National Bank of Serbia

Macroeconomic Developments in Serbia

February 2024

National Bank of Serbia

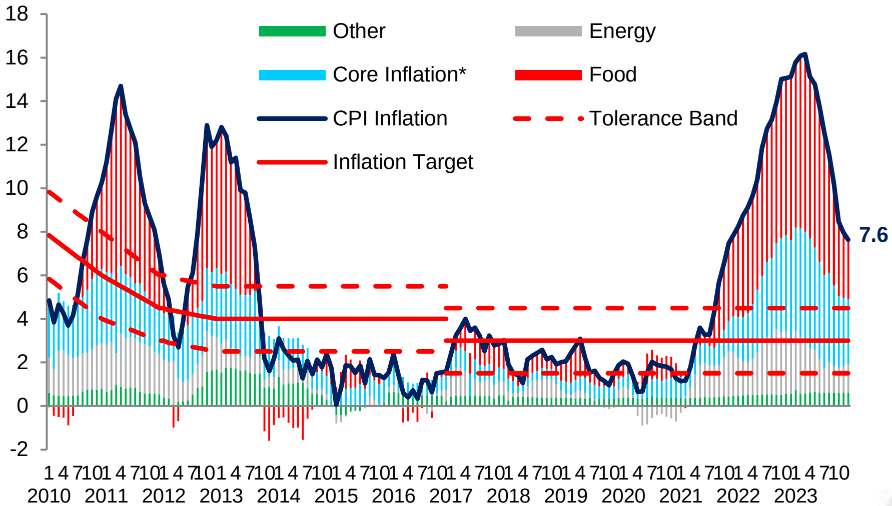
Sustained Macroeconomic Stability

- Despite the multidimensional crisis that lasts more than 3 years, Serbia has managed to preserve the stability of its economy and the consumers and investors confidence, as evidenced by cumulative real GDP growth in the period 2020-2023 of around 12%, record inflows of FDI, continued growth of employment and wages in the private sector, as well as a record level of FX reserves.
- Inflation has been on a declining path since April, in October it returned to a single-digit level, while in December it slowed further to 7.6% y/y. Inflation will continue falling through the projection horizon, while the return to the target tolerance band is expected in middle 2024 and approaching to central point of target is expected by the end of 2024.
- According to the SORS flash estimate, real GDP growth in Q4 2023 was 3.8% y/y (0.9% s.a.), which further accelerated compared to Q3. According to the SORS preliminary estimate, real GDP growth in 2023 was 2.5%.
- Projected GDP growth for 2024 is in the range of 3-4%, and in 2025 and 2026 we expect an additional acceleration to the range of 4-5%, in line with the new investment cycle associated with the project EXPO 2027.
- In 2023 the CAD amounting to EUR 1.8 bn (2.6% of GDP), which represents a record low value of the share of the CAD in GDP. For 2024, we project the CAD of EUR 3.0 bn (4.0% of GDP), due to expected acceleration of investment cycle.
- Due to product and geographic diversification and export-oriented investments, Serbia's exports showed resilience in 2023 despite the decrease in demand from the EU and the region, upon which it relies heavily and managed to achieve a growth of approximately 8% y/y in goods and services exports.
- According to LFS, the unemployment rate in Q3 2023 was 9.0%, which is 0.6 pp lower than in Q2. Formal employment stood at 2.2% during the whole 2023.
- Fiscal developments in 2023 were also better than expected, with a realized deficit of the consolidated budget of RSD 181.1 bn (2.2% of GDP). At the end of 2023, general government public debt stood at the level of 52.7% of GDP.
- In February 2024, the key policy rate was kept unchanged at 6.5% motivated by further dissipation of global inflationary pressures, the downward trajectory of inflation at home and its expected return within the target tolerance band by mid-2024.
- Banking sector stability has been preserved - the share of NPLs in November was at 3.14%.

Inflation in December slowed down to 7.6% y/y

In accordance with NBS expectations, inflation followed a declining path since Q2...

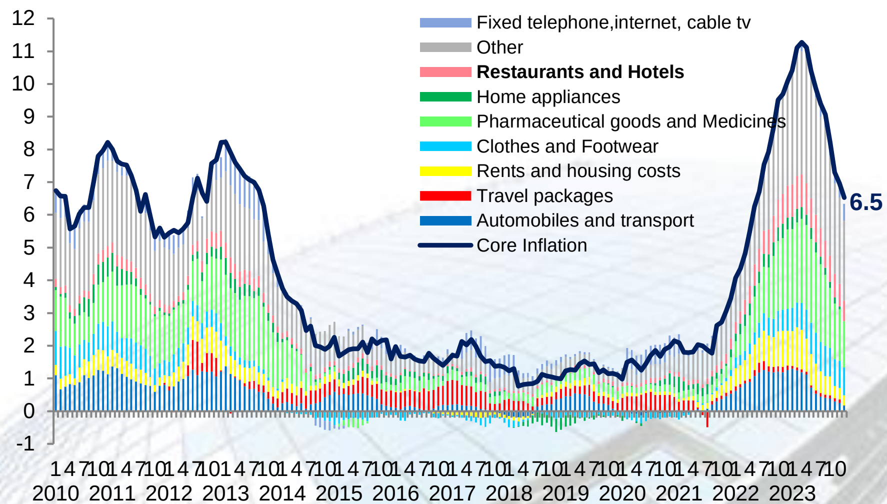
Chart 1 **CPI developments**
(y/y rates, %) and contributions (pp)



- In the period of seven years prior to the outbreak of the current crisis, inflation averaged around 2%.
- Average annual inflation in 2023 was 12.1% which is close to the average inflation in 2022 (11.9%).
- Compared to the end of 2022 inflation has almost halved and amounted 7.6% in December.
- Inflation has been decreasing since April. Slowdown was especially intensified in H2, which is largely attributable to the softer growth in food prices and core inflation.

…with a lower level of core inflation compared to the headline

Chart 2 **Contributions to y/y core inflation**
(pp)

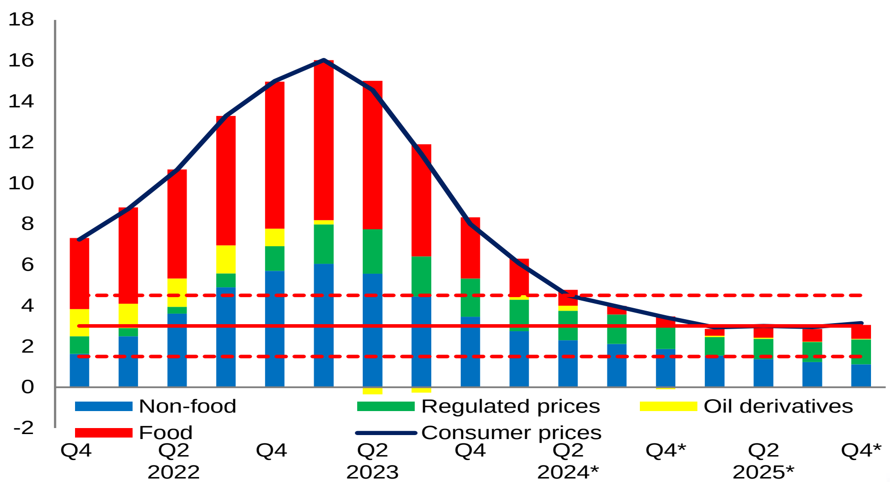


- In the period before the outbreak of the current crisis, core inflation also averaged around 2%.
- In December, core inflation slowed down to 6.5% y/y, which was contributed to by the effects of the tightening of monetary policy, weakening of cost pressures and lower inflation expectations.
- According to the February Bloomberg survey, one-year ahead expectations of the financial sector were within NBS tolerance band and stood at 4.2%.
- Medium term expectations of the financial sector were also within NBS tolerance band.

Inflation Will Follow Downward Path in the Coming Period

Inflation should return to the target tolerance band in the middle of the current year…

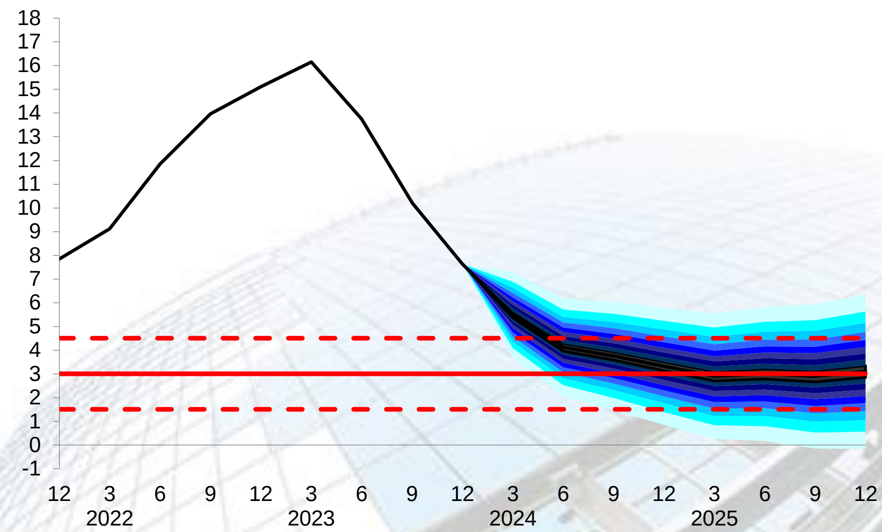
Chart 3 **Inflation projection** (February 2024 IR)
(average y/y rates in % per quarter and contributions in pp)



*NBS Forecast

… approaching the target midpoint at the end of the year.

Chart 4 **Inflation projection** (February 2024 IR)
(y/y rates, in %)



- Inflation slowdown is the result of the effects of past monetary tightening, the slower pace of imported inflation, the decrease in inflation expectations, as well as the easing of cost-push pressures.
- Cost-push pressures are weakening due to the fall in prices of primary agricultural commodities and certain industrial raw materials.
- Disinflationary effect also comes from subdued aggregate demand due to slackened global growth.

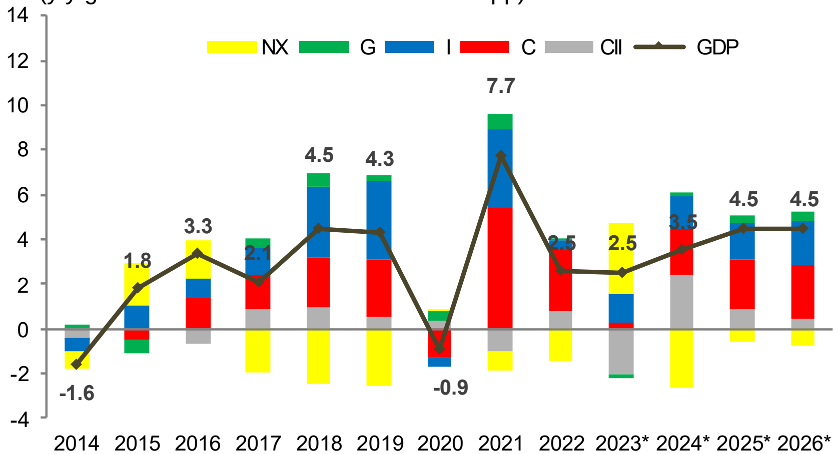
- The key risks to the projection are mostly related to external environment and refer to geopolitical conditions and the outlook for global economic growth, and their impact on global energy and commodity prices.
- As for the factors from the domestic environment, the projection risks are mainly associated with the pace of the recovery of domestic demand and the outcome of this year's agricultural season.
- Overall, the risks of the inflation projection are assessed as symmetric.

Projected GDP growth in 2024 in the range of 3-4%, in a medium term revised upwards to 4-5%

Growth in the 2024 led by private consumption and fixed investments

Chart 5 **GDP developments**

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



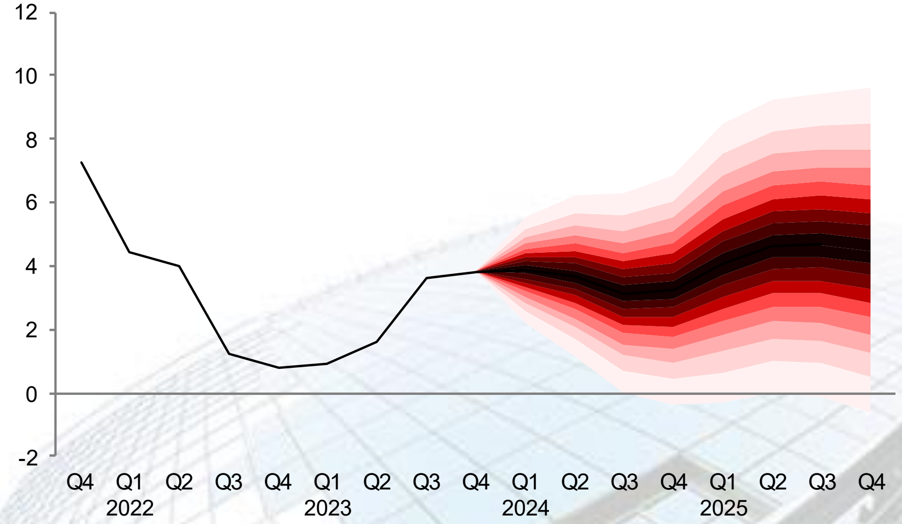
*NBS forecast

- 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 9.5% in three years of crisis (2020-2022).
- According to the SORS flash estimate, real GDP growth in Q4 2023 was 3.8% y/y, which is in line with the recently published estimate of real GDP growth for 2023 of 2.5%.
- According to our new projection, we expect the acceleration of the growth of the real GDP of Serbia this year to the range of 3.0-4.0%, with the central value of the projection of 3.5%.

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

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

(y/y growth rates in %)

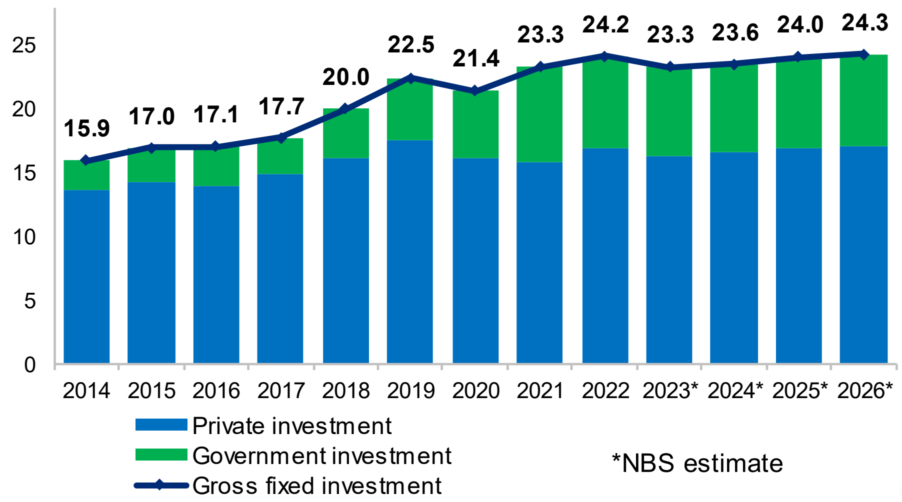


- In 2024, growth will be driven by domestic demand, where higher private consumption will be contributed to by continued growth in employment and wages, and to investment growth by the implementation of projects in transport, energy and communal infrastructure. Due to the expected acceleration of investments and personal consumption, we project that imports will grow faster than exports, which will result in a negative contribution to net exports.
- We have revised the projection of growth in 2025 and 2026 upwards, to a range of 4%-5%, taking into account the realization of the investments planned for organizing the specialized exhibition EXPO 2027.

Investments Remain at a High Level

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

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

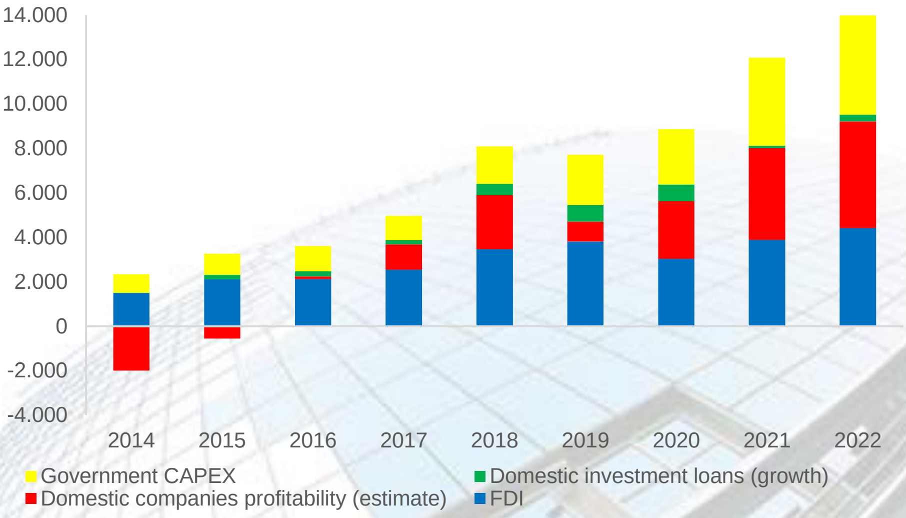


- According to our estimate, the share of fixed investments in nominal GDP in 2023 has reached the level of more than 23%. Government investments reached level of about 7% in 2023 and should remain around that level in the medium term.

- Starting from the analysis of the planned capital projects in the infrastructure in the next 3 years and the EXPO 2027 project, in the medium term we expect that the share of investments in GDP will increase further.

…supported by diversified financing sources

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

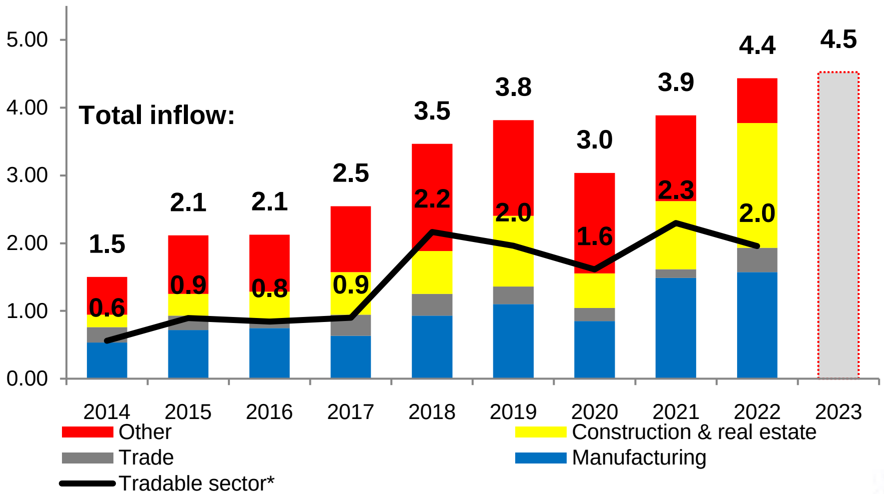


- In earlier years, investments have largely relied on FDI.
- Owing to maintained macroeconomic and financial stability, relative stability of exchange rate, as well as fiscal consolidation, in recent years three more strong pillars for financing investments have been established: multiplied profitability of the economy, investment loans and doubled government investments.
- On top of that, FDI inflow reached record levels of around EUR 4.4 bn and 4.5 bn in 2022-2023.

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)

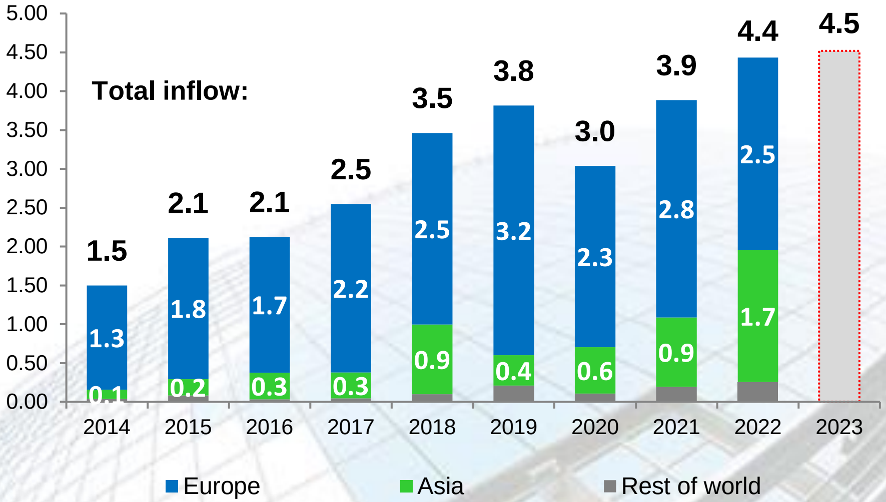


*industry, agriculture, transport & storage, accomodation and food svc.

- Out of an inflow of EUR 18.6 bn in past five years (2018-2022), over EUR 10.0 bn has been directed into tradable sectors, most notably manufacturing (almost EUR 6.0 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 more than half of total FDI to the Western Balkans region in the 2018-2022.

…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**
(EUR bn)



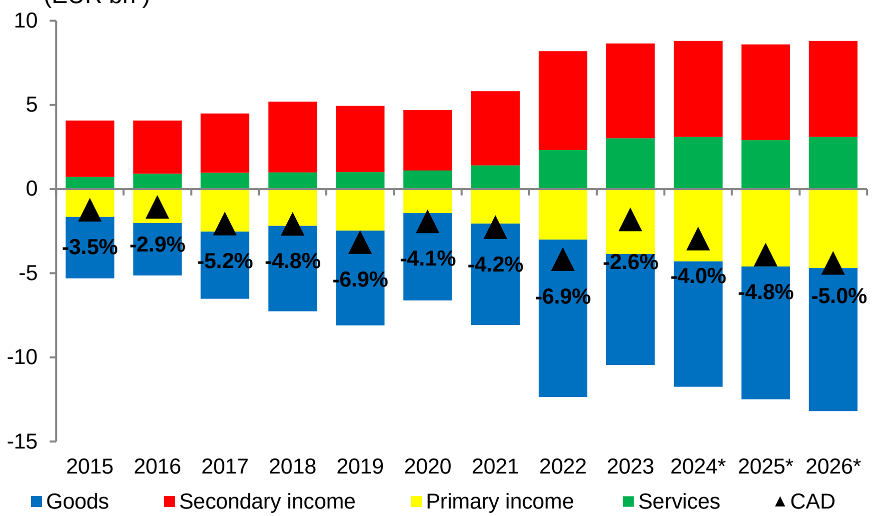
- **In 2022, FDI inflow amounted to EUR 4.4 bn (net inflow EUR 4.3 bn),** and in 2023, **a new record level of FDI inflow of EUR 4.5 bn (net EUR 4.2 bn) was recorded.**
- FDI inflows are diversified by region of origin as well, with a greater share of countries from the Asia, alongside Serbia's major trading partner - the European Union.

A record-low current account deficit was recorded in 2023.

The current account deficit in 2023 amounts to 2.6% of GDP due to strong export growth and lower import

Chart 11 **Current account balance by component**

(EUR bn)

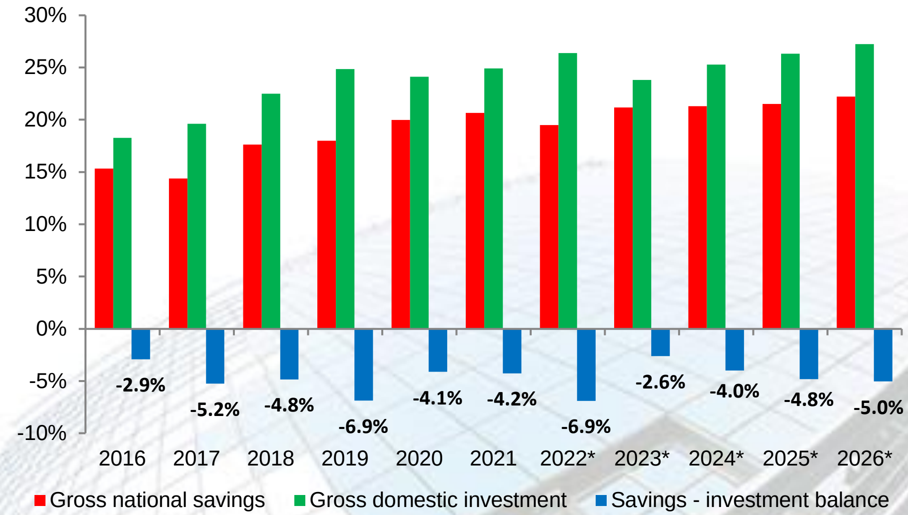


- In 2015-2022 Serbia's current account deficit has been fully financed by FDI, which is mostly expected in the following years as well (projected net FDI inflow of around 5% of GDP).
- Lower prices of energy, as well as the growth of exports of manufacturing, electricity and services contributed to a **significant CAD reduction in 2023**, from EUR 4.2 bn (6.9% of GDP) in 2022 **to EUR 1.8 bn (2.6% of GDP) in 2023.**
- CAD projection for 2024 has been revised upwards to **4.0% GDP**, and in the medium term, it should approach the level of 5% of GDP, which is within the bounds of external sustainability.

Speed-up of investment cycle will be followed by stabilization in share of gross national savings

Chart 12 **Savings and investment balance**

(% of GDP)

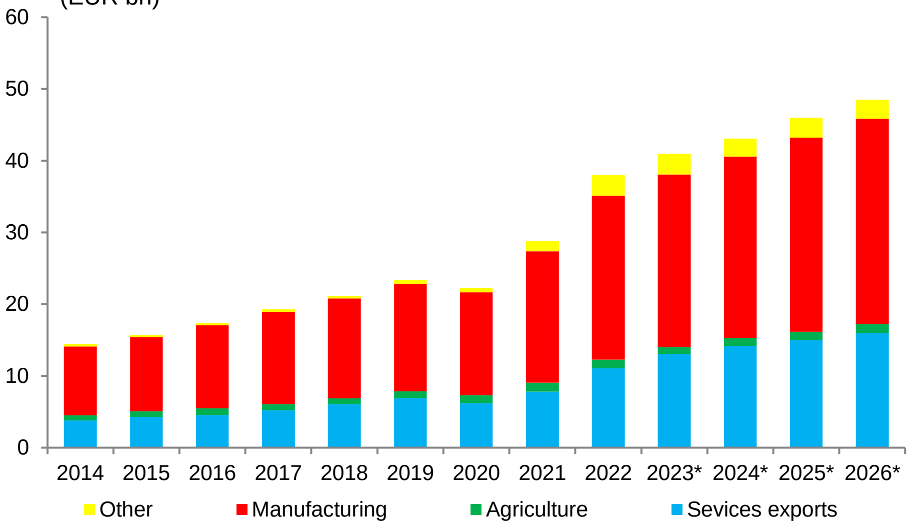


- The S-I gap narrowed in 2023 as a result of increase of gross national savings.
- Over the intermediate period, expected stabilization of the gross national savings share will be accompanied by a gradual speed-up of investments in transport, energy and communal infrastructure, as well as in projects related to the international world exhibition EXPO 2027.

Revealed Exports Resilience During the Crisis; Lower Imports Led by a Better Situation in the Energy Market

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)

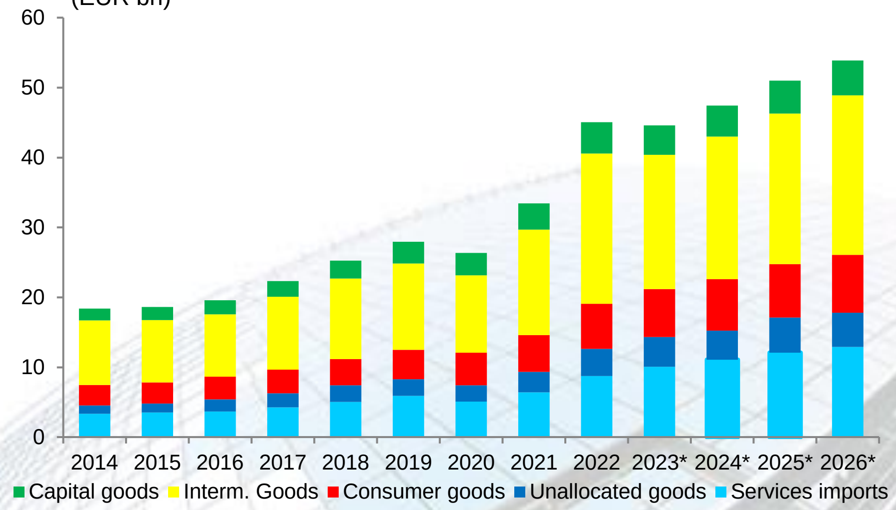


*NBS Forecast

- In 2022, there was an **intensive growth of goods exports of 28.0%,** driven by the strong growth of exports of the **manufacturing and mining sectors**, with even more significant growth of services exports that was recorded (42.1%), driven by exports of tourism and ICT services.
- **Goods exports continued to grow in 2023 and recorded increase of 3.7% y/y**, due to higher manufacturing exports, within which growth in exports was observed in 16 out of 23 branches of activity. **Services exports were higher by 18.1%** year-on-year, and was driven by ICT, transportation and business services.

The projection reflects that the new investment cycle will result in the increased imports of equipment and intermediate good

Chart 14 **Imports of goods and services**
(EUR bn)



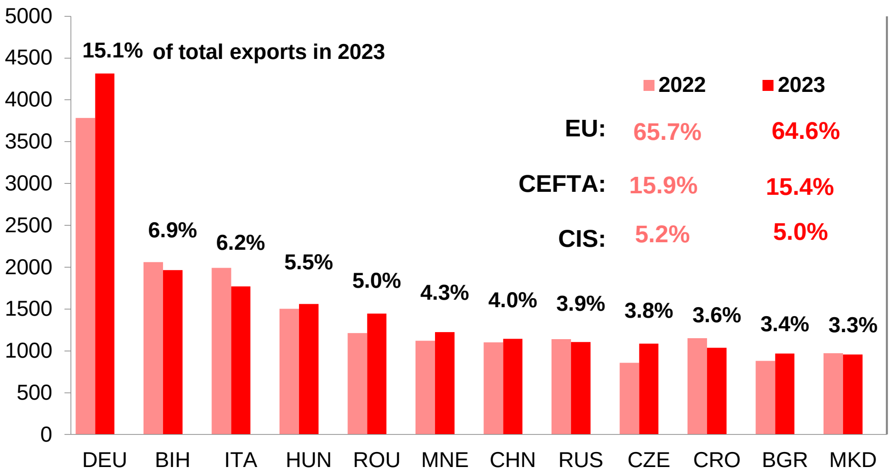
*NBS Forecastt

- **During 2022, there was an increase in goods imports of 34.1% and imports of services by 37.0%.** The largest contribution to the growth of goods imports were from intermediate products (around 60%), of which a third accounts for higher energy imports, while the growth in service imports was driven by transportation and tourism services.
- **Imports of goods decreased** by 4.8% in 2023, with the largest contribution to the decrease coming from reduced intermediates imports, which includes energy (a decrease in energy imports by EUR 1.7 bn compared to 2022). On the other hand, the **imports of services** increased by 15%.

Geographic Diversification Helped Export Resilience During the Period of Multidimensional Crisis

Significant increase in exports to Germany of 14% was recorded in 2023…

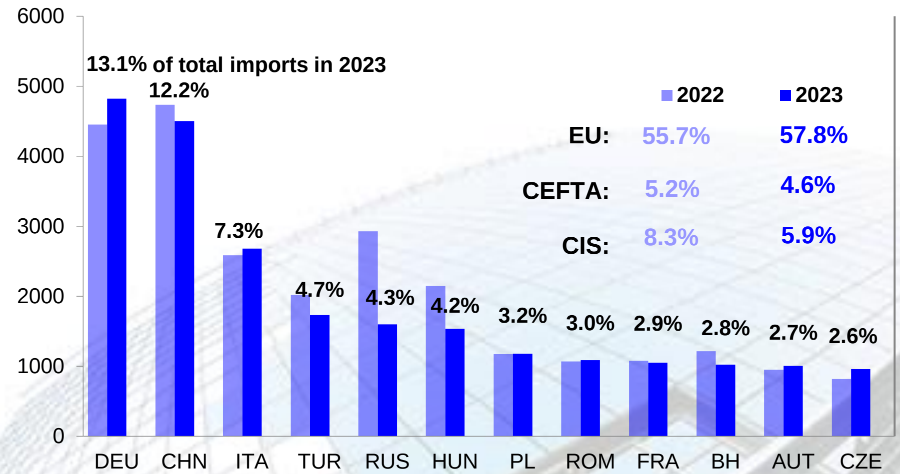
Chart 15 **Goods exports by country in 2023 / 2022**
(EUR mn and % of total)



- Serbia's exports showed resistance in 2023, despite the decrease in demand from the EU and the region, on which it relies the most. In this period, most of Serbian exports went to the EU, followed by CEFTA and CIS.
- By country, the largest share of exports went to Germany (15.1%), followed by Bosnia and Herzegovina (6.9%), Italy (6.2%), Hungary (5.5%) Romania (5.0%) and Montenegro (4.3%).

…which was followed by the growth of imports from Germany

Chart 16 **Goods imports by country in 2023 / 2022**
(EUR mn and % of total)

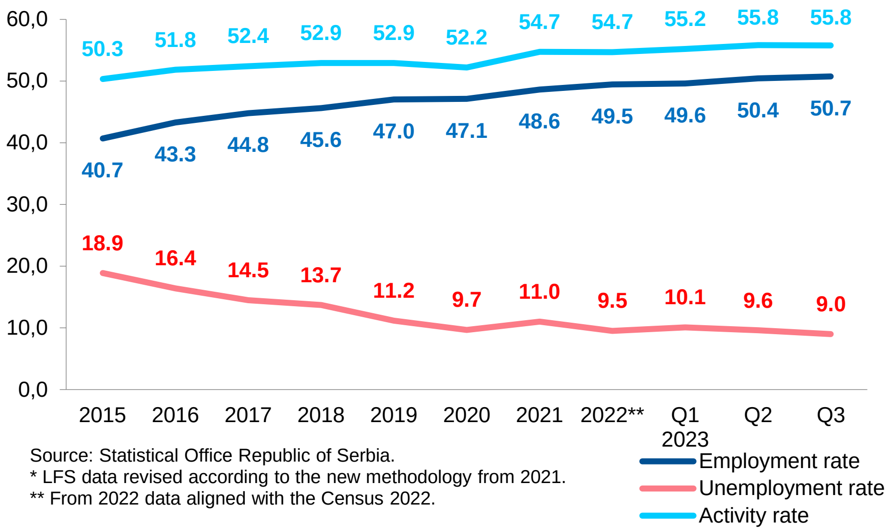


- Majority of imports in 2023 come from the EU (around 58%), followed by CIS and CEFTA.
- Compared to the 2022, the volume of imports from Germany in 2023 overtook the volume of imports from China, making Germany the largest importing country again (with a share of 13.1%).

Favourable Developments in the Labour Market and Productivity Growth

Single-digit unemployment rate in Q3 2023 (9.0%)

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

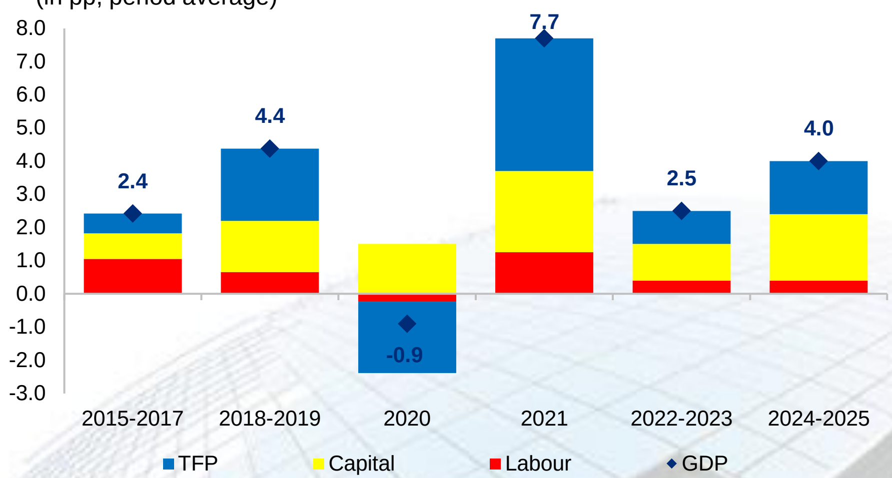


Source: Statistical Office Republic of Serbia.
* LFS data revised according to the new methodology from 2021.
** From 2022 data aligned with the Census 2022.

- According to data from the Labour Force Survey (aligned with the 2022 census), the unemployment rate is on a single-digit level in Q3 and amounted to 9.0% (-0.6 p.p. compared to Q2), while the employment rate amounted to 50.7%, which is an increase of 0.3 p.p. compared to Q2. In Q3, the rate of informal employment was 12.8% (+0.5 p.p. compared to Q2).
- The activity rate (persons 15+) in Q3 2023 amounted to 55.8%, still on the record level, and unchanged comparing to Q2.

Significant contribution of total factor productivity and capital to GDP growth

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



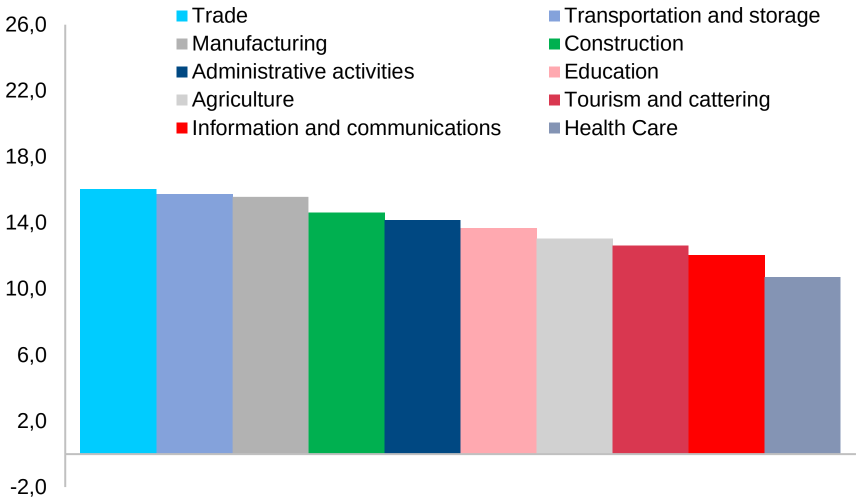
Sources: SORS, NBS calculation.
* NBS estimate.

- Acceleration of economic growth in the period 2018-2019 was driven mainly by faster productivity growth.
- In 2020, similar to other countries, there was a temporary drop in productivity and a negative labour contribution due to reduction in the participation rate due to the pandemic.
- From 2021 productivity was the main driver of growth, along with investment.
- In the medium term, we also expect from productivity and investment to be the main drivers of GDP growth, while the contribution of labour will be lower.

Growth in Wages and Employment During 2023

Real wage growth in the private sector in the period January - November 2023 (2.5% y/y)

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

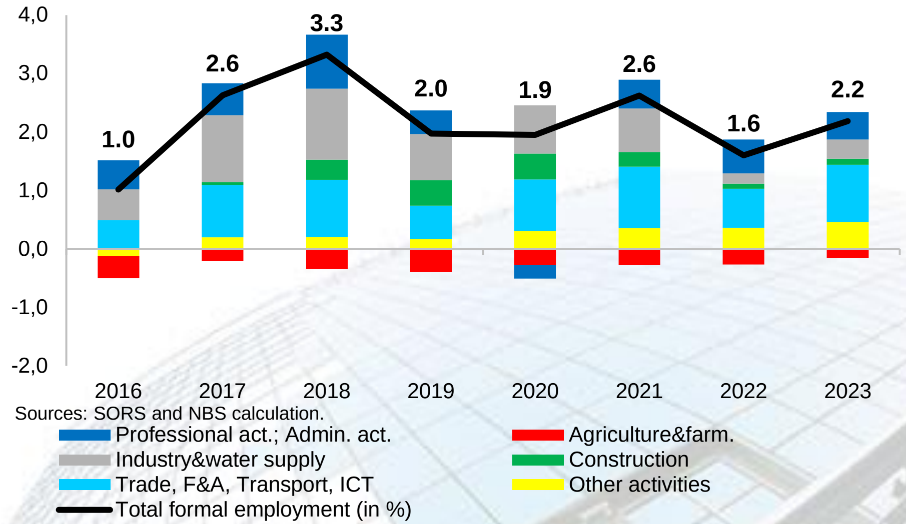


Sources: SORS.

- In the period January-November 2023, the nominal average net wage was 85,175 dinars (726 euros) and is higher by 15.0%. The growth was driven by a faster growth of wages in the private sector (15.9% y/y) than in the public sector (13.1% y/y).
- During 2023, a double-digit y/y growth of average wages was achieved in almost all activities, and it is most pronounced in trade and manufacturing.
- During eleven months of 2023, nominal net wages grew slightly faster than inflation, but still there is no significant inflationary pressures induced from the labour market.

High level of formal employment in the private sector during 2023

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



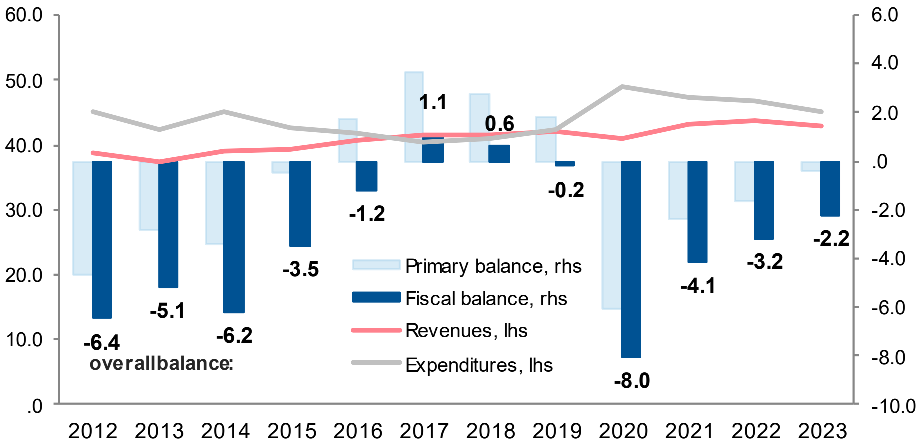
Sources: SORS and NBS calculation.

- Total formal employment during the whole 2023 amounted to 2.36 million persons and is higher by 2.2% y/y (51 thousand persons). This growth was led by private sector growth of 2.8% y/y (about 48 thousand persons), with a high level of employment in the private sector of about 1.75 million persons.
- Employment growth is present in most activities. Growth stands out in ICT (employment at a record level of about 110 thousand persons in December) and in professional and scientific activities (the number of employees at the level of 141 thousand persons), as well as in manufacturing (employment of more than 500 thousand persons).

Fiscal Developments in 2023 are Better Than Expected

In 2023, the consolidated deficit was RSD 181.1 bn (-2,2% of GDP)

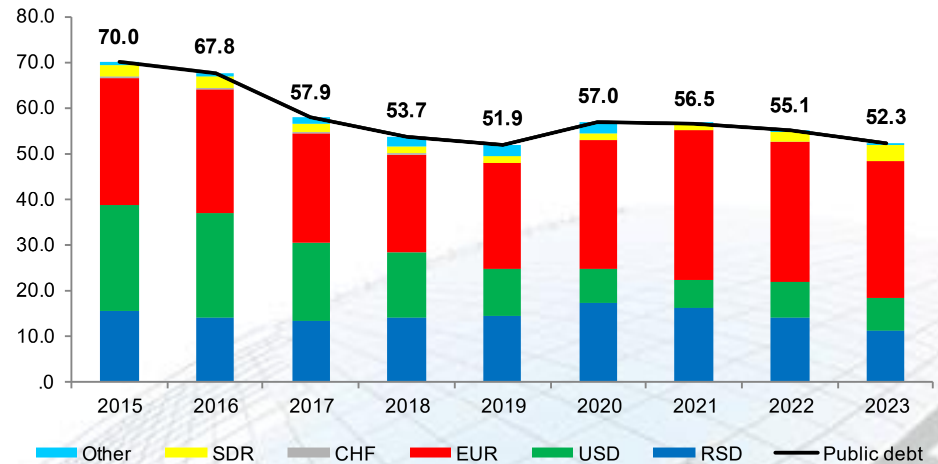
Chart 21 **General government revenues, expenditures and outcome** (% share in GDP)



- In the years before pandemic, Serbia eliminated fiscal deficit, with government investments reaching near 5% of GDP.
- Higher deficit in 2020-2022. arose as a result of higher expenditures due to the pandemic and a package of measures to support the economy and the population, and in 2022, support to companies from the energy sector.
- In 2023, the general government budget deficit amounted to RSD 181.1 bn (-2.2% of GDP) and was thus lower compared to the plan from the revised Fiscal Strategy (-2.8% of GDP) as a result of lower current expenses. Share of capital expenditures was kept at around 7% of GDP.
- In medium term, we expect its return to the level of around 1.5% of GDP.

Public debt remains on a downward trajectory and within the Maastricht criteria

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

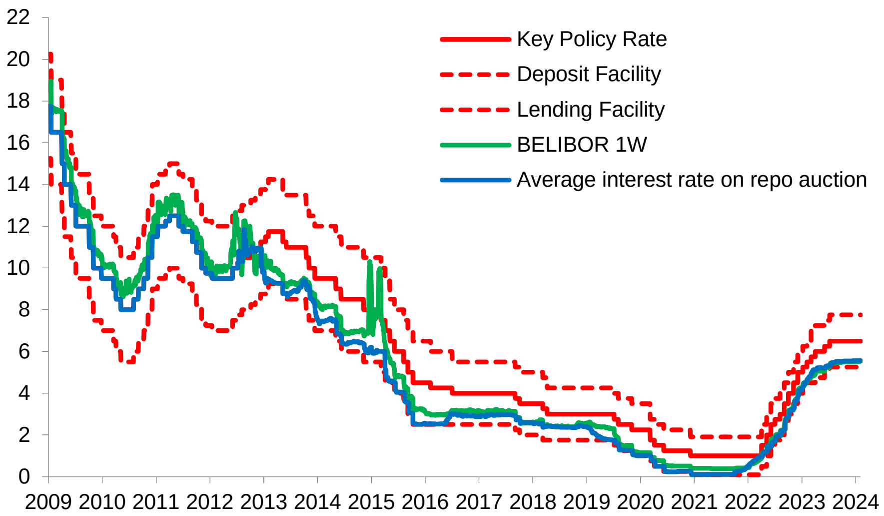


- As of 2021, the share of public debt in GDP is on a downward trajectory, despite the impact of the international energy crisis on the growth of budget expenditures and energy procurement.
- At the end of 2023, the share of central government public debt in GDP amounted to 52.3% (general government public debt 52.7%) and decreased by 2.8 pp relative to 2022.
- We expect that as a result of the lower deficit, the public debt will continue its downward trajectory in the coming years, to around 50% of GDP in 2026.

Monetary Conditions were tightened in the Previous Months Through the Key Policy Rate and Required Reserve Ratio

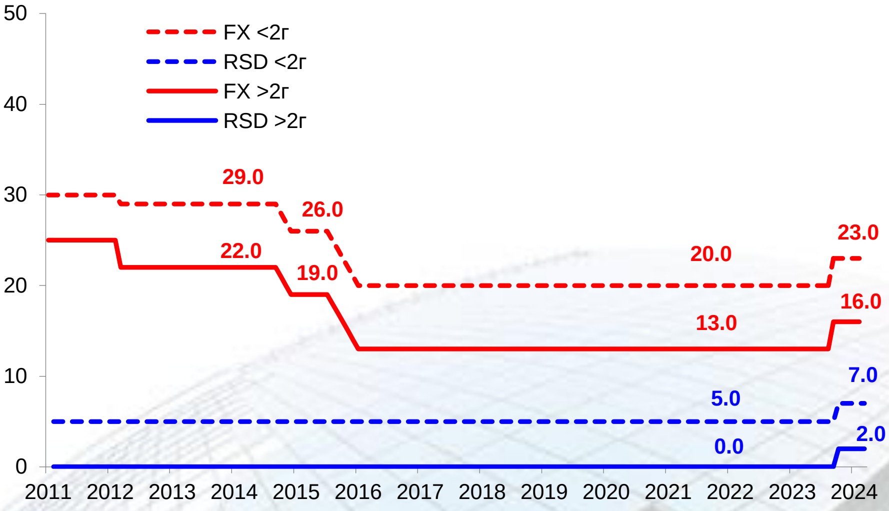
In February 2024, the key policy rate remained unchanged at 6.5%

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



The required reserve ratio was increased in September

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



In making such decision, the Executive Board primarily took into account the following factors:

- further dissipation of global inflationary pressures, the downward trajectory of inflation at home and its expected return within the target tolerance band by mid of this year,
- the key policy rate and required reserve ratios were already lifted in the prior period, so the relevant effects will continue to impact inflation going forward,
- the pass-through of past monetary tightening to the rates in the money, lending and savings markets, and subsiding one-year ahead inflation expectations of the financial and corporate sectors that confirm the efficiency of the monetary policy transmission mechanism.

NBS increased required reserves (RR) in September:

- the RR rate on foreign currency reserve base by 3 pp each (to 23% and 16% for liabilities with the contracted maturity of below and over two years, respectively), while increasing dinar allocations of FX RR by 8 pp each (to 46% and 38%, depending on maturity of liabilities)
- the RR rate on the dinar reserve base by 2 pp each (to 7% and 2%, depending on maturity of liabilities).

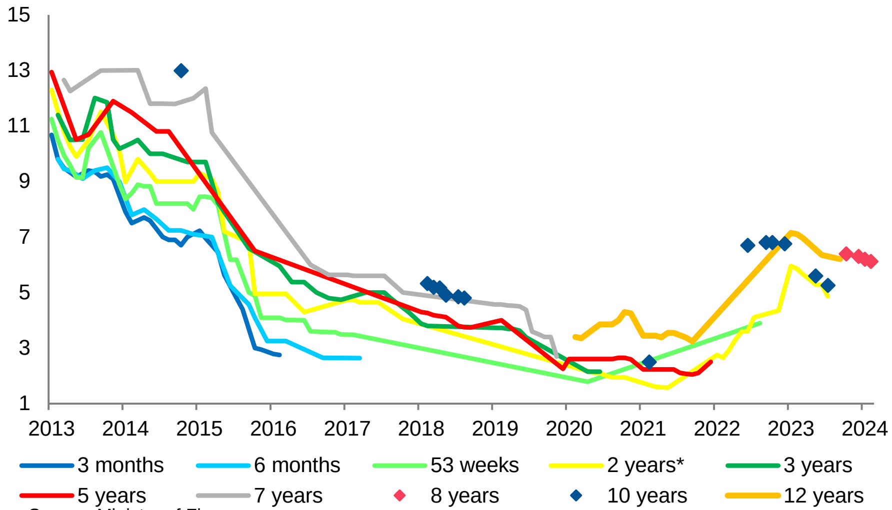
Major effects:

- withdrawal of excess dinar liquidity, in the amount of around RSD 114 bn or 20%.
- After the measure took place the turnover on O/N Interbank market has increased.

Monetary Conditions Determine Financing Conditions of the Private Sector

Interest rates on dinar government securities are on a decline over the last few months

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

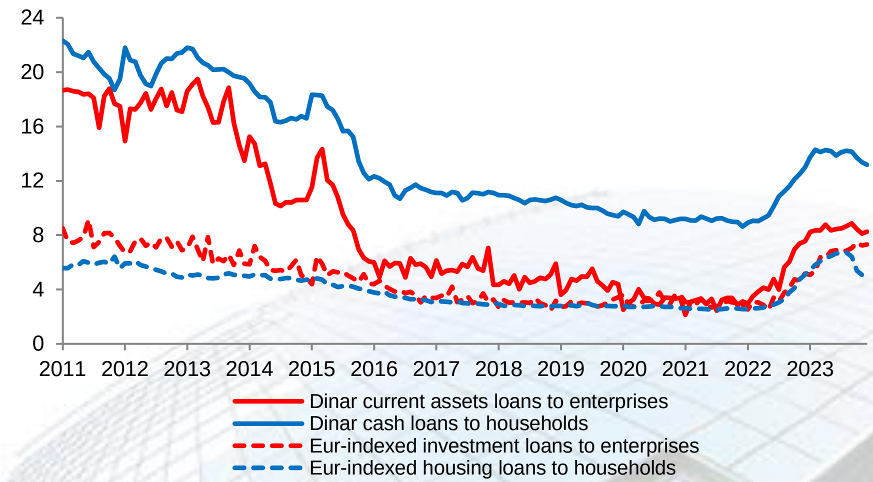


Source: Ministry of Finance.
* Excluding coupon securities with the rate linked to the NBS key policy rate.

- The share of long-term dinar securities (5+ year maturity) increased from 2% in 2012 to almost 90% in 2024, with the extension of the dinar yield curve to 12 years in February 2020.
- Yield rates continued to decline as a result of lower government financing needs, declining global yield rates, as well as lower country's risk premium. The January and February auctions in this year, for the sale of 8y dinar government securities, saw record-high performances of a dinar securities auctions, with a significant participation of non-residents.
- Serbia's dinar-denominated bonds were included in renowned J.P. Morgan GBI-EM family of indices as of 30 June 2021.

After rising in the previous months, interest rates on private sector loans mildly declined in Q4 2023

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



* From September 2010 to December 2014, "Other loans" of the household sector included cash loans and other loans. From January 2015, "Cash loans" are shown separately.

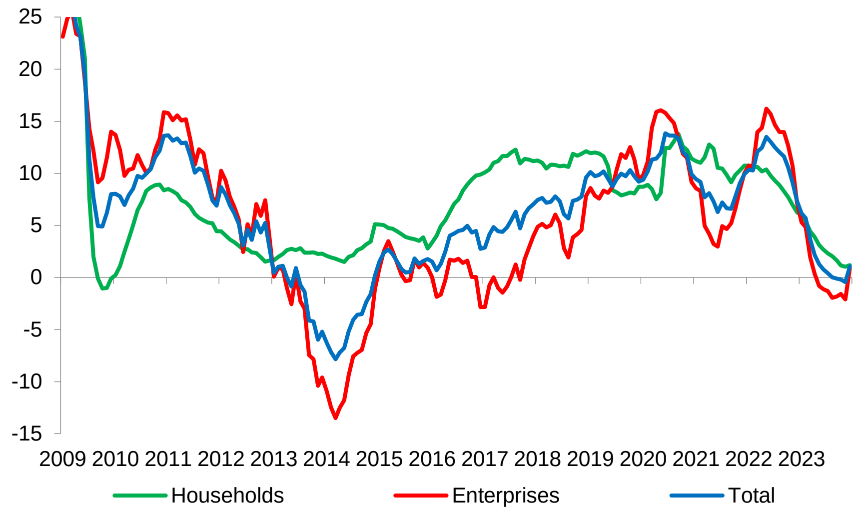
- In line with monetary tightening cycle that had a moderate pace last year, interest rates on new dinar loans to the corporates and households stabilized in recent months and some slightly declined in Q4. In December interest rates:
  - for current assets loans to corporates equalled to 8.2%
  - for cash loans to households declined to 13.2%.
- After the implementation of the NBS decision to cap housing loan rates, that will remain in force until end-2024, the average rate on housing loans is on decline since October, and equalled to 5.0% in December.

National Bank of Serbia

In Line With the Higher Borrowing Costs, Credit Activity Slowed Down in 2023

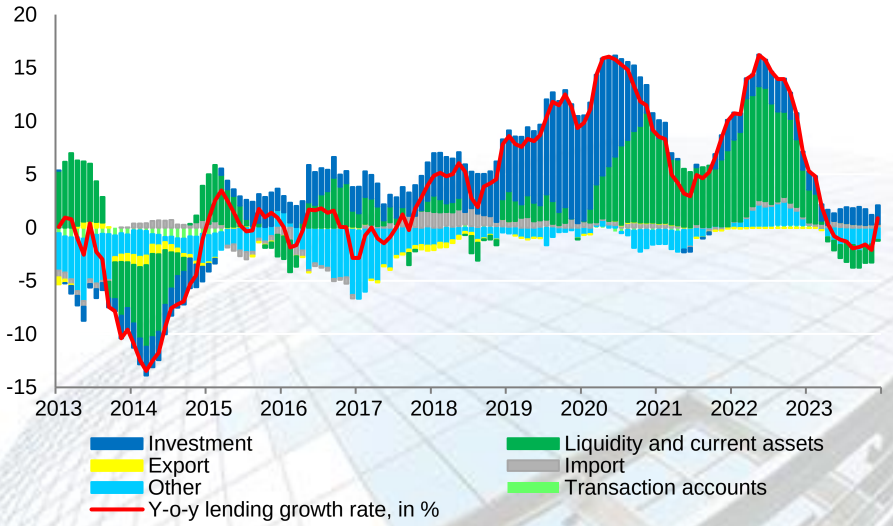
Credit activity accelerated slightly around year –end....

Chart 27 **Bank lending to enterprises and households**
(y/y rates, constant exchange rate 31 October 2022, in %)



... underpinned by the rise in corporate loans in December

Chart 28 **Contributions to y-o-y corporate lending growth**
(in pp, constant exchange rate 31 October 2022)



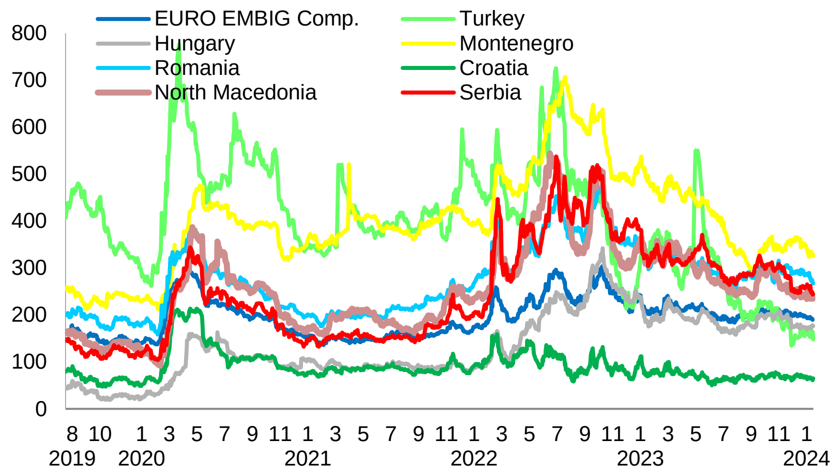
- In 2023, total domestic loans increased by 1.1%. Lending activity slowed during 2023, due to tightening of the monetary policy of the NBS and the ECB, the maturing of guarantee scheme loans, the and tightened bank lending standards.
- Loans to households increased by1.2% and corporate loans by 0.9% in 2023.

- In 2023, **investment loans** rose by 4.4% and made 41.9% of total corporate loans in December, while the share of **liquidity and current assets loans** equalled to 46.8%.
- **Micro, small and medium-size enterprises loans** made 59.1% of total corporate loans in December.

Relative Stability of Exchange Rate and Credit Rating are Preserved Even in the Period of Crises

The risk premium of Serbia decreased in 2023

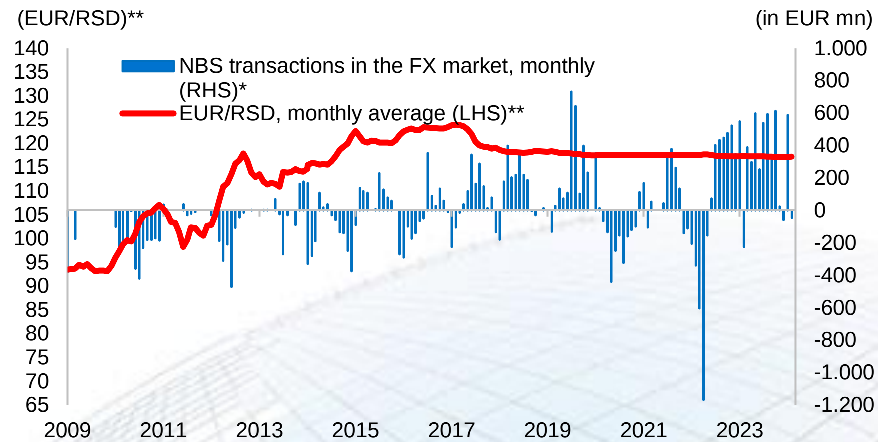
Chart 29 **Risk premium indicator for euro-denominated debt - EURO EMBIG**
(basis points, daily values)



- Due to the reduction in global uncertainty and favorable domestic macroeconomic prospects, Serbia's risk premium decreased in 2023, while in January, it remained almost unchanged compared to December.
- Fitch (in August 2023 and February 2024) and S&P (in October 2023) **confirmed Serbia credit rating at BB+, with a stable outlook**. Moody's has affirmed Serbia's Ba2 ratings with stable outlook (September 2023).
- As factors that determine the retention of the credit rating, the agencies point out: sound medium-term growth prospects, FDI inflow, credible monetary policy, economic resilience to a challenging external environment, stable public finance, and structural reform progress.

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

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



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

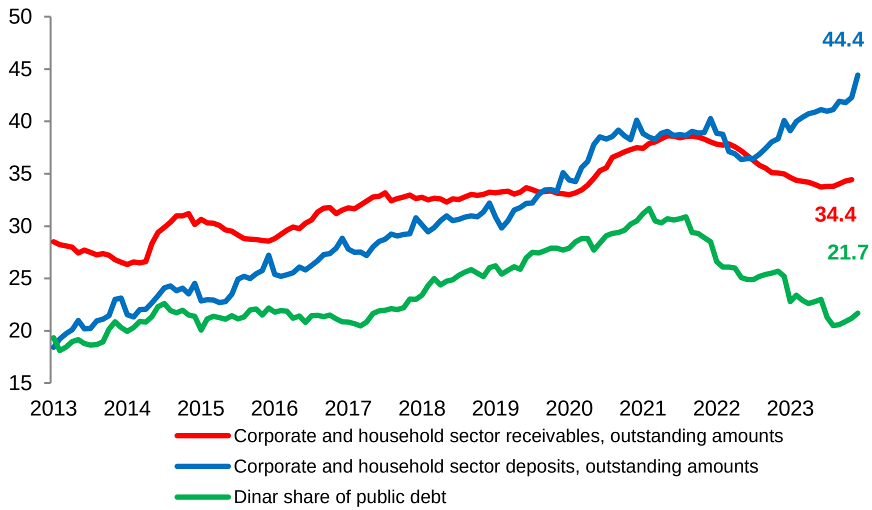
- The dinar gained 0.1% against the euro in 2023. Appreciation pressures reflect favourable BoP developments, high purchases of foreign cash and inflows from payment card operations.
- Short lived depreciation pressures were recorded at the very beginning of 2024, but they shifted to appreciation in the second half of January. In January 2024 dinar remained unchanged against the euro.
- The net FX purchases in the IFEM amounted to EUR 3.94 bn in 2023, while in January 2024 the NBS net sold EUR 45 mn.
- FX reserves amounted to EUR 25.0 bn in end-January, which is their record high, and are well above the standards 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 %)

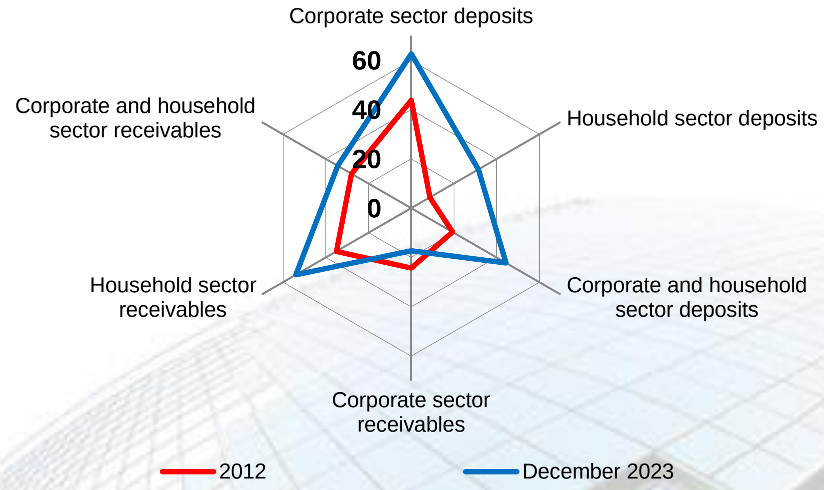


- NBS stimulates the dinarisation process by delivering low and stable inflation in medium-term, preserving relative exchange rate stability and using other measures to stimulate dinar source of finance.
- The Government contributes to dinarisation through tax policy, by developing the dinar securities market - dinar debt share rose from 2.5% in 2008 to 21.7% in December 2023.
- Dinarisation of corporate and household sector deposits rose by 25.1 pp compared to end-2012 to 44.4% in December 2023 which is new maximum level. Dinarisation of corporate and household sector claims amounted to 34.4% in December 2023 (up by 6.4 pp compared to end-2012).

Households are predominantly indebted in dinars and dinar savings records maximum level

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

(outstanding amounts, in %)



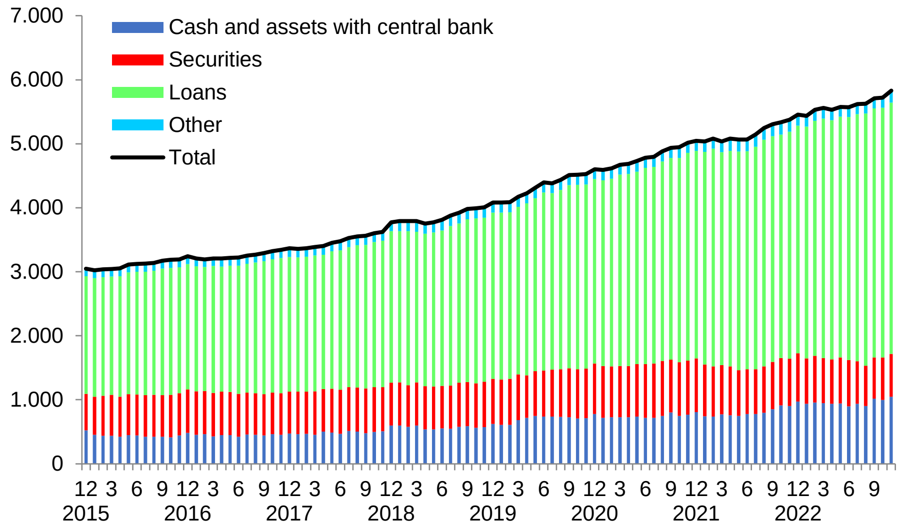
- Over the past years, dinarisation of household receivables had a firm upward trend as a result of NBS measures aimed to support dinarisation – an upsurge from 35.1% (2012) to 54.0% (December 2023).
- Dinar savings of households (residents) recorded strong growth in period 2018-2021 (22% in 2018, 31% in 2019, 17% in 2020, and 12% in 2021), while its temporary reduction in the beginning of 2022 was the consequence of growing uncertainty caused by the escalation of geopolitical tensions at the international level.
- Since June 2022 it is on an upward path again, reaching new maximum levels – during 2023 it has increased by 43.2%. In January 2024, dinar savings grew by additional RSD 5 bn, to RSD 142.8 bn.

Traditional Banking Mostly Financed by Domestic Deposits

Adequate structure of banking sector assets

Chart 33 **Structure of banking sector assets**

(RSD bn)



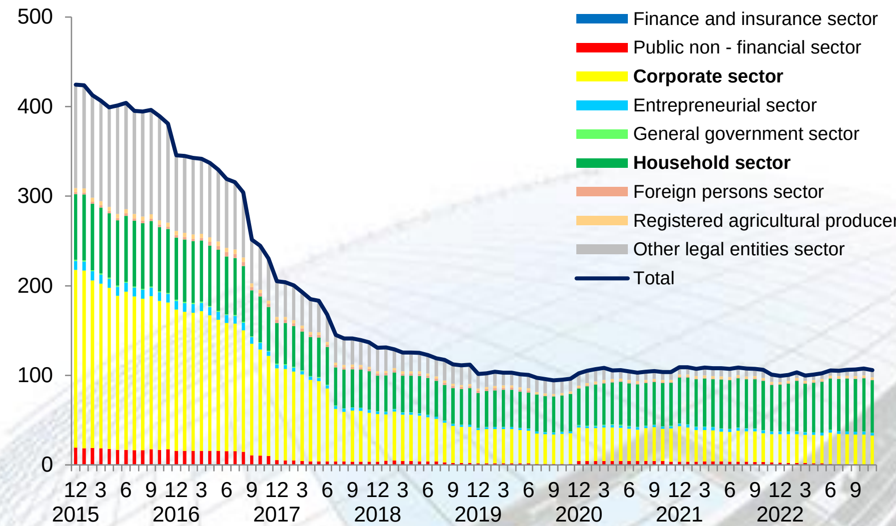
Source: NBS

- 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 11.5% of the total net banking sector assets at the end of November 2023.
- Stability of retail and corporate deposits in funding mix is present, with share in total liabilities of 44% and 33%, respectively at the end of November 2023.
- Despite high loan portfolio euroization, currency matching of assets and liabilities is present, with net open position of 1.9% of regulatory capital at end of November 2023.

Improving the quality of the banking sector assets

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

(RSD bn)



Source: NBS

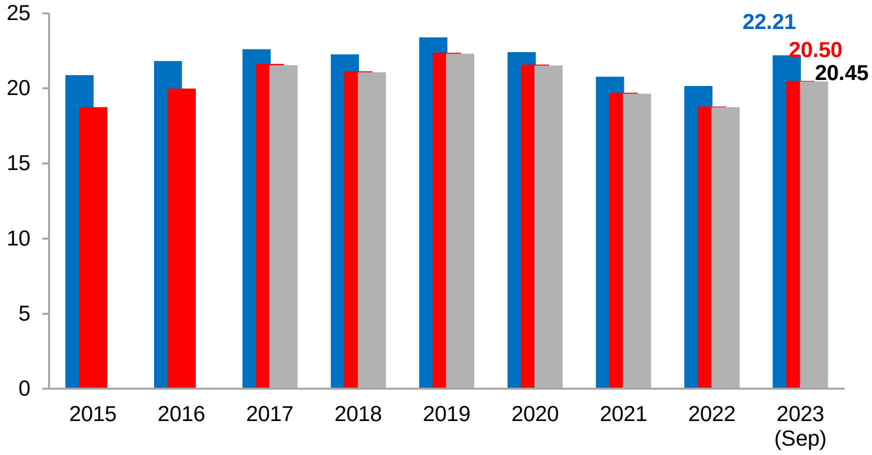
- Successful implementation of NPLs resolution activities, led to a record low level of NPL amounts. The amounts of NPL throughout 2023 continued to stand still, and are well below its pre-crisis level.
- The main channels for the NPLs reduction were repayments, write-offs, and transfer (sale) to third parties.
- At the end of November 2023, the largest share in non-performing loans was made by the household sectors (55.5%) and corporate (30.4%).

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**

(%)

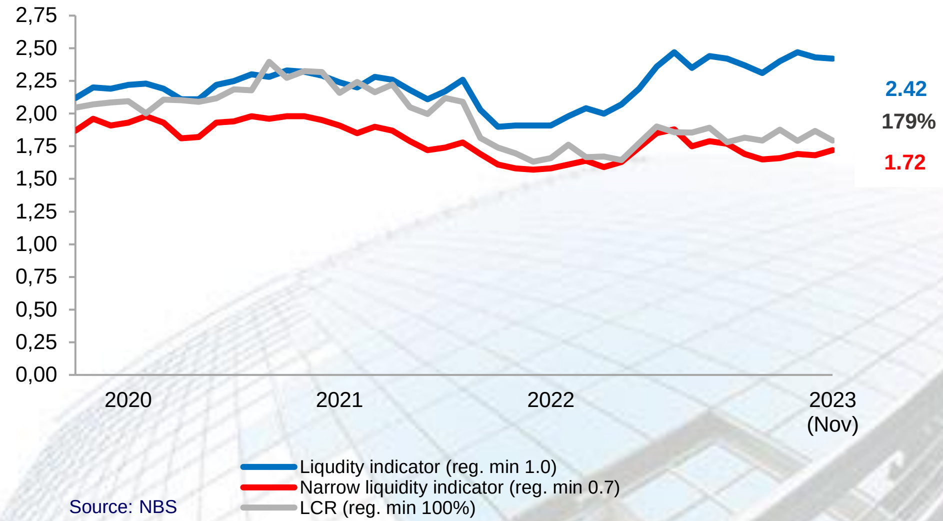


Source: NBS

- 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 2023 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 43.9% of the total assets of the banking sector in November 2023.
- The loan to deposit ratio that at the end of November 2023 amounted 76.6%, indicates stability of funding and in general the liquidity of the banking sector.

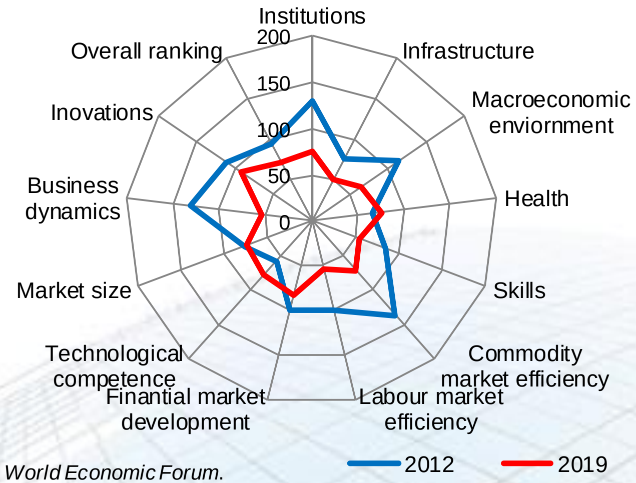
Structural slides

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 previous period:

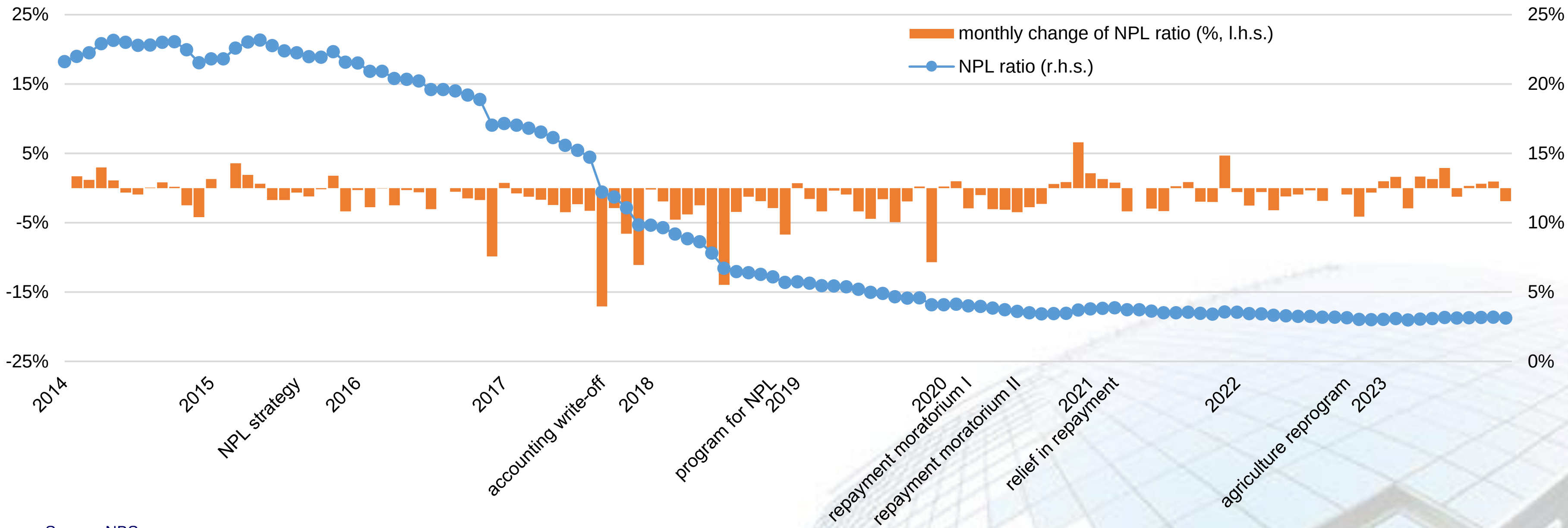
- Construction sector;
- Labor market;
- Tax administration;
- Financial sector;
- Contract enforcement and resolving insolvency.

Undertaken measures and activities – response to current crisis events

1. **<u>Moratorium and reliefs in repayment for households and corporate affected by the pandemic</u>**
   - ✓ Two moratoriums in 2020: in March (90 days) and in July (60 days)
   - ✓ Six-month grace period provided for the households and corporate most affected by the COVID-19 (December 2020, applications were submitted until the end of April 2021)
2. **<u>Reliefs for housing loan users (2020, valid until the end of 2023)</u>**
   - ✓ The amount of housing loan that can be granted to first-home buyer increased to 90% of the value of the mortgaged real estate
   - ✓ 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
3. **<u>Facilitated access to financing and other reliefs for cash, consumer and other non-purpose loans users</u>**
   - ✓ Facilitated approval of consumer loans up to 90.000 RSD, (in 2020 when cash loans were included, valid only for consumer loans until 2023)
   - ✓ Extending the repayment and refinancing to households who entered loan contracts before the start of pandemic, without affecting capital
   - ✓ Enabled one restructuring of cash, consumer and other non-purpose loans for households without affecting capital
4. **<u>Mitigating the effects of changes in securities prices on the financial market</u>**
   - ✓ Banks are not required to deduct 70% of unrealized losses on securities issued by the Republic of Serbia, valued at fair value through other comprehensive income from CET-1 capital (adopted in August 2022, valid until the end of 2023)
5. **<u>Precisely defined framework regarding fees related to payment account</u>**
   - ✓ Minimum package of payment account services (basic package) is defined
   - ✓ The fee that bank can charge for this account is limited to 150 RSD
6. **<u>Temporary reliefs for agricultural producers</u>**
   - ✓ Possibility to reprogram obligations for registered agricultural producers (October 2022, applications were submitted until the end of April 2023)
   - ✓ Relief is extended to debtors engaged in fruit purchasing and storage in cold storage facilities (January 2023, applications were submitted until the end of April 2023)

Successful Implementation of Measures and Sustainability of Achieved Results - NPL Indicator

Chart 39 NPL Ratio (%)



Source: NBS

- The decrease in NPL ratio by 20.18 p. p., from inherited-post-crisis period record levels (23.18%; May 2015) to as low as 3.00% (March 2023), 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***)

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.

National Bank of Serbia

Serbia’s Economic Outlook

*NBS projection

Serbia	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023*	2024*	2025*
Real GDP, y-o-y %	-0,7	2,9	-1,6	1,8	3,3	2,1	4,5	4,3	-0,9	7,7	2,5	2,5	3,5	4,5
Private consumption, in %	-1,7	-1,7	-0,1	-0,6	1,9	2,2	3,1	3,7	-1,9	7,8	4,0	0,4	3,0	3,3
Private investment,[1] in %	14,9	-8,4	-5,2	5,2	2,1	9,5	12,3	13,9	-5,5	10,2	4,0	5,1	5,6	6,1
Government consumption, in %	0,4	-2,1	0,9	-3,7	0,0	2,9	3,8	2,0	2,9	4,3	0,4	-0,8	1,5	2,0
Government investment, in %	7,6	-35,8	13,6	14,0	21,2	-6,3	45,3	30,7	11,0	32,4	-3,4	5,4	7,0	7,5
Exports, in %	2,9	18,0	4,3	9,3	12,0	8,2	7,5	7,7	-4,2	20,5	16,6	5,0	4,2	4,8
Imports, in %	-0,6	6,5	5,1	4,0	7,0	11,1	10,8	10,7	-3,6	18,3	16,1	0,3	7,1	4,9
Unemployment Rate, in %[4]	25,9	24,0	20,6	18,9	16,4	14,5	13,7	11,2	9,7	11,1	9,5	9,6		
Nominal Wages, in %[5]	9,0	6,2	1,4	-0,2	3,7	3,9	6,5	10,6	9,4	9,6	13,8	15,0		
Money Supply (M3), in %	9,4	4,6	7,6	6,6	11,6	3,6	14,5	8,4	18,1	13,3	6,9	12,4		
CPI,[2] in %	7,3	7,9	2,1	1,4	1,1	3,2	2,0	1,9	1,6	4,0	11,9	12,1	4,5	3,0
National Bank of Serbia Key Policy Rate,[3] in %	11,25	9.5	8,00	4,50	4,00	3,50	3,00	2,25	1,00	1,00	5,00	6,50	6,50	
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	-4,2	-6,9	-2,6	-4,0	-4,8

[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 LFS methodology from 2021. From 2021 data are aligned w ith the Census 2022. Data for 2023 is average of three quarters 2023 data.

[5] Since 2018, nominal w ages published according to the new methodology. Data for 2023 is data for the period January-November 2023.

Banking Sector Overview

Serbia	2014	2015	2016	2017	2018	2019	2020	2021	2022	November 2023
Number of banks[1]	29	30	31	29	27	26	26	23	21	20
Employees	25,106	24,257	23,847	23,055	22,830	23,087	22,823	22,550	21,995	21,977
Branches	1,787	1,730	1,719	1,627	1,598	1,598	1,576	1,515	1,371	1,350
HHI Assets	794	796	813	813	779	800	786	867	936	979
Share of foreign banks, %	74.5	76.1	76.7	76.9	75.4	75.7	86.0	87.0	83.6	76.1
Assets (net), EUR m	24,545	25,059	26,253	28,440	31,931	34,731	39,177	42,943	46,525	49,766
Capital, EUR m	5,074	5,090	5,122	5,631	5,725	6,002	6,098	6,121	6,138	6,928
Loans (gross), EUR m	16,170	16,175	16,442	17,565	19,406	21,111	23,439	25,939	28,142	28,754
Of which gross NPL, EUR m	3,483	3,491	2,800	1,730	1,105	862	871	927	848	903
Gross NPL ratio, %	21.5	21.6	17.0	9.8	5.7	4.1	3.7	3.6	3.0	3.1
IFRS impairment of NPLs	54.9	62.3	67.8	58.1	60.2	61.5	59.0	56.3	58.1	59.5
Deposits, EUR m	15,637	16,523	18,242	19,926	23,115	25,197	28,984	32,483	35,506	37,784
Pretax Income, EUR m	29.0	80.0	172.0	579.8	595.8	543.5	357.5	419.7	748.1	1.091.1
CAR[2], %	20.0	20.9	21.8	22.6	22.3	23.4	22.4	20.8	20.2	22.2
CET1 ratio %[2,3]	-	-	-	21.5	21.1	22.3	21.6	19.7	18.8	20.5
Leverage%[2,3]	-	-	-	11.1	12.6	13.6	12.4	11.1	10.3	10.8
Liquidity ratio	2.2	2.1	2.1	2.0	2.0	2.2	2.2	2.1	2.2	2.4
Liquidity coverage ratio[3], %	-	-	-	239.5	213.3	199.3	211.8	199.8	177.5	179.4
FX ratio, %	3.9	4.4	2.7	2.9	4.5	1.5	1.0	1.0	1.8	1.9
ROA, %	0.1	0.3	0.7	2.1	2.1	1.7	1.1	1.1	1.9	2.5
ROE, %	0.6	1.6	3.4	10.6	11.3	9.8	6.5	7.5	13.8	18.2
Net interest margin[4], %	4.3	4.3	3.9	3.7	3.6	3.3	3.0	2.7	2.9	4.0

[1] The NBS revoked operating licence 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 was merged to Direktna bank on 1 July, 2017. Jubanka ad Beograd was merged to AIK bank on 23 Decembar, 2017. Pireaus bank was merged to Direktna bank on 26 October, 2018. Vojvođanska bank was merged to OTP bank 25. April, 2019 (consolidated under Vojvođanska brand). OTP bank was merged into Vojvođanska banka 29. April, 2021 (consolidated under OTP brand). mts bank was merged to Banka Poštanska Štedionica on 30 Jun 2021. Direktna bank was merged into Eurobank Direktna on 10 December 2021. NLB bank was merged into Komercijalna bank on 29 April 2022 under the NLB - Komercijalna banka name. Naša AIK bank was merged into AIK bank on 01 December 2022. RBA bank was merged into Raiffeisen bank on 29 April 2023.

[2] The last available data of 30.09.2023

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

[4] Net interest margin to average total asset