MACROECONOMIC FORECAST

Autumn 2019

Ministry of Finance of the Republic of Bulgaria

he autumn macroeconomic forecast of the Ministry of Finance takes into account updated external assumptions in terms of foreign demand and international prices. Compared with the spring forecast the global economic growth is expected to decelerate more substantially during 2019. The growth is revised slightly downwards in 2020 and will remain stable over the medium term. The slowdown in the European economy growth in 2019 is expected. The international financial institutions reaffirm their expectations for acceleration in the EU and euro area growth in 2020 compared with the current year.

Bulgaria, as well as other Central and Eastern European countries, was characterized by stable growth dynamics in the first half of 2019, which contrasted to the sharp slowdown in economic activity in some of the large countries in the euro area. Real GDP increased by 4.1% yoy on the back of economy's strong performance in the first quarter, while in the second quarter it slowed down due to declining exports and lower stocks. In the quarters ahead, GDP growth is expected to decelerate, while the growth rate for the whole 2019 is estimated at 3.4%. The economic growth will reach 3.3% in 2020 driven by consumption and investment. The exports are expected to recover but the negative contribution of net exports to GDP growth will increase as imports growth accelerates.

In the first half of 2019, employment increased and the unemployment rate reached its historical lowest level. The favorable labour market performance is expected to continue in the second half of the year as well. The unemployment rate is projected to decline to 4.4% in 2019. In 2020, employment growth is expected to decelerate to 0.2% due to limitations from the labour supply. The compensation per employee is estimated to grow at a rate of 8% in 2019 due to both private and public sectors, as the latter follows the ongoing policy on wage increases in education and public administration. In 2020 the growth of compensation per employee is expected to slightly decelerate to 7.4% in line with the downward trend in employees' dynamics.

The inflation is forecasted to reach 2.8% at the end of 2019 (by 0.4 pps higher compared to the spring forecast), while the annual average inflation will be 2.5%. Prices of services and food are expected to contribute the most to end of period inflation. At the same time the contribution (direct and indirect) of energy goods' prices to the inflation development in the country will gradually fade. In 2020 inflation will be lower compared to 2019 as world commodity prices, especially crude oil price, are not expected to be a pro inflationary factor.

The risks to the forecast are related to the unstable geopolitical environment and the implications of the rising protectionist policies. The growth in the euro area might be affected by volatile global demand and restricted export opportunities. The deterioration of the external environment is the main risk that the Bulgarian economy is facing. It can negatively affect both export and the expected increase in private investment over the forecast horizon. •

1. External environment

The pace of the world economic growth tends to slow down in 2019 and 2020, but in medium-term horizon world GDP growth is expected to remain stable.

Leading international institutions such as the IMF, EC, ECB reaffirm their expectations for higher growth of the European economy in 2020 compared to previous year. They are mainly driven by the recovery in euro area countries. Higher GDP growth is also projected in developing countries (incl. Russia, Turkey, India, Brazil), which will accelerate global growth to 3.5% in 2020. In 2021 and 2022 the EU economy will increase at a slower pace, compared to 2020, while the world economy will accelerate slightly, driven by the dynamics in developing countries.

The assumption for the BGN/USD exchange rate is based on the pegged 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. In the current publication, actual daily data was available up until 16.09.2019. Under the current technical assumption, the exchange rate of EUR in 2019 is projected to be USD 1.12, in 2020 – USD 1.11, compared with

1.18 in 2018. The nominal depreciation of the euro in 2019 and 2020 will be 5.3% and 1.5%, respectively.

In 2019, the average price of a barrel of Brent crude oil is expected to reach USD 63, compared to the expectation of USD 61.5 in the spring forecast. The price is 11.4% lower than the USD 71.1 reported in 2018. Recalculated in BGN the price will decrease more modest (6.3%), due to the depreciation of the euro. The oil price in 2020–2022 is revisited downwards in dollar terms, by 8.3, 2.6 and 0.6%, respectively.

In 2019 the decline in non-energy commodity prices, expressed in dollars, is expected to be larger, compared to the spring forecast. During the first eight months of the year the decline was as follows – food (6.9%), beverages (7.1%), raw materials (3.7%), basic metals (12.3%). Recalculated in EUR (BGN) the decline is much lower and for some of them a slight increase is observed, since the euro, respectively the BGN, depreciated by 6.4% against the USD over the same period. The price in USD of non-energy raw materials is projected to be lower by 2.1% in 2019 and in the period 2020-2022 to have a slight increase – by 1.4% on average. •

External assumptions. Difference from the previous forecast.

	AUTUMN FORECAST 2019			SPRING FORECAST 2019				DIFFERENCE FROM THE PREVIOUS FORECAST				
External environment	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021	2022
World real GDP [%]	3.1	3.5	3.6	3.6	3.5	3.6	3.6	3.6	-0.3	-0.1	0.0	0.0
EU 28 real GDP [%]	1.6	1.8	1.7	1.7	1.5	1.7	1.6	1.5	0.1	0.1	0.2	0.2
USD/EUR exchange rate	1.12	1.10	1.10	1.10	1.13	1.13	1.13	1.13	-0.01	-0.03	-0.03	-0.03
Oil price, Brent [USD/barrel]	63.0	57.8	56.3	56.0	61.5	61.4	60.5	60.0	1.5	-3.6	-3.7	-4.0
Non-energy commodity prices [in USD, %]	-2.1	1.4	1.3	1.4	-0.2	1.1	0.7	0.6	-1.9	0.3	0.7	0.8

Source: MF, EC, IMF, WB

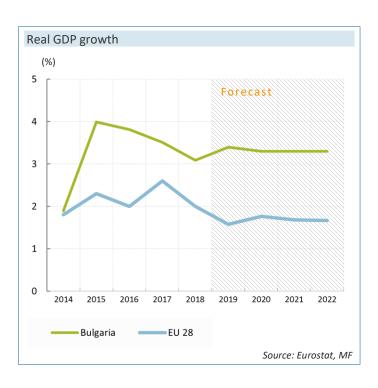
2. Gross domestic product

On 17 October 2019, the National Statistical Institute (NSI) published revised GDP data for the period from 1995 to the second quarter of 2019, reflecting changes in methodology made in accordance with Eurostat recommendations.

According to the revisions, the nominal value of GDP for 2018 increased by BGN 1.8 bn, due to higher exports and investments, while consumption was lower. Real economic growth remained unchanged at 3.1% in 2018, but the change in growth structure was significant. The revisions also influenced the components of GDP in the first half of 2019.

In the first half of 2019, real GDP growth reached 4.1% yoy. The high growth was mainly due to developments in the first quarter, while a slowdown in GDP growth was reported in the second quarter, both from a decrease in stocks and a decline in exports. Imports also decreased due to the decline in exports and the use of part of the companies' stocks. This led to positive contribution of net exports to GDP growth. During the second half of 2019, we expect an increase in imports as the economy needs imports of raw materials, as well as consumer and investment goods. As a result, GDP growth is expected to slow down in the second half of the year.

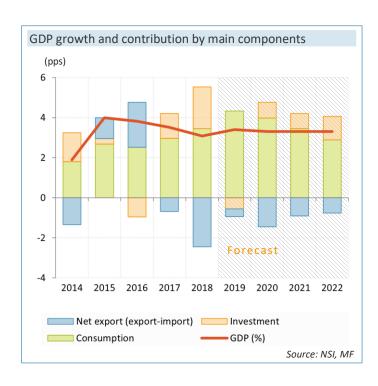
The forecast for real GDP growth for 2019 remains unchanged, compared to spring, at 3.4%. Private consumption will be the major driver of growth. Households' consumption reported strong growth in the first half of the year, supported by favourable development in the labour market and increase in loans to households. Consumer spending is expected to remain high by the end of the year, but growth will slow down slightly in the second half of the year. Public consumption also reported strong performance in the first six months of the year and will have a positive contribution to GDP growth. As a result, final consumption will increase by 5.7% in 2019. Growth in gross fixed capital formation is expected to accelerate in the second half of the year, but will remain relatively low



(1.9%) as the uncertain external environment will lead to lower private investment. Despite the unfavourable dynamics of exports in the first half of the year, net exports had a positive contribution to GDP growth, due to the decline in imports. It is expected that by the end of the year the increase in investment will lead to higher imports and, accordingly, to negative contribution of net exports to GDP growth of 0.4 pps.

GDP growth will reach 3.3% in 2020, driven by domestic demand. Final consumption will increase by 5.2%. Private consumption spending will maintain its relatively high growth rate but, compared to the previous year, the pace will slow down slightly due to the more limited employment growth. The increase in public sector wages will also have a positive impact on consumption. Fixed investments will grow by 3.9%, supported by both private and public investments. Despite the expected recovery of exports, higher domestic demand will result in higher imports and an increase in the negative contribution of net exports to 1.5 pps.

Economic growth will stay at the level of 3.3% in the period 2021–2022. Domestic demand will remain a driver of GDP growth in terms of both consumption and investment. At the same time, final consumption growth is expected to slow down at the end of the forecast period as a result of lower public consumption and slowdown in private consumption growth, in line with the depletion of employment growth opportunities. On the other hand, the increase in investment will accelerate, supported mainly by the dynamics of public investment. The negative effect on GDP growth of net exports is expected to decrease to 0.8 pps. at the end of the forecast period.



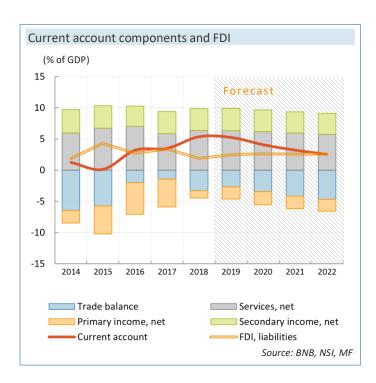
3. Balance of payments

The external sector forecast reflects the revisited Balance of Payments data as at 19.09.2019, recent dynamics as outlined by short-term statistics and updated expectations for the international prices and external demand. The major changes, compared to the spring forecast, are related to the expectations for trade dynamics, as the changed bases and the additional available information affect the rates of change throughout the whole forecast period.

The current forecast is based on assumptions for a decreasing international prices of most product groups in 2019, most notably for energy products. The appreciation of the USD against the EUR, respectively BGN, will offset part of the drop in prices, though the decline in the main raw materials will remain significant. As a result, positive terms of trade are expected in 2019, i.e. higher exports prices than imports.

The expectations about the economic activity in the country's main trading partners suggest an increase in export of goods in 2019, the rate will however be below the one

in the spring forecast. The lower growth in domestic demand and export will restrict import of goods and its growth rate will also be lower compared to the previous



forecast. Downward revision is also made in the forecast for trade with services. Taking into account the available statistical data for January-July 2019 and updated information for previous years, the export growth rate is lowered, while import is now expected to decline. The nominal increase in import of goods and services will reach 1.8%, against 3.1% for exports. Both rates are lower than in the spring forecast, but export is now expected to outpace import, which will result in an improvement in the overall balance of trade in goods and services to a surplus of 3.7% of GDP in 2019 compared with 3% in 2018. The surplus of secondary income will increase as a result of higher transfers related to EU funds. At the same time, due to higher payouts to non-resident investors, the primary income deficit will shrink. The current account surplus is expected to reach 5.2% of GDP in 2019, which is a decrease of 0.2 pps, compared to 2018 and an increase of 2.6 pps, compared to the spring forecast.

In 2020 the positive terms of trade are expected to continue, with increasing prices of metals and agricultural raw materials and a decline in international fuel prices.

Combined with the acceleration of the real growth in imports and exports, this will result in higher nominal growth in commodity trade in 2020. At the same time, trade deficit will widen because of the higher import growth. The surplus of the trade with services is expected to decline slightly as ratio to GDP, while the overall balance of goods and services will shrink to 2.7% of GDP. The change in the balance of income articles will be negligible. The dynamics of individual balance of payments articles are expected to lower the Current account surplus to 4.1% of GDP in 2020.

In the period 2021–2022 the nominal growth in export of goods and services will slow down from 4% to 3.6%, while that of import from 5.5% to 4.8%. This will gradually diminish the foreign trade surplus, and thereof the current account surplus – to 3.2% of GDP in 2021 and 2.5% in 2022.

FDI inflows will continue to increase at a pace close to nominal GDP growth over the forecast period. As a result, incoming FDIs will account for about stable share of about 2.6% of GDP annually.

4. Labour Market and Incomes

During the first half of 2019 the labour force increased in contrast to the expected negative dynamics set in the spring forecast. It reflected the transitions from inactivity to active labour market participation, while the population at working age declines. Although the current labour force developments are positive, the expectations for its annual decrease in the period 2020–2022 stay unchanged. This will be due to the negative demographic trends which curb the potential for the labour supply expansion. The 2019 increase of the labour force will result in higher participation rates as compared to the last forecast for the whole forecast period, but this does not alter the expected slower pace of increase in the medium term.

Together with the high labour demand and upward trend in wages, the number of employed increased in the first half of 2019 while the unemployment rate reached its historical lowest level. The favorable labour market performance is expected to continue in the second half of the year as well. The labor force at working age (15-64) is projected to grow by 1.3% for the whole2019 as the participation rate will follow an accelerating pace of increase compared to 2018, up to 73.4% (15-64). The expected increase in employment will be supported by a further decline in the unemployment rate to 4.4%¹ on average for the whole year. After the reported decrease in the second half of 2018 the employment dynamics improved, up by 0.2% in the first half of 2019 (ESA 2010), and is expected

¹ According to the definition of the Labour force survey

to accelerate till the end of 2019 to reach 0.4% on average for the whole 2019. This will be supported by the less negative contribution of the employment dynamics in agriculture and the higher positive influence from services.

Similarly, to the spring forecast, the employment growth is expected to decelerate to 0.2% in 2020 due to limitations from the labour supply. The latter will be driven by the persistent negative demographic trends as well as the rapid depletion of the available labour resource of unemployed and people out of the labour force (discouraged) who could meet the demand of labour. The unemployment rate will keep the downward trend at a decelerating pace, to reach 4.1% in 2020.

In 2020–2022 the employment performance will moderate and turn to a decrease in the end of the forecast period. The unemployment rate will drop slightly to 4% in 2021 and it is expected to remain unchanged in 2022. The participation rate is estimated to increase at a slower rate and to reach 76% (15-64) in 2022.

Regarding the compensations of employees, expectations are revised upwards compared to the spring forecast. The revised NSI data led to a higher indicator's level in 2018 which corresponded to an annual growth rate of 10.6%,

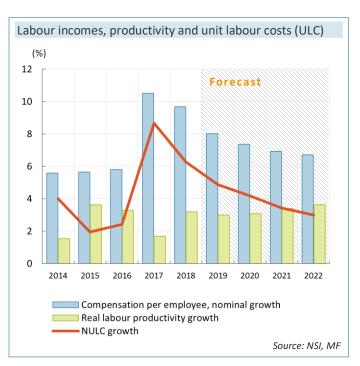
Employment growth and unemployment rate (%) 2 16 Forecast 12 1 8 -1 4 ი -2 2014 2015 2016 2017 2018 2019 2020 2021 2022 Employment, yoy Unemployment rate, rhs Source: NSL ME

while the pace of increase of the compensation per employee amounted to 9.7%.

Reflecting the higher base from the previous year, the compensation per employee dynamics decelerated to 7.5% in the first half of 2019. It is expected that wage growth shall slightly accelerate in the second half of the year, in line with the projected stronger increase in the number of employees. As a result, the average compensation per employee growth in 2019 will come at 8% supported by both the private sector where the labour demand is high and the public sector due to the policy on rising wages in education and public administration.

In 2020 the compensation per employee growth is projected to further slow down to 7.4% influenced by the weakened positive labour market dynamics. This will be mainly on account of the private sector due to the lost momentum in the number of employees' development. Meanwhile, wage increase in education together with the planned new 10% increase of wages in public administration will keep the public sector compensation of employees' growth close to that of the previous year.

Along with the expected discountinuation of the employment increase, wage growth will continue to slow down in 2021-2022 till 6.7% in the end of the forecast period.



This deceleration will be evident in the public sector but it will be also relevant for the private sector, while the growth rate of the latter is expected to remain close to that for the whole economy.

Similar to the spring forecast, estimates for labour productivity growth are kept at 3.3% on average. Taking into account the expected income dynamics, the nominal

unit labour costs (ULC) growth is envisaged to gradually slow down during the forecast period, from 4.9% in 2019 to 3% in 2022. In the end of the forecast period, the compensation per employee and the nominal labour productivity are projected to increase closely together. This reflects the medium term perspective that income dynamics is explained by fundamentals such as the economic development, productivity and inflation.

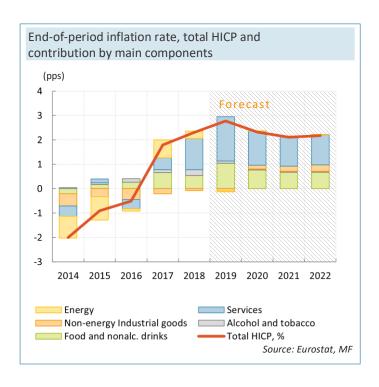
5. Inflation

During the first eight months of 2019 inflation was higher than forecasted in the spring. This was mostly due to the increase of the prices of food and services, the latter including a second round effects in the prices of catering services coming from higher food prices. An upward trend is being observed in the food prices since the beginning of 2018 and in August 2019 the price increase reached 5.1% compared to the same month of the previous year. It was affected by several factors: lower domestic supply, reflecting a decrease of GVA and the production in agriculture in 2018; increase in the world prices of cereals; higher unit labour cost; some global shocks like the African plague, which led to an increase of world price of pork meat and affected the prices in the EU as well.

End of period inflation in 2019 is forecasted to reach 2.8% (by 0.4 pps higher compared to the Spring Forecast), while the annual average inflation will be 2.5%. Core inflation² is expected to reach 2.9% compared to 2.1% at the end of 2018. Prices of services and food are expected to contribute the most to the end of period inflation in 2019 and will increase by 4.8 and 5.6% respectively. At the same time the contribution (direct and indirect) of energy goods' prices to the inflation development in the country will gradually fade.

In 2020 end of period inflation will be 2.3% and the annual average is forecasted at 2.1%. Pro inflationary effects from world commodity prices, especially crude oil price,

is expected to be limited. Food prices will further increase, although at a slower pace. International prices of agricultural goods are projected to increase slightly in 2020, whereas it is likely that they would record a decline in 2019. No supply shocks of agricultural goods are expected in 2020, while the depreciation of the euro towards the US dollar will be less compared to 2019. End of period core inflation is forecasted to reach 2.6%, led by the 4.3% increase of prices of services.



² The total index excluding food, alcohol, tobacco and energy.

For the second part of the forecast period (2021–2022) the inflation is projected to slow down affected by the expected lower oil prices and stabilization of the non-energy commodity prices. Inflation will continue to be

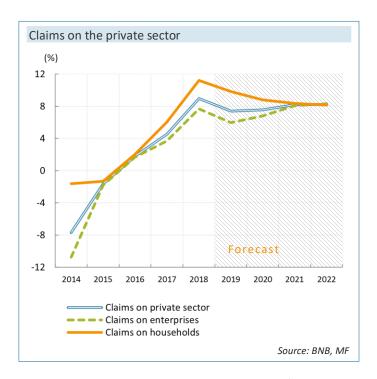
driven by domestic factors — the demand from households, backed by higher incomes, low unemployment and credit growth. The prices of services are expected to increase faster compared to prices of goods. •

6. Monetary sector

In 2019–2022, private sector credit will continue to grow, in line with expectations for favourable conditions for both the demand and supply of credit resources. Attracted deposits in the banking system are expected to grow further for the entire forecast period, as well.

As of end-August 2019 the annual growth rate of claims on private sector slowed down to 6% vs. expected 7.5% in the spring forecast. The positive development of credits to non-financial corporations and to households continued, accompanied by a faster decline in "bad and restructured credits" in all segments and improved quality of banks' balance sheets. Demand for consumer and housing loans remained high in the low interest rates environment, which is expected to prevail in medium term. The annual growth of consumer loans and loans for house purchase accelerated, while in the corporate segment the decrease of the bad and restructured credits held back their rate of increase. All this led to an upward revision of expectations for the claims on households and a downward revision for the claims on non-financial corporation for 2019 compared with the Spring Forecast of the Ministry of Finance.

Credits to non-financial corporations will accelerate during the whole forecast period, reflecting the positive expectations for the private investment development after 2019. Their annual growth rate will reach 5.9% in 2019 and 8.3% in 2022. Growth of credits to households will



slowdown in line with the declining growth of compensation per employee and expectations for lower growth rates of house prices in the forecast period, which will limit the house purchases for investment purposes. Claims on households will increase in total by 9.8% in 2019 and by 8.2% yoy in 2022.

Claims on private sector will have an upward dynamic in the period 2020–2022, as well (with increasing contribution from non-financial corporations), and their annual growth is expected to be 7.4% in 2019 and to go up to 8.3% at end of the forecast horizon.

7. Risks

The volatile geopolitical environment and the implications of the rising protectionism gradually began to affect economic activity in both developing and developed countries. The deterioration of the external environment is a major risk to the forecast, which is hindering the growth of Bulgaria's export. As a result of the introduced trade restrictions, economic activity in China has begun to slow down, which has affected a number of countries, incl. some of Bulgaria's major trading partners. Although Turkey's GDP decline turned out to be less than expected in the second quarter of 2019, the risks of deepening recession in the country remain. There is still uncertainty about the scenario of BREXIT, which in turn may also limit export growth. The materialization of these risks would increase the negative contribution of net export to GDP growth and reduce the current account surplus. •

	ACTUAI	L DATA*	PROJECTIONS					
MAIN ECONOMIC INDICATORS	2017	2018	2019	2020	2021	2022		
International Environment								
World real GDP [%]	3.8	3.6	3.1	3.5	3.6	3.6		
EU28 real GDP [%]	2.5	2.0	1.6	1.8	1.7	1.7		
USD/EUR exchange rate	1.13	1.18	1.12	1.10	1.10	1.10		
Crude oil, Brent [USD, bbl]	54.4	71.1	63.0	57.8	56.3	56.0		
Non-energy commodity prices [in USD, %]	5.5	1.7	-2.1	1.4	1.3	1.4		
Gross Domestic Product								
Nominal GDP [mln BGN]	102 308	109 695	118 625	126 769	134 915	143 355		
Real GDP growth [%]	3.5	3.1	3.4	3.3	3.3	3.3		
Consumption	3.9	4.6	5.7	5.2	4.5	3.7		
Gross fixed capital formation	3.2	5.4	1.9	3.9	3.7	5.8		
Export of goods and services	5.8	1.7	-0.4	2.3	2.5	2.5		
Import of goods and services	7.4	5.7	0.2	4.9	4.2	3.8		
Labour Market and Prices								
Employment growth [SNA, %]	1.8	-0.1	0.4	0.2	-0.1	-0.3		
Unemployment rate [LFS, %]	6.2	5.2	4.4	4.1	4.0	4.0		
Compensation per employee [%]	10.5	9.7	8.0	7.4	6.9	6.7		
GDP deflator [%]	3.9	4.0	4.6	3.5	3.0	2.9		
Annual average HICP inflation [%]	1.2	2.6	2.5	2.1	2.2	2.1		
Balance of Payments								
Current account [% of GDP]	3.5	5.4	5.2	4.1	3.2	2.5		
Trade balance [% of GDP]	-1.5	-3.3	-2.7	-3.5	-4.2	-4.7		
Foreign direct investments [% of GDP]	3.4	1.9	2.4	2.6	2.6	2.5		
Monetary Sector								
Money M3 [%]	7.7	8.8	8.4	8.2	8.3	8.3		
Claims on enterprices [%]	3.7	7.7	5.9	6.8	8.1	8.3		
Claims on households [%]	6.1	11.2	9.8	8.8	8.4	8.2		

^{*} The forecast is based on statistical data up to 24 September 2019, unless otherwise noted

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