MACROECONOMIC FORECAST

Spring 2017

Ministry of Finance of the Republic of Bulgaria

Bulgarian economy is expected to expand by 3% in 2017 driven by domestic demand. As compared to 2016, the external sector will have lower contribution to the GDP growth. On the one hand, import growth will accelerate due to higher consumption and investment. On the other hand, export growth will be at a slower pace, taking into account the latest assumptions for foreign demand. Along with the slight slowdown in the economic activity in the EU, a lower import growth is expected in the Western Balkans and Turkey. These countries account for 15% of Bulgarian export. The expectations for the economic growth are revised slightly up for the whole forecasting period compared to the previous forecast of the Ministry of Finance. The tendency for higher GDP growth in Bulgaria as compared to EU 28, which started in 2015, will continue in 2017-2020, which implies strengthening of the real convergence process compared to the period from the beginning of the crisis until 2014.

Given the expectations that Bulgarian economy is going to maintain its relatively high growth rate and the anticipated further recovery of domestic demand, employment is projected to increase at rates similar to those in 2015–2016. The decline in the unemployment rate will slow down during the forecasting period in line with the slower labour force decline. The latter will result from the measures for increasing the age and length of service needed for retirement, and the longer stay on the labour market. Inflation will be positive, as international commodity prices, whose decline accounted the most for the deflation in producer and consumer prices in the previous three years, started to recover and are expected to further increase. Credit to the private sector reported an increase in yoy terms at the end of 2016, which is expected to accelerate in 2017–2020. The latter will be due to the improved conditions both on the demand and the supply side, including the continuing positive impact of the 2016 Asset Quality Review and stress test results.

1. External Environment

The assumptions for the development of the world economy remain the same as in the previous forecast. World GDP growth will accelerate in 2017 and 2018, supported by the stronger economic activity in developing countries and the United States. The expected increase in commodity prices and stronger demand from advanced economies will result in higher GDP growth in the emerging markets, while planned fiscal stimulus in the United States will boost the US economy. The contribution of the developing countries to world economic growth will continue to expand until the end of the forecasting period alongside the expected slowdown of US economic activity.

Meanwhile, EU GDP growth for 2017 is revised slightly upwards due to the better-than-expected performance of the European economy in 2016. Despite the increased uncertainty in the region over the past year related to geopolitical tensions, migration flows towards the EU countries and the results of the UK referendum which took place on June 23, 2016, there was a slight improvement of the development of the European economy in the second half of the year. The

latter is expected to have a positive impact on GDP growth in 2017. Medium-term growth prospects in the EU remain unchanged as compared to the previous forecast.

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 two-week period ending on the cut-off date of 16 March 2017.

All main commodity price indices are expected to increase in 2017. Following the agreement among some major OPEC and non-OPEC producers to limit output, Brent prices are forecast to rise 27.7%, averaging \$56.4 per barrel in 2017. Non-energy commodity price indices are also projected to increase after five consecutive years on the decline. Metal prices will rise 23.5% mainly due to subdued supplies and stronger demand expected from China and the United States. Commodity prices are forecast to continue increasing in 2018–2020.

_	Spring forecast 2017				Updated autumn forecast 2016			Difference from the previous forecast		
	2017	2018	2019	2020	2017	2018	2019	2017	2018	2019
World real GDP, %	3.4	3.6	3.7	3.7	3.4	3.6	3.7	0.0	0.0	0.0
EU28 real GDP, %	1.8	1.8	1.8	1.8	1.6	1.8	1.8	0.2	0.0	0.0
USD/EUR exchange rate	1.06	1.06	1.06	1.06	1.09	1.09	1.09	-0.03	-0.03	-0.03
Oil price, Brent (USD/barrel)	56.4	56.9	58.3	59.7	52.2	54.7	56.1	4.2	2.2	2.1
Non-energy commodity prices, in USD (annual percentage change)	8.6	1.6	1.4	1.4	1.7	2.4	2.3	6.9	-0.8	-0.9

2. Gross Domestic Product

In 2016 Bulgarian GDP increased by 3.4%. The growth was balanced with contribution from both domestic demand (1.6 pps) and net export (1.8 pps).

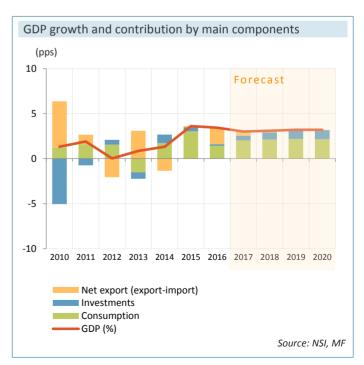
Bulgarian economy is expected to expand by 3% in 2017 driven by domestic demand and particularly by private consumption. In 2016 there were favourable developments on the labour market and increase in the consumer confidence indicator. We expect this tendency to continue in 2017, which will lead to an increase in the private consumption by 2.3%.

The gross fixed capital formation will increase by 2.8% on the back of higher public capital expenditures due to acceleration in the EU funds absorption. At the same time, there will be no substantial increase in private investment given the high base effect from the previous year. In 2016 the private investment increased for the first time since 2012, accompanied by improvement in the business climate in the country. The increase in the capacity utilization in 2014 and

2015 led to higher investment for capacity extension in 2016. As a result, private investments growth reached more than 10%.

The higher domestic demand in 2017 will lead to an increase in import. Meanwhile, export growth will slow down, taking into account the latest assumptions for foreign demand. Along with the slightly weaker EU economic activity, lower import growth is expected in the Western Balkans and Turkey. These countries account for 15% of Bulgarian export. As a result, the positive contribution of net export to the GDP growth will decrease from 1.8 pps in 2016 to 0.4 pps in 2017.

Economic growth will slightly accelerate to 3.1% in 2018, supported by the favourable dynamics of private consumption and investment. The increase in households' real disposable income and continued positive development of the labour market will boost private consumption growth to 3%, while investment growth will accelerate to 3.8%. Private investment will



have major contribution for the expected increase. Although export growth is expected to accelerate slightly, the positive contribution of net export will diminish to 0.2 pps as stronger domestic demand will lead to higher import growth.

GDP growth will reach 3.2% at the end of the forecasting period. Domestic demand (both consumption and investment) will be leading for the expected increase. At the same time, the contribution of net export will continue to decrease gradually in the following years and is expected to reach zero in 2020.

Downside risks to the economic outlook are related mainly to lower external demand. Increased uncertainty globally and in Europe, in particular, could affect negatively the economic growth in our main EU trading partners. Thus, the export growth of Bulgaria could be lower. First and foremost, the uncertainty is

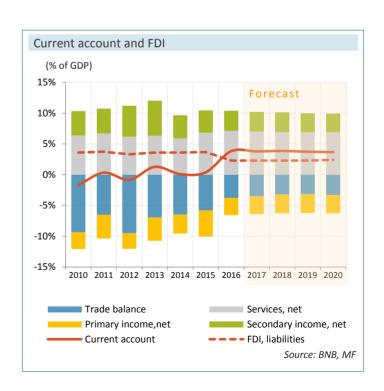
associated with the forthcoming Brexit. The future trade relations between the EU and the UK are still unclear. The upcoming elections in France and Germany additionally increase the uncertainty in the EU. Geopolitical tensions and the migration crisis also pose a downside risk to the economic activity in the region. Furthermore, global economic growth could be impacted by a shift of the US economic policy regarding the foreign trade. Weaker external demand and increased uncertainty may also postpone some investment projects in Bulgaria.

On the other hand, the observed positive dynamics of the labour market and the increased consumer confidence may result in higher-than-expected consumption growth. Investment could be also underestimated, taking into account the reported improvement in the private investment activity and the expected recovery in public investment in 2017.

3. Current Account

In 2016 the current account balance improved significantly to a surplus of 3.8% of GDP, on the back of favourable price dynamics, export growth rate surpassing the increase in import and lower income payments to foreign investors.

The expected increase in international prices in 2017, and especially in oil prices, along with depreciation of the EUR against the USD, will result in higher trade deflators and negative terms of trade (i.e. the export of goods deflator will be lower than the import of goods deflator). A shift in the export/import deflator dynamics is expected from 2018 onwards, in line with the global price changes. The increase in import prices (especially fuel prices) will be slower than the rise of export prices and will lead to improvement in the terms of trade.



Due to the expected price and quantities developments, in 2017–2019 the nominal rise in export of goods will outpace the increase in import, improving the trade balance from a deficit of 3.8% of GDP in 2016 to 3.5% in 2107 and 3.2% in 2018 and 2019. Trade deficit will increase slightly to 3.3% of GDP in 2020.

Taking into account the significant growth in travel services export in 2016, the increase in services export will decelerate in 2017, which in turn will lead to lower services balance as a ratio to GDP. In the following years the services trade surplus will remain almost unchanged at about 6.9% of GDP.

The acceleration in the gross operating surplus, along with the increase in FDI inflows will lead to higher payments on investment income to non-residents and thus higher primary income deficit of slightly above 3% of GDP. As the project contracting and execution of the 2014–2020 programming period advance, transfers from EU to the General government will increase. The related increase in Secondary Income surplus will, however, be at a pace closer to the GDP growth. Therefore, its balance as a ratio to GDP will stabilise at about 3–3.2%.

As a result of the above mentioned dynamics of the main subaccounts, Current account surplus will be at about 3.8% of GDP in 2017-2018 and will gradually decline in the period thereafter.

4. Labour Market and Incomes

The revision in the expectations for the employment developments from the updated autumn 2016 forecast was due to the unfavourable performance in the second half of 2016 on the account of the yoy decrease reported in Q3. In Q4, employment dynamics returned to positive territory; however, the annual pace of increase of 0.5% remained lower than expected. The unemployment rate was also lower than previously projected and the higher decrease in the labour supply resulted in weaker participation rate of the population. In the medium term, employment expectations have not been significantly revised from the updated autumn 2016 forecast, while unemployment and participation rates are generally lower.

At the beginning of 2017 short-term indicators on employers' expectations for hiring labour during the year were positive in all sectors under survey, while registered unemployment until February continued decreasing on a year earlier. The average employed number (ESA 2010) is expected to increase by another

0.5% in 2017 within the context of relatively high GDP growth and further domestic demand recovery. Positive developments will be grounded on the expected employment increase in services but also on job creation in manufacturing due to favourable export performance.

The unemployment rate will continue to decrease to 6.9%¹. Its rate of decline will slow down as compared to the previous year on the account of narrower labour supply decrease resulting from the measures for increasing the age and length of service needed for retirement, and the longer stay on the labour market. The pension reform is expected to strengthen its influence on the labour force participation during the years due to the gradual increase in the retirement age and length of service for retirement. Structural reforms on the labour market will also support the expected increase in the participation rate of population.

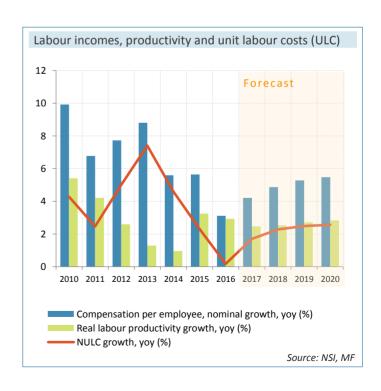
¹ Based on the LFS definition.

The unemployment rate will further decrease to 6.2% at the end of the forecasting horizon, while the average medium-term employment growth is projected at about 0.5%. Still, the employment growth will somewhat accelerate to 0.6% in 2018, influenced by the strengthening domestic demand and the positive impact of the foreign environment on domestic economic activity. Afterwards, it is projected to decelerate to 0.5% in 2019 and 0.4% in 2020 due to negative demographic developments and their impact on the supply of labour, which broadly narrows the potential for the employment increase.

Expectations on the medium-term wage growth have not been significantly modified from the updated autumn 2016 forecast. The compensation per employee growth in the second half of 2016 moderated faster than expected, thus its annual increase decelerated to 3.1% for the year on average and the share of compensation of employees in gross value added narrowed to 48%. This lower base effect led to slightly reduced wage growth in the medium term compared to the previous forecast.

Unemployment and participation rates 57 14 Forecast 55 12 53 10 8 51 49 6 47 4 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 Participation rate, 15+ (%) Unemployment rate (%), rhs Source: NSI. MF The compensation per employee growth is expected to speed up to 4.2% in 2017, supported by the increase in productivity, labour demand and inflation. This acceleration will be driven mainly by services not only as a result of the higher economic activity but also due to base effects from the reported decrease in the compensation per employee in this sector in 2016. Nominal wage growth will continue to gather momentum during the entire forecasting horizon, up by 5–5.5% per annum, supported by the expected further increase in productivity and labour demand and the inflation rate acceleration.

In 2017–2020, real labour productivity growth is expected at 2.6% on average and together with the expected compensation per employee dynamics will result in moderate nominal unit labour costs increase at an annual average of 2.3%. The relatively stronger wage growth compared to productivity will reflect a gradual increase in the share of compensation of employees in gross value added to 49.2% at the end of the forecasting horizon.



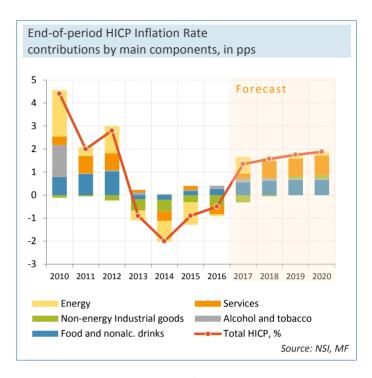
5. Inflation

The annual HICP inflation rate in the country remained negative throughout the entire 2016, but decelerated to -0.5% yoy in December. The annual average inflation rate stood at -1.3%. The headline rate dynamics during the year have been largely driven by the decline in fuel prices, which followed crude oil prices developments. Core inflation also remained negative at -0.4% on average for the considered period.

The annual inflation rate moved to positive territory in January 2017 for the first time since mid-2013 and accelerated to 0.9% yoy in February mostly on the account of the ongoing recovery in crude oil prices.

Given the current HICP dynamics and the latest assumptions for the major commodity indices, the annual average inflation rate in 2017 is projected to be positive at 1.2%. The accumulated inflation at the end of the year is forecast to accelerate to 1.3%. The expected higher international prices together with the depreciation of the euro against the US dollar will result in higher domestic prices of energy and food, thus they will mainly contribute to the end-of-period inflation. Services prices are expected to increase only slightly, backed by the higher domestic demand, while prices of non-energy industrial goods will continue on the decline, albeit at a slower rate.

The annual average inflation rate in 2018 is projected to be 1.3% and is expected to accelerate to 1.7% in 2019 and to 1.8% in 2020 under the assumption for



higher international prices of crude oil and major nonenergy commodities, as well as higher domestic demand.

The envisaged hike in excise stakes on tobacco in 2017 and 2018 is expected to contribute by 0.1 pp to the change in the headline rate at the end of each year.

Risks to the inflation forecast are mainly related to commodity price developments. Given the current juncture on the international crude oil market, there are significant risks concerning supply, which are on the upside as well as on the downside. Meanwhile, unfavourable weather conditions could support higher-than-expected food price increases on the global scale. •

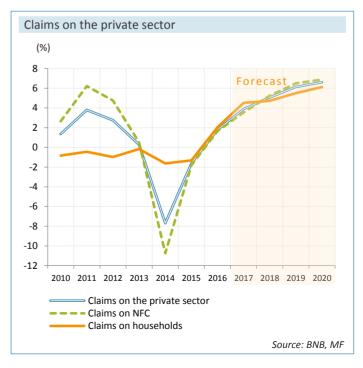
6. Monetary sector

Private credit dynamics in the fourth guarter of 2016, as well as its current developments in 2017 led to an upward revision of expectations compared to the previous forecast. Money supply growth is forecasted to reach 8.1% yoy in 2017 on the account of the expected further growth of BNB's international reserves and deposits of residents in the banking system. Broad money growth will accelerate to 8.4% yoy at the end of 2018 and will further speed up to 8.9% in 2020. The annual growth rate of deposits will remain close to the increase in broad money. Overnight deposits will keep a leading role, but their contribution will shrink at the expense of deposits with agreed maturity and those redeemable at notice, which will gradually accelerate their growth over the end of the forecasting period.

Private credit growth remained negative throughout the first half of 2016, but its decline started to decelerate in the second quarter. It moved to positive territory in August for the first time since the beginning of the year and its positive annual change at the end of 2016 stood at 1.5%.

Money supply and deposits (%) 25 Forecast 20 15 10 5 0 -5 -10 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 - M3 – – – Overnight deposits BGN deposits included in M3 --- FX deposits included in M3 Source: BNB. MF Private credit will continue to gather momentum in 2017–2020 in line with the expected private consumption growth, improved economic activity, accelerated growth of import of goods and strengthening private investments in 2018. Claims on the private sector are expected to increase by 3.9% yoy at the end of 2017, driven mainly by the claims on households. The expected acceleration over 2016 will be due to improved environment, both on the demand and the supply side, including a continuing positive impact from 2016 Asset quality review (AQR) and stress test results.

The annual growth rate of claims on the private sector is expected to accelerate to 5.1% in 2018 and 6.6% at the end of 2020, with claims on non-financial enterprises contributing more. Claims on households will gradually gather speed, too. The expected increase in their consumption will have positive contribution in line with the expected trends in the labour market and forecasted growth of compensation per employee, which will slightly accelerate after 2017.



	ACTUAL	. DATA*	PROJECTIONS				
MAIN ECONOMIC INDICATORS	2015	2016	2017	2018	2019	2020	
International Environment							
World real GDP (%)	3.2	3.1	3.4	3.6	3.7	3.7	
EU28 real GDP (%)	2.2	1.9	1.8	1.8	1.8	1.8	
USD/EUR exchange rate	1.11	1.11	1.06	1.06	1.06	1.06	
Crude oil, Brent (USD, bbl)	52.4	44.2	56.4	56.9	58.3	59.7	
Non-energy commodity prices (in USD, %)	-15.0	-1.7	8.6	1.6	1.4	1.4	
Gross Domestic Product							
Nominal GDP (mln BGN)	88 571	92 635	97 156	102 012	107 422	113 062	
Real GDP growth (%)	3.6	3.4	3.0	3.1	3.2	3.2	
Consumption	3.8	1.8	2.6	2.8	2.9	2.9	
Gross fixed capital formation	2.7	-4.0	2.8	3.8	4.6	4.9	
Export of goods and services	5.7	5.7	5.2	5.4	5.4	5.6	
Import of goods and services	5.4	2.8	4.8	5.3	5.6	5.9	
Labour Market and Prices							
Employment growth (SNA, %)	0.4	0.5	0.5	0.6	0.5	0.4	
Unemployment rate (LFS, %)	9.1	7.6	6.9	6.5	6.3	6.2	
Compensation per employee (%)	5.6	3.1	4.2	4.9	5.3	5.5	
GDP deflator (%)	2.2	1.1	1.8	1.8	2.0	2.0	
Annual average HICP inflation (%)	-1.1	-1.3	1.2	1.3	1.7	1.8	
Balance of Payments							
Current account (% of GDP)	0.4	3.8	3.8	3.8	3.7	3.6	
Trade balance (% of GDP)	-5.8	-3.8	-3.5	-3.2	-3.2	-3.3	
Foreign direct investments (% of GDP)	3.7	2.3	2.3	2.3	2.3	2.4	
Monetary Sector							
Money M3 (%)	8.8	7.6	8.1	8.4	8.7	8.9	
Claims on enterprises (%)	-1.8	1.6	3.5	5.2	6.5	6.9	
Claims on households (%)	-1.3	2.0	4.5	4.7	5.5	6.1	

^{*} The forecast is based on statistical data up to 17 March 2017.