



# MACROECONOMIC FORECAST

## MARCH 2024



BULGARIAN NATIONAL BANK

145 YEARS

# MACROECONOMIC FORECAST

MARCH 2024



BULGARIAN NATIONAL BANK

— 145 YEARS —

The BNB quarterly Macroeconomic Forecast provides annual projections of major macroeconomic indicators for Bulgaria in the current and next two years. The macroeconomic forecast is prepared by the BNB Economic Research and Forecasting Directorate and does not necessarily reflect the views of the members of BNB Governing Council about the prospects for the development of the Bulgarian economy. Information regarding the forecast preparation procedure, as well as technical details on the macroeconomic forecasting model can be found in BNB Forecasting Function Section of Economic Review, [issue 4/2015](#).

The Macroeconomic Forecast publication (March 2024) was presented to the BNB Governing Council at its 11 April 2024 meeting. It employs statistical data and information available as of 27 March 2024. The estimates and projections published in this issue should not be regarded as advice or recommendation. The information in the publication should be used exclusively at the user's risk.

The Bulgarian National Bank, members of the BNB Governing Council and the BNB staff involved in the preparation of this publication shall not be liable whatsoever for any use of the projections, estimates and all other information in this publication by any other person.

The Macroeconomic Forecast is available at the BNB website, Research and Publications Section, Periodical Publications Sub-section. Reproduction of parts of this publication is permitted provided that the source is acknowledged.

Please address notes, comments and suggestions to the Bulgarian National Bank, Economic Research and Forecasting Directorate at 1, Knyaz Alexander I Square, 1000 Sofia.

© Bulgarian National Bank, 2024

1, Knyaz Alexander I Square  
1000 Sofia, Bulgaria

Website: [www.bnb.bg](http://www.bnb.bg)

This issue includes materials and data received up to 11 April 2024.

The contents of the BNB Macroeconomic Forecast may be quoted or reproduced without further permission. Due acknowledgement is requested.

ISSN 2738-7666 (online)

# CONTENTS

---

SUMMARY .....	5
FORECAST OF KEY MACROECONOMIC INDICATORS FOR 2024-2026 .....	6
External Environment .....	6
Economic Activity in Bulgaria .....	7
Balance of Payments .....	8
Labour Market .....	8
Monetary Sector .....	9
Inflation .....	9
FORECAST REVISIONS .....	11
RISKS TO THE FORECAST .....	13

## CHARTS

- Fan Chart of the Expected Annual Rate of Change in Real GDP .....
- Fan Chart of the Expected Annual Rate of Change in Inflation at the End of the Period .....

## TABLES

- GDP and Inflation Forecast Revisions (March 2024 vis-à-vis December 2023) .....
- Forecast of Key Macroeconomic Indicators for 2024–2026 .....

## Abbreviations

BNB	Bulgarian National Bank
CPI	Consumer Price Index
ECB	European Central Bank
EU	European Union
EWRC	Energy and Water Regulatory Commission
HICP	Harmonised Index of Consumer Prices
NRRP	National Recovery and Resilience Plan

# SUMMARY

The BNB forecast of key macroeconomic indicators is prepared as of 27 March 2024 based on assumptions about global economic developments, commodity price dynamics in international markets and money market interest rates in the euro area as of 7 March 2024.

External assumptions indicate weaker increase in demand for Bulgarian goods and services in 2024 compared to December 2023 macroeconomic forecast, reflecting the lower economic activity of Bulgaria's main euro area trading partners in the short term projected by the ECB. As a result, external demand for Bulgarian goods and services is assumed to increase by 2.1 per cent in 2024, before accelerating to 3.3 per cent in 2025 and 3.4 per cent in 2026. According to market participants' expectations, euro prices of commodities in international markets in 2024 will remain at their 2023 levels, with a more substantial decline in natural gas and electricity prices. Euro commodity prices weighted by their importance for Bulgaria's international trade are assumed to rise by between 1.9 per cent and 2.8 per cent in 2025 and 2026, mainly driven by developments in non-energy commodity prices. Market participants' expectations for euro area short-term interest rates point to a decline over the whole projection horizon, starting in the second quarter of 2024.

Bulgaria's real GDP growth is expected to stand at 2.2 per cent in 2024 (compared with 1.8 per cent in 2023), driven by positive contribution from domestic demand, while net exports are expected to make a negative contribution. Domestic demand is projected to be supported by private consumption growth in the context of rising labour income in real terms, investment growth, as well as by higher government consumption. The acceleration in real GDP growth is mainly due to the assumed shift of the contribution of changes in inventories from strongly negative in 2023 to neutral in 2024, which is projected in the forecast. Net exports dynamics reflects a projected higher growth in imports of goods and services than in exports. Real GDP growth is projected to accelerate to 3.3 per cent in 2025 before moderating to 2.6 per cent in 2026, with this dynamics being largely driven by the set profile of public investment.

Annual HICP inflation is anticipated to slow down to 2.3 per cent at the end of 2024, with average annual inflation coming to 3.0 per cent. In addition to the base effects of the strong price increase in the previous year, the slowdown in inflation in 2024 will be also due to assumed declines in international prices of energy commodities and decreased prices of some groups of goods and services with administratively set prices. Services and food groups are expected to have a major positive contribution to headline inflation at the end of 2024. In line with the technical assumptions about oil and food price dynamics in international markets, as well as with the projected growth rates of private consumption and labour costs, the annual growth rate of consumer prices is expected to be 2.7 per cent at the end of 2025 and remain at this level at the end of 2026. Over the medium term, the positive contribution of core components to overall inflation is expected to remain significant.

Risks to the real GDP growth forecast are assessed as balanced for 2024, while for 2025 and 2026, risks of lower growth compared to that in the baseline scenario prevail given the ongoing global geopolitical conflicts. In addition, there are significant internal risks of slower than projected implementation of investment projects financed by both national and EU funds.

There are risks to the materialisation of the inflation forecast in the short term associated with slower consumer price inflation *vis-à-vis* the baseline scenario, while in the medium term there are mainly upside risks to the inflation forecast. In the short term, downside risks to consumer price growth stem mainly from a potentially larger than expected decrease in administratively controlled prices, as well as from a possible stronger and faster pass-through by companies of falling commodity prices in international markets to final consumer prices in Bulgaria. In the medium term, the possible implementation of faster and more frequent wage indexation in an environment of labour shortages, stronger than expected consumer demand growth, as well as a larger than projected increase in administered prices pose risks to higher inflation compared with the baseline scenario.

# FORECAST OF KEY MACROECONOMIC INDICATORS FOR 2024–2026

---

## External Environment

The BNB forecast of key macroeconomic indicators is prepared as of 27 March 2024 based on assumptions about global economic developments, commodity price dynamics in international markets and money market interest rates in the euro area as of 7 March 2024.

Assumptions about developments in external demand for Bulgarian goods and services are based on the latest European Central Bank (ECB) forecast<sup>1</sup>. It considers that global GDP growth in 2024 will moderate slightly, given the materialisation of the effects of monetary policy tightening and the gradual cooling in the labour market in advanced economies, as well as subdued consumption and problems in the Chinese real estate sector. Global trade growth is expected to remain below historical averages, supported by increased geopolitical tensions and ongoing processes of trade fragmentation. As a result, external assumptions imply that the demand for Bulgarian goods and services will grow at a slower pace in 2024 than assumed in the December 2023 macroeconomic outlook in line with the short-term projected lower economic activity in Bulgaria's main trading partners in the euro area. External demand for Bulgarian goods and services is assumed to increase by 2.1 per cent in 2024, before accelerating to 3.3 per cent in 2025 and 3.4 per cent in 2026.

The assumptions for the price change in energy commodities (crude oil, natural gas, electricity)<sup>2</sup> and non-energy commodities<sup>3</sup> (metals,<sup>4</sup> food<sup>5</sup> and other commodities<sup>6</sup>) take into account prices of futures contracts concluded in international markets as of 7 March 2024. In recent years, these prices showed high volatility. Market participants expect euro energy prices<sup>7</sup> in international markets to continue declining on an annual basis throughout the forecast period, while prices of non-energy commodities are expected to stabilise in 2024, followed by increases of around 3 per cent in 2025 and 2026.

The assumptions of crude oil suggest a decline in its prices over the whole projection horizon. This development may reflect a slowdown in global economic activity and increased oil supply from the United States expected by market

---

<sup>1</sup> For further details, see [ECB staff macroeconomic projections, March 2024](#). The ECB forecast includes information on the global economy development as of 9 February 2024 and information on dynamics of euro area economic activity as of 21 February 2024.

---

<sup>2</sup> The assumption about price dynamics in oil products for the whole projection horizon is based on futures contracts traded in international markets. As regards natural gas, prices of futures contracts for delivery until the first quarter of 2025 (inclusive) are also used, after which a technical assumption is made that prices will remain unchanged at the attained level until the end of 2026. Assessments of electricity price movements are based on market information on futures contracts concluded in the German market, encompassing the period until the first quarter of 2025 (inclusive), after which a technical assumption is made that prices will remain unchanged at the attained level until the end of 2026.

<sup>3</sup> Futures contracts concluded for trading of relevant commodities in international markets are used, with data available until the end of the first quarter of 2025. For the remainder of the projection horizon, no public information on a sufficient volume and number of futures contracts for these commodities in international markets is available, and dynamics of prices is therefore assessed by taking into account their historical relationship with global trade developments set out in the external assumptions of the forecast.

<sup>4</sup> Including steel, copper, aluminium, lead, zinc, nickel and tin weighted in accordance with Bulgaria's foreign trade flows.

<sup>5</sup> Including pigmeat, coffee, wheat, maize, rice, soybeans, sugar, cocoa, milk and livestock weighted in accordance with Bulgaria's foreign trade flows

<sup>6</sup> Including rubber, timber and cotton weighted in accordance with Bulgaria's foreign trade flows.

<sup>7</sup> The forecast of euro commodity prices is based on a technical assumption about the euro/US dollar exchange rate, which is fixed for the whole forecast horizon at its average value for the last ten days as of the cut-off date of the external environment assumptions (7 March 2024). As a result of this technical assumption, in 2024 the euro/US dollar exchange rate remains broadly unchanged from 2023.



participants, which offset the decision taken by OPEC+ participants to reduce output by the end of the second quarter of 2024. Market participants expect a larger annual decline in gas and electricity prices in the European market in 2024 compared to the BNB December 2023 forecast. This may reflect lower consumption over the winter months, as well as the relatively subdued manufacturing activity in the euro area. A technical assumption is made that natural gas and electricity prices in the European market after 2024 will remain unchanged from the first quarter of 2025 until the end of the forecast period.

Food and metal prices are assumed to remain at their previous year levels in 2024 and to increase in 2025 and 2026. Euro commodity prices weighted by their importance for Bulgaria's international trade over the forecast horizon are also expected to follow a similar development and after remaining unchanged in 2024 growth rates are assumed to rise by between 1.9 per cent and 2.8 per cent in 2025 and 2026, mainly driven by developments in non-energy commodity prices.

Forecast assumptions take into account market sentiment as of 7 March 2024 for a gradual decline in short-term interest rates in the euro area money market throughout the forecast period, which started in the second quarter of 2024.

## Economic Activity in Bulgaria

Available economic indicators<sup>8</sup> for January–February 2024 signalled some slowdown in the quarter-on-quarter growth of economic activity in Bulgaria in the first three months of the year. Taking into account these data and the technical assumptions described above, we anticipate real GDP growth in Bulgaria to be 2.2 per cent in 2024 (compared to 1.8 per cent in 2023). Higher real GDP growth in 2024 will reflect mainly the reversal of negative contribution of changes in inventories, the continued growth of domestic demand at a rate similar to that of the previous year, as well as the shift of exports of goods and services from decline in 2023 to growth in

<sup>8</sup> This refers to the following indicators: production indices in industry, construction and services; retail trade turnover index; unemployment rate; business climate and consumer confidence index; producer price index in industry; new loans to corporations and households; global PMI.

2024.<sup>9</sup> Household final consumption expenditure is projected to grow further, but at a slower pace, underpinned by growth in labour income in real terms and by persistent increases in social transfers to households by the government. Other factors that will boost household spending include sustained high lending activity, improved consumer confidence and weak incentives for households to save as a result of still negative interest rates on deposits in real terms. Growth in fixed capital investment is expected to slow down slightly in 2024, driven by the projected fall in public investment<sup>10</sup> due mainly to the completion in 2023 of the implementation of projects financed by EU funds during the 2014-2020 programming period and the start-up of the 2021-2027 programming period. At the same time, private investment is expected to grow in 2024 following a decline in the previous year, supported by the projected increase in final demand for Bulgarian goods and services, high level of capacity utilisation in industry and anticipated growth of credit to the private sector. Government consumption in real terms<sup>11</sup> is also projected to shift from a decline in 2023 to an increase in 2024. These developments are expected to be driven by higher healthcare expenditure and general government wages as set in the forecast, in line with the information from the Updated Medium-Term Budgetary Forecast (UMBF) for the period 2024-2026 of 12 January 2024, as well as the BNB assumption for the growth of government intermediate consumption expenditure in 2024<sup>12</sup>.

<sup>9</sup> The shift from a decline to growth in exports of goods is expected mainly as a result of the exhausted negative effects of one-off country-specific factors limiting goods exports in 2023. The forecast includes a technical assumption of zero impact on production activity, volumes and prices of exports and imports of oil products, resulting from the decision of the Bulgarian Parliament to ban exports of oil products of Russian origin as of 1 January 2024 and imports and processing of Russian crude oil from 1 March 2024.

<sup>10</sup> The NSI does not provide official data on the breakdown of total investment into private and public investment in the economy. The series on private investment is constructed by the BNB as a difference between total investment and the estimated amount of public investment on an accrual basis in real terms. Public investment estimates for the period from January to September 2023 are based on quarterly non-financial accounts data on the general government sector as published by the NSI, while for the fourth quarter of 2023 data from the Consolidated Fiscal Programme (CFP) are used.

<sup>11</sup> A breakdown of government consumption components for the fourth quarter of 2023 is not available as of the cut-off date of the forecast. The macroeconomic forecast uses an assumption for individual components based on information from the CFP.

<sup>12</sup> Public wage growth is also partly reflected in the forecast of the annual growth of the government consumption deflator, and therefore, higher wages contribute to a limited extent to the change in government consumption in real terms in 2024.



Net exports are expected to contribute negatively to economic activity in 2024, owing to projected higher growth in imports compared to exports of goods and services. Growth of exports will be driven by the accelerated increase in external demand for Bulgarian goods as projected in the technical assumptions and by the exhausted negative impact of one-off country-specific factors limiting goods exports in 2023. The increase in imports will be determined by the projected growth of relevant components of final demand and BNB estimates of their import content, as the reversal of the negative contribution of changes in inventories, which are characterised by a high import content, will be essential for changing the trajectory of imports compared to the reported downturn in 2023.

In 2025, real GDP growth is projected to accelerate to 3.3 per cent before moderating to 2.6 per cent in 2026. The economic activity dynamics will be driven by the profile of investment in fixed capital which are projected in 2025 to be supported by the implementation of projects financed by EU funds, including under the National Recovery and Resilience Plan (NRRP)<sup>13</sup>. In addition, in 2025–2026, government consumption growth in real terms is expected to continue albeit tending to slow down. The forecast of government consumption dynamics takes into account information on the projected increase in healthcare expenditure in the UMBF for 2024–2026. In 2025 and 2026, some acceleration in private consumption growth is expected compared to 2024, as this GDP component will continue to contribute most positively to the pick-up in economic activity. Labour market conditions play a leading role for projected dynamics of private consumption, as the expected increase in labour shortages for firms amid rising economic activity will continue to put upward pressure on labour income growth at a rate which is higher than that of labour productivity and inflation. Despite the assumed improvement of external demand, the negative contribution of net exports is expected to remain in the period 2025–2026 in line with the growth in fixed capital investment and final consumption expenditure, which is characterised by a high import content. The negative contribution of net

exports is projected to shrink somewhat in 2026, owing to the anticipated acceleration in the growth of goods exports over the forecast horizon, mainly reflecting the technical assumption about the dynamics of foreign demand.

## Balance of Payments

The current account balance is expected to be negative, with the deficit amounting to 0.5 per cent of GDP in 2024 and further increasing in 2025 and 2026. The current account developments over the projection horizon will be driven mainly by the widening of the trade balance deficit due to the expected higher growth of goods imports than exports. At the same time, the surplus on trade in services is expected to stabilise as a percentage of GDP, given the full recovery in the number of visits of foreign nationals to Bulgaria compared to that recorded before the outbreak of the COVID-19 pandemic. In line with the projected gradual decline in euro area interest rates over 2024–2026, the deficit on the net primary income item is projected to register a slight decrease as a percentage of GDP compared to 2023. Over the whole projection horizon, the capital account surplus is expected to increase as a percentage of GDP compared to 2023, owing to the assumed increase in incoming capital transfers from the EU, including under the NRRP.

## Labour Market

Labour market conditions are expected to remain tight over 2024–2026, reflecting the projected increase in economic activity in Bulgaria, with limited labour supply. The number of employees is expected to increase by 0.4 per cent in 2024 and by 0.2 per cent in 2025, and its growth possibilities to be strongly limited from 2026 onwards due to the ongoing adverse demographic trends in the country leading to a decline in the working-age population. The projected real GDP growth and declining labour force will be reflected in the gradual decrease in the unemployment rate from 4.5 per cent in 2024 to 3.7 per cent in 2026. At the same time, labour productivity is expected to increase by 1.8 per cent in 2024 and 3.2 per cent in 2025, after which its growth will slow down to 2.5 per cent in 2026, in line with the projected dynamics of economic activity and of employees. Despite the easing of inflationary pressures in 2024, compensation *per* employee is expected to increase by 7.6 per cent in nominal terms, supported by the growth

<sup>13</sup> The expected acquisition of new fighter planes for the Bulgarian Air Force is expected to be another factor supporting investment activity growth in 2025. In the forecast, this acquisition has a neutral contribution to real GDP growth, as acquisition costs are equally accounted for in government investments and in goods imports.

of economic activity in the country, the rise in the minimum wage from the beginning of the year, higher funds for wages in the public sector than in 2023 as projected in the State Budget Law for 2024 and increasing labour shortages. The growth rate of compensation *per* employee is expected to remain high over the remainder of the projection horizon and to stand at 7.6 per cent in 2025 and 7.3 per cent in 2026, reflecting tight labour market conditions and increasing labour market shortages. As a result, real wage growth will outpace the growth rate of real labour productivity over the whole projection horizon, thereby supporting private consumption growth but also leading to higher unit labour costs. Nominal unit labour costs are projected to increase by 5.7 per cent in 2024 and their growth rate to slow down to 4.2 per cent in 2025 and 4.7 per cent in 2026. At the same time, increases in labour costs intended to maintain staff and attract new labour force could lead to a decrease in the price competitiveness of Bulgarian firms in the long term, which would ultimately have an unfavourable effect on exports of goods and services.

## Monetary Sector

The effects of monetary policy tightening in the euro area and of a rise in the MRR rate to 12 per cent (implemented by the BNB since mid-2023) on deposit and lending rates in the household sector have continued to be limited for the banking system as a whole in the context of high inflows of attracted funds, ample liquidity and strong competition among banks. A slower and weaker rise in new household deposit and lending rates may be expected until the end of 2024 and 2025, as compared to the previous forecast, thereafter their values remaining close to the achieved levels. Given the expected dynamics of euro area short-term money market rates, new corporate lending rates are projected to start decreasing from mid-2024 to the end of 2025, before remaining close to the achieved levels.

Against the background of a gradual increase in deposit interest rates and preserved household propensity to save in the form of bank deposits, annual growth of non-government sector's deposits is expected to remain high, but to slow down to 7.6 per cent at end-2024 and to 6.9 per cent at end-2025 and end-2026, in line with projected wage growth dynamics. The annual growth of

credit to the non-government sector is projected to tend slowing but to be weaker compared to the previous forecast, reaching 8.5 per cent in 2024, 6.9 per cent in 2025 and 6.8 per cent in 2026. This downward dynamics is expected to reflect a decrease in inflation, a gradual increase of lending interest rates for the household sector and slowing house price growth.

## Inflation

Inflation forecast in 2024–2026 is based on technical assumptions underlying the trajectory of global energy and agricultural commodity prices, the projected degree of their pass-through by firms to final consumer prices (notably in services and food groups), and on the effects of implemented discretionary fiscal measures to support households and firms. On the basis of the information available as of 27 March 2024, the forecast envisages the following government measures: increases in the excise rate on tobacco products as per the Law on Excise Duties and Tax Warehouses for 2024–2025<sup>14</sup>; termination of the reduced tax rates on supply of bread and flour and on restaurant and catering services (0 per cent and 9 per cent VAT) and restoration of the standard VAT rate of 20 per cent from 1 July 2024 and 1 January 2025<sup>15</sup>; increased drug expenses by the National Health Insurance Fund on a list of medicinal products for treating chronic cardiovascular diseases from 2 April 2024.<sup>16</sup>

Annual inflation is expected to be 3.0 per cent on average for 2024 and to slow down to 2.3 per

<sup>14</sup> The excise duty calendar was adopted by the [Law on Amendment to the Tax and Social Insurance Procedure Code, published in the Darjaven Vestnik, issue 100 of 16 December 2022](#) (available in Bulgarian only).

<sup>15</sup> The effective period for the reduced VAT rate on supply of bread and flour and supply of restaurant and catering services was extended until 30 June 2024 and 31 December of 2024, respectively, by the [Law on Amendment of the Law on the Value Added Tax](#) (available in Bulgarian only), published in the Darjaven Vestnik, issue 106 of 22 December 2023. The forecast assumes that in the event of a refund of the standard VAT rate, the effect of the increase would be fully passed on to final consumer prices in the relevant sub-groups.

<sup>16</sup> On 7 March 2024, the Supervisory Board of the National Health Insurance Fund (NHIF) [approved](#) a change in the level of remuneration for certain medicinal products included in the positive drug list. The Decision was approved on 21 March 2024 by the National Council on Prices and Reimbursement of Medicinal Products, and the complete list of medicines and co-payments for various medicines by the NHIF [were published](#) by the Ministry of Finance. On the basis of this information, the forecast projects an average decrease in prices for patients of 58 per cent for medicines in the positive drug list for treating cardiovascular diseases, with the effect estimated at a 0.5 percentage points decrease in overall inflation.

cent at the end of the year. In addition to the base effects of the strong price increase in the previous year, the slowdown in inflation in 2024 will be also due to assumptions about declines in international prices of energy commodities (petrol, electricity, natural gas) and to decreased prices of some groups of goods and services with administratively set prices. In the short term, we expect growth rates of private consumption and unit labour costs to continue contributing to a weaker pass-through by firms of falling international prices of major energy and agricultural commodities, particularly to food and services prices in Bulgaria. As a result, these groups are projected to have the largest positive contribution to headline inflation at the end of 2024. At the same time, the positive contribution of administered goods and services and tobacco products is expected to shrink substantially compared with the previous year, largely owing to the projected declines in the prices of some medicinal products.

The growth rate of consumer prices is projected to be 2.7 per cent at the end of 2025 and to remain at the same level at the end of 2026, with this development mainly reflecting dynamics of food and energy commodity prices in international markets, based on the technical assumptions. Core components and food products are expected to remain the groups with the highest positive contribution to inflation in 2025 and 2026, in line with the projected retention of strong consumer demand in Bulgaria and a continuous increase in unit labour costs. Over the medium term, administered prices are assumed to rise in line with firms' projected labour costs developments, with an exception to this approach for regulated central gas supply prices<sup>17</sup>, tobacco products prices, and water supply and sewerage services prices<sup>18</sup>. The growth rate of administratively controlled prices thus obtained was increased further on an expert

basis to include the average estimated error observed historically in this group's inflation<sup>19</sup>.

---

<sup>17</sup> The forecast includes a technical assumption that the price of central gas supply will follow the dynamics of the natural gas price in international markets.

<sup>18</sup> The forecast envisages increases from 1 January 2024 in the prices of water supply and sewerage services approved by Decision of the Energy and Water Regulation Commission (EWRC) of 22 December 2023 changing the service prices of 26 water supply and sewerage companies in the country which were adopted along with the business plans. Regarding Sofia Water Supply and Sewerage EOOD, an exception is made along with an assumption that the approved increase in service prices will enter into force in the third quarter of 2024. The projected price increase in water supply and sewerage services for 2025 is in line with these prices for household customers, as projected in the business plans of the companies.

---

<sup>19</sup> See the highlight [Assessment of the Size and Factors Behind the Inflation Forecast Error in the Post-COVID-19 Pandemic Period](#), published in the June 2023 Macroeconomic Forecast.

# F FORECAST REVISIONS

---

Compared to the [December 2023 macroeconomic forecast](#), current expectations point to slightly lower real GDP growth in 2024–2025, while the growth forecast for 2026 remains unchanged. The main drivers for the revision in the GDP projection and its components are related to additional incoming reporting data on economic activity in the fourth quarter of 2023 and the first two months of 2024, taking into account new measures adopted by the government and changes in the technical assumptions about the external environment.

Real GDP growth for 2024 has been revised downwards by 0.3 percentage points, reflecting the projected lower positive contribution of domestic demand compared to the December 2023 forecast. This revision is only partly offset by the anticipated lower negative contribution of net exports of goods and services. As regards domestic demand components, revisions have been made towards lower growth in fixed investments and, to a significantly lesser extent, in private consumption compared to the December 2023 forecast. These developments are largely affected by new incoming data on the indicators related to the economic development in Bulgaria. The revision of the contribution of net exports to GDP changes in 2024 is determined by the projected lower growth of goods and services imports, which can be explained by the revision in the components of domestic demand and BNB's estimates of their import content. At the same time, the effect of projected weaker imports growth is partly offset by the expected lower growth in exports of goods and services in 2024 compared to the previous macroeconomic forecast, reflecting changes in the external environment assumptions.

The revision towards lower real GDP growth in 2025 by 0.1 percentage points is due to projected weaker private consumption growth. This is in accord with the projected lower growth of households' disposable income in real terms, due to expected slower growth in labour productivity and correspondingly in real compensation *per* employee. In the current macroeco-

nomical forecast, fixed capital investments have been revised towards higher growth in 2025, with private and public sectors contributing to this. As regards the general government sector, the nominal amount of investments in 2024 and 2025 is similar to that in the previous forecast, but the expected lower growth of prices of goods for investment purposes is reflected in higher growth of real investments in 2025.

The inflation forecast at end-2024 has been revised towards a lower increase in consumer prices (by -0.8 percentage points), which is determined by significant revisions towards lower inflation in the groups of administratively set prices and core components. The revision in inflation for the group of goods and services with administratively controlled prices (-2.3 percentage points) points to a slower increase in consumer prices, due to new information on discretionary measures taken by the government to reduce the price of certain medicinal products. Core inflation has also been revised downwards (by -1.6 percentage points) on account of reported data showing a faster than projected slowdown in annual growth in both services and industrial goods prices, while the expected increase in unit labour costs is lower than in the previous forecast. At the same time, the projected fall in energy prices at the end of 2024 is lower (by 1.8 percentage points) as a result of a revision in the technical assumptions for the path of international crude oil prices. Revisions in the rate of change in the food HICP reflect the reported data received since the beginning of 2024, which indicate a limited pass-through of the realised declines in international commodity prices to food price inflation in Bulgaria. The forecast for annual inflation at the end of 2025 and at the end of 2026 has been revised downwards by 0.4 and 0.2 percentage points, respectively, compared with the December forecast for 2023. This was mainly due to downward revisions to services prices, reflecting downward revisions to the growth rate of unit labour costs and industrial goods due to their high import component, and

to the projected stronger deceleration in euro area core inflation than in our previous forecast.

### GDP and Inflation Forecast Revisions (March 2024 *vis-à-vis* December 2023)

Annual rate of change, per cent	Forecast as of March 2024				Forecast as of December 2023				Revision (percentage points)			
	2023	2024	2025	2026	2023	2024	2025	2026	2023	2024	2025	2026
GDP at constant prices	1.8	2.2	3.3	2.6	1.8	2.5	3.4	2.6	0.0	-0.3	-0.1	0.0
Private consumption	5.4	3.6	4.0	3.9	5.8	3.7	4.2	3.9	-0.4	-0.1	-0.2	0.0
Government consumption	-0.4	2.9	2.7	2.4	-0.6	2.9	2.7	2.4	0.2	0.0	0.0	0.0
Gross fixed capital formation	3.3	2.9	8.6	3.0	1.0	5.3	8.2	2.6	2.3	-2.4	0.4	0.4
Exports (goods and services)	-1.9	2.9	3.6	3.6	-1.5	3.4	3.6	3.7	-0.4	-0.5	0.0	-0.1
Imports (goods and services)	-6.3	4.5	5.2	4.6	-6.3	5.4	5.2	4.7	0.0	-0.9	0.0	-0.1
HICP at end of period	5.0	2.3	2.7	2.7	5.0	3.1	3.1	2.9	0.0	-0.8	-0.4	-0.2
Core inflation	5.3	3.3	3.2	3.1	5.3	4.9	4.0	3.7	0.0	-1.6	-0.8	-0.6
Energy products	-0.6	-2.2	-1.0	-0.9	-0.6	-4.0	-0.8	-0.8	0.0	1.8	-0.2	-0.1
Food	6.0	3.1	3.3	3.4	6.0	2.5	3.3	3.3	0.0	0.6	0.0	0.1
Goods and services with administratively controlled prices and tobacco products	5.4	0.8	2.2	2.1	5.4	3.1	2.4	2.3	0.0	-2.3	-0.2	-0.2

Source: BNB.



# RISKS TO THE FORECAST

---

The baseline scenario of the forecast is characterised by high uncertainty about external developments due to military conflicts and international geopolitical tensions. Taking into account the assumptions underlying the baseline scenario, risks to the real GDP growth forecast are assessed as balanced for 2024, while for 2025 and 2026, risks of lower real GDP growth in Bulgaria prevail.

The risks of lower economic activity stem from both the global and domestic macroeconomic environment. With regard to the international environment, these risks relate mainly to the possibility of weaker external demand for Bulgarian goods and services, increased economic uncertainty and higher international commodity prices than projected in the technical assumptions due to the military conflicts in Ukraine and the Middle East. Bulgaria's main domestic risk to the realisation of the economic activity forecast stems from the possibility of a slower than projected implementation of investment projects financed by both national and EU funds. Risks to the realisation of higher real GDP growth in Bulgaria are mainly associated with the likelihood of higher than projected private consumption growth, if households' propensity to consume is stronger than projected and in the event of higher than expected credit growth. The uncertainty about the forecast for exports and imports stems from the possible realisation of negative economic effects following the decision of the Bulgarian National Assembly<sup>20</sup> on the early termination of the derogation granted to Bulgaria by the EU in respect of imports and processing of Russian oil<sup>21</sup>.

The uncertainty of the forecast for a particular indicator may be graphically illustrated by means of a fan chart. Chart bands of a particular colour indi-

cate an interval within which the forecast value<sup>22</sup> is expected to fall with a certain probability (for more details, see the notes to the charts). Usually, such an interval widens with the increase in the forecast horizon, reflecting the increasing uncertainty further into the future. The middle band of the chart, depicted in the darkest colour, includes the baseline scenario of the annual rate of change of real GDP and the probability distribution shows a 20 per cent probability for the actual value to fall within this band in each of the quarters. According to the probability distribution for 2024 with 60 per cent probability the annual rate of change in real GDP is expected to be in the range of 0.9 per cent to 3.5 per cent.

There are risks to the materialisation of the inflation forecast in the short term associated with slower consumer price inflation *vis-à-vis* the baseline scenario. Such risks stem from a potentially larger than expected decrease in administratively controlled prices, which may occur with the adoption of the amendments to the Law on Higher Education currently under discussion in relation to state tuition fees for state-commissioned education in Bulgaria. Another risk is related to a possible stronger and faster pass-through by companies of falling commodity prices in international markets to final consumer prices in Bulgaria, especially in the food group. At the same time, in the medium term, risks are assessed to be tilted towards higher final consumer price growth *vis-à-vis* the baseline scenario. Faster price increases may be the result of

---

<sup>20</sup> See [Law on Amendment to the Law on Control of the Implementation of Restrictive Measures in View of Russia's Actions Destabilising the Situation in Ukraine](#) (published, Darjaven Vestnik, issue 106 of 22 December 2023).

<sup>21</sup> The forecast makes the technical assumption that the production and export capacity of the Bulgarian economy, as well as the prices of oil products in the country, will not be negatively affected by the abrogation of the derogation. The abrogation of the derogation poses downside risks to the forecast for the contribution of net exports to real GDP growth and upside risks to the inflation forecast for 2024 and 2025.

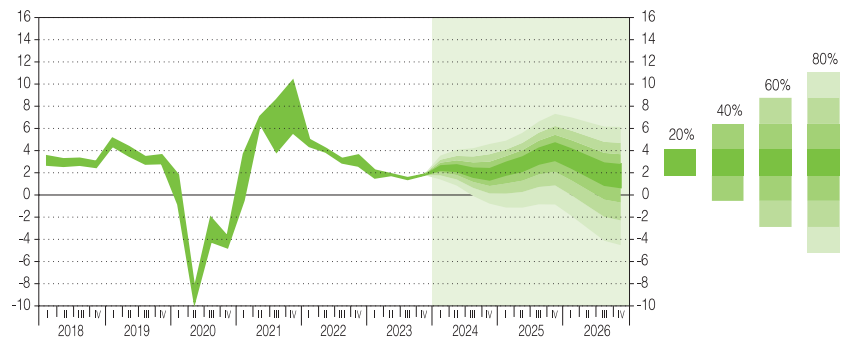
---

<sup>22</sup> The fan chart is constructed on the basis of the so-called asymmetric exponential distribution. To present the forecasting team's estimate of the uncertainty of projected values, it is necessary to estimate the general uncertainty of the forecast (by determining the dispersion  $\sigma$  of the distribution) and the so-called balance of risks (by determining the asymmetry parameter  $\nu$  of the distribution), which indicates the direction in which the realised value is more likely to deviate from the projected value. The balance of risks is determined subjectively by the forecasters on the basis of possible changes in the structure of the economy, inaccuracies in the information available at the time of the forecast production, imperfections in forecasting methods employed, forthcoming economic policy decisions, *etc.* Historical data on the average forecast error made by the BNB experts when preparing previous forecasts are used to determine the general uncertainty to the forecast. For more details on the construction of the fan chart, see the highlight entitled Measurement and Presentation of Uncertainty in Forecasting Economic Indicators, [Economic Review \(issue 1 of 2012\)](#).

potential materialisation of higher than projected international energy and non-energy commodity prices due to a possible escalation of geopolitical tensions worldwide. Higher inflation in the core components and food could materialise in the event of higher and more frequent wage indexation in an environment of labour shortages and stronger than expected consumer demand growth. Another risk of higher inflation in the group of goods and services with administratively controlled prices stems from the likelihood of a reversal of some of the approved price reductions for some medicinal products and the possibility of higher than projected in the baseline scenario increases in the regulated prices for water and sewerage services, natural gas, electricity and heat for household consumers. The fan chart of inflation suggests that with a probability of 60 per cent, annual inflation in consumer prices is expected to range between -0.1 and 4.3 per cent at the end of 2024.

### Fan Chart of the Expected Annual Rate of Change in Real GDP

(per cent)

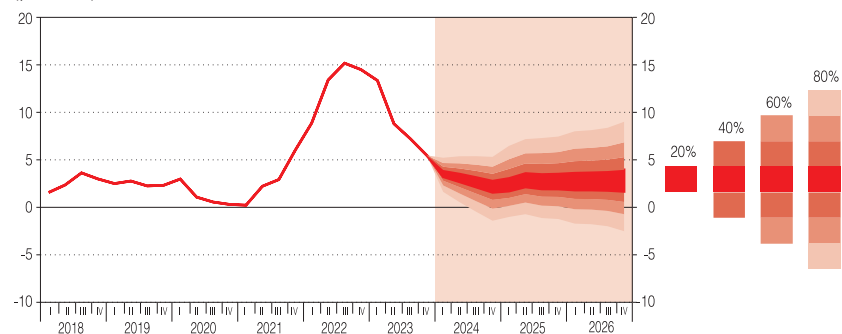


Note: The chart provides historical series and annual real GDP growth forecast according to non-seasonally adjusted data. The fan chart shows expert views of the forecasters on the uncertainty surrounding the projected value based on a probability distribution. The reporting period includes revised GDP growth estimates, with the latest reporting periods revised on fewer occasions, thus narrowing the band. The middle band of the projected horizon chart, depicted in the darkest colour, includes the central projection and the probability distribution shows a 20 per cent probability for the actual value to fall in this band in each of the quarters. If neighbouring bands (in the same brighter colour) are added to the middle band, there would be a 40 per cent coverage of the probability mass. Thus, by adding each same colour couple of bands, the probability for the value to fall there would be increased by 20 percentage points to reach 80 per cent. The probability for the value to remain outside the coloured part of the chart is 20 per cent based on the distribution chosen.

Source: BNB.

### Fan Chart of the Expected Annual Inflation at the End of the Period

(per cent)



Notes: The fan chart shows expert views of the forecasters on the uncertainty surrounding the projected value based on a probability distribution. The middle band of the chart, depicted in the darkest colour, includes the central projection and the probability distribution shows 20 per cent probability for the actual value to fall in this band in each of the quarters. If neighbouring bands (in the same brighter colour) are added to the middle band, there would be a 40 per cent coverage of the probability mass. Thus, by adding each same colour couple of bands, the probability for the value to fall there would be increased by 20 percentage points to reach 80 per cent. The probability for the value to remain outside the coloured part of the chart is 20 per cent based on the distribution chosen.

Source: BNB.



## Forecast of Key Macroeconomic Indicators for 2024–2026

(per cent)

	2023	2024	2025	2026
<b>Annual rate of change</b>				
GDP at constant prices	1.8	2.2	3.3	2.6
Private consumption	5.4	3.6	4.0	3.9
Government consumption	-0.4	2.9	2.7	2.4
Gross fixed capital formation	3.3	2.9	8.6	3.0
Exports (goods and services)	-1.9	2.9	3.6	3.6
Imports (goods and services)	-6.3	4.5	5.2	4.6
HICP at end of period	5.0	2.3	2.7	2.7
Core inflation	5.3	3.3	3.2	3.1
Energy products	-0.6	-2.2	-1.0	-0.9
Food	6.0	3.1	3.3	3.4
Goods and services with administratively controlled prices and tobacco products	5.4	0.8	2.2	2.1
Employment	1.0	0.4	0.2	0.0
Unit labour costs	12.3	5.7	4.2	4.7
Labour productivity	0.9	1.8	3.2	2.5
Unemployment rate (share of labour force, %)	4.4	4.5	4.0	3.7
Claims on the non-government sector	12.2	8.5	6.9	6.8
Claims on corporations <sup>1</sup>	7.6	5.6	4.7	4.9
Claims on households	15.9	11.5	9.7	9.3
Deposits of the non-government sector	9.5	7.6	6.9	6.9
<b>Share of GDP</b>				
Balance of payments current account	-0.3	-0.5	-1.3	-1.9
Trade balance	-3.9	-4.8	-5.5	-5.8
Services, net	7.1	7.2	7.2	7.3
Primary income, net	-5.0	-4.5	-4.3	-4.2
Secondary income, net	1.5	1.6	1.2	0.9
<b>Annual rate of change</b>				
External assumptions				
External demand	0.5	2.1	3.3	3.4
Average annual Brent oil price (in USD)	-17.2	-2.0	-6.4	-4.0
Average annual price of non-energy products (in USD) <sup>2</sup>	-4.4	1.9	2.8	3.1
Brent oil price at the end of period (in USD)	-4.9	-6.4	-5.4	-3.5
Prices of non-energy products at the end of period (in USD)	2.3	3.1	3.3	3.1

<sup>1</sup> Data refer to non-financial corporations.

<sup>2</sup> Prices of non-energy products are weighted according to the structure of Bulgarian imports of goods.

Source: BNB.

ISSN 2738-7666 (ONLINE)

THE SCULPTURAL COMPOSITION BY KIRIL SHIVAROV DEPICTING HERMES AND DEMETER ON THE SOUTHERN FAÇADE OF THE BULGARIAN NATIONAL BANK BUILDING IS USED IN COVER DESIGN.