UPDATED AUTUMN MACROECONOMIC FORECAST

2016

The update of the 2016 autumn macroeconomic forecast of the Ministry of Finance ensued from the publication of revised time series for the Balance of payments on 17 September 2016 and for the National accounts on 11 October 2016. The revisions of the Balance of payments follow the BNB practice and the ECB requirements and cover the period January 2014 – June 2016, while GDP revisions cover the period from 2000 until the second quarter of 2016. The latter are partly due to changes in sources and methods used, i.e. the revision of the perpetual inventory method for consumption of fixed capital of non-market units due to GNI reservation of Eurostat, the revision of the Balance of payments data and the reclassification of Bulgarian deposit insurance fund in sector General government. Moreover, the revisions take into account the availability of the exhaustive Annual statistical reporting data, the Supply and Use Tables balancing and the reclassification of units due to EC requirements.*

As a result of these revisions, the nominal GDP for 2015 was increased by more than BGN 2 bn. The real GDP growth for 2015 and H1 2016 was raised by around 0.6 pps. Drivers of growth were also changed. Before the revision, net export accounted the most for the growth in 2015, while after the revisions domestic demand turned to be the main economic activity driver. For the first half of 2016 the contribution of net export expanded due to the lower real increase in import of goods and services.

National accounts and Balance of payments: changes after the revisions

	Before the revisions			After the revisions			Difference		
	2014	2015	2016 Jan-Jun	2014	2015	2016 Jan-Jun	2014	2015	2016 Jan-Jun
Gross domestic product									
Nominal GDP (mln BGN)	83 612	86 373	40 430	83 634	88 571	41 499	22	2 199	1 069
Real GDP growth (%)	1.5	3.0	3.0	1.3	3.6	3.5	-0.2	0.6	0.6
Consumption	2.2	0.7	1.1	2.2	3.8	0.7	0.0	3.2	-0.4
Gross fixed capital formation	3.4	2.5	0.4	3.4	2.7	0.4	0.0	0.2	0.0
Export of goods and services	-0.1	7.6	4.4	3.1	5.7	3.9	3.2	-1.9	-0.5
Import of goods and services	1.5	4.4	3.5	5.2	5.4	1.9	3.6	1.0	-1.6
Labour market and prices									
Compensation per employee (%)	5.6	1.8	7.9	5.6	5.6	4.0	0.0	3.8	-3.9
GDP deflator (%)	0.4	0.3	0.2	0.5	2.2	0.1	0.0	1.9	-0.1
Balance of payments									
Current account (% of GDP)	0.9	1.4	1.5	0.1	0.4	1.7	-0.8	-1.0	0.2
Trade balance (% of GDP)	-6.5	-4.3	-1.2	-6.5	-5.8	-1.8	0.0	-1.5	-0.6
Foreign direct investments (liabilities, % of GDP)	3.6	3.6	1.9	3.6	3.7	2.3	0.0	0.1	0.4

Source: NSI, BNB

* *The forecast is based on statistical data up to 28 October 2016, unless noted otherwise.*

1. External Environment

The external assumptions for the development of world and European economy remain the same as in the September forecast.

GDP growth rates of both the European and the U.S. economy are expected to decelerate over the current year. The anticipated favourable economic development of the emerging markets as well as the acceleration of the GDP growth in the United States will shape the dynamics of the world economy in 2017. At the same time, the development of the European economy will remain subdued due to the increased uncertainty in the region related to the geopolitical tensions, the migration flows towards the EU countries, the impact of "Brexit" and the worsening economic and political environment in Turkey.

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 28 October 2016.

Brent price in 2016 is projected to be $44.3/bbl, thus its anticipated fall for the year on average would be 15.4%. Non-energy commodity prices are expected to decline by 2.3% during the current year, the revision vis-à-vis the previous forecast being mostly on the account of slower-than-expected recovery of food prices and larger decreases in prices of metals and agricultural raw materials. All main commodity price indices are expected to increase in the period 2017–2019, mainly due to stronger demand and subdued supplies on the global scale.

External assumptions: difference from the autumn forecast

	Updated autumn forecast 2016				Autumn forecast 2016				Difference from the autumn forecast			
External environment	**2016**	**2017**	**2018**	**2019**	**2016**	**2017**	**2018**	**2019**	**2016**	**2017**	**2018**	**2019**
World real GDP, %	3.1	3.4	3.6	3.7	3.1	3.4	3.6	3.7	0.0	0.0	0.0	0.0
EU28 real GDP, %	1.8	1.6	1.8	1.8	1.8	1.6	1.8	1.8	0.0	0.0	0.0	0.0
USD/EUR exchange rate	1.11	1.09	1.09	1.09	1.12	1.12	1.12	1.12	-0.01	-0.03	-0.03	-0.03
Oil price, Brent (USD/bbl)	44.3	52.2	54.7	56.1	43.6	50.9	53.9	56.2	0.7	1.3	0.9	0.0
Non-energy commodity prices, in USD (%, yoy)	-2.3	1.7	2.4	2.3	-0.8	1.5	2.4	2.4	-1.4	0.1	0.0	-0.1

Source: EC, WB, IMF, MF

2. Gross Domestic Product

The updated 2016 autumn macroeconomic forecast is based on the new GDP time series, which show significant revisions for 2015 and H1 2016. Real GDP growth rate has been revised upwards but there are also changes in the GDP components for the two periods.

Final consumption increased by 0.7%[1] yoy in H1 2016. Households' consumption is expected to continue increasing in the second half of the year, supported by the increase in employment and real wages. The decrease in

[1] Based on not seasonally adjusted data

public expenditures, observed in the first six-month period, will reverse and public consumption will have a positive contribution to the GDP growth in 2016. As a result, final consumption will expand by 1.6%.

The revised data on investment showed larger increase in inventories, while the nominal value and the real increase in investment in fixed capital remained almost unchanged. Investment increased by 7.7% in H1, but is expected to slow to 4.1% for the whole 2016. This will be due to the lower projected increase in inventories and private investment in the second half of the year and the decline in public capital expenditures associated with the transition to the new 2014–2020 EU funds financial framework. The gross fixed capital investment is expected to increase by 0.1% driven by the private sector.

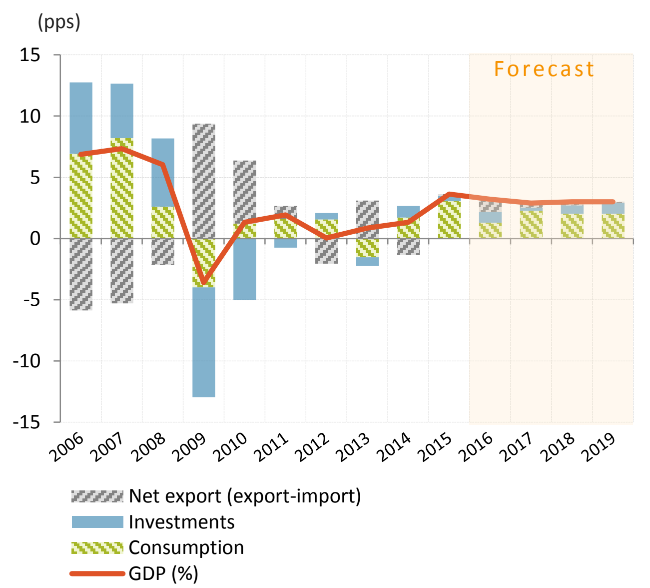
The export is expected to expand by 4.1%, which will be close to the 3.9% reported for the first half of the year. The data revisions for the import of goods and services also led to a change in the forecast. In the second half of the year we expect acceleration in the import growth due to an increase in domestic demand and export.

Bulgarian GDP growth is estimated at 3.2% in 2016, which is higher than the projected 2.6% in the autumn forecast. Domestic demand (consumption and investment) is still expected to mainly account for the headline growth number, but the projected contribution of net export is higher, up from 0.6 pps to 1 pp due to the import data revisions.

GDP growth will slow slightly to 2.9% in 2017, higher than the expected increase of 2.5% in the autumn forecast. The weaker external demand from the European economy will lead to deceleration in export growth to 3.2% and thus will weigh on activity next year. Due to the expected upward trend in consumption and investment in fixed capital, import growth will reach 2.7%, slightly higher than the one in 2016. As a result, the contribution of net export to GDP growth will narrow to 0.4 pps, from 0.6 pps in 2016.

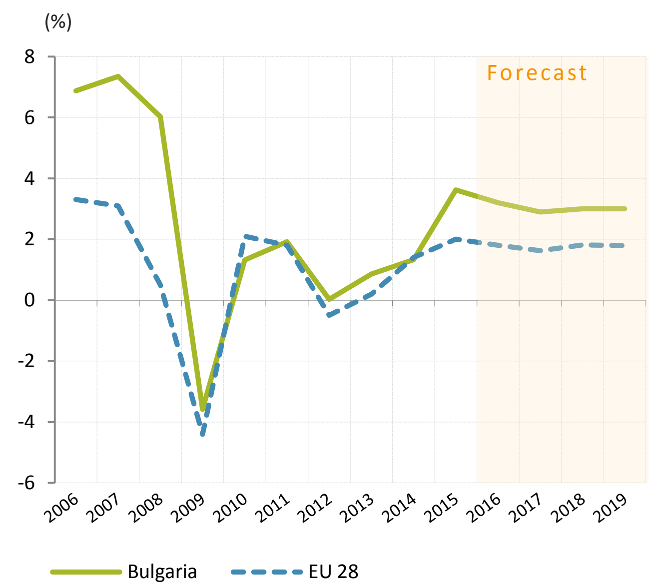
The increase in consumption will be supported by the continued positive labour market developments and the registered improvement in the consumers' expectations about the purchase of durable goods. The increase in wages in some public sector activities will also have a positive effect. Investment in fixed capital will pick up to 1.1% as the decline in public capital expenditures is ex-

GDP growth and contribution by main components



Source: NSI, MF

Real GDP growth



Source: Eurostat, MF

pected to reverse, while positive dynamics in private investment will persist. Gross capital formation will increase by 1.2% due to the technical assumption that the change in inventories will have zero contribution to GDP growth during the forecast period.

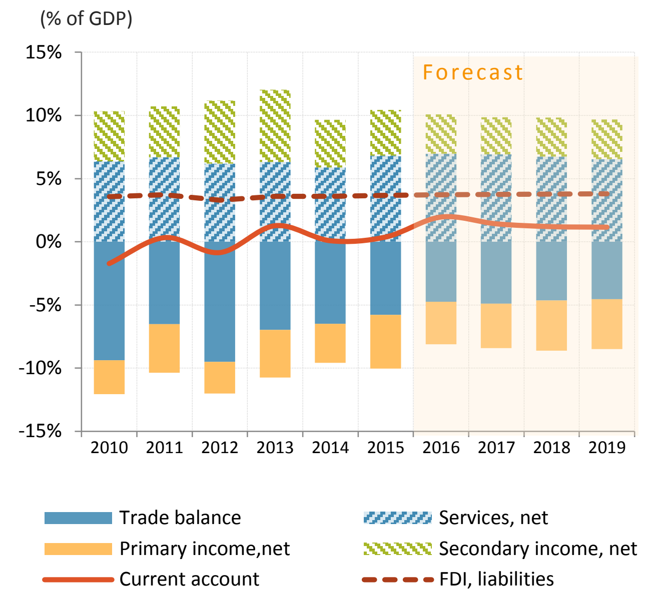
GDP growth will gradually gain momentum to 3% over the period 2018-2019. Domestic demand with both consumption and investment will contribute the most to the headline growth. Higher increase in domestic demand will lead to acceleration in import. Thus, the contribution of net export will continue to decrease and is expected to be close to zero at the end of the forecast period.

3. Current Account

The updated autumn forecast incorporates the revised BOP and GDP data as well as the latest external assumptions for commodity price dynamics. There are no significant changes in the main BOP accounts dynamics, but growth rates are adjusted to take into account the base effects and some changes in the price indices.

As in the previous forecast, we expect deceleration in the price declines till the end of 2016, which will be reflected in higher annual deflators and positive terms of trade. In real terms, export and import dynamics in the second half of the year will be similar to those in H1. Lower import growth in the first half of 2016 and sharper decrease in the prices of main traded goods will result in nominal declines in export and import of goods for the year. Export will be marginally below its level in 2015 compared with a small export growth expected in the autumn forecast. Import will decline by 2% yoy. Trade balance will be 4.8% of GDP, down from 5.8% in 2015. Current account surplus will reach 2% of GDP.

Current account and FDI inflow



Source: BNB, MF

Global commodity price assumptions are for sharper increase in raw materials and oil prices in 2017, which will push trade deflators further up compared to the autumn forecast. Terms of trade will be negative. Nominal export and import growth will be slightly above 6% yoy, as import growth will outpace the increase in export. This will result in higher trade deficit (up to 4.9% of GDP). The surplus on the current account balance will narrow more markedly than previously expected down to 1.4% of GDP in 2017.

In 2018-2019, the positive net export and positive terms of trade will result in higher growth rates of export as compared to import, despite the acceleration in the later. Trade deficit will be about 4.6% of GDP, while the positive balance on the CA will reach 1.2% of GDP.

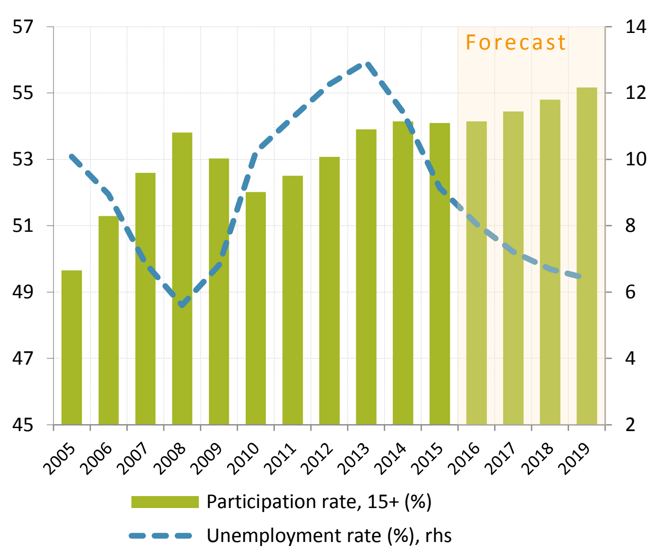
4. Labour Market

GDP revisions did not affect the employment numbers, thus the expectations for the main labour market developments changed only marginally with respect to the autumn forecast.

Recent employment and unemployment dynamics were in line with expectations, thus the projected change in both indicators for the whole 2016 remains the same. While the increase in the number of employed picked up to 1.5% yoy (ESA 2010) in Q2 2016 supported mainly by the services sector, it is expected to decelerate in the second half of the year. The latter will be driven by the worsened business expectations for the employment dynamics in services in August-October, the expected slowdown in manufacturing activity and the slower decrease in the unemployment. The annual average employment growth is expected at 1.1% (ESA 2010), while the unemployment rate will reach 8.1% (LFS).

The upward revision in the GDP growth for 2017 resulted in a slightly higher employment growth of 0.7% compared to the previously expected increase of 0.6%. The latter, however, did not affect the expectations for a slowdown in employment dynamics over the previous year, as well as the drivers that will contribute to the rise of employed. Weaker foreign demand is expected to have a negative influence on employment in manufacturing. However, its effect will be offset by higher domestic demand which will support employment in the services sector. Thus, the unemployment rate is expected to continue decreasing to 7.2% in 2017, as the contribution of demography for the unemployment decline is expected to become weaker due to measures for the retirement age increase. The latter manifested itself even in 2016 as for the nine-month period the newly retired for age and length of service decreased by 14.3% yoy. The pension reform is envisaged to have a stronger impact on the labour force contraction in the medium term which will also support the expected rise in the participation rate of the population. The higher labour force participation will be further sustained by the structural reforms and active labour market policies implemented.

Unemployment and participation rates



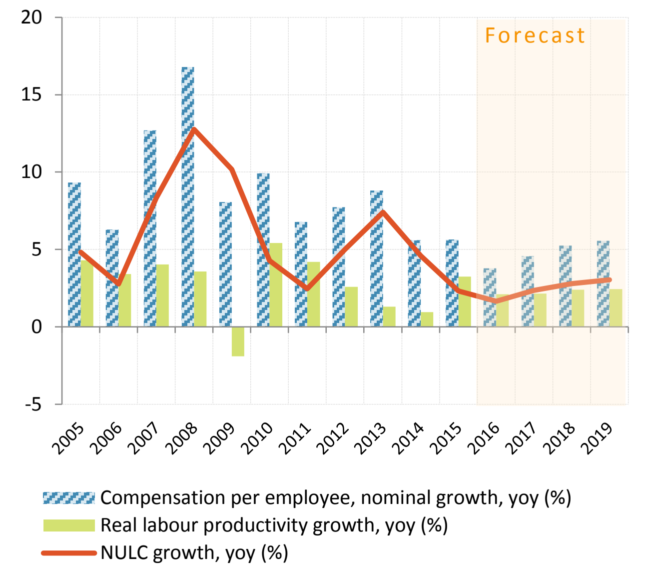
Source: NSI, MF

Expectations for the employment dynamics in 2018 and 2019 remain unchanged compared to the autumn forecast, while the relatively lower employment growth in 2019 resulted from the higher base in the previous two years. As regards the unemployment, the low base effect will lead to a slightly lower level of unemployment of 6.4% in 2019. In the medium term, the economic growth will support the labour market developments. However, the potential for employment expansion will narrow due to the negative demographic developments, the fast decrease of unemployment during the last two years and the drop in the number of discouraged people.

GDP revisions by income approach affected significantly current wage developments. Due to the upward adjustment of 2015 preliminary data, the nominal growth of compensation per employee slowed to 4.0% yoy in H1 2016 (being 7.9% yoy before the revisions), which was particularly due to the activities in the services sector. Revised GDP data resulted in a lower-than-expected increase in the compensation of employees with respect to the autumn forecast, with the largest impact being expected in 2016.

Similar to previous expectations, the growth of compensation per employee in industry is projected to decelerate in the second half of 2016 in line with the expected slowdown in employment and gross value added. On the other hand, the nominal growth of compensation per employee in services is expected to step up further as compared to the first six-month period of the year due to higher domestic demand. The rate of increase in the compensation per employee for the total economy in the second half of 2016 will remain close to the one observed in H1. However, its annual average rate is expected to decelerate to 3.8% in 2016, down from 5.6% in 2015. The slowdown in foreign demand and the subsequent moderate contribution to wage dynamics is expected to continue in the first half of 2017 as well, while a more sizable increase in the indicator is expected in the second half of 2017. Thus, its growth rate will go up to 4.6% for the whole year, the latter reflecting also the downward correction in 2016 expectations. This value will remain close to the previous forecast due to the upward revision in productivity, labour demand and positive price developments. These factors will support further acceleration in income dynamics in 2018-2019. Throughout the entire forecast period, real labour productivity is expected to reach an annual average growth of 2.3%[2], while compensation per employee will increase by 4.8% in nominal terms. The upward revision in productivity expectations combined with the slightly lower wage dynamics are expected to contribute positively to cost competitiveness measured by unit labour cost developments. The latter is projected to grow by an annual average rate of 2.5% and 1.4% in nominal and real terms, respectively.

Labour incomes, productivity and unit labour costs (ULC)



Source: NSI, MF

[2] Labour productivity is calculated as a ratio of GDP at 2010 prices and the employed numbers (ESA 2010)

5. Inflation

The revision of the inflation forecast takes into account newly published data as of October 2016 as well as our latest assumptions on international prices of crude oil and other major commodities. Thus, the expectations for the end-of-period inflation in 2016 have been revised downwards given the recent HICP developments, which on its turn led to a different forecast for the average inflation rate in 2016 and 2017.

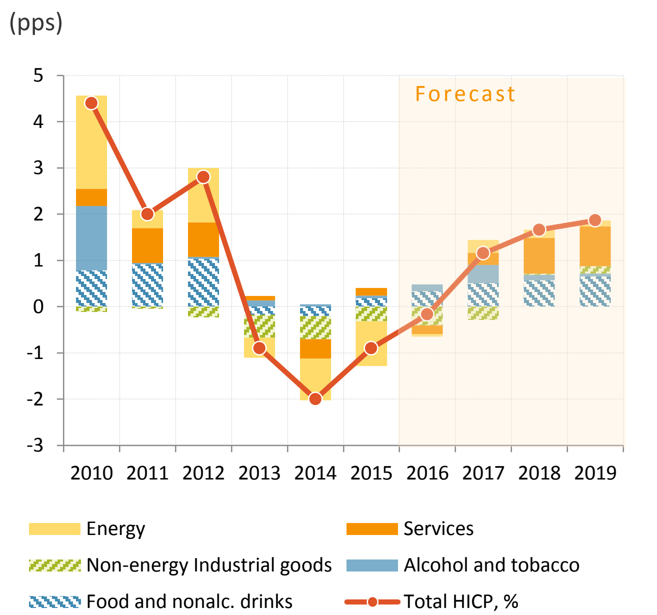
The annual HICP inflation rate in the country remained negative in 2016. There's been a temporary deepening in the deflation rate during the first half of the year driven by the decrease in energy and food prices, as well as lower prices of services related to communication. During the summer months, however, the negative headline rate decelerated significantly and stood at -1.1% yoy in July-September.

The negative inflation rate in the country is expected to decelerate further to -0.2% yoy at the end of 2016, given the current HICP dynamics and the latest assumptions for the major international price indices. Only prices of food and tobacco are expected to report increase in yoy terms as of December. The former would be mostly on the account of the ongoing recovery in international food prices, while the latter is due to the excise stakes' hike in the beginning of the year. The energy component is projected to report a decrease due to the cuts in administered prices of central heating and gas supply during the year, as well as lower prices of transport fuels. Prices of non-energy industrial goods are expected to continue declining particularly due to still cheaper consumer durables. Prices of services are also projected to report a decline in December 2016. The average inflation rate is expected to be -1.2%, given the reported high deflation rates in April-May. The accumulated inflation at the end of 2017 is forecast to turn positive at 1.2%. Only consumer durables are still expected to have a negative contribution, albeit smaller, to the change in the headline rate. All other main HICP components are expected to report price increases under the assumption for higher international prices of crude oil and major non-energy commodities, as well as higher domestic demand. The annual average inflation rate in 2017 is projected to be 1.1% and is expected to accelerate to 1.5% in 2018 and to 1.7% in 2019.

The envisaged hike in excise stakes on tobacco in 2017 and 2018 is expected to contribute by 0.3 and 0.1 pp to the change in the headline rate in the end of the corresponding year.

Risks to the inflation outlook are largely tilted to the downside and are related to lower-than-expected prices of crude oil and major non-energy commodities. Furthermore, weaker domestic demand growth could result in more subdued headline rate than currently expected.

End-of-period HICP inflation rate and contributions by main components



Source: NSI, MF

6. Monetary Sector

Monetary sector expectations have been revised to take into account newly published data as of September 2016 as well as the revised numbers for the GDP components and the labour market. Latest developments of credit to households led to an upward revision and provided for a higher expected growth of claims on the private sector in 2016.

The expansion of broad money lost momentum in the beginning of 2016, but picked up in April and June driven by the accelerated growth of overnight deposits. At the end of September, the annual growth rate of money supply reached 8.7%, which was comparable to the one recorded at the end of 2015 (8.8%). Broad money increase will slow slightly to 8.3% yoy in 2016 driven by the lower deposit growth at the end of the current year.

Money supply growth will accelerate gradually throughout the forecast period to 8.8% yoy in 2017 and to 9.3% in 2019. This will be backed by the expected growth of BNB's international reserves and domestic deposits in the banking system. Overnight deposits will slow down over the projected period, while deposits with agreed maturity and deposits, redeemable at notice, will speed up. This will result from the gradually diminishing preference of domestic economic agents for higher liquidity.

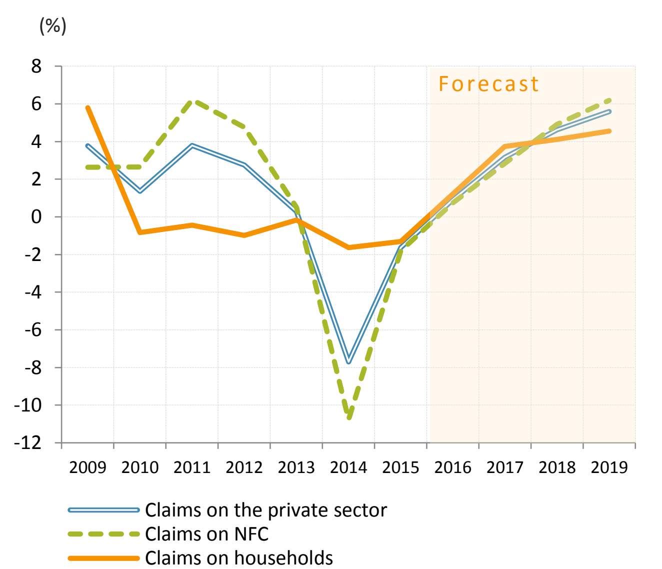
Private credit decreased in yoy terms during the first half of 2016, albeit at a slower pace in the second quarter. At the end of August, it rose by 0.1% yoy, but turned back slightly negative in September, down by 0.1% yoy.

Claims on the private sector are expected to increase by 0.9% yoy at the end of 2016 driven mainly by the claims on households. The latter will go up by 1.2% yoy, while claims on corporations will remain more moderate, up by 0.7% yoy.

Private credit will continue to recover in 2017 and is projected to increase by 3.2% yoy. Claims on corporations are going to be the main driver, reflecting the expected positive development of private investment. Growth rate of credit to households will go up as well, following the projected faster growth of private consumption and the expected positive development of the labour market.

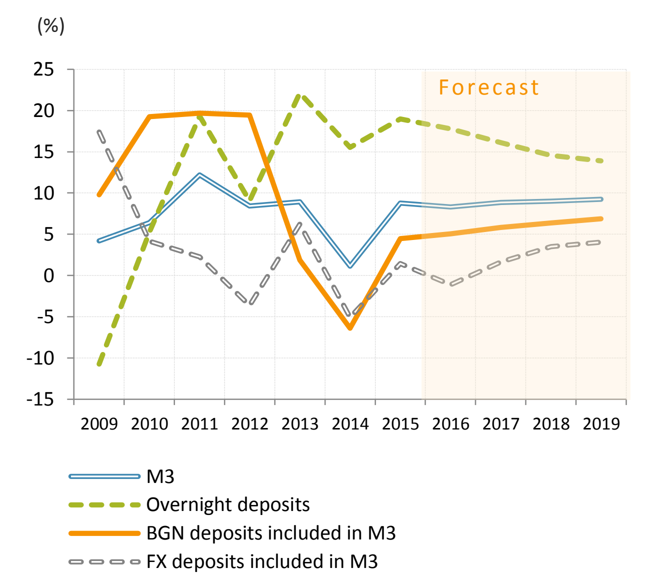
Private credit will pick up in 2018-2019. The annual growth rate of claims to the private sector is expected to accelerate to 5.6% in 2019 with claims on non-financial enterprises contributing more, while those on households will gather speed more gradually.

Claims on the private sector



Source: BNB, MF

Money supply and deposits



Source: BNB, MF

MAIN ECONOMIC INDICATORS	ACTUAL DATA*		PROJECTIONS			
	2014	2015	2016	2017	2018	2019
International environment						
World real GDP (%)	3.4	3.1	3.1	3.4	3.6	3.7
EU28 real GDP (%)	1.4	2.0	1.8	1.6	1.8	1.8
USD/EUR exchange rate	1.33	1.11	1.11	1.09	1.09	1.09
Crude oil, Brent (USD/bbl)	98.9	52.4	44.3	52.2	54.7	56.1
Non-energy commodity prices (in USD, %)	-4.6	-15.0	-2.3	1.7	2.4	2.3
Gross domestic product						
Nominal GDP (mln BGN)	83 634	88 571	91 665	95 348	99 580	104 087
Real GDP growth (%)	1.3	3.6	3.2	2.9	3.0	3.0
Consumption	2.2	3.8	1.6	3.0	2.6	2.7
Gross fixed capital formation	3.4	2.7	0.1	1.1	3.2	4.2
Export of goods and services	3.1	5.7	4.1	3.2	3.7	3.7
Import of goods and services	5.2	5.4	2.5	2.7	3.3	3.7
Labour market and prices						
Employment growth (SNA, %)	0.4	0.4	1.1	0.7	0.6	0.5
Unemployment rate (LFS, %)	11.4	9.1	8.1	7.2	6.7	6.4
Compensation per employee (%)	5.6	5.6	3.8	4.6	5.3	5.6
GDP deflator (%)	0.5	2.2	0.3	1.1	1.4	1.5
Annual average HICP inflation (%)	-1.6	-1.1	-1.2	1.1	1.5	1.7
Balance of payments						
Current account (% of GDP)	0.1	0.4	2.0	1.4	1.2	1.2
Trade balance (% of GDP)	-6.5	-5.8	-4.8	-4.9	-4.6	-4.6
Foreign direct investments (% of GDP)	3.6	3.7	3.7	3.8	3.8	3.8
Financial sector						
Money M3 (%)	1.1	8.8	8.3	8.8	9.0	9.3
Claims on enterprices (%)	-10.8	-1.8	0.7	2.8	4.9	6.2
Claims on households (%)	-1.6	-1.3	1.2	3.7	4.1	4.5

** The forecast is based on statistical data up to 28 October 2016, unless noted otherwise*