MACROECONOMIC FORECAST

Autumn 2022

Ministry of Finance of the Republic of Bulgaria

Both the global and the EU economies had relatively strong growth in the first half of the current year, but the high degree of uncertainty, significantly higher energy prices and supply chain issues are expected to dampen economic activity in late 2022 and early 2023. The ongoing process of interest rate hikes by leading central banks, in response to historically high inflation, is expected to further limit economic growth globally and particularly in the euro area in 2023.

On 19.10.2022, the National Statistical Institute published revised National accounts data. According to them, the most significant revision was in the data for 2021, as nominal GDP was raised by BGN 6.3 bn, and real GDP growth was revised from 4.2 to 7.6%. In the first half of 2022, Bulgarian economy expanded by 4.1%[1] over the same period of the previous year. Growth will slow down in the second half, standing at 2.9% for the whole 2022. The weaker external demand will limit the increase in export in 2023 and GDP growth will slow down to 1.6%.

Compared to the spring forecast, employment growth in 2022 has been significantly revised down to 0.9%, due to the smaller number of Ukrainian refugees who have been employed on Bulgarian labour market. In 2023, employment is projected to continue to grow, but at a slower pace of 0.4%, which will be due to the expected slowdown in economic growth. The unemployment rate for 2022 is estimated at 4.6%. In the 2023–2025 period it is expected to follow a downward trend and to reach 4.2% in 2025.

The overall increase in compensation per employee will be mainly driven by the private sector. The country’s compensation per employee is estimated to grow by a nominal 15% in 2022 and to decelerate to 9.9% in 2023. The latter remains relatively strong in historical perspective. The slowdown however will reflect the expected weakening in inflation dynamics, the worsened economic activity outlook as well as the less pronounced contribution of the public sector.

The annual HICP inflation rate is projected to decelerate in Q4 2022 and reach 13.2% at the year-end, due to the expected dynamics of international prices, as well as the base effects from late-2021. The annual average inflation in 2022 will be 12.7%. In the coming years, inflation will continue to decelerate in line with the expected downward dynamics of world commodity prices and waning second-round effects. Core inflation components will contribute the most to the increase in the headline rate, which is expected to decelerate to 3.8% at the end of 2023, while the annual average inflation rate will be 6.4%.

---

[1] Not seasonally adjusted data.

By the end of 2022, the nominal growth of merchandise import is expected to remain higher compared to export which will lead to an increase in the trade deficit to 4.9% of projected GDP. Compared to the spring forecast, the expectations for the trade deficit improved due to higher real export growth and positive terms of trade. The current account deficit will reach 0.7% of GDP. Next year, a significant slowdown in trade with goods is expected, thus the trade deficit will widen to 5.6%. The growth of tourist receipts will remain relatively high and will support the expansion of the services surplus. The overall dynamics of the balance of payments assume maintaining a stable external position of the country and a stable level of international reserves.

Credit to the private sector has been gaining momentum since the beginning of 2022, up by 13.9% yoy at the end of August. By the end of the year its growth rate will slow down and as a result the total claims on the private sector will increase by 11.3% compared to end-2021. In 2023, the growth of the claims on the private sector will continue to decelerate. The main factors behind this will be the lower economic growth and the expected increase in interest rates on loans resulting from the transmission of the ECB monetary policy normalization. Total claims on the private sector will increase by 6.7% yoy.

There are many risks to the macroeconomic forecast due to the high degree of uncertainty on a global scale and, above all, the geopolitical situation surrounding the war in Ukraine. A significant risk is the possibility of additional cut-off in energy commodities import from the Russian Federation to the EU and Bulgaria, and the inability to be quickly replaced with supplies from other countries. If the hike in interest rates does not bring inflation down to the desired levels, this could create the perception that leading central banks cannot cope with rising prices and would create self-fulfilling expectations of inflation above official targets in the medium term.

Given the potential risks to the forecast, an alternative macroeconomic scenario has also been prepared. It considers the possibility of a higher increase in prices of some internationally traded goods and a more unfavourable dynamics of external demand compared to the baseline scenario. As a result of the simulation and the assumptions used, inflation in the country will be higher compared to the baseline scenario by an average of 1.1 pps in the period 2022–2024. GDP growth will be lower throughout the forecast horizon by 0.3 pps in 2022 and by 1.3 pps in 2023, after that the negative effect on growth will gradually diminish. The level of GDP at constant prices in the alternative scenario will remain permanently below the baseline until the end of the projection period. ●

1. External environment. Main assumptions.

The first half of 2022 was marked by strong economic growth in the world driven by the recovery in consumption and trade following the COVID-19 crisis. However, the global economy is surrounded by a high degree of uncertainty and challenges such as the Russian invasion in Ukraine, high commodity prices and supply chain disruptions. Uncertainty, sharply elevated prices of energy commodities and in general the historically high inflation are expected to dampen economic activity, leading to a technical recession in some of our major trading partners towards the end of 2022 and early 2023. Suppressed demand and relatively high inflation will persist in 2023, as a result the GDP growth in EU will slow down to around 0.7%. In 2024–2025, GDP growth is expected to return to its pre-pandemic average of just over 2%.

The assumption for the BGN/USD exchange rate in the current forecast is based on the fixed exchange rate of the local currency vis-à-vis the euro and a technical assumption for the USD/EUR exchange rate. The latter is assumed to remain unchanged over the projection horizon at the average levels for the ten-working-day period ending on the cut-off date of 10.10.2022. According to this technical assumption, the average annual exchange rate of the euro is expected to depreciate by 12.4% in nominal terms to USD 1.04 in 2022. In 2023, the euro will depreciate further by 5.8% to USD 0.98 and remain at this level until the end of the forecast horizon.

Regarding commodity prices, the assumptions about their dynamics are based on the information on the relevant futures as of 10.10.2022. The average price of Brent crude oil in 2022 is expected to be USD 100.7 per barrel, which corresponds to an increase of 43% compared to the previous year. In line with current market expectations, it is expected to gradually decline in the following years to an average of USD 72.7 in 2025. Prices of natural gas in Europe are assumed to go up by 244% in dollar terms in 2022 and by 25% in 2023, after which they are expected to decline in the following two years.

Non-energy commodity prices are assumed to go up by 8.3% on average in dollar terms this year, due to the expected increase in prices of food commodities and fertilizers, while metal prices will report a decrease. The expectations are for a 14.2% decrease in the prices of non-energy commodities in 2023, after which their decline is expected to narrow to 2% on average in 2024 and 1% in 2025. •

External assumptions: difference from the previous forecast

	Autumn forecast 2022				**Spring forecast 2022**				**Difference from the previous forecast**			
External environment	**2022**	**2023**	**2024**	**2025**	**2022**	**2023**	**2024**	**2025**	**2022**	**2023**	**2024**	**2025**
World real GDP, %	3.2	2.7	3.2	3.4	3.8	3.3	3.4	3.3	-0.6	-0.6	-0.2	0.1
EU real GDP, %	3.2	0.7	2.1	2.2	3.1	2.2	2.3	1.9	0.1	-1.5	-0.3	0.2
USD/EUR exchange rate	1.04	0.98	0.98	0.98	1.10	1.10	1.10	1.10	-0.07	-0.12	-0.12	-0.12
Oil price, Brent (USD/barrel)	100.7	83.6	76.6	72.7	100.0	90.0	82.9	78.6	0.7	-6.4	-6.4	-5.9
Non-energy commodity prices, in USD, %	8.3	-14.2	-2.0	-1.0	18.9	-6.3	-2.6	-1.3	-10.6	-7.9	0.7	0.3
EURIBOR 3month (%)	-0.2	0.8	1.1	1.0	-0.2	0.8	1.1	1.1	0.0	-0.1	0.1	-0.1

Source: MF, IMF, Bloomberg

2. Gross Domestic Product

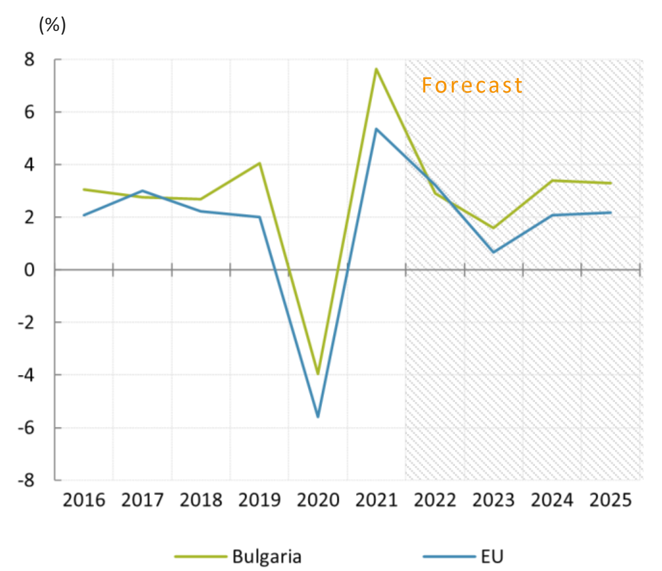
The revised GDP data published by NSI on 19 October 2022 were taken into account in the forecast. According to them, the nominal value of GDP for 2020 and 2021 was increased, up by BGN 6.3 bn[2] in 2021. In real terms, the decline of GDP for 2020 was revised from 4.4% to 4%, and growth for 2021 rose significantly – from 4.2% to 7.6%. For the first half of 2022, real GDP growth stood at 4.1%[3], being 4.5% before the revision. The growth was driven entirely by domestic demand, while net export had a negative contribution.

In the second half of 2022, GDP growth is expected to slow down and to reach 2.9% for the whole year. Household consumption growth will be limited by the increase in prices and higher uncertainty. As a result, the real growth of private consumption for the year will be 2.5%, compared to 3.8% for the first half of the year. A positive contribution to GDP growth is expected from public consumption and investment. Private investment activity will be suppressed, but the decline in gross fixed capital formation will be offset by a positive change in inventories.

At the end of the calendar year, economic activity in Bulgaria's main trading partners is expected to slow down. This will limit the demand for Bulgarian goods and, accordingly, the growth of export. The contribution of the external sector to the growth of GDP will be negative, while being slightly positive in 2021.

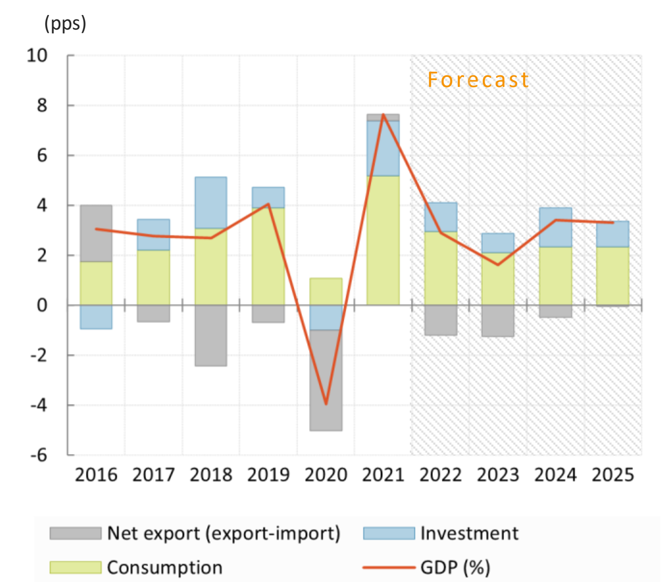
Expectations for the economic growth in 2023 were revised downwards compared to the spring forecast. The growth of GDP will slow down to 1.6%. Weaker growth in countries that are main trading partners of Bulgaria will lead to a slowdown in external demand and, subsequently, in export growth compared to 2022. At the same time, lower growth of domestic demand is expected. The contribution of government consumption for growth will decrease, and on the investment side, a neutral contribution is expected from the change in inventories. Meanwhile, easing inflationary pressures will support household consumption growth, fixed capital investment will pick up, led by the public sector. This will bring import

Real GDP growth



Source: Eurostat, MF

GDP growth and contribution by main components



Source: NSI, MF

2 BGN 2.6 bn change in inventories, BGN 2 bn – consumption, BGN 0.9 bn – net export and BGN 0.7 bn – GFCF.

3 Not seasonally adjusted data.

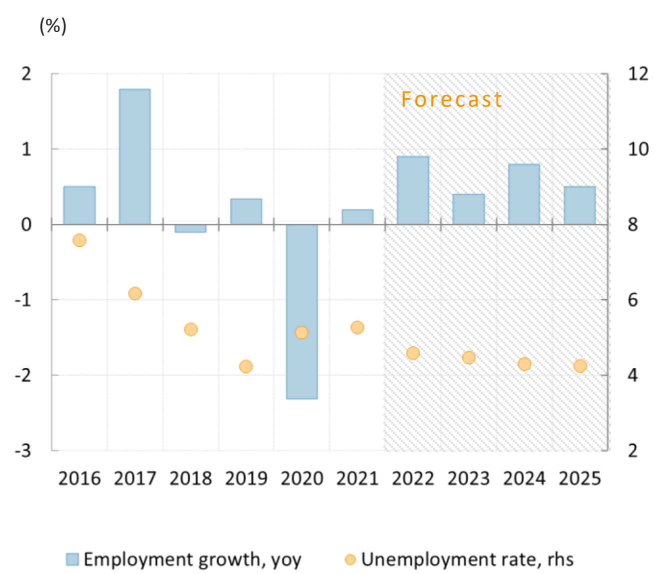
growth above that of export and the negative contribution of net export to GDP growth will slightly increase.

In 2024–2025, GDP growth is expected to be 3.4–3.3%. Increased confidence among economic agents will lead to higher growth in household consumption and private investment. Moreover, public investment will support the growth of the economy. The expected recovery of consumption in our trading partners will accelerate the export growth, which will reduce the negative contribution of net export.

3. Labour Market and Incomes

Employment growth in 2022 is expected at 0.9%. Compared to the spring forecast, the employment growth was significantly revised downwards (by 0.8 percentage points) due to the smaller than expected effect of the Ukrainian refugees on the Bulgarian labour market. In the spring forecast, it was assumed that about 35 thousand Ukrainians would start to work by the end of the year, while now this assumption has been updated to between 5 and 10 thousand people. In the following three years, the upward trend in employment dynamics is expected to be maintained. For 2023, the employment will go up, but at a lower rate (0.4%), which is entirely due to the expected slowdown in the Bulgarian economy growth. Employment growth is expected to accelerate in 2024 with a level close to that in 2022 (0.8%) which is consistent with the economy returning to relatively high GDP growth rates. In 2025, employment growth is expected to slow down again to 0.5%. The labour force demand will continue to be high, but the possibilities for an extensive increase in the labour supply will be increasingly exhausted (mainly due to unfavourable demographic processes in the country). The employment and activity rates of the population (15-64) will have reached 73% and 76% respectively, and when the data from the last census is used it is possible that these figures will be even higher.

Employment growth and unemployment rate



Source: NSI, MF

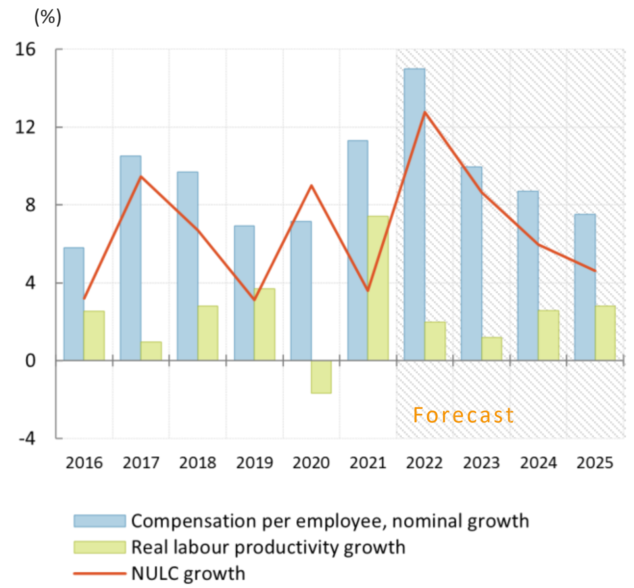
The unemployment rate in 2022 is estimated at 4.6% which is 0.4 pp lower compared to the previous forecast. Employment growth in the current year came mostly from unemployed people rather than from those who were out of the labour force. In the spring forecast, the additional number of people employed was expected to be more evenly distributed between the unemployed and people who were out of the labour force. In the 2023–2025 period, the unemployment rate is expected to follow a continuous downward trend and in the last forecast year it will reach 4.2%. The relatively small decline in the unemployment rate over these three years means that the projected employment growth in the same period is expected to take place mostly by people coming back to the labour force and not so much by unemployed persons who found new job.

The outlook for the nominal increase in the compensation per employee in 2022 and 2023 has been revised upwards. The correction reflects the impact of rising prices on wages in 2022 which is expected to carry over partially in 2023 as well. With the projected slowdown in inflation, nominal wage growth will also decelerate at the end of the forecasting period. Together with the pickup in labour productivity growth this will bring the nominal unit labour costs dynamics down.

Compensation per employee is estimated to grow by a nominal 15% in 2022. In line with developments in the first half of 2022, private sector wage growth will have a leading contribution. In 2023, the nominal growth of compensation per employee is expected to decelerate due to the lower expected inflation rate, as well as the worsened economic activity outlook and the less pronounced contribution of the public sector. Thus, the nominal growth of compensation per employee is set at 9.9% in 2023. A partial rebound of real compensation per employee growth is foreseen in 2023 and only in 2024-2025 the real dynamics of labour income will accelerate to the rates observed in the period before 2021. In nominal terms, the growth of compensation per employee is estimated at 8.7% in 2024 and 7.5% in 2025.

The slowdown in economic activity in the second half of 2022 and 2023 will mainly reflect the lower contribution of labour productivity. The real growth of the indicator overall in the economy is estimated at an average of 2.1% in 2022–2025, with more substantial increases expected

Labour incomes, productivity and unit labour costs (ULC)



Source: NSI, MF

in the last two years of the forecasting period. The improved productivity dynamics will partially offset the expected increase in compensation per employee thus, the nominal unit labour costs growth is expected to slow down to about 4.5% at the end of the forecasting period, while real unit real labour costs are estimated at even lower rates of 1.5% (annual average).

4. Inflation

The annual HICP inflation rate continued to accelerate to 15% in August. The dynamics of world commodity prices, especially energy, and their second round effects, were the main driver behind the increase in the headline rate. In addition to the factors on the supply side, strong domestic demand also played a role. Considered by main subcomponents, food and non-alcoholic beverages contributed the most, followed by energy goods. Core inflation[4] also accelerated to 12.1% yoy in August, boosted by second-round effects from higher energy prices.

The annual inflation rate is expected to decelerate to 13.2% at the end of 2022, due to the assumed dynamics of international commodity prices, as well as the base effects from late-2021. Food prices will remain as a leading contributor to the end-of-period inflation, while their increase will slightly decelerate to 22.9% yoy. The contribution of transport fuels will narrow more substantially and energy inflation is expected to slow down to 14.6% yoy in December. The contribution of core inflation components is expected to strengthen due to the second-round effects from higher energy prices, as well as the increase in labour costs. Services prices are expected to go up by

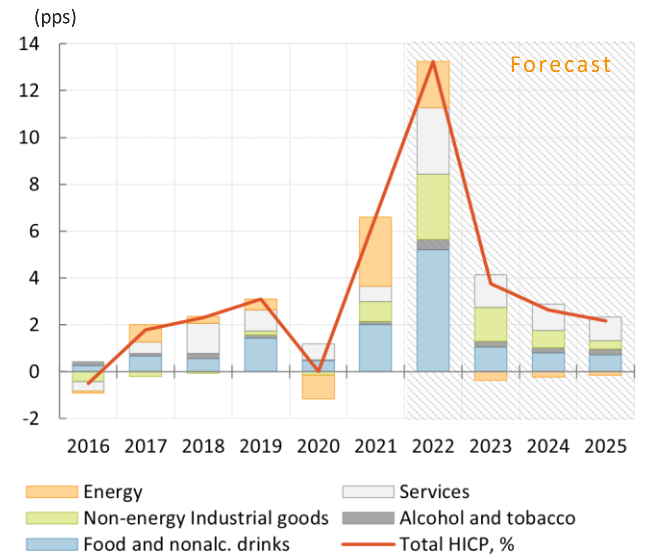
[4] Core inflation includes processed food, services and non-energy industrial goods.

10.4% at the year-end, while those of non-energy industrial goods will increase by 9.1%. The annual average inflation rate in 2022 is expected at 12.7%.

In the coming years, inflation will continue to slow down mainly in line with the expected downward dynamics in commodity prices and the waning of second-round effects. The annual average inflation rate in 2023 will be 6.4%, and inflation at the end of the period will slow down to 3.8%. According to futures prices, the international price of Brent crude oil is expected to fall by just over 13% at the end of 2023, which will lead to cheaper transport fuels for the corresponding period. In this regard, energy goods will have a negative contribution to the inflation at the end of the year. Core inflation components will be the leading contributor to the increase in the headline rate due both to the waning second-round effects from higher energy and food prices and the increase in labour costs in the economy.

In 2024 and 2025, energy will continue to have a negative contribution due to the expected downward dynamics in international commodity prices. As a result, year-end inflation is expected to continue to decelerate, to 2.6% and 2.2% respectively. Until the end of the forecasting period, core inflation components will preserve their leading contribution to headline inflation in the country, but it is expected to narrow. The average annual inflation rate will be 3.2% in 2024 and 2.4% in 2025.

End-of-period inflation rate, total HICP and contribution by main components



Source: Eurostat, MF

5. Balance of Payments

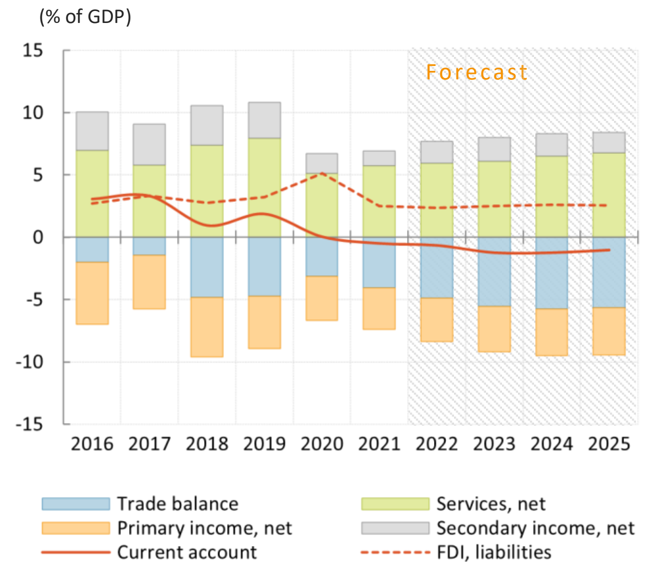
By the end of 2022 nominal growth of merchandise import is expected to remain higher compared to export which will lead to an increase in the trade deficit to 4.9% of projected GDP. The high real growth of import will underpin the deterioration of the trade balance, while the terms of trade will be positive. The recovery of export of services will continue in the current year, with transport and travel services being the main positive contributor. Import of services will also increase significantly but the surplus on the article will rise to 5.9% of GDP. The growing amount of investment income paid to non-residents will be reflected in an increase in the primary income deficit, and inward transfers from the EU will support the increase in the secondary income surplus. The current account deficit will reach 0.7% of the projected GDP or by 0.2 pps more compared to the previous year. The expected trade deficit is improving compared to the spring forecast due to an increase in real export growth and the formation of positive terms of trade, which were expected to be negative in the spring forecast.

In 2023, a significant slowdown in trade with goods is expected, which will be driven by lower real growth rates and the decline in prices of some internationally traded goods and commodities. The terms of trade will remain positive but the still strong domestic demand will continue to support real growth of import, causing the trade deficit to widen to 5.6% of projected GDP. Growth in tourist receipts will remain relatively high and boost the services trade surplus to 6.1% of GDP. Inward transfers under the Recovery and Resilience Facility (RSF) will support an increase in the secondary income surplus, and the overall income deficit will remain unchanged as a ratio to GDP. The current account deficit will continue to grow to 1.2% of GDP. The trend is the opposite to the expected one in the spring forecast due to worsening expectations for the growth of goods exports and, accordingly, the trade deficit.

The recovery of economic activity in our main trading partners will lead to an acceleration of growth in commodity trade in the last two years of the forecasting period. The nominal growths of export and import will be almost equal, keeping the trade deficit at 5.8% and 5.7% of GDP in 2024 and 2025, respectively. Income from foreign visitors will continue to grow and in 2024 will exceed the levels of the pre-crisis year 2019. The surplus on services will continue to increase and will reach 6.8% of GDP in 2025. The deficit on primary income will slightly increase due to an increase in investment income paid to non-residents. The secondary income surplus will shrink slightly due to the end of the period for receiving EU funds from the Multiannual Financial Framework 2014-2020 and the gradual launch of projects under the new programmes. In 2024, the current account deficit will maintain its level as a share of GDP, and in the following year it will decrease slightly to 1% of GDP.

Over the forecasting period, the capital account balance will be above the average of recent years, due to the effect of inward transfers under the RRF. The financial account balance will be driven by the repayment and refinancing of external government debt and by FDI inflows, which will increase from 2.4% of GDP in 2022 to 2.6% of GDP in 2025.

Current account components and FDI



Source: BNB, NSI, MF

The overall dynamics of the Balance of Payments implies maintaining a sustainable external position and a stable level of international reserves.

6. Monetary Sector

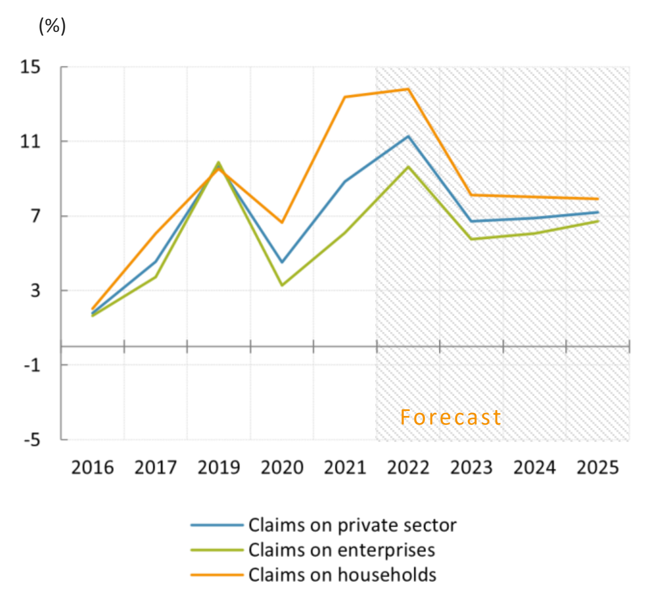
The annual growth rate of credit to the private sector followed an upward trend from the beginning of 2022. As at end-August its growth rate went up to 13.9% compared to 8.7% at the end of 2021 with contribution from both credit to households and to non-financial corporations. Despite the still weak investment activity, credit to NFCs accelerated, driven mainly by overdraft, and from the beginning of the third quarter – by short-term loans. This development reflected increased demand for working capital by the NFCs arising from significantly higher production costs, the latter due to higher commodities' prices and supply chains disruptions. The prevailing low interest rates and accelerating inflation environment supported the sustained high demand for credit from households. Since the beginning of the year there was an accelerating growth of consumer loans (13.5% yoy as at end-August) and a stable high growth rate of loans for house purchase (18%), with the latter being also influenced by the continuing increase in house prices.

Claims on the private sector will start slowing down towards the end of 2022. The annual growth of claims on corporations[5] will reach 9.6%, as the demand for working capital will start to subside along with the decline in aggregate demand. Claims on households will grow by 13.8% at the end of 2022. The slowdown there will be less, as the support of the factors, which led to their acceleration in 2022 year-to-date will continue. In total, claims on the private sector will increase by 11.3% compared to 2021.

In 2023, the growth of the claims on the private sector will continue to decelerate, which will include both claims on corporations and on households. The slowdown will be driven by lower economic growth, expected increase in interest rates on loans as a result of the transmission of the ECB monetary policy normalization, and to a smaller extent by the entering into force of the increased levels of the counter-cyclical capital buffers, imposed by the BNB. Total claims on the private sector will grow by 6.7%. Claims on corporations will expand by 5.8%, their lower growth rate being at the expense of a significant decline in the overdraft growth and slower increase of short-term loans. Claims on households will go up by 8.1%. Higher contribution for the slowdown will come from lower growth of the loans for house purchase as the real estate market is expected to cool off. Consumer loans will keep a steadier pace, having in mind the projected higher growth of private consumption and positive real growth of the compensation of employees during the year.

During the period 2024-2025 the claims on households will grow at a relatively high but declining rate, which will reach 7.9% yoy at the end of 2025. Claims on corporations will be accelerating slightly in line with recovering private investment (supported as well by the RRP), and their annual growth rate will reach 6.7%. In total, claims on the private sector will slowly pick up pace towards the end of the forecasting period and at the end of 2025 will expand by 7.2%.

Claims on the private sector



Source: BNB, MF

Deposits in the banking system will continue to grow at a relatively fast rate during the forecasting period. At the end of 2022 the annual growth rate of money supply will go up to 11.5% compared to 10.7% at the end of 2021. In the period 2023-2025 the M3 growth will slow down in line with increased investment activity in the country. At the end of 2025 M3 will increase by 9.8% yoy.

7. Risks

Given the significant uncertainty surrounding global economic development, there are many risks to the macroeconomic forecast.

The geopolitical situation surrounding the war in Ukraine remains highly unstable, with possible significant negative effects for the EU and Bulgarian economies.

[5] Includes claims on financial and non-financial corporations.

A significant risk is the possibility of additional import restriction of energy commodities from the Russian Federation to the EU and Bulgaria, and the inability to be quickly replaced with supplies from other countries. This would be reflected in a more accelerated growth in prices of energy commodities and electricity and disruptions in production processes both in the country and in major trading partners. Accordingly, a more significant negative effect on the production and export of goods from Bulgaria would be expected.

Risks to the inflation forecast are mainly on the upside and are associated with the expected commodity price dynamics and their secondary effects. If our assumptions for a decrease in international prices fail to materialize, this would mean higher-than-projected inflation in the medium-term.

Further inflation acceleration in 2022 and 2023 could lead to a loss of households' purchasing power and weaker growth in consumption. At the same time, high costs, the increased uncertainty and possible problems with production may lead to a strong restriction of investment activity.

It is also worth noting that there was a significant positive contribution from the change in inventories to GDP growth in 2021 and the first half of 2022. In the forecasting horizon, its contribution is assumed to be slightly negative in the second half of 2022 and zero in 2023[6] but it is possible to observe a more significant negative impact of this component, which will further reduce GDP growth.

Due to the rising inflation, leading central banks have taken actions to tighten the monetary policy. A faster rise in interest rates could significantly increase the debt servicing costs for both the private sector and some countries (incl. EU Member States). The higher debt servicing costs could limit the possibilities for budgetary support for vulnerable groups of the population, small and medium-sized businesses. In the context of high inflation and uncertainty, this could further constrain the aggregate demand. If the increase in interest rates does not bring inflation down to the desired levels, this could create the perception that the central banks cannot cope with the price surge and would create self-fulfilling expectations for persistent inflation above the official targets in the medium term. Accordingly, this would be reflected into a significant deviation of the expected dynamics for economic growth and prices globally.

The possibility of future COVID-19 outbreaks continues to pose a downside risk to the outlook. Although households and businesses have largely adapted to the epidemic situation, and the data from the last year do not show a significant negative effect on the Bulgarian economy in this regard, it is possible during the winter period the pace of infection to accelerate again, and new variants that pose an increased risk to public health to emerge, which would lead to new restrictions on public life and thus further contraction of economic activity. This could lead to further disruption of global supply and production chains in the country's main trading partners with the resulting negative effects on foreign trade.

There are also positive risks to the forecast. Growth rates in the EU and the euro area in the first half of the year surpassed the preliminary expectations and if this trend continues higher export growth is possible. It is possible that the expected slowdown in growth in major trading partners will not lead to a significant decrease in external demand and, accordingly, the negative effects on export will be more limited than expected. At the same time, easing geopolitical tensions could lead to a significant slowdown in inflation and thus have a positive effect on purchasing power. ●

6 The forecasting practice is to assume a neutral contribution of the change in inventories.

MAIN ECONOMIC INDICATORS	ACTUAL DATA*		PROJECTIONS			
	2020	2021	2022	2023	2024	2025
International Environment						
World real GDP [%]	-3.0	6.0	3.2	2.7	3.2	3.4
EU28 real GDP [%]	-5.6	5.4	3.2	0.7	2.1	2.2
USD/EUR exchange rate	1.14	1.18	1.04	0.98	0.98	0.98
Crude oil, Brent [USD/bbl]	42.3	70.4	100.7	83.6	76.6	72.7
Non-energy commodity prices [in USD, %]	3.3	32.7	8.3	-14.2	-2.0	-1.0
Gross Domestic Product						
Nominal GDP [mln BGN]	120 553	139 012	161 721	173 826	186 001	197 715
Real GDP growth [%]	-4.0	7.6	2.9	1.6	3.4	3.3
Consumption	1.4	6.7	3.8	2.7	3.0	3.0
Gross fixed capital formation	0.6	-8.3	-3.6	4.9	9.5	6.1
Export of goods and services	-10.4	11.0	5.4	1.5	4.8	4.9
Import of goods and services	-4.3	10.9	7.6	3.4	5.5	5.1
Labour Market and Prices						
Employment growth [SNA, %]	-2.3	0.2	0.9	0.4	0.8	0.5
Unemployment rate [LFS, %]	5.1	5.3	4.6	4.5	4.3	4.2
Compensation per employee [%]	7.2	11.3	15.0	9.9	8.7	7.5
GDP deflator [%]	4.3	7.1	13.1	5.8	3.5	2.9
Annual average HICP inflation [%]	1.2	2.8	12.7	6.4	3.2	2.4
Balance of Payments						
Current account [% of GDP]	0.0	-0.5	-0.7	-1.2	-1.2	-1.0
Trade balance [% of GDP]	-3.1	-4.1	-4.9	-5.6	-5.8	-5.7
Foreign direct investments [% of GDP]	5.1	2.5	2.4	2.5	2.6	2.5
Monetary Sector						
Money M3 [%]	10.9	10.7	11.5	10.6	10.1	9.8
Claims on enterprises [%]	3.3	6.1	9.6	5.8	6.1	6.7
Claims on households [%]	6.6	13.4	13.8	8.1	8.0	7.9

* *The forecast is based on statistical data up to 10 October 2022, except for GDP data, which was published on 19 October 2022.*

Source: IMF, EC, WB, MF, NSI, BNB, Bloomberg

8. Alternative Scenario

The international economic environment is characterized by a high degree of uncertainty caused by the military invasion of the Russian Federation in Ukraine, high prices of food and energy commodities, a sharp increase in interest rates by the leading central banks, and supply chain disruptions. Considering these potential risks, the alternative macroeconomic scenario examines an increase in the prices of some internationally traded goods and a more unfavourable dynamic of external demand compared to the baseline scenario.

Higher international commodity prices will exacerbate already elevated inflationary pressures around the world. In a number of countries, the consumer price index would rise well above the targets, which would force ECB to react more decisively and with a more substantial increase in the reference interest rate by the end of 2022, which in turn would be reflected as an interest rate hike on the interbank market. The increase in prices will limit the disposable income of households, which, combined with the higher costs for loans repayment, will cause a decrease in real consumption. High interest rates will have a negative impact on the investment activity of companies, as well as on the public sector expenditures. As a result, the EU economy will contract in 2023, while the GDP growth in 2022 and 2024 will be lower compared to the baseline scenario.

The results of the simulation show that inflation in the country will be higher in the period 2022–2024 compared to the baseline scenario by 1.1 pps, on average. At the same time, the rise in international prices of food and energy commodities has a stronger effect on the price index of import compared to export, i.e. negative terms of trade will lead to a lower GDP deflator in 2022 and especially in 2023 compared to the baseline scenario.

The increased cost of living and repayment of existing and new loans will reduce the purchasing power of the population, which will be reflected in lower household consumption throughout the forecasting period. The uncertain external environment, the more expensive commodity prices and higher interest rates will limit investment activity in the country, while the effect will be somewhat delayed compared to the other GDP components. Weaker investment activity will lead to weaker labour demand and slower income growth compared to the baseline scenario, which in turn will also have a negative impact on household consumption.

External assumptions of the alternative scenario (difference from the baseline scenario)

	2022	2023	2024	2025
World real GDP (pps)	-0.2	-1.3	-0.2	0.0
EU real GDP (pps)	-0.3	-1.8	-0.5	0.0
USD/EUR exchange rate (%)	0.0%	0.0%	0.0%	0.0%
Crude oil, Brent (USD/bbl, %)	13.5%	54.0%	38.4%	0.0%
Food prices (in USD, %)	4.3%	29.5%	33.3%	0.0%
EURIBOR 3м. (pps)	0.5	1.3	1.5	0.0

Source: own calculations

Assumptions for a less favourable development of the external environment in the period 2022-2024 will have a negative impact on the growth of export of goods and services throughout the projection horizon. Import of goods and services will also be lower compared to the baseline scenario, as a result of weaker domestic demand and export. The negative contribution of net export to GDP growth will increase in 2022 and 2023, and will be more favourable in the last two years of the forecast period compared to the baseline scenario. The current account balance will follow the trends of the foreign trade and deteriorate relative to the baseline until 2024, after which it will improve slightly.

GDP growth will be lower compared to the baseline scenario throughout the forecasting period. It will be 0.3 pps lower in 2022 and by 1.3 pps in 2023, after which the effect on growth will gradually begin to diminish. The level of GDP at constant prices in the alternative scenario will remain permanently below that in the baseline until the end of the period.

Main macroeconomic indicators (difference from the baseline scenario)

	2022	2023	2024	2025
GROSS DOMESTIC PRODUCT				
GDP level current prices [%]	-0.3%	-2.1%	-2.6%	-3.1%
Real GDP level [pps]	-0.3	-1.3	-0.9	-0.4
Consumption	-0.1	-0.8	-1.9	-1.9
Gross fixed capital formation	-0.2	-1.0	-3.4	-1.4
Export of goods and services	-0.5	-3.0	-0.3	-0.2
Import of goods and services	-0.3	-2.2	-2.3	-2.1
LABOUR MARKET AND PRICES				
Employment level, (SNA)[%]	-0.1%	-0.5%	-0.8%	-0.9%
Unemployment rate, (LFS) [pps]	0.0	0.2	0.4	0.5
Compensation of empoyees [pps]	-0.1%	-0.7%	-0.9%	-1.1%
GDP deflator [pps]	-0.1	-0.5	0.4	0.0
Annual average HICP inflation [pps]	0.5	1.7	1.0	-1.1
BALANCE OF PAYMENTS				
Current account in % of GDP [pps]	-0.4	-1.9	-0.8	0.7

Source: MF