



National Bank of Serbia

2024
February

INFLATION REPORT

2024
February

INFLATION REPORT

NATIONAL BANK OF SERBIA

Belgrade, Kralja Petra 12

Tel: +381 11 3027-100

Belgrade, Nemanjina 17

Tel: +381 11 333-8000

www.nbs.rs

Number of copies: 60

ISSN 1820-9394

Introductory note

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

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

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

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

The February *Inflation Report* was considered and adopted by the NBS Executive Board at its meeting of 8 February 2024.

Earlier issues of the *Inflation Report* are available on the National Bank of Serbia's website (<http://www.nbs.rs>).

Executive Board of the National Bank of Serbia:

Jorgovanka Tabaković, Governor

Željko Jović, Vice Governor

Ana Ivković, Vice Governor

Dragana Stanić, Vice Governor

Nikola Dragašević, Vice Governor

ABBREVIATIONS

bp – basis point
CPI – Consumer Price Index
EBRD – European Bank for Reconstruction and Development
ECB – European Central Bank
EIB – European Investment Bank
EMBI – Emerging Markets Bond Index
EU – European Union
FAO – UN Food and Agriculture Organization
FDI – foreign direct investment
Fed – Federal Reserve System
FOMC – Federal Open Market Committee
GDP – gross domestic product
GVA – gross value added
H – half-year
IFEM – Interbank Foreign Exchange Market
IMF – International Monetary Fund
LHS – left hand scale
mn – million
NAVA – non-agricultural value added
NPL – non-performing loan
OFO – other financial organisation
OPEC – Organization of the Petroleum Exporting Countries
pp – percentage point
Q – quarter
q-o-q – quarter-on-quarter
RHS – right hand scale
RMCP – real marginal cost of processed food production
s-a – seasonally-adjusted
SDR – Special Drawing Right
SORS – Statistical Office of the Republic of Serbia
y-o-y – year-on-year

Other generally accepted abbreviations are not cited.

Macroeconomic projections presented in the *Report* were concluded on 2 February.

Contents

I Overview	1
II Monetary policy since the November <i>Report</i>	7
III Inflation movements	11
<i>Text box 1: What do different inflation indicators and consumer price growth distribution tell us?</i>	14
IV Inflation determinants	17
1 Financial market trends	17
2 Money and loans	22
3 Aggregate demand	25
<i>Text box 2: Trends in the income and consumption of Serbian households based on the results of household budget surveys</i>	27
4 Economic activity	31
5 Labour market developments	32
V Projection	35
<i>Text box 3: When can leading central banks be expected to start lowering their key policy rates?</i>	
<i>Text box 4: Reliability of futures in global oil price forecasting</i>	44
<i>Text box 5: Comparison of the outcome of macroeconomic projections for 2023 with the NBS's projections from a year ago and with projections of other institutions</i>	60
<i>Text box 6: Alternative projection scenarios</i>	70
Table A Indicators of Serbia's external position	72
Table B Key macroeconomic indicators	73
Index of charts and tables	75
Executive Board meetings and changes in the key policy rate	78
Press releases from NBS Executive Board meetings	79

I Overview

In 2023, the global economy generally outperformed the expectations of all relevant international institutions. Many countries demonstrated a significant degree of resilience to numerous shocks, and the negative impact of monetary tightening by central banks on global growth is estimated to have been weaker than initially anticipated. It is now more widely expected that leading global economies that recorded high inflation in the past period will manage to avoid recession, wherefore “soft landing” is being increasingly spoken about. On the other hand, the potential escalation of the Middle East conflict and the Red Sea shipping crisis may affect primary commodity prices and trigger disruptions in global production and distribution chains. The risks to global growth are also associated with deepening economic and political fragmentation, China’s bleaker growth outlook, and financial crises that may break out due to the still high interest rates in financial markets and the difficulties to refinance soaring debt. However, under the IMF estimate, for the first time in a long while, the risks to the global growth projection are symmetric. Growth is estimated at 3.1% this year, which is better than expected in October. The economy of the euro area, our key trade partner, practically stagnated in H2 last year, which is why the growth forecast for this year is somewhat lower than three months ago, but still higher than in 2023.

Global inflation continued to decelerate in Q4 2023, dominantly under the impact of lower food prices and tight monetary conditions. The pace of its slowdown going forward will depend primarily on the impact of geopolitical tensions on primary commodity prices. Euro area inflation went up in December, for the first time since April 2023 (to 2.9% y-o-y), which was expected given the low base for energy prices. The increase, however, was smaller than expected. According to the Eurostat estimate, euro area inflation moderated somewhat, to 2.8% in January. It is anticipated to slow down this and next year. Under the ECB estimate, it is likely to touch the 2% target in 2025. As pointed out by the ECB, inflationary pressures in the euro area remain elevated, notably due to the sharp increase in unit labour costs in a tight labour market, but will gradually subside

The global economy outperformed the expectations last year. Under the IMF estimate, the global growth outlook for this year is more favourable than three months ago.

Global inflation continued to decelerate, despite the geopolitical tensions posing a risk to the pace of its further decline.

The monetary tightening cycle of leading central banks has most probably ended. Monetary easing is likely to begin this year.

In the period since the previous Inflation Report, the NBS Executive Board has not changed the key policy rate, which has stood at 6.5% since July 2023, given that inflation's slowdown and return to the target unfolded in line with expectations.

Interest rates in the interbank money market were stable over the past months, while the rates on private sector loans and dinar government securities declined.

The effects of past monetary tightening dampened inflationary pressures through the credit channel, without prejudice to financial stability.

as the pressures on wage growth will dissipate with inflation's slowdown.

The cycle of policy rate hikes generally ended in 2023.

At the meetings that ensued, leading central banks, the Fed and the ECB, kept their policy rates unchanged. While stating that the level of interest rates will be maintained for a sufficiently long duration, they also hinted at their decline in the course of 2024, depending on the movements of inflation, economic activity and labour market trends. On the other hand, some regional inflation targeters have already embarked on monetary easing. IMF officials warned central banks to be wary when lowering interest rates this year and to wait at least until H2 2024 before they take that road, reminding them of the many episodes in the past when central banks accommodated their monetary policy as soon as inflation took a downward path, which turned out to be a premature move.

The decision of the NBS Executive Board to **keep the key policy rate unchanged** in the period since the previous *Report* was motivated by further dissipation of global inflationary pressures, the established downward trajectory of inflation at home and its expected return within the target tolerance band in mid-2024. When making this decision, the Board also took into account the fact that the key policy and required reserve rates were raised, continuing to spill over to inflation in the period to come.

As the key policy rate was kept unchanged, **interest rates in the interbank money market levelled off** over the past months. The rates on dinar corporate and household loans declined moderately in Q4 2023. The rates on dinar government securities also decreased, on account of a lower country risk premium, reflecting global factors, but still more so Serbia's favourable macroeconomic outlook. This is also confirmed by the strong demand of foreign investors for eight-year dinar securities, issued in January 2024 and sold in a record amount of over RSD 63 bn, at a yield rate of 6.15%, which was lower than at the auctions of the same maturity securities held in late 2023. The effects of past monetary tightening by the ECB underpinned a further increase in the rate on euro corporate loans, while the rate on euro household loans declined in Q4, due to the application of the NBS decision to cap the rates on housing loans to natural persons.

Lending to the non-monetary sector accelerated somewhat in late 2023, increasing by 1.1% at the year-level. Similar growth rates were recorded for both corporate and household loans. The acceleration in Q4 reflected a rise in corporate loans, recorded in December,

while a negative effect on the stock of household loans came from the accounting treatment of housing loans due to the application of the NBS decision to cap the rates on housing loans to natural persons. Still, the growth in lending recorded in 2023 was lower than in the year before, due to higher interest rates on dinar and euro-indexed loans, the maturing of corporate loans approved under guarantee schemes, and tighter bank credit standards. Thanks to a robust bank regulatory framework and the adopted macroprudential policy measures, synchronised with monetary policy measures, **the share of NPLs in total loans** stayed close to the minimum level of around 3% in December.

At EUR 1.8 bn or 2.6% of GDP in 2023, the current account deficit was the lowest on record and broadly in line with our November expectations. Compared to 2022, the current deficit narrowed by as much as RSD 2.4 bn, under the strongest impact of the goods deficit, which went down by EUR 2.8 bn. The surplus on the services account widened further. Working in the opposite direction was the increase in the deficit on the primary income account, driven by the rising FDI stock and a moderately reduced surplus on the secondary income account. The narrowing of the goods deficit reflected a combined influence of rising exports (3.7% y-o-y) and falling imports (4.8% y-o-y), primarily due to the energy balance deficit which declined by around EUR 1.9 bn owing to reduced global energy prices, lower quantity imports and elevated electricity exports. Goods exports were up primarily owing to manufacturing exports, which rose 5.4% as a result of past investment. Of the 23 manufacturing branches, 16 recorded growth, notably those related to the automotive industry and production of machinery, equipment and electronics.

FDI inflows were record high for the second year in a row, amounting to EUR 4.5 bn in 2023 according to preliminary data. They remained broadly diversified by geography and project and channelled mainly to export-oriented sectors. Net FDI inflows came at EUR 4.2 bn, covering the current account deficit multiple times. As this fuelled appreciation pressures, aiming to ensure relative stability of the exchange rate, the NBS bought a record amount of EUR 3.94 bn net in 2023. Portfolio investment inflows reached EUR 918 mn net, owing primarily to the successful issue of eurobonds early in the year. As a result, FX reserves rose to a record high of EUR 24.9 bn at year end, significantly above all adequacy metrics.

In 2023, the **consolidated** general government deficit measured RSD 181.1 bn or 2.2% of GDP, which is a better outturn than the 2.8% deficit planned by the

In 2023, the external position improved owing to a reduced goods deficit and a widened services trade surplus.

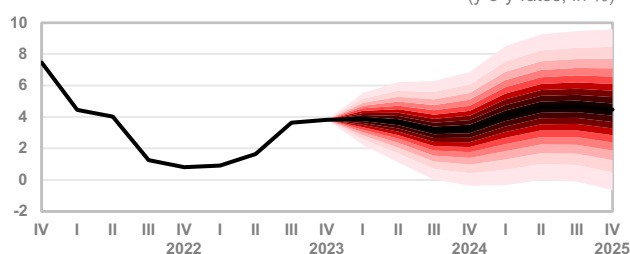
Foreign capital inflows exceeded the current account deficit multiple times, fuelling appreciation pressures and resulting in a record level of FX reserves of EUR 24.9 bn at end-2023.

At around 2.2% of GDP in 2023, the fiscal deficit was lower than planned by the supplementary budget, mainly on account of lesser current expenditure.

GDP grew 2.5% for the second year in a row and was fully in line with our November projection.

GDP growth is expected to accelerate to 3–4% this year, and to 4–5% from next year, reflecting, among other things, the implementation of investment in the lead-up to hosting Expo 2027.

GDP growth projection
(y-o-y rates, in %)



supplementary central government budget. The outperformance reflects primarily lower than planned current expenditure, mostly outlays for goods and services procurement and subsidies, and, to a lesser degree, lower than planned capital expenditure. Consistent with a more favourable deficit outcome, the government fiscal impulse was smaller than expected, contributing to lower inflation. The share of general government public debt in GDP amounted to 52.7% in late 2023, vs. 53.6% planned by the supplementary budget.

GDP grew in Q4 2023 (3.8% y-o-y and 0.9% s-a, under our estimate) at a similar pace as in Q3, thus accelerating significantly from H1. Unlike H1, when the growth was led by net exports on account of rising goods and services exports and falling imports, in H2 it was driven mainly by investment and private consumption. According to the SORS estimate, GDP grew 2.5% p.a., led by all production and most service sectors, despite the divergent movement of some service sectors in H1. The SORS estimates that the agricultural season was better than in 2022, adding 0.5 pp to GDP growth. An almost equal contribution came from construction, reflecting stepped-up government investment in transport infrastructure and partly low last year's base, and industry, thanks mostly to a rebound of production in the energy sector and higher copper ore exploitation. Manufacturing also lent an impulse, despite the dented production of our key trade partners, primarily Germany.

Real GDP growth is expected to accelerate to 3–4% this year (central projection: 3.5%), on account of, among other things, the carry-over effect from 2023, estimated at around 1.5 pp. The growth will be led by domestic demand. Net exports will provide a negative contribution, despite the expected continued export growth as a result of the effects of past investment in export-oriented sectors and a gradual recovery of external demand. Private consumption will be propped by the continued employment and wage growth, notably in the private sector. This will produce no major inflationary effects given that wage and employment growth will be driven by elevated productivity. We also expect the share of outlays for public sector wages and pensions to remain relatively stable, at around 10–11% of GDP. Investment growth will be driven by the implementation of projects in transport, energy and utility infrastructure. Given the anticipated acceleration of investment and personal consumption, imports are projected to rise faster than exports, resulting in a negative contribution of net exports. The economy will likely gather steam in the years to come. We have now revised up the medium-term GDP growth projection to 4–5%, taking into account the

implementation of investment in the lead-up to hosting Expo 2027. Under our projection, owing to the anticipated acceleration of the investment cycle and the related imports of equipment and intermediate goods, **the current account deficit will equal around 4–5% of GDP in 2024 and in the medium run.** Such level of the current account deficit ensures external sustainability and is estimated to remain fully covered by net FDI inflows, as in the past nine years.

Inflation continued down in Q4 2023. As announced a year ago, **in late 2023 it was half the level recorded the year before, measuring 7.6%,** slightly below our November projection. Inflation decelerated further on the back of subsiding cost-push pressures, the base effect for food prices, and the effects of past monetary tightening, which also dragged core inflation (CPI excluding food, energy, alcohol and cigarettes) down to 6.5% y-o-y in December. Inflation slowed also on the back of a reduction in short-term inflation expectations of the financial and corporate sectors and medium-term financial sector expectations that are anchored within the NBS target tolerance band.

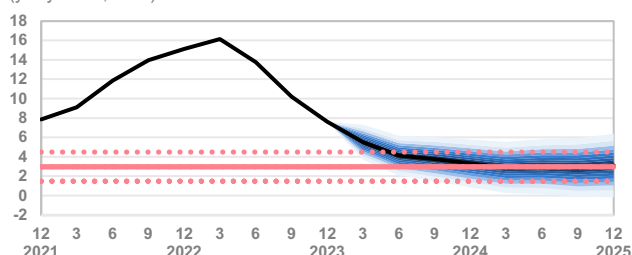
Under our new projection, **y-o-y inflation will most probably retreat within the target band by mid-2024, continue to slow thereafter, approach the midpoint of 3% by year end, and stay around this level until the end of the projection horizon.** The contributing factors include the effects of past monetary tightening, subsiding global cost-push pressures, deceleration of imported inflation, the persistently weak external demand and the expected further decline in inflation expectations. The new inflation projection is slightly lower than the November projection as we have assumed lower global prices of primary commodities – oil and primary agricultural commodities.

Uncertainty surrounding the inflation and GDP projections is still mainly associated with factors from the international environment – geopolitical relations and the outlook for global growth, as well as their impact on world prices of energy and other primary commodities. To some degree, the risks also stem from the persistence of core inflation globally and the duration of monetary policy tightening by leading central banks. At home, the risks to the projection are associated with the pace of rebound in domestic demand, primarily on account of the level of FDI inflows and investment in infrastructure and the energy sector. Another source of risk is the outcome of the agricultural season at home, primarily through its impact on fruit and vegetable prices. Overall, we judge the risks to the inflation and GDP projections to be

In Q4, y-o-y inflation in Serbia moved at a lower level than projected in November, notably as a result of lower petroleum product prices in an environment of falling global oil prices.

Under our new projection, inflation will continue to slow, retreating within the target tolerance band in mid-2024 and approaching the 3% midpoint by year end.

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



We judge the risks to the inflation and GDP projections to be symmetric.

symmetric this year and beyond. The NBS will continue to monitor and analyse trends in the international commodity and financial markets, and make monetary policy decisions depending on the pace of inflation's slowdown. Going forward, delivering price and financial stability in the medium term will remain the monetary policy priority, along with supporting continued growth and development of our economy, a further rise in employment and a favourable investment environment.

II Monetary policy since the November Report

The Executive Board's decision to keep the key policy rate on hold in the period since the previous Report is underpinned by the continued easing of global inflationary pressures, the established downward path of inflation at home and its expected return within the target tolerance band in mid-2024.

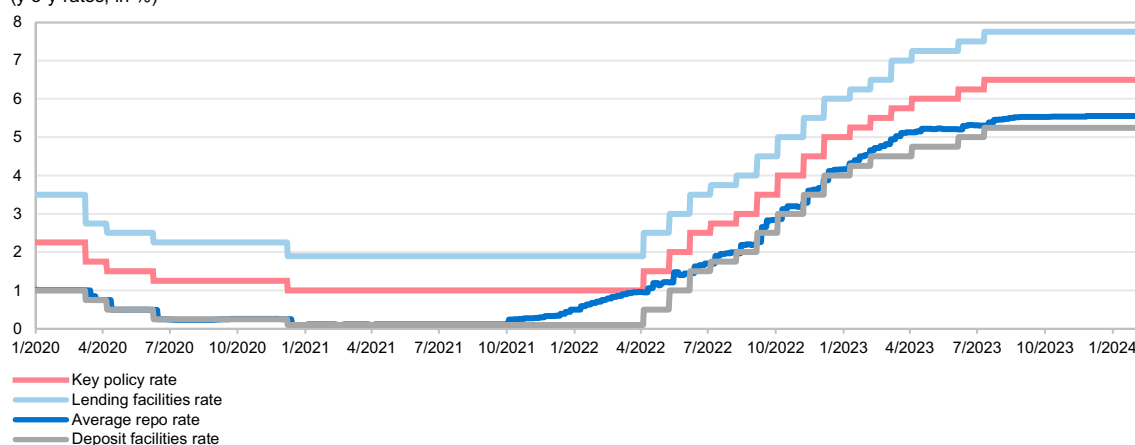
In making the decision, the Board also relied on the fact that the key policy rate and the reserve requirement ratios had been increased and that the effects of these measures would continue to pass through to inflation in the period ahead as well.

Since the November *Inflation Report*, the **NBS Executive Board has kept the key policy rate unchanged from its July 2023 level of 6.5%**. The deposit and lending facility rates have been kept at 5.25% and 7.75%, respectively. The July hike was the 15th consecutive in the current cycle (since April 2022), resulting in a 550 bp higher key policy rate overall. Since October 2021, the weighted average repo rate was raised almost to the same extent, to 5.56% at end-January 2024. Moreover, in an environment of pronounced excess dinar liquidity in the banking sector, in September last year the NBS Executive Board raised banks' required reserve ratios and the percentages of dinar allocations of FX required reserves, thus further tightening monetary conditions. Past monetary policy tightening has passed through to interest rates in the

markets of money, loans and savings, leading to lower one-year ahead inflation expectations of the financial and corporate sectors, which signals the efficiency of the monetary policy transmission mechanism.

The Executive Board's decisions in December 2023 and January 2024 were based on the **November medium-term inflation projection**, according to which inflation would continue to decline and retreat within the target tolerance band in mid-2024, and then approach the 3% target midpoint at end-2024. **Y-o-y inflation** decelerated to a somewhat greater extent than projected in November and measured 8.0% and 7.6% in November and December, respectively. **Inflation decline to almost half the level recorded a year ago** resulted primarily from

Chart II.0.1 Movement in the key policy rate and average repo rate
(y-o-y rates, in %)



Source: NBS.

monetary policy measures, the weakening of global cost-push pressures, the slowdown in imported inflation, good agricultural season, and lower inflation expectations. Core inflation (CPI excluding food, energy, alcohol and cigarettes), which is most affected by monetary policy measures, moved below headline inflation throughout 2023.

In its monetary policy making, the Executive Board had in mind that **globally cost-push pressures have continued to subside and inflation to decline**, as these were the main contributors to domestic inflation in the prior period. Despite persisting geopolitical risks, it is estimated that global economy is approaching price stability, mainly due to the implementation of restrictive policies by the majority of central banks. Still, one should bear in mind that further escalation of geopolitical tensions could cause new shocks to energy prices, which could slow down the disinflation process and defer inflation's return to the central banks' targets.

Headline inflation in the **euro area**, our key trade partner, slowed down further. Although it went up in December for the first time since April 2023 (to 2.9% y-o-y), this was expected due to the low base from energy prices, with the recorded growth lower than anticipated. Inflation is expected to slow down further this and the next year. According to the ECB's December forecast, it should average 2.7% this year, which is a 0.5 pp downward revision relative to the previous projection (largely due to the lower energy prices), while the forecast for 2025 was kept unchanged at 2.1%. However, the ECB pointed out that inflationary pressures in the euro area are still elevated, mostly due to the strong increase in unit labour costs amid tight labour market conditions, but also that they will gradually decline as the inflation slowdown will soften the pressures on wage growth.

The **ECB** has not changed its interest rates since September, emphasizing that the ensured restrictive monetary conditions should lead to inflation's return to the target in the medium run. The ECB's main interest rates are at the highest level since the introduction of the euro in 1999. Their robust pass-through to financial conditions weakened the dynamic of credit, and hence, economic activity, especially in Q4 2023. Consistent with the estimate that tight monetary policy would constrain economic growth for some time yet, but that this effect would wane over the projection horizon, the ECB revised down its projection of economic growth for this year by 0.2 pp to 0.8% and kept it unchanged for the next year at 1.5%, the same as for 2026.

The key policy rates of most other central banks peaked in the current monetary tightening cycle as well. The question that arises now is when the interest rates of leading central banks – the ECB and the Fed will start to decline and at what pace. It is expected that the leading central banks, as well as the central banks of most countries, will embark on the cycle of monetary policy easing during this and the next year, but when this will happen depends on the specific circumstances of each country. Nonetheless, the ECB, the Fed and the IMF point out that monetary easing should not come too early so as not to renew inflationary pressures.

In its monetary policy making, the NBS Executive Board took into account that the **global financial conditions are still tightened**, although they are expected to gradually ease in the coming period, supported by the anticipated further **fall in the global risk premium of emerging market economies**. As for Serbia, **FDI inflow remained high and outstripped the current account deficit by multiple times in 2023**, thus contributing to the record increase in the NBS's FX reserves. In addition, the Executive Board emphasized that **Serbia's credit rating** was maintained one notch below the investment grade in the face of numerous global challenges, particularly the Ukraine conflict and deceleration of external demand. The rating agencies assess that Serbia has a coherent economic policy framework, credible monetary policy, moderate public debt levels, adequate FX reserves, and a stable banking sector.

Among the challenges from the international environment which mandate caution, the Executive Board highlighted **geopolitical conflicts** and the consequent risk of rising global prices of oil and other primary commodities. The prices of most primary commodities in the global market declined in 2023, but are still more than 40% above the pre-pandemic level. The global oil prices are particularly volatile – after the hike in September and October 2023, reflecting the decision of the OPEC+ countries to extend the cap on supply until end-2023, but also concerns over oil supply amid conflicts in the Middle East, the price of oil declined primarily due to subdued demand from advanced economies. At the same time, as indicated by oil futures, the global oil price is expected to decrease in the period ahead. Global gas price has been revised down even more, and global electricity price is also expected to decline. Still, uncertainty surrounding the movements in energy prices, particularly prices of oil and gas, remains pronounced, with potential escalation of the Middle East conflict posing the main risk.

Also, **China's economic performance** could affect global prices not only of energy but also of most other primary commodities, which is why China's growth outlook is one of the important factors of inflation movements in the period ahead. The World Bank estimates that China's economic growth will slow down to around 4.5% this year, mostly due to problems in the construction sector. This would be China's weakest economic performance in the past 33 years, excluding the pandemic 2020 and 2022. Global economic growth is also expected to slow down further this year, for the third consecutive year, due to restrictive monetary policies and financial conditions in most of the countries, but also weak global trade and investments. It is estimated that geopolitical tensions and rising protectionist measures will lead to geoeconomic fragmentation and losses in the long run, hence global economic growth rates will trend below the pre-pandemic 3%.

On the domestic front, the Executive Board had in mind that **inflation expectations of the financial and corporate sector** continued down. According to the Ipsos survey, one-year ahead inflation expectations of the financial sector approached the upper bound of the target band, whereas the Bloomberg survey places them on that upper bound. The expectations of this sector for two and three years ahead are within the NBS's target band. The Executive Board had in mind that lower inflation expectations support lower inflation and a higher real interest rate, i.e. restrictive monetary conditions even without changes in the key policy rate.

Despite the continuing rise in employment and estimated real wage growth of 2.6% in 2023, **domestic consumption** did not exert any major inflationary pressures. Additionally, despite higher outlays for public sector wages, pensions and one-off fiscal aid at the end of the year, 2023 recorded a lower general government

deficit than expected, measuring 2.2% of GDP, thus creating a **weaker than expected fiscal impulse**. Overall, GDP growth measured 2.5% in 2023, fully in accordance with the NBS's forecast. Growth was led by net exports, thanks to rising exports of goods and services and lower imports, and by fixed investments. Assuming that global inflationary pressures wane, the euro area recovers and the implementation of planned investment projects in the area of transport, energy and utility infrastructure accelerates further, the **Executive Board expects GDP growth to pick up to 3.0–4.0% this year**. According to their estimate, personal consumption will remain an important growth factor, though not to the extent that would cause major inflationary pressures, and so will fixed investments, which also boost potential output.

The Executive Board's decision at its February meeting to keep the key policy rate unchanged was mainly motivated by the continuing downward trajectory of y-o-y inflation in Serbia and its new projection, which is slightly lower than in November and indicates that inflation will move around the target midpoint over the monetary policy horizon. The Executive Board assesses that geopolitical tensions pose the main risk to the projection, and that the possibility of their intensification mandates caution in monetary policymaking.

As the main risks to inflation and other economic developments still emanate from the international environment, the NBS will continue to monitor and analyse trends in the international commodity and financial markets and make monetary policy decisions depending on the pace of inflation's slowdown. Going forward, delivering price and financial stability in the medium term will remain the monetary policy priority, along with supporting continued growth and development of our economy, a further rise in employment and a favourable investment environment.

III Inflation movements

Consistent with our expectations from the November Report, y-o-y inflation in Serbia continued on a downward path in Q4 and measured 7.6% y-o-y in December, which is twice lower than at end-2022. This was facilitated by the further weakening of cost-push pressures, the base effect from food prices and the effects of past monetary tightening. The same factors led to a slowdown in core inflation to 6.5% y-o-y in December.

Inflation slowdown is also supported by the lower short-term inflation expectations of the financial and corporate sectors, as well medium-term inflation expectations of the financial sector anchored within the NBS target band.

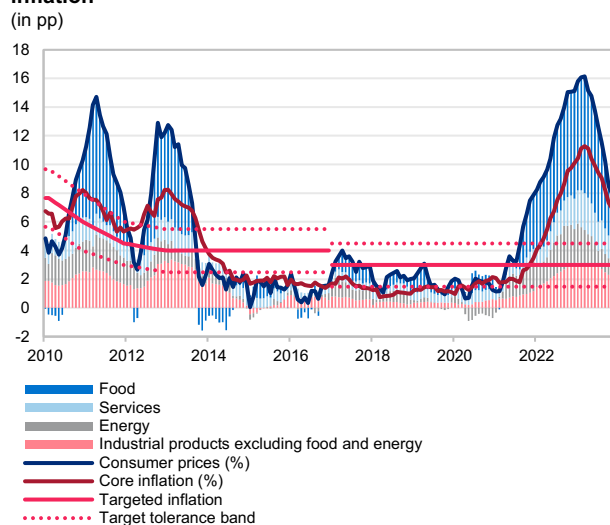
Inflation movements in Q4

Y-o-y inflation decelerated additionally in Q4 to 7.6% in December, somewhat lower than our expectations from the November Report and almost twice lower than at end-2022. Further slowdown of the y-o-y growth in food prices (primarily processed food), with a 1.6 pp lower contribution to y-o-y inflation in December relative to September, played a key role in inflation's slide. The decline in the contribution of food prices reflected the high base from the same period last year, as well as reduced cost-push pressures in food production and transport costs due to lower global prices of primary agricultural commodities and industrial raw materials. The prices of industrial products (excluding food and energy) and the prices of services also decreased their contribution to y-o-y inflation in Q4 – by 0.4 pp and 0.3 pp, respectively. Accordingly, **core inflation** (measured by CPI excluding food, energy, alcohol and cigarettes) also decelerated to 6.5% y-o-y in December, down by a third from end-2022. On the other hand, energy prices increased mildly their contribution to y-o-y inflation in Q4 (by 0.1 pp), mostly reflecting the implemented adjustment in electricity prices in November. Conversely, much slower y-o-y growth in the prices of petroleum products, mirroring the fall in the global oil price in Q4, worked in the opposite direction.

According to SORS estimates, average inflation in 2023 equalled 12.1% and average core inflation 9.1%. Headline and core inflation peaked in March, and since then both indicators have been on a stable downward path. Core inflation moved below headline inflation during the entire 2023, propped by the NBS monetary policy tightening.

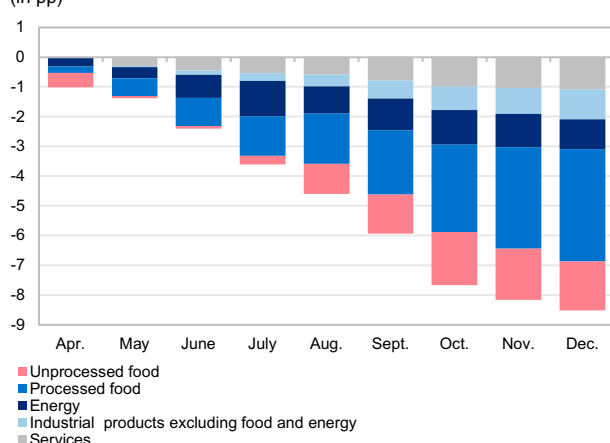
In quarterly terms, **a 0.9% hike in consumer prices in Q4** underperformed the expectations stated in the November Report, primarily due to the lower prices of petroleum

Chart III.0.1 Contribution of main CPI components to y-o-y inflation



Sources: SORS and NBS calculation.

Chart III.0.2 Change in contribution of main CPI components to y-o-y inflation – relative to March 2023*



Sources: SORS and NBS calculation.
* Y-o-y inflation peaked in March.

Chart III.0.3 Inflation at the end of 2022 and 2023
(in pp)

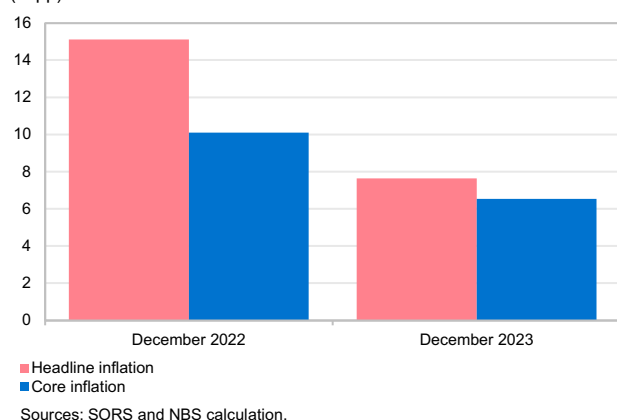
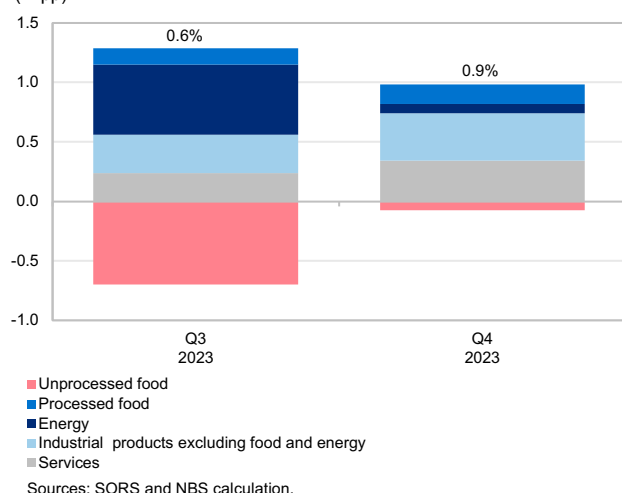


Chart III.0.4 Contribution of main CPI components to quarterly inflation
(in pp)



products. Mirroring the drop in the global oil price, the **prices of petroleum products** in the domestic market dipped by 6.8% in Q4 (with a negative 0.4 pp contribution to inflation). On the other hand, the previously announced adjustments in the prices of gas and electricity for households (9.9% and 7.3%, respectively) were implemented in November, with gas prices giving a marginal contribution, and electricity prices a 0.4 pp contribution to inflation in Q4. These movements led to a 0.5% **energy price** hike in Q4, which is much lower than in the previous quarters of 2023, owing to the declining prices of petroleum products.

The **prices of food and non-alcoholic beverages** edged up mildly in Q4 (by 0.3%, with a 0.1 pp contribution to inflation). **Processed food prices** recorded similar growth (0.8%) as in Q3, with an unchanged 0.2 pp contribution to quarterly inflation. In this group, Q4 saw a rise in the prices of processed meat, milk and dairy, confectionery and non-alcoholic beverages, while the prices of edible oils and fats continued down. **Unprocessed food prices** slackened by 0.7% (with a 0.1 pp negative contribution to inflation), mainly as a result of the seasonal cheapening of fresh fruit (with a 0.2 pp negative contribution to inflation), whereas the prices of fresh vegetables and fresh meat grew (with a 0.1 pp aggregate contribution to inflation).

Inflation growth in Q4 was dominantly led by the higher prices of **industrial products (excluding food and energy)**, with a 0.4 pp contribution to inflation. The prices of industrial products rose by 1.4% in Q4 (similar as in Q3), driven by the seasonal hike in the prices of clothes and footwear (with a 0.2 pp contribution to inflation), as well as higher prices of pharmaceutical products, alcohol and cigarettes, providing a 0.2 pp aggregate contribution to inflation.

The **prices of services** increased by 1.4% in Q4 on account of the higher prices of cable TV and internet services, catering, tuition, medical services, crafts and rent, with a 0.3 pp aggregate contribution to inflation.

Administered prices grew 3.0% in Q4, owing to the mentioned hike in the prices of gas, electricity and cigarettes. In y-o-y terms, these prices accelerated their growth, to 10.9% in December (compared to 8.9% in September).

The **prices within core inflation** recorded a 1.4% increase in Q4, primarily owing to the already mentioned hike in the prices of industrial products, notably clothes and footwear, as well as higher prices of services.

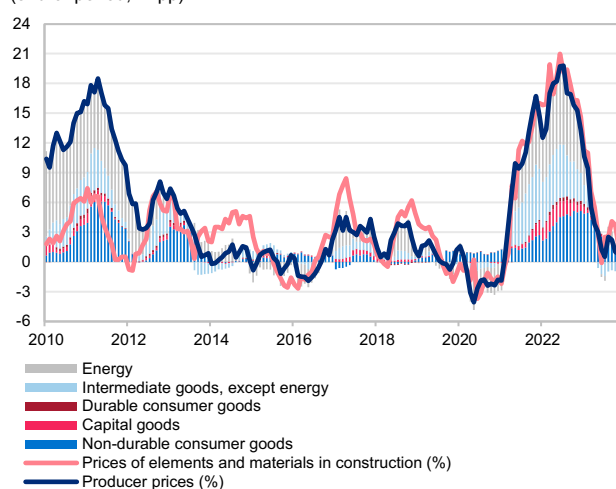
Producer and import prices in Q4

After slowing down in October and November, **industrial producer prices in the domestic market** grew y-o-y in December, mainly because of the higher costs in electricity and gas supply. Regardless, industrial producer prices recorded a lower y-o-y growth rate in December relative to September (1.6% vs. 2.2%), as the **prices of non-durable consumer goods** decreased their contribution significantly in Q4, mostly owing to the y-o-y drop in the prices of food production in November and December (for the first time since end-2018). The prices of intermediate and capital goods, as well as durable consumer goods gave a similar contribution to the y-o-y dynamics of industrial producer prices in Q4 as in Q3. The **prices of elements and materials in construction** also posted lower y-o-y growth rates in December than in September (2.5% vs. 4.1%).

The weakening of cost-push pressures in industry and construction is indicated also by the fact that industrial producer prices in the domestic market dipped by 0.4% in Q4, and the prices of elements and materials in construction by 1.1%.

Import prices expressed in dinars¹ declined further in Q4, to 2.3% y-o-y in December (after -4.0% y-o-y in September). The y-o-y decline in import prices continued to be driven by almost all components, primarily lower prices of equipment, intermediate goods and other imported goods, approximated by the export prices of Germany, as well as by the lower global prices of crude oil and primary agricultural commodities. Although lower in December than in September, a positive contribution to the y-o-y dynamics of import prices in Q4 stemmed only from the prices of imported services, approximated by the euro area core inflation. At quarterly level, import prices expressed in dinars stagnated in Q4.

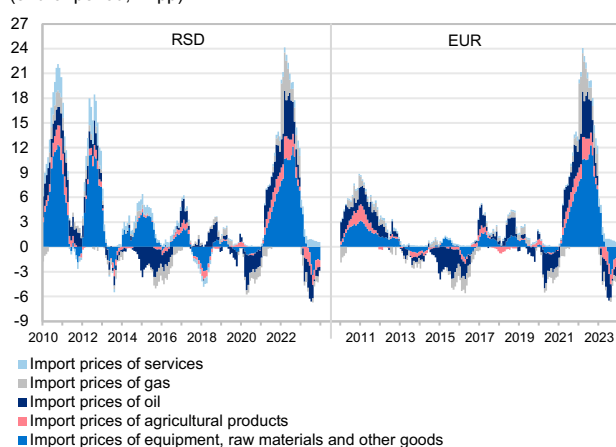
Chart III.0.5 Contribution by destination groups of consumption to the y-o-y producer price dynamics* (end-of-period, in pp)



Sources: SORS and NBS calculation.

* Industrial producer prices for the domestic market.

Chart III.0.6 Contribution of selected components to y-o-y growth rate of imported prices (end-of-period, in pp)



Sources: Destatis, FAO, Bloomberg, Eurostat, SORS and NBS calculation.

¹ Preliminary data. The base year is 2010. The weighted average of several components is used as an indicator of import prices: the global Brent oil price, import gas price, food price index (FAO index), consumer prices within euro area core inflation, and export prices of Germany, one of Serbia's key trade partners. The fixed weights of the components are calculated according to the value of imported goods and services in 2022.

Text box 1: What do different inflation indicators and consumer price growth distribution tell us?

Measured as the y-o-y change in consumer prices, inflation in Serbia has been on a downward trajectory since April 2023, ending the year at 7.6%, i.e. half the level recorded the year before. The decline was aided primarily by the slowing growth in food prices (4.6 pp), which in 2021 and 2022 had the strongest impact on inflation's rise, reflecting an interplay of numerous external shocks and a poorer agricultural season at home during two consecutive years. In 2023 energy prices also dragged inflation down (by 1.1 pp), despite the government's decision to distribute the necessary electricity and household gas price hikes (driven by the energy crisis in Europe) over two years (2022 and 2023). Core inflation (CPI excluding the prices of food, energy, alcohol and cigarettes) also dropped, from 10.1% in late 2022 to 6.5% in late 2023, reflecting monetary policy measures and the easing of global inflationary pressures. Its contribution to headline inflation was 1.6 pp lower than at end-2022. Within core inflation, an almost equal contribution came from product and services prices, with the contribution of both price categories declining. This suggests the subsiding of inflationary pressures and inflation's likely further slowdown.

Given that it provides a deeper insight into price changes and enables filtering, i.e. the exclusion of prices of some goods and services categories whose volatility is prompted by short-term and specific factors impacting some price categories only, the analysis of the distribution of price growth of different goods and services categories may shed more light on inflation dynamics, particularly during the episodes of elevated inflation. We have observed the distribution of changes in all consumer price categories and the trimmed mean (removing the largest and smallest values). This helped us follow inflation trends and assess underlying inflation, as a measure of fundamental inflationary pressures.

If we observe y-o-y price growth rates of all products and services included in the consumer basket (660), we can see that until September 2021, when inflation in Serbia began to rise amid a global polycrisis environment, the share of product and services prices whose y-o-y growth exceeded the upper bound of the target tolerance band was below 30%, or 17% on average since early 2017. Since September 2021, the

Chart O.1.1 Contributions of product and services prices to core inflation
(in pp)

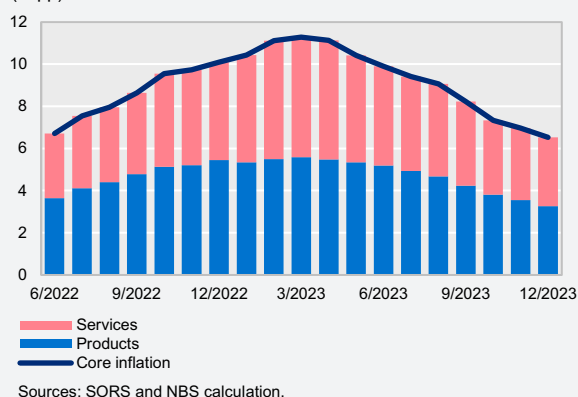


Chart O.1.2 Movement of different y-o-y core inflation indicators
(in %)

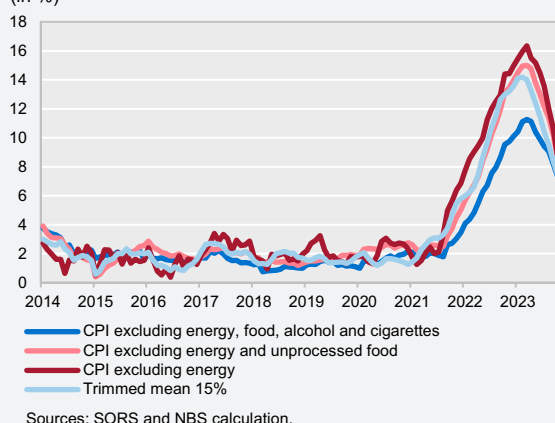
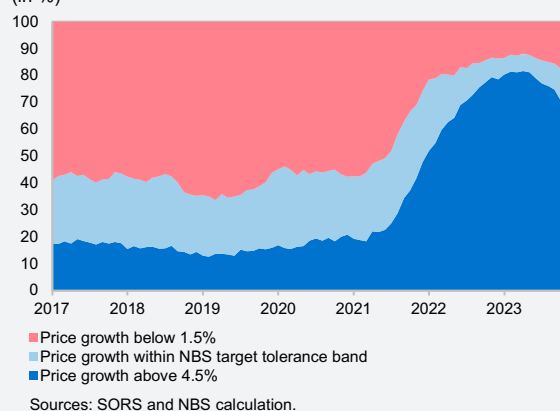


Chart O.1.3 Share of products and services from CPI list according to the level of y-o-y growth rates
(in %)



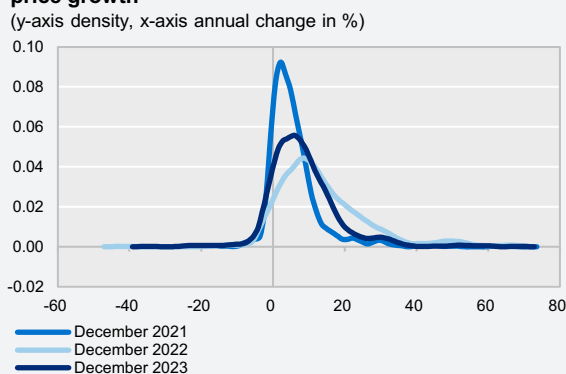
share began to increase, reaching around 80% in early 2023. However, since June 2023, the share of product and services prices growing more than 4.5% in y-o-y terms has been declining, to below 64% in December 2023. At the same time, an increase was registered in the share of product and services prices recording y-o-y growth either within the target tolerance band or below 1.5%.

After the pandemic, the overall distribution of y-o-y growth in product and services prices has become more asymmetric to the right. Still, in December 2023, compared to December 2022, the distribution was less asymmetric to the right and less dispersed, while central tendency measures were lower, pointing to subsiding inflationary pressures.

In addition to core inflation indicators obtained by excluding the most volatile inflation components, such as food and energy prices, the trimmed mean may also help assess underlying inflation, i.e. fundamental inflationary pressures. The intensity of inflationary pressures is assessed by excluding those products and services whose prices recorded the largest changes in both directions in the course of a month. Unlike the first group of core inflation indicators, the trimmed mean does not always exclude the same products, but the same predefined percentage of the consumer basket, regardless of the type of products and services. For instance, the NBS excludes 7.5% of both products and services which displayed the largest price growth/drop in a month – 15% in total. Since April 2023, this inflation measure has also been declining. In December it stood at 6.2%, while as of November it has been below core inflation (excluding the most volatile price categories). This suggests the subsiding of inflationary pressures generated by product and services prices that recorded the highest y-o-y growth in the prior period, as well as pressures fuelled by the prices of other products and services.

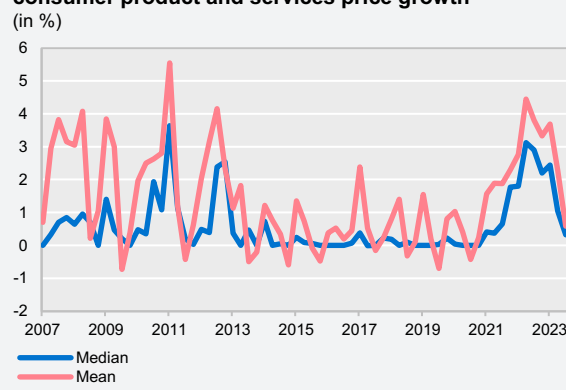
The long-term price distribution in Serbia is similar to other countries. In the major part of the period observed (2007–2023), weighted average quarterly inflation has been above the weighted median and the asymmetry coefficient has mostly been positive, meaning that, in general, the distribution of price changes is skewed to the right. This can be explained by supply-side shocks (which generally pushed prices up) and the downward price rigidity. If we observe quarterly consumer price growth rates, we can see that the weighted mean and the median (with the shares of these categories in the consumer basket used as weights) of quarterly consumer price growth rates were elevated in Q3 2010 – Q2 2011, in Q3 and Q4 2012 and in Q4 2021 – Q1 2023. The comparison of the weighted average quarterly consumer price growth and the standard deviation shows a positive correlation, i.e. price dispersion is higher in periods of elevated inflation. The standard deviation in the current cycle of inflation's growth was lower than in 2007–2013. It has been declining as of Q2 2023, just as the weighted mean and the median, signalling subdued inflationary pressures.

Chart O.1.4 Distribution of y-o-y product and services price growth



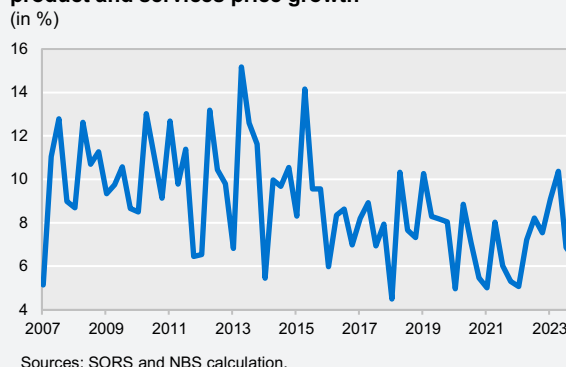
Sources: SORS and NBS calculation.

Chart O.1.5 Weighted mean and median of quarterly consumer product and services price growth



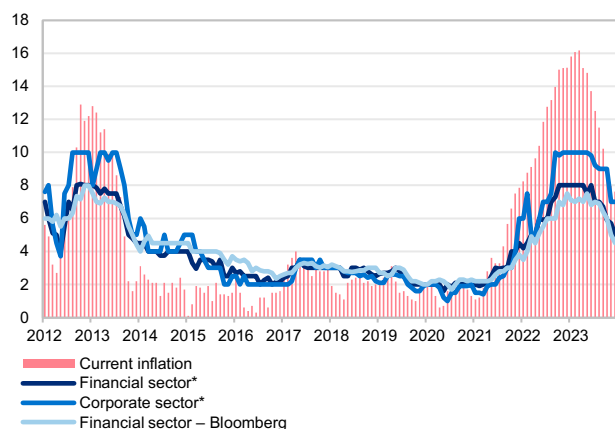
Sources: SORS and NBS calculation.

Chart O.1.6 Standard deviation of quarterly consumer product and services price growth



Sources: SORS and NBS calculation.

Chart III.0.7 Current inflation and one-year ahead inflation expectations
(y-o-y rates, in %)



Sources: Gallup, Ipsos/Ninamedia, Bloomberg and NBS.

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

Inflation expectations

Consistent with inflation slowdown, inflation expectations of the financial and corporate sectors continued to fall in Q4.

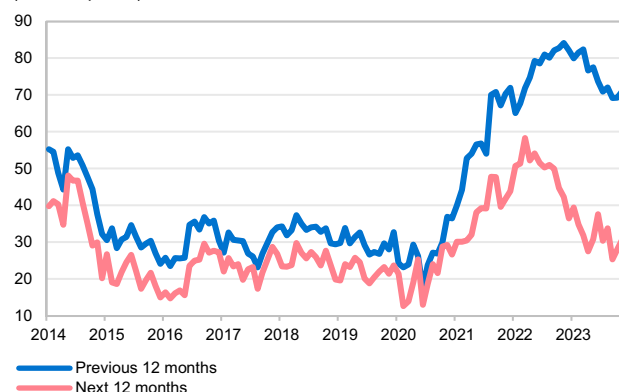
According to the January Ipsos survey, **short-term expectations of the financial sector** found themselves within the NBS target band for the first time since February 2022 and measured 4.5%. According to the Bloomberg survey, these inflation expectations stood at the upper bound of the target band in December, only to fall further to 4.3% in January.

One-year ahead inflation expectations of corporates fell from 9.0% in October to 7.0% in November, where they stayed in December, only to decline further to 6.7% in January. More than a half of respondents do not expect a change in the prices of their products and services over the next twelve months.

After falling to 12.0% in November, **one-year ahead inflation expectations of households** returned to 15.0% in December, the same as in January. According to the results of the qualitative survey, the index of expected inflation (31%) recorded lower values than the index of perceived inflation (71%), suggesting that households expect that inflation will be lower in the coming 12 months than in the previous year. Both perceived and expected inflation have been on a decline, as the percentage of households who feel that prices are or will be considerably higher is receding.

Medium-term inflation expectations of the financial sector are anchored within the target tolerance band, with two-year ahead expectations equalling 3.5% in January, and **three-year ahead** expectations 3.3%. **Medium-term inflation expectations of corporates** for two years ahead fell from 6.0% to 5.0% in December, this being also the level of their expectations for three years ahead. January saw no changes in these inflation expectations. **Inflation expectations of households** for both periods have stayed unchanged, at 10.0%.

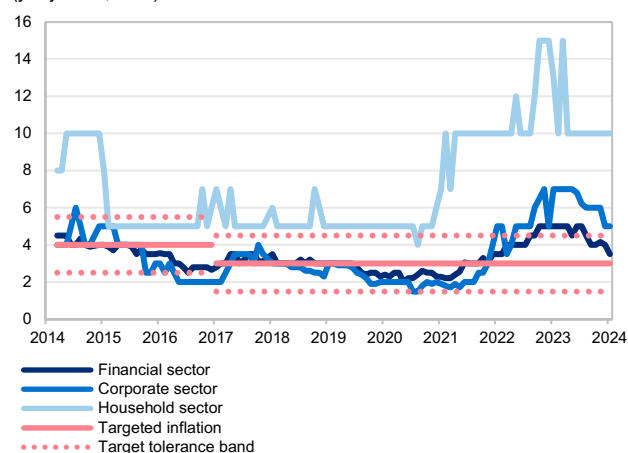
Chart III.0.8 Household perceived and expected inflation*
(in index points)



Sources: Ipsos/Ninamedia and NBS calculation.

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

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



Sources: Ipsos/Ninamedia and NBS.

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

IV Inflation determinants

1 Financial market trends

The NBS has kept the key policy rate on hold since August 2023, which reflected on the flatlining of interest rates in the interbank money market. The rates on dinar corporate and household loans went down q-o-q in Q4. Also declining were the interest rates on dinar government securities, due to the global fall in yields and the lower country risk premium.

The effects of the ECB's past monetary policy tightening drove the interest rate on euro corporate loans up, while the interest rate on euro household loans dropped in Q4 owing to the application of the NBS's cap on the interest rates on housing loans extended to natural persons.

The local FX market saw continued appreciation pressures in Q4, fuelled by the high FDI inflow and the record low current account deficit thanks to more favourable trends in foreign trade.

Interest rates

Since August 2023, the NBS has kept the **key policy rate** at 6.5% and the rates on lending and deposit facilities at 7.75% and 5.25%, respectively. This also had a bearing on interest rates in the interbank money market, which almost flatlined throughout Q4.

Speaking of dinar liquidity of banks, the average stock of sold repo securities decreased by RSD 41.5 bn from September to RSD 444.7 bn in December. This was mainly a reflection of higher dinar allocations under FX required reserves and the higher required reserve ratios, while the average daily balance of overnight bank deposits with the NBS edged up mildly, by RSD 2.1 bn to RSD 102.0 bn in December.

The interest rates in **the interbank money market** remained almost unchanged in Q4. At end-December BEONIA measured 5.23%, with the average daily turnover in the overnight interbank market rising from RSD 1.7 bn in Q3 to RSD 4.0 bn in Q4, which may be associated with the increase in required reserves, one of

Chart IV.1.1 NBS operations – liquidity withdrawal

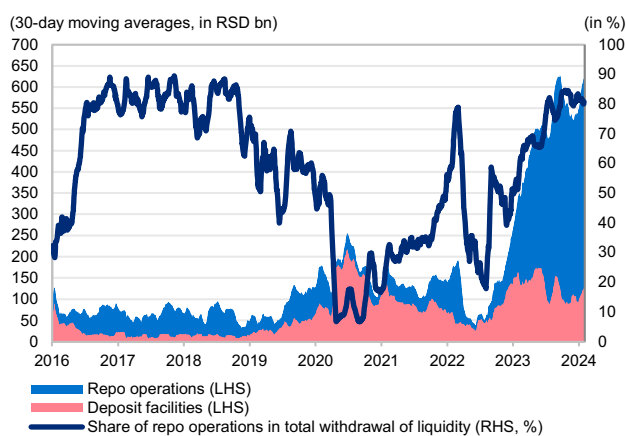


Chart IV.1.2 Interest rate movements

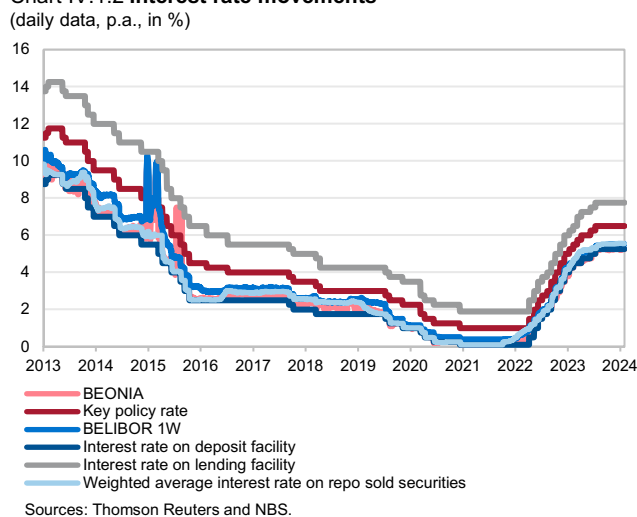


Chart IV.1.3 Interest rates in the primary market of dinar government securities
(p.a., in %)

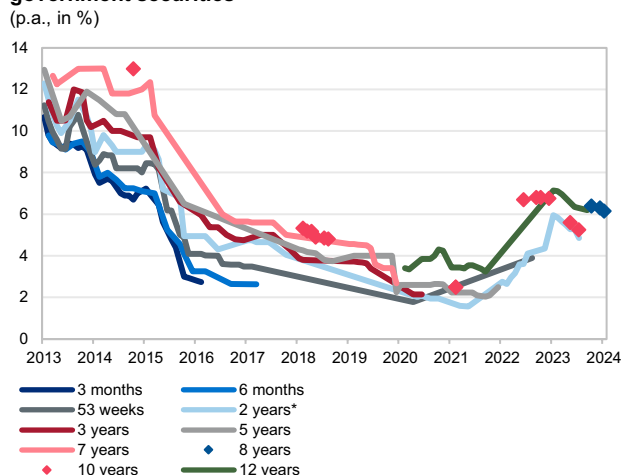


Chart IV.1.4 Yield curve in the secondary government securities market
(average values, p.a., in %)

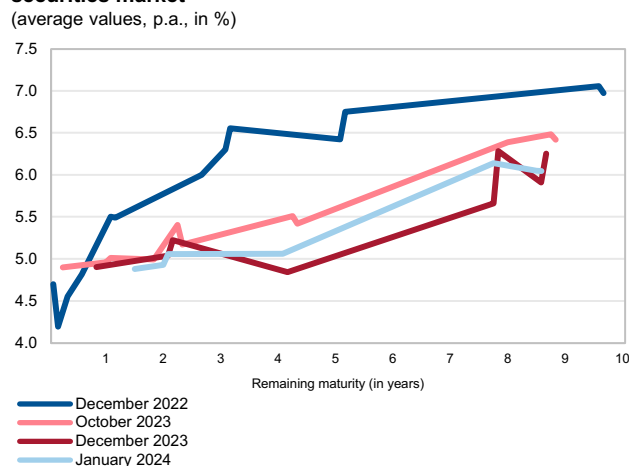
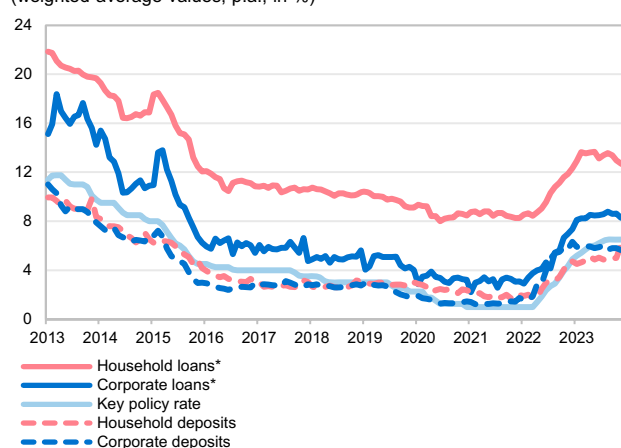


Chart IV.1.5 Interest rates on new dinar loans and deposits
(weighted average values, p.a., in %)



the goals of which was to boost trading volumes in the interbank money market. At end-December 2023, BELIBOR rates moved from 5.25% for the shortest to 5.8% for the six-month maturity.

In the primary market of dinar government securities, the auctions of 8Y dinar securities were organised for the first time in Q4 2023 in October and December, with the maturity date of 26 October 2031, while another auction was held in January this year. The yield rate fell by 9 bp in December relative to the October auction and by a further 15 bp to 6.15% in January, considerably below the coupon rate of 7.00%. The October and December auctions resulted in the sale of securities nominally worth RSD 42.4 bn, while January saw a record high performance of a dinar securities auction, of RSD 63.1 bn, with non-resident purchases accounting for a significant share of RSD 24.6 bn in nominal terms. After the record-breaking investors' demand in 8Y securities auctions, the existing issue of this maturity was increased by additional RSD 40 bn, to RSD 150 bn. As earlier sold securities worth RSD 58.1 bn matured in January 2024, the stock of dinar securities went up by RSD 47.5 bn relative to Q3 2023, to RSD 844.8 bn at end-January.

In the period October–January, non-residents participated in the primary market by purchasing dinar securities with 8Y original maturity, in the total nominal value of RSD 31.2 bn. However, due to the net sale of dinar securities in the secondary market by non-residents, the stock of dinar government securities in non-residents' ownership went up by RSD 22.1 bn relative to end-Q3, to RSD 156.8 bn at end-January, making up close to 19% of the total portfolio of dinar government securities.

In Q4, the turnover in the **secondary market of dinar government securities** increased from the quarter before, by almost 17%, to RSD 59.4 bn. The weighted average yields on dinar government securities fell from the previous *Report*, reflecting a decline in the country risk premium. In January, the weighted average bond yields for the remaining maturities 2Y–9Y dropped by 26–46 bp relative to October 2023, moving in the range from 4.93 for 2Y to 6.13% for 8Y bonds.

There were no euro government securities auctions in Q4, while January saw an auction of 3Y **euro government securities**, which were sold in the nominal value of EUR 99.8 mn, with the yield rate of 4.00%. As the previously issued EUR 351.4 mn-worth of securities fell due, the stock of sold euro securities decreased to EUR 1,668.0 mn at end-January.

The stabilisation of interest rates in the domestic interbank money market in Q4 led to a decline in the interest rate on **new dinar** corporate loans by 0.3 pp to 8.3%, while promotional cash loan offers of some banks pushed down the rate on **new dinar household loans** by 0.9 pp, to 12.5% in December.

The decline in the weighted average interest rate on dinar corporate loans was fully driven by the falling interest rate on working capital loans, by 0.6 pp to 8.3% (holding an around 60% share in dinar corporate lending), while interest rates on investment and other non-categorised loans went up. The fall in the interest rate on dinar household loans was mainly led by a sharp fall in the interest rate on cash loans, and in part also by the lower interest rate on other non-categorised loans.

After the September hike, the ECB kept the main interest rates on hold, but the effects of past monetary policy tightening spurred the rise in the **interest rate on euro corporate loans** in the domestic market by 0.2 pp to 7.1% in December. This growth was driven by the rising interest rate on investment loans and other non-categorised loans, so the interest rate on both loan categories equalled 7.3% at year end. **The interest rate on euro household loans** decreased by 0.9 pp, to 6.3% in December, due to the decrease of interest rates on housing loans to 5%, as a result of the application of the NBS's decision to cap the interest rates on housing loans approved to natural persons. According to this decision, until 31 December 2024, the fixed part of the nominal interest rate on variable-rate loans must not exceed 1.1%, while in the case of fixed-rate loans, the nominal rate is capped to 5.03%.

Risk premium

Having increased moderately in October, global risk premium moved on a downward path until end-December reflecting inflation slowdown in the USA and Europe and statements by the officials of leading central banks that the monetary conditions tightening cycle is most probably over.

Serbia's dollar risk premium dropped in Q4 by 38 bp, while increasing in January by 2 bp, to 190 bp at the end of the month. It continued moving below EMBI Composite, which declined in Q4 by 43 bp, to 319 bp at end-December, while going up by 17 bp in January. Serbia's EURO EMBIG went down by 60 bp in Q4 and by 3 bp in January to 244 bp at the end of the month. EURO EMBIG Composite declined by 3 bp in Q4 and by 10 bp in January to 190 bp at the end of the month. At the

Table IV.1.1 Interest rates on new loans – by type and currency
(in %)

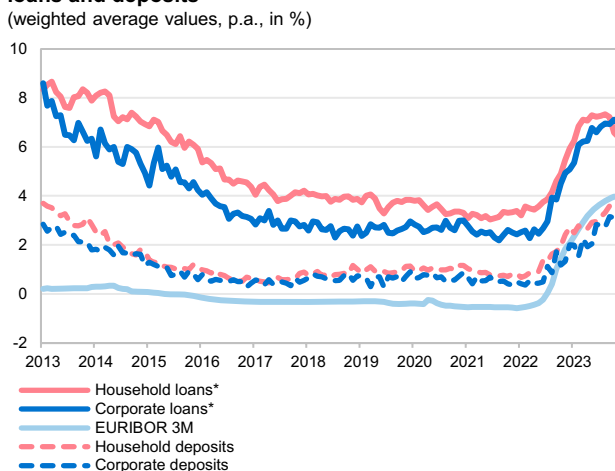
	Dinar			Euro and euro-indexed		
	2022		2023	2022		2023
	Q4	Q3	Q4	Q4	Q3	Q4
Total household loans*	12.3	13.4	12.5	5.9	7.2	6.3
Cash loans	13.0	14.2	13.2	3.5	3.5	3.3
Housing loans	11.5	11.9	12.9	5.1	6.4	5.0
Consumer loans	2.7	3.6	3.0	5.5	6.5	6.5
Other loans	10.8	10.9	10.5	8.2	9.8	9.8
Total corporate loans*	7.3	8.6	8.3	5.1	6.9	7.1
Working capital loans	7.6	8.9	8.3	5.2	7.0	7.0
Investment loans	7.6	9.0	9.4	5.2	7.1	7.3
Other loans	7.0	8.1	8.3	4.2	6.5	7.3
Import loans	-	-	-	5.5	6.0	6.5

Source: NBS.

Note: Data relate to average values on the last day of the month in the quarter observed.

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

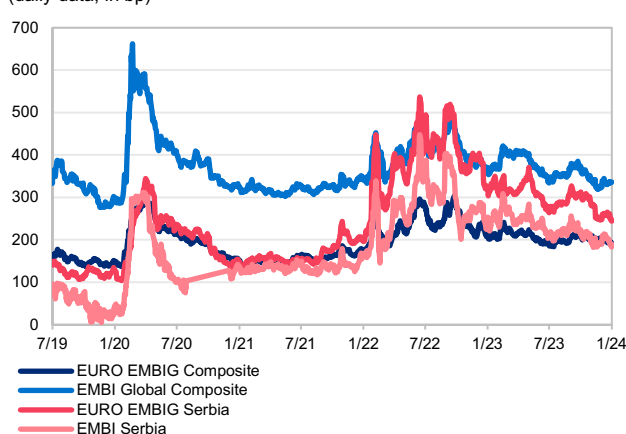
Chart IV.1.6 Interest rates on new euro and euro-indexed loans and deposits
(weighted average values, p.a., in %)



Sources: European Banking Federation and NBS.

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

Chart IV.1.7 Risk premium indicators
(daily data, in bp)



Source: J.P. Morgan.

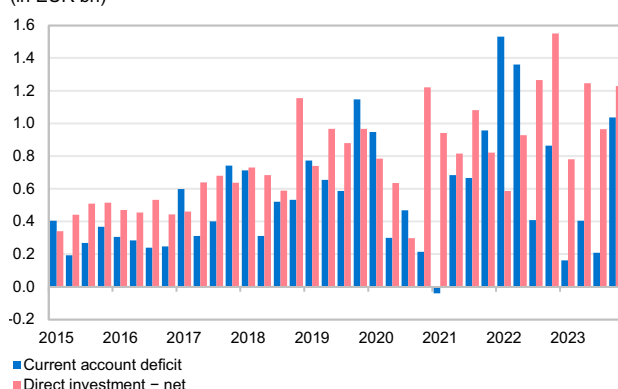
Table IV.1.2 **Credit rating**
(change of rating and outlook)

	2018	2019	2020	2021	2022
S&P	BB /positive ⁵⁾	BB+ /positive ⁵⁾	BB+ /stable ²⁾	BB+ /positive ⁵⁾	BB+ /stable ³⁾
Fitch		BB+ /stable ⁴⁾			
Moody's		Ba3 /positive ⁴⁾		Ba2 /stable ¹⁾	

Source: NBS.

¹⁾ March, ²⁾ May, ³⁾ June, ⁴⁾ September, ⁵⁾ December.

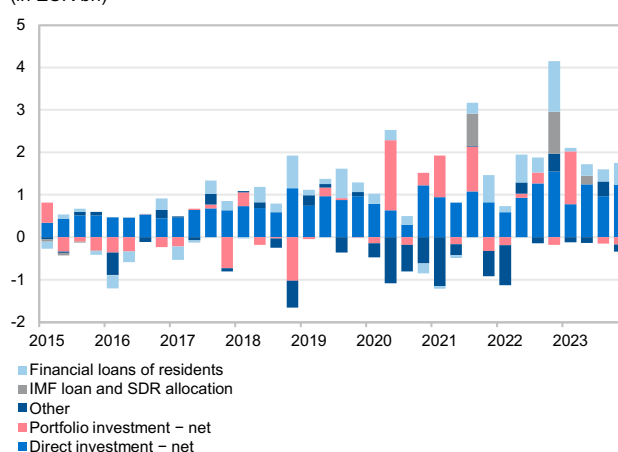
Chart IV.1.8 **Current account deficit and net FDI inflow**
(in EUR bn)



Source: NBS.

Note: Preliminary data for Q4 2023.

Chart IV.1.9 **Structure of the financial account**
(in EUR bn)



Source: NBS.

Note: Preliminary data for Q4 2023.

level of the year marked by many shocks from the international environment and globally tightened financing conditions, Serbia's risk premium on dollar debt dropped by 82 bp and that on euro debt by 142 bp.

Foreign capital inflow

FDIs accounted for the bulk of capital inflow to the financial account in Q4 2023 as well. This, along with inflows from financial and trade loans entirely covered the outflows incurred by portfolio investments and a rise in domestic banks' account holdings abroad. As in the previous part of the year, net inflow from FDIs exceeded the current account deficit by multiple times, sustaining appreciation pressures in the local FX market.

FDI inflow to Serbia amounted to EUR 1.3 bn in Q4 2023, while measuring EUR 4.5 bn or 6.1% of GDP at the level of the year, even more than the past record high annual inflow from 2022 (EUR 4.4 bn). Almost four fifths of FDIs took the form of equity and reinvested earnings, confirming foreign investors' commitment to Serbia. By sector, the bulk of investments were channelled to manufacturing, construction, mining, and trade. Net FDI inflow at the level of the year came at EUR 4.2 bn and fully covered the current account deficit for the ninth year in a row.

Capital outflow under **portfolio investments** amounted to EUR 172.6 mn in Q4 as residents increased their investments in securities in foreign markets, while non-residents decreased their investments in domestic securities. At the level of the year, portfolio investments generated a net inflow of EUR 917.8 mn owing to the successful January eurobond issues worth USD 1.75 bn.

Spurred by the rise in government and corporate borrowing in Q4, **financial loans** generated a net inflow of around EUR 520.5 mn. **Trade loans and advances** also generated an inflow (EUR 246 mn), while **currency and deposits** incurred an outflow (EUR 413.5 mn), given that the increase in domestic banks' balances abroad outstripped the rise in non-residents' balances with banks in Serbia.

In December, the **IMF** successfully concluded the second review of Serbia's economic programme, enabling it to withdraw around EUR 400 mn under the SBA. In view of the accumulation of a considerable amount of reserves, the creation of fiscal room and sustainable financing of the balance of payments, these funds have not been drawn down and the arrangement will be treated as precautionary in the remaining period, which is a review earlier than expected at the time of SBA approval.

Trends in the FX market and exchange rate

The dinar remained relatively stable against the euro in Q4 2023 and its value broadly unchanged, while nominally higher by 0.1% at the level of the year. At the same time, affected by the euro's appreciation against the dollar in the international market, the dinar gained nominally 4.6% against the dollar in Q4 and 4.0% in 2023 overall.

In Q4 as well, the supply of foreign currency outstripped the demand, which resulted in continued appreciation pressures that were moderated by the NBS's interventions in the IFEM. The largest contribution to the rise in foreign currency supply came from residents who were net sellers of foreign currency in Q4 owing to a continued rise in exports and FDI inflows despite the purchase of foreign currency for energy imports. The net purchase of foreign cash and lengthening of banks' position on account of payment card operations worked in the same direction. These inflows more than sufficed to cover the foreign currency demand generated by non-residents and supported by the reduction in FX-indexed bank assets in the same period.²

To maintain the relative stability of the dinar exchange rate against the euro, the NBS intervened in the IFEM in Q4 primarily on the purchase side, buying EUR 555 mn net. Thus, the amount of net FX purchases based on NBS interventions in the IFEM reached EUR 3,940 mn in 2023 which is a record high annual amount of net FX purchases.

Depreciation pressures were recorded at the very beginning of 2024, but they shifted to appreciation in the second half of January, so in January 2024 the NBS sold foreign currency in the net amount of EUR 45 mn.

The currencies of inflation-targeting regional peers recorded divergent trends relative to the euro in Q4. Thus, despite lower policy rates, the Polish zloty and the Hungarian forint strengthened by 6.6% and 2.2%, respectively. At the same time, the value of the Romanian leu stayed unchanged, while the Czech koruna and Turkish lira weakened by 1.6% and 11.9%, respectively. The currencies which gained ground at the level of the year were the Polish zloty (7.9%) and the Hungarian forint (4.6%), while the Romanian leu weakened by 0.5%, the Czech koruna by 2.5%, and the Turkish lira by 39.2%.

² Aiming to balance their short open FX positions and reduce exposure to FX risk, banks buy foreign currency, which works towards the weakening of the dinar.

Chart IV.1.10 Dinar exchange rate and NBS transactions in the FX market

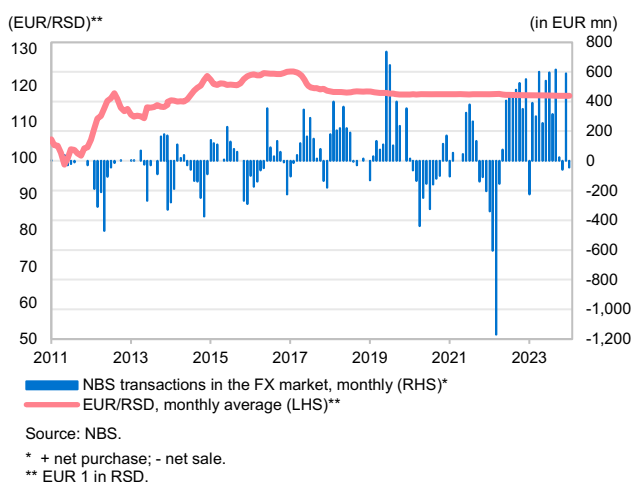


Chart IV.1.11 Movements in USD/RSD and USD/EUR exchange rates

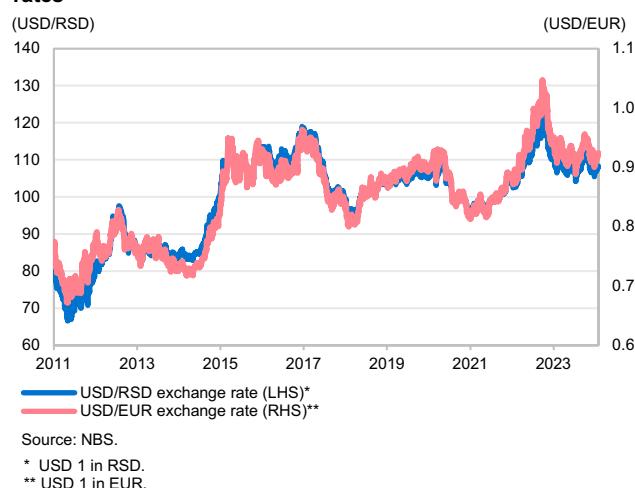


Chart IV.1.12 Exchange rates of selected national currencies against the euro* (daily data, 31 December 2010 = 100)

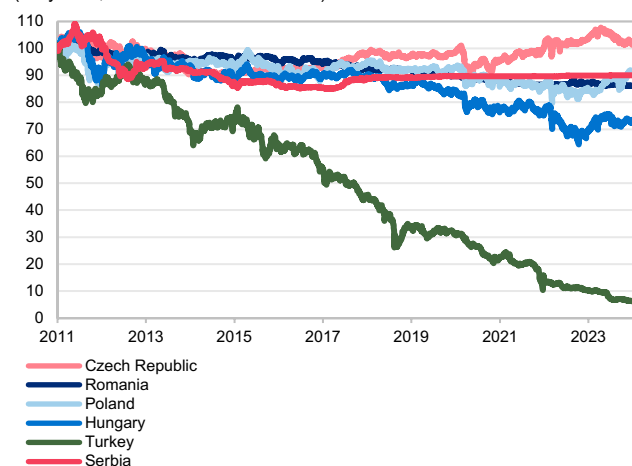


Chart IV.2.1 Domestic loans to the non-monetary sector and M3 (nominal y-o-y rates, in %)

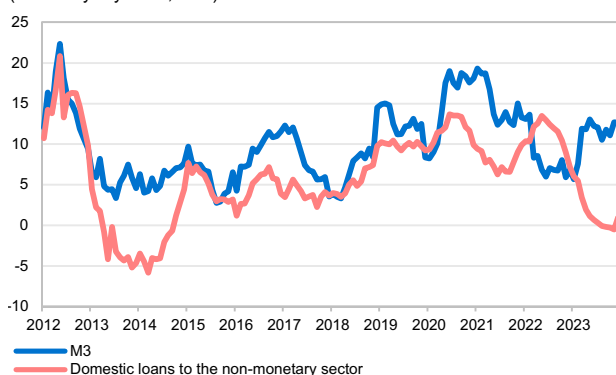


Chart IV.2.2 Contributions to quarterly growth in M2, by sector (in pp)

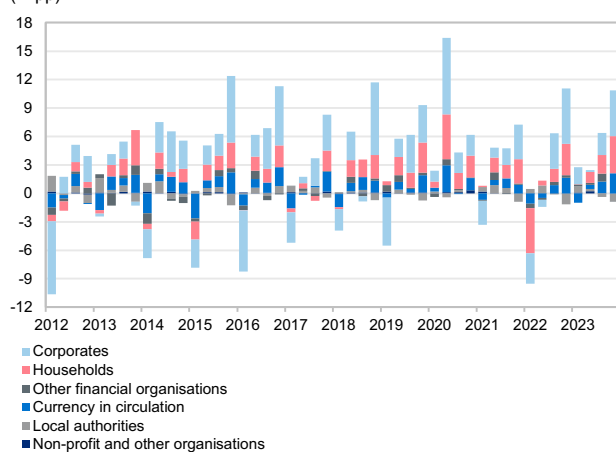
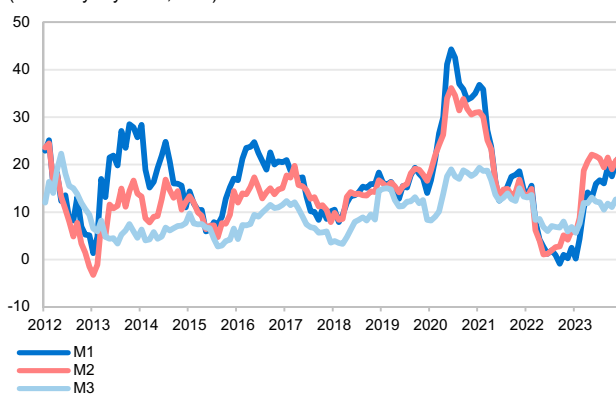


Chart IV.2.3 Monetary aggregate movements (nominal y-o-y rates, in %)



2 Money and loans

The rising dinar component was the key driver of the overall money supply growth in Q4, with household dinar savings reaching new record levels. Lending to non-monetary sectors picked up slightly toward year end, edging up 1.1% annually, with corporate and household loans recording similar growth rates.

Money

The broadest monetary aggregate M3, which in addition to dinars includes FX deposits of non-monetary sectors, rose by 5.5% in Q4, mainly owing to the expansion of the most liquid component – dinar demand deposits (contribution of 3.3 pp).

In terms of individual categories, dinar **demand deposits** added RSD 143.4 bn in Q4, driven by the rising transaction deposits of corporates (RSD 83.0 bn) and households (RSD 60.0 bn). **Dinar time deposits** also went up in Q4, by RSD 18.9 bn, on the back of a continued dynamic growth in **household dinar savings**, by RSD 20.9 bn. Thanks to the preserved financial stability in the face of heightened global uncertainty, household dinar savings continued to post record levels, measuring RSD 136.5 bn at end-December.³ Relative stability of the dinar exchange rate against the euro, higher interest rates on dinar compared to euro savings, as well as the more favourable tax treatment, made dinar savings more profitable than FX savings, contributing to their more dynamic growth.

FX deposits of non-monetary sectors went up by EUR 277.9 mn in Q4, led by the rising FX deposits of households, which reached EUR 13.4 bn, while corporate FX deposits were reduced, through servicing of liabilities to foreign creditors.

Y-o-y, the rise in M3 picked up in Q4, to 12.7% in December. However, the excess money ratio, measuring the deviation of the actual money supply M3 from the estimated one,⁴ was negative, indicating that M3 was below the inflationary level.

³ If the assets of non-residents are included, end-December dinar savings equalled RSD 137.9 bn and FX savings EUR 14.4 bn.

⁴ The money demand equation was estimated using the regression model, with the real GDP and 3M BELIBOR featuring as explanatory variables.

Loans

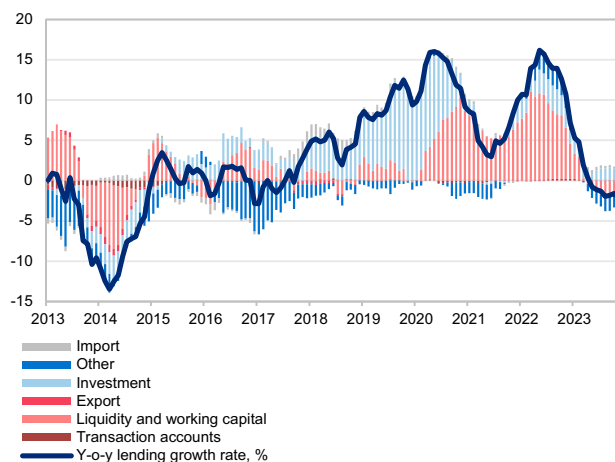
Excluding the exchange rate effect,⁵ total domestic loans gained 1.1% in 2023, with **corporate loans** increasing by 0.9% and **household loans** by 1.2%. Lending lost pace in 2023 (with total loans slightly falling y-o-y between September and November), reflecting higher lending rates due to the monetary tightening by the ECB and NBS and the tightening of banks' credit standards. In the corporate loan segment, a significant impact on the loan stock came also from the maturing of guarantee scheme loans, and in the household loan segment – a temporary negative influence stemmed from September also from the accounting treatment of receivables under housing loans after the adoption of the decision on capping interest rates on these loans.

Thanks to improved disbursement in December, **corporate loans** added RSD 8.4 bn in Q4. This growth was led by investment, as well as liquidity and working capital loans. On the other hand, the stock of other non-categorised loans, and to a lesser extent, import loans, decreased, while current account debt remained unchanged. On the back of such trends, the share of investment in total corporate loans increased to 41.9% in Q4, and the share of liquidity and working capital loans to 46.8% in December. Sector-wise, companies in real estate, construction and transport incurred the greatest debt in Q4, while those in trade and energy reduced their liabilities. As micro and medium-sized enterprises increased their debt, while large enterprises reduced their liabilities, the share of micro, small and medium-sized enterprises' loans in total corporate loans went up to 59.1% in December. The rise in dinar and the decrease in FX-indexed corporate receivables led to a higher degree of corporate loans dinarisation in Q4, by 1.1 pp to 17.3%.

The volume of new corporate loans in Q4 amounted to RSD 345.0 bn, up by 9.0% compared to the same period of 2022. Liquidity and working capital loans remained dominant (63.8%), rising by 32.1% y-o-y. More than a half of these loans was approved to large enterprises. Investment loans accounted for 22.9% of new loans and 63.7% of them were absorbed by micro, small and medium-sized enterprises.

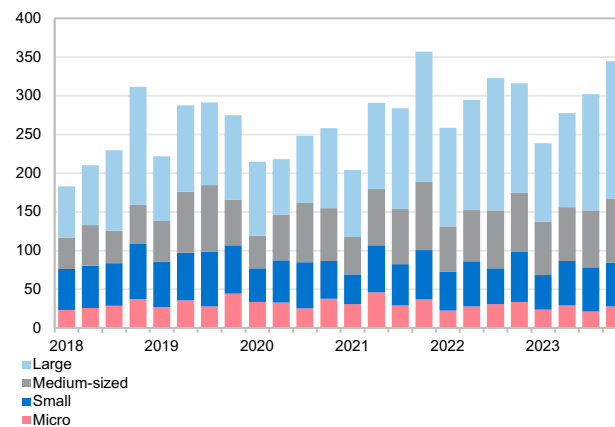
Household loans, excluding the exchange rate effect, contracted by RSD 3.4 bn in Q4, amid a decrease in the

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



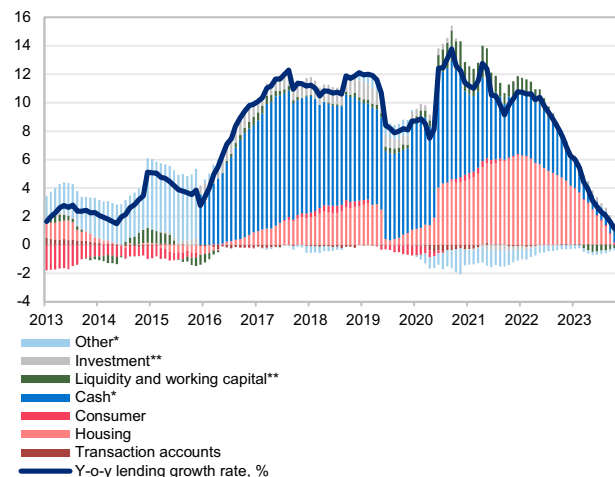
Source: NBS.

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



Source: NBS.

Chart IV.2.6 Contributions to y-o-y household lending growth (in pp, excluding the exchange rate effect)



Source: NBS.

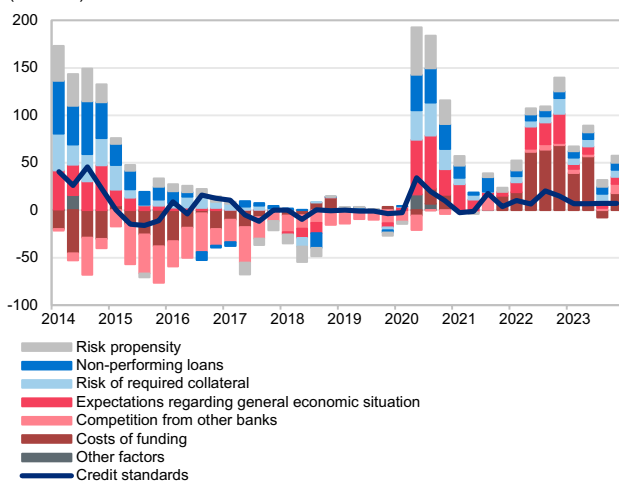
* Until December 2015, the contribution of cash loans is shown within the contribution of other loans.

** Loans extended to entrepreneurs.

⁵ Calculated at the new programme exchange rate, as at 31 October 2022.

Chart IV.2.7 Change in corporate credit standards and contributing factors

(in net %)

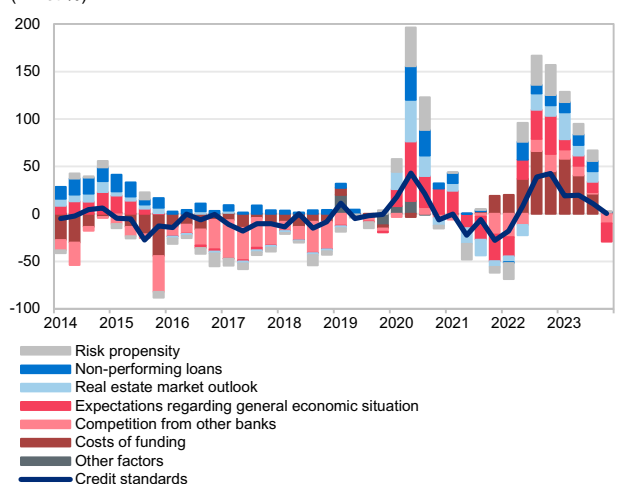


Source: NBS.

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

Chart IV.2.8 Change in household credit standards and contributing factors

(in net %)



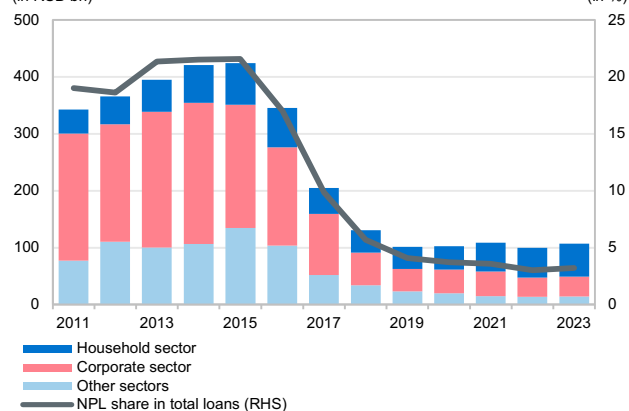
Source: NBS.

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

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

(in RSD bn)

(in %)



Source: NBS.

stock of housing loans⁶ and lower borrowing under transaction accounts. On the other hand, borrowing under cash and consumer loans increased, pushing the degree of dinarisation of household loans up by 0.5 pp, to 54.0%. At year end, the share of housing in total household loans equalled 39.3% and the share of cash loans 44.7%.

The volume of new household loans amounted to RSD 144.9 bn in Q4, up by 9.7% y-o-y. Cash loans accounted for almost two-thirds and housing for 15.5% of new household loans (a decrease from 2022, when they accounted for over one-fifth of new household loans on average), reflecting elevated real estate prices and costs of borrowing.

The results of the NBS's January bank lending survey⁷ show that banks, consistent with the expectations, tightened corporate credit standards in Q4, while keeping those for households unchanged. Stricter corporate credit standards reflected mainly higher costs of financing, competition and elevated risk perception due to the uncertainty regarding the overall economic situation, the riskiness of the required collateral and non-performing receivables, which translated into a lower propensity to risk. Banks expect that corporate credit standards will be tightened further in Q1 2024, while those for households will be loosened. In banks' view, dinar corporate and household loan demand expanded, while FX loan demand contracted. Corporate loan demand was driven by the need to finance working capital and investment. Demand expansion in the household segment reflected the needs to refinance existing loans and purchase durable consumer goods, with a positive influence stemming from rising wages, while the situation in the real estate market, i.e. high apartment prices, worked in the opposite direction. Banks expect loan demand to expand in Q1 2024 in both sectors.

Gross NPL ratio continued to move close to its historical low in Q4, measuring 3.2% in December, suggesting that the tightening of financial conditions had no major impact on bank asset quality. In December, gross NPL ratio of the corporate sector⁸ equalled 2.1%, and of the household sector⁹ 4.4%, unchanged from September.

⁶ This reflects the accounting treatment of receivables under housing loans due to the application of the decision on capping interest rates on these loans, since a part of receivables has been temporarily written off. This amount will be gradually returned to the stock of housing loans during the 15 months of the application of this decision.

⁷ The NBS has conducted the survey since the beginning of 2014.

⁸ Includes companies and public enterprises. Looking at companies only, the share of NPLs in total loans is also unchanged, and stood at 2.4% in December.

⁹ With entrepreneurs and private households included, the share of NPLs is also unchanged, and stood at 4.3% in December.

NPL coverage remained high – allowances for impairment of total loans in December measured 101.0% of NPLs, and allowances for impairment of NPLs – 60.5% of NPLs.

Capital adequacy ratio equalled 22.2% at end-Q3 2023, down by 0.1 pp from end-Q2, indicating high capitalisation (regulatory minimum – 8.0%) and resilience of the banking sector to external and local risks.

3 Aggregate demand

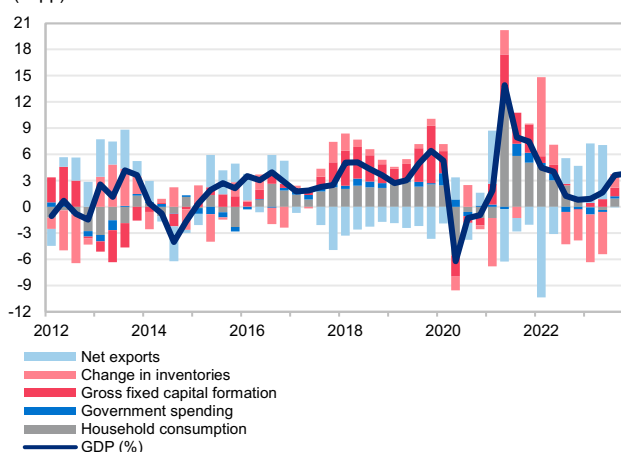
According to the SORS flash estimate, economic growth measured 3.8% y-o-y in Q4, and was, in our view, mostly based on rising investments. Looking at fixed investments, a greater contribution came from private investments than from those of the government. Total consumption, driven primarily by household consumption, also provided a positive contribution. On the other hand, amid lower external demand and recovery of the equipment imports, net exports provided a negative contribution to GDP growth in Q4.

Domestic demand

We estimate that **private consumption** has recovered gradually since H1 2023 and rose by 2.5% y-o-y in Q4. Household consumption growth is indicated by the retail trade turnover which grew by 2.6% y-o-y in Q4, as well as by the 0.6% y-o-y rise in catering turnover in October. On the other hand, the number of domestic tourist arrivals and overnight stays declined in Q4 by 5.4% and 14% y-o-y, respectively. At the same time, the imports of consumer goods in euros dropped by 0.3% y-o-y in Q4.

Looking at the sources of private consumption, we may conclude that the rise in household consumption in Q4 was driven by its major source – the wage bill, which kept recording double-digit nominal y-o-y growth (16.6% in the October–November period), while its real growth was more moderate, measuring 7.5% y-o-y. In addition, household consumption in Q4 was supported by loans intended for consumption which, after a deceleration for the most part of 2023 accelerated their growth mildly in Q4, to 2.0% y-o-y. On the other hand, after practically stagnating in Q2, remittances dropped in H2 2023 in y-o-y terms, their drop measuring 15.8% in Q4. This decline is largely a result of the high last year's base and partly of economic slowdown and growing costs of living in Western Europe where the bulk of remittances come from.

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



Sources: SORS and NBS calculation.
Note: NBS estimate for Q4 2023.

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

	2023			
	Q1	Q2	Q3	Q4
Household consumption	-0.1	-0.5	1.3	2.5 *
Indicators				
Retail trade	-3.4	-5.7	-1.4	2.6
Catering turnover	16.8	7.4	6.2	0.6 ***
Number of domestic tourists	3.7	1.0	-4.7	-5.4
Number of overnight stays of domestic tourists	3.9	0.8	-10.4	-14.0
Consumer goods import (BEC classification), nominal	12.8	5.8	4.2	-0.3
Sources				
Total wage bill, nominal	18.1	17.8	16.4	16.6 **
Net remittances inflow, nominal	29.5	0.1	-6.0	-15.8
Stock of loans intended for consumption, nominal	3.1	1.0	0.9	2.0

Sources: SORS and NBS calculation.

* NBS estimate.

** October–November.

*** October.

Table IV.3.2 **Investment indicators**

	2023			
	Q1	Q2	Q3	Q4
Real y-o-y growth rates (in %)				
Fixed investment (national accounts)	1.9	3.9	4.1	7.0 *
Construction (national accounts)	-1.6	14.8	12.8	8.3 *
Government investment	11.3	7.2	10.0	12.0 *
Number of issued construction permits	-7.8	2.9	11.2	23.4 **
Production of construction material	-5.8	-10.8	3.5	-2.4
Value of works performed	-0.5	17.9	15.8	11.1
Equipment imports, nominal	5.1	-20.5	-15.5	7.7
Production of domestic machinery and equipment	27.6	11.1	-2.4	-10.6

Sources: SORS and NBS calculation.

* NBS estimate.

** October–November.

We estimate that **government consumption** was on the rise since mid-2023 and increased by 1.5% in Q4, driven by the higher expenses for public sector wages and procurement of goods and services. As a result, **total consumption** went up by 2.3% y-o-y in Q4.

The positive dynamics of **private investments** continued in Q4 despite the still pronounced geopolitical tensions. We estimate that their growth accelerated to 5.3% y-o-y in Q4, with the bulk of private investments financed from own sources as corporate profitability increased significantly in the year before. Also, Q4 saw an FDI inflow of close to EUR 1.3 bn. A part of this growth was supported by investment loans, which went up by 3.6% y-o-y in Q4. Private investment growth is indicated by the increase in the number of issued construction permits by 23.4% y-o-y in October and November and a rise in equipment imports by 7.7% y-o-y in Q4.

Continued implementation of infrastructure projects financed by the government contributed to the 12.0% y-o-y growth in **government investments** in Q4, as we estimate. Accordingly, **total fixed investment** increase is estimated at 7.0% y-o-y with a 1.9 pp contribution to GDP growth in Q4.

At the same time, we estimate that increased **inventories provided** a 0.4 pp contribution to GDP growth in Q4.

In quarterly terms, we estimate that GDP growth in Q4 exhibited similar dynamics as in Q3 and measured 0.9% s-a. This growth was driven by all components of domestic demand, primarily the recovery of personal consumption on account of higher wages and pensions and waning of inflationary pressures. On the other hand, a negative contribution stemmed from net exports due to somewhat higher real growth in the imports than in the exports of goods and services.

Text box 2: Trends in the income and consumption of Serbian households based on the results of household budget surveys

Based on the results of household budget surveys¹ in the past ten years, we have analysed the dynamics and composition of income and personal consumption of households.

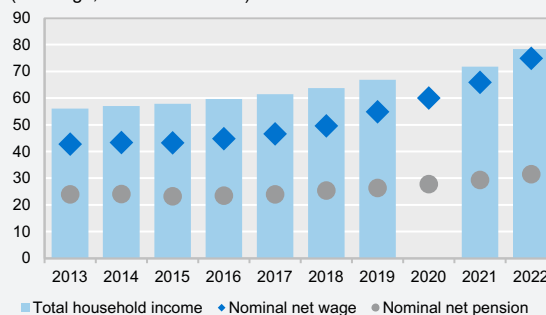
The results of the surveys for the 2013–2022 period show that total household income, i.e. disposable funds, increased from RSD 56,073 (EUR 496) in 2013 to RSD 78,393 (EUR 667) in 2022 (Chart O.2.1). Of this, around 96% refers to income in cash and the rest to income in kind. Income in cash increased in 2022 relative to 2013, by 42.1%, mostly due to the steady rise in nominal wages which were 75.2% higher in 2022 than in 2013, and to the growth in pensions which, after the fiscal consolidation, increased cumulatively by 24.2% in the 2019–2022 period. As income dynamics were mostly in line with inflation movements in the observed period, households' real purchasing power was not jeopardised.

The gradual increase in household income from 2013 onwards was propped up mostly by the preserved labour market and a more favourable business and investment environment, resulting in strong FDI inflows and higher formal employment. Also, during most of the observed period loan repayment costs subsided, as did the cost of new borrowing by households, supporting a rise in disposable income.

In all years, **income from regular employment** was dominant within sources of total income. Its share climbed from 44% in 2013 to close to 50% in 2022, reflecting improvement in labour market conditions, notably the rise in formal employment and wages. **Pensions are another important source of household income** (old-age, survivor's and other pensions), which in all observed years made up around a third of total household income.

As the income of Serbian households went up, so did their private consumption – from RSD 56,013 (EUR 495) in 2013 to 78,678 (EUR 670) in 2022. Within the composition of household consumption in the 2013–2022 period (Chart O.2.3), we see a gradual decline in the consumption of basic products and services, mostly food, beverages and housing, which are considered necessary and are therefore less price-elastic, and a corresponding increase in the outlays for products and services which are customarily consumed only after the basic needs are met and, hence, usually have greater price-elasticity, such as communication, recreation, culture, catering services, etc.

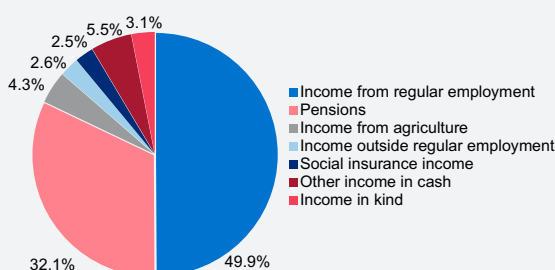
Chart O.2.1 Dynamics of household income and nominal wages and pensions in the 2014–2022 period* (average, in RSD thousand)



* Data on income for 2020 are not available because the survey was not conducted.

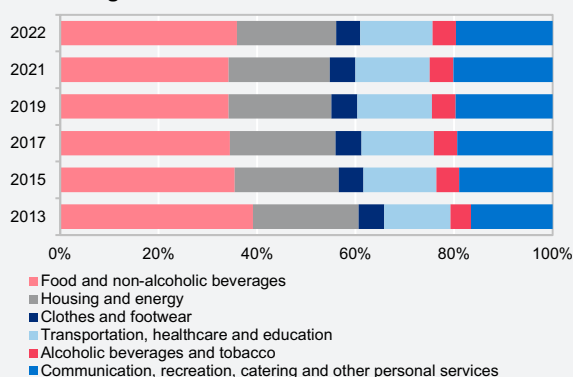
Sources: SORS (Household Budget Survey) and NBS.

Chart O.2.2 Structure of total household income in Serbia in 2022



Sources: SORS (Household Budget Survey) and NBS.

Chart O.2.3 Structure of household consumption by main categories



* Data for 2020 are not available.

Sources: SORS (Household Budget Survey) and NBS calculation.

¹ The Household Budget Survey collects annual data on household income and consumption. Since 2003, the Survey has been conducted in accordance with international standards and recommendations. The Survey for 2020 was not carried out because of the coronavirus pandemic.

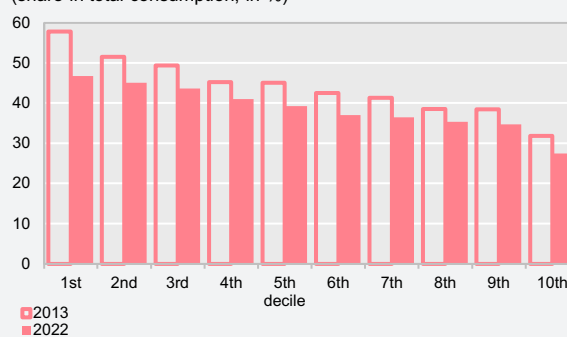
Though outlays for food and non-alcoholic beverages were dominant throughout the observed period, their share subsided steadily – from 39.1% in 2013 to 34.2% in 2021, only to rise again in 2022 (to 35.9%) due to elevated food inflation. Outlays for food would probably have been even higher if the RS Government had not temporarily capped the prices of basic foodstuffs (bread, sugar, flour, vegetable oil, meat and milk) in late 2021 and early 2022. Outlays for clothes and footwear were stable at around 5% of total consumption. In addition to food and beverages, households spent much of their disposable income to pay for utilities, water and energy supply, but this share also decreased – from 21.5% in 2013 to 20.2% in 2022. Though the price of electricity and gas for households was lifted in late 2022, the RS Government cut the excise tax on petroleum products throughout 2022 to contain growth in these prices and their spillover to prices of other products and services. The share of outlays for transport (private and public) was constant at around 9.0%, whereas the share of outlays for healthcare and education, which are mainly provided by the public sector, measured around 6.0%, so households spent a total of around 15.0% of disposable income for these services. Compared to food, housing and transport, households spent much less on communication, recreation, culture, catering and other personal services. Their share in the composition of spending increased gradually, though – from 16.5% in 2013 to 20.1% in 2021, and dipped slightly to 19.6% in 2022 as prices of catering services went up and cost-push pressures led to higher outlays for everyday products and services.

Trends in the composition of spending were similar across all household categories, regardless of the level of their consumption, as indicated by the breakdown of consumption by deciles (ten equal groups into which surveyed Serbian households were classified and then ranked from lowest to highest according to equivalent consumption). In all decile groups, the share of outlays for basic foodstuffs decreased the most, while the share of spending on products and services in the categories of communication, recreation, catering and other personal services increased (Charts O.2.4 and O.2.5). The first decile (10% of households with the lowest consumption) saw the largest relative improvement – in the 10-year period, the share of outlays for food decreased from close to 60% in 2013 to below 50% in 2022, while the share of outlays on products and services in the categories of communication, recreation, catering and other personal services rose from around 10% in 2013 to around 15% in 2022.

The increase in the share of urban and rural households owning and using consumer durables over the past years also points to an improvement in the households' living standards. This means that, over time, households were able to spend more from their budget to buy products within the higher price range, such as passenger vehicles, mobile phones, computers, air conditioners, household appliances, etc. Notably, in the past ten years there has been a gradual increase in the number of households using one or more passenger cars – their share rose from 45.9% in 2013 to 52.1% in 2022.

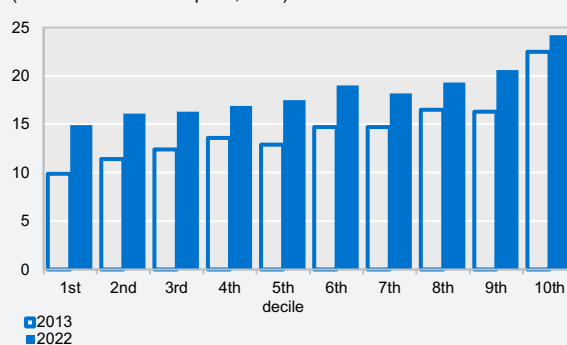
Also, average household consumption increased in the 2013–2022 period across Serbia's geographic regions. The highest growth in 2022 relative to 2013 was recorded in the less developed regions – South and Eastern Serbia

Chart O.2.4 Outlays for food and non-alcoholic beverages by individual household decile group
(share in total consumption, in %)



Sources: SORS (Household Budget Survey) and NBS calculation.

Chart O.2.5 Outlays for communication, recreation, catering and other personal services and items by individual household decile group
(share in total consumption, in %)



Sources: SORS (Household Budget Survey) and NBS calculation.

(77.2%) and Šumadija and Western Serbia (43.3%) (Chart O.2.6). Average household consumption in the less developed regions has therefore converged towards consumption in the Belgrade region as the most developed one, signalling a more equitable regional distribution of income and consumption. Thus, average household consumption in the South and Eastern Serbia region measured 61.0% of average household consumption in the Belgrade region in 2013, and 86.1% in 2022. Consumption by households in the Šumadija and Western Serbia region also came closer to the average consumption by households in the Belgrade region (Chart O.2.7).

The following conclusions can be drawn based on the above analysis:

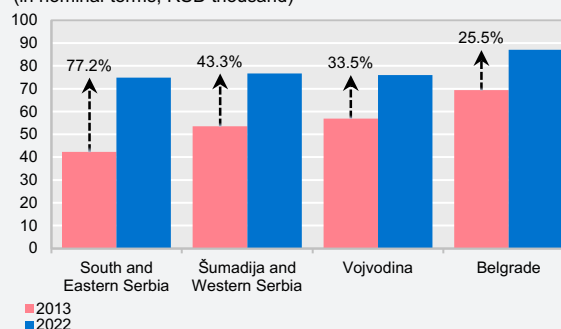
- The results of the household budget surveys reveal substantial growth in total household income in the 2013–2022 period, guided primarily by the continuous rise in net wages and the gradual increase in pensions. Due to higher private sector wages and formal employment, the share of income from regular employment in total income was more dominant in 2022 than in 2013. As income increased, so did personal consumption and possession of consumer durables by households.

- Though still dominant, outlays for basic products and services, most notably food, beverages and housing, declined gradually, and outlays for communication, recreation, culture, catering services, etc., went up, signalling improvement in the households' financial position in the prior period. Such shift in the structure of spending is noted across all decile groups, even in those with the lowest consumption levels.

- Personal consumption increased the most in 2022 relative to 2013 in the less developed regions – South and Eastern Serbia, and Šumadija and Western Serbia, contributing to faster regional convergence measured by the ratio of average personal consumption in individual regions relative to the Belgrade region as the most developed one.

Chart O.2.6 Average household consumption by region in Serbia

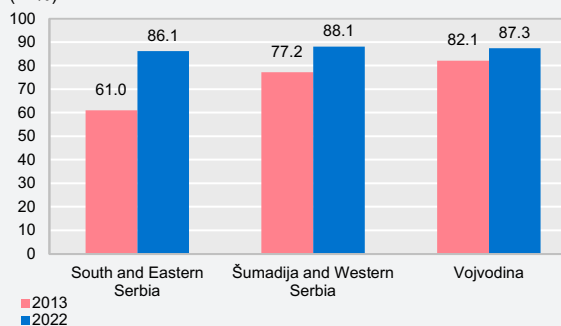
(in nominal terms, RSD thousand)



Sources: SORS (Household Budget Survey) and NBS calculation.

Chart O.2.7 Average household consumption by region in Serbia relative to average household consumption in the Belgrade region

(in %)



Sources: SORS (Household Budget Survey) and NBS calculation.

Chart IV.3.2 Exports and imports of goods and services
(in previous-year constant prices, ref. 2010)

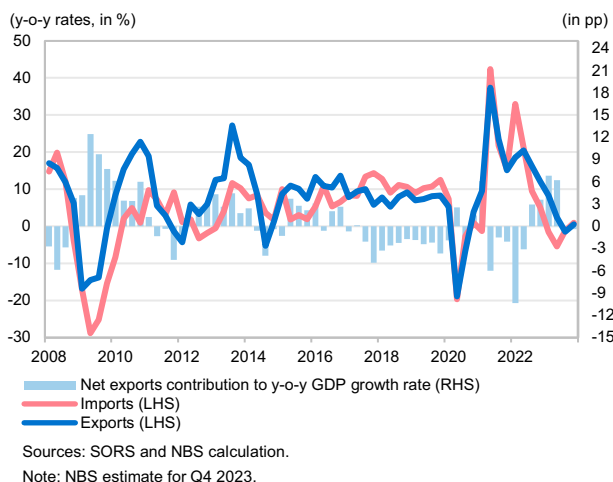


Chart IV.3.3 Movement in external demand indicators for Serbian exports
(3M moving average, s-a)

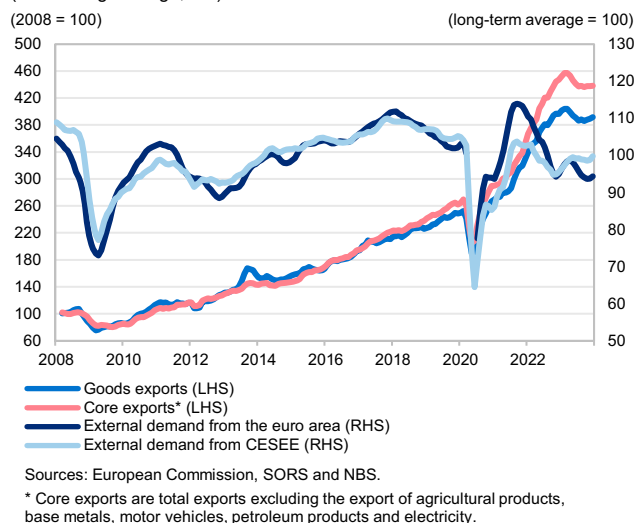
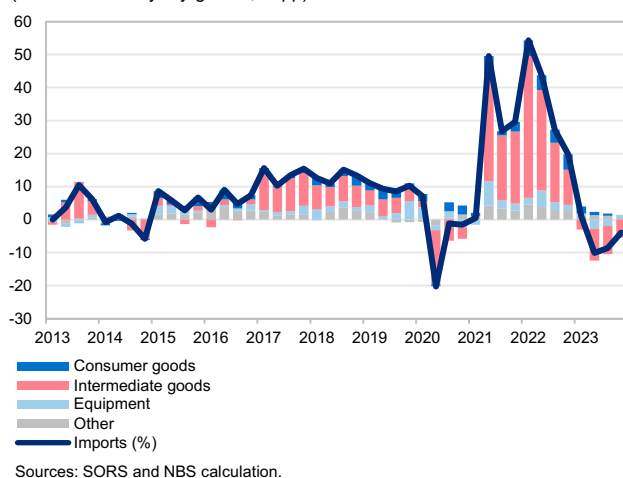


Chart IV.3.4 Movement of key import components
(contributions to y-o-y growth, in pp)



Net external demand

Following a strong positive contribution in H1, in y-o-y terms, **net exports** provided a negative contribution to GDP growth in the remainder of the year (-0.4 pp in Q4). Considering the pace of economic activity in the euro area and reduced external demand, the negative contribution of net exports was expected and in line with our projections from the previous reports. We estimate that in Q4 Serbia's real exports went up by 0.5% and imports by 0.9% y-o-y, the latter after declining for three quarters.

Commodity exports in euro terms decreased by 2.3% y-o-y in Q4, mostly as a consequence of lower mining exports (-2.3 pp), and a fall in electricity exports due to the high base effect (-1.3 pp). Owing to investments in the previous period, the growth in manufacturing exports continued, measuring 1.1% y-o-y in Q4 (1.0 pp contribution). For the first time since the beginning of the year, agriculture also provided a positive contribution (0.5 pp) thanks to a better agricultural season and exports of autumn crops.

Relative to the same period in 2022, the rise in manufacturing exports in Q4 was recorded in 10 out of 23 branches, with the greatest positive contribution stemming from base metals, motor vehicles and metal products. Lower exports of chemical and food industry, as well as rubber and plastic products exerted the greatest effect in the opposite direction.

Commodity imports in euros declined by 2.4% y-o-y in Q4 as a result of both lower import prices and lower imported quantities. Imports classification by BEC (Broad Economic Categories) reveals that the decline is mostly owed to intermediate goods (-9.5%), a category inclusive of energy. In y-o-y terms, the import of energy went down by EUR 245 mn, the import of equipment went up by 7.7%, while the import of consumer goods decreased by 0.3% in Q4, after slowing down gradually during the year.

Positive trends in foreign **trade in services** extended into Q4, as a surplus was recorded in the amount of EUR 865 mn. Services export growth received the largest impetus from business and ICT services. At the same time, import growth received the largest contribution from business and tourist services.

Continued export growth and lower energy imports reflected on higher coverage of commodity imports with

exports in Q4 measuring 81.0% in December¹⁰ and 92.1% including services, up by 6.7 pp and 7.7 pp, respectively, from end-2022.

4 Economic activity

Led by the pick-up in manufacturing and construction and the recovery in agricultural output, economic growth gathered pace from 3.6% in Q3 to 3.8% y-o-y in Q4. Other sectors also provided a positive contribution to economic activity in Q4, stepping up in y-o-y terms from Q3.

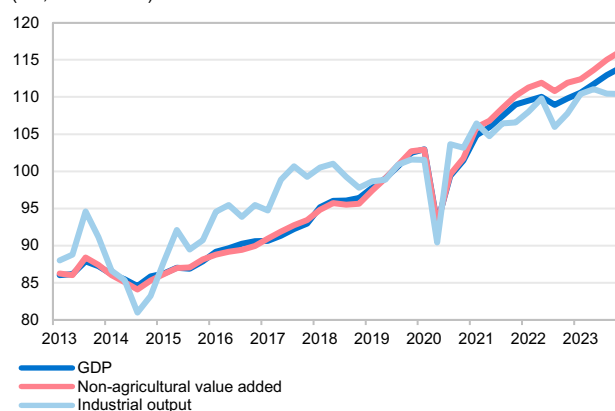
At the quarterly level, economic activity in Q4 is estimated to have maintained the dynamics from a quarter earlier, rising by 0.9% s-a.

Having increased collectively by 3.6% y-o-y, in our estimate, **services** added 1.8 pp to economic growth in Q4. This is indicated primarily by trade data, as the real retail trade turnover went up by 2.6% y-o-y in Q4. Catering also perked up, its real turnover rising by 0.6% y-o-y in October. At the same time, the total number of tourist arrivals increased by 2.5% y-o-y in Q4, led by the rising number of foreign tourists (10.6% y-o-y).

Industrial production is estimated to have grown by 2.8% y-o-y in Q4, powered primarily by manufacturing whose volume of production continued to expand despite headwinds from faltering external demand. Besides, after problems in late 2021 and early 2022 that weighed down on coal and hence electricity output, the electricity system stabilised in 2023, resulting in a 6.5% y-o-y increase in electricity production in Q4. At the same time, mining output slumped by 4.7% y-o-y, mainly because of the 10.5% y-o-y reduction in coal exploitation.

In contrast to H1, manufacturing recovered in H2, its y-o-y growth stepping up from 2.1% in Q3 to 2.8% in Q4. Growth in the volume of production was registered in 12 out of 24 branches. The largest positive contribution came from computers, other transport equipment, and food. The production of base metals increased as well (70% y-o-y in Q4), supported, inter alia, by the low base effect, having in mind the shutdown of one blast furnace in the Smederevo steel plant in July 2022, whose full effect unfolded as of August. A more notable increase was recorded also in the production of pharmaceutical products, motor vehicles and trailers, and beverages.

Chart IV.4.1 **Economic activity indicators**
(s-a, 2019 = 100)



Sources: SORS and NBS calculation.

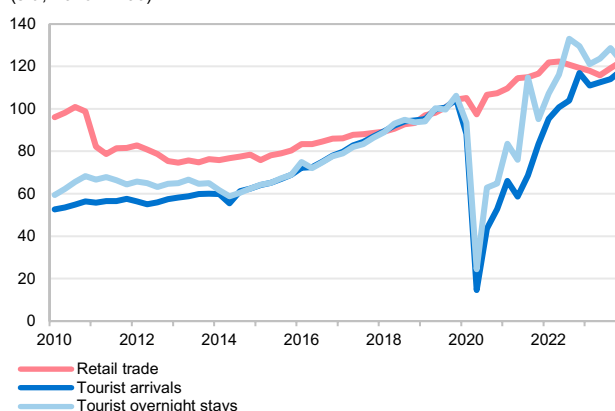
Table IV.4.1 **Contributions to y-o-y GDP growth**
(in pp)

	2022	2023				
	Q4	Q1	Q2	Q3	Q4*	
GDP (in %, y-o-y)	0.8	0.9	1.6	3.6	3.8	
Agriculture	-0.5	0.4	0.4	0.6	0.5	
Industry	0.5	0.5	0.1	0.7	0.7	
Construction	-0.9	-0.1	0.7	0.7	0.5	
Services	1.7	0.3	0.4	1.6	1.8	
Net taxes	0.0	-0.2	0.0	0.1	0.3	

Sources: SORS and NBS calculation.

* NBS estimate.

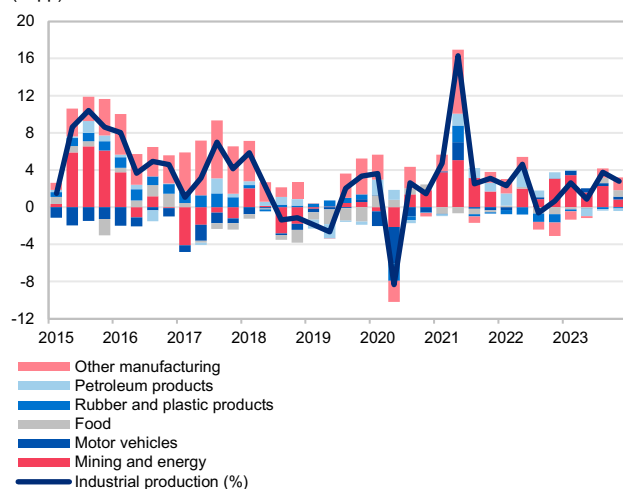
Chart IV.4.2 **Service sector indicators**
(s-a, 2019 = 100)



Sources: SORS and NBS calculation.

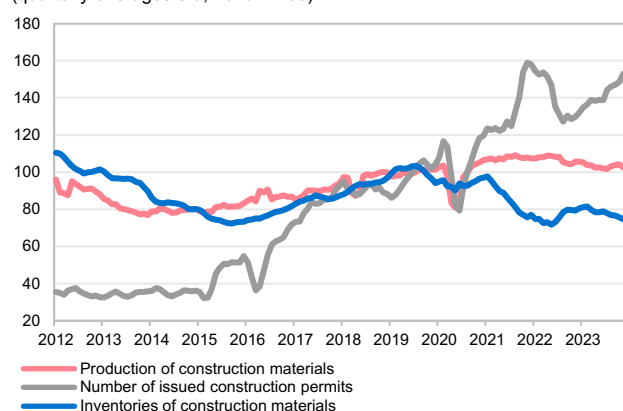
¹⁰ Measured by the 12-month moving average.

Chart IV.4.3 Contributions to y-o-y industry growth rate (in pp)



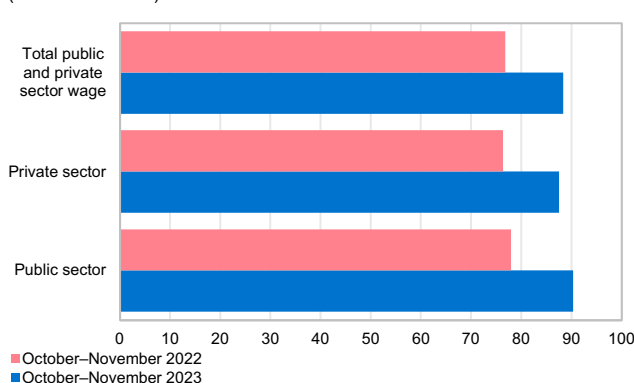
Sources: SORS and NBS calculation.

Chart IV.4.4 Construction activity indicators (quarterly averages s-a, 2019 = 100)



Sources: SORS and NBS calculation.

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



Source: SORS.

According to our estimate, **construction** rallied by around 8% y-o-y in Q4, reflecting the low last year's base, on the one hand, and better execution of infrastructure projects at home, on the other. This is indicated by the 23.4% y-o-y rise in the number of issued construction permits and the 12.5% y-o-y growth in the imports of capital goods. Also, the value of construction works performed rose by 11.1% y-o-y in Q4.

The SORS preliminary estimate of the growth in the production of key crops suggests that, after two consecutive weak seasons, this agricultural season was better. We therefore estimate **agricultural production** to have grown by around 9% y-o-y in Q4, as well as in 2023 overall.

Net taxes are estimated to have edged up in Q4 by 2.0% y-o-y, contributing 0.3 pp to GDP growth.

At the quarterly level, GDP in Q4 is estimated to have maintained the dynamics from a quarter earlier, rising by 0.9% s-a. As for individual components, growth appears to have been driven the most by manufacturing. Services also provided a positive contribution, given that they all recorded growth relative to the quarter before.

5 Labour market developments

Favourable labour market trends continued into Q4 2023, as indicated by higher formal employment and wages and reduced unemployment.

Wages

In the October–November period, the average nominal net wage amounted to RSD 88,347 (EUR 754), stepping up its y-o-y growth to 15.0% (from 14.1% in Q3). The rise recorded in the public sector was somewhat faster than in the private (15.9% vs. 14.6%). In real terms, the average net wage growth accelerated to 6.0% (from 2.2% in Q3). At the same time, medial net wage increased by 16.0% y-o-y, to RSD 68,106.

In all **economic sectors**, October and November saw a continuation of the y-o-y growth in average wages. Double-digit growth rates were recorded in most sectors, and the highest in education, transport and public administration (18.4%, 17.3% and 16.6%, respectively).

As a result of further wage and formal employment increases, total nominal **net wage bill**, as the main source of consumption, went up by 16.6% y-o-y in October and November.

According to preliminary data, **overall economic productivity** rose by 2.7% y-o-y in Q4 on account of a faster rise in economic activity than in employment.

Employment

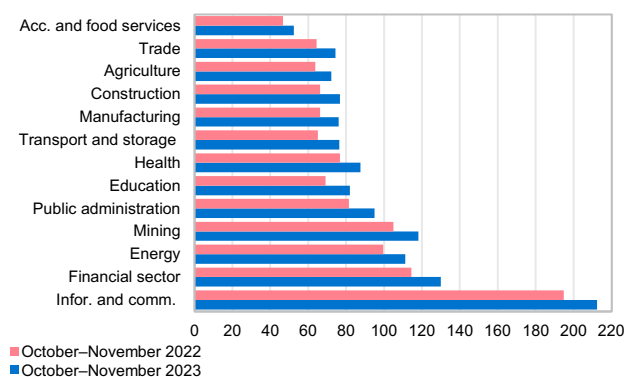
Total formal employment hit a new record high of around 2.37 mn in Q4. In December it was higher by around 15 thousand than a year ago, with the y-o-y growth mildly decelerating to 1.1% in Q4 (from 2.2% in Q3). The y-o-y growth in formal employment in December was driven by continued employment with legal entities and entrepreneurs, whereas the number of individual farmers declined.

As in the past, most new jobs in Q4 were created in the private sector, boosting **private sector formal employment** to the new record high level of around 1.76 mn. In December, around 14 thousand persons more were employed than a year earlier, with the highest number of new recruits recorded in the professional, scientific, innovation and technical services, ICT services and construction. In contrast, looking at dominantly private sector industries, registered employment recorded the sharpest y-o-y drop in December in administrative and auxiliary services, and trade. In December, **public sector employment** also increased in y-o-y terms, by around two thousand persons.

According to the National Employment Service's records, **registered unemployment** decreased to a new low (386,841) in November, with around 42 thousand unemployed people less than in the same period last year. At the same time, the y-o-y decline in unemployment was widely dispersed across occupational groups.

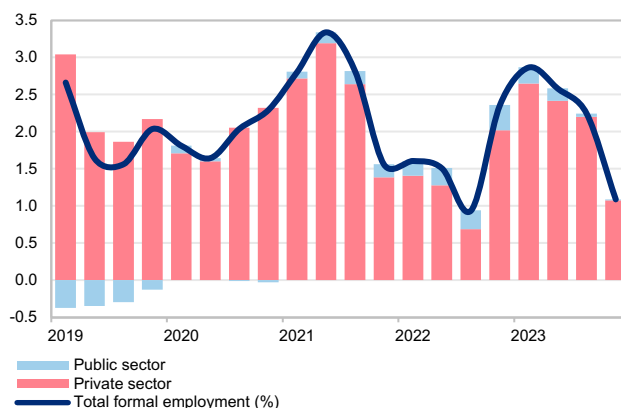
According to the **LFS**, inclusive of both formal and informal labour market segments, the working age (15–64) participation rate in Q3 2023 stood at 72.0%, while the activity rate of population older than 15 measured 55.8%, both rates marking a 0.7 pp increase relative to the same period last year. The employment rate went up by 0.5 pp y-o-y, to 50.7% in Q3 2023, while the unemployment rate stayed unchanged, at 9.0%.

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



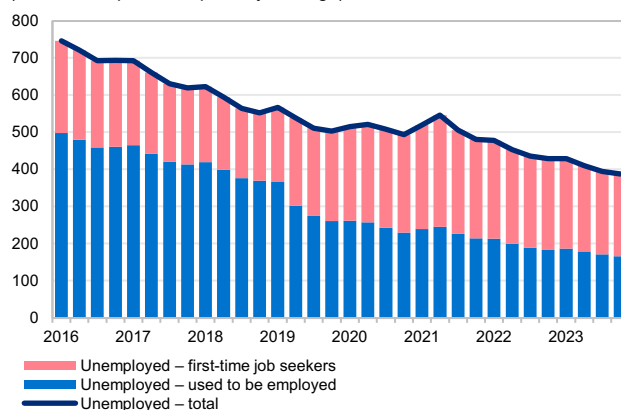
Source: SORS.

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



Sources: SORS and NBS calculation.

Chart IV.5.4 **Movement of registered unemployment**
(in thousand persons, quarterly average)



Source: National Employment Service.
Note: Data concluding with November 2023.

V Projection

We expect GDP growth to pick up to the range of 3–4% this year, with central projection at 3.5%. Our projection for the next two years has been revised up to the range of 4–5%, taking into account investments planned in the lead-up to hosting Expo 2027. Growth will be guided by domestic demand, with higher private consumption propped up by a continued rise in employment and wages, mostly in the private sector, and investment growth supported by the implementation of projects in transport, energy and utility infrastructure. As investments and personal consumption are expected to gather speed, we expect imports to rise faster than exports and the contribution of net exports to be negative.

Under our new projection, inflation will retreat within the target band by mid-year, approach the target midpoint in late 2024 and hover around this level until the end of the projection horizon. Inflation will slow down further reflecting the effects of past monetary tightening, softer global cost-push pressures, slowing imported inflation, still subdued external demand, and the expected continued slide in inflation expectations.

Uncertainty surrounding the inflation and GDP projections remains largely associated with international factors – geopolitical relations, outlook for global growth and, in particular, euro area growth, and their impact on world prices of energy and primary commodities. To a degree, risks also stem from the persistence of core inflation globally and the degree of monetary policy tightening by leading central banks. At home, the risks to the projection are associated with the pace of rebound in domestic demand, primarily on account of the level of FDI inflows, and investment in infrastructure and the energy sector. Another source of risk is the outcome of the agricultural season at home, primarily through its impact on fruit and vegetable prices.

External assumptions

Economic activity

In view of the effects of past global monetary and financial tightening and the still restrictive monetary policies aimed at curbing high inflation, as well as the lower volume of global trade and investment, **in January the World Bank forecast a continued slowdown in global economy for the third consecutive year, to 2.4% in 2024** (from 2.6% in 2023), which is projected to pick up to 2.7% in 2025. Near-term economic prospects are divergent by economic region – in advanced countries economic growth is expected to slow to 1.2% in 2024 (from 1.5% in 2023), while emerging and developing economies, which turned out to be more resilient and kept their credit rating, are forecast to grow 3.9% in 2024, compared to 4.0% in 2023. This does not include countries that are financially vulnerable due to excessive borrowing, wherefore their credit rating is lower.

In January, the IMF revised up its October global growth projection for 2024 by 0.2 pp to 3.1%, in light

Table V.0.1 Key projection assumptions

	2024		2025		2026
	Nov	Feb	Nov	Feb	Feb
External assumptions					
Euro area GDP growth	1.0%	0.8%	1.5%	1.5%	1.5%
Euro area inflation (average)	2.6%	2.6%	2.1%	2.1%	1.9%
3M EURIBOR (December)	3.1%	2.7%	2.8%	1.9%	1.9%
International prices of primary agricult. commodities (Q4 to Q4)*	4.2%	-2.7%	-1.0%	3.3%	3.1%
Brent oil price per barrel (year-end, USD)	84	83	84	80	80
Internal assumptions					
Administered prices (Dec. to Dec.)	5.2%	5.2%	6.5%	6.6%	5.0%

* Composite index of soybean, wheat and corn prices.

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

Table V.0.2 Real GDP growth projections for 2024 and 2025
(in %)

	2023	2024		2025	
	Estimate	Prev. proj.	New proj.	Prev. proj.	New proj.
World	3.1	2.9	3.1	3.2	3.2
Advanced economies	1.6	1.4	1.5	1.8	1.8
Euro area	0.5	1.2	0.9	1.8	1.7
USA	2.5	1.5	2.1	1.8	1.7
Emerging and developing economies	4.1	4.0	4.1	4.1	4.2
Russia	3.0	1.1	2.6	1.0	1.1
China	5.2	4.2	4.6	4.1	4.1

Source: IMF WEO Update (January 2024).

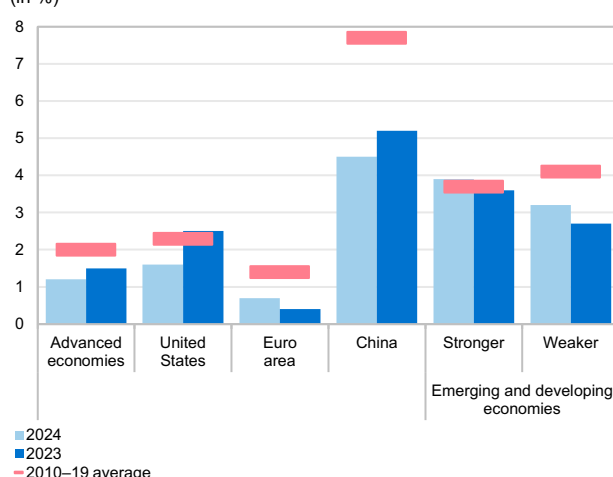
of the more favourable economic results in the USA and several large emerging and developing economies, notably China and Russia.

Global growth projection for 2025 remained unchanged at 3.2%. The risks to the projection are estimated as balanced, and the likelihood of a “hard landing” of the global economy is lower than in previous projections, assuming that global inflation stays on the downward trajectory and economic growth remains steady.

After modest growth in H1 2023, **the euro area economic activity** in Q3 decreased slightly (by 0.1% s-a), dominantly on account of depleting goods inventories. The leading near-term economic indices for the euro area, PMI and ESI, indicate poorer business performance during Q4 as well, under the impact of previously tightened monetary and financial conditions, subdued consumer and corporate confidence, dented external competitiveness and prolonged geopolitical tensions. According to Eurostat’s January preliminary flash estimate, the euro area’s GDP growth stagnated in Q4. By sector, industrial activity trended in the contraction zone since end-2022, while activity in the services sector, through weaker, continued to yield a positive contribution to growth. The euro area labour market continued to prop economic activity, with unemployment still being close to the record low level (6.4% in December), while activity and employment in Q3 were similar as in prior quarters. However, subdued corporate business activity resulted in weaker labour force demand, as reflected in the smaller number of new jobs. In **Germany and Italy**, our key foreign trade partners in the euro area, divergent movements were recorded in Q3 – Germany’s GDP stagnated, while Italy’s rose slightly. In January, Eurostat estimated that s-a GDP growth in Q4 edged down 0.3% in Germany, and rose 0.2% in Italy.

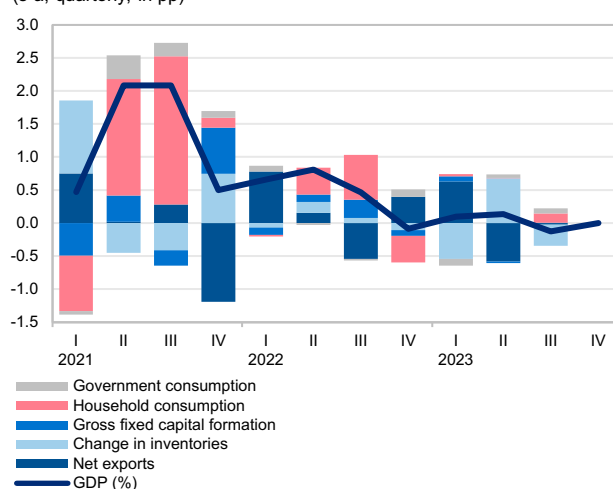
Due to weaker economic indicators in H2 2023, in December the **ECB** slightly revised down its September projection of euro area GDP growth in 2023 – by 0.1 pp, to 0.6%. It estimated that early this year, the euro area will see gradual economic recovery triggered by an increase in households’ real disposable income and recovery of external demand. Still, the negative tendencies carried over from end-2023, coupled with the previously tightened monetary and financial conditions which affect manufacturing and construction sectors the most, as well as the waning of the positive effects of the opening up of economies after the pandemic, drove the ECB in December to revise down its GDP growth projection for 2024 as well – by 0.2 pp, to 0.8%, while the projection for

Chart V.0.1 Economic growth by economic region – results and projections
(in %)



Source: World Bank (January 2024).

Chart V.0.2 Contributions of components to the real GDP growth rate in the euro area
(s-a, quarterly, in pp)



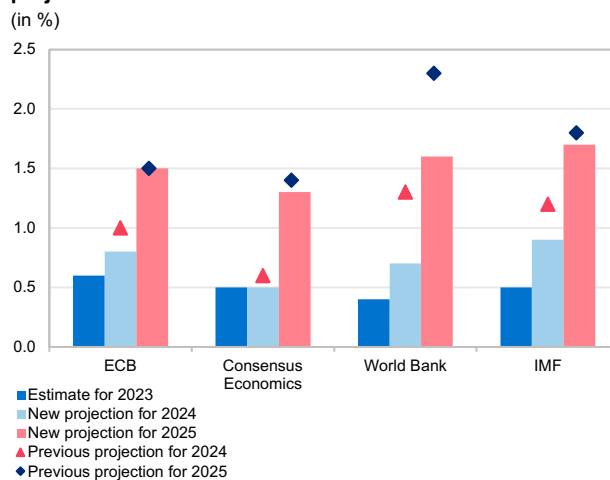
Source: Eurostat.

2025 remained unchanged (1.5%). These projections were used as euro area growth assumptions in our new projection.

In its analyses, Consensus Economics expects that the Q3 fall in GDP increased the likelihood of the euro area's economy falling into technical recession in H2. Even so, in January analysts upheld their October 0.5% projection of economic growth in 2023, which is the same as the forecast for 2024, though slightly revised down from October (by 0.1 pp). The services sector turned out to be resilient, but is nevertheless showing signs of decelerating activity, while manufacturing was in the contraction zone during Q4 as well. This was primarily due to the poor performance of Germany's production sector, while France and Spain faced a new slump in orders both at home and in external markets. This is further aggravated by the newly arisen difficulties in energy supply via the Red Sea, which can have an adverse effect on the already weak economic activity in the euro area.

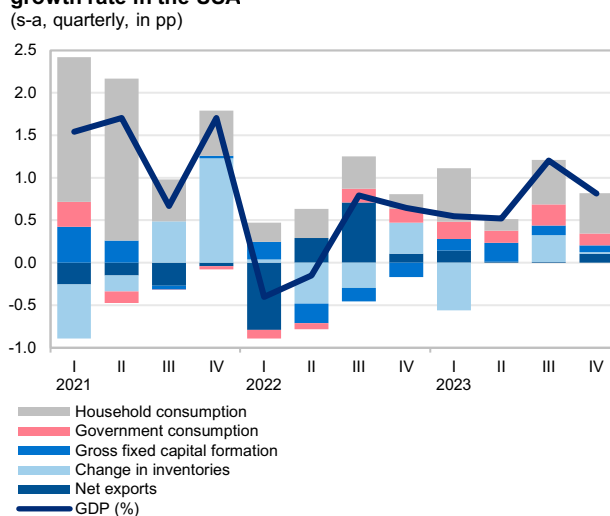
The **US economy** picked up to 1.2% s-a (i.e. 4.9% annualised) in Q3, its highest quarterly growth since Q4 2021, attributable to the increase in total consumption and investments. By sector, the recorded GDP growth in Q3 is owed to increased output of non-durable consumer goods, notably in the chemical industry and construction, as well as higher turnover in retail trade and the IT sector. According to the preliminary assessment of the Bureau of Economic Analyses, US economic growth in Q4 measured 0.8% s-a. Although economic activity in the US had already been forecast to decelerate significantly in Q4, in December the **Fed** made major upward revisions of its US GDP growth projection for 2023 – by 0.5 pp, to 2.6%, in view of the better than anticipated performance for the most of 2023. As the effects of past monetary policy tightening played out and financial and credit conditions tightened in turn, the Fed expects the US economic growth to lose breath significantly in 2024. In December it was forecast at 1.4%, or 0.1 pp below the September projection. The December unemployment rate (3.7%) was somewhat lower than in September (3.8%), while the participation and employment rates went up. Though conditions in the US labour market are still tight, the Fed estimated that the gap in labour demand and supply continued to narrow, as attested to by the decreasing number of new jobs and slower y-o-y growth in nominal wages. Assuming slower economic growth and a further elimination of imbalances in the labour market, the Fed projected a 4.1% unemployment rate in 2024 (compared to 3.8% in 2023).

Chart V.0.3 Adjustments to the euro area's GDP growth projection for 2024 and 2025



Sources: ECB (September and December), Consensus Economics (October and January), World Bank (June and January) and IMF (October and January).

Chart V.0.4 Contribution of components to the real GDP growth rate in the USA



Sources: U.S. BEA and NBS calculation.

Table V.0.3 Real GDP growth projections by country of the region for 2024 and 2025

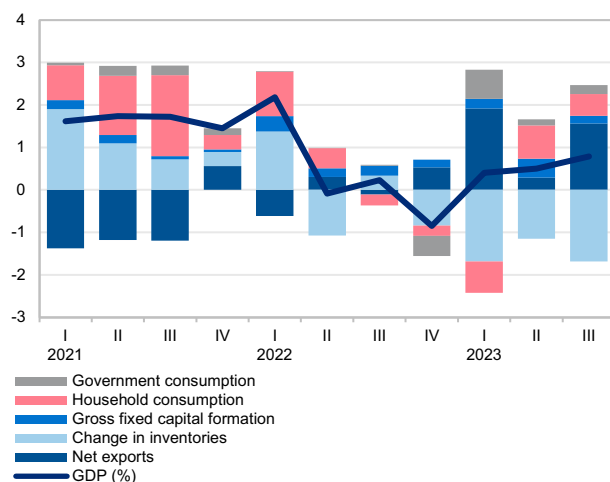
	January 2024			October 2023	
	2023*	2024	2025	2024	2025
Poland	0.5	2.9	3.5	2.7	3.6
Czech Republic	-0.4	1.4	2.8	2.2	2.9
Hungary	-0.5	2.7	3.3	2.7	3.5
Romania	2.0	3.3	3.7	3.4	4.1
Slovakia	1.2	1.9	2.6	2.0	2.8
Slovenia	1.4	2.2	2.4	2.3	2.5
Croatia	2.5	2.4	2.7	2.4	2.7
Bulgaria	1.8	2.1	2.8	2.3	2.8
Albania	3.0	3.1	3.7	3.6	-
Bosnia and Herzegovina	2.4	2.5	2.9	2.6	-
North Macedonia	1.8	2.8	3.5	2.8	-
Montenegro	4.7	3.8	3.4	3.4	-

Source: Consensus Economics.

* Estimate.

Chart V.0.5 Contributions of components to the real GDP growth rate in the CESEE region*

(s-a, quarterly, in pp)



Source: Eurostat.

* Including Bulgaria, Czech Republic, Croatia, Hungary, Poland, Romania, Slovenia and Slovakia.

Economic activity in the CESEE region rose 0.8% s-a in Q3, dominantly on account of robust growth in net exports and to a lesser degree increased consumption and fixed investments, while the fall in goods inventories acted in the opposite direction. Economic dynamics varied across countries of the region in Q3 – Poland and Hungary recorded the highest s-a growth of GDP, Croatia and Romania's GDP growth slowed down, while the Czech Republic and Slovenia recorded a decline. In January Consensus Economics stood by its October GDP growth projection for 2023 for the Southeast European region (2.1%), but raised it slightly for Central Europe – by 0.1 pp, to 0.3%. Forecasts for 2024 include higher GDP growth rates (2.9% for Southeast Europe and 2.4% for Central Europe), assuming a further increase in household consumption parallel with the receding inflation. Supported by EU funds, investments should also give a positive contribution to economic growth. In contrast, weak economic activity in the euro area, notably in Germany, as well as geopolitical tensions, act as a drag on external demand and the industrial sectors of CESEE countries.

According to the Federal Service for State Statistics, the **Russian economy** picked up to 5.5% y-o-y in Q3, posting the highest y-o-y growth rate since Q2 2021. This was facilitated by the strong fiscal incentives of the government, including considerable investments in the defence sector and finding alternative markets for primary commodities in the wake of the sanctions imposed by the West. At end-2023, the government extended the validity of the decision on capping oil production to 300,000 barrels a day, announcing an additional 200,000 barrels a day as of January 2024. As the country's performance turned out to be multiple times better than anticipated, in January the World Bank estimated that instead of the previously forecast 0.2% fall of GDP, Russia's GDP rose 2.6% in 2023. The Russian economy is projected to rise 1.3% in 2024.

According to the preliminary estimate of the National Bureau of Statistics, in Q4 the **Chinese economy** recorded y-o-y growth of 5.2% (after rising 4.9% in Q3), mostly on the back of the expanding industrial activity. At the level of 2023, China's GDP is estimated to have reached 5.2%, which is the same as in the World Bank's January assessment (0.4 pp below the June projection) and also the lowest annual growth rate since 1990. This is attributable to the prolonged crisis in the real estate business sector, continuously undermined consumer confidence which is reflected in dented household consumption, and a slowdown in global economic

activity. Assuming that the negative effects of these factors will persist, the World Bank forecast a slowdown in China's economic growth to 4.5% in 2024.

Inflation

Global inflation took a downturn in 2023, triggered by lower global prices of energy and food and weaker demand, particularly for industrial products. In contrast with the receding prices of products and raw materials, inflation in the services sector remained persistent, notably in advanced countries, dominantly due to the increased nominal wages amid the still tight labour markets. Therefore, core inflation is retreating more slowly than headline, which is still trending above the target in the majority of advanced countries, as well as in some emerging and developing countries in the inflation targeting regime. Assuming that core inflation continues to lose pace and the global prices of primary commodities remain lower, **in January the World Bank projected that global inflation would decelerate from 5.5% in 2023 to 3.7% in 2024 (unchanged relative to the June projection) and then to 3.4% in 2025.**

Against the backdrop of improving global supply chains, unfolding of the effects of past monetary policy tightening and easing of tight labour market conditions, **in January the IMF estimated that inflation is retreating faster than anticipated in the majority of economic regions, projecting a slowdown in global inflation from 6.8% in 2023 to 5.8% in 2024 and then 4.4% in 2025.** The January inflation projection for 2024 stayed put relative to the October forecast, while the projection for 2025 was revised down by 0.2 pp.

In October and November, **y-o-y inflation in the euro area** retreated further, to 2.9% and 2.4%, respectively, dominantly due to the accelerated contraction in energy prices where the base effect then played out and had a key impact on a temporary rise in y-o-y inflation to 2.9% in December (which is still below the Q3 level). The December hike in inflation was expected and even lower than what analysts initially estimated. Though the prices of unprocessed food increased, food inflation slowed further in Q4 thanks to a slower y-o-y increase in processed food prices. During Q4, the y-o-y prices of industrial products (excluding energy) also continued to slow, as did the prices of services, but to a lower extent. This helped drive **y-o-y core inflation in the euro area** down to 3.4% in December, its lowest level since March 2022. **Inflation in Germany** (measured by the change in HCPI) mirrored the developments in the euro area and,

Chart V.0.6 Inflation movements by economic region
(s-a data, annual rates, in %)

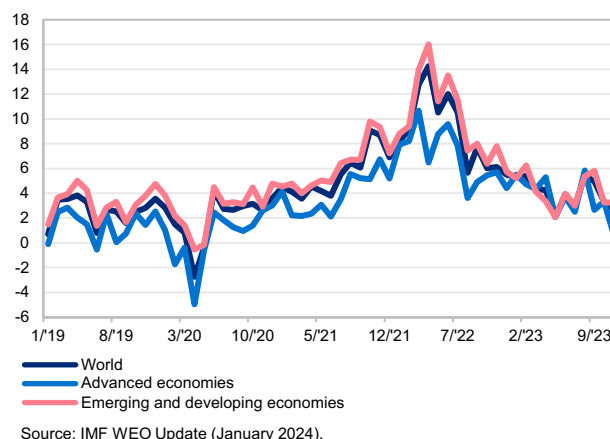


Chart V.0.7 Revisions of inflation projections by economic region for 2024 and 2025
(in %)

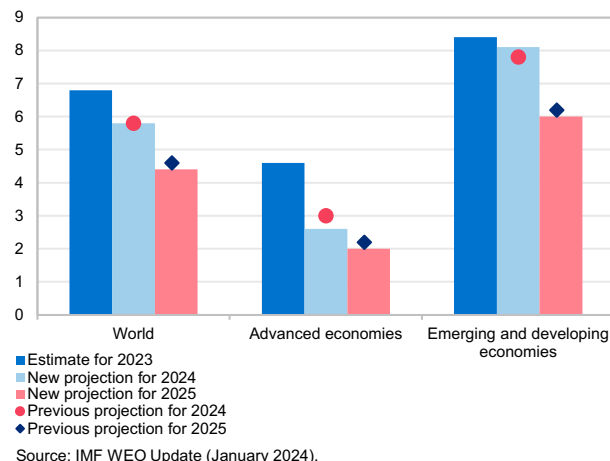


Chart V.0.8 Contributions of HICP components to y-o-y inflation in the euro area
(in pp)

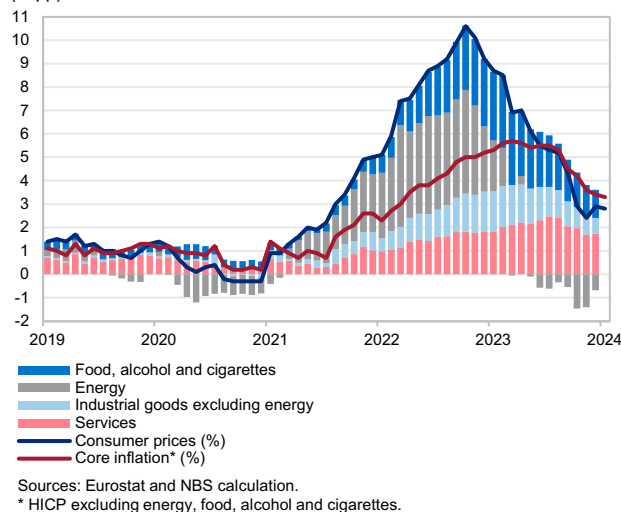
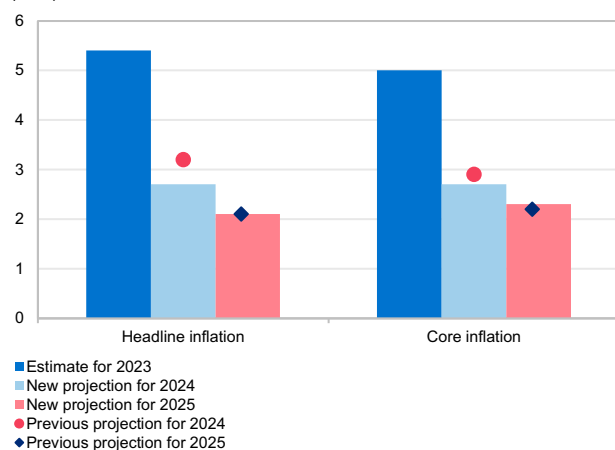


Chart V.0.9 Revision of the euro area inflation projection for 2024 and 2025

(in %)

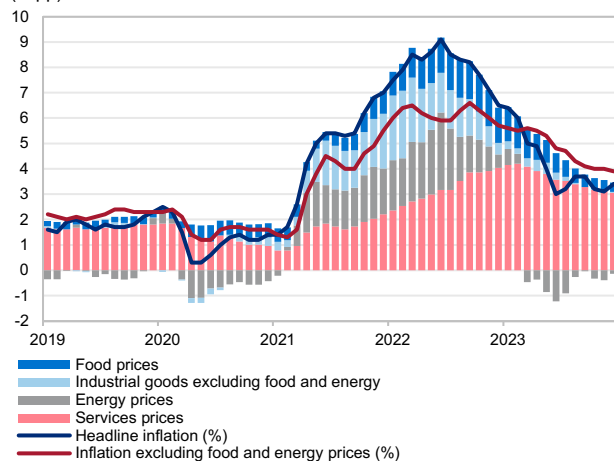


after edging down in October and November, turned up briefly in December, measuring 3.8% y-o-y, on account of the base effect from energy prices, while **inflation in Italy** slowed down further, to 0.5% y-o-y in December, as a result of a fast contraction in energy prices. According to Eurostat's preliminary flash estimate, the euro area inflation in January retreated to 2.8% y-o-y and core inflation to 3.3% y-o-y.

The **ECB** expects disinflationary developments in the euro area to continue given the projected fall of energy prices, further easing of bottlenecks in the supply of gas and other production inputs, the playing out of the effects of past monetary policy tightening and anchored long-term inflation expectations. As a result of lower than anticipated inflation rates in the euro area at end-2023 and the falling energy prices (despite the low base effect), in December the ECB trimmed its September estimate of average inflation in 2023 – by 0.2 pp, to 5.4%, as well as the average inflation projection in 2024 – by 0.5 pp, to 2.7%, while the projection for 2025 stayed unchanged (2.1%). Also, in December the ECB revised down its assessment of the average core inflation in 2023 relative to the September figure – by 0.1 pp, to 5.0%, as well as the projection for 2024 – by 0.2 pp, to 2.7%. The costs of wages remained the main engine behind price growth within core inflation – its forecast for 2025 was slightly revised up by 0.1 pp, to 2.3%. Upside risks prevailed in the December inflation projection as well, notably due to exacerbated geopolitical tensions that can bring about a new hike in energy prices, as well as due to unfavourable weather conditions that might reflect on higher food prices, and a steeper increase in wages and profit margins than expected. A downside risk stems from the demand subsiding more than expected because of the previously tightened monetary conditions and the potential deterioration of global economic developments triggered by the rising geopolitical tensions. According to the January forecast of Consensus Economics, average inflation in the euro area will be lower and measure 2.2%. Nonetheless, in our projection we kept the average inflation assumption of 2.6% for this year bearing in mind the ECB's December forecast.

Chart V.0.10 Contributions of CPI components to y-o-y inflation in the USA

(in pp)



Inflation in the USA (measured by the change in the CPI) displayed similar movements as in the euro area. After falling in October and November, it rose to 3.4% y-o-y in December due to last year's low base effect from energy prices. Even so, inflation in Q4 was lower than in Q3 owing to the continued slowdown in food inflation and slower y-o-y growth in services prices. Together with the several months of slight growth in industrial product prices, this helped slow down **core inflation in the USA**

(measured by the change in CPI excluding food and energy prices) to 3.9% y-o-y in December, its lowest level since May 2021. Inflation measured by personal consumption expenditures index (total and excluding food and energy) also declined in y-o-y terms during Q4, therefore in December the **Fed** slashed its September estimates of headline and core inflation in 2023 – by 0.5 pp each, to 2.8% and 3.2%, respectively, while for 2024 both measures were projected at 2.4%. The Fed does not expect headline and core inflation to return to the 2% target before 2026. Moreover, the risks to the December projection remained skewed to the upside since inflation can turn out to be more persistent than expected, especially in case of supply-side shocks.

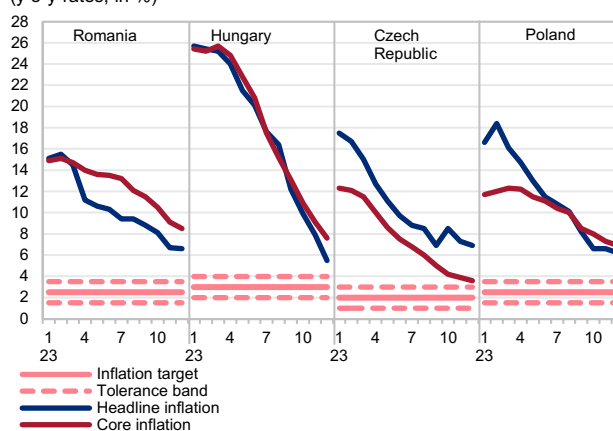
Y-o-y inflation in all **CESEE countries** remained on the downward trajectory in Q4, dominantly as the y-o-y growth in food prices slowed further, reflecting the effect of high last year's base, and energy prices declined. Petroleum product prices in **Hungary** and **Poland** were lower in December than a year ago, thus contributing to y-o-y inflation losing pace significantly to 5.5% and 6.2%, respectively. Y-o-y inflation in **Romania** slackened to 6.6% in December, mostly on account of slower food inflation, which fell into the negative territory in the **Czech Republic** and acted as a drag on headline inflation, slowing it to 6.9% in December. In January Consensus Economics lowered its 2024 average inflation projection for South East Europe by 0.1 pp to 4.9%. The average inflation projection for Central Europe for 2024 was lowered by 0.7 pp to 4.1%.

In almost all **Western Balkan countries** (except Montenegro) y-o-y inflation first slowed in October and November, only to rise slightly in December under the impact of low base from petroleum product prices. Still, it was kept below the Q3 level in all countries, and the lowest level in December was recorded in Bosnia and Herzegovina (2.2%) and North Macedonia (3.6%), followed by Albania (4.1%) and Montenegro (4.3%).

Monetary policy

In the December 2023 meeting, the **ECB** decided to keep interest rates on hold, for the second time in a row, after lifting interest rates in ten consecutive meetings (by a total of 4.50 pp since July 2022, when the cycle of monetary policy tightening began). Interest rates on deposit facilities, main refinancing operations and credit facilities remained at 4.00%, 4.50% and 4.75%, respectively. On a parallel note, the ECB continued to downsize its balance sheet according to plan, at a moderate dynamic. It is unwinding the portfolio of securities purchased under the **Asset Purchase**

Chart V.0.11 CPI movements in selected CESEE countries in the previous year (until September 2023)
(y-o-y rates, in %)



Sources: Central banks of selected countries.

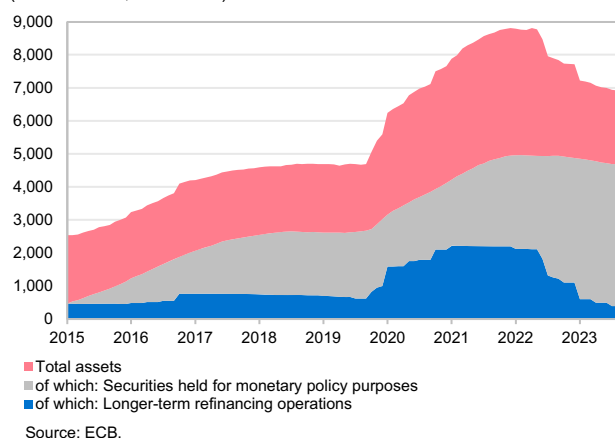
Table V.0.4 Inflation projections by country of the region
(in %)

	January 2024			October 2023	
	2023*	2024	2025	2024	2025
Poland	11.5	4.7	4.0	5.6	3.8
Czech Republic	10.7	2.7	2.2	2.8	2.3
Hungary	17.6	4.5	3.7	5.3	3.7
Romania	10.5	5.7	4.0	5.8	3.7
Slovakia	10.5	4.0	3.0	4.4	3.1
Slovenia	7.5	3.2	2.4	3.6	2.2
Croatia	7.9	3.5	2.6	3.8	2.5
Bulgaria	9.5	4.1	3.3	4.4	3.1
Albania	4.6	3.3	3.0	3.1	-
Bosnia and Herzegovina	6.8	3.0	2.3	2.6	-
North Macedonia	9.6	4.8	2.9	4.0	-
Montenegro	8.8	5.4	3.6	4.9	-

Source: Consensus Economics.

* Estimate.

Chart V.0.12 Consolidated Eurosystem balance sheet
(end-of-month, in EUR bn)

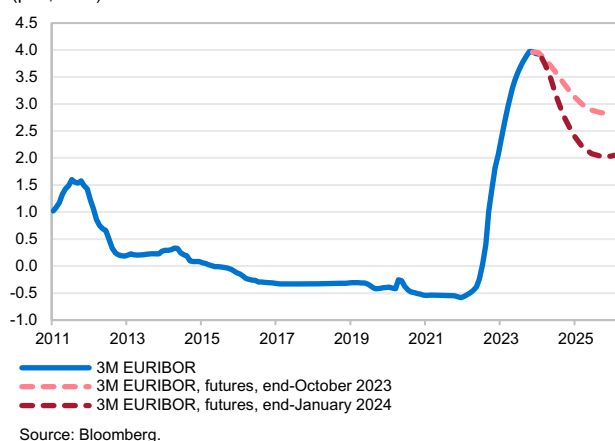


Programme (APP), as the ECB is no longer reinvesting the principal payments from maturing securities. As for the **Pandemic Emergency Purchase Programme (PEPP)**, the ECB will fully reinvest the principal payments from maturing securities during H1 this year, and then gradually close the portfolio during H2 in order to discontinue refinancing by the end of the year. Additionally, the ECB is regularly monitoring the impact of the return of funds to banks, borrowed under the **long-term refinancing operations (TLTROs)**, on monetary conditions.

Keeping its interest rates unchanged, the ECB stated that euro area inflation slowed down significantly over the past months and its likely growth in the near term will be temporary. Pressures towards price hike in the euro area are still present, primarily due to the strong growth of labour costs. This is the main reason given by the ECB President to explain why the December meeting did not discuss the reduction of interest rates and why it is still not possible to declare victory over inflation. Only late in spring will the ECB most likely have enough information to estimate whether the pressures from the labour market are receding and whether interest rates could start to be trimmed.

In January 2024, the ECB did not change its interest rates. The interest rate increases implemented to date are still being strongly passed through to the private sector, and tightened financing conditions are having a dampening effect on demand, slowing inflation down. It is emphasized that the ECB will ensure that interest rates remain sufficiently restrictive for as long as necessary.

Chart V.0.13 Expected 3M EURIBOR
(p.a., in %)



In the meeting in December 2023, the **Fed** kept its federal funds rate range unchanged (5.25–5.50%) and announced the continuation of asset downsizing within the balance sheet. In the press release following the meeting, the Fed stated that US economic growth is slower, while increase in the number of jobs – though slower over the past months – remains strong. Inflation will be significantly moderated in 2024, though still at an elevated level, and is expected to reach the target in 2026. It is underlined that the Fed is carefully monitoring inflationary risks and is determined to bring the inflation rate back to the 2% target level. As for moves going forward, the Fed stressed that it will continue to monitor economic data and stay alert and ready to adapt its monetary policy stance in an appropriate manner in the event of risks that might interfere with the achievement of central bank objectives. According to the December projection, FOMC members expect the federal funds rate to reach 4.6% (median interval 4.5–4.75%) at end-2024. They expect three policy rate cuts in 2024 of 0.25 pp each. In the press conference following the December meeting, the Fed

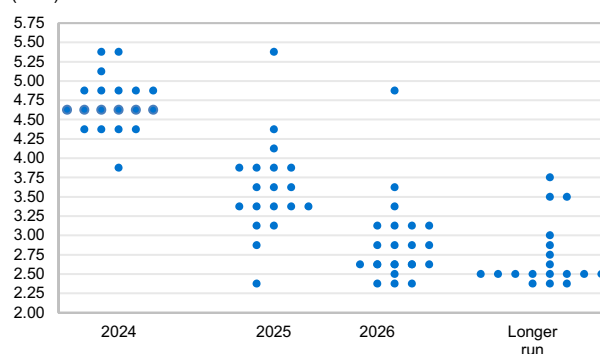
Chairman stated that the cycle of policy rate hikes has most likely ended, but did not exclude the possibility of further increases. He added that inflation is slowing down faster than anticipated and that the question arises as to which moment will be appropriate to begin reducing the restrictiveness of monetary policy, which was discussed in this meeting. In the meeting held at the end of January, the Fed kept the federal funds rate range unchanged, and a reduction could ensue once the Fed is certain that inflation is on a sustainable path towards the target.

In December, for the third month in a row, the **Bank of England** kept the policy rate unchanged at 5.25%, its highest level in 15 years. The decision was not unanimous, and the three outvoted members were in favour of a 25 bp policy rate hike. The central bank stressed that the extended period of restrictive monetary policy is necessary in order to suppress inflation. In December, the **Swiss** central bank kept its policy rate on hold at 1.75%, where it has stood since its last increase in June 2023.

Of the inflation targeting central banks in the **CESEE region**, the **Russian central bank** lifted its policy rate by 1.0 pp to 16.0% in December 2023, in line with market participants' expectations. This was the fifth consecutive policy rate hike by the Bank of Russia. The total increase since last July amounted to 8.5 pp. The central bank's press release stated that inflationary pressures in Russia remain elevated. The expected return of inflation to target during 2024 and its stabilisation at around 4% from 7.5% y-o-y in December 2023 imply that the restrictive monetary conditions will be kept for a longer period. After three consecutive 5.0 pp hikes, the **central bank of Turkey** raised its policy rate on two more occasions – each time by 2.5 pp, in December and January, to 45.0%, as was expected by market participants. The January hike is the eighth consecutive increase in the Turkish central bank's policy rate, which now cumulatively stands at 36 pp.

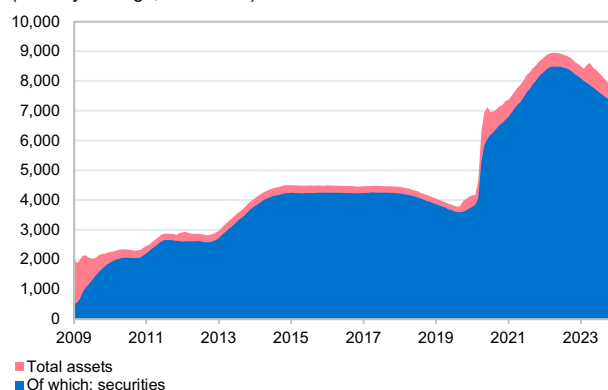
On the other hand, the **Czech central bank** trimmed its policy rate by 0.25 pp to 6.75%, as expected by the majority of market participants. This is the first policy rate cut in three years. Analysts state that the Czech central bank had been waiting for the right moment to join Hungary and Poland in monetary accommodation, but that the beginning of the cycle was postponed amid concerns that the inflation rate would remain elevated. The **central bank of Hungary** also trimmed its policy rate in December and January, each time by 0.75 pp, to 10.0%. After cutting the rate to 5.75% last October, the **Polish central bank** kept the rate on hold, in accordance with expectations. The **central bank of Romania** also left its policy rate untouched for a year, at 7%.

Chart V.0.14 FOMC participants' expectations of appropriate monetary policy: midpoint of target range or target level for the federal funds rate (in %)



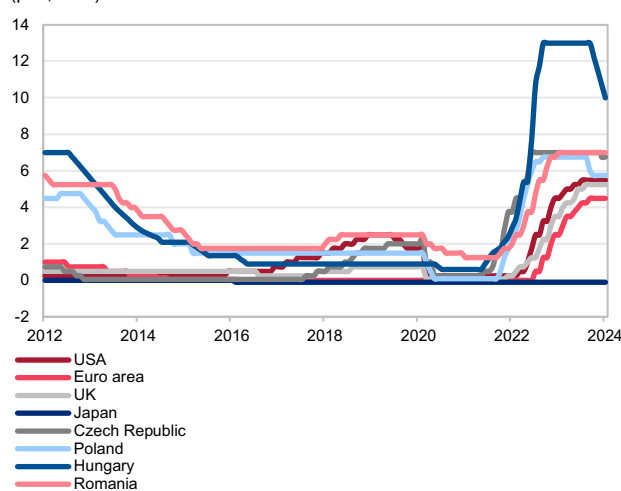
Source: Fed, Summary of Economic Projections, September 2023.

Chart V.0.15 Fed's total assets (monthly average, in USD bn)



Source: Fed.

Chart V.0.16 Policy rates across selected countries (p.a., in %)



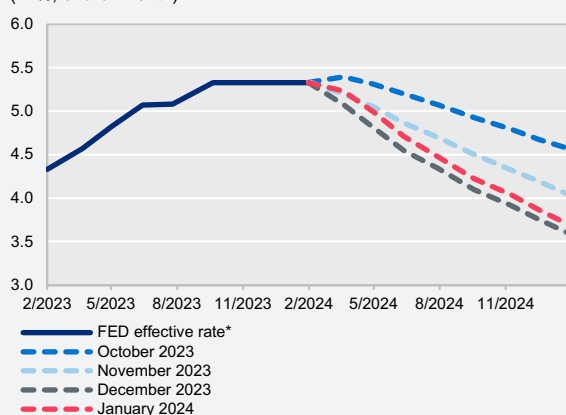
Sources: Central banks of selected countries.

Text box 3: When can leading central banks be expected to start lowering their key policy rates?

In response to the rising inflationary pressures, many central banks stepped up their monetary policy tightening during 2022 and 2023. The cycle of policy rate hikes was for the most part concluded by mid-2023, and the ECB was the last of the leading central banks to lift its main interest rates (in September). In meetings following the conclusion of the tightening cycle, central banks did not change their policy rates, announcing that they would remain at the current level for a longer period. They also signalled that the decline might follow during 2024 if data about inflation, economic activity and labour market allow it. Given the estimates that policy rates have most likely reached their peak and have been unchanged for some time, as well as that the economic activity is decelerating amid less favourable growth prospects and inflation is receding further, we saw an additional rise in market speculations about the future moves of leading central banks, i.e. the beginning of interest rate cuts. Since October 2023, expectations of market participants regarding interest rate movements have been revised down, judging by the movements of the Federal Funds Futures in case of the Fed and the Overnight Index Swaps in case of the ECB.

Chart O.3.1 Market expectations in terms of interest rates in the USA, futures

(in %, end-of-month)

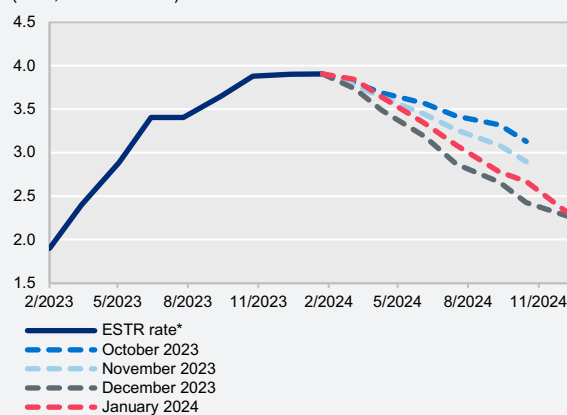


Source: Bloomberg.

* Fed effective rate in the overnight unsecured money market.

Chart O.3.2 Market expectations in terms of interest rates in the euro area, swaps

(in %, end-of-month)



Source: Bloomberg.

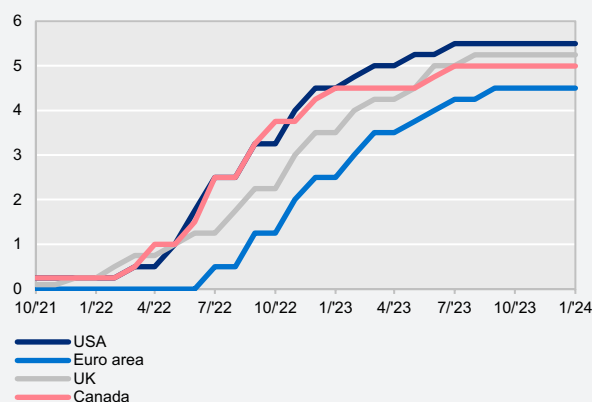
* The rate in the overnight unsecured money market in the euro area.

According to the IMF's expectations, the fall of inflation in 2024 will be slower due to the overheated labour market and high inflation in the services sector. IMF officials warned central banks to be wary when lowering their interest rates this year and to wait at least until H2 2024 before they take that road, reminding them of the many episodes in the past when central banks accommodated their monetary policy as soon as inflation took a downward path, which turned out to be a premature move, given that afterwards inflation stopped declining or even went back up again. BIS officials also underlined that central banks should not be in a rush to trim interest rates given that different factors could continue to exert pressure on inflation, primarily the loose fiscal policy, pressures on wage growth to compensate for their real fall, weakening of the disinflationary effect of some factors, as well as the potential premature relaxation of financial conditions. They recall that the fight against inflation so far was achieved at unexpectedly low costs, such as lower GDP growth and higher unemployment, and that the resilience could persist until economies come out of the post-pandemic inflation. Judging by their officials' rhetoric, leading central banks are on the same page with the IMF and BIS in this respect. Even so, developments in the Middle East and the Red Sea are giving rise to fears that energy prices might turn up again amid increased transport costs. The results of an analysis by professional forecasters, published in the January Consensus Forecast (the survey includes the expectations pertaining to the Fed, ECB, Bank of Canada and Bank of England), indicate that the prevailing sentiment is that these central banks will start trimming their policy rates during or at the end of Q2 this year. In annual terms, the largest number of respondents included in Consensus Forecast's panel expect the Fed, ECB and Bank of England to lower their main interest rate by 0.75 pp each and the Bank of Canada by 1 pp in 2024. Fitch Ratings

also expects that the majority of central banks in key countries it monitors in its analyses (Fitch 20 Economies) will start trimming their interest rates in 2024, and by the end of the year the Fed, ECB and Bank of England are expected to lower their policy rates by 0.75 pp each.

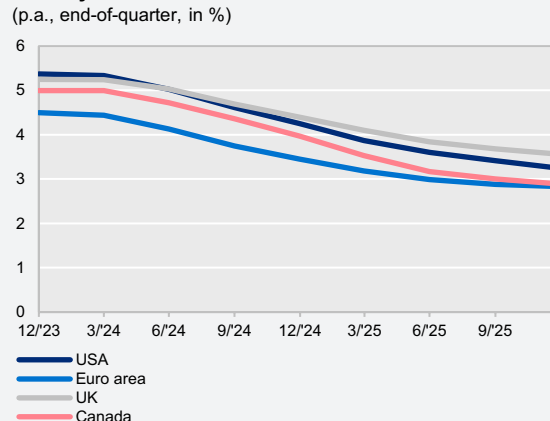
Often in the forefront among leading central banks when it comes to changing the direction of its monetary policy, the **Fed** was the first to stand out when its Chairman stated that in the December 2023 meeting FOMC members discussed the adequate moment to start trimming interest rates. The press release after the January meeting said that the Fed will trim its federal funds rate once it is more certain that inflation is steadily moving towards the 2% target. The previous cycle of the Fed's monetary policy tightening was one of the fastest on record, as the federal funds rate rose by 5.25 pp to the 5.25–5.50% range between March 2022 and July 2023, while in June 2022 the Fed began unwinding its balance sheet according to the defined dynamics, in a manner that would enable an efficient implementation of its monetary policy. The federal funds rate range stayed put in the following meetings, and according to the dot-plot chart published in December 2023, the majority of FOMC members expect the interest rate to recede by 0.75 pp in 2024 and move in the 4.50–4.75% range at the end of the year. The majority of participants in the Consensus Forecast's panel expect the first rate cut in June, while some of them believe it will take place already in March.

Chart O.3.3 Movements of policy rates by country
(p.a., in %)



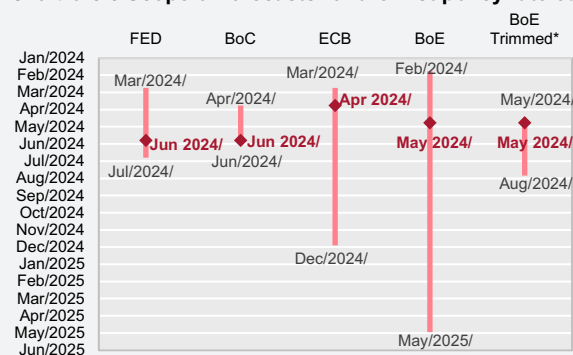
Sources: Central banks of selected countries.

Chart O.3.4 Expected movements of policy rates by country*
(p.a., end-of-quarter, in %)



Sources: Consensus Forecasts – G7 and Western Europe, January 2024.
* The average of responses by all panel participants.

Chart O.3.5 Scope of forecasts for the first policy rate cut



— Between the earliest and the latest listed date for the first policy rate cut
◆ The most often cited date of the first cut

Sources: Consensus Forecasts – G7 and Western Europe, January 2024.

* Excluding the first and last date of the earliest cut.

Chart O.3.6 Expected policy rate cuts in 2024
(in pp)



Sources: Consensus Forecasts – G7 and Western Europe, January 2024.
Note: the most frequent response.

Including the latest increase in September 2023, the **ECB's** main refinancing rate was raised by a total of 4.5 pp since July 2022, to 4.5%, while the downsizing of the balance sheet began in autumn 2022 when banks started paying off their liabilities under TLTROs. Balance sheet downsizing was stepped up further as of March 2023 by reducing the portfolio of securities purchased within the APP, while the principal payments from maturing securities purchased under the PEPP will be reinvested until end-2024, with the gradual closing of the portfolio in order to avoid an adverse impact on monetary conditions. In view of statements by ECB officials, we should not expect the main refinancing rate to be trimmed before mid-2024. After the statement that the December meeting did not discuss monetary policy accommodation, the ECB President was more specific in Davos, underlining that only later in spring will there be enough information to assess whether labour market pressures are waning and to make a decision on lowering borrowing costs, if possible. Some members of the ECB's Governing Council believe it is still too early to declare victory over inflation and that the ECB should not rush into trimming the rates. Moreover, they stated that markets were overly optimistic in their expectations that the first ECB rate cut could unfold in the April meeting, which was also expected by the majority of participants presented in the results of the Consensus Forecast's panel. Even so, the Consensus Forecast relativised these expectations, assessing in the accompanying text that the first rate cut of 0.25 pp could take place "in or around June."

On the other hand, a group of CEE central banks that began with monetary policy tightening during 2021 at a more intensive pace than the leading central banks have already started lowering their rates. Having increased its policy rate by 6.65 pp between October 2021 and September 2022, Poland trimmed the rate in September and October 2023 by a total of 1 pp, keeping it at 5.75% thereafter. Noting that this was enabled by strong disinflation and reduced vulnerability of the country, the central bank of Hungary started trimming its policy rate in October 2023, and including the January cut, lowered it by a total of 3.0 pp to 10.0%. Previously, it began trimming the rate on one-day deposits in May, adding that this was the beginning of monetary policy normalisation. Between May and December 2023, this rate was slashed from 18.0% to 10.75%. At end-2023, these countries were joined by the Czech Republic, whose central bank trimmed its policy rate by 25 bp, to 6.75%. Moreover, markets believe that the December inflation in CEE countries indicates that further interest rate cuts are possible, and that some countries might soon step up their monetary policy accommodation.

The easing of monetary policies by leading central banks should be conducive to more favourable global financial conditions and an increase in disposable income for investment and consumption, as well as the higher inflow of capital and lower risk premium for emerging countries. More favourable global financial conditions and higher capital inflows to emerging economies would reflect on the recovery of economic activity of our key foreign trade partners, thus triggering a rise in demand for our exports and exerting a positive effect on economic activity at home. If leading central banks accommodate their monetary policies too quickly, inflation in those countries could stay elevated, which would in turn give rise to higher pressures on our inflation on account of imported prices. Nevertheless, we expect that central banks, being aware of the past negative experience, will remain cautious and mitigate their monetary policy gradually, to a degree that will not prevent inflation from continuing on the downward path.

Financial and commodity markets

Yields on ten-year government securities of advanced European countries declined during Q4 – by 99 bp on average q-o-q, while yields on ten-year US Treasuries declined by 71 bp. The fall in yields on ten-year government bonds of advanced European countries and the USA in Q4 is mostly attributable to expectations of market participants as to the relaxation of leading central banks' monetary policies in the coming period.

During Q4, **the dollar weakened vis-à-vis the euro and other leading currencies** in the international financial market. The fall in the dollar's value in the observed period can be associated with market participants' expectations that the following year the Fed would begin trimming the interest rates sooner, while statements by ECB officials were more conservative in terms of not relaxing the monetary conditions too early.

The global Brent oil price was dominantly on the downward path in Q4 amid stepped-up output in non-OPEC+ countries, high inventories in the USA and lower than anticipated oil demand in the last quarter of 2023, with expectations of slower growth in 2024 as well. The price of oil in Q4 averaged around USD 84 per barrel, or 2.6% below the Q3 figure, while in y-o-y terms it was 5% lower. In January, the global price of oil increased relative to December, averaging USD 80.2 per barrel, under the prevailing influence of elevated geopolitical risk and tensions in the Middle East. Aware of the uncertainty as to the spread of the conflict in the Middle East, we expect the Brent oil price to edge up to around USD 83 per barrel by end-2024, and then retreat to around USD 80 per barrel by end-2025. Consensus Economics has voiced the same expectations. Similarly, the US Energy Information Administration (EIA) expects the oil price to measure USD 81 and USD 78 per barrel in 2024 and 2025, respectively.

After a seasonally common increase in October, **the benchmark price of natural gas for Europe (Dutch TTF hub) dropped to around EUR 32 per MWh by end-December** (equivalent to around USD 350 per 1,000 cubic metres)¹¹ as weather was warmer than usual in this part of the year and gas storage levels were high. The natural gas price in Q4 averaged around EUR 41 per MWh, which is 23.3% higher than in Q3, as well as 57.1% lower than in the corresponding period last year. Under the impact of the same factors, the natural gas price

Chart V.0.17 Yields on ten-year bonds of euro area countries (daily data, in %)

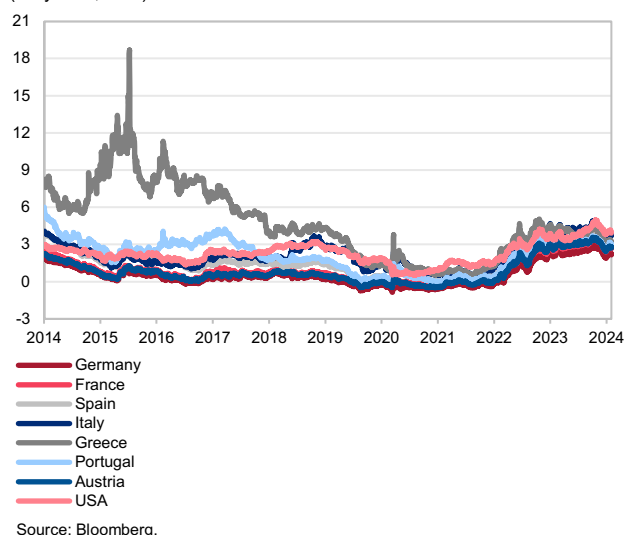


Chart V.0.18 Exchange rates of selected national currencies against the dollar* (daily data, 31 December 2013 = 100)

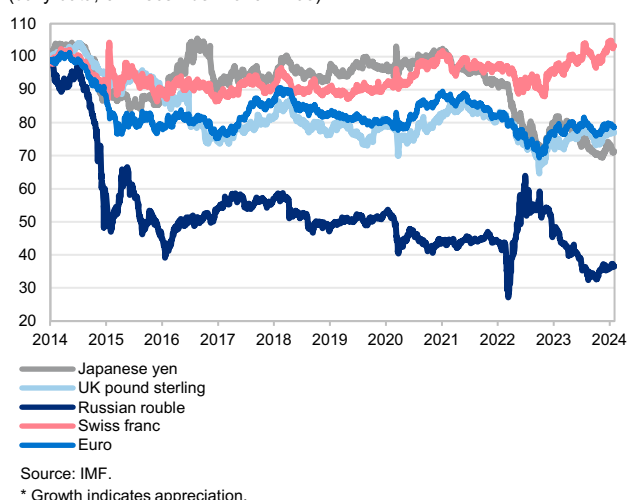
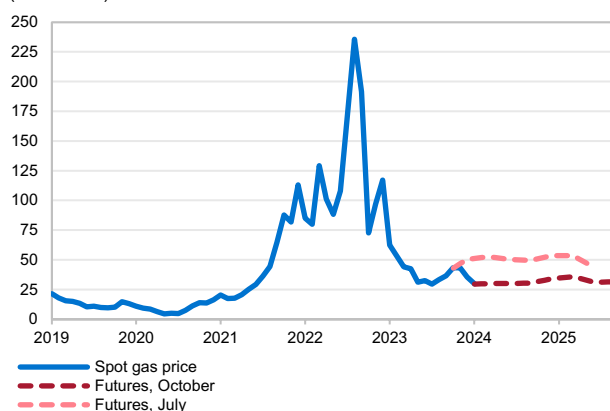


Chart V.0.19 Assumption for Brent oil prices (USD/barrel)



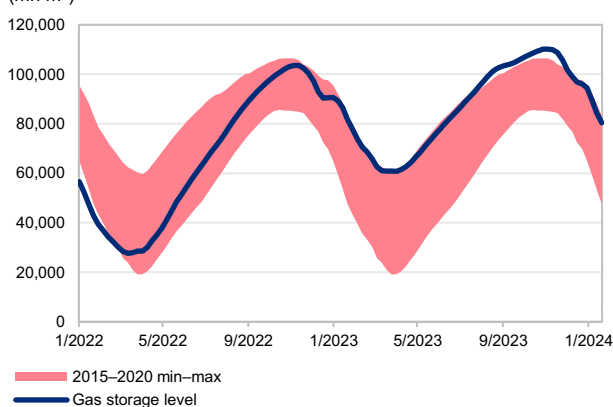
¹¹ The price expressed in dollars per 1,000 cubic metres of gas was calculated based on the production price of gas expressed in MWh, the EUR/USD exchange rate and an appropriate coefficient (10.55 MWh = 1,000 m³).

Chart V.0.20 European price of natural gas (EUR/MWh)



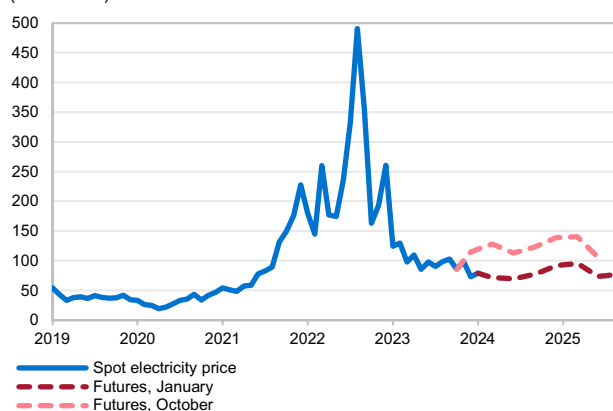
Source: Refinitiv.

Chart V.0.21 EU gas storage levels (mn m³)



Source: Bruegel.

Chart V.0.22 European price of electricity (EUR/MWh)



Source: Refinitiv.

decreased further in January and averaged around EUR 30 per MWh. With subdued demand for natural gas and high filling levels in storage facilities, market futures were on average 60% lower than in our previous projection. At end-2024, the price of gas should equal around EUR 34 per MWh. Consensus Economics expects the natural gas price to go up in Q1, undergo a seasonally usual fall in Q2 and Q3, and then turn back up again to around EUR 43 per MWh at end-2024.

The benchmark price of electricity for Europe (German stock exchange) moved steadily down during Q4, reflecting favourable weather conditions and the lower price of natural gas. In Q4, the price of electricity averaged around EUR 86 per MWh, or 11.2% lower than in Q3, while in y-o-y terms it was 58.0% lower. The price of electricity in the Hungarian stock exchange displayed a similar trend, averaging EUR 102.9 per MWh in Q4. Electricity prices rose moderately in January with the onset of colder weather and were 8.1% and 2.1% higher than the December prices in the German and Hungarian stock exchanges, respectively. According to market futures, the price of electricity will move on the downward path in H1, only to climb up to around EUR 91 per MWh by end-2024.

Thermal coal price decreased in October and November, however, elevated demand in Asia drove it up moderately in December, to around USD 142 per tonne. Even so, the coal price was still 12.7% below the September level, while in y-o-y terms it was as much as 62.6% lower. In January the price of coal decreased to around USD 125 per tonne, and Consensus Economics expects it to continue on the downward path until end-2025.

Dominantly under the impact of the natural gas price, the **global prices of mineral fertilizers resumed the downward trajectory in Q4** and in December measured 24.2% below the September level, while relative to the same period the previous year they were 36.0% lower.

After an initial dip in October, **the prices of metals and minerals rose moderately by end-Q4**, in the wake of statements by officials from leading central banks that the cycle of monetary policy tightening will most likely be wrapped up, while in January they remained mostly unchanged. According to Consensus Economics, prices of metals are expected to continue up until end-2025, when the index of global prices of basic metals¹² will be 10.1% higher than at end-2023. In contrast, the World Bank

¹² This index has been calculated by The Economist, and the shares of individual metals reflect their respective shares in world metal trade: aluminium (47%), copper (32%), nickel (8%), zinc (7%), lead and tin (3% each).

expects the metals prices to go down in 2024, only to turn up again in 2025 on the back of the recovery in China's real estate sector and the rising demand for metals used in the green transition.

The global food prices, measured by the FAO index, trended down in Q4, landing 2.3% lower in December than September, or 10.4% below the level from the same period a year ago. The fall was mostly facilitated by the lower sugar prices (17.5%) amid stepped-up production in Brazil. Q4 also saw a decline in meat prices (2.4%) due to increased inventories of leading exporters, as well as the prices of cereals (2.7%), reflecting increased supply. Conversely, the rising demand pushed dairy product prices up (6.1%), while increased import led to higher vegetable oil prices (1.2%). Food prices continued to decline in January (1.0%), under the impact of lower prices of cereals and meat, while the prices of sugar, vegetable oil and dairy products rose moderately.

The prices of primary agricultural commodities in global markets displayed stable movements in Q4 and changed imperceptibly relative to Q3. Good harvest in the northern hemisphere exerted downward pressure on the prices of primary agricultural commodities, while elevated geopolitical uncertainty and worsened weather conditions in key agricultural regions in the southern hemisphere acted in the opposite direction. The global prices of primary agricultural commodities declined in January due to dampened activity around Christmas and New Year's holidays and strong competition from the Black Sea region. Going forward, we anticipate a fall in the prices of primary commodities, and we expect them to be 2.7% lower in December than at the end of 2023, after which they should recover moderately in 2025. Our assumptions on movements in the prices of primary commodities were based on market futures.

Chart V.0.23 **Selected commodity prices in the global market**
(index points)

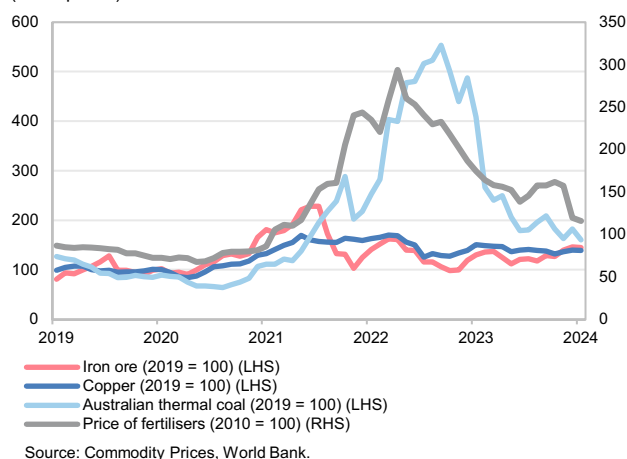
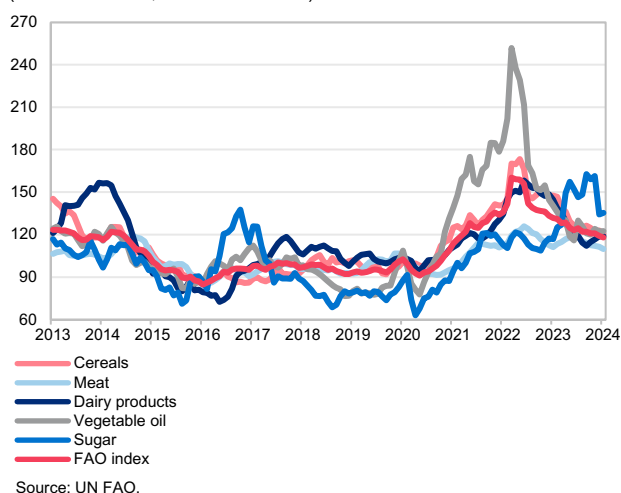


Chart V.0.24 **World Food Price Index**
(in nominal terms, 2014–2016 = 100)



Text box 4: Reliability of futures in global oil price forecasting

The NBS's medium-term projection requires the forecasting of movements of various factors from the international environment which have a bearing on economic indicators at home. Particularly important are movements of the global crude oil price, because it has a considerable impact on the costs of energy, transport and production, i.e. on almost all domestic prices, especially in light of the fact that Serbia is a net oil importer. Instability in the global oil market has had a major bearing on CPI dynamics in Serbia over the past years. Thus, the direct contribution of petroleum product prices to y-o-y inflation in Serbia in 2023 was mainly negative, while climbing up to 35% in mid-2021. Due to volatility and the fact that energy prices form part of inflation which central banks cannot impact directly, they feature as one of the key risks in central bank projections, including those made by the NBS.

The relevance of the global oil price for other energy product prices, and for domestic inflation, calls for as adequate as possible assumption about its path over the projection horizon. Consistent with the practice of other central banks and international institutions, the NBS forecasts the path of global oil price movement for the next two years based on market futures. In this text box we will analyse how well the futures projected the movement of the global oil price in the central projection and compare their predictive power with other methods.

Crude oil is a commodity whose price is affected not only by the changes in market fundamentals, but largely also by the turbulences arising from geopolitical tensions, speculative trade, OPEC+ decisions etc. The oil market is particularly sensitive to geopolitical risks, which give rise to speculative trade and oil price volatility. Furthermore, oil is traded in the futures market, which increases the sensitivity of its price to news and expectations of market participants. It is therefore no surprise that satisfactory results in oil price projections are hard to achieve and that the projections of different international institutions often diverge considerably. Thus, the current oil price projections span from 79.1 to 82.5 US dollars per barrel for the end of this and from 75.3 to 80.6 US dollars for barrel for the end of the next year.

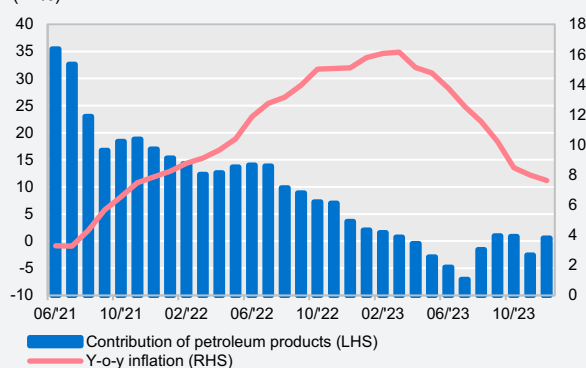
Given that oil is also a financial asset, we have the option to use the information from the financial market to predict its future price. As opposed to the spot price, i.e. the price of the commodity bought/sold today, the futures price is formed today, but for buying/selling the commodity on a specific future date. However, it should

Chart O.4.1 Global oil price
(USD/barrel, monthly average)



Source: Refinitiv.

Chart O.4.2 Contribution of petroleum products to y-o-y headline inflation
(in %)



Sources: SORS and NBS calculation.

Table O.4.1 Global oil price projections
(USD/barrel, annual average)

	2023	2024
EIA	82.5	79.5
Consensus Forecast	82.5	80.6
ECB	80.1	76.5
IMF	79.1	75.3

Source: Institutions above.

be borne in mind that futures-based forecasts are far from ideal due to the risk premium, but also the convenience yield and storage costs. Namely, investors require an appropriate risk premium for keeping risky assets such as oil, which is why they pay for the futures less than the expected future value of the commodity. Since the risk premium is not measurable and varies across time, it is difficult to predict the spot price. The relations between oil futures and the expected spot price are further complicated by the convenience yield and storage costs. Namely, the convenience yield exists owing to the advantages of possession of commodities over futures, reflected in the possibility to derive additional benefits in case of a sudden hike in demand. The convenience yield is not measurable either and it largely depends on the stock of inventories – when the inventories are stable and replenished, the convenience yield will be low, because there is no fear of shortages and vice versa. All the above needs to be taken into account when grounding the assumptions about the future spot price of oil on futures, as is customary in the projections of most central banks.

The reliability of futures-based forecasting is monitored and analysed most often in comparison with alternative methods, primarily the random walk method which assumes that changes in the global oil price cannot be predicted and that the current spot price is the best possible prediction of the future spot price. The performance of futures can also be compared to that of professional surveys, as we have done in this analysis.

In assessing the reliability of alternative forecasting methods, we analysed the performance of market futures, projections from the Consensus Economics survey and random walk forecasts from the period 2017–2022, for one year ahead, applying as the accuracy assessment methods – the mean error, mean absolute error and root mean squared error. The mean forecasting error is positive for all three methods, suggesting that they underestimated the oil price in the period observed, i.e. after one year the actual spot price of oil overshot the forecasts under all three methods. On average, the futures-based, Consensus Economics and random walk forecasts underestimated the actual oil price in the period observed between 4.6% and 8.0%. It should be borne in mind that the smallest mean error does not necessarily indicate the best forecasting method, given that positive and negative deviations are mutually offset, so the mean error tends to be low. Looking at absolute values of deviations, the error increases in all three methods, especially in random walk, while still not suggesting the superiority of any method. It is similar with the root mean squared error, which is a more precise measure, moving in that period from 22.4% to 24.2%. All three projections had smaller deviations from the actual values in the pre-pandemic period compared to the post-pandemic, and it is similar also with the first two assessment methods. The results show that different alternatives yield similar results in forecasting oil prices, and the probability of accurate forecasting increases markedly in the absence of uncertainty.

Table O.4.2 Assessment of the reliability of alternative methods of forecasting the global oil price
(in %)

	Market futures	Consensus Forecast	Random walk	Market futures	Consensus Forecast	Random walk	Market futures	Consensus Forecast	Random walk
	One-year ahead from the period:								
	2017–2022			2017–2019			2020–2022		
Mean error	8.0	6.7	4.6	-1.6	-2.2	-3.9	17.5	15.7	13.0
Mean absolute error	18.6	18.5	20.3	14.9	14.7	16.0	22.3	22.2	24.7
Root mean squared error	22.6	22.4	24.2	17.6	17.7	19.1	26.6	26.2	28.4

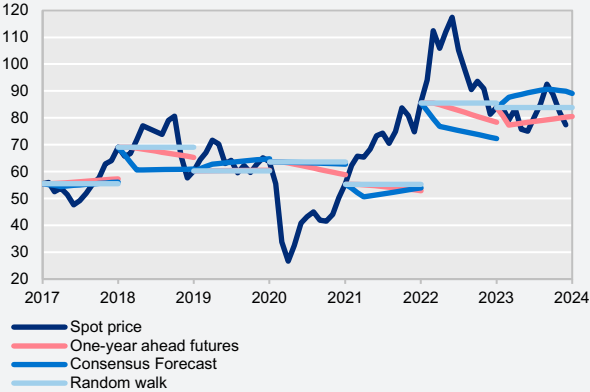
Sources: Refinitiv, Consensus Economics and NBS calculation.

The use of market futures in forecasting also has some deficiencies, especially in periods of exogenous stress, when prices in commodity markets are highly volatile. However, other methods of oil price forecasting seem to do no better. We also considered the success ratio and the Pesaran-Timmermann test, showing whether futures accurately predict a change in the direction of oil prices. The success ratio of market futures for the period 2017–2022 is 0.72, meaning that market futures accurately determine the direction of oil price movements in 72% of cases, the percentage being higher pre-pandemic (0.86) compared to post-pandemic (0.58). At the same time, the Pesaran-Timmermann test confirmed that market futures accurately predict the direction of oil price movements. Besides, market futures are easily accessible, transparent

and simple for communicating to the public, which makes them convenient for making assumptions about the movement of global oil price in central banks' projections.

The path of the global oil price cannot be fully predicted, so one must be aware of the risks in light of different data, information and expert judgement. In making monetary policy decisions, the NBS takes into account the limitations of market futures in global oil price projections. It therefore considers a series of other factors when assessing the risks associated with the movements of the global price of oil and other primary commodities over the projection horizon. Given the importance of the assumption about the global oil price movements in projecting not only inflation, but GDP as well, the NBS will continue to carefully monitor and analyse the adequacy of using oil futures in formulating those assumptions.

Chart O.4.3 **Alternative methods of forecasting one-year ahead global oil price**
(USD/barrel)



Sources: Refinitiv, Consensus Economics.

Internal assumptions

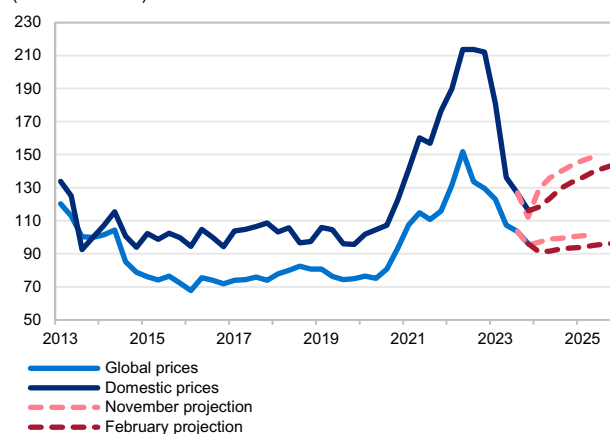
Assuming a slight further dip in their global counterparts, we expect **primary agricultural commodity prices at home** to continue down in 2024 and level off next year. Our assessment of the character of the domestic agricultural season takes note of the anticipated effects of equipment modernisation and wider application of agrotechnical measures, supported also by higher government subsidies to agriculture. It is, however, too early to draw any conclusions since we lack relevant information at the start of the year. Our projection therefore assumes that agricultural season this year will be slightly better than last year and that agricultural production will rise by around 1%. We assumed mild growth to extend into next year.

Our assumptions of **administered price** growth are based on the fact that most electricity and natural gas price adjustments were made last year, and no adjustments have been planned for 2024, which is consistent with the second review of the IMF arrangement and our expectations from the previous *Report*. We therefore expect administered price growth to measure 5.2% this year, mostly reflecting a further adjustment of excise duties on cigarettes, coffee, alcoholic beverages and petroleum products. We have assumed administered price growth of 6.6% in 2025.

With regard to factors influencing domestic demand, we expect wages and pensions to go up further this and the next year, though at a more moderate pace than last year since inflation will also slow notably. After rising by around 16% last year, we expect the wage bill to remain the key source of consumer demand and to expand by around 12% this year, reflecting the higher minimum wage (by 17.8%), the projected continued growth in employment, and public and private sector wages. Rising consumer demand will also be propped up by foreign remittances inflow which is projected to be broadly the same as last year (EUR 5 bn). Higher disposable income for consumption this year should also be supported by the capping of interest rates on new euro-indexed housing loans and lower costs of repayment of existing loans for first-time home buyers, approved at a variable interest rate and worth up to EUR 200,000.

At the **consolidated level**, the government deficit measured RSD 181.1 bn or 2.2% of the projected GDP¹³ in 2023. This outturn is better than planned by the

Chart V.0.25 **Assumption for prices of primary agricultural commodities***
(Q4 2013 = 100)



Sources: Novi Sad Commodity Exchange, CBOT, Euronext and NBS calculation.
* Measured by the composite index of wheat, corn and soybean prices.

Table V.0.5 **New set of fiscal rules**

General fiscal rules

Government sector debt, including restitution liabilities, is not to exceed 60% of GDP

Medium-term deficit target is 0.5% of GDP

Depending on the level of government sector debt, the deficit is adjusted to the following levels (in % of GDP):

60% or above	0.0%
55-60%	0.5%
45-55%	1.5%
45% or below	3.0%

Specific fiscal rules

Share of government sector wages in GDP up to 10%

Indexation of pensions depending on their share in GDP as follows:

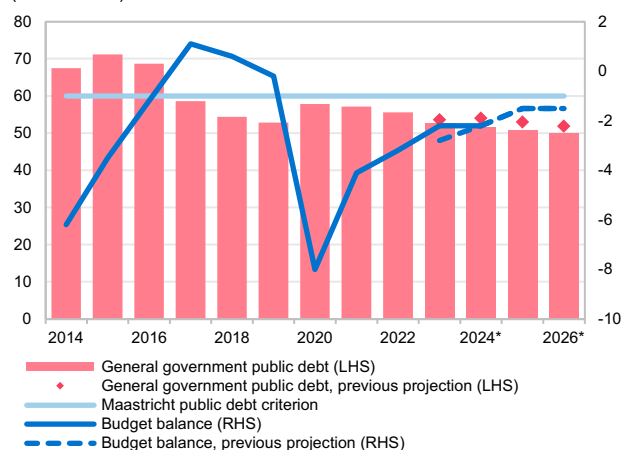
10.5% or above	Indexed to change in CPI
10-10.5%	Weighted indexation to change in net average wage and change in CPI
10% or below	Indexed to change in net average wage

Source: Ministry of Finance.

¹³ According to the projection of the Ministry of Finance for 2023.

Chart V.0.26 Budget balance and general government public debt

(in % of GDP)



Source: Ministry of Finance.

* Projection from the Revised Fiscal Strategy for 2024 with Projections for 2025 and 2026.

supplementary budget (2.8% of GDP) and it was achieved without entailing a major drop in the share of capital expenditures in GDP. As the deficit outturn was more favourable, the government's fiscal impulse surprised on the downside, contributing to lower inflation. General government public debt was 52.7% of GDP at end-December, compared to the 53.6% of GDP at the end of the year planned by the supplementary budget.

According to the Revised Fiscal Strategy for the Period 2024–2026, **the medium-term fiscal framework** envisages a decrease in the share of public debt in GDP. The aim is to bring this share down to 50% by end-2026, while the government deficit is planned to be limited to 2.2% in 2024, and 1.5% in 2025 and 2026, consistent with the general fiscal rules. When it comes to government expenditure in the coming period, the share of wages and pensions is expected to stay stable, within the bounds defined by the special fiscal rules (i.e. at around 10% and 11%, respectively), while priority will be given to infrastructure and capital projects. The share of capital expenditure is planned at around 6–7% of GDP in the 2024–2026 period. Going forward, the government will additionally support the competitiveness of the private sector and stable economic growth by continuing the policy of reducing the tax burden on the corporate sector.

In our estimate, a reduced government deficit in the coming period would result in lower inflationary pressures, which, together with a declining public debt trajectory, would have a positive impact on the **country's credit rating and risk premium**.

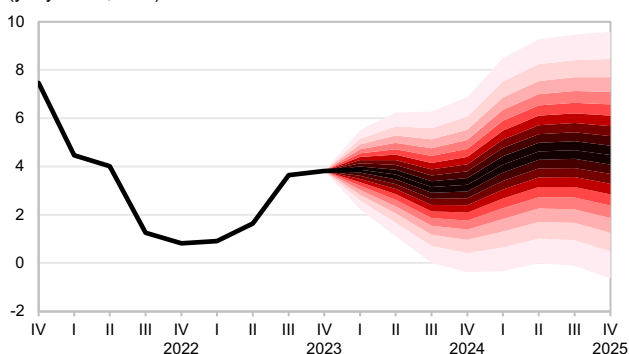
GDP projection

According to the SORS estimate, fully consistent with our projection, in 2023 real GDP growth came at 2.5%, led by elevated activity in all production and most service sectors. An almost equal impetus came from construction, industry and agriculture. On the expenditure side, net exports are estimated to have provided the strongest positive contribution to GDP growth thanks to the real growth in goods and services exports and a fall in imports in H1. An impulse also came from fixed investment and, to a lesser extent, personal consumption, with dampened inventories and government spending working in the opposite direction.

Under our new projection, **real GDP growth is anticipated to step up to 3.0–4.0% this year (central projection: 3.5%)**. The achievement of the projection will be supported by the carry-over effect from 2023, estimated to equal around 1.5 pp. Economic growth will

Chart V.0.27 GDP growth projection

(y-o-y rates, in %)



Source: NBS.

be propped by domestic demand – consumption and fixed investment. Household consumption will rise on account of a further increase in employment and wages, notably in the private sector, as well as pensions, without fuelling any stronger inflationary pressures. Fixed investment is expected to rise owing to a reduction in the global risk premium and receding global inflationary pressures, but still more so owing to elevated corporate profitability, robust FDI inflows, and government investment in transport, energy and utility infrastructure. In 2024, net exports will make a negative contribution, despite the expected continued rise in exports, due to the projected accelerated growth in the imports of equipment and intermediate goods for the needs of the investment cycle and stronger personal consumption.

Under our new projection, economic activity is expected to accelerate further in the years to come, **wherefore we have revised up our GDP growth projections for 2025 and 2026 to 4.0–5.0% (central projection: 4.5%)**. This assumes the expected recovery of the euro area and, as a result, external demand, and the materialisation of investment planned for Expo 2027 and other infrastructure projects.

When it comes to the GDP growth structure from the aspect of its use, a significant positive contribution, of 2.0 pp in 2024, is expected from **private consumption**, whose share in GDP is the largest. Consumption will be led by a further increase in employment and wages (including minimum wage growth) and pensions, in accordance with fiscal rules. As the anticipated private sector wage growth reflects labour productivity gains, no major inflationary pressures are expected on those grounds. Real disposable income will increase on account of inflation's slowdown and lower costs of housing loan repayment, reflecting the NBS decision to temporarily cap those rates until the end of the current year. Also, it is reasonable to expect that central banks will embark on gradual monetary easing in 2024, which should encourage lending activity and support household consumption. Still, the projected rise in private consumption in 2024 and the years beyond is slower than the projected GDP growth, contributing to medium-term price stability.

In accordance with the plan defined by the revised fiscal strategy for 2024, we expect **government spending in 2024** and beyond to continue to lend a moderately positive impetus to GDP growth of around 0.3 pp on average annually. This is indicated primarily by public sector wage outlays, projected at around 10% of GDP in the medium run, in line with fiscal rules, while the share of outlays for goods and services in GDP will be even slightly declining.

Chart V.0.28 Contributions to real GDP growth (in pp)

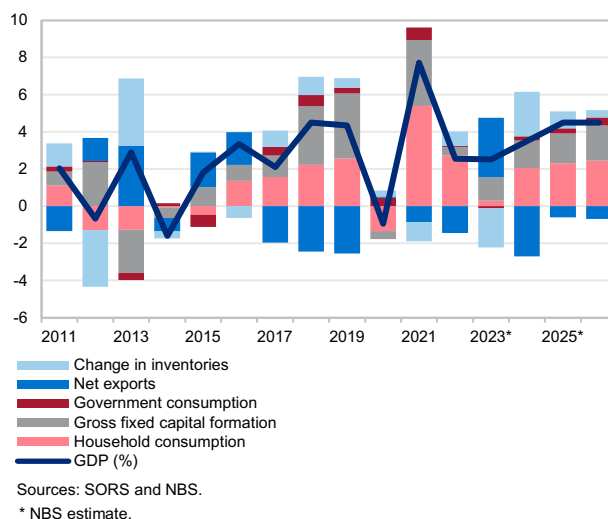


Chart V.0.29 Rate of growth in private consumption and its sources (nominal y-o-y rates, in %)

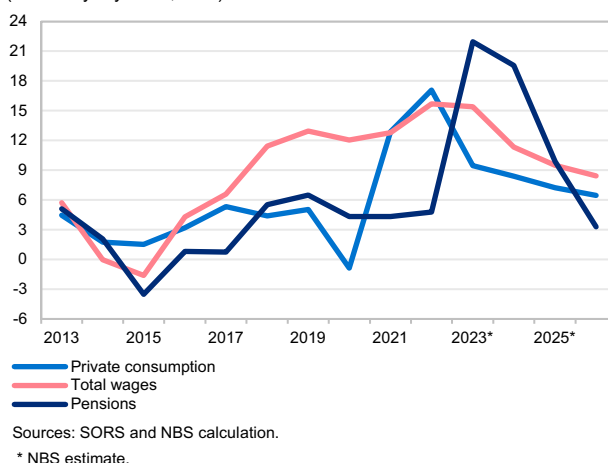


Chart V.0.30 Fixed investment (y-o-y growth, in pp)

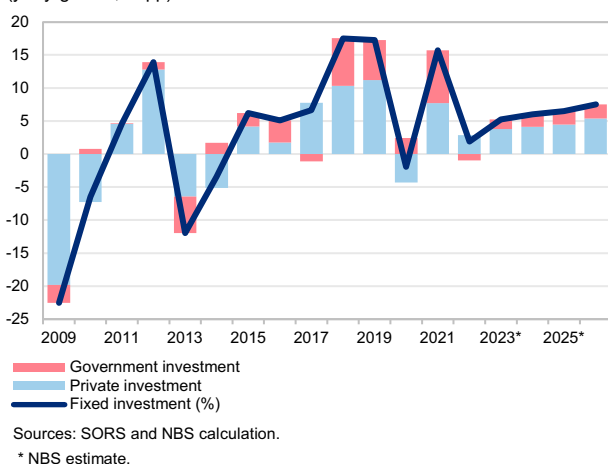
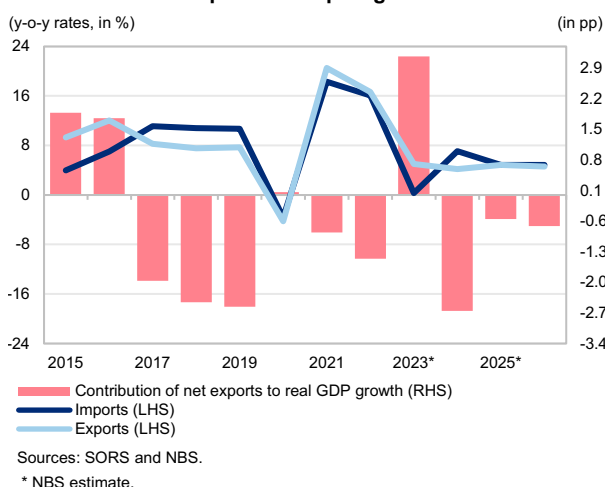


Chart V.0.31 Real export and import growth

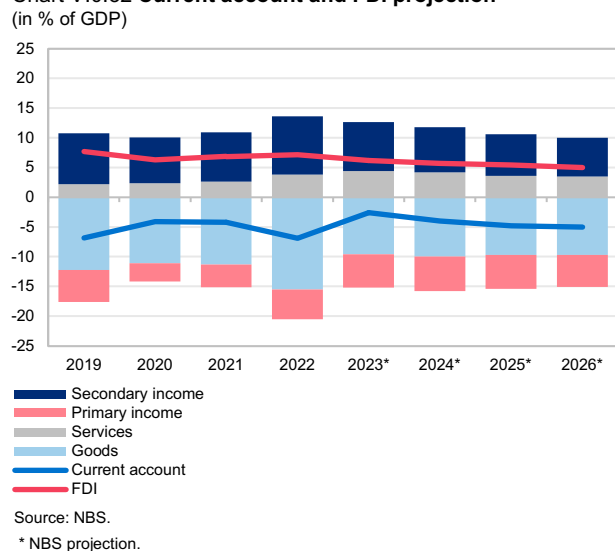


Under the new projection, **private investment** is expected to grow at a faster pace in 2024 and contribute 1.0 pp to GDP growth. The contribution of investment is projected to increase in the years to come. The positive dynamics of private sector investment activity mirrors the preserved investor confidence, a favourable growth outlook, and the proven resilience to past negative external shocks. The expected monetary easing by leading central banks and inflation's slowdown will have a positive impact on investor sentiment, supporting both domestic and cross-border investment loans. Still, the main source of funding private investment will remain equity, owing to elevated corporate profitability and the expected further, relatively robust FDI inflows. **Government investment** is also anticipated to step up, contributing 0.5 pp to GDP growth in 2024 and beyond, according to the new projection. Significant transport infrastructure and energy projects, to be financed with government funds, have been planned. In anticipation of Expo 2027 in Belgrade, we can also expect further sizeable investment in other public infrastructure.

A gradual rebound of **inventories** is expected in 2024, given that their large portion was used last year for domestic consumption and partly for exports. Agricultural inventories will be replenished thanks to good last year's season, particularly of autumn crops. The contribution of inventories is likely to be close to the neutral level in the coming years.

Given the expected effects of past investment in export-oriented sectors and the gradual recovery of external demand, our exports are projected to increase further in 2024. Owing to the good last year's agricultural season, particularly of autumn crops, the yields of primary agricultural commodities exceeded significantly the domestic needs, which will most probably push up exports this year. Despite the expected rise in the imports of primarily tourism services in an environment of elevated private consumption, we expect the surplus in services trade to stay at a similar level as in 2023, reflecting broad-based growth in the exports of services by type, notably ICT and business services, tourism and air transport services. However, given the planned investment activities going forward, in 2024 we projected a vigorous rise in imports (faster than the projected export growth), notably of equipment and intermediate goods. Growing private consumption on the back of higher disposable income will prop up consumer goods imports as well. This will result in a negative contribution of **net exports** (-2.7 pp). Given the expected acceleration of the investment cycle, net exports are likely to continue to provide a negative contribution of around 0.6–0.7 pp in the years to come as exports will rise at marginally lower rates than imports.

Chart V.0.32 Current account and FDI projection

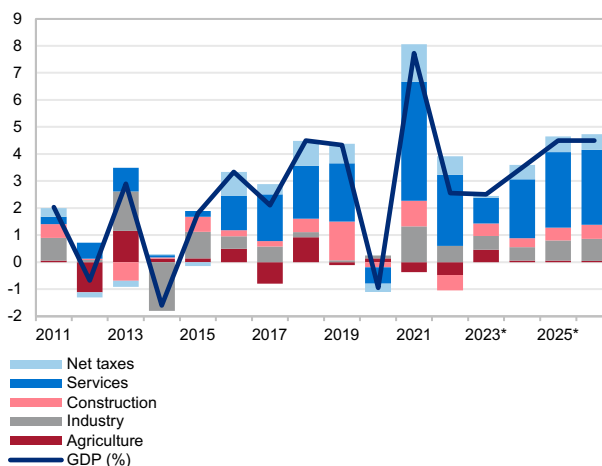


Faster real growth in imports than exports this year and in the years to come will lead to a higher foreign trade deficit than in 2023, while terms of trade, i.e. rising export and falling import prices, will work towards its reduction. As far as other components of the **current account** are concerned, the projection assumes that the surplus on the secondary income account will not exceed 8% of GDP, which is an average pre-pandemic level. As net FDI inflows are expected at around 5% of GDP, the yield based on their ownership will remain a solid expenditure item on the primary income account, whose deficit will thus moderately widen. FDI inflows are expected to remain broad-based in terms of geography and project, with the bulk channelled to export-oriented sectors.

Given all the above, we project **the current account deficit to approach 4% this year, and move in the range of 4–5% of GDP in the medium run**. It is important to note that this is a level that ensures external sustainability. As in the past nine years, the current account deficit is estimated to be fully covered by net FDI inflows.

On the production side, GDP growth will continue to be led by service sectors (2.2 pp), supported by rising personal consumption, as a reflection of positive labour market trends, rising wages and disposable income, notably in an environment of inflation's slowdown. Consistent with the growth of service sectors, a positive contribution is estimated to come from **net taxes** (around 0.5 pp annually). **Production sectors** are also projected to expand, providing a cumulative contribution to GDP growth of 0.9 pp in 2024, according to the new projection. The strongest positive impetus is expected from accelerated **industrial** growth. A similar contribution (0.2 pp) is likely to come from its manufacturing segment, as new capacities are expected to be activated and the existing ones to be expanded. Energy will also be a contributor (0.2 pp). In accordance with the new arrangement with the IMF, structural reforms have been planned in the energy sector. The launch of a new facility in the Kostolac thermal power plant will also give a positive contribution to GDP. Owing to greater exploitation of coal and metal ores, particularly copper, mining is expected to give a mild, positive contribution (0.1 pp). **Construction** is also anticipated to be a positive contributor (around 0.3 pp) given the planned implementation of projects in the fields of transport, energy and utility infrastructure. We have assumed a continued moderate increase in **agricultural** production, reflecting the modernisation of equipment and stepped-up implementation of agrotechnical measures, supported by higher government subsidies to the agricultural sector. As

Chart V.0.33 **Contributions to real GDP growth, production side**
(in pp)



Sources: SORS and NBS.

* NBS estimate.

a result, agricultural production is likely to give a mild, positive contribution to GDP. In the years to come, the contribution of construction, manufacturing and most service sectors is expected to increase, reflecting the organisation of Expo 2027.

Inflation projection

Like the previous one, our new inflation projection mostly reflects the fact that global inflationary pressures have continued easing and that the effects of monetary policy tightening are increasingly felt. Under the February central projection, **y-o-y inflation will most probably retreat within the target band by mid-2024**, continue to slow thereafter, approach the target midpoint of 3% by year-end, and stay around this level until the end of the projection horizon. The new inflation projection is slightly lower than the November one as we have assumed reduced global prices of primary commodities – oil and primary agricultural commodities.

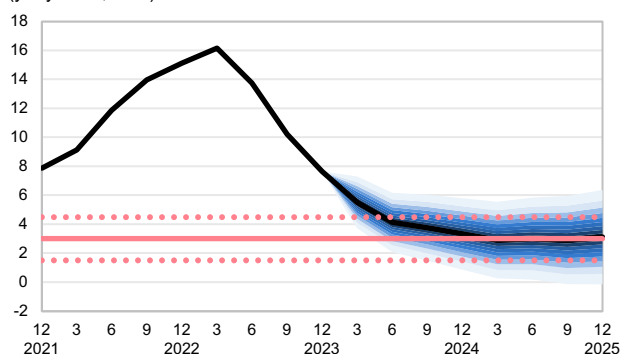
Though high geopolitical tensions, trade fragmentation and protectionist measures persist, several key factors will aid the downward trajectory of y-o-y inflation: stringent monetary conditions, subsiding inflation expectations, slowing of imported inflation, falling prices of primary agricultural commodities and the negative output gap.

Most central banks have now in all likelihood ended the cycle of **monetary policy tightening**, and some have embarked on monetary policy easing. Leading central banks, the ECB and the Fed, are expected to start relaxing their monetary policies this year. As inflation has subsided, however, real interest rates will remain elevated and monetary policies will stay stringent for some time yet.

In the current cycle of monetary tightening, the NBS Executive Board sought primarily to impact **market players' inflation expectations**, accelerate their retreat within the target band and ensure that inflation strikes a sustainable downward path. Inflation expectations of the financial sector declined in particular, and are within the NBS target band. Inflation expectations of all sectors are expected to go down as current inflation declines, prompting a further fall in inflation and, at the same time, supporting a rise in the real interest rate and a more restrictive effect of monetary policy even without added tightening of monetary conditions.

As in the prior projection, a **key assumption underpinning the anticipated declining inflation**

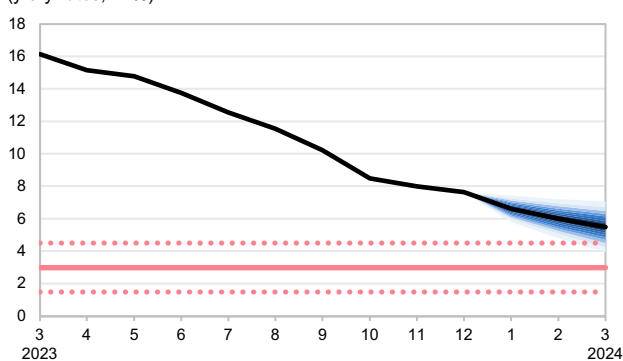
Chart V.0.34 Inflation projection
(y-o-y rates, in %)



Source: NBS.

The fan chart depicts the probability of various inflation outcomes in the next eight quarters. The central projection is within the darkest central band and the probability that inflation would lie in it is 10%. Each following shade includes 10% probability, which means that outcomes of inflation somewhere within the entire fan chart are expected with probability of 90%. In other words, the probability that inflation in the next eight quarters would lie somewhere outside the band in the chart is 10%.

Chart V.0.35 Short-term inflation projection
(y-o-y rates, in %)



Source: NBS.

trajectory is the decrease in inflation across the world, primarily in the euro area. Imported inflation will subside under the impact of both supply- and demand-side factors. On the supply side, it is important that the prices of energy and other primary commodities have gone down, and global value chains have improved. On the demand side, there are the effects of rising interest rates due to restrictive monetary policies of leading central banks and the exhaustion of households' savings accumulated in the first stage of the pandemic, while fiscal aid programmes for citizens have been wound up in large economies.

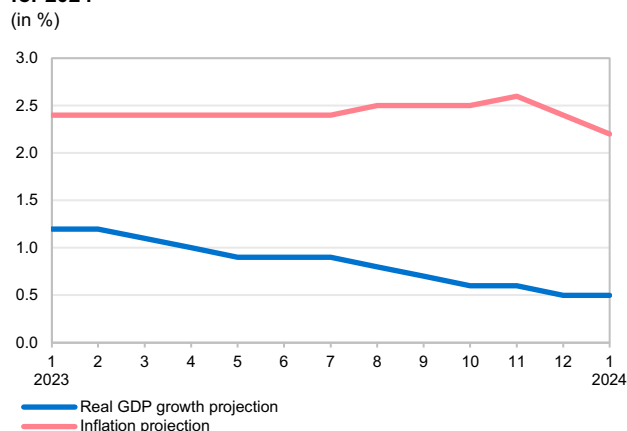
Though inflation is receding, in most countries it will not return within the target band before 2025. There is still concern over **tight labour markets** and the possible triggering of the price and wage spiral. Labour costs are expected to rise vigorously in the euro area, powering core inflation. The ECB still expects nominal wage growth to slow gradually during the projection horizon and inflation to subside, as this will weaken pressures for higher wages in order to offset inflation.

After peaking in 2022, **prices of primary agricultural commodities and food slid further**, sustaining inflation's downward trajectory. Global food prices, according to the FAO index, lost 10.1% last year, the largest annual drop since 2015. Global food prices are expected to subside further in the period ahead, as indicated by the anticipated decrease in primary agricultural commodity prices, consistent with futures. This also reflects a reduction in the costs of agricultural inputs, notably **mineral fertilisers**.

By contrast to our previous projection, we no longer expect **the global crude oil price** to be the key inflationary factor. The global oil price has receded since our previous projection despite the Middle East conflict and reduced output by OPEC+, as supply was offset by other producers, mostly Iran and the USA. Oil futures also went down, as did the oil price expectations of almost all relevant institutions. The key reason behind oil price slowing is slackened oil demand due to weaker economic activity globally and in China. Tensions early this year, which threaten to compromise the shipping of oil (and other commodities) via the Black Sea and the Suez Canal, mandate caution, however, as abandoning this route would greatly slow oil shipping and increase the costs of oil transportation, insurance and other logistics services.

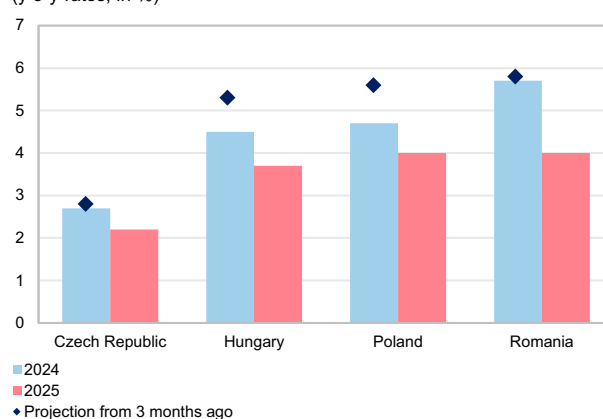
Consistent with weak global growth and tight financial conditions during most of the projection horizon, we expect disinflationary pressures on account of **external demand** to persist. Euro area growth is anticipated to

Chart V.0.36 **GDP and inflation projections of the euro area for 2024**



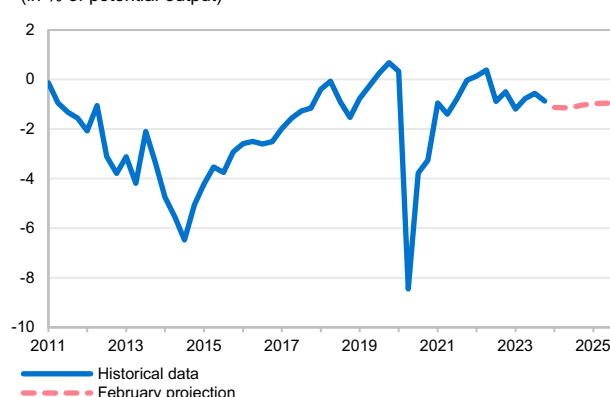
Source: Consensus Economics.

Chart V.0.37 **Projection of consumer price growth**
(y-o-y rates, in %)



Source: Consensus Economics.

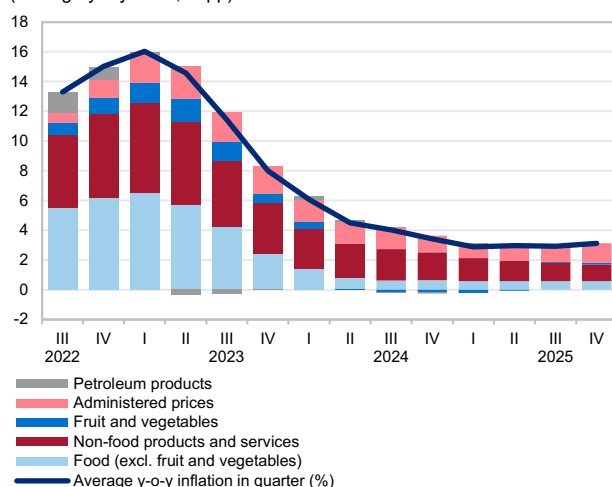
Chart V.0.38 **Output gap projection***
(in % of potential output)



Sources: SORS and NBS.

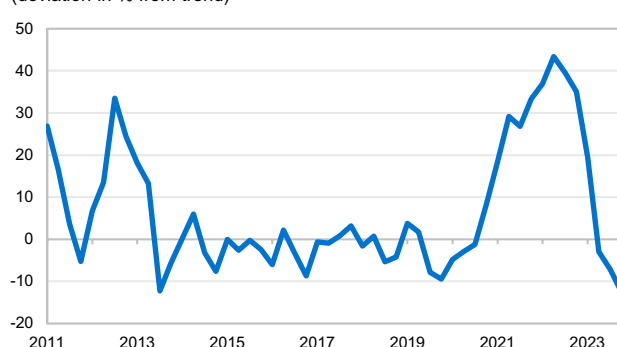
* Output gap is estimated on the basis of NAVA.

Chart V.0.39 Contributions to y-o-y inflation by component
(average y-o-y rates, in pp)



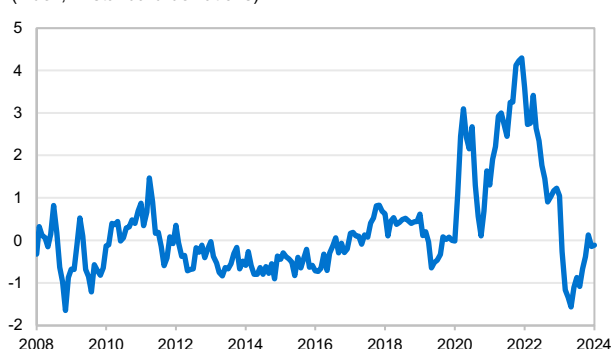
measure 0.8% in 2024 and 1.5% in 2025. Such modest growth mostly reflects trends in Europe's strongest economy and our leading trade partner, Germany. The Bundesbank expects modest growth of 0.4% and 1.2% this and the next year, respectively, reflecting weak external demand, slowly rising domestic consumption and restrictive financial conditions for investment. In regard to **domestic demand in Serbia**, a somewhat lower income disposable for consumption on account of past monetary tightening by the ECB and the NBS, and the expected tighter fiscal policy stance, will be partly offset by higher private sector wages and the continued rise in employment. For this reason, the negative output gap is expected to deepen slightly in H1 2024 and then start to narrow, but it will not close until the end of the projection horizon.

Chart V.0.40 Real marginal costs gap in food production
(deviation in % from trend)



We expect the contribution of all inflation components to y-o-y inflation to decrease, aiding its further slowdown. In particular, this refers to **food prices (excluding fruit and vegetables)**, which gave the biggest push to y-o-y inflation growth in the previous period. The decline in the contribution of food prices will reflect the high base for industrial food products and reduced cost-push pressures in food production due mostly to lower prices of primary agricultural commodities (corn, wheat and soy) which have returned to their pre-crisis levels, as well as to receding imported inflation. The dissipation of cost-push pressures in food production is indicated by the further closing of the real marginal costs gap (measured by the deviation from trend of the ratio of input prices to prices of final food products) which has entered negative territory. The gap began to close in Q3 2022, and entered negative territory from Q2 2023 with additional food price hikes and the decline in prices of primary agricultural commodities. We expect the contribution of food prices to y-o-y inflation to subside further in H1 this year and level off at 0.6 pp until the end of the projection horizon.

Chart V.0.41 Global supply-chain pressures
(index, in standard deviations)



The contribution of **non-food inflation** to y-o-y inflation is also expected to decline. The prices of this product category largely depend on the prices of numerous imported products, primarily from the euro area, our most important trade partner. The rise in non-food inflation since 2021 coincides almost entirely with growth in imported inflation from the euro area and other non-euro area EU member countries, which are also our important partners (such as Hungary, Romania, the Czech Republic). As in the prior projection, imported inflation is a factor whose effect on non-food product prices will weaken considerably over the projection horizon. A continued decline in inflation expectations will also

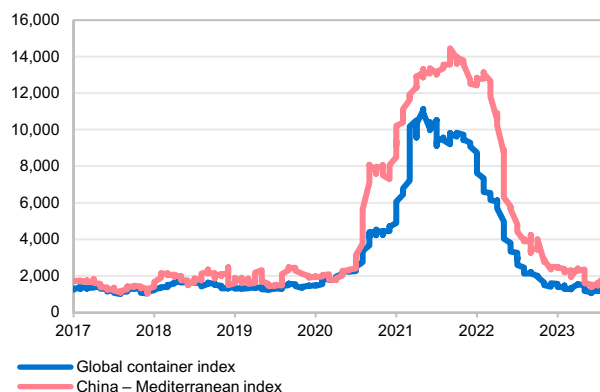
relieve pressures on domestic prices of non-food products. Though the global supply chain pressure index increased over the past months, it is still negative and we expect it to produce no pressures on non-food inflation. We are more concerned about the elevated costs of international container transport, though they are still well below the peak reached in 2022. With all this in mind, we expect the contribution of non-food products and services to subside steadily – from around 2.7 pp early this year to around 1 pp towards the end of the projection horizon.

As we assumed in our previous projection, no further hikes in the prices of electricity and natural gas are planned for this year, since most of the price adjustments were made in 2023. For this reason, we expect much lower **administered price** growth of 5.2% and 6.5% in 2024 and 2025, respectively. The contribution of administered prices to y-o-y inflation will decline gradually during the year to around 1 pp at end-2024.

As the global oil price has decreased since our previous projection and oil price expectations for the coming period have gone down, we expect **petroleum product prices** to contribute less to y-o-y inflation than we anticipated three months ago. Instead of having an inflationary effect for most of 2024, we now expect petroleum product prices to provide a negligible contribution to y-o-y inflation both this and the next year.

We expect **fruit and vegetable prices** to gradually return from their current relatively high level to their long-term trend (which corresponds to the rise in the prices of non-food products and services). With the easing of cost-push pressures from the prices of energy, primarily of natural gas and, by extension, mineral fertilisers, as well as due to the new agricultural season (which we assume to be slightly better than average) and the base effect, we expect their contribution to y-o-y inflation to decline notably early this year and turn negative from Q3, i.e. work towards reducing y-o-y inflation in the coming year, and have a negligible impact on y-o-y inflation in H2 2025.

Chart V.0.42 **Cost of container transport**
(in USD)



Source: Freightos.

Text box 5: Comparison of the outcome of macroeconomic projections for 2023 with the NBS's projections from a year ago and with projections of other institutions

The year 2023 was fraught with numerous challenges, mostly from the international environment, making it very difficult for central banks, the NBS included, to make projections. As data on the outturns of macroeconomic indicators for 2023 are now available, this text box looks into the degree to which our projections from a year ago have materialised, and how and to what extent they changed during the year.

At present, we can conclude that global economic flows in 2023 were generally better than expected by relevant market players. Global economies displayed considerable resilience to numerous shocks, and central banks' monetary policy tightening affected global growth less than expected. With the normalisation of global supply chains and the easing of inflationary pressures, particularly energy- and food-related ones, global inflation slackened gradually but steadily in 2023, giving rise to optimism that high interest rates, which, as a rule, contain faster economic recovery, would not linger for much longer and may begin to decline in the coming period.

As 2023 was marked by globally heightened uncertainty and shocks from the international environment, the risks surrounding macroeconomic projections were more pronounced than in normal circumstances, which is also confirmed by the analysis of the median square error in the forecasts made not only by the NBS,¹ but also by other central banks and relevant international financial institutions. By analysing the departure of actual from anticipated movements, it will be easier to make projections for the coming period as well, since based on this analysis we can conclude which projection methods and data sources proved to be more accurate. In this text box, we also compared our projections with other relevant institutions' projections for Serbia in order to assess the reliability and credibility of our estimates.

When it comes to the GDP projection for 2023, our central projection from November 2022 until May 2023, and in November 2023, was entirely in line with the actual outcome and measured 2.5%. In August, we still expected growth to range between 2% and 3%, but closer to the lower bound of the projected range, due to the poorer economic growth outlook in the euro area, notably in Germany. Our economy, however, demonstrated greater than anticipated resilience to subdued demand from the euro area. The same was confirmed by monthly data for Q3 which arrived in the meantime, so we again revised up our GDP projection for 2023 to 2.5% in November. If we compare our projection with those of other relevant international institutions (IMF, World Bank, European Commission, EBRD, Consensus Economics), we can see that other institutions mostly expected 2023 growth to be lower than that projected by the NBS and that during the year their projections were mostly revised down to below or around 2%. The median square error calculated for the 2016–2019 period indicates that the NBS's forecasts were for the most part more accurate than the projections of other institutions.² When it comes to the projection for 2024, throughout 2023 the NBS forecast GDP growth in the range of 3–4%, with central projection at 3.5%. Other institutions have also projected 2024 GDP growth within the 3–3.5% range, and mostly expect growth of 3.8% in 2025 which is close to the NBS's projection as well. Similarly to us, other institutions also expect growth to be guided by domestic demand, notably private consumption and fixed investment.

Table O.5.1 Projections of Serbia's GDP

	Projection for 2023					Projection for 2024				
	IX–XI 2022	I–II 2023	IV–V 2023	VII–VIII 2023	X–XI 2023	X–XI 2022	I–II 2023	IV–V 2023	VII–VIII 2023	X–XI 2023
National Bank of Serbia	2.5	2.5	2.5	2.0*	2.5	3.5	3.5	3.5	3.5	3.5
IMF	2.7	-	2.0	2.0	2.0	3.5	-	3.0	3.0	3.0
Consensus Forecasts	2.6	2.4	2.1	1.9	2.0	-	3.3	3.1	3.2	3.0
European Commission	2.4	-	1.9	-	2.2	3.0	-	3.0	-	3.1
World Bank	2.7	-	2.3	-	2.0	2.8	-	3.0	-	3.0
EBRD	3.3	-	2.0	-	1.8			3.5		3.5

Source: National Bank of Serbia (inflation reports), IMF (WEO and programme review press releases), Consensus Forecasts (monthly reports for Eastern Europe), European Commission (spring and autumn projections), World Bank (Regional Economic Updates, spring and autumn editions), EBRD (Regional Economic Outlook, spring and autumn editions).

* The NBS expected GDP in the 2–3% range, but closer to the lower bound.

¹ See Text box 1: Analysis of factors behind the deviation of actual from projected inflation in Serbia in 2021 and 2022 (*Inflation Report – November 2022*).

² See Text box 5: NBS's projection of domestic GDP growth, its revision during the year and comparison with projections of international financial institutions (*Inflation Report – November 2020*).

The inflation outturn in 2023 was also broadly in line with our projections from a year ago, despite persisting uncertainty surrounding prices of oil and other energy in the global market.

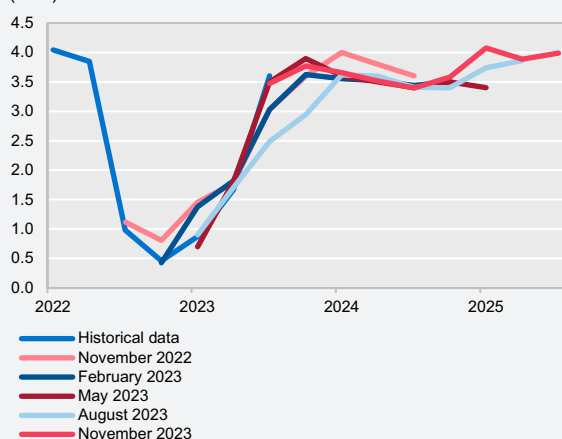
Since November 2022, we have constantly expected inflation to measure 8% or less at end-2023, and were among the first institutions to anticipate such inflation level in late 2023. The average inflation in 2023 was 12.1% and was even lower than we projected. Outturns in the latter half of 2023 generally surprised on the downside, since food prices slackened sooner than expected, as did the prices within core inflation. Throughout 2023, we expected inflation to strike a downward path in 2023 and 2024 due to the effects of monetary policy tightening, high base, easing of global cost-push pressures, slowing of imported inflation, declining inflation expectations and subdued external demand. Other international institutions had similar projections of average inflation in 2023, while in 2024 they expect average inflation to be around 1 pp higher than projected by the NBS.

Table O.5.2 Inflation projections for Serbia

	Projection for 2023					Projection for 2024				
	X–XI	I–II	IV–V	VII–VIII	X–XI	X–XI	I–II	IV–V	VII–VIII	X–XI
	2022	2023	2023	2023	2023	2022	2023	2023	2023	2023
National Bank of Serbia	12.5	12.3	12.7	12.7	12.5	-	4.5	4.7	4.4	4.6
IMF	8.3	-	12.2	12.4	12.4	4.2	-	5.3	5.3	5.3
Consensus Forecasts	7.5	10.0	10.5	10.9	12.0	-	4.7	4.8	4.7	5.2
European Commission	10.6	-	12.4	-	12.7	5.6	-	5.9	-	5.5
World Bank	9.2	-	8.2	-	12.4	3.7	-	4.0	-	5.3

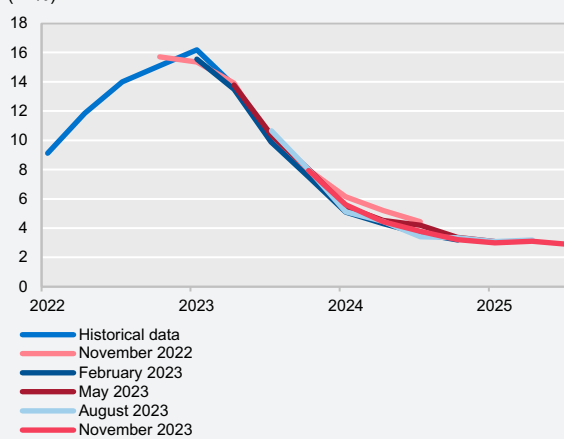
Source: National Bank of Serbia (inflation reports), IMF (WEO and programme review press releases), Consensus Forecasts (monthly reports for Eastern Europe), European Commission (spring and autumn projections), World Bank (Regional Economic Updates, spring and autumn editions).

Chart O.5.1 Actual and projected GDP in Serbia (in %)



Source: NBS.

Chart O.5.2 Actual and projected y-o-y inflation in Serbia (in %)



Source: NBS.

Table O.5.3 Projections of Serbia's current account

	Projection for 2023					Projection for 2024				
	X–XI	I–II	IV–V	VII–VIII	X–XI	X–XI	I–II	IV–V	VII–VIII	X–XI
	2022	2023	2023	2023	2023	2022	2023	2023	2023	2023
National Bank of Serbia	-9.4	-6.9	-4.5	-2.5	-2.5	-7.3	-6.2	-4.3	-3.4	-3.8
IMF	-7.0	-	-6.1	-4.7	-2.3	-5.0	-	-5.7	-4.6	-3.2
Consensus Forecasts*	-5.7	-5.6	-4.8	-3.9	-3.4	-	-5.0	-4.3	-3.9	-3.7
European Commission	-7.8	-	-5.5	-	-3.3	-6.5	-	-5.1	-	-3.5
World Bank	-9.4	-	-6.3	-	-2.5	-7.9	-	-5.4	-	-3.4

Source: National Bank of Serbia (inflation reports), IMF (WEO and programme review press releases), Consensus Forecasts (monthly reports for Eastern Europe), European Commission (spring and autumn projections), World Bank (Regional Economic Updates, spring and autumn editions).

* The NBS's projection of the nominal GDP was used when calculating the share of the current account in GDP.

The projection of the current account deficit for 2023 was revised during the year and departed the most from end-2022 projections, when uncertainty regarding global energy prices was still present (oil, gas and electricity) as the winter season was about to start and geopolitical tensions were running high. For this reason, current account deficit projections for 2023 were initially very high. They turned more favourable as the year advanced, reflecting primarily the sharp decline in energy prices and the resultant decrease in the value of energy imports, as well as investment in export sectors due to which manufacturing exports were more resilient to weaker external demand from the euro area. From mid-2023, we expected the 2023 current account deficit to measure an all-time low of around 2.5% of GDP, and the outturn (2.6% of GDP) was in line with our projection. Other institutions also revised down their current account deficit projections for 2023, taking into account better than expected export outturns and lower import. According to the latest available data, all relevant institutions expect the current account deficit to range between 3% and 4% in 2024, reflecting domestic demand growth and, even more importantly, accelerated investment growth.

In view of the above and the experience from previous years which taught us that the global environment and macroeconomic conditions can change very quickly, the NBS will remain cautious and conservative when producing projections in order to preserve its credibility and continue to make appropriate and well-timed monetary policy decisions. We will also continue the practice of explaining, in a transparent manner, the reasons behind the departure of actual from projected outcomes, in order to point to the importance of materialisation of potential risks which surround projections and form their integral part.

Risks to the projection

The risks to our new inflation and GDP projections are still mainly associated with factors **from the international environment** – geopolitical relations, outlook for global growth and, in particular, euro area growth, and their impact on world prices of energy and other primary commodities. To some degree, the risks also stem from the persistence of core inflation and the duration of monetary policy tightening by leading central banks. **At home**, the risks to the projection are associated with the pace of rebound in domestic demand, primarily on account of the level of FDI inflows, and investment in infrastructure and the energy sector. Another source of risk is the outcome of the agricultural season at home, primarily through its impact on prices of fruit and vegetables. **Overall, we judge the risks to the GDP and inflation projections to be symmetric over the projection horizon.**

Table V.0.6 **Key risks to the GDP and inflation projection**

Risk	Possible channels of influence	Estimate of the risk effect on GDP relative to the baseline scenario	Estimate of the risk effect on inflation relative to the baseline scenario
Intensification of geopolitical tensions and impact on the prices of oil, gas and electricity in the global market (Serbia net energy importer)	Intensification of geopolitical tensions and the conflicts would lead to renewed growth in global energy prices. Production costs would go up, reducing funds for investment and possibly generating second-round effects on inflation, which could partly be offset by lower demand for these products.	↓	↑
Global growth prospects	Slower economic growth globally, and particularly in the euro area, would result in subdued external demand for our exports and reduced demand-side pressures on inflation.	↓	↓
Global inflation, notably in the euro area, and monetary policies of leading central banks	– Higher/lower than expected global inflation, notably in the euro area, leads to higher/lower imported inflation, which increases/decreases production costs. – Greater and/or faster than expected monetary policy tightening by leading central banks results in greater investor risk aversion and decreased capital flows to emerging economies, and vice versa.	↕	↕
International prices of primary agricultural commodities and metals (Serbia is a net exporter)	A rise/fall in the prices of primary agricultural commodities and metals has inflationary/disinflationary effects. This inflates/deflates production costs and decreases/increases income available for investment, but the effects on GDP would most probably be neutralised by higher/lower exports, as Serbia is a net exporter of primary agricultural commodities and metals.	↕	↕
Pace of domestic demand growth	Higher/lower disposable income on account of faster/slower than expected wage and employment growth due to higher/lower export demand and/or higher/lower FDI inflow would result in faster/slower growth in domestic demand and stronger/weaker inflationary pressures. Accelerated activity growth in construction amid faster implementation of infrastructure projects by the government, investments planned in the lead-up to hosting Expo 2027, as well as private investment in the conditions of receding inflationary pressures, would drive up domestic demand, GDP and inflation.	↑	↑
Recovery of the energy sector	Energy sector reform may have weaker or stronger than expected effects on the volume of production.	↑	↓
Agricultural season	A better than assumed agricultural season leads to higher supply of agricultural products and may produce disinflationary pressures, and vice versa: a poorer than assumed agricultural season results in reduced supply of agricultural products and inflationary pressures.	↕	↕

Note: ↑ means a more inflationary effect relative to the baseline scenario, ↓ lower economic growth, ↑ higher economic growth, ↓ a more disinflationary effect, and ↕ that the risks to the projection are symmetric relative to the baseline scenario.

Geopolitical tensions remain the key source of instability in commodity and financial markets. They mounted early this year when shipping of oil and other commodities (notably automotive industry parts) via the Red Sea and the Suez Canal was compromised. Abandoning this route would greatly slow commodity transport and inflate the costs of transportation, insurance and other logistics services. Governments, investors and consumers are concerned over energy supply and renewed hikes in the prices of oil, food and other commodities, which could give rise to a fresh cycle of inflationary pressures and extend and/or intensify future monetary policy tightening in order to rein in inflation. Even if this produced no direct effects on energy prices in Serbia, it would still lead to higher imported inflation and, by extension, inflation at home. Further economic and political fragmentation could divide countries into trade blocs and cause major production losses worldwide, including negative effects on our key trade partners. Namely, relations between economies in the West and China have worsened of late. If they deteriorated further, this could have negative spillovers on the world's economy and global supply chains. Our main trade partner, Germany, would be affected in particular, not only due to falling demand from China, but also due to the German economy's reliance on China's critical inputs. According to a Bundesbank analysis, nearly one out of every two firms in Germany's manufacturing sector directly or indirectly sources critical intermediate inputs from China.¹⁴ Germany's financial sector could also be at risk, as German banks have large exposures to domestic enterprises that are heavily dependent on China. As the geopolitical situation is unlikely to improve soon, we judge the **risks to the GDP projection on account of potential escalation of geopolitical tensions to be skewed to the downside, and to the inflation projection – to the upside.**

Global economic activity will in all likelihood remain subdued for a while. According to the World Bank's January estimate, it will continue to slow in 2024, for the third consecutive year. Downside risks to the outlook predominate. The IMF, on the other hand, revised up its global growth projection for this year by 0.2 pp to 3.1% in January. Whereas for a long time the risks were assessed as tilted to the downside, the IMF now judges them to be broadly balanced. According to both institutions, the key downside risks are the intensification of geopolitical tensions and the related shocks in global primary commodity markets, which could further slow

¹⁴ "Economic risks from Germany's ties with China," Bundesbank website, 24 January 2024.

global growth and result in persistent inflation, debt repayment woes due to elevated costs of borrowing, growth disappointment in China, further trade and financial fragmentation due to geopolitical tensions, and global shocks caused by climate change and natural disasters. If the global economy weakens more than anticipated, so will the **economic activity in the euro area**, our main trade partner. Euro area growth could also surprise on the downside if the effects of tight monetary policies turn out to be stronger, and geopolitical tensions flare further. If the global economy and, in particular, the euro area slowed more than expected, this would affect Serbia through lower external demand and reduced energy and primary commodity prices. Subdued external demand would hold back growth in domestic manufacturing and exports.

Global growth could also be higher than anticipated. On the upside, the IMF notes the possibility that inflation will decelerate faster than expected which, combined with a quicker decline in inflation expectations, could allow central banks to move forward with their policy easing and contribute to raising growth. Governments in major economies might withdraw fiscal policy support more slowly, and there is also the possibility of larger benefits from artificial intelligence and supply-side reforms. As the upside risk, the World Bank sees the recent surprisingly robust economic activity in the USA which, together with declining global inflation, points to the possibility that global growth could be higher than projected. In its December projection, the ECB states that the euro area's economic growth in 2024 could be even higher if the increase in private sector real income encourages higher consumption, and global growth surprises on the upside. It is possible that consumers in leading economies have not yet drained their stock of savings accumulated during the pandemic, and that policy support measures in China could bolster the recovery and generate positive global spillovers. Faster GDP growth in China would probably result in higher prices of energy and other primary commodities, making it more difficult to rein in inflation and calling for more stringent monetary policy. With all this in mind, we judge the **risks to the GDP projection, and to a smaller extent to the inflation projection, to be somewhat tilted to the downside in respect of global growth and external demand, particularly from the euro area.**

Taking into account the risks to global growth on the one hand, and the risks from geopolitical tensions on the other, we judge the **risks of departure of global prices of primary commodities (agricultural commodities and metals) to be symmetric.**

Though **global inflation** has receded, the path to sustainable price stability worldwide is still fraught with challenges. First of all, tight labour markets, particularly in advanced economies, could lead to higher than anticipated wage growth. A key issue in the euro area is whether demand will contract enough for companies to absorb the higher wage costs without further lifting the prices of their products and services, as this is the condition for achieving the inflation target in 2025. Central bankers are concerned that high inflation has given companies the pricing power they had not had for decades due to low inflation, which makes it more difficult to combat inflation. If **companies shift the wage increase onto consumers by raising the prices of their products**, both core inflation and inflation expectations would probably go up. This would additionally tighten monetary conditions over a longer time period, with negative implications for economic growth and financial stability. Weaker demand amid tighter than expected credit conditions and a more efficient monetary policy transmission mechanism would work in the opposite direction, particularly in the medium term.

Renewed inflation growth would lead to **tighter than expected monetary policies by leading central banks**. If leading central banks tightened their policies more than anticipated, global financing conditions would be even stricter, with risk premium going up and capital inflow to emerging economies dwindling, generating depreciation pressures. This would drive up the cost of FX borrowing at home, which would then have a dampening effect on domestic demand through lower disposable income for consumption and investments, while the maintained relative stability of the dinar exchange rate would significantly alleviate inflationary pressures from a possibly reduced inflow of portfolio investments. If inflation in advanced economies returns to lower levels sooner than expected and/or economic growth slows down more significantly, leading central banks could start lowering the rates sooner. As this would result in more favourable financial conditions globally, **we assess the risks on this account as symmetric**.

At home, the risks to the projection are associated with the **speed of domestic demand growth**. On the one hand, lower income resulting from subdued export demand could reflect negatively on the labour market, i.e. result in slower than anticipated employment and wage growth, with negative implications for domestic demand. On the other hand, **Serbia's ability to attract FDI** could turn out to be greater than anticipated, especially as our FDI inflow projections are quite conservative and record-high outturns were recorded over the past years, exceeding our

projections. This would lead to further growth in wages and employment. Faster than assumed performance of construction works would work in the same direction. As inflationary pressures have eased and the prices of construction elements and materials levelled off, the implementation of state-financed **infrastructure projects**, and of private investments, could speed up. The effect of implementation of investments planned in the lead-up to hosting Expo 2027 in the coming years could surprise us on the upside. With this in mind, we judge the **risks to the GDP projection on account of domestic demand to be skewed to the upside. Also, faster than anticipated domestic demand growth would add somewhat to inflationary pressures.**

Another risk to the projection are the **developments in the domestic energy sector**. Given the need to ensure energy security, but also a gradual transition to a green economy, significant investments in the energy sector have been planned under the IMF arrangement, which could produce stronger than anticipated effects on electricity exports. We therefore judge the risks **to the economic growth projection on this account to be tilted to the upside. At the same time, this reduces the need for major electricity price adjustments at home.**

The **agricultural season poses a symmetric risk to the inflation and GDP projections**, mostly through its impact on fruit and vegetable prices. We have assumed agricultural season this year to be slightly better than last year, and we used the same assumption for the agricultural season in 2025, taking into account advances in equipment modernisation and wider application of agrotechnical measures, propped up by higher government subsidies to agriculture.

As the key risks to inflation and other economic developments still emanate from the international environment, the NBS will continue to monitor and analyse trends in the international commodity and financial markets, as well as geopolitical relations, and estimate their impact on our economy. In making its monetary policy decisions the NBS will take into account that the key policy and required reserve rates have been raised in the past period and that the effects of these measures will continue to spill over to inflation. Going forward, delivering price and financial stability in the medium term will remain the monetary policy priority, as this contributes to sustainable economic growth and, by extension, to a further rise in employment and a favourable investment environment.

Text box 6: Alternative projection scenarios

According to the assessments of all relevant international institutions, risks to macroeconomic projections are lower than a year or two ago, though still abounding, and the major ones are associated with the further tightening of geopolitical tensions.

While the outbreak of the conflict in Israel had no substantial effect on global prices of primary commodities since our previous *Report*, geopolitical uncertainty remains the key risk to inflation and GDP projections due to the latest developments in the Middle East. Considering Yemen's Houthi rebel attacks on commercial ships in the Red Sea and the US and UK's response, this text box will look into the effects of the alternative scenario, assuming further tightening of geopolitical tensions in the Middle East. On the other hand, we will also present a scenario more favourable than the baseline, assuming that euro area inflation will continue to decline faster than expected, accounting for the fact that in their latest report from January, Consensus Economics gives a lower euro area inflation for this year (2.2%) than we assumed (2.6%), guided primarily by the ECB's December projections.

The escalation of the Israeli conflict stoked fears among market participants of contagion throughout the Middle East region, which would significantly impact the prices of primary commodities, mainly oil, given the large market shares of countries in the region. However, after the initial spike of around 5% in early October, the oil price was on a downward path until year end. The occasional departures and a moderate rise in the oil price reflect the Houthi attacks on ships in the Red Sea in mid-December and the US and UK interventions in mid-January. While these attacks had no major bearing on the oil price, most cargo ships resorted to the alternative route around Africa, which is much lengthier and increases the costs of container transport, as well as delivery deadlines, thus generating global supply bottlenecks. The Container Port Performance Index (CPPI) at end-January more than doubled compared to end-December, though remaining many times lower compared to where it stood post pandemic. As for global supply bottlenecks, according to the New York Fed index, January witnessed a 24.2 % increase compared to December, while remaining in the negative territory.

The continuing conflict in the Bab el-Mandeb Strait, connecting the Indian Ocean and the Red Sea, and routing around 40% of the marine trade between Europe and Asia, would lead to a further rise in container transport prices and bottlenecks in global supply chains, inducing new inflationary pressures. Apart from that, conflict spreading in the Middle East, primarily the involvement of Iran, which supports the Houthis, would spur energy price rise, not only because Iran is a major global oil exporter, but also due to its position on the Strait of Hormuz which connects the Persian Gulf and the Indian Ocean and serves as a passage for around one fifth of global oil exports and a large quantity of liquid gas. A spike in energy prices would thus trigger a rise in global inflation and additional tightening of financial conditions, and, by extension, a global economic slowdown. It would further undermine consumer and investment confidence, especially in emerging and developing economies, as the capital would retreat to advanced ones.

In view of all the above, in the first alternative (downside) scenario we assumed a rise in the oil price to around USD 100 per barrel by end-2024 and its partial decline to USD 95 per barrel by end-2025. In that case, the prices of primary agricultural commodities, whose movements are largely correlated with those of global oil prices, are assumed to gain around 12% at end-2024 relative to end-2023, only to fall slightly in 2025 (by around 2%). The consequences of the downside scenario would be as follows:

- A direct effect of the rise in global primary commodity prices on inflation at home would stem from higher prices of petroleum products in the domestic market and an indirect from higher food production costs. A rise in euro area inflation would also have an indirect effect on domestic inflation, on the same grounds, through higher import prices. In our estimate, the consequences of such a scenario would be higher average inflation, by 0.4 pp in 2024 and by 0.3 pp in 2025, compared to the baseline.
- Increased inflationary pressures would also induce a further tightening in monetary policies, which coupled with higher cost-push pressures, global fragmentation and rising risk premium, would negatively affect global economic growth. Lower external demand and tightened global financial conditions would also negatively affect domestic economic activity, via lower exports, as well as investments and consumption, which would nevertheless partly soothe inflationary pressures. Still, the effects on economic growth in such a scenario would be lower than the effects on inflation, probably not exceeding 0.2 pp.

• The effects of such a scenario would not reflect significantly on the current account deficit either. Lower external demand would dent the value of exports, which would in part be compensated by higher exports of agricultural commodities and metals due to the rise in their prices in the global market. Apart from that, higher prices of oil, and probably also of other energy products, would lead to higher energy imports, in value terms, but this would be offset by lower imports of equipment and consumer goods in conditions of lower external and domestic demand. Upward pressure on the current account deficit could come from higher expenditures on the primary income account driven by interest rate increases.

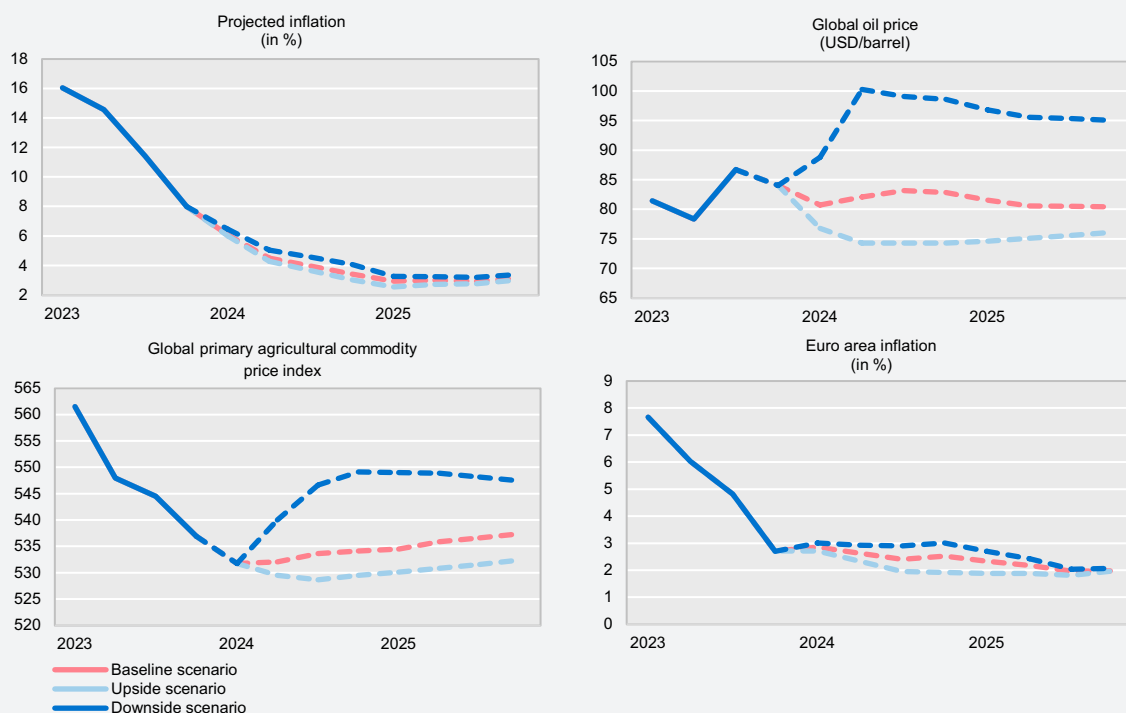
On the other hand, we developed an upside scenario in which we assumed that euro area inflation would slow down faster than expected and average 2.2% in 2024 vs. 2.6% envisaged in the baseline scenario. At the same time, we projected somewhat lower prices of oil (USD 74 per barrel) and primary agricultural commodities at the end of this year compared to the baseline (by around 7%), as also indicated by market futures. The materialisation of the upside scenario would entail the following:

• Average inflation would be lower by 0.3 pp in 2024, and by 0.2 pp in 2025 than in the baseline, reflecting lower inflation in the euro area and lower global primary commodity prices.

• Lower inflation in the euro area would spur faster monetary easing than expected, which would trigger growth in production and external demand. This would add around 0.2 pp to domestic economic growth. Lower inflationary pressures and lower risk premium would also benefit higher growth than in the baseline.

• The materialisation of upside scenario would result in a faster rise in exports on the back of higher external demand, lower energy imports due to the lower global oil price, and a decrease in primary income expenses reflecting lower interest rates. On the other hand, a rise in domestic demand would probably entail a stronger increase in imports than in the baseline, with the current account deficit remaining slightly lower than in the baseline nonetheless.

Chart O.6.1 Effects of alternative scenarios on inflation



Sources: SORS and NBS calculation.

Table A
Indicators of Serbia's external position

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
EXTERNAL LIQUIDITY INDICATORS (in %)																			
FX reserves/imports of goods and services (in months)	6.1	9.0	7.5	5.4	9.7	8.4	8.8	7.7	7.6	6.6	6.7	6.2	5.4	5.4	5.7	6.1	5.9	5.2	6.7
FX reserves/short-term debt ¹⁾	177.0	265.1	250.6	162.6	220.6	191.2	299.9	237.3	268.6	294.0	256.4	234.0	202.1	210.9	275.6	228.1	249.6	264.9	334.5
FX reserves / GDP	22.1	34.8	30.5	22.9	32.6	31.7	34.0	32.4	30.7	27.9	29.1	27.8	25.4	26.3	29.1	28.8	30.8	32.1	36.0
Debt repayment/GDP ²⁾	4.7	9.7	9.6	10.1	12.1	11.3	11.7	12.3	12.6	13.3	11.1	12.3	10.9	11.3	10.0	5.8	9.2	9.6	9.0
Debt repayment/exports of goods and services ³⁾	19.8	36.2	37.5	37.5	48.8	37.5	37.3	36.0	33.0	32.7	25.2	25.9	22.2	22.9	19.7	12.2	17.0	15.3	15.8
EXTERNAL SOLVENCY INDICATORS (in %)																			
External debt/GDP ³⁾	56.2	55.2	55.1	58.8	68.6	74.5	68.1	76.1	70.4	72.4	73.4	72.0	65.1	62.2	61.4	65.8	68.4	69.3	66.7
Short-term debt/GDP ³⁾	12.5	13.1	12.2	14.1	14.8	16.6	11.3	13.7	11.4	9.5	11.3	11.9	12.6	12.4	10.6	12.6	12.4	12.1	10.8
External debt/exports of goods and services ³⁾	234.9	205.7	214.3	218.9	276.9	247.1	216.5	223.6	184.0	177.7	166.8	152.4	132.2	126.0	121.0	138.2	126.6	110.2	109.8
FINANCIAL RISK EXPOSURE INDICATORS (in %)																			
FX reserves/M1	290.3	356.1	306.7	300.4	393.4	416.6	429.6	402.1	330.4	278.1	250.2	207.3	176.2	168.0	174.1	130.0	138.1	158.7	166.6
FX reserves/reserve money	169.8	179.5	173.8	140.7	190.5	196.4	207.6	197.9	199.9	196.6	193.7	196.6	185.0	171.4	194.1	157.1	180.0	180.2	201.0
OPENNESS OF ECONOMY (EXPORTS + IMPORTS)/GDP																			
	67.1	73.0	74.7	78.0	65.1	75.3	78.0	84.5	87.1	91.8	96.2	100.6	106.2	108.2	111.5	103.9	116.7	137.5	123.8
MEMORANDUM: (in EUR million)																			
GDP ¹⁾	22,276	25,906	31,551	35,701	32,486	31,546	35,432	33,679	36,427	35,467	35,740	36,779	39,235	42,892	46,005	46,815	53,345	60,426	69,120
External debt ³⁾	12,520	14,291	17,382	20,982	22,272	23,509	24,123	25,645	25,644	25,679	26,234	26,494	25,526	26,662	28,254	30,787	36,488	41,895	44,821
External debt servicing ³⁾	1,054	2,513	3,039	3,594	3,922	3,564	4,154	4,130	4,595	4,728	3,960	4,508	4,285	4,849	4,592	2,710	4,886	5,801	1,607
Central bank foreign exchange reserves	4,922	9,020	9,634	8,162	10,602	10,002	12,058	10,915	11,189	9,907	10,378	10,205	9,962	11,262	13,378	13,492	16,455	19,416	24,909
Short-term debt ²⁾	951	968	1,044	1,832	1,852	1,758	612	455	196	99	303	672	844	1,401	1,925	1,585	1,612	2,405	1,599
Current account balance	-1,778	-2,356	-5,474	-7,125	-2,032	-2,037	-3,656	-3,671	-2,098	-1,985	-1,234	-1,075	-2,051	-2,076	-3,161	-1,929	-2,266	-4,162	-1,810
CREDIT RATING (change of rating and outlook)																			
	2005 May/July	2006 Feb	2007 July	2008 March/ Dec	2009 Dec	2010 Nov	2011 March	2012 Aug	2013 July	2014 Jan	2015 Dec	2016 Jan/March/ June/Dec	2017 March/Dec	2018 Dec	2019 Sept/Dec	2020 May	2021 March/Dec	2022 June	
S&P	BB- /stable	BB- /positive	BB- /stable	BB- /negative	BB- /stable		BB /stable	BB- /negative				BB- /positive	BB /stable	BB /positive	BB+ /positive	BB+ /stable	BB+ /positive	BB+ /stable	
Fitch	BB- /stable			BB- /negative		BB- /stable		BB- /negative		B+ /stable	B+ /positive	BB-/stable	BB /stable		BB+ /stable				
Moody's									B1 /stable			B1 /positive	Ba3 /stable		Ba3 /positive		Ba2 /stable		

Methodological notes:

Foreign exchange reserves/imports of goods and services (in months) - ratio of end-of-period foreign exchange reserves to average monthly imports of goods and services during last 12 months.

Foreign exchange reserves/short-term debt (in %) - ratio of foreign exchange reserves to stock of short-term debt at remaining maturity at end-of-period.

Foreign exchange reserves/GDP (in %) - ratio of end-of-period foreign exchange reserves to GDP.

Debt repayment/GDP (in %) - ratio of debt repayment (excl. early repayment of a part of debt to London Club creditors) to GDP during period under review.

Debt repayment/exports (in %) - ratio of debt repayment (excl. early repayment of a part of debt to London Club creditors) to exports of goods and services during period under review.

External debt/GDP - ratio of end-of-period outstanding debt to GDP.

Short-term debt/GDP - ratio of end-of-period short-term debt at remaining maturity to GDP.

External debt/exports (in %) - ratio of end-of-period outstanding debt to annual value of exports of goods and services.

Foreign exchange reserves/M1 (in %) - ratio of foreign exchange reserves to money supply at end-of-period.

(Exports + imports)/GDP (in %) - ratio of value of exports and imports of goods and services to GDP during period under review.

¹⁾ According to ESA 2010. Data for 2023 is NBS estimate.

²⁾ At original maturity.

³⁾ Data for 2023 is data for Q3 2023.

Notes:

1. The Statistical Office revised GDP data for the period 2005-2017, which led to a change in the share of macroeconomic indicators in GDP.

2. Data are subject to corrections in line with the official data sources.

3. Starting from 2007 data on exports and imports of goods and services are shown in accordance with BPM6. Data for 2005 and 2006 are shown according to previous methodology.

4. Starting from 2007 the general trade system of registration of exports and imports of goods is applied. This is a broader concept and includes all goods entering/exiting country's economic territory, apart from goods in transit. Data for 2005 and 2006 are disseminated using the special trade system.

5. External debt servicing does not include advance debt repayments.

Table B
Key macroeconomic indicators

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Real GDP growth (in %) ¹⁾	5.5	5.1	6.4	5.7	-2.7	0.7	2.0	-0.7	2.9	-1.6	1.8	3.3	2.1	4.5	4.3	-0.9	7.7	2.5	2.5
Consumer prices (in %, relative to the same month a year earlier) ²⁾	17.7	6.6	11.0	8.6	6.6	10.3	7.0	12.2	2.2	1.7	1.5	1.6	3.0	2.0	1.9	1.3	7.9	15.1	7.6
NBS foreign exchange reserves (in EUR million)	4,922	9,020	9,634	8,162	10,602	10,002	12,058	10,915	11,189	9,907	10,378	10,205	9,962	11,262	13,378	13,492	16,455	19,416	24,909
Exports (in EUR million) ³⁾	5,329	6,948	8,110	9,583	8,043	9,515	11,145	11,469	13,937	14,451	15,728	17,385	19,312	21,166	23,349	22,271	28,818	38,004	41,009
- growth rate in % compared to a year earlier	19.1	30.4	-	18.2	-16.1	18.3	17.1	2.9	21.5	3.7	8.8	10.5	11.1	9.6	10.3	-4.6	29.4	31.9	7.9
Imports (in EUR million) ³⁾	9,612	11,970	15,468	18,267	13,099	14,244	16,487	16,992	17,782	18,096	18,643	19,597	22,343	25,257	27,960	26,370	33,439	45,054	44,596
- growth rate in % compared to a year earlier	0.7	24.5	-	18.1	-28.3	8.7	15.7	3.1	4.7	1.8	3.0	5.1	14.0	13.0	10.7	-5.7	26.8	34.7	-1.0
Current account balance ³⁾ (in EUR million)	-1,778	-2,356	-5,474	-7,125	-2,032	-2,037	-3,656	-3,671	-2,098	-1,985	-1,234	-1,075	-2,051	-2,076	-3,161	-1,929	-2,266	-4,162	-1,810
as % of GDP	-8.0	-9.1	-17.3	-20.0	-6.3	-6.5	-10.3	-10.9	-5.8	-5.6	-3.5	-2.9	-5.2	-4.8	-6.9	-4.1	-4.2	-6.9	-2.6
Unemployment according to the Survey (in %) ⁶⁾						20.9	24.9	25.9	24.0	20.6	18.9	16.4	14.5	13.7	11.2	9.7	11.0	9.5	9.0
Wages (average for the period, in EUR) ⁷⁾	210.4	257.8	347.1	402.0	337.8	331.8	372.5	366.1	388.5	379.8	367.9	374.5	394.5	419.8	466.0	510.9	560.2	637.9	726.4
RS budget deficit / surplus (in % of GDP) ⁴⁾				-1.6	-3.0	-3.2	-3.8	-5.6	-4.9	-5.9	-2.7	-0.2	0.7	0.6	0.2	-8.3	-4.6	-3.3	-2.2
Consolidated fiscal result (in % of GDP) ⁴⁾	1.1	-1.4	-1.8	-2.5	-4.2	-4.3	-4.5	-6.4	-5.1	-6.2	-3.5	-1.2	1.1	0.6	-0.2	-8.0	-4.1	-3.2	-2.2
RS public debt, (central government, in % of GDP) ⁸⁾	47.6	33.9	27.9	26.8	30.9	39.5	42.8	52.9	56.0	66.2	70.0	67.7	57.8	53.6	51.9	57.0	56.5	55.1	52.3
RSD/USD exchange rate (period average)	66.87	67.03	58.39	55.76	67.47	77.91	73.34	88.12	85.17	88.54	108.85	111.29	107.50	100.28	105.28	103.03	99.49	111.86	108.41
RSD/USD exchange rate (end of period)	72.22	59.98	53.73	62.90	66.73	79.28	80.87	86.18	83.13	99.46	111.25	117.14	99.12	103.39	104.92	95.66	103.93	110.15	105.87
RSD/EUR exchange rate (period average)	82.99	84.11	79.96	81.44	93.95	103.04	101.95	113.13	113.14	117.31	120.73	123.12	121.34	118.27	117.85	117.58	117.57	117.46	117.25
RSD/EUR exchange rate (end of period)	85.50	79.00	79.24	88.60	95.89	105.50	104.64	113.72	114.64	120.96	121.63	123.47	118.47	118.19	117.59	117.58	117.58	117.32	117.17
MEMORANDUM:																			
GDP (in EUR million) ⁵⁾	22,276	25,906	31,551	35,701	32,486	31,546	35,432	33,679	36,427	35,467	35,740	36,779	39,235	42,892	46,005	46,815	53,345	60,426	69,120

¹⁾ At constant prices of previous year. Data for 2023 is the Statistical Office estimate.

²⁾ Retail prices until 2006.

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

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

⁵⁾ According to ESA 2010. Data for 2023 is NBS estimate.

⁶⁾ Data are revised according to the new methodology of Labour Force Survey from 2021. From 2021 data aligned with the 2022 Census. Data for 2023 is data for Q3 2023.

⁷⁾ Until 2018, wages are shown according to the old methodology. Since 2018, wages are shown according to the new methodology and data are based on Tax Administration evidence. For conversion of wages from RSD to EUR, we used the average of the period RSD/EUR exchange rate. Data for 2023 is the average of eleven months.

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

Notes:

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

Index of charts and tables

Charts

II.0.1	Movement in the key policy rate and average repo rate	7
III.0.1.	Contribution of main CPI components to y-o-y inflation	11
III.0.2	Change in contribution of main CPI components to y-o-y inflation – relative to March 2023	11
III.0.3	Inflation at the end of 2022 and 2023	12
III.0.4	Contribution of main CPI components to quarterly inflation	12
III.0.5	Contribution by destination groups of consumption to the y-o-y producer price dynamics	13
III.0.6	Contribution of selected components to y-o-y growth rate of imported prices	13
III.0.7	Current inflation and one-year ahead inflation expectations	16
III.0.8	Household perceived and expected inflation	16
III.0.9	Two-year ahead inflation expectations	16
IV.1.1.	NBS operations – liquidity withdrawal	17
IV.1.2	Interest rate movements	17
IV.1.3	Interest rates in the primary market of dinar government securities	18
IV.1.4	Yield curve in the secondary government securities market	18
IV.1.5	Interest rates on new dinar loans and deposits	18
IV.1.6	Interest rates on new euro and euro-indexed loans and deposits	19
IV.1.7	Risk premium indicators	19
IV.1.8	Current account deficit and net FDI inflow	20
IV.1.9	Structure of the financial account	20
IV.1.10	Dinar exchange rate and NBS transactions in the FX market	21
IV.1.11	Movements in USD/RSD and USD/EUR exchange rates	21
IV.1.12	Exchange rates of selected national currencies against the euro	21
IV.2.1.	Domestic loans to the non-monetary sector and M3	22
IV.2.2	Contributions to quarterly growth in M2, by sector	22
IV.2.3	Monetary aggregate movements	22
IV.2.4	Contributions to y-o-y corporate lending growth	23
IV.2.5	Structure of new corporate loans, by enterprise size	23
IV.2.6	Contributions to y-o-y household lending growth	23
IV.2.7	Change in corporate credit standards and contributing factors	24
IV.2.8	Change in household credit standards and contributing factors	24
IV.2.9	NPL level and share in total loans, gross principle	24
IV.3.1.	Contributions to y-o-y GDP growth rate, expenditure side	25
IV.3.2	Exports and imports of goods and services	30
IV.3.3	Movement in external demand indicators for Serbian exports	30
IV.3.4.	Movement of key import components	30
IV.4.1.	Economic activity indicators	31
IV.4.2	Service sector indicators	31
IV.4.3	Contributions to y-o-y industry growth rate	32
IV.4.4	Construction activity indicators	32
IV.5.1.	Average nominal net wage	32
IV.5.2	Nominal net wage by economic sector	33
IV.5.3	Structure of y-o-y growth in total formal employment	33
IV.5.4	Movement of registered unemployment	33
V.0.1.	Economic growth by economic region - results and projections	36
V.0.2	Contributions of components to the real GDP growth rate in the euro area	36
V.0.3	Adjustments to the euro area's GDP growth projection for 2024 and 2025	37

V.0.4	Contribution of components to the real GDP growth rate in the USA	37
V.0.5	Contributions of components to the real GDP growth rate in the CESEE region	38
V.0.6	Inflation movements by economic region	39
V.0.7	Revisions of inflation projections by economic region for 2024 and 2025	39
V.0.8	Contributions of HICP components to y-o-y inflation in the euro area	39
V.0.9	Revision of the euro area inflation projection for 2024 and 2025	40
V.0.10	Contributions of CPI components to y-o-y inflation in the USA	40
V.0.11	CPI movements in selected CESEE countries in the previous year (until September 2023)	41
V.0.12	Consolidated Eurosystem balance sheet	42
V.0.13	Expected 3M EURIBOR	42
V.0.14	FOMC participants' expectations of appropriate monetary policy: midpoint of target range or target level for the federal funds rate	43
V.0.15	Fed's total assets	43
V.0.16	Policy rates across selected countries	43
V.0.17	Yields on ten-year bonds of euro area countries	47
V.0.18	Exchange rates of selected national currencies against the dollar	47
V.0.19	Assumption for Brent oil prices	47
V.0.20	European price of natural gas	48
V.0.21	EU gas storage levels	48
V.0.22	European price of electricity	48
V.0.23	Selected commodity prices in the global market	49
V.0.24	World Food Price Index	49
V.0.25	Assumption for prices of primary agricultural commodities	53
V.0.26	Budget balance and general government public debt	54
V.0.27	GDP growth projection	54
V.0.28	Contributions to real GDP growth	55
V.0.29	Rate of growth in private consumption and its sources	55
V.0.30	Fixed investment	55
V.0.31	Real export and import growth	56
V.0.32	Current account and FDI projection	56
V.0.33	Contributions to real GDP growth, production side	57
V.0.34	Inflation projection	58
V.0.35	Short-term inflation projection	58
V.0.36	GDP and inflation projections of the euro area for 2024	59
V.0.37	Projection of consumer price growth	59
V.0.38	Output gap projection	59
V.0.39	Contributions to y-o-y inflation by component	60
V.0.40	Real marginal costs gap in food production	60
V.0.41	Global supply-chain pressures	60
V.0.42	Cost of container transport	61

Tables

IV.1.1.	Interest rates on new loans – by type and currency	19
IV.1.2	Credit rating	20
IV.3.1.	Movement in key indicators and sources of household consumption	26
IV.3.2	Investment indicators	26
IV.4.1	Contributions to y-o-y GDP growth	31
V.0.1.	Key projection assumptions	35
V.0.2	Real GDP growth projections for 2024 and 2025	36
V.0.3	Real GDP growth projections by country of the region for 2024 and 2025	37
V.0.4	Inflation projections by country of the region	41
V.0.5	New set of fiscal rules	53
V.0.6	Key risks to the GDP and inflation projection	65

Table A Indicators of Serbia's external position	72
Table B Key macroeconomic indicators	73

Charts in text boxes

O.1.1. Contributions of product and services prices to core inflation	14
O.1.2. Movement of different y-o-y core inflation indicators	14
O.1.3. Share of products and services from CPI list according to the level of y-o-y growth rates	14
O.1.4. Distribution of y-o-y product and services price growth	15
O.1.5. Weighted mean and median of quarterly consumer product and services price growth	15
O.1.6. Standard deviation of quarterly consumer product and services price growth	15
O.2.1. Dynamics of household income and nominal wages and pensions in the 2014-2022 period	27
O.2.2. Structure of total household income in Serbia in 2022	27
O.2.3. Structure of household consumption by main categories	27
O.2.4. Outlays for food and non-alcoholic beverages by individual household decile group	28
O.2.5. Outlays for communication, recreation, catering and other personal services and items by individual household decile group	28
O.2.6. Average household consumption by region in Serbia	29
O.2.7. Average household consumption by region in Serbia relative to average household consumption in the Belgrade region	29
O.3.1. Market expectations in terms of interest rates in the USA, futures	44
O.3.2. Market expectations in terms of interest rates in the euro area, swaps	44
O.3.3. Movements of policy rates by country	45
O.3.4. Expected movements of policy rates by country	45
O.3.5. Scope of forecasts for the first policy rate cut	45
O.3.6. Expected policy rate cuts in 2024	45
O.4.1. Global oil price	50
O.4.2. Contribution of petroleum products to y-o-y headline inflation	50
O.4.3. Alternative methods of forecasting one-year ahead global oil price	52
O.5.1. Actual and projected GDP in Serbia	63
O.5.2. Actual and projected y-o-y inflation in Serbia	63
O.6.1. Effects of alternative scenarios on inflation	71

Tables in text boxes

O.4.1. Global oil price projections	50
O.4.2. Assessment of the reliability of alternative methods of forecasting the global oil price	51
O.5.1. Projections of Serbia's GDP	62
O.5.2. Inflation projections for Serbia	63
O.5.3. Projections of Serbia's current account	63

Executive Board meetings and changes in the key policy rate

2023

Date	Key policy rate (p.a, in %)	Change (in basis points)
12 January	5.25	+25
9 February	5.50	+25
9 March	5.75	+25
6 April	6.00	+25
11 May	6.00	0
8 June	6.25	+25
13 July	6.50	+25
10 August	6.50	0
7 September	6.50	0
10 October	6.50	0
9 November	6.50	0
7 December	6.50	0

2024

Date	Key policy rate (p.a, in %)	Change (in basis points)
11 January	6.50	0
8 February	6.50	0
7 March		
11 April		
10 May		
13 June		
11 July		
8 August		
12 September		
10 October		
7 November		
12 December		

Press releases from NBS Executive Board meetings

Press release from Executive Board meeting held on 7 December 2023

At its meeting today, the NBS Executive Board decided to keep the key policy rate on hold, at 6.50%. It did not change the rates on deposit (5.25%) and lending facilities (7.75%) either.

The Board's decision was motivated by the further easing of global inflationary pressures, the established downward trajectory of inflation at home and its expected return within the target band in mid-2024. Moreover, monetary conditions in the past period were tightened by means of the main instrument – the interest rate, and in September by increasing the required reserve ratio, with the full effects of these measures yet to play out. The transmission of past monetary tightening onto the interest rates in the money, lending and savings markets signals the effectiveness of the monetary policy transmission mechanism.

In making the decision, the Executive Board took into account the continued receding of global inflationary pressures. In the euro area, our key foreign trade partner, inflation continued to subside in November, thanks mostly to falling energy prices and subdued growth in the prices of food and services. In addition to reduced global inflation, the Executive Board also took account of the fact that global economic growth is still slow and below its long-term average, reflecting monetary policy tightening by central banks worldwide implemented in order to rein in inflation. As inflation has subsided and economic activity slackened, leading central banks, the ECB and the Fed, are increasingly expected to start the cycle of monetary policy easing somewhat sooner than anticipated. Still, labour market pressures remain robust and are highlighted by leading central banks as key factors due to which caution is warranted in the conduct of monetary policy. Caution is also mandated by uncertainty surrounding energy prices and geopolitical tensions in the world, though global oil prices levelled off in November.

The Executive Board pointed out that domestic economic trends are in line with the NBS's projections. Y-o-y inflation stayed on the downward path, falling in October to the single-digit level of 8.5%. The key contribution to the disinflation process came from the continued slowdown in the food price growth, as well as from the slackening of the growth in the prices of products and services within core inflation (CPI excluding food, energy, alcohol and cigarettes) to 7.3% y-o-y. The food price growth registered in October (10.5% y-o-y) is the lowest in the past two years. The Executive Board stressed the importance of the stabilization in the market of basic foodstuffs, aided also by the easing of cost-push pressures in food production, as indicated by the movement in producer prices in food industry which receded by 2.1% in the year through November. Inflation is expected to decline further in the coming period – to around or below 8% at year end, and then return within the target band in mid-2024 and converge to the 3% target midpoint by the end of 2024. The projected inflation trajectory will be underpinned by the effects of monetary tightening, the slowdown in imported inflation, and the anticipated further fall in inflation expectations.

According to SORS data, y-o-y GDP growth amounted to 3.6% in Q3, exceeding the flash estimate owing to the pick-up in construction, as a result of stepped-up implementation of infrastructure projects, and in industry. Indicators available at the monthly level suggest continuation of favourable trends in the real sector in Q4. Industrial production and manufacturing output increased by 3.0% and 3.3% y-o-y, respectively in October, while the decline in the volume of retail trade turnover, seen this year, came to a halt. Such dynamics of economic activity is in line with the NBS's GDP growth projection of around 2.5% this year. Assuming global inflationary pressures ease and the euro area economy recovers, on the one hand, and the implementation of the planned investment projects in transport, energy and utility infrastructure accelerates as expected, on the other, Serbia's GDP growth will pick up to 3.0–4.0% in 2024 and return to the pre-pandemic trajectory of around 4% thereafter.

The NBS will continue to keep a close eye on key inflation factors in the domestic and international environment and make monetary policy decisions based on the projected inflation profile. It will also remain committed to maintaining financial stability and supporting continuous economic growth, as well as employment and a favourable investment environment.

The next rate-setting meeting will take place on 11 January 2024.

Press release from Executive Board meeting held on 11 January 2024

At its meeting today, the NBS Executive Board voted to keep the key policy rate on hold, at 6.50%. The rates on deposit (5.25%) and lending (7.75%) facilities also remained unchanged.

The decision was 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. As the key policy rate and required reserve ratios were already lifted in the prior period, 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 signal the efficiency of the monetary policy transmission mechanism.

The Board also acknowledged the further easing of cost-push pressures and inflation going down globally. Though the global economy ended last year on a healthier footing than expected, its growth is below a long-term average and will slow this year. This, along with inflation's decline, raises the expectations that leading central banks – the ECB and Fed may begin to ease their monetary policies earlier. Still, the labour market pressures remain strong, with these central banks highlighting them as the key factor that mandates caution in monetary policy conduct. Besides, given China's impact on global trade and world prices of primary commodities, its macroeconomic outlook and the persisting geopolitical tensions remain the key sources of uncertainty that also call for caution.

The Executive Board stressed that y-o-y inflation in Serbia continued to recede as projected by the NBS and that according to SORS estimates, it fell to 7.6% in December, almost half the level from end-2022. As in previous months, inflation retreated mostly on account of monetary policy measures, easing of global cost-push pressures, lower imported inflation and a good agricultural season. The Executive Board noted that core inflation (CPI excluding food, energy, alcohol and cigarettes) trended at a much lower level than headline inflation throughout the year, thanks to the undertaken monetary policy measures. Going forward, the Board expects inflation to recede further and return within the target tolerance band around mid-year, coming close to the 3% target at end-2024. This will be facilitated by monetary tightening, slowdown in imported inflation and the anticipated continued decline in inflation expectations.

According to SORS, GDP growth in 2023 is estimated at 2.5%, which is in line with the NBS projection. Activity growth was recorded in all production and services sectors. The biggest growth was made by the energy, agriculture and construction sectors, the latter thanks to the stepped-up implementation of infrastructure projects. The manufacturing industry showed resilience in conditions of slower external demand by recording increased production and exports. Favourable developments continued in the labour market as well, recording further growth in employment, decrease in unemployment and growth in real wages. At the annual level, average wage increased by 15.0% in nominal terms, while its growth in real terms (2.6%) was around the real GDP growth rate, attesting to the preserved purchasing power of households. Assuming global inflationary pressures ease and the euro area economy recovers, on the one hand, and the implementation of the planned investment projects in transport, energy and utility infrastructure accelerates as expected, on the other, Serbia's GDP growth will pick up to 3.0–4.0% this year. The Executive Board judges that personal consumption will also be an important driver of growth, though not to the extent that would give rise to major inflationary pressures, and so will fixed investments that boost potential output as well.

The NBS will continue to keep a close eye on key inflation factors in the domestic and international environment and make monetary policy decisions based on the projected inflation profile. It will also remain committed to maintaining financial stability and supporting continuous economic growth, as well as employment and a favourable investment environment.

The next rate-setting meeting will take place on 8 February.

Press release from Executive Board meeting held on 8 February 2024

At its meeting today, the NBS Executive Board voted to keep the key policy rate on hold, at 6.50%. It did not change the deposit (5.25%) and lending facility (7.75%) rates either.

The Board's decision was motivated by the continued subsiding of global inflationary pressures, the established downward trajectory of inflation at home and its anticipated retreat within the target tolerance band in mid-2024. The Board also took into account the past increases in the key policy and required reserve rates, whose effects will continue to spill over to inflation. The pass-through of monetary tightening on interest rates in the markets of money, loans and

savings, and a fall in one-year-ahead financial and corporate sector inflation expectations signal the efficiency of the monetary policy transmission mechanism.

Moreover, global inflation is falling faster than anticipated and approaching pre-pandemic levels, reflecting the subsiding of cost-push pressures, the easing of global supply bottlenecks, and the effects of past monetary tightening by most central banks. Although global oil prices are falling in an environment of dented demand, and primary agricultural commodity prices are going down thanks to a good agricultural season, the global uncertainty may drive these prices up and slow inflation's return within the target band in many countries. Since early 2024, the costs of transport, insurance and other logistics services have gone up due to geopolitical tensions and the difficulties to supply oil, other raw materials and products via the Red Sea and the Suez Canal. Though these developments have so far not significantly impacted global primary commodity prices and inflation of our important trade partners, nor did they affect the prices of products and services that we import, the NBS Executive Board maintains that these movements call for caution in monetary policy decision making. In addition, further global fragmentation may divide countries into trade blocs and trigger significant losses in global production, including negative effects for our key trade partners.

The Executive Board underlined that y-o-y inflation in Serbia continues on the downward trajectory. At end-2023 it was half the level from end-2022, measuring 7.6%, i.e. slightly below the level anticipated in the November projection. Inflation slowed further on the back of weakened cost-push pressures and the base effect from food prices, as well as the effects of past monetary policy tightening, which also contributed to a decrease in core inflation (CPI excluding food, energy, alcohol and cigarettes), to 6.5% y-o-y in December. Going forward, the Executive Board expects inflation to decline further and return within the target tolerance band in mid-year. This will be facilitated by the effects of monetary tightening, slowdown in imported inflation, the still subdued external demand and the anticipated further fall in inflation expectations.

Fixed investments and private consumption helped Serbia's GDP growth pick up to 3.8% y-o-y in Q4 2023, leading to the real growth of 2.5% at the level of 2023. In view of the subsiding global inflationary pressures and the gradual recovery in the euro area, as well as the anticipated further acceleration in the implementation of planned investment projects in road, energy and utility infrastructure, GDP growth is expected to step up this year to the range of 3–4%, with the central projection value of 3.5%.

In today's meeting, the Executive Board adopted the February Inflation Report with the latest macroeconomic projections that will be presented to the public in more detail at a press conference on 14 February, along with additional explanations of monetary policy decisions.

The next rate-setting meeting will take place on 7 March.

CIP - Каталогизација у публикацији
Народна библиотека Србије, Београд

336.71(497.11)

INFLATION Report / National Bank of
Serbia. - 2006- . - Belgrade (Kralja Petra
12) : National Bank of Serbia, 2006- (Beograd :
Zavod za izradu novčanica i kovanog novca
"Topčider") . - 30 cm

Tromesečno
ISSN 1820-9394 = Inflation Report
(National Bank of Serbia)
COBISS.SR-ID 155775244