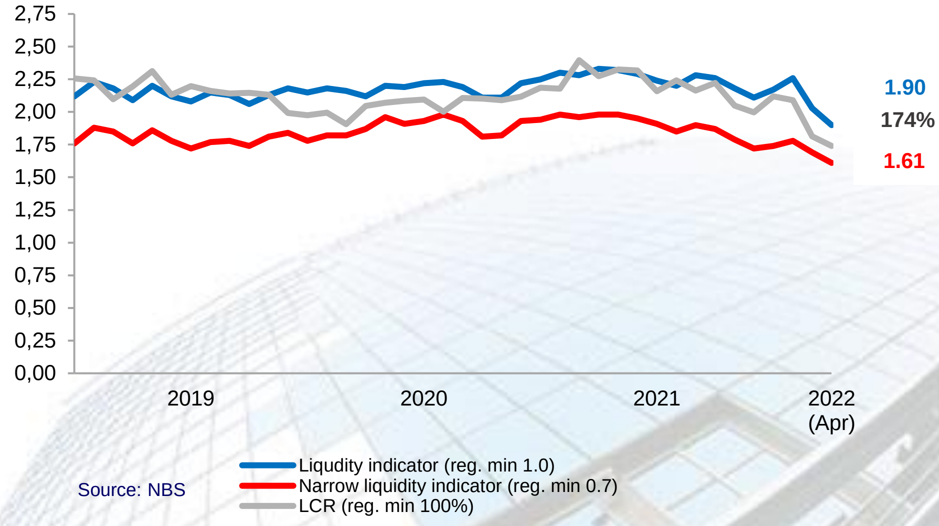


Source: NBS

- 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 March 2022 amounted to 10.8%.

Serbian banking sector is highly liquid

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



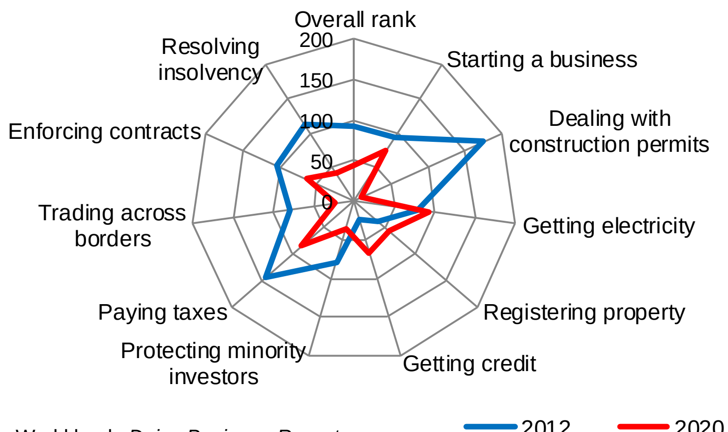
Source: NBS

- Liquidity ratios are constantly at levels significantly higher than the regulatory minimum.
- Liquid assets account for around 32.8% of the total assets of the banking sector in April 2022.
- The loan to deposit ratio that at the end of April 2022 amounted 88.4%, indicates stability of funding and in general the liquidity of the banking sector.

Structural slides

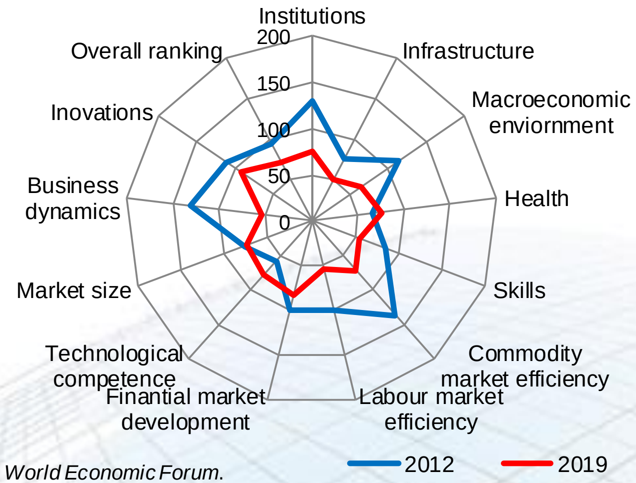
Improved Structural Competitiveness Provided Additional Boost to Overall Macroeconomic Performance

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*.

Key reform areas in the last four years:

- 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

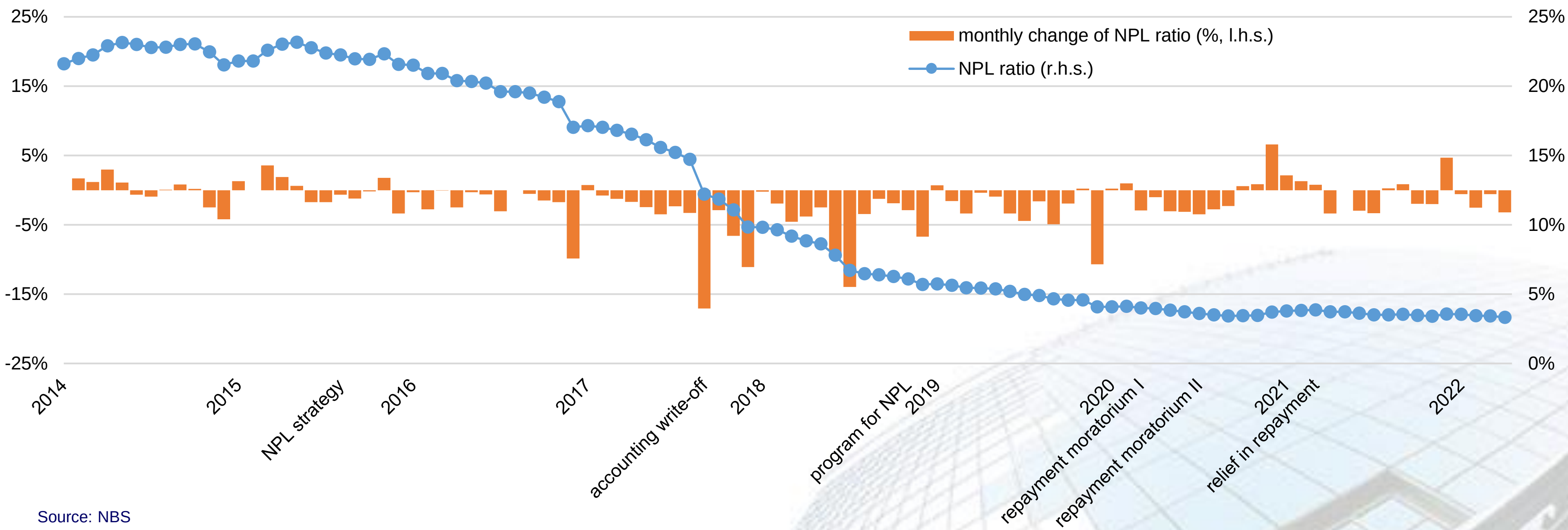
- ✓ reduced minimal level of completion for a building to be financed by a housing loan
- ✓ the possibility of extending the repayment period for five years
- ✓ simplified procedure for approving short-term dinar loans up to RSD 90,000
- ✓ valid until the end of 2021

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

Successful implementation of measures and sustainability of achieved results - NPL indicator

Chart 39 NPL Ratio (%)



Source: NBS

- The decrease in NPL ratio by 19.85 p. p., from inherited-post-crisis period record levels (23.18%; May 2015) to low 3.33% (April 2022), is the result of a systematic approach to problem solving, timely implementation of adequate measures and sustainability of achieved results.

- The most prominent implemented regulations in terms of results are:

  - *Decision on accounting write-off of the bank's balance sheet assets* (Official Gazette of RS 77/2017; in force since September 2017; abb. ***accounting write-off***)

  - *Strategy for resolving problem loans* (for the period 2015-2018; Government session on August 13, 2015; abb. ***NPL strategy***) and its successor *Program for resolving problem loans* (for the period 2018-2020; Government session on December 27, 2018; abb. ***program for NPL***)

National Bank of Serbia

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.

Serbia's Economic Outlook

*NBS projection

Serbia	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022*	2023*
Real GDP, y-o-y %	-0.7	2.9	-1.6	1.8	3.3	2.1	4.5	4.3	-0.9	7.4	4.0	4.5
Private consumption, in %	-1.7	-1.7	-0.1	-0.6	1.9	2.2	3.1	3.7	-1.9	7.6	3.5	3.7
Private investment,[1] in %	14.9	-8.4	-5.2	5.2	2.1	9.5	12.3	13.9	-5.5	5.9	10.0	11.3
Government consumption, in %	0.4	-2.1	0.9	-3.7	0.0	2.9	3.8	2.0	2.9	2.6	2.5	3.2
Government investment, in %	7.6	-35.8	13.6	14.0	21.2	-6.3	45.3	30.7	11.0	32.4	3.2	-0.2
Exports, in %	2.9	18.0	4.3	9.3	12.0	8.2	7.5	7.7	-4.2	19.4	7.4	8.1
Imports, in %	-0.6	6.5	5.1	4.0	7.0	11.1	10.8	10.7	-3.6	19.3	7.8	7.6
Unemployment Rate, in %[4]	25.9	24.0	20.6	18.9	16.4	14.5	13.7	11.2	9.7	11.0	10.6	
Nominal Wages, in %[5]	9.0	6.2	1.4	-0.2	3.7	3.9	6.5	10.6	9.4	9.6	13.4	
Money Supply (M3), in %	9.4	4.6	7.6	6.6	11.6	3.6	14.5	8.4	18.1	11.8		
CPI,[2] in %	7.3	7.9	2.1	1.4	1.1	3.2	2.0	1.9	1.6	4.0	9.2	5.3
National Bank of Serbia Key Policy Rate,[3] in %	11.3	9.5	8.0	4.5	4.0	3.5	3.0	2.25	1.00	1.00	2.50	
Current Account Deficit BPM-6 (% of GDP)	10.9	5.8	5.6	3.5	2.9	5.2	4.8	6.9	4.1	4.4	-6.5	-5.4

[1] Excluding the effect of change in inventories

[2] Average inflation in corresponding year.

[3] Latest data

[4] Labour Force Survey. Data are revised according to the new LFS methodology from 2021. Data for 2022 is data for Q1 2022.

[5] Since 2018, nominal w ages published according to the new methodology. Data for 2022 is average for the period January - March 2022.

Banking Sector Overview

Serbia	2013	2014	2015	2016	2017	2018	2019	2020	2021	April 2022
Number of banks[1]	30	29	30	31	29	27	26	26	23	22
Employees	26,380	25,106	24,257	23,847	23,055	22,830	23,087	22,823	22,550	22,245
Branches	1,989	1,787	1,730	1,719	1,627	1,598	1,598	1,576	1,515	1,418
HHI Assets	741	794	796	813	813	779	800	786	867	906
Share of foreign banks, %	74.3	74.5	76.1	76.7	76.9	75.4	75.7	86.0	87.0	83.7
Assets (net), EUR m	24,827	24,545	25,059	26,253	28,440	31,931	34,731	39,177	42,943	43,174
Capital, EUR m	5,186	5,074	5,090	5,122	5,631	5,725	6,002	6,098	6,128	6,101
Loans (gross), EUR m	16,140	16,170	16,175	16,442	17,565	19,406	21,111	23,439	25,939	27,516
Of which gross NPL, EUR m	3,448	3,483	3,491	2,800	1,730	1,105	862	871	927	918
Gross NPL ratio, %	21.4	21.5	21.6	17.0	9.8	5.7	4.1	3.7	3.6	3.3
IFRS impairment of NPLs	50.9	54.9	62.3	67.8	58.1	60.2	61.5	59.0	56.3	56.5
Deposits, EUR m	15,067	15,637	16,523	18,242	19,926	23,115	25,197	28,984	32,483	32,180
Pretax Income, EUR m	-18.0	29.0	80.0	172.0	579.8	640.6	575.5	391.9	458.1	197.3
CAR[2], %	20.9	20.0	20.9	21.8	22.6	22.3	23.4	22.4	20.8	20.0
CET1 ratio %[2,3]	-	-	-	-	21.5	21.1	22.3	21.6	19.7	18.9
Leverage%[2,3]	-	-	-	-	11.1	12.6	13.6	12.4	11.1	10.8
Liquidity ratio	2.4	2.2	2.1	2.1	2.0	2.0	2.2	2.2	2.1	1.9
Liquidity coverage ratio[3], %	-	-	-	-	239.5	213.3	199.3	211.8	199.8	174.1
FX ratio, %	4.4	3.9	4.4	2.7	2.9	4.5	1.5	1.0	1.0	2.2
ROA, %	-0.1	0.1	0.3	0.7	2.1	2.1	1.7	1.1	1.1	1.4
ROE, %	-0.4	0.6	1.6	3.4	10.6	11.3	9.8	6.5	7.5	9.7
Net interest margin[4], %	4.2	4.3	4.3	3.9	3.7	3.6	3.3	3.0	2.7	2.7

[1] The NBS revoked operating licence 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 Jun 2021. Direktna bank w as merged into Eurobank Direktna on 10 December 2021. NLB bank w as merged into Komercijalna bank on 29 April 2022 under the NLB - Komercijalna banka name.

[2] The last available data of 31.03.2022

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

[4] Net interest margin to average total asset