



MACROECONOMIC FORECAST

NOVEMBER 2024



BULGARIAN NATIONAL BANK

— 145 YEARS —

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CONTENTS

SUMMARY.....	5
FORECAST OF KEY MACROECONOMIC INDICATORS FOR 2024-2026.....	6
External Environment	6
Economic Activity in Bulgaria	7
Balance of Payments	9
Labour Market	9
Monetary Sector	9
Inflation	10
FORECAST REVISIONS	12
RISKS TO THE FORECAST	14

CHARTS

- Fan Chart of the Expected Annual Rate of Change in Real GDP..... 15
- Fan Chart of the Expected Annual Inflation at the End of the Period

TABLES

- GDP and Inflation Forecast Revisions (November 2024 Forecast *vis-à-vis* June 2024 Forecast)
- 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
NHIF	National Health Insurance Fund
NRRP	National Recovery and Resilience Plan

SUMMARY

The BNB forecast of key macroeconomic indicators is prepared as of 8 November 2024 based on assumptions about global economic developments as of 16 August, commodity price dynamics in international markets and money market interest rates in the euro area as of 18 October 2024.

According to the technical assumptions for the development of global economic activity, the growth of external demand for Bulgarian goods and services in 2024 will be lower than projected in the June 2024 macroeconomic forecast. External demand is assumed to increase by 1.2 per cent in 2024, before accelerating to 3.5 per cent and 3.6 per cent in 2025 and 2026. Market participants' expectations point to a year-on-year decline in energy prices in euro in international markets over the whole projection horizon. However, given the assumed increase in non-energy commodity prices, euro commodity prices weighted by importance for Bulgaria's international trade are expected to increase by around 1.6 per cent in 2024 and at rates between 2.4 per cent and 3 per cent in 2025 and 2026. Market participants expect that euro area short-term interest rates will continue declining over the whole projection horizon.

In 2024, Bulgaria's real GDP growth in Bulgaria is expected to reach 2.2 per cent. Private consumption and changes in inventories will have the main positive contribution to this growth, while the contribution of public investment and net exports is expected to be negative. The projected increase in consumer expenditure in 2024 is mainly due to higher employment and wages in real terms, as well as higher social transfers to households. Real GDP growth is expected to gradually accelerate to 2.7 per cent in 2025 and 3.4 per cent in 2026, reflecting mainly the set investment profile for the total economy and a projected stronger acceleration in the growth of exports of goods and services in 2026. At the same time, private consumption will continue to contribute most strongly to real GDP growth in 2025 and 2026.

Annual inflation is expected to be 1.9 per cent at the end of 2024 (compared to 5.0 per cent at the end of 2023) and average annual inflation to slow down to 2.5 per cent (from 8.6 per cent in 2023). The projected deceleration in inflation at the end of 2024 reflects mainly the decline in international oil prices and prices of industrial goods imported in the country. Projected high rates of growth in both unit labour costs and private consumption remain the factors that will continue to exert upward pressure on prices in both the short and medium term. As a result, the services and food groups are expected to continue to have the highest positive contribution to headline inflation in the 2024–2026 period, followed by the group of administratively controlled prices. The HICP growth rate is expected to accelerate to 2.5 per cent at the end of 2025 and to stand at 2.4 per cent at the end of 2026.

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 still significant internal risks of slower than projected implementation of investment projects financed by both national and EU funds. Risks to the inflation forecast are assessed as balanced for the whole projection horizon. They are related mainly to international commodity price dynamics, the extent of firms' pass-through of higher labour costs to consumer prices, as well as to changes in administratively controlled prices and in the VAT rate on bread, flour and catering compared to the forecast baseline scenario.

FORECAST OF KEY MACROECONOMIC INDICATORS FOR 2024–2026

External Environment

The BNB forecast of key macroeconomic indicators is prepared as of 8 November 2024 based on the assumptions of the European Central Bank (ECB) about global economic activity developments as of 16 August 2024 and commodity price dynamics in international markets and money market interest rates in the euro area as of 18 October 2024.

The assumptions about developments in external demand for Bulgarian goods and services are based on the latest ECB forecast¹. According to it, global GDP growth will slow to 3.4 per cent in 2024 and 2025 owing to the expected weakening of manufacturing activity and the deterioration in global business and consumer sentiment. As a result of this and of heightened geopolitical tensions and ongoing processes of trade fragmentation, the ECB forecasts that global trade growth will be lower than its historical averages until the end of the projection horizon. According to the ECB forecast, external demand for Bulgarian goods and services in 2024 will increase at a slower pace than projected in the June 2024 BNB macroeconomic forecast given the deterioration in the economic outlook in Bulgaria's major trading partners in the euro area. Assumptions suggest that external demand for Bulgarian goods and services will grow by 1.2 per cent in 2024, before accelerating to 3.5 per cent in 2025 and 3.6 per cent in 2026.

Assumptions for the price change in energy commodities (crude oil, natural gas, electric-

ity)² and non-energy commodities³ (metals⁴, food⁵ and other commodities⁶) take into account prices of futures contracts concluded in international markets as of 18 October 2024. Market participants expect the year-on-year decline in euro energy commodity prices⁷ in international markets to continue over the entire forecast period, mainly as regards crude oil. However, given the assumed increase in non-energy commodity prices over the same period, the euro commodity prices weighted by importance for Bulgaria's international trade are expected to increase at rates between 1.5 per cent and 1.7 per cent in 2024 and at rates between 2.2 per cent and 3 per cent in 2025 and 2026.

As regards the crude oil price in euro, assumptions suggest that it will fall on an annual basis from 2024 to the end of the

² The assumption about price dynamics of petroleum products for the whole projection horizon is based on data on futures contracts traded in international markets. For natural gas, prices for futures supply contracts are also used up to the third quarter of 2025 (inclusive), after which a technical assumption is made that prices will remain unchanged at the level reached by the end of 2026. The estimates of electricity price dynamics are made on the basis of market information from futures contracts concluded in the German market, covering the period up to the third quarter of 2025 (inclusive), followed by the technical assumption that the price will remain unchanged until the end of 2026.

³ Futures contracts concluded for trading of relevant commodities in international markets are used, with data available until the end of the third quarter (inclusive) 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.

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

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

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

⁷ The forecast for 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 years as of the cut-off date of the external environment assumptions (8 October 2024).

¹ For further details, see [ECB staff macroeconomic projections](#), September 2024. The ECB forecast includes information on the global economy development as of 16 August 2024 and information on dynamics of euro area economic activity as of 29 August 2024.

projection horizon, likely reflecting market participants' expectations of lower demand for oil and OPEC+ decision to gradually phase out the cuts of crude oil production after December 2024.⁸ Market participants expect the price of natural gas in Europe to rise on a quarterly basis in the fourth quarter of 2024 and in the first quarter of 2025, owing mainly to the uncertainty stemming from the military conflicts in Ukraine and the Middle East, which would contribute to the average annual increase in natural gas prices in 2025. Market participants expect electricity prices in Europe to remain close to 2023 levels in 2024 and to increase in 2025. A technical assumption is made that electricity and natural gas prices in the European market will remain unchanged until the end of the forecast period compared to the level reached in the third quarter of 2025.

Non-energy commodity prices in international markets in euro are assumed to increase less on an annual basis in 2024 and 2025 than those as projected in the June 2024 BNB forecast. The increase in euro prices of non-energy products in 2024 is expected to be most pronounced in food and agricultural commodities. Based on the assumptions, growth in metal and agricultural prices will accelerate, while food prices will slightly decline. As a result of these developments, euro prices of non-energy commodities in international markets, weighted by importance for Bulgaria's international trade, will rise by 2.9 per cent in 2024 and by nearly 3.2 per cent in 2025 and 2026.

Market participants' expectations as of 18 October 2024 are for a continued gradual decline in short-term interest rates in the euro area over the entire projection horizon.

Economic Activity in Bulgaria

In the first half of 2024, annual growth of real GDP was 2.1 per cent, according to non-seasonally adjusted data of the National Statistical

Institute (NSI).⁹ Available economic indicators¹⁰ for the third quarter of 2024 signal a slight acceleration of the annual growth in economic activity in Bulgaria. Taking into account these developments and the technical assumptions of the external economic environment, real GDP growth is projected to reach 2.2 per cent in 2024 (from 1.9 per cent in 2023). Higher real GDP growth in 2024 will be mainly driven by the transition from a negative to a positive contribution of changes in inventories¹¹, followed by a projected acceleration in private consumption growth and expectations of an increase in goods exports in 2024 after a fall in 2023.¹² Private consumption is projected to pick up by 4.8 per cent in real terms in 2024, and growth will be supported by rising employment and higher real disposable income of households in the context of increased labour demand and record high labour shortages in Bulgaria. Other factors favourable to consumer expenditure growth in 2024 will be the increased social transfers to households, public sector wage growth and high lending activity, supported by both the active supply of credit resources by banks and increased demand by households. Fixed capital investments declined in the first six months of the year due to a decline in pub-

⁹ On 18 October 2024, the NSI published revised annual and quarterly data on GDP and its components for the period from 2014 to the second quarter of 2024. The largest revisions were made for 2023, with nominal GDP being increased by BGN 1489 million, mainly due to an increase in the GDP deflator. The annual rate of change in real GDP for 2023 has been revised by 0.04 percentage points (up to 1.9 per cent, from 1.8 per cent before the revision), while growth in the first half of 2024 has been left unchanged. At the same time, by GDP sub-component, there are significant changes with a mutually offsetting effect for both 2023 and the first half of 2024. As a result, the revision of historical GDP data leads to a lack of comparability between the current forecast and that of June 2024.

¹⁰ 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.

¹¹ In 2023, a decreased accumulation of inventories was observed in the economy, in line with the decline in the economic uncertainty following the war in Ukraine, the reported decline in non-energy commodity prices and improvements in the functioning of global supply chains (down 81.4 per cent in new stocks over 2023, compared to growth of 306.3 per cent in 2021 and 19.0 per cent in 2022). At the same time, the inventories component contributed positively to the real GDP growth in the first half of 2024, and this dynamics is expected to remain until the end of the year. A technical assumption is made for the 2025–2026 period that the contribution of inventories to the economic activity dynamics will be neutral.

¹² The transition from a decline to growth in exports of goods is expected to result largely from the exhausted negative effects of country-specific one-off factors limiting metal exports in 2023.

⁸ For further details, see [the OPEC press release](#) of 5 September 2024.

lic investment,¹³ which according to BNB estimates is driven by the high base of nationally financed investment in the second quarter of 2023. For 2024, public investment is projected to fall, reflecting lower national investment in the first half of the year and, to a comparatively lesser extent, the completed EU-financed projects under the 2014–2020 programme period and the still initial phase of projects implementation under the 2021–2027 programme period. Total fixed capital investments are expected to decline by 6.3 per cent in real terms in 2024. The high growth in government expenditure on compensation of employees recorded in the first half of 2024 is projected to have the most significant effect for the increasing government consumption in real terms in 2024.¹⁴ At the same time, nominal growth in intermediate consumption is assumed to be lower than in other components of government consumption, which will limit the acceleration in real government consumption growth during the year. Net exports are expected to contribute negatively to the annual rate of change in real GDP in 2024 due to the projected weaker real growth in exports compared to imports of goods and services. The forecast of exports reflects the set technical assumption of low growth in external demand in 2024, as well as the exhausted negative effects¹⁵ of country-specific one-off factors which limited metal exports in 2023. The forecast of real growth in goods and services imports is based on the dynamics of final demand components and BNB estimates of their import content.

Real GDP growth is expected to increase to 2.7 per cent in 2025. The accelerated growth is mainly driven by an expected higher investment activity in Bulgaria, with fixed capital investments projected to grow by 9.4 per cent in real terms in 2025, supported mainly by the implementation of EU-financed projects under the National Recovery and Resilience Plan

¹³ The NSI does not provide official data on the breakdown of total investments into private and public investments in the economy. Private investment series is constructed by the BNB as a difference between total investments and the estimated amount of public investments on an accrual basis in real terms. The assessment of public investments for 2023 and the first half of 2024 is based on quarterly non-financial accounts data of the general government sector published by the NSI.

¹⁴ The series on public wage growth is also partially reflected in the projected annual growth of the government consumption deflator.

¹⁵ For more information, see [the June 2024 Macroeconomic Forecast](#).

(NRRP)¹⁶. Private consumption will continue to have the major contribution to the economic growth in 2025, underpinned by a projected increase in wages, though its growth rate will slow down slightly from 2024 to 4.2 per cent. Concurrently, government consumption is projected to pick up by 1.0 per cent in real terms in 2025, driven mainly by the dynamics of compensation of employees in the public sector.¹⁷ The negative contribution of net exports is anticipated to rise to 1.4 percentage points as a result of stronger growth in goods and services imports, reflecting higher investment activity and growth in consumer expenditure with high import content. Despite an assumed improvement in external demand compared to the previous year, growth of goods exports will be limited due to expected repairs in a large metallurgical plant¹⁸ in 2025.

Economic growth is expected to accelerate to 3.4 per cent in 2026, which will be mainly due to a shift from a negative to a slightly positive contribution of net exports. The main contributors to this will be a projected acceleration of goods and services exports in line with the set technical assumptions about external demand and completion of repairs limiting exports in the previous year. At the same time, growth of goods and services imports is expected to slow down, mostly in line with the profile of fixed capital investments and their estimated import content. Private consumption is envisaged to increase by 4.0 per cent in real terms in 2026 and to retain its largest positive contribution to the real GDP growth. This will be driven by sustained tight labour market conditions, leading also to a retention of the trend toward a significantly higher growth rate of nominal wages *vis-à-vis* consumer prices.

¹⁶ The expected acquisition of new fighter aircraft 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 the acquisition costs are equally accounted for in government investment and goods imports.

¹⁷ The forecast of the dynamics in compensation of employees in the public sector for 2025–2026 takes into account the information on approved amendments to the Law on the Ministry of the Interior and the Law on Defence and Armed Forces of the Republic of Bulgaria, which are expected to enter into force on 1 January 2025. Also, an assumption is made that the policy of maintaining wages in the education sector at 125 per cent of the national average wage will continue.

¹⁸ According to [the quarterly report](#) of Aurubis AG, a repair in its Pirdop plant is planned for 2025.

Balance of Payments

The current account balance is expected to be negative over the entire projection horizon, with deficit reaching 0.3 per cent of GDP in 2024, before increasing to 1.3 per cent of GDP in 2026. Current account flow dynamics over the projection horizon will be mainly determined by an increase in the trade balance deficit due to the expected higher growth of goods imports than goods exports and prevailing unfavourable terms of trade in the 2024 to 2026 period. At the same time, the services trade surplus is anticipated to be 8.7 per cent of GDP in 2024 and to stabilise at similar levels in 2025 and 2026, given the full recovery of visits by foreigners in Bulgaria compared to the pre-COVID-19 levels. The net primary income deficit is projected to gradually decline as a percentage of GDP compared to 2023 in line with the expected decline in euro area interest rates. Over the forecast horizon, the capital account surplus as a percentage of GDP is expected to increase gradually due to an assumed rise in incoming capital transfers from the EU, including under the NRRP.

Labour Market

Labour market conditions remained tight in the first half of 2024, with increased economic activity in Bulgaria amid limited labour supply further exerting pressure for increasing wages in real terms above the growth rate of labour productivity. We expect these developments to be sustained throughout the projection horizon. The number of employed persons rose by 1.2 per cent in the first six months of 2024, and their growth is expected to remain unchanged on average for the whole 2024. Despite the projected economic growth increase in 2025–2026, the rise in employment will be limited to 0.1 per cent in 2025, and the number of employees is projected to remain at a similar level in 2026 as a result of the ongoing adverse demographic developments in Bulgaria leading to a decrease in labour force. These developments will also reflect in a gradual decline of the unemployment rate from 4.3 per cent in 2024 to 3.6 per cent in 2026. The projected increase in economic growth in Bulgaria amid limited growth in employees will result in accelerating real labour productivity growth

from 1.1 per cent in 2024 to 2.7 per cent in 2025 and 3.4 per cent in 2026. Despite slowing inflation in the first half of 2024, nominal annual growth in compensation *per* employee remained high (13.5 per cent), supported by expanded economic activity, the 19.6 per cent rise of minimum wage since the beginning of the year, increased public sector wages and high labour shortages in Bulgaria. Growth in compensation *per* employee is projected to be 13.3 per cent in 2024 and to moderate over the rest of the projection horizon in line with weaker inflationary pressures. At the same time, growing domestic labour shortages are suggested to further contribute to a higher wage growth rate compared to the corresponding rate of the projected increase in labour productivity and inflation. As a result, compensation *per* employee is expected to increase by 8.1 per cent in 2025 and 7.7 per cent in 2026 and to support further consumer expenditure. The high growth of compensation *per* employee in 2024 will also cause a strong increase in unit labour costs of 12 per cent. Unit labour costs growth is anticipated to slow down to 5.3 per cent in 2025 and 4.2 per cent in 2026, in line with more moderate wage growth and a projected labour productivity rise.

Monetary Sector

In the upward phase of the interest rate cycle in 2022–2024, the transmission of the ECB monetary policy to interest rates on deposits and loans in the household sector in Bulgaria remained comparatively weak in the context of sustained significant inflows of attracted funds, high liquidity and strong competition in the domestic banking sector. The two cuts in key interest rates undertaken by the ECB since mid-2024 marked the beginning of a turnaround in the euro area interest rate cycle, with market expectations showing further declines in the coming quarters. In view of a comparatively weak transmission of the ECB monetary policy in the upward phase of the interest rate cycle and low levels of interest rates on household deposits and loans in Bulgaria, no strengthening of this transmission in the downward phase of the interest rate cycle is expected. Interest rates on new time deposits and new loans to households are projected to remain close to their current levels and probably to increase

slightly in the short term. A greater transmission of already undertaken and expected future cuts in key euro area interest rates can be expected in lending rates on corporate loans that are more strongly linked to reference interbank market indices in the euro area. In line with market expectations about dynamics of these indices, interest rates on newly extended corporate loans are projected to follow a downward trend until mid-2026 thereafter remaining at similar levels to those reached.

We expect annual growth of non-government sector's deposits to remain relatively high over the projection horizon, though tending to slow down moderately in line with the projected slowdown in wage growth. Annual growth in credit to the private sector is anticipated to be stronger compared to our previous forecast of June 2024, especially in the sector of households, with both demand and supply side factors contributing further to this growth. Annual growth of credit to the non-government sector is projected to reach 13.6 per cent at the end of 2024, before slowing down to 10.8 per cent in 2025 and to 9.4 per cent in 2026, in line with the projected slowdown in private consumption growth and lower house price growth, as well as with the expected maintenance of the average annual inflation at levels close to those reached in 2024.

Inflation

The projected inflation dynamics over the 2024–2026 period depends largely on the underlying technical assumptions for international prices of major energy and agricultural commodities, the projected degree and speed of their pass-through to final consumer prices of services and food, as well as on the effects of discretionary fiscal measures taken. The forecast employs information available as of 4 November 2024 on the following government measures: increases in the excise duty on tobacco products for 2024–2026 as provided for in the Excise Duties and Tax Warehouses Law;¹⁹ termination of the reduced tax rates on supply of bread and flour (zero per cent) and

¹⁹ The excise duty calendar was adopted by the [Law on Amendment to the Tax and Social Insurance Procedure Code](#) (published; Darjaven Vestnik, issue 100 of 16 December 2022). It foresees a simultaneous increase in the specific excise duty rate and a reduction in the proportional excise duty on tobacco products, while setting out that the minimum overall excise duty per 1000 cigarettes will increase by 4.6 per cent in 2024, by 4.4 per cent in 2025 and by 4.2 per cent in 2026.

on restaurant and catering services (9 per cent) and restoration of the standard VAT rate of 20 per cent as of 1 January 2025.²⁰ The forecast includes water and sewerage services price rises in 2024–2026 based on the business plans for the development of water and sewerage companies in Bulgaria approved by the Energy and Water Regulatory Commission and the water and sewerage services prices for household consumers set out therein.²¹ The forecast assumes that the measure for providing compensation to business electricity consumers will remain in place until the end of 2024 in line with the government's programme approved in July 2024.²² At the same time, external assumptions included in the forecast suggest that over the forecast horizon, the electricity price will remain persistently above the threshold currently set for compensation.

Annual inflation measured by the Harmonised Index of Consumer Prices is expected to be 1.9 per cent at the end of 2024 (compared to 5.0 per cent at the end of 2023) and average annual inflation to slow down to 2.5 per cent (from 8.6 per cent in 2023). The main factors behind the slowdown in inflation at the end of 2024 are the expected year-on-year price decline in energy products in view of the technical assumptions on international oil prices set out in the forecast, as well as the projected decrease in the prices of imported industrial goods. In line with projected strong consumer demand and increased unit labour costs, inflation in the group of services is expected to remain persistently high at the end of 2024 (4.2 per cent), while food prices will continue to grow at a faster rate than that suggested by international agricultural commodity prices. As a result, these groups are expected to have the largest positive contribution to the overall inflation at the end of 2024. The group of goods and services with administratively controlled prices and tobacco products is also

²⁰ The periods of validity of the reduced VAT rates for the supply of bread and flour (published; Darjaven Vestnik, issue 42 of 14 May 2024) and for the supply of restaurant and catering services (published, Darjaven Vestnik, issue 106 of 22 December 2023) were extended until 31 December 2024 by amendments to the [Value Added Tax Law](#). 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.

²¹ All [decisions on business plans of water supply and sewerage operators](#) are published on the ERWC's website.

²² A [decision of the Council of Ministers](#) provides that from 1 July 2024 to 31 December 2024, business consumers in Bulgaria are entitled to compensation for the price of electricity. Compensation is 100 per cent of the difference between the real average monthly exchange price of the day-ahead segment of the Independent Bulgarian Energy Exchange EAD for the respective month and the base price of BGN 180/MWh.

projected to have a relatively high positive contribution to inflation at the end of the year, reflecting increased prices of tobacco products as a result of the changes in excise duties since early 2024, the rise in prices of passenger rail transport as of May 2024²³, the 1.8 per cent price rise of electricity for household consumers from 1 July 2024, and increased water and sewerage prices incorporated in the forecast. However, the positive contribution of administratively controlled prices at the end of 2024 is expected to be lower than at the end of 2023 due to lower prices of certain medicinal products²⁴ and the decrease of 8.5 per cent in the price of heating²⁵ for households from 1 July 2024, as approved by the EWRC.

The rate of increase in consumer prices is forecasted to accelerate to 2.5 per cent at the end of 2025 and to reach 2.4 per cent at the end of 2026, with average annual inflation expected to be close to these values. The inflation forecast reflects both the technical assumptions used for developments in international prices of food and energy commodities and the expectations of continued high pro-inflationary pressures in terms of the internal macroeconomic environment. Services and food groups are expected to have the largest positive contribution to the overall inflation in the medium term, reflecting projected growth in production costs of firms in line with the upward wage dynamics and the set technical assumption for lifting the compensation programme for business electricity consumers. Oil price declines set in the technical assumptions are expected to contribute to lower transport fuels prices over 2025 and 2026, which, however, is not anticipated to weigh on the other HICP components, given the pro-inflationary factors listed above and projected strong private consumption. A restoration of the standard VAT rate for bread, flour and catering in the beginning of 2025 will push up prices of these products. In the 2025–2026 period, administratively controlled prices are assumed to increase in line with the projected dynamics of firms' labour costs, with regulated prices of

central gas supply²⁶, tobacco products, and water supply and sewerage services²⁷ being an exception to this approach. The growth rate of administratively controlled prices thus obtained for 2026 is increased further on an expert basis to include the average estimated error observed historically in this group's inflation²⁸.

²³ For details, see [the press release](#) of the BDZ.

²⁴ On 7 March 2024, the Supervisory Board of the National Health Insurance Fund [approved](#) a change in reimbursement levels for certain medicinal products included in the positive drug list. This 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.

²⁵ For further information, see [the press release](#) of the EWRC.

²⁶ The forecast includes a technical assumption that the price of central gas supply would follow dynamics of the natural gas price in international markets.

²⁷ The set price increase in water supply and sewerage services for 2025 is in line with the prices for household customers, as projected in the business plans of these companies.

²⁸ See the highlight '[Assessment of the Size and Factors Behind the Errors in the Inflation Forecasts in the Post-COVID-19 Pandemic Period](#)', published in the June 2023 Macroeconomic Forecast.

FORECAST REVISIONS

Compared to the [June 2024 macroeconomic forecast](#), current expectations are for slightly higher real GDP growth in 2024, lower growth in 2025 and higher growth in 2026. The main drivers for the revision in the GDP forecast and its main components are related to additional reporting data on economic activity in the second and third quarters of 2024, the revision of NSI national accounts data on 18 October 2024, changes in the technical assumptions for the external environment and developments in exports of goods given the reporting of new data on planned refurbishments in a major enterprise in 2025.

For 2024, real GDP growth was raised by 0.1 percentage points, driven by the projected positive contribution of inventories as compared with the negative contribution in the previous forecast, and projected higher growth in private consumption compared with the June 2024 forecast. These revisions are only partly offset by expected lower growth

in government consumption, fixed capital investments and exports of goods and services. These developments are largely affected by the NSI revision on historical series on GDP components and the new reporting data on the economic development in Bulgaria. An additional factor behind the downward revision in fixed capital investments is the changed assumption for the amount of funds expected to be absorbed by Bulgaria under the NRRP. Due to the comparatively slow absorption of funds and implementation of the intermediate stages and targets under the NRRP according to the fixed deadline for the implementation of projected expenditure, the forecast assumes an underspending of funds under the NRRP for Bulgaria, which will affect fixed capital investments of the general government sector. Projected lower growth in government consumption is mainly driven by the base effect resulting from the NSI upward revision in the 2023 baseline.

GDP and Inflation Forecast Revisions (November 2024 Forecast *vis-à-vis* June 2024 Forecast)

Annual rate of change, per cent	Forecast as of November 2024				Forecast as of June 2024				Revision (percentage points)			
	2023	2024	2025	2026	2023	2024	2025	2026	2023	2024	2025	2026
GDP at constant prices	1.9	2.2	2.7	3.4	1.8	2.1	3.2	2.9	0.1	0.1	-0.5	0.5
Private consumption	1.4	4.8	4.2	4.0	5.4	4.0	4.0	3.9	-4.0	0.8	0.2	0.1
Government consumption	1.1	0.7	1.0	2.3	-0.4	2.9	2.5	2.4	1.5	-2.2	-1.5	-0.1
Gross fixed capital formation	10.2	-6.3	9.4	3.2	3.3	0.5	8.5	3.5	6.9	-6.8	0.9	-0.3
Exports (goods and services)	0.0	1.5	3.0	4.3	-1.9	2.3	3.7	3.6	1.9	-0.8	-0.7	0.7
Imports (goods and services)	-5.5	2.4	5.7	4.4	-6.3	2.7	5.6	4.5	0.8	-0.3	0.1	-0.1
HICP at end of period	5.0	1.9	2.5	2.4	5.0	2.2	2.8	2.6	0.0	-0.3	-0.3	-0.2
Core inflation	5.3	1.8	2.8	2.6	5.3	2.3	3.3	2.9	0.0	-0.5	-0.5	-0.3
Energy products	-0.6	-7.2	-1.0	-0.8	-0.6	-2.5	-1.0	-0.9	0.0	-4.7	0.0	0.1
Food	6.0	3.6	2.8	3.3	6.0	3.2	3.4	3.3	0.0	0.4	-0.6	0.0
Goods and services with administratively controlled prices and tobacco products	5.4	3.4	2.3	2.1	5.4	2.4	2.2	2.1	0.0	1.0	0.1	0.0

Source: BNB.

The downward revision of real GDP growth by 0.5 percentage points in 2025 is mainly due to a projected slower increase in exports of goods and services and in government consumption. The downward revision in government consumption in real terms is attributable to the projected higher growth rate of the government consumption deflator due to expected higher nominal growth in compensation of employees in 2025 than that projected in the June 2024 macroeconomic forecast. The revision of exports is affected by additional information obtained on refurbishments in 2025 in a large production company in metallurgy, which is expected to temporarily limit exports of metals from Bulgaria. These developments will be only partially offset by projected higher growth in private consumption and gross fixed capital formation in 2025. The revision in private consumption is related to projected higher growth in real disposable income of households, while that of gross fixed capital formation is due to the base effect of lower investments in 2024.

Economic activity growth in 2026 has been revised positively by 0.5 percentage points compared to the June 2024 macroeconomic forecast. This reflects mainly projected higher growth in exports of goods due to the assumed recovery of metal exports after the effects of temporary supply-side factors are exhausted in 2025. Private consumption in 2026 has also been revised upward in line with the projected higher growth rate of real disposable income of households.

The inflation forecast of consumer prices has been revised downward at the end of 2024 (by -0.3 percentage points). Energy product prices have been revised downward by -4.7 percentage points as a result of new reporting data on transport fuel prices and technical assumptions about oil prices in euro in international markets. Core inflation at the end of 2024 has been decreased by 0.5 percentage points due to an expected year-on-year decline in prices of industrial goods at the end of 2024 compared with projected low growth in the previous macroeconomic forecast. The new reporting data up to September 2024 and the revised ECB projections of industrial goods prices in the euro area

contribute to this effect. These developments are partially offset by the upward revision of inflation in the group of administratively controlled prices and tobacco products (by 1.0 percentage point) due to new reporting data obtained and new information on upcoming changes in some regulated prices. As regards food products, inflation has been revised upward (by 0.4 percentage points at the end of 2024), mainly due to the changed assumptions about international food prices and the estimated speed of their pass-through to final consumer prices in Bulgaria. The forecast of the annual rate of change of the HICP at the end of 2025 and at the end of 2026 has been revised downward (by -0.3 and -0.2 percentage points, respectively) mainly due to a change in the technical assumptions about international prices of major agricultural and energy commodities and inflation in industrial goods in the euro area.

RISKS TO THE FORECAST

The baseline scenario of the forecast is characterised by a high uncertainty about external developments due to ongoing military conflicts and increased geopolitical tensions globally. 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.

Risks of lower economic activity stem from both the global and domestic macroeconomic environment. As regards global environment, these risks relate mainly to the likelihood of weaker external demand for Bulgarian goods and services as a result of a heightened economic uncertainty amid further trade fragmentation and rising geopolitical tensions internationally. Other risks stem from the probability that euro area GDP growth may remain persistently lower than set in the technical assumptions, reflecting the effect of factors of a structural nature. An internal risk to the economic activity forecast arises from the parameters of the 2025 State Budget Law, which were not available at the time of preparing the forecast. A possible initiation of urgent measures for fiscal consolidation could limit economic activity, and macroeconomic effects will depend on the type of initiated measures. Concurrently, in view of a continued political uncertainty in Bulgaria, the risk of slower than projected implementation of investment projects financed by both national and EU funds remains. 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 of the forecast for a particular indicator may be graphically illustrated by means of a fan chart. Chart bands of a par-

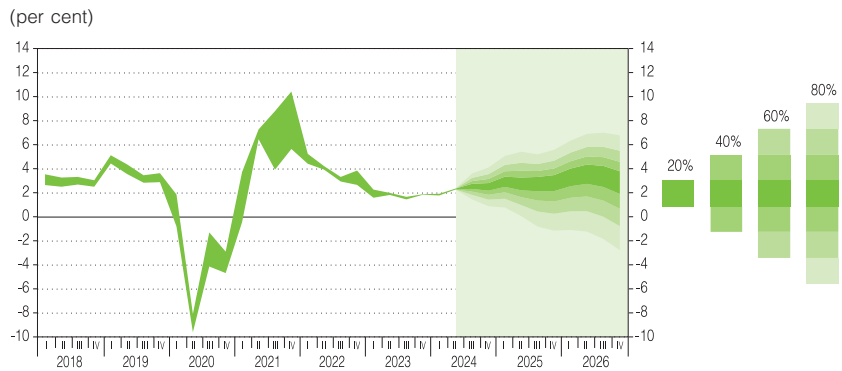
ticular colour indicate an interval within which the forecast value is expected to fall with a certain probability (for more details, see the notes to the charts)²⁹. Usually, each interval widens with the increase in the forecast horizon, reflecting the increasing uncertainty further into the future. 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 constructed 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 a 60 per cent probability the annual rate of change of real GDP is expected to be in the range of 1.8 per cent to 2.8 per cent.

Risks to the food inflation forecast are assessed as balanced over the entire projection horizon. These risks are related mainly to the dynamics of external assumptions about international prices of major energy and agricultural commodities in the forecast, and to the extent to which firms pass the projected increase in labour costs on final consumer prices. Uncertainty to the forecast arises from possible changes in administratively controlled prices and in the VAT rate on bread, flour and catering compared to the forecast baseline scenario. The fan chart of inflation suggests that with a probability of 60 per cent annual

²⁹ 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 σ of the distribution) and the so-called *balance of risks* (by determining the asymmetry parameter ν 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 highlights entitled *Measurement and Presentation of Uncertainty in Forecasting Economic Indicators*, [Economic Review, issue 1 of 2012](#).

inflation in consumer prices is expected to range between 0.8 per cent and 3.1 per cent at the end of 2024.

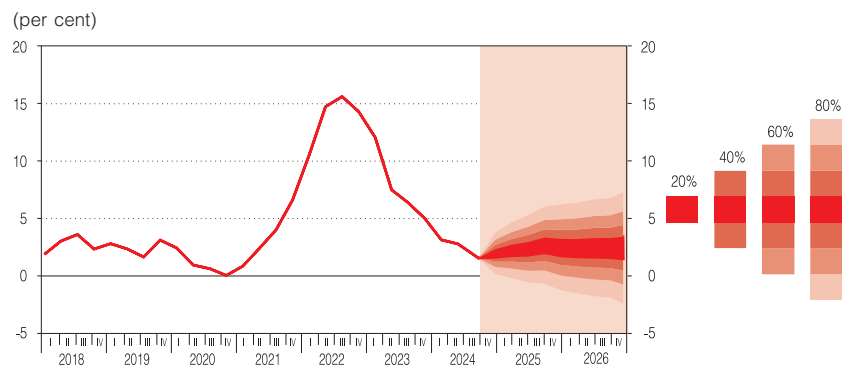
Fan Chart of the Expected Annual Rate of Change in Real GDP



Notes: 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



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
Annual rate of change				
GDP at constant prices	1.9	2.2	2.7	3.4
Private consumption	1.4	4.8	4.2	4.0
Government consumption	1.1	0.7	1.0	2.3
Gross fixed capital formation	10.2	-6.3	9.4	3.2
Exports (goods and services)	0.0	1.5	3.0	4.3
Imports (goods and services)	-5.5	2.4	5.7	4.4
HICP at end of period				
HICP at end of period	5.0	1.9	2.5	2.4
Core inflation	5.3	1.8	2.8	2.6
Energy products	-0.6	-7.2	-1.0	-0.8
Food	6.0	3.6	2.8	3.3
Goods and services with administratively controlled prices and tobacco products	5.4	3.4	2.3	2.1
Employment				
Employment	1.1	1.2	0.1	0.0
Unit labour costs	12.5	12.0	5.3	4.2
Labour productivity	0.8	1.1	2.7	3.4
Unemployment rate (share of labour force, %)	4.4	4.3	3.9	3.6
Claims on the non-government sector				
Claims on the non-government sector	12.2	13.6	10.8	9.4
Claims on corporations ¹	7.6	8.3	6.2	5.9
Claims on households	15.9	20.4	16.3	13.2
Deposits of the non-government sector	9.5	9.4	8.2	7.8
Share of GDP				
Balance of payments current account	0.9	-0.3	-1.2	-1.3
Trade balance	-4.1	-5.5	-7.4	-7.1
Services, net	8.2	8.7	8.9	8.9
Primary income, net	-4.8	-4.6	-4.2	-4.2
Secondary income, net	1.6	1.1	1.6	1.1
Annual rate of change				
External assumptions				
External assumptions				
External demand	1.0	1.2	3.5	3.6
Average annual Brent oil price (in USD)	-17.2	-1.9	-7.2	-2.8
Average annual price of non-energy products (in USD) ²	-5.0	3.5	3.7	3.3
Brent oil price at the end of period (in USD)	-4.9	-9.6	-2.4	-2.1
Prices of non-energy products at the end of period (in USD)	1.2	5.7	4.0	3.2

¹ Data refer to non-financial corporations.

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

Source: BNB.

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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.