

BULGARIAN NATIONAL BANK



ECONOMIC REVIEW

3/2017



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The BNB quarterly Economic Review presents information and analysis of balance of payments dynamics, monetary and credit aggregates, their link with the development of the real economy, and their bearing on price stability. Processes and trends in the external environment are also analysed since the Bulgarian economy is directly influenced by them. This publication contains also quantitative assessments of the development in major macroeconomic indicators in the short run: inflation, economic growth, exports, imports, trade balance and BoP current account, foreign direct investment, monetary and credit aggregate dynamics.

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1, Knyaz Alexander I Square
1000 Sofia, Bulgaria

Tel.: (+359 2) 9145 1351, 9145 1209, 9145 1231

Website: www.bnb.bg

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ABBREVIATIONS

ABSPP	Asset-Backed Securities Purchase Programme
APP	Asset Purchase Programme
APRC	Annual percentage rate of charge
BIR	Base interest rate
BOP	Balance of Payments
BTC	Bulgarian Telecommunications Company
b.p.	basis points
CBPP3	Covered Bond Purchase Programme
CEECs	Central and East European countries
CEFTA	Central European Free Trade Association
CFP	Consolidated Fiscal Programme
CIF	Cost, insurance, freight
CNY	Chinese Yuan
CPI	Consumer Price Index
DXY	an index measuring the exchange rate of the US dollar against the basket of six major currencies
EA	Employment Agency
EC	European Commission
ECB	European Central Bank
EIB	European Investment Bank
EMBI	Emerging Markets Bond Index
EONIA	Euro OverNight Index Average
EU	European Union
EURIBOR	Euro Interbank Offered Rate
EWRC	Energy and Water Regulatory Commission
FAO	
FDI	Foreign Direct Investment
FOB	Free on Board
FRS	Federal Reserve System
GDP	Gross Domestic Product
GFMS	Gold Fields Mineral Services
HICP	Harmonized Index of Consumer Prices
HRW	Hard Red Wheat
HUF	Hungarian forint
IEA	International Energy Agency
IMF	International Monetary Fund
ISM	Institute for Supply Management
LEONIA	LEv OverNight Index Average
LIBOR	London Interbank Offered Rate
M1	narrow money
M2	M1 and quasi-money
M3	broad money
MF	Ministry of Finance
MFIs	Monetary Financial Institutions
mt	metric tons
NPISHs	Non-profit institutions serving households
NSI	National Statistical Institute
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
OTC	over-the-counter
PBoC	People's Bank of China
PMI	Purchasing Managers' Index
p.p.	percentage points
PPP	Purchasing Power Parity
PSPP	Public Sector Purchase Programme
RON	Romanian new leu
SITC	Standard International Trade Classification
WTI	West Texas Intermediate

SUMMARY

Global economic indicator dynamics suggests that global economic activity continued to improve in the third quarter of 2017. For the first seven months of 2017 on average, the annual growth rate of world trade accelerated significantly, with the strongest growth observed in foreign trade flows of Eastern European countries and Asian emerging markets. In August global inflation reached 2.2 per cent on an annual basis, with developing countries recording more pronounced consumer price rises since early 2017, driven mainly by the annual increase in international oil product and metal prices. Over the third quarter the European Central Bank (ECB) and the US Federal Open Market Committee made no adjustments to euro area and US monetary policies, respectively.

In line with expectations of improving global economic activity, external demand for Bulgarian goods and services is likely to continue growing on an annual basis in the fourth quarter of 2017 and first quarter of 2018. If market expectations of international fuel, commodity and food price dynamics materialise, the terms of trade for Bulgaria will be favourable in the fourth quarter of 2017 and first quarter of 2018.

Between January and July 2017 the balance of payments current and capital account surplus declined from the same period of 2016, reflecting mainly lower transfers under EU programmes and higher trade balance deficit. In the fourth quarter of 2017 and first quarter of 2018 the balance of payments current and capital account surplus is expected to continue decreasing as a share of GDP on an annual basis, reflecting largely the projected growth in net primary income deficit. The anticipated better absorption of funds under the EU-funded operational programmes will contribute to the annual increase in capital account surplus as a share of GDP *vis-à-vis* the first half of 2017.

In the first eight months of 2017 non-government sector deposits in the banking system continued growing at a comparatively high annual rate. Annual growth in credit to non-financial corporations and households accelerated. This dynamics reflected the improving economic environment and continued gradual declines in lending rates, with the utilisation of loans extended under the National Programme for Energy Efficiency of Multi-family Residential Buildings contributing additionally to this effect. In the fourth quarter of 2017 and first quarter of 2018 deposit growth is expected to slightly accelerate as compared with current levels, reflecting higher disposable income and increased household savings. In the context of continuing strengthening of economic activity and comparatively low interest rates, bank loans to non-financial corporations and households are expected to grow further.

Developments in financial flows generated in the process of external and internal economic factor interaction contributed to the growth in international foreign exchange reserves. In August 2017 the market value of international reserves (assets on the Issue Department balance sheet) was EUR 24.4 billion (EUR 47.8 billion), marking an increase of EUR 545 million from the end of 2016.

In the second quarter of 2017 real GDP increased by 1.0 per cent on a quarterly basis. Domestic demand continued to have the main positive contribution to growth, its main components (private consumption and investment in fixed capital) posting an increase. Government consumption had a neutral contribution to growth, and its dynamics was determined by the rate of increase in compensation *per* employee in budget organisations and state-managed funds, operating expenditure and health insurance payments. Positive domestic demand dynamics contributed to an increase in imports, while improved external demand led to a significant increase in exports of goods and services which resulted in a close to nil contribution of net exports to real GDP growth.

Positive developments in short-term economic indicators continued in the third quarter of 2017, suggesting a sustainable improvement of the economic environment until the end of the year. At the same time, labour market conditions continued to improve, as reflected in the recovery of employment and increased compensation *per* employee. Additional factors expected to support the creation of conditions for improving investment activity and private consumption are the increasing domestic and external demand for goods and services and still relatively low oil prices and interest rates. These factors are expected to contribute to the further increase in real GDP in the fourth quarter of 2017 and first quarter of 2018, reflecting mainly the contribution of domestic demand. Balanced risks with regard to the external environment and the possible higher than expected increase in private consumption and government investment create conditions for achieving higher than expected economic growth at the end of 2017 and in the beginning of 2018.

Since early 2017 HICP followed an upward trend on an annual basis, and inflation came to 0.7 per cent in August. Higher crude oil and commodity prices on international markets and their direct and indirect effect on domestic prices were the main inflation drivers. In addition, higher import and domestic prices of some agricultural products also made a positive contribution to inflation, reflecting the increase in food prices since the year start. The increase in tobacco excise duty since early 2017 was a factor having a weak inflationary effect. The internal factors related to the sustained long-term trend toward cheaper telecommunication services, air transport and durable goods helped lower inflation.

Reflecting higher food prices and a lower negative contribution of core inflation, domestic inflation is expected to increase in the fourth quarter of 2017 and first quarter of 2018. Goods and services with administratively controlled prices are also expected to make a positive contribution to the overall inflation.

1. EXTERNAL ENVIRONMENT

Global economic indicator dynamics suggests that global economic activity continued to improve in the third quarter of 2017. For the first seven months of 2017 on average, the annual growth rate of world trade accelerated significantly, with the strongest growth observed in foreign trade flows of Eastern European countries and Asian emerging markets. In August global inflation reached 2.2 per cent on an annual basis, with developing countries recording more pronounced consumer price rises since early 2017, driven mainly by the annual increase in international oil product and metal prices. Over the third quarter the ECB and the US Federal Open Market Committee made no adjustments to euro area and US monetary policies.

Current Business Situation

In the third quarter of 2017 the average value of global economic indicator (global PMI) went up compared with the second quarter, signalling further improvements in the global economic activity. This increase was largely due to both industry and services sectors. In the first seven months of 2017 on average, the annual growth rate of global trade accelerated significantly¹ compared to the same period of previous year. Strongest growth in the relevant period was observed in foreign trade flows of Eastern European countries and emerging market economies in Asia.²

Since the beginning of 2017 global inflation increased on the end of 2016 level, reaching 2.2 per cent on an annual basis in August.³ A more pronounced increase in inflation was observed in the developing countries, reflecting a year-on-year increase in petroleum products and metal prices in international markets.

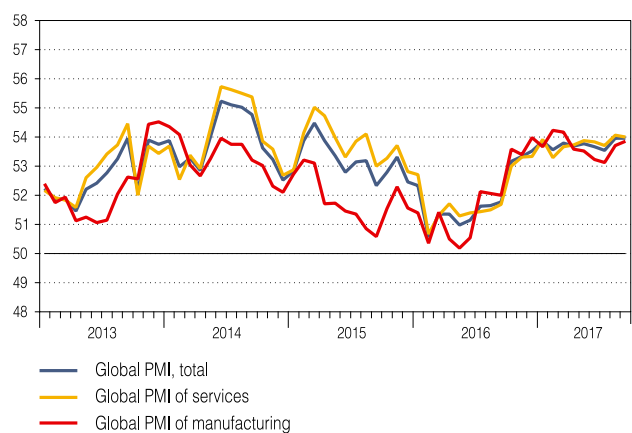
In line with expectations of improving global economic activity, external demand for Bulgarian goods and services is likely to continue growing on an annual basis in the fourth quarter of 2017 and first quarter of 2018. If market expectations of international oil, commodity and food price dynamics materialise, the terms of trade for Bulgaria will be favourable in the fourth quarter of 2017 and first quarter of 2018.

¹ CPB Netherlands Bureau for Economic Policy Analysis data as of 25 September 2017.

² CPB Netherlands Bureau for Economic Policy Analysis classification by country groups.

³ Based on the World Bank data as of 9 October 2017.

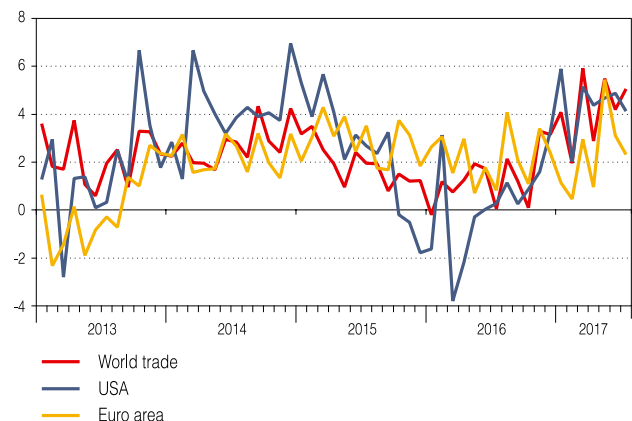
Global PMIs



Source: JP Morgan.

World Trade

(annual rate of volume growth, per cent)



Source: CPB Netherlands Bureau for Economic Policy Analysis.

Euro Area

Euro area real GDP grew by 0.6 per cent on a quarterly basis in the second quarter of 2017, from 0.5 per cent in the first quarter. Economic activity acceleration was observed in all countries of the euro area, except Finland, with GDP growth in Germany, France, Italy and Spain reaching 0.6, 0.5, 0.3 and 0.9 per cent, respectively. All GDP components contributed positively to the economic activity increase, while the contribution of the change in inventories was negative (-0.1 percentage points). Developments in leading economic indicators, including PMIs and EC indices, show that euro area economic growth in the third quarter of 2017 will be close to that observed in the previous period.

Labour market indicators continued to improve slowly, with unemployment going down to 9.1 per cent in August 2017. The indicator of the expected unemployment rate over the next 12 months included in the EC consumer confidence index showed slight deterioration in consumer expectations about labour market developments.

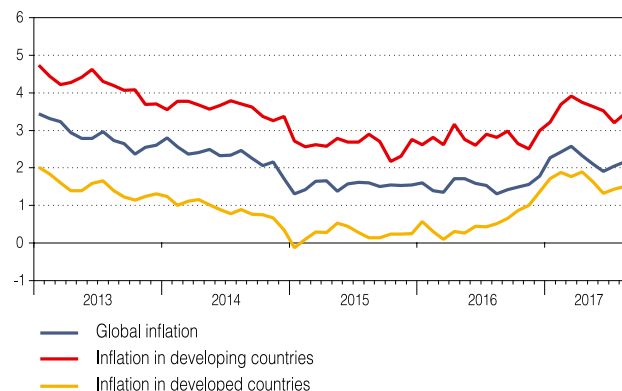
In August the annual change of the Harmonised Index of Consumer Prices (HICP) reached 1.5 per cent, from 1.3 per cent in July, and according to Eurostat's preliminary estimate, inflation in September remained unchanged compared to August at an annual rate of 1.5 per cent. In ECB's view, HICP energy component will have a negative contribution to the overall inflation in the euro area in the fourth quarter of this year and early 2018 due to a negative base effect.

In September the ECB raised its euro area real GDP growth forecast by 0.3 percentage points for 2017, leaving its forecasts for 2018 and 2019 unchanged. While risks to the outlook for euro area economic growth are balanced, risks to a lower than expected rate are mainly associated with global factors and foreign exchange market developments.

The ECB euro area inflation forecast remained unchanged for 2017, while that for 2018 and 2019 was revised downwards to 1.2 per cent (-0.1 percentage points) and 1.5 per cent (-0.1 percentage points). The downward revision largely reflects the appreciation of the euro in nominal effective terms.

Inflation Measured through CPI

(per cent, annual rate of change, seasonally adjusted data)

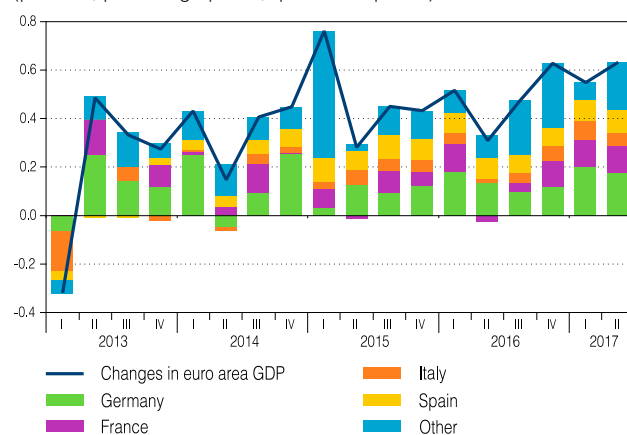


Note: The World Bank measures the change of CPI in individual groups as a weighted average of CPI changes in the countries of the group. For calculating the weights of the countries, real GDP based on purchasing power parity is used. Groups include only World Bank Member States classified by the World Bank as developing and developed countries.

Source: the World Bank.

Contribution to the Change in Real GDP in the Euro Area by Country

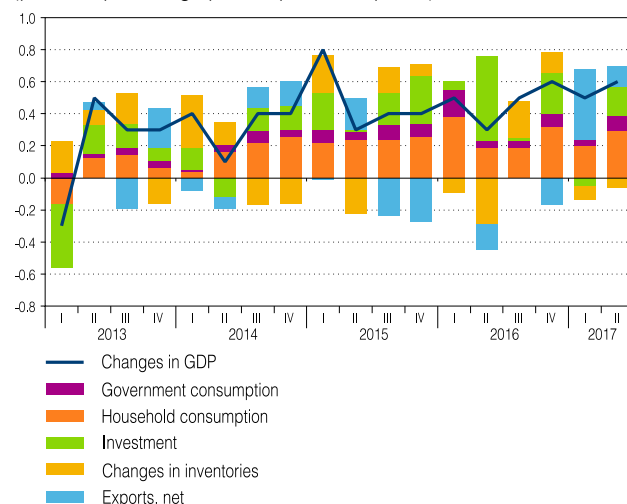
(per cent; percentage points; quarter-on-quarter)



Sources: Eurostat and BNB calculations.

Contribution to the Change in Real GDP in the Euro Area by Component

(per cent; percentage points; quarter-on-quarter)



Source: Eurostat.

At its monetary policy meetings of 20 July and 7 September 2017, the ECB made no changes to the interest rates, the parameters of the expanded Asset Purchase Programme (APP) and forward guidance on monetary policy. As of 29 September 2017 the cumulative amount of purchases under the APP totalled EUR 2118.1 billion, of which EUR 1748.1 billion under the PSPP, EUR 231.3 billion under the CBPP3, EUR 24.1 billion under the ABSPP and EUR 114.7 billion under the CSPP.

As a result of continuing APP purchases, excess liquidity in the euro area banking system increased to EUR 1701.8 billion as of 29 September 2017, from EUR 1600.1 billion at the end of June 2017, the Eurosystem balance sheet figure reaching EUR 4.319 trillion. The increased excess liquidity in the euro area banking system continued to contribute to the low EONIA level, its average value remaining unchanged between 3 July and 29 September 2017 at -0.36 per cent. The trade volume of overnight deposits on euro area interbank market increased slightly, with its daily average coming to EUR 7.3 billion for the 3 July to 29 September 2017 period (EUR 6.4 billion for the second quarter of the year). In the third quarter EURIBOR interest rates on interbank market deposits remained unchanged in most maturity sectors. As of 29 September 2017 interest on deposits with a maturity of one month (-0.37 per cent) and six months (-0.27 per cent) remained at their end-June levels, whereas interest on deposits with a maturity of 12 months fell to -0.17 per cent (-2 basis points from the end of June 2017).

Projections of the Annual Rate of Change of Euro Area Real GDP

(per cent)

Institution	Date of release	2017		2018		2019	
		latest	previous	latest	previous	latest	previous
ECB	September 2017	2.2	1.9	1.8	1.8	1.7	1.7
EC	May 2017	1.7	1.6	1.8	1.8	-	-

Sources: ECB, EC.

Projections of Euro Area Annual Inflation Rate

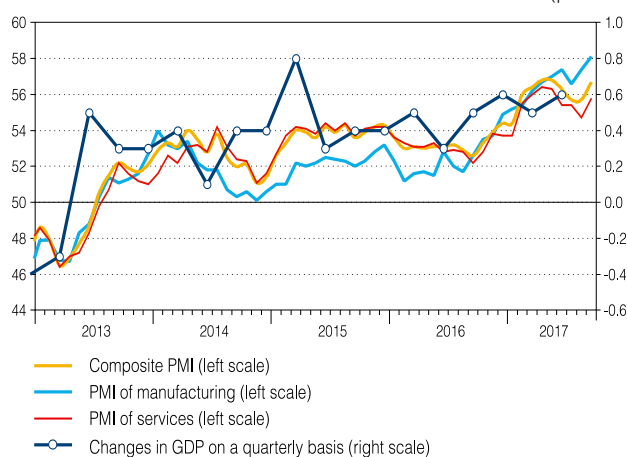
(per cent)

Institution	Date of release	2017		2018		2019	
		latest	previous	latest	previous	latest	previous
ECB	September 2017	1.5	1.5	1.2	1.3	1.5	1.6
EC	May 2017	1.6	1.7	1.3	1.4	-	-

Sources: ECB, EC.

GDP Change and Manufacturing and Services PMIs

(per cent)

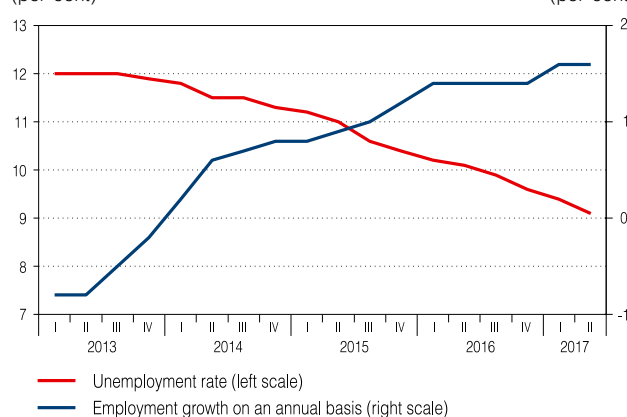


Sources: Eurostat, Markit.

Euro Area Unemployment Rate and Employment Growth

(per cent)

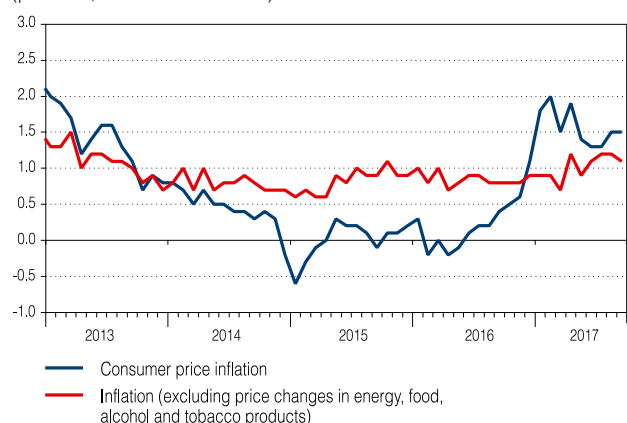
(per cent)



Source: Eurostat.

Euro Area Inflation Rate

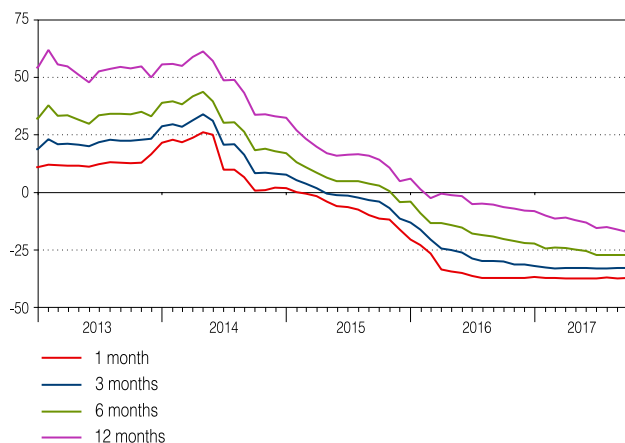
(per cent; on an annual basis)



Source: Eurostat.

EURIBOR Dynamics

(basis points)



Source: the ECB.

The United States

In the second quarter of 2017 US real GDP growth accelerated to 0.8 per cent on a quarter-on-quarter basis against 0.3 per cent in the first quarter, largely due to the recovered growth in inventories and the acceleration of private consumption growth.

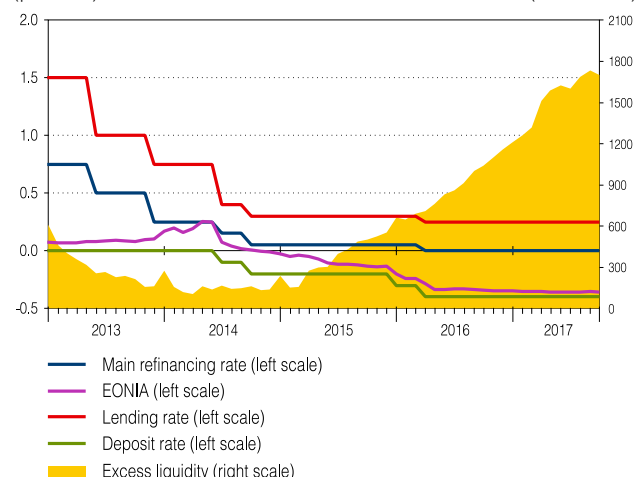
In the third quarter of 2017 the average values of leading economic indicators, among which ISM-PMI industrial production and services sectors and consumer confidence indices, did not change significantly compared with the previous quarter, signalling relatively high economic activity.

In August the annual rate of change of the price index of personal consumption expenditure (PCE) remained at the level of 1.4 per cent for a third consecutive month. The core PCE index (excluding food and fuels) decelerated on an annual basis to 1.3 per cent in August, from 1.4 per cent in July and 1.5 per cent in June. On the other hand, August CPI data point to an increase in the annual rate of overall inflation (to 1.9 per cent, from 1.7 per cent in July), while the annual growth rate of core inflation stabilised at 1.7 per cent for a fourth consecutive month. September data concerning expectations about the change in consumer prices in one to five-year horizon, which are part of the consumer confidence index of the University of Michigan, showed stabilisation in long-term and a slight increase in short-term inflation expectations.

ECB Interest Rates, EONIA and Excess Liquidity in the Euro Area Banking System

(per cent)

(EUR billion)

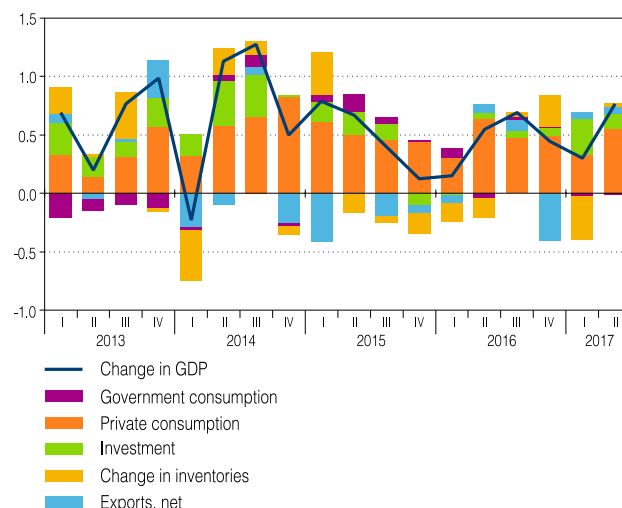


Note: Average EONIA data are average for the month.

Source: the ECB.

Contribution to US GDP Growth by Component (Quarterly)

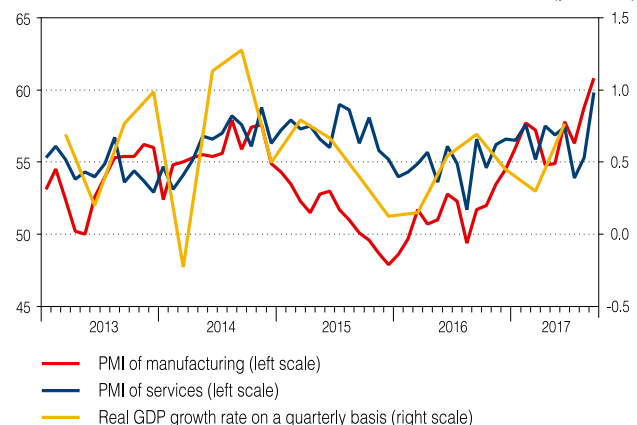
(per cent; percentage points)



Source: Bureau of Economic Analysis.

US Manufacturing and Services ISM-PMIs and GDP Growth (Quarterly)

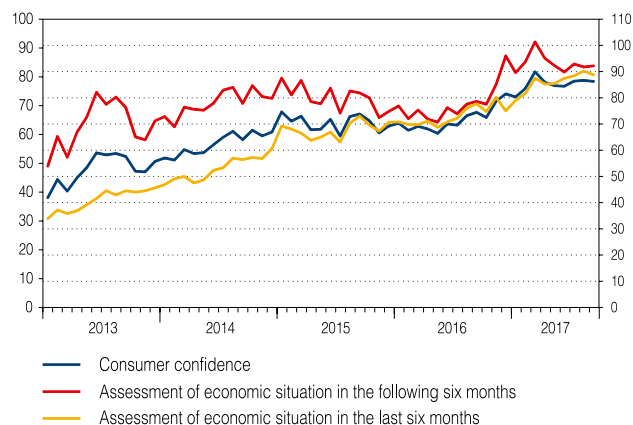
(per cent)



Sources: Institute for Supply Management, Bureau of Economic Analysis.

US Consumer Confidence Indices

(2000 = 100)



Source: Conference Board.

US labour market conditions did not change substantially in the third quarter of 2017. The average quarterly number of new employees in the non-farm sector declined compared to the second quarter as a result primarily of the negative impact of Hurricanes Harvey, Irma and Maria on the number of new employees in September. At the same time, the US unemployment rate dropped to 4.2 per cent. Up-to-date employment statistics of leading economic activity indicators show that US labour market conditions continue to be favourable.

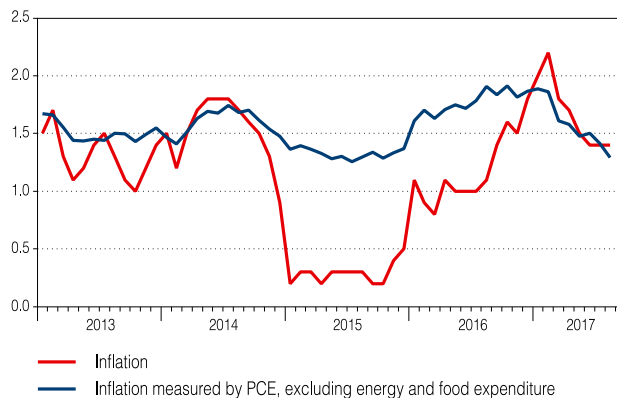
At its July and September meetings, the Federal Open Market Committee (FOMC) decided to maintain the current federal funds rate corridor at 1.00–1.25 per cent. In addition, at the September meeting, the Committee decided to start as of October 2017 the implementation of the June programme to gradually reduce the Federal Reserve's balance sheet. According to the projection median of individual FOMC members, one further increase of the federal funds rate is expected by the close of 2017. At the same time, the projection median of individual members about the long-run equilibrium level of federal funds rate was revised downwards from 3 to 2.75 per cent.

China

In the second quarter of 2017 real GDP growth rate in China accelerated to 1.7 per cent on a quarter-on-quarter basis against 1.3 per cent in the first quarter. GDP grew by 6.9 per cent on an annual basis, the same as in the previous quarter.

US Inflation Rate

(per cent; on an annual basis)



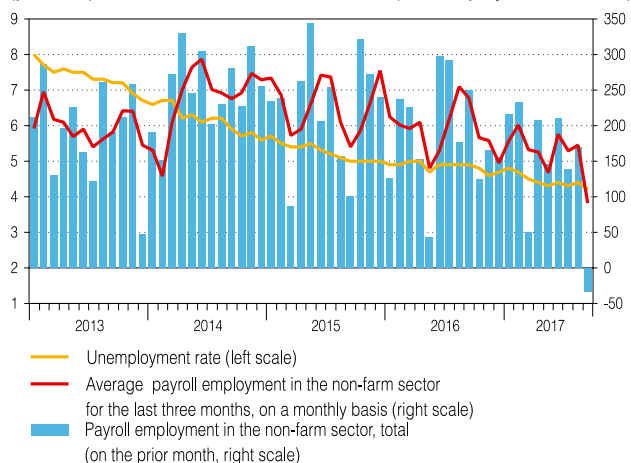
Note: Inflation is measured by the personal consumption expenditure deflator.

Source: Bureau of Labor Statistics.

US Unemployment Rate and Number of New Employees in the US Non-farm Sector

(per cent)

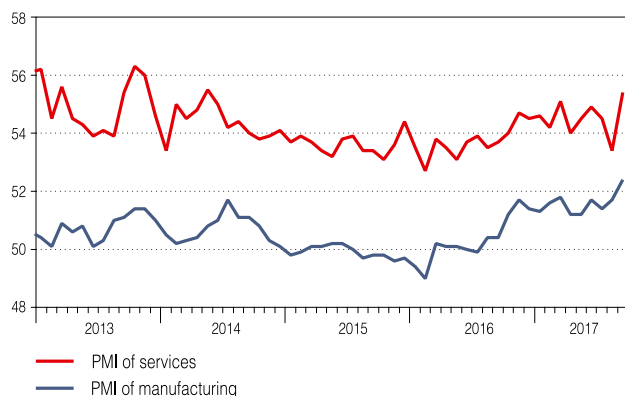
(new employees, thousand)



Source: Bureau of Labor Statistics.

Manufacturing and Services PMIs in China

(per cent; on an annual basis)



Source: China Federation of Logistics and Purchasing.

China's leading economic indicators developments in the third quarter of 2017 signalled moderate acceleration in economic growth.

In July and August the annual growth rate of industrial output and total investment in China slowed down compared to the average values of indicators for the second quarter. This development was driven mainly by government policy to reduce air pollution in 28 cities in Northern China, which led to shutdowns or limitation of production capacities. As a result, the supply of certain commodities, such as cement, steel and aluminium decreased, which, in turn, put an end to the downward trend in the annual growth rate in producer prices. The annual increase of consumer prices also accelerated from 1.5 per cent in June to 1.8 per cent in August.

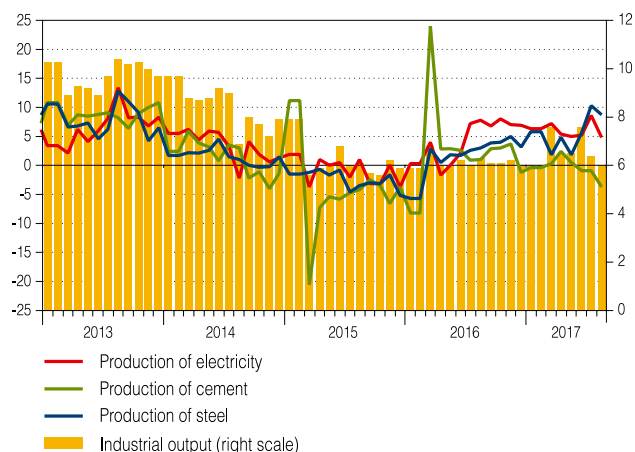
In the third quarter the downward trend in the annual increase of house prices in China was sustained, reflecting a series of measures introduced by the regional authorities in the country. These measures differ across regions depending on local circumstances.

In the third quarter the People's Bank of China left the interest rates unchanged, announcing however that as of 1 January 2018, it would reduce the minimum required reserves for certain banks by 50 to 100 basis points. Selection of banks and reduction of the minimum required reserves rate will be based on specific criteria, including the share of newly extended corporate loans to micro and small enterprises and newly established companies in 2017.

Industrial Output and Output in Selected Sub-sectors in China

(per cent; on an annual basis)

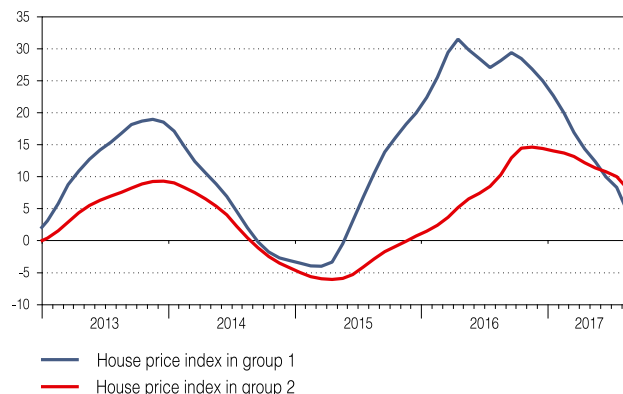
(per cent; on an annual basis)



Source: National Bureau of Statistics of China.

House Prices in China

(per cent; on an annual basis)

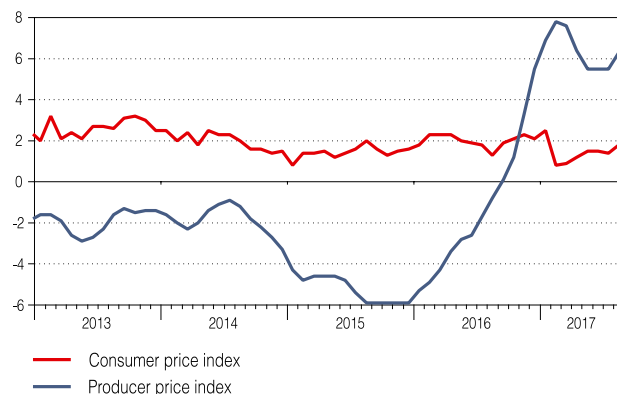


Note: Group 1 includes the four largest cities: Beijing, Shenzhen, Guangzhou, and Shanghai. Group 2 includes the capitals of the rest provinces.

Source: National Bureau of Statistics of China.

China's Inflation Rate

(per cent; on an annual basis)



Source: National Bureau of Statistics of China.

International Commodity Prices

Crude Oil

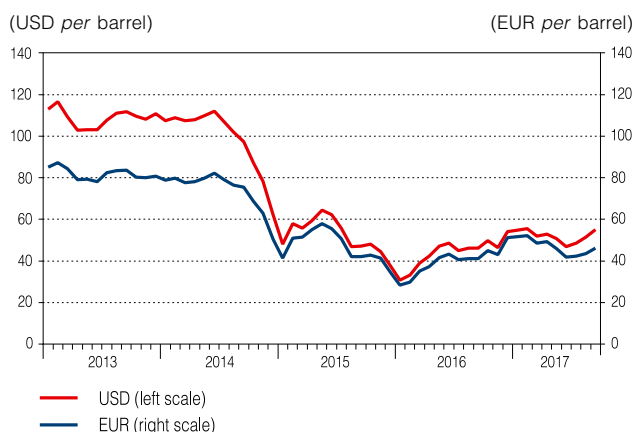
Crude oil prices on international markets soared on an annual basis in the first nine months of 2017, reaching in September a level of around USD 55.2 *per barrel* (Brent). The price increase was largely due to a gradual reduction in excess supply at the market. On the supply side, temporary production disruptions due to the geopolitical situation occurred in some Middle East countries, Nigeria and Libya. Other factors were the suspension of oil production in different sites in the USA following the Harvey hurricane and data releases on lower than expected oil inventories in the country. On the other hand, according to International Energy Agency (MAE) an accelerated increase in worldwide crude oil demand was observed in the second quarter of the year compared to the previous quarter, with particularly strong demand recorded in Europe and the USA. As a result, the Agency revised upwards its forecast about crude oil demand for 2017.

Oil price expectations about the fourth quarter of 2017 and first quarter of 2018, based on crude oil futures prices in September, increased *vis-à-vis* June, with market participants taking into account the data about lower supply in the USA and a possible extension of restrictions on production in November. Concurrently, given the high level of inventories and partial compliance with the agreed parameters for oil production cuts between OPEC and other large producer countries, the expected crude oil price for the fourth quarter of 2017 and first quarter of 2018 is about USD 52.5 *per barrel*, which means slowing annual growth in the fourth quarter of 2017 and a decline in the first quarter of 2018.

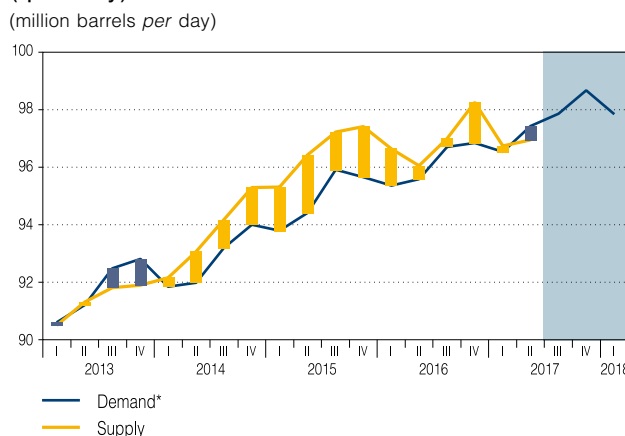
Commodity and Food Prices

The average metal price in the first eight months of 2017 went up 22.9 per cent on an annual basis (up 24.5 per cent in euro). The main factors behind this were both the signs of increases in global industrial production and growing demand by China related to infrastructure investment. In addition, metal prices were influenced by China's policy to reduce air pollution in 28 cities in the north of the

Brent Crude Oil Prices

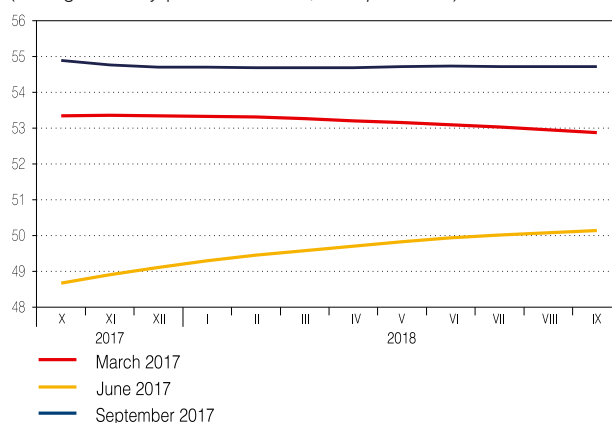


World Crude Oil Supply and Demand* (quarterly)



Brent Crude Oil Futures Prices

(average monthly price of contract, USD *per barrel*)



country, leading to shutdowns or limitation of metal production capacities, and contributing to significant increases in aluminium price.

The price of copper, which is of key importance to Bulgarian exports of goods, also rose in the January– August 2017 period on an annual basis. Temporary disruptions in the production process in some important copper ore mines in Chilli, Peru and Indonesia, and lower than expected copper ore yields in North America and Australia contributed to this effect.

Metal prices in US dollars are expected to continue rising on an annual basis in the fourth quarter of 2017 and first quarter of 2018. Concurrently, the projected depreciation of the dollar against the euro will result in an annual decline in metal prices in euro in the first quarter of 2018.

The global food price index declined slightly on an annual basis in the first eight months of 2017 in US dollars (down 0.7 per cent in euro). There was divergent dynamics across sub-components. On the one hand, the price of groups, such as meat and maize, declined on an annual basis. On the other hand, an increase in the price of wheat, which is essential for the Bulgarian goods exports, was observed on an annual basis in both US dollars and euro over the January to August period. Unfavourable weather conditions in the USA which had a negative effect on the exports contributed to this. At the same time, market expectations of wheat yields in the European Union and Australia were lowered. Despite the observed average growth, in August wheat price saw a decline on a quarterly basis driven by the expected increased yields worldwide in 2017.

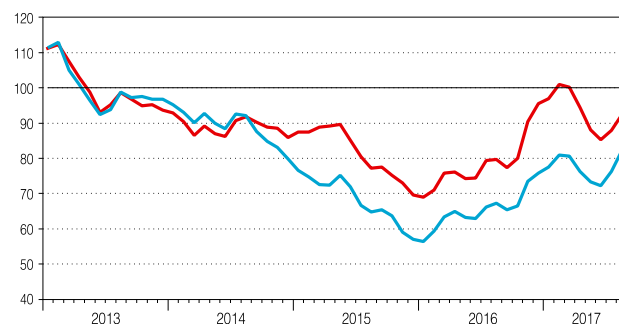
The forecast of food prices in US dollars points to an increase on an annual basis at the close of 2017 and in early 2018, while prices in euro are expected to fall down due to depreciation of the US dollar against the euro.

If market expectations of oil, commodity and food price dynamics on international markets materialise, the terms of trade for Bulgaria will be favourable in the fourth quarter of 2017 and first quarter of 2018.

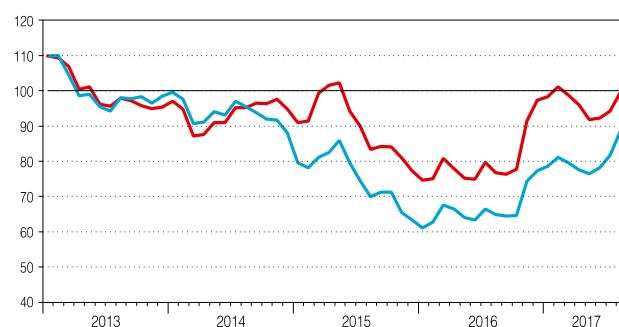
Price Indices of Major Raw Materials and Commodity Groups

(2013 = 100)

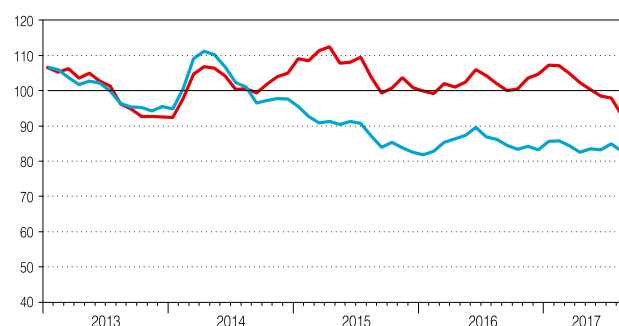
Metals



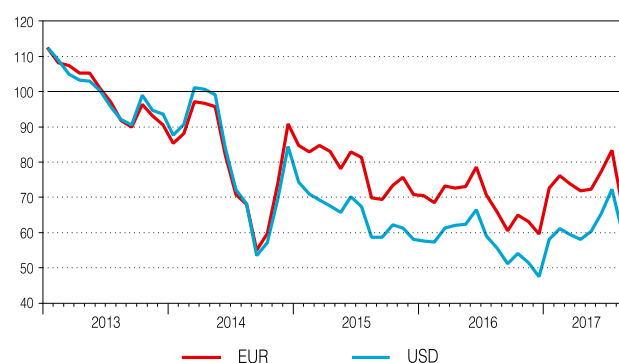
Copper



Food



Wheat



Sources: ECB and BNB calculations.

2. FINANCIAL FLOWS, MONEY AND CREDIT

Between January and July 2017 the balance of payments current and capital account surplus declined from the same period of 2016, reflecting mainly lower transfers under EU programmes and higher trade balance deficit.

In the fourth quarter of 2017 and first quarter of 2018 the balance of payments current and capital account surplus is expected to continue decreasing as a share of GDP on an annual basis, reflecting largely the projected growth in net primary income deficit. The anticipated better absorption of funds under the EU-funded operational programmes will contribute to the annual increase in capital account surplus as a share of GDP *vis-à-vis* the first half of 2017.

In the first eight months of 2017 non-government sector deposits in the banking system continued growing at a comparatively high annual rate. Annual growth in credit to non-financial corporations and households accelerated. This dynamics reflected the improving economic environment and continued gradual declines in lending rates, with the utilisation of loans extended under the National Programme for Energy Efficiency of Multi-family Residential Buildings contributing additionally to this effect. In the fourth quarter of 2017 and first quarter of 2018 deposit growth is expected to slightly accelerate as a result of higher disposable income and household savings and increased gross operating surplus of firms. In the context of a continuing improvement of economic activity and comparatively low interest rates, bank loans to non-financial corporations and households are expected to grow further.

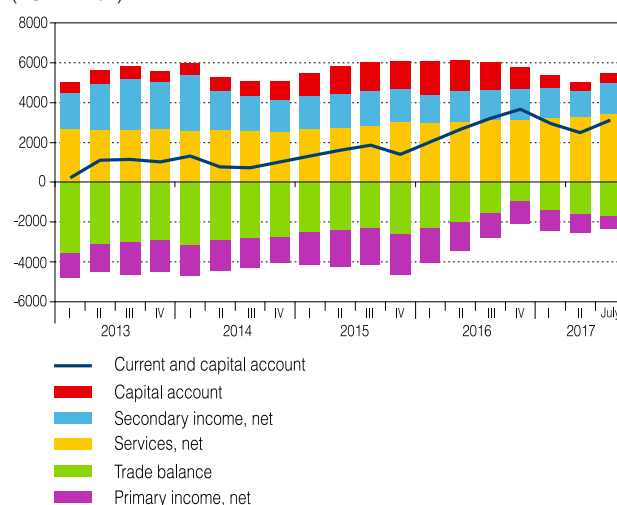
External Financial Flows

In the January–July 2017 period, the balance on the current and capital account was positive at EUR 1835.8 million compared with EUR 2602.4 million reported in the corresponding period of 2016.⁴ Lower surplus was reported on both the current and capital account. Lower current account surplus in the first seven months of 2017 compared with the corresponding period of 2016 reflected mainly the increased trade balance deficit as a result of both higher real growth in imports as compared with exports of goods and worsened terms of trade.⁵ The capital account surplus went down in the January–July 2017 period against the corresponding period of 2016, a result of the lower volume of transfers under EU programmes.

Between January and July 2017 the deficit on the net primary income item decreased due to lower outflows under the reinvested profit item.⁶ The higher surplus on the net services item pertained to a stronger annual decline in imports of

Current and Capital Account Dynamics and Contribution by Component (on an Annual Basis)

(EUR million)



Note: In each quarter, the chart shows accumulated balances under the items for the last four quarters. Chart data as of July 2017 are accumulated for the last twelve months.

Source: the BNB.

⁴ Preliminary data. The analysis of balance of payments flows employs information from its analytical reporting.

⁵ For a more detailed analysis of exports and imports of goods and services, see Chapter 3.

⁶ Preliminary data subject to revision.

services compared with that reported in exports. Only the travel sub-item posted an increase in both exports and imports on the corresponding period of 2016.

In the fourth quarter of 2017 and first quarter of 2018 the current account surplus⁷, as a share of GDP, is expected to shrink further on an annual basis. The major factor behind this will be the anticipated rise in the deficit on the net primary income item, promoted by the gross operating surplus in the economy which tended to increase in recent quarters and a possible rise in reinvested profit. The year-on-year trade balance deficit is expected to contract as a share of GDP compared with the first half of the year.⁸ Improved absorption of funds under the EU-funded operational programmes for the 2014–2020 programming period will help increase the capital account surplus on an annual basis as a share of GDP compared with the first half of 2017.

Between January and July 2017 the financial account balance was positive driven by the stronger increase in Bulgarian residents' foreign assets compared with the increase in foreign liabilities. Bank transactions⁹ contributed most to the dynamics of total foreign assets in the first seven months of 2017. The increase in total liabilities on the financial account was mostly attributable to foreign direct investment attracted by other sectors¹⁰ and to a lesser extent to new external obligations on portfolio and other investment assumed by these sectors. General government sector foreign liabilities posted a decline following a debt repayment on Eurobonds maturing in July and due to residents' purchases of Bulgarian government securities issued in international capital markets.

Between January and July 2017 direct investment liabilities (reporting FDI inflows into Bulgaria) decreased from the corresponding period of 2016 to EUR 497.6 million (against EUR 1085.4 million in the same period of 2016).¹¹ The

⁷ It should read the balance of the account for the last four quarters.

⁸ For a more detailed analysis of foreign trade flows, see Chapter 3, The Exports and Imports of Goods and Services Section.

⁹ For a more detailed analysis of banks' activities, see Chapter 2, Monetary and Credit Aggregates.

¹⁰ Sectors other than central banks, other monetary financial institutions and general government.

¹¹ Preliminary data subject to revision.

Flows on Major Balance of Payments Accounts

(EUR million)

	2015	2016	On an annual basis as of July 2017
Current account	-16.9	2 561.4	2 462.7
Trade balance	-2 622.4	-984.4	-1 601.2
Services, net	3 003.6	3 092.3	3 311.8
Primary income, net	-2 038.5	-1 131.0	-754.2
Secondary income, net	1 640.4	1 584.6	1 506.3
Capital account	1 422.4	1 069.9	402.1
Financial account	-738.3	840.2	1 498.4
Change in reserves	3 729.7	3 467.3	939.3

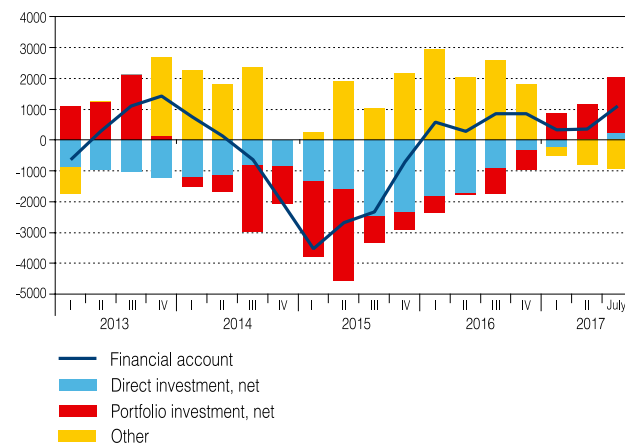
(per cent of GDP)

	2015	2016	On an annual basis as of July 2017
Current account	0.0	5.3	5.0
Trade balance	-5.8	-2.0	-3.3
Services, net	6.6	6.4	6.7
Primary income, net	-4.5	-2.4	-1.5
Secondary income, net	3.6	3.3	3.1
Capital account	3.1	2.2	0.8
Financial account	-1.6	1.7	3.0
Change in reserves	8.2	7.2	1.9

Source: the BNB.

Financial Account Dynamics and Contribution by Component (on an Annual Basis)

(EUR million)



Notes: The Other item includes Other Investments, net, and Financial Derivatives (Other than Reserves) and Employee Stock Options, net. In each quarter, the chart shows accumulated balances under the items for the last four quarters. Chart data as of July 2017 are accumulated for the last twelve months.

Source: the BNB.

Banks' Flows on Balance of Payments Financial Account

(EUR million)

	2015	2016	January–July 2017
Direct investment			
Assets	1.6	9.9	15.5
Liabilities	271.6	124.5	-113.1
Portfolio investment			
Assets	-785.9	317.5	-219.2
Liabilities	1.5	0.8	21.0
Other investment			
Assets	-1 931.3	528.7	858.6
Liabilities	-1 638.6	-112.2	166.3
Total assets	-2 715.7	856.0	654.8
Total liabilities	-1 365.5	13.1	74.1
Net assets	-1 350.2	843.0	580.7

Source: the BNB.

strongest foreign direct investment inflow was from the Netherlands and Switzerland.

As a result of net flows on current, capital and financial account, gross international reserves slightly fell on December 2016. According to the balance of payments data¹² for the January–July 2017 period, the decrease came to EUR 36.2 million. As of July 2017 the international reserve coverage of the average nominal imports of goods and non-factor services remained high (9.2 months) for the last 12 months, posting a slight decrease from July 2016 (9.9 months).

In July 2017 Bulgaria's gross external debt decreased on the end of 2016 due mainly to lower external debt of the government and, to a lesser extent, to intercompany lending and other sectors' external obligations. The decrease in the government external debt reflected mainly repayment of Eurobonds¹³ maturing in July. Residents' purchases of Bulgarian government securities issued in international markets from non-residents contributed to a lesser extent. The share of long-term debt in Bulgaria's total gross external debt was 77.4 per cent in July, posting a slight decrease against end-2016.

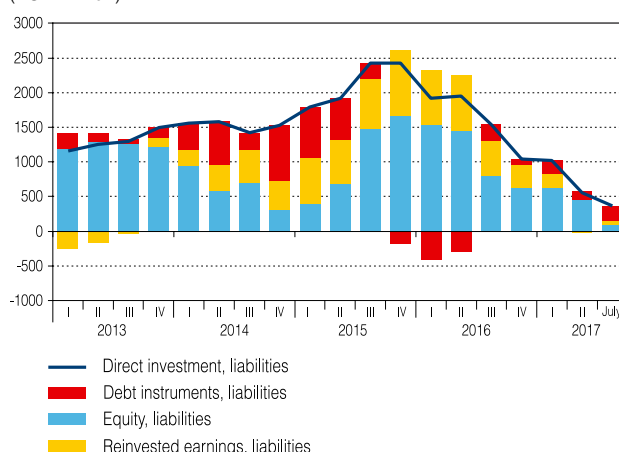
While maintaining low interest rates in the euro area, conditions for foreign debt service by Bulgarian residents remained favourable. However, Bulgarian residents preferred to reduce their external debt, and between January and July

¹² Valuation adjustments and price revaluation excluded.

¹³ The effect of eurobonds redemption was partly limited as only 39.5 per cent of them were held by non-residents in June 2017.

Direct Investment: Liabilities by Type of Investment (on an Annual Basis)

(EUR million)



Note: In each quarter the chart shows accumulated balances under the items for the last four quarters. Chart data as of July 2017 are accumulated for the last twelve months.

Source: the BNB.

Gross External Debt in July 2017

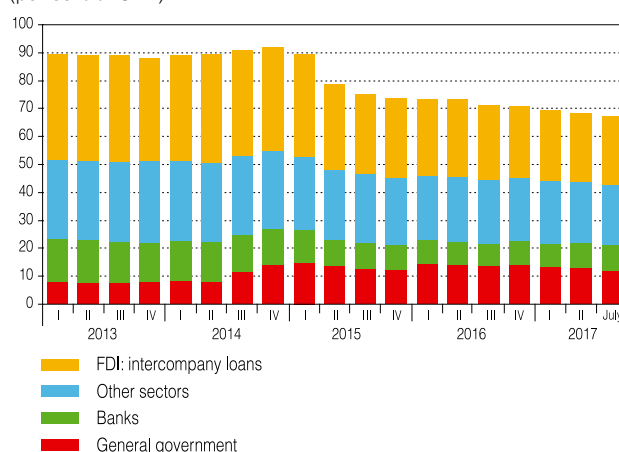
(EUR million)

	Amount	Change	
		On December 2016	Last 12 months
General government	6 015.2	-767.3	-602.5
Central bank	0.0	0.0	0.0
Banks	4 343.1	180.2	655.0
Other sectors	10 647.5	-82.3	-381.9
FDI – intercompany loans	12 101.9	-269.2	-519.5
Total	33 107.7	-938.6	-849.0

Source: the BNB.

Gross External Debt as a Share of GDP

(per cent of GDP)



Note: The share of the central bank is not included in the chart as it is nil.

Source: the BNB.

2017 service costs on short-term external obligations increased from the corresponding period of 2016, while interest payments decreased. In the first seven months of 2017 the new external debt of all sectors, with the exception of banks, posted a decline compared with the January–July 2016 period.

Monetary and Credit Aggregates

In the first eight months of 2017 the inflow of funds attracted from residents in the banking system remained strong and continued to contribute to a relatively high annual growth rate of broad money aggregate M3. In August 2017 broad money grew by 7.7 per cent on the same period of 2016 (7.6 per cent at the end of 2016).

Overall annual growth of non-government sector's deposits¹⁴ in the banking system accounted for 6.0 per cent in August 2017 (7.0 per cent at the end of 2016), with household deposits contributing most significantly to this growth. In an environment of low interest rates both households and corporations, preferred to keep their savings mainly in overnight deposits. As regards the currency structure, deposits in levs prevailed.¹⁵ At the end of August 2017 household deposits reached BGN 46.1 billion, exhibiting a certain slowdown in their annual growth (to 5.4 per cent) as compared with the end of the previous year (6.6 per cent in December 2016). At the same time, growth in deposits of non-financial corporations has tended to accelerate since the beginning of the year to reach 11.1 per cent in August (6.3 per cent in December 2016). Total non-financial corporations' deposits amounted to BGN 20.9 billion.

The retained high share of attracted funds from residents in the banking system reflected the effective implicit rate of minimum required reserves¹⁶ maintained close to its level of

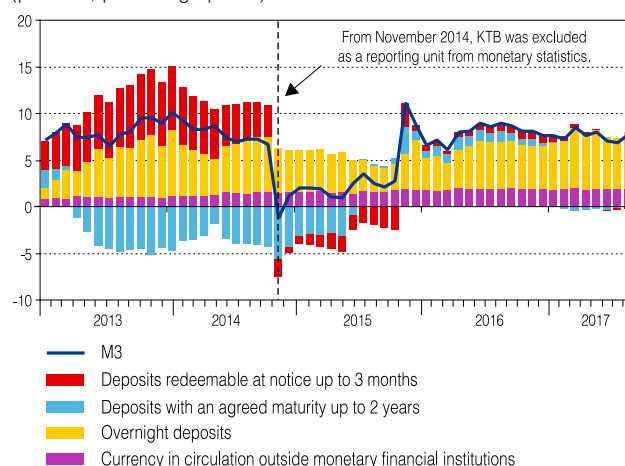
¹⁴ Non-government sector's deposits include deposits of households, non-financial corporations and financial corporations. Deposits of households and non-financial corporations (94.7 per cent on average for the last 12 months as of August 2017) comprise the major share of all non-government sector's deposits, and the analysis therefore is focused on these two sectors.

¹⁵ As of August the share of lev-denominated deposits in total non-government sector deposits accounted for 61.2 per cent.

¹⁶ According to Article 3 of BNB Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks, the rate of minimum required reserves on funds attracted from residents is 10 per cent of the deposit base, from non-residents 5 per cent and from the state and local government budgets 0 per cent.

Annual Rate of Change in M3 and Contribution by Component

(per cent, percentage points)



Note: The marketable instruments component is not shown on the chart due to its insignificant contribution to broad money growth.

Source: the BNB.

end-2016. In August 2017 it was 9.39 per cent (9.43 per cent at the end of 2016), commercial banks' deposits with the BNB comprising 8.25 percentage points in minimum required reserves performance, and the remaining 1.14 percentage points forming recognised cash balances.

The annual growth rate of reserve money accelerated from the end of 2016, accounting for 15.7 per cent in August 2017 (4.0 per cent in December 2016). Monetary base developments were mainly driven by banks' reserves with the BNB and, to a lesser extent, by the currency in circulation.

Between January and August 2017 banks' reserves with the BNB were higher than in 2016, posting a year-on-year increase of 19.7 per cent in August (against a 2.2 per cent decline in December 2016). Accelerated growth was entirely due to excess reserves developments. As of August 2017 the excess funds on banks' minimum reserve accounts with the BNB over the required minimum of reserve assets under Ordinance No 21 was 115.6 per cent on an average daily basis (89.8 per cent in December 2016).

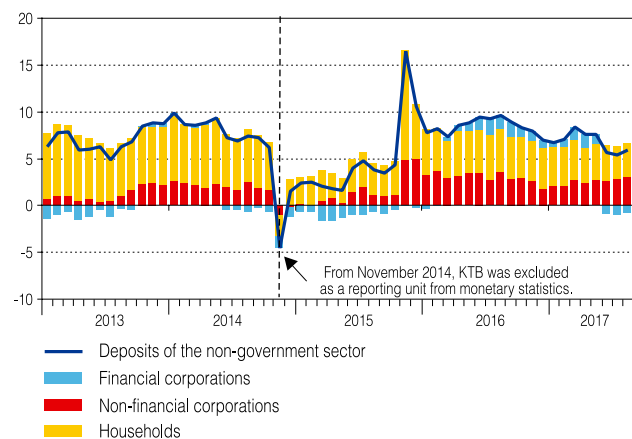
In August 2017 banknotes and coins in circulation rose by 12.0 per cent on an annual basis, indicating a slight acceleration compared with the rate of end-2016. The increase in private consumption helped retain comparatively high growth rates of currency in circulation.

Bank transactions with the BNB in reserve currency (euro) are the main instrument of banks for managing their lev liquidity under currency board arrangements in Bulgaria. Between January and August 2017 BNB purchases (net) from banks amounted to EUR 1.1 billion. Banks' liquidity remained high in the first eight months of 2017. In August the liquid assets ratio calculated under BNB Ordinance No 11 accounted for 37.61 per cent (38.24 per cent in December 2016).

In the January–August 2017 period claims on the non-government sector followed by foreign assets and deposits of banks with the BNB contributed most strongly to the growth of banks' assets. As a result of increased foreign assets and insignificant growth in foreign liabilities on end-2016, banks' net foreign assets rose

Annual Growth of Non-government Sector's Deposits and Contribution by Sector

(per cent, percentage points)

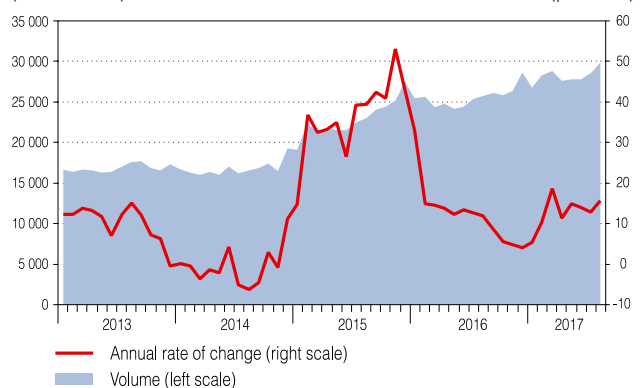


Source: the BNB.

Reserve Money

(BGN million)

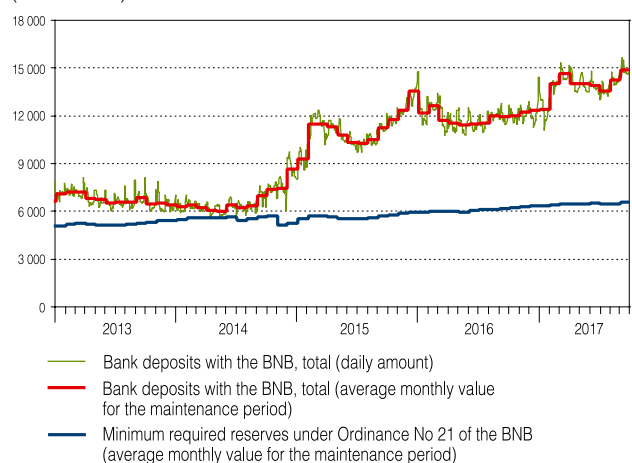
(per cent)



Source: the BNB.

Bank Deposits with the BNB

(BGN million)



Source: the BNB.

by BGN 772 million to reach BGN 5.6 billion in August.

Loan demand accelerated over the year amid the improving economic environment and continuing gradual decrease in lending rates. Year-on-year growth of claims on the non-government sector gradually accelerated, supported also by the the utilisation of loans under the National Program for Energy Efficiency of Multi-family Residential Buildings which contributed to the significant increase in other loans to households. In August total growth of loans to non-financial corporations and households¹⁷ accelerated to 3.9 per cent (1.0 per cent by end-December 2016). Excluding other loans to households, the bulk of which extended under the National Program for Energy Efficiency of Multi-family Residential Buildings, the annual growth rate of loans to non-financial corporations and households came to 3.2 per cent in August.

As of August 2017 annual growth of loans to households increased by 5.7 per cent (2.0 per cent at the end of December 2016). Housing, consumer and other loans contributed to these developments. Excluding other loans to households, which include the loans under the National Program for Energy Efficiency of Multi-family Residential Buildings, total annual growth of loans to households accounted for 4.1 per cent in August 2017. Between January and August new household loans¹⁸ followed upward dynamics in the three categories: consumer, housing and other loans.¹⁹

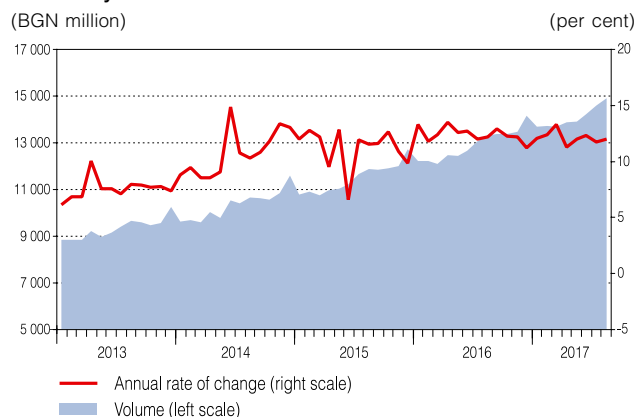
In August 2017 credit growth to non-financial corporations reached 2.8 per cent on an annual basis (0.3 per cent by end-2016). In the first months of the year loans, excluding overdraft, contributed more markedly to developments

¹⁷ Loans represent the bulk of bank claims on the non-government sector with a share of 98 per cent on average for the last 12 months as of August 2017, and the analysis was therefore focused on them. In addition to loans, claims also include repurchase agreements, securities other than shares, and shares and other equity. Non-government sector's deposits, in turn, include loans to households, loans to non-financial corporations and loans to financial corporations. The share of loans to households and non-financial corporations in total loans to the non-government sector accounted for 97 per cent on average in the last 12 months as of August 2017, and therefore developments in these two sectors are addressed.

¹⁸ The terms 'new' and 'newly extended' hereinafter referred to as the statistical category 'new business'.

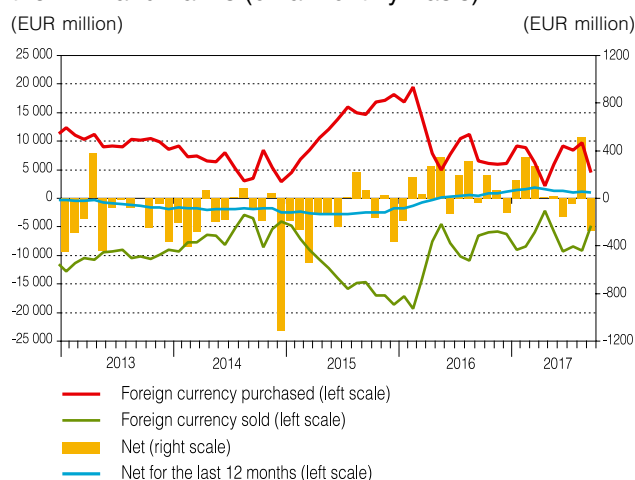
¹⁹ Based on 12-month moving average.

Currency in Circulation



Source: the BNB.

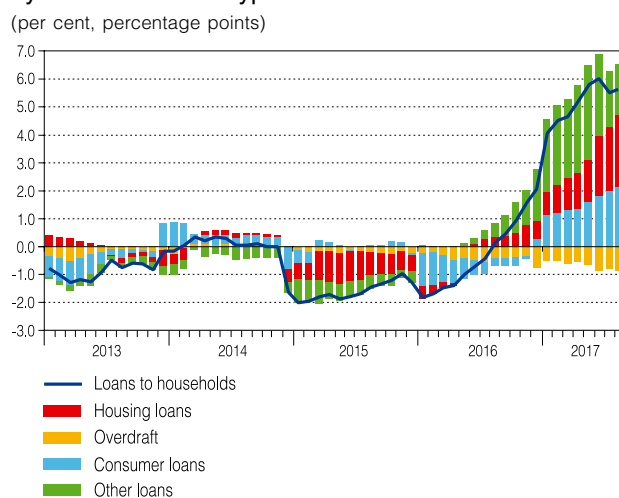
Foreign Currency Purchases and Sales between the BNB and Banks (on a Monthly Basis)



Note: Net means currency purchased minus currency sold by the BNB. Data refer to all bank transactions in foreign currency, including liquidity management operations related to the transfer of own funds from lev accounts with the BNB to own accounts with the BNB in euro and *vice versa*.

Source: the BNB.

Annual Growth of Household Credit and Contributions by Individual Loan Types



Source: the BNB.

of loans extended to corporations, while the second quarter of 2017 saw a gradual increase in the contribution of overdraft. Breakdown by economic activity shows that manufacturing, agriculture²⁰ and real estate activities made the largest positive contribution to annual growth of credit in the April–June 2017 period, while mining and quarrying and construction had the largest negative contribution.

Between January and August 2017 the volume of new loans to non-financial corporations tended to decline compared with the end of 2016.²¹ The share of new lev-denominated loans increased by 2.5 percentage points on end-2016 to 51.9 per cent in August at the expense of the decreasing shares of new corporate loans in euro and US dollars to 46.1 and 2.1 per cent, respectively.²²

Summarised results of the bank lending survey²³ in the second quarter of 2017 suggest that credit standards²⁴ remained almost unchanged in approving credit applications of large corporations and easing of the standards for crediting small and medium-sized enterprises. Enhanced competition in the banking sector was the major factor behind easing banks' lending policy.²⁵ Eased lending standards²⁶ reflected primarily further falling costs of borrowed funds and rising volumes of attracted funds, high banking liquidity and lowered risk assessment. In the third quarter of 2017 banks expect further easing of loan standards for households, while keeping relatively unchanged standards for corporations.

In the April to June 2017 period, banks registered enhanced demand for loans by both

²⁰ Agriculture, forestry and fishery.

²¹ Based on 12-month moving average.

²² Based on 12-month moving average.

²³ Summarised results of the bank lending survey are presented through weighting bank responses by their market share in the relevant credit segment.

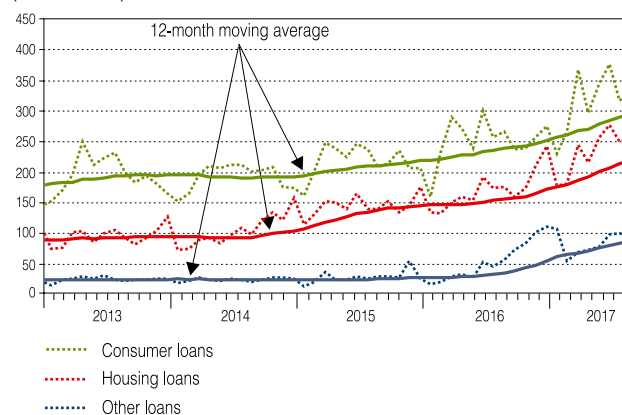
²⁴ Credit standards are understood as internal bank guidelines and criteria for loan approvals established prior to negotiating the terms of extended loans. Credit standards determine the type of the loan and collateral considered admissible by banks, taking into account specific priorities by sector, etc. Credit standards specify also all relevant conditions to be met by a borrower.

²⁵ Credit policy refers to credit standards and credit conditions applied by banks in extending loans.

²⁶ Credit conditions typically involve the reference interest rate surcharge, the loan amount, conditions for its utilisation and other conditions, fees and commissions, collateral or guarantees to be provided by a borrower.

New Loans to Households (Monthly Volumes)

(BGN million)

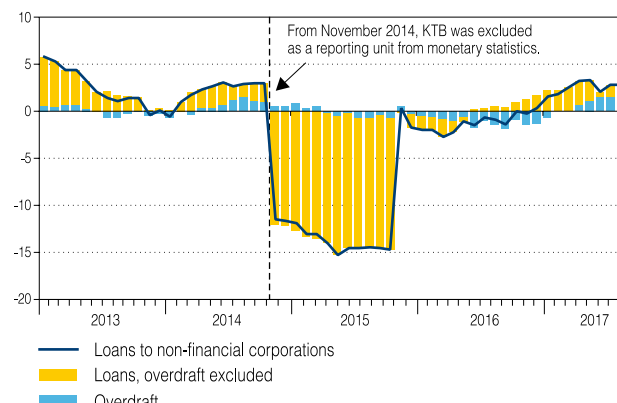


Note: For data characterised by significant volatility, additionally moving averages computed for suitably selected periods are provided, in order to smooth the fluctuations in corresponding time series and present the trends in their development.

Source: the BNB.

Annual Growth of the Credit to Non-financial Corporations and Contributions of Individual Types of Loans

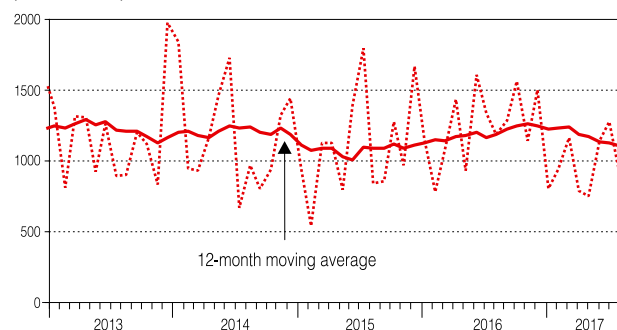
(per cent, percentage points)



Source: the BNB.

New Loans to Non-financial Corporations (Monthly Volumes)

(BGN million)



Source: the BNB.

corporations and households, with the strongest growth recorded in housing loans. According to the weighted balance of opinions, the main factors behind enhanced demand for bank resources by corporations over the quarter were low interest rates and investment demand. Low interest rates were also the major stimulating factor behind demand for loans by households. Moreover, the higher demand for housing loans was driven by the favourable outlook in the residential property market, including expectations of house prices. Bank expectations in the third quarter of 2017 show that demand for funds by corporations and households will further increase, with more significant growth projected in corporate lending.

In the fourth quarter of 2017 and first quarter of 2018 the growth rate of deposits is expected to slightly accelerate due to higher disposable income and household savings, as well as the increase in corporations' gross operating surplus. In the context of a continuing improvement in economic activity and comparatively low lending rates, bank loans to non-financial corporations and households are expected to further increase over the forecast horizon. A positive effect on credit dynamics is expected to occur on the part of both demand and supply. Based on the indicative projections of the Ministry of Regional Development and Public Works, as of July 2017 the use of funds under the National Programme for Energy Efficiency of Multi-family Residential Buildings and the loans extended under it are anticipated to continue contributing significantly to credit growth in the last quarter of 2017.

Interest Rates

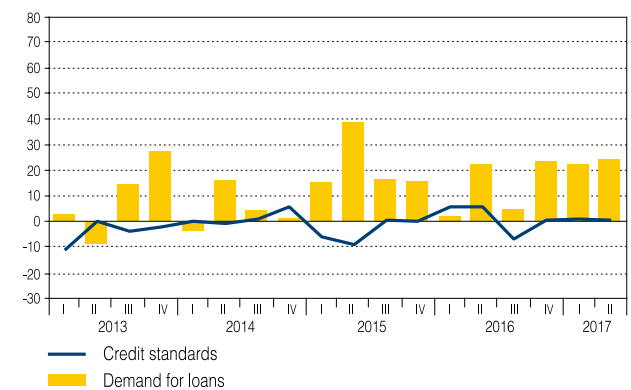
LEONIA Plus index,²⁷ reporting real transactions in the lev overnight deposit market, moved within a wide range in the third quarter of 2017 and averaged -0.39 per cent in September, down 3 basis points against the EONIA level in the same month. Strong fluctuations

²⁷ At its 16 March 2017 meeting, the BNB Governing Council decided to discontinue, as from 1 July 2017, the calculation of the LEONIA reference rate and adopted a Methodology for Calculation of the LEONIA Plus Reference Rate of Concluded Overnight Deposit Transactions in Bulgarian levs on the Inter-bank Market, which replaced the LEONIA index from 1 July 2017 (for further details, see http://www.bnb.bg/PressOffice/POPPressReleases/POPRDate/PR_20170316_EN).

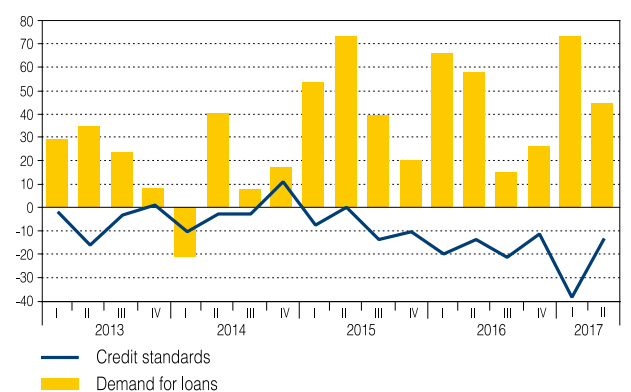
Changes in Demand and Credit Standards

(balance of opinions; percentage points)

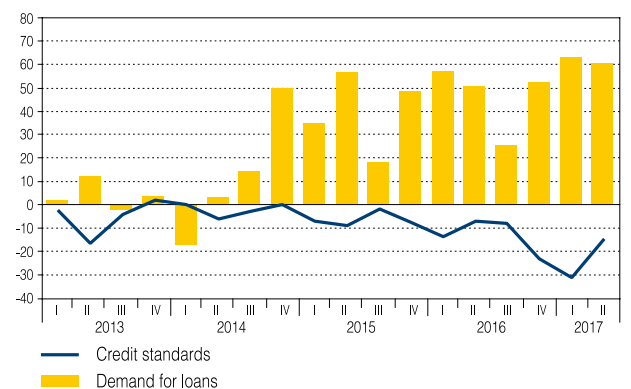
a) corporate loans



b) consumer loans



c) housing loans



Note: As regards credit standards, charts present banks' balance of opinions defined as a difference in percentage points between the percentage of banks responding 'tightened' ('considerably' and 'somewhat'), and the percentage of banks responding 'eased' ('considerably' and 'somewhat'). As regards credit demand, the balance of opinions is defined in percentage points as a difference between the percentage of banks responding 'increased' ('considerably' and 'somewhat') and the percentage of banks responding 'reduced' ('considerably' and 'somewhat'). All opinions are weighted by the bank's market share in the relevant credit segment.

Source: the BNB.

reflected the small number and low volume of transactions.

Quotations in various maturities of SOFIBOR in the Bulgarian lev interbank money market, having an indicative value as they do not reflect interest rates on concluded real transactions, remained almost unchanged in the January–September 2017 period. The yield curve in the lev interbank money market reported some decline in quotations of 5 and 8 months and in those of 12 months compared with December 2016. In September unsecured three-month lev deposit rates²⁸ declined by 2 basis points from December 2016 to reach 0.10 per cent, with decreases in six-month and 12-month rates coming to 8 and 6 basis points to 0.26 and 0.69 per cent.

Spreads of money market quotations in Bulgaria *vis-à-vis* the euro area remained almost unchanged for instruments with a maturity of up to six months and slightly increased for instruments with a maturity of over six months. In September the spread between unsecured deposit rates in levs and those in the euro area was 43 basis points in three-month deposits and 86 basis points in 12-month deposits.

Interest rates on time deposits in Bulgaria retained their downward trend. In August the average weighted interest rate on new time deposits of non-financial corporations and households declined by 23 basis points from the end of 2016 to 0.3 per cent. The trend continued to be driven by relatively large inflows of attracted funds in the banking system and high liquidity of banks.

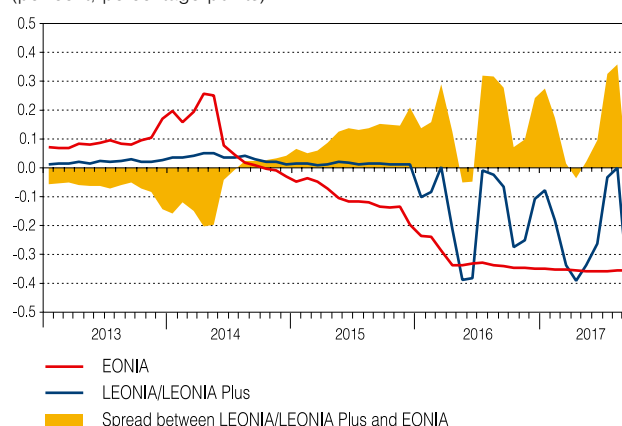
Between January and August 2017 the decrease in the interest rates on new time deposits of households was stronger than that of corporate deposits. By currency, interest rates on new time deposits in levs and euro exhibited a stronger decline.

In August the breakdown by bank of average weighted interest rates on new time lev deposits of households showed a decrease on June in the number of banks with average interest

²⁸ On 16 March 2017 the BNB Governing Council decided to discontinue, as from 1 July 2018, the activities in relation to the calculation and publication of the SOFIBID and SOFIBOR reference rates (for further details, see http://www.bnb.bg/PressOffice/POPressReleases/POPRDate/PR_20170316_EN).

Interbank Money Market Interest Rates on Overnight Deposits

(per cent, percentage points)

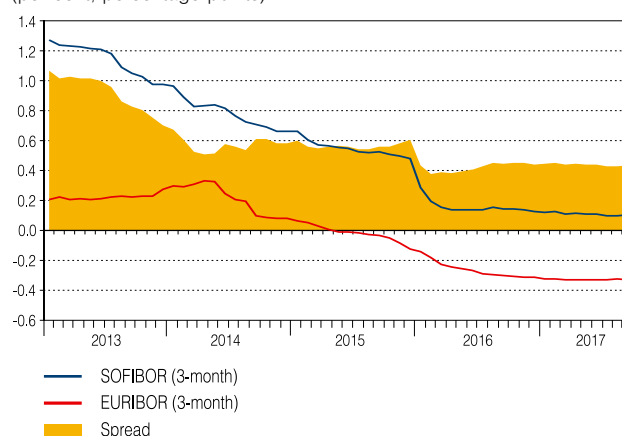


Note: As from 1 July 2017 LEONIA was replaced by LEONIA Plus. Monthly values of LEONIA Plus are calculated as arithmetic average of the values for the days on which interbank market transactions for providing unsecured overnight deposits in levs were concluded.

Source: the BNB.

Interest Rates on Three-month Deposits

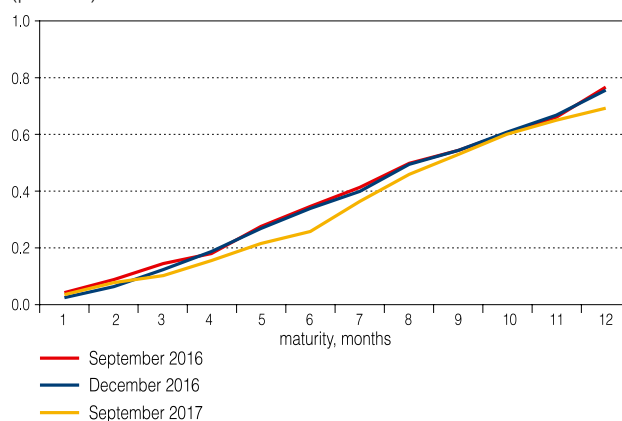
(per cent, percentage points)



Sources: the BNB, the ECB.

Interbank Money Market Instruments Yield Curve

(per cent)



Source: BNB.

rates between 0.75 and 1.00 per cent and over 1.00 per cent at the expense of the increasing number of banks offering interest rates from 0.50 to 0.75 per cent. The standard deviation continued to contract indicating a low variation of interest rates offered by banks on new time lev deposits of households.

Between January and August 2017 the downward trend in lending rates was also sustained reflecting the lower price of bank resources, improving macroeconomic environment and strong competition in the banking sector.

Interest rates on new loans to non-financial corporations decreased by 49 basis points in lev-denominated loans compared to December 2016, by 80 basis points in euro-denominated loans and by 53 basis points in US dollar-denominated loans. As of August 2017 interest rates on new corporate loans in the three major currencies were 3.9 per cent in levs, 4.6 per cent in euro and 5.1 per cent in US dollars.²⁹

The annual percentage rate of charge (APRC) of household loans also exhibited a decrease, with the decrease in housing loans (-74 basis points) exceeding that of consumer loans (-66 basis points). Over the review period the decrease in the implicit rate of non-interest service charges was only minor. In August 2017 the APRC applied to housing loans was 4.7 per cent and that applied to consumer loans 10.3 per cent.³⁰

In August 2017 the breakdown of average weighted interest rates on new housing euro loans showed ranges of up to 4.0 per cent and from 4.0 to 5.0 per cent. The standard deviation fell by 16 basis points to 0.83 per cent. The average interest rate on new housing euro loans decreased by 41 basis points compared with June to reach 4.3 per cent.

In the fourth quarter of 2017 and first quarter of 2018 interest rates on new time deposits and loans are expected to remain close to the current levels. Enhanced growth of funds attracted in the banking system and the competition in the sector will be the major factors behind low interest rates. Expectations for keeping the ECB

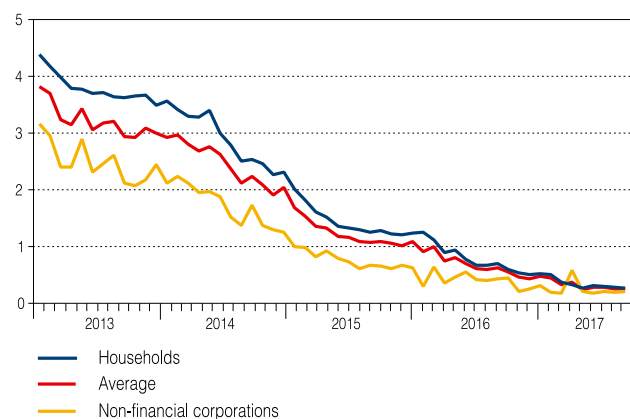
²⁹ The above values of interest rates on loans to non-financial corporations are weighted averages on a 12-month basis.

³⁰ Values indicating the APRC and interest rates are weighted averages of the interest rates on household consumer and housing loans on a 12-month basis.

Interest Rates on New Time Deposits

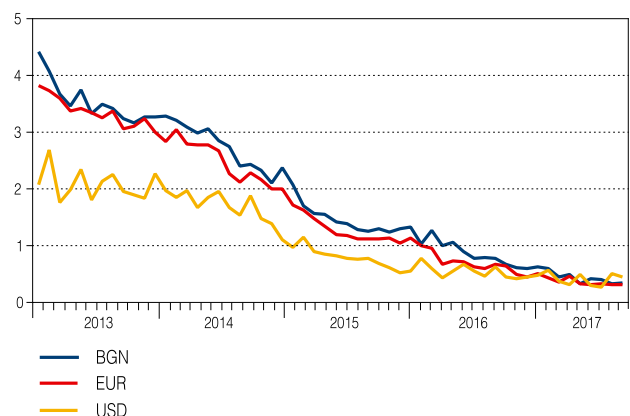
(per cent)

a) by sector



Note: The average interest rate is calculated for all sectors, maturities and currencies weighted by the relevant volumes of new deposits. The average interest rates for non-financial corporations and households are calculated on the basis of interest rates for all sectors and maturities weighted at their respective new deposit volumes.

b) by currency

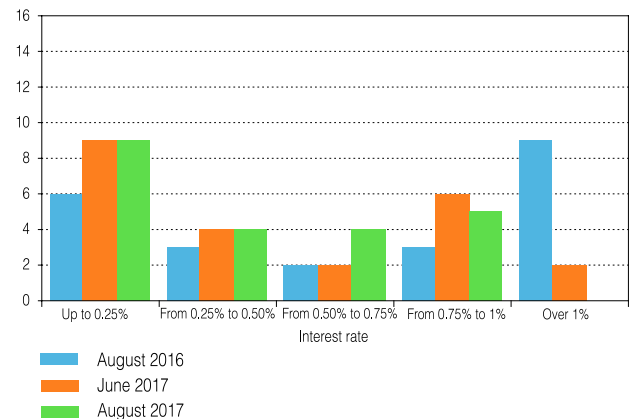


Note: The average interest rate by currency is calculated on the basis of interest rates for all sectors and maturities weighted by their respective new deposit volumes.

Source: the BNB.

Variation of Interest Rates on New Household Time Lev Deposits

(frequency – number of banks)



Source: the BNB.

main interest rates unchanged over the projection horizon do not contribute to retaining the interest rates in the Bulgarian banking sector at the current levels.

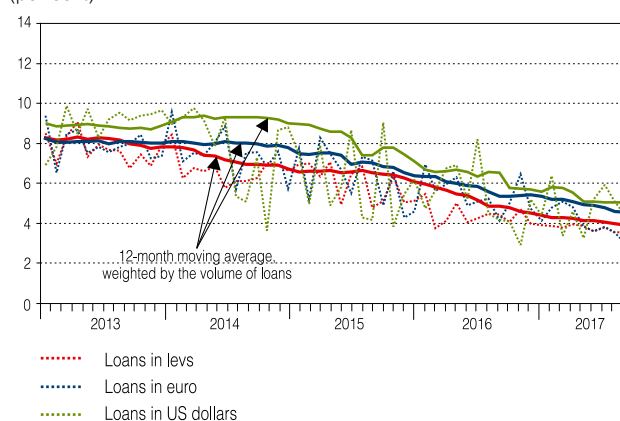
The downward trend in the yield of primary market government securities was sustained in the third quarter of 2017 driven by limited government securities supply since the beginning of the year, high banking system liquidity and market expectations of keeping the ECB key interest rate at current levels for an extended period of time. The average annual yield of the ten year and six month issue attained at the July auction fell by 15 basis points compared with the last opening of the issue in May and reached 1.63 per cent. The decision of the Ministry of Finance to sell below the initially offered volume also added to the significant decrease. In September an issue with a maturity of seven years and six months was offered for the first time. As a result of the strong investor demand, the average annual yield was 0.69 per cent.

Yield dynamics on the secondary government securities market was similar to that on the primary market. The long-term interest rate used for assessing the degree of convergence fell to 1.65 per cent in July exhibiting an insignificant increase to 1.70 per cent in August. Between July and September the yield of Bulgarian Eurobonds issued in international capital markets also continued to decrease. The decrease was most strongly pronounced in the long end of the maturity curve. The spread between yields of Bulgarian and German government securities narrowed across all maturity sectors. This could be explained by enhanced investor interest in Bulgarian government securities amid improving national macroeconomic indicators and still attractive yields.

In the fourth quarter of 2017 and first quarter of 2018 the yield of Bulgarian government securities is expected to continue its decrease mainly as a result of the strong domestic demand and medium-term prospects for retaining low euro area current interest rates. Given the accumulation of a significant fiscal reserve in August and preliminary announced parameters of the 2017 issuing policy, government bond supply is expected to remain subdued until the end of the year. The pending sizeable payments on government securities maturing in the first quar-

Interest Rates on New Loans to Non-financial Corporations by Currency

(per cent)



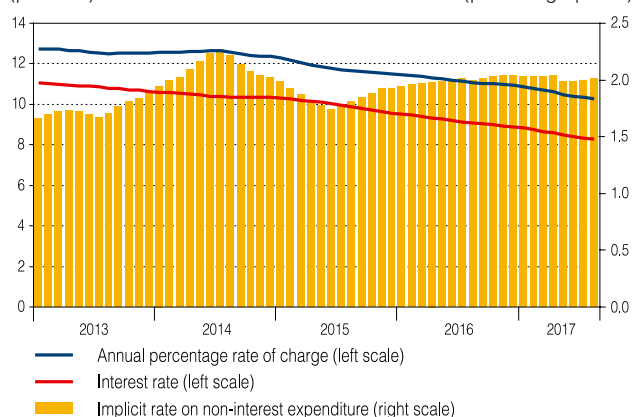
Source: the BNB.

Interest Rates and Annual Percentage Rate of Charges on New Household Loans

a) consumer loans

(per cent)

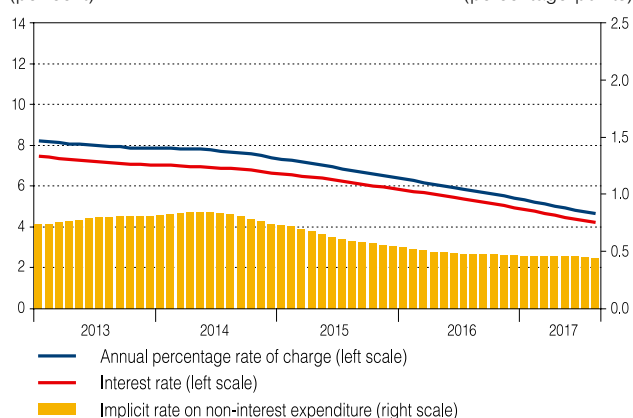
(percentage points)



b) housing loans

(per cent)

(percentage points)



Notes: Interest rates in all maturities and currencies are weighted by the relevant volumes of new loans for a 12-month period. Implicit per cent is the difference between the APRC and the relevant interest rates and reflects the approximate per cent of all non-interest service charges on loans (including fees and commissions).

Source: the BNB.

ter of 2018 presume a negative net financing by government bonds for the period, which will also contribute to lower yields of newly issued securities.

Financial Flows between the General Government and the Other Sectors of the Economy

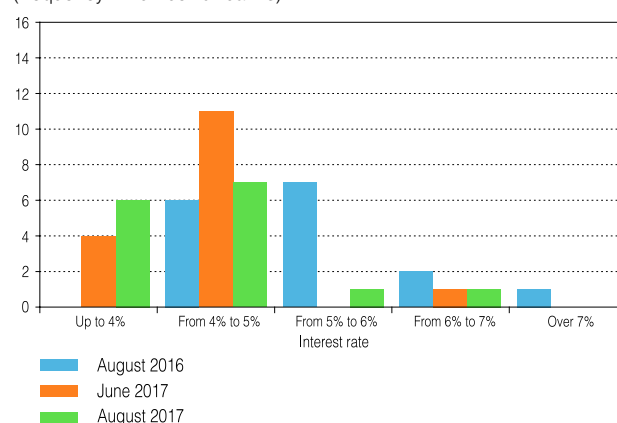
Government's revenue and expenditure policy, and budget financing operations affect the allocation of liquidity across economic sectors.

In the second quarter of 2017 the government had a relatively limited effect on other economic sectors' liquidity. Reimbursed funds from the EC under the EU Common Agricultural Policy (BGN 360.1 million) and grants received under EU programmes (BGN 270.5 million) exceeded insignificantly the payments on foreign debt service (BGN 164.6 million) and EU budget contribution costs (BGN 274.6 million), thereby contributing to the liquidity injection in the budget. The positive net government bond issue over the period (BGN 210 million) was the major driver of liquidity injections from the financial sector to the budget. Positive net financial flows attracted from the financial and external sectors to the budget contributed to the increase in the government deposit with the BNB (by BGN 338.8 million). Withdrawal of liquidity from the non-government sector as a result of the primary surplus reported in the second quarter of 2017 was entirely offset by relatively high advance payments from the national budget under the EU Common Agricultural Policy for the period (BGN 704.8 million). As a result, in the April–June period the fiscal policy had a minimum positive effect on the liquidity of the non-government non-bank sector, amounting to 0.8 per cent of GDP for the quarter.

Based on Ministry of Finance preliminary data as of October, it may be concluded that the financial end external sectors will be net beneficiaries of liquidity from the budget in the third quarter of 2017 due to payments on government securities which matured in July, worth EUR 950 million. The government deposit with the BNB decreased by BGN 799.2 million from the second quarter mostly as a result of debt payments on this issue.

Variation of Interest Rates on New Housing Loans in Euro

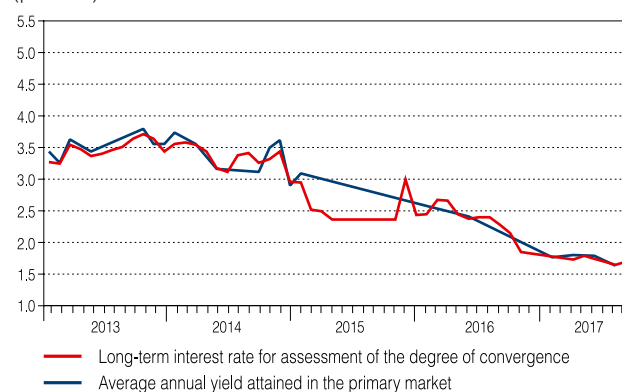
(frequency – number of banks)



Source: the BNB.

Interest Rates on Ten-Year-and-Six-Month Government Securities in the Primary and Secondary Markets

(per cent)

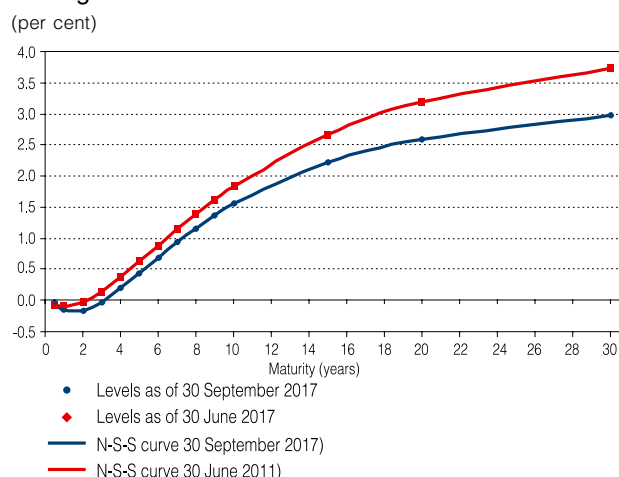


Source: the BNB.

Developments in financial flows generated in the process of external and internal economic factor interaction contributed to the growth in international foreign exchange reserves. In August 2017 the market value of international reserves (assets on the BNB Issue Department balance sheet) amounted to EUR 24.4 billion (BGN 47.8 billion) posting an increase by EUR 545 million on end-2016. According to the currency board principles, the increase in international reserves corresponds to the increase in the Issue Department balance sheet liabilities. The increase in currency in circulation and higher banks' reserves with the BNB contributed most strongly to the dynamics of liabilities in the first eight months of 2017 compared with 2016.

Taking into account the information available until September, bank reserves with the BNB are expected to remain close to the current levels in the fourth quarter of 2017 and the first quarter of 2018. According to the government's medium-term budget forecast of May 2017, the government deposit with the BNB is expected to decrease in the third quarter of 2017 under the assumption of a sizeable increase in budget expenditure to the projected amount in the consolidated fiscal programme. In the first quarter of 2018 the net negative issue of government securities is anticipated to have a downward effect on the government deposit, while the excess of revenue over expenditure typical of the early year will contribute to a rise in budget liquid funds. Currency in circulation is expected to further increase on an annual basis at relatively high rates, reflecting private consumption growth and retention of deposit rates at the current low levels.

Reference Government Securities Yield Curve in Bulgaria

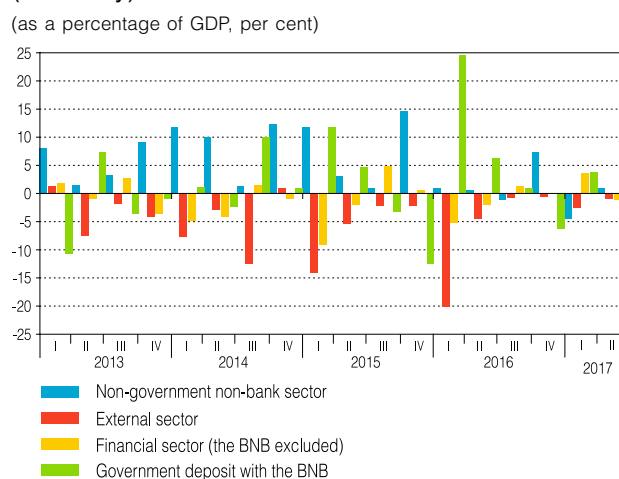


Notes: The reference yield curve of Bulgarian government securities is based on BNB own calculations according to a modified methodology based on the models of *Nelson-Siegel-Svensson* (1994). The yield change refers to the previous quarter.

Daily data on the yields of Bulgarian government securities issued and traded in international capital markets, published in the MF Central Government Debt and Guarantees Monthly Bulletin are employed.

Sources: the MF, BNB calculations.

Consolidated Budget Effect on Other Sectors' Liquidity (Quarterly)



Sources: the MF, the BNB.

3. ECONOMIC ACTIVITY

In the second quarter of 2017 real GDP increased by 1.0 per cent on a quarterly basis. Domestic demand had the main contribution, while net exports' contribution was neutral to growth.

Positive developments in short-term economic indicators continued in the third quarter of 2017, suggesting a sustainable improvement of the economic environment until the end of the year. At the same time, labour market conditions continued to improve, as reflected in the recovery of employment and increased compensation *per* employee. Additional factors expected to support the creation of conditions for improving investment activity and private consumption are the increasing domestic and external demand for goods and services and still relatively low oil prices and interest rates. These factors are expected to contribute to the further increase in real GDP in the fourth quarter of 2017 and first quarter of 2018, reflecting mainly the contribution of domestic demand. Balanced risks with regard to the external environment and the possible higher than expected increase in private consumption and government investment create conditions for achieving higher than expected economic growth at the end of 2017 and in the beginning of 2018.

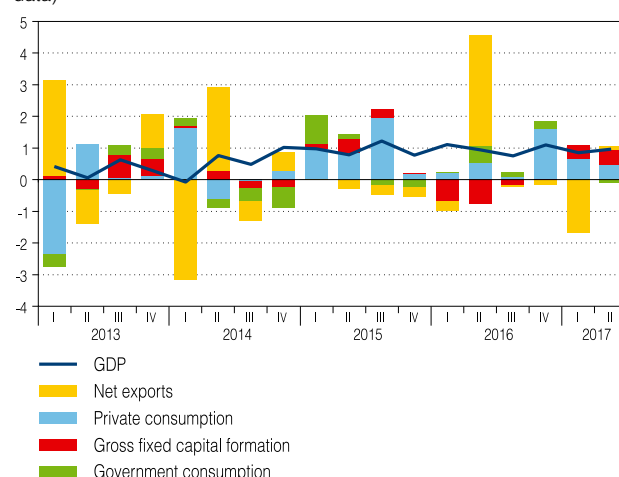
Current Economic Environment

In the second quarter of 2017 real GDP rose by 1.0 per cent³¹ on a quarterly basis. Domestic demand remained the key positive contributor to growth with its both components – private consumption and fixed capital investment – reporting an increase. Government consumption had neutral contribution to growth driven by the rate of increase in compensation *per* employee in budget organisations and state-managed funds, operating expenditure and healthcare spending. BNB private investment estimates (using quarterly non-financial accounts of the general government sector and reports on the implementation of the Consolidated Fiscal Programme, published by NSI and MF respectively), show that their quarter-on-quarter growth contributed positively to total fixed capital investment growth, whereas government investment declined. Positive domestic demand dynamics helped boost imports, while improved external demand supported the sizeable increase of exports of goods and services, which resulted in almost nil contribution of net exports to real GDP growth.

³¹ The quarter-on-quarter analysis in this Chapter employs seasonally adjusted data, unless otherwise indicated. The seasonal adjustment of indicators, on which the NSI or Eurostat do not officially publish seasonally adjusted data, was made via the TRAMO SEATS or OxMetrics programme by using automated set up for diagnostics and optimisation of adjustment parameters.

Contribution to GDP Growth by Final Use Component

(per cent, percentage points; quarter-on-quarter; seasonally adjusted data)

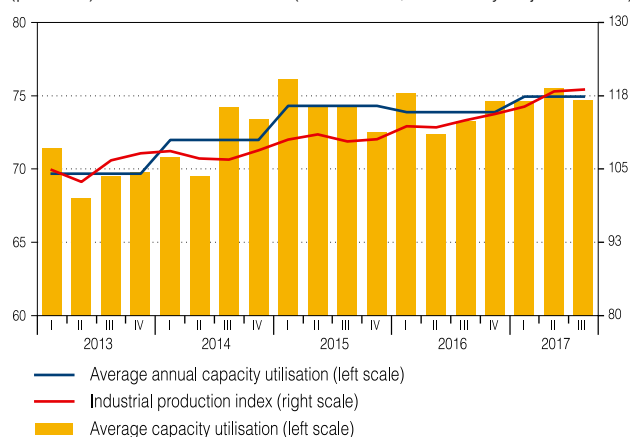


Note: Non-additive data due to direct chain-linked and seasonal adjustment of GDP and its components; the contribution of the change in inventories has not been included.

Sources: the NSI, BNB calculations.

Industrial Production Index and Production Capacity Utilisation in Industry

(per cent) (2010 = 100; seasonally adjusted data)



Note: Data on the industrial production index for the third quarter of 2017 relate to the July–August period.

Sources: the NSI, BNB calculations.

The NSI business surveys tracking firms and households' sentiment measured by the business climate in Bulgaria and consumer confidence indicators, improved further in the third quarter of 2017. Expectations about the economic activity by the end of the year are also favourable, with a sizeable improvement observed in construction and manufacturing. All sectors reported an increase in the share of enterprises planning to increase their staff in the following three months.

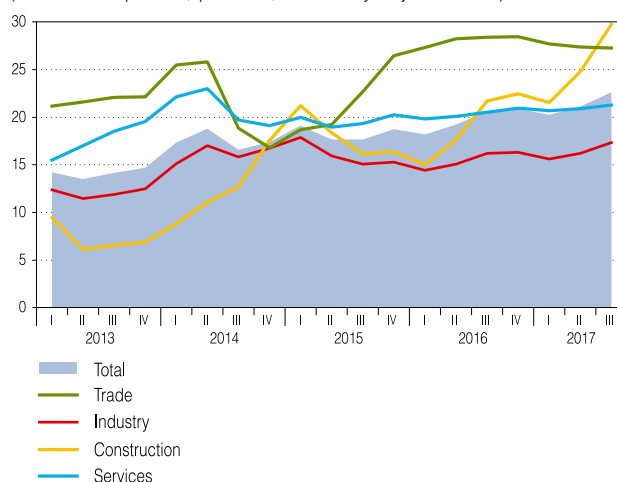
Given the improving economic indicators and growing capacity utilisation, it may be expected that firms will continue to expand their investment activity and recruit staff by the end of the year. An additional favourable factor that will help accelerate investment growth is their assessment of the declining importance of uncertain economic environment as a factor hampering enterprises' activities. In line with the positive consumer sentiment and growing disposable income of households, private consumption is expected to continue to contribute to growth at the end of 2017 and in early 2018.

Government expenditure policy is expected to have a positive contribution to GDP growth in the fourth quarter of 2017 and in the first quarter of 2018 in terms of both government consumption and government investment.

Exports of goods and services is expected to continue to grow in line with strengthening

Expectations about Future Economic Activity

(balance of opinions, per cent; seasonally adjusted data)

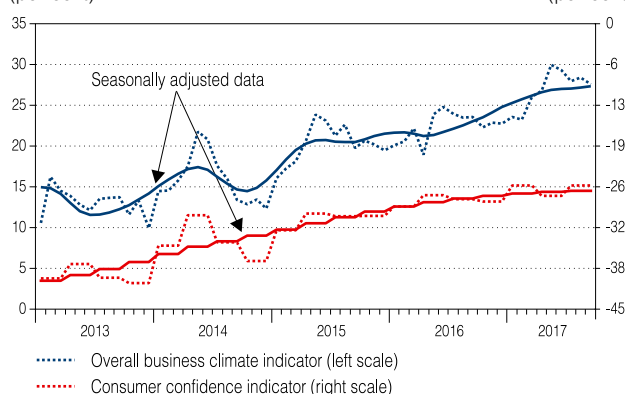


Sources: the NSI, BNB calculations.

Business Climate and Consumer Confidence

(per cent)

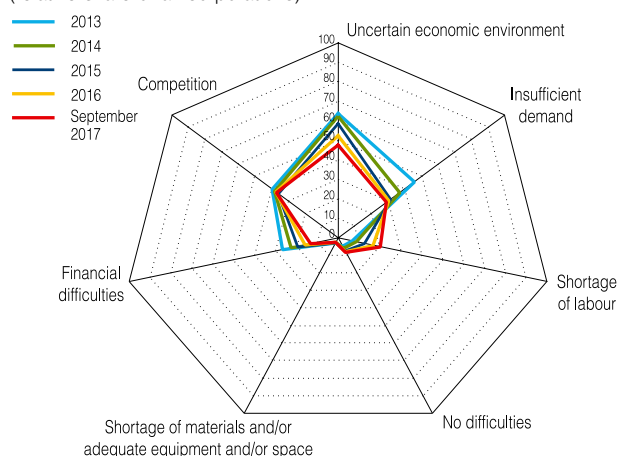
(per cent)



Sources: the NSI, BNB calculations.

Factors Hampering Business Activities

(relative share of all corporations)



Note: Average for the period calculated as sector-weighted (industry, construction, trade and services).

Sources: the NSI, BNB calculations.

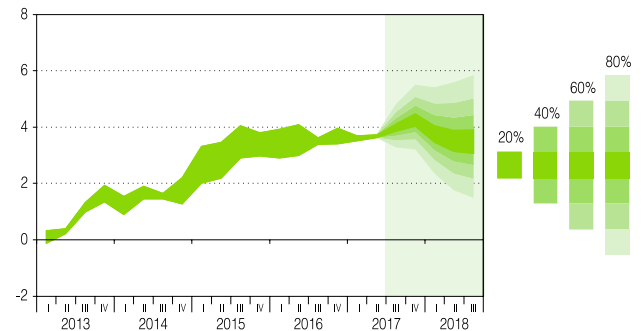
external demand, while imports of goods and services will accelerate in line with domestic demand.

As a result of this dynamics, real GDP is expected to continue to increase on both quarterly and annual basis in the fourth quarter of 2017 and in the first quarter of 2018 with domestic demand contributing most to this.

Risks to the external environment and private investment are assessed as balanced. The possibility private consumption (total for 2017 and in early 2018) and government investment (in 2018) to grow faster than projected in the BNB forecast may result in higher than expected real economic growth over the forecast horizon.

Fan Chart of the Expected Annual Rate of Change of GDP

(per cent; seasonally adjusted data)



Note: The fan chart shows the expert views of the forecasters on the uncertainty surrounding the projected value based on a probability distribution. The reporting period shows revisions of GDP growth estimates. The middle band of the chart, depicted in the darkest colour, includes the central projection and the probability distribution shows 20 per cent probability for the actual value to fall in this band in each of the quarters. If neighbouring bands (in the same brighter colour) are added to the middle band, there would be a 40 per cent coverage of the probability mass. Thus, by adding each same colour couple of bands, the probability for the value to fall there would be increased by 20 percentage points to reach 80 per cent. The probability for the value to remain outside the coloured part of the chart is 20 per cent based on the distribution chosen.

Source: the BNB

Real GDP Growth by Final Use Component

(per cent, quarter-on-quarter; real rate, seasonally adjusted data)

	2014				2015				2016				2017	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
Consumption	0.7	-0.6	-0.2	0.2	1.5	1.2	2.0	0.3	0.3	1.4	0.4	1.8	1.0	0.6
incl.														
Household consumption	2.6	-0.9	-0.1	0.4	1.4	1.3	2.9	0.3	0.3	0.8	0.1	2.5	1.1	0.7
Government final consumption expenditure	2.5	-2.3	1.5	-5.5	2.3	2.5	-0.9	-0.8	-0.6	3.2	0.0	1.9	1.5	-2.3
Collective consumption	-0.7	-0.1	-3.6	-1.7	4.9	-1.2	0.7	-0.1	-0.4	2.4	1.6	1.4	-0.4	0.1
Gross fixed capital formation	0.3	1.4	-1.0	-1.0	0.8	2.1	1.3	0.1	-3.2	-3.8	-0.8	0.0	2.1	2.6
Exports of goods and non-factor services	-2.4	4.6	1.3	4.0	2.2	-1.3	-2.2	3.3	2.9	3.1	2.5	1.0	-1.2	1.3
Imports of goods and non-factor services	2.8	0.2	2.3	3.0	2.2	-0.8	-1.7	3.7	3.3	-2.2	2.7	1.3	1.3	1.1
GDP	-0.1	0.8	0.5	1.0	1.0	0.8	1.2	0.8	1.1	0.9	0.8	1.1	0.9	1.0

Source: the NSI.

Exports and Imports of Goods and Services

Between January and June 2017 nominal exports and imports of goods increased by 14.5 per cent and 18.6 per cent on an annual basis.³² According to non-seasonally adjusted GDP data, in the first half of 2017 real annual growth in exports of goods came to 7.9 per cent on an annual basis, while real imports of goods increased by 10.9 per cent. Cross-checking the changes in exports and imports of goods in nominal and real terms suggests that the dynamics of global prices over the first

³² Foreign trade data.

Net Exports of Commodity Groups by Use, January – June 2017

	Balance (EUR million)	Change* (EUR million)	GDP growth** (per cent)	Growth of imports** (per cent)
Consumer goods	179.5	-131.5	5.2	10.5
Raw materials	-502.7	-234.3	15.1	19.4
Investment goods	-363.8	152.7	19.4	11.9
Energy resources	-967.4	-440.6	27.3	46.9
Other exports	-48.1	-2.5	10.9	7.3
Total	-1702.4	-656.2	14.5	18.6

* Balance change on same period of previous year.

** Exports and imports growth for the period on an annual basis.

Source: the BNB

half-year has contributed positively to nominal growth of international trade flows. Balance of payments data show that the upward trend in nominal exports and imports of goods remained sustained in July 2017.

In the fourth quarter of 2017 and the first quarter of 2018 real exports and imports of goods are expected to continue to increase on an annual basis, with growth in exports outpacing that in imports. Real exports of goods will reflect the expected increase in external demand. Real imports dynamics shall be determined by the projected annual investment and private consumption growth in Bulgaria.

According to balance of payments data, the first seven months of 2017 saw a decline in real exports and imports of services on an annual basis compared to the corresponding period of 2016.³³ Only the travel sub-item posted an increase in both exports and imports on an annual basis. According to national accounts data, in the first half of 2017 the decrease in overall exports and imports of services was entirely due to a fall in real volumes, while the price component increased in both items. In the fourth quarter of 2017 and the first quarter of 2018 real annual exports and imports of services are expected to recover as a result of growing external and domestic demand.

In the first half of 2017 exports of goods to EU Member States increased by 11.3 per cent on an annual basis reflecting the improvement of EU economic activity. Exports to Germany and Belgium contributed most to this growth. Exports of metals³⁴ and machines³⁵ had the most significant contribution to the dynamics of exports to EU Member States by commodity group. Exports to non-EU countries reported a sizeable increase on an annual basis in the January to June 2017 period. The main drivers behind this were stronger exports of metals and machines. Turkey and Russia contributed most to the growth in exports to non-EU countries. In the first half of 2017 the share of exported

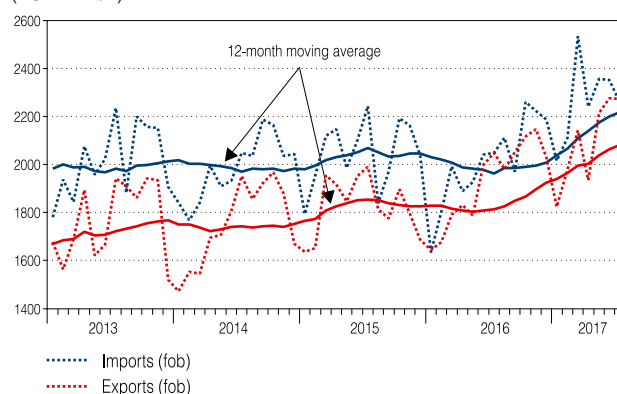
³³ Preliminary data subject to revision.

³⁴ In this chapter it should read the base metals and their products group under the Combined Nomenclature.

³⁵ In this chapter, it should read the machines, vehicles, appliances, instruments and weapons group under the Combined Nomenclature.

Exports and Imports of Goods Dynamics

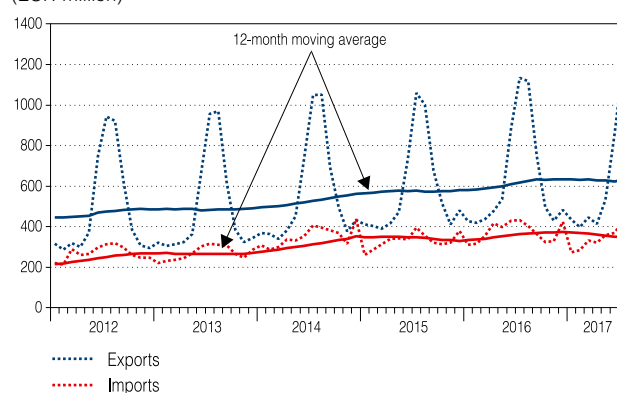
(EUR million)



Source: the BNB

Exports and Imports of Services Dynamics

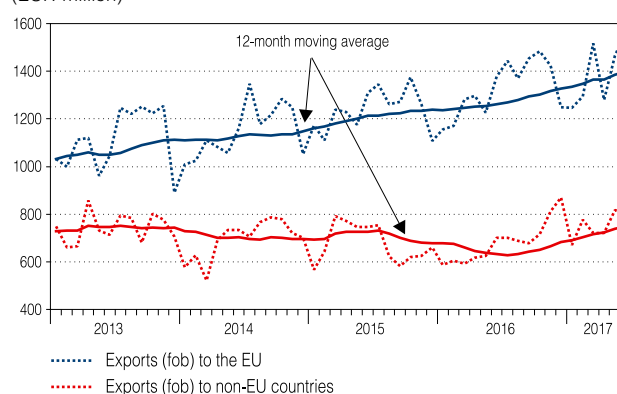
(EUR million)



Source: the BNB.

Dynamics of Exports to EU and non-EU Countries

(EUR million)



Source: the BNB.

goods to EU Member States decreased slightly at the expense of that to non-EU countries to reach 64.9 per cent.

Nominal exports of all commodity groups under the Combined Nomenclature excluding animal and plant products reported an increase on an annual basis in the first half of 2017, with exports of machines and metals having the largest positive contribution. The upward trend in nominal exports of goods observed over the recent years continued, reflecting the improving competitiveness of Bulgarian economy. An indicator for this is the increasing market share of Bulgaria in both global and EU trade. Against the backdrop of rising unit labour costs over the recent years, it can be concluded that improving competitiveness was largely attributable to non-price factors.

Between January and June 2017 exports of machines increased sizeably on an annual basis – a trend observed also in 2016. Exports of machines dynamics in the first half-year was due to higher exported volumes, whereas prices³⁶ declined. Nominal exports to non-EU countries saw a more significant increase. Exports of machines are expected to continue to increase in the fourth quarter of 2017 and first quarter of 2018 reflecting enhanced external demand.

Between January and June 2017 a trend towards growth in nominal exports of energy products³⁷ formed, largely due to the annual increase in petroleum products' prices³⁸. Annual increase was observed both in the exports to EU and non-EU countries. Given the gradual decline in the annual growth of international petroleum products' prices in dollars at the end of 2017 and their expected decline in the beginning of 2018, mineral products exports are forecast to decelerate in nominal terms.

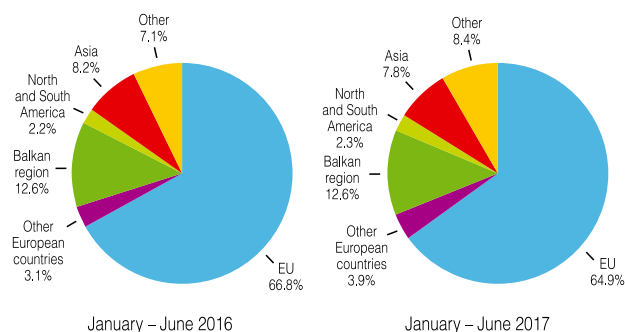
Exports of base metals reported the most sizeable annual growth in total exports of goods

³⁶ The quarterly export deflators for the machines, equipment and vehicles group under the Standard International Trade Classification (SITC) were used to estimate the price effect in the first and second quarters of 2017.

³⁷ In this chapter, it should read mineral products and fuels group under the Combined Nomenclature.

³⁸ The quarterly export deflators for the mineral fuels, oils and related products group under the SITC were used to estimate the price effect in the first and second quarters of 2017.

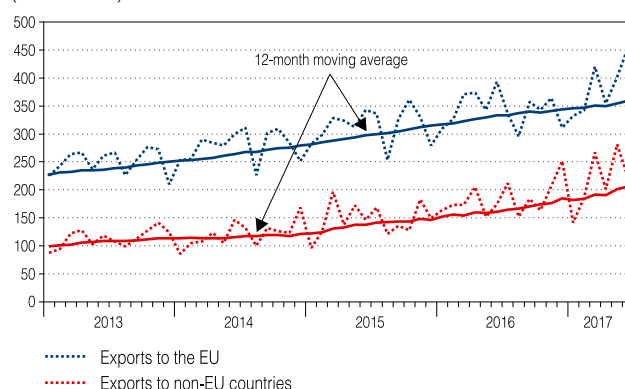
Exports of Goods Geographical Breakdown



Source: the BNB.

Exports of Machines, Vehicles, Appliances, Instruments and Weapons

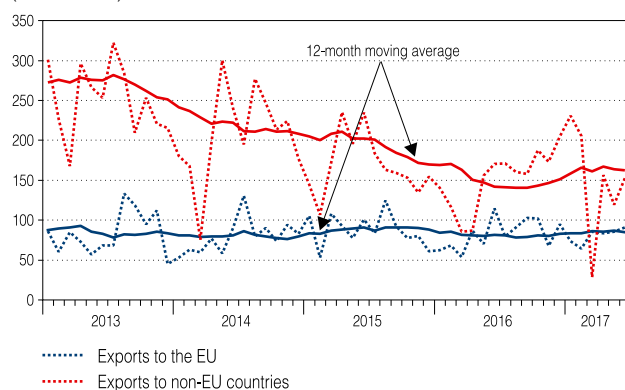
(EUR million)



Source: the BNB.

Exports of Mineral Products and Fuels

(EUR million)



Source: the BNB.

in the first half of 2017. This was partly due to the lower base from the previous year when copper production declined due to renovation and extension of the production capacity in a key enterprise for this sector³⁹. Metal prices in euro and in dollars had a positive effect, posting a marked annual increase⁴⁰ in the first half of 2017. By geographical breakdown exports of metals contributed to overall growth in exports to both EU and non-EU countries. Exports to Germany and Belgium contributed most to this group's growth. Due to the projected slow down on an annual basis at the end of the current year and in the beginning of 2018 in the increase in metal prices in dollars and the depletion of the one-off effects of lower volumes in 2016, nominal exports of metals growth is expected to moderate.

Nominal exports of animal and plant products went down on an annual basis in the January to June 2017 reflecting the fall in exported physical volumes, whereas export prices increased on an annual basis⁴¹. The fall in exports of animal and plant products was due to the weaker exports of cereals in real terms and was observed in both exports to EU and non-EU countries. Over the forecast horizon, nominal exports of the group is expected to increase on an annual basis driven by higher external demand and expected good harvest in Bulgaria.⁴²

Exports of chemical products⁴³ for the January to June 2017 period increased on an annual basis for both EU and non-EU countries. Nominal growth of exports of this group was the result of exported larger physical volumes, whereas export prices fell on an annual basis.⁴⁴ In the fourth quarter of 2017 and the first quarter of 2018 the trend towards an increase in

³⁹ According to the press release published on 10 May 2016 on the Aurubis website: <http://bulgaria.aurubis.com/news-and-publications/press-releases/aurubis-reports-good-half-year-results/>

⁴⁰ The quarterly export deflators for the precious and other non-ferrous metals under SITC were used to estimate the price effect in the first and second quarters of 2017.

⁴¹ The quarterly export deflators for the food and live animals group under SITC were used to estimate the price effect in the first and second quarters of 2017.

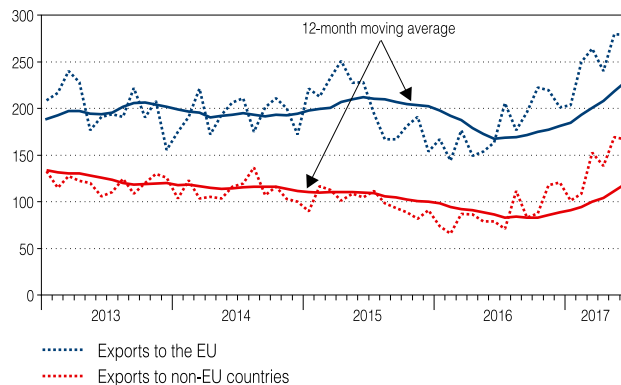
⁴² For further details see Wheat Outlook of USDA, September 2017, p 11.

⁴³ The chemical products, plastics and rubber group under the Combined Nomenclature.

⁴⁴ The quarterly export deflators for the chemicals and chemical products group under the SITC were used to estimate the price effect in the first and second quarters of 2017.

Exports of Base Metals and Related Products

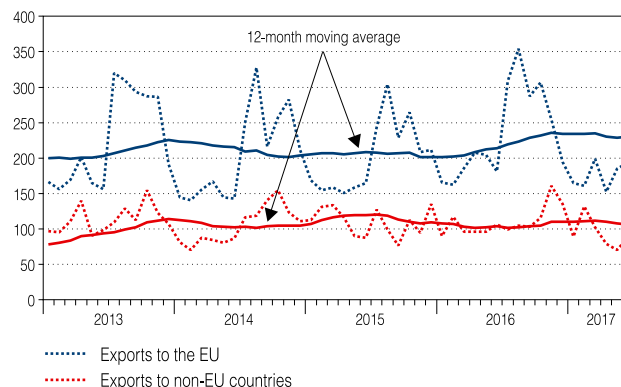
(EUR million)



Source: the BNB.

Exports of Animal and Plant Products, Food, Drinks and Tobacco

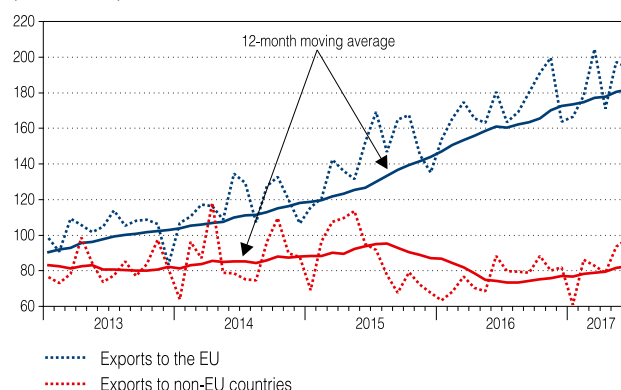
(EUR million)



Source: the BNB.

Exports of Chemical Products, Plastics and Rubber

(EUR million)



Source: the BNB.

exported physical volumes is expected to continue to have a positive effect on the nominal exports of chemical products.

According to balance of payments data, in the January to July 2017 period exports of services decreased by 1.9 per cent on an annual basis, mainly due to the decline in the other services sub-item. However, year-on-year earnings from visits of foreign nationals to Bulgaria increased by 10.7 per cent over the period. According to NSI data, in the first seven months of 2017 visits of foreign nationals to Bulgaria increased by 10.0 per cent on the corresponding period of 2016, mainly due to the visits from Romania and Greece.

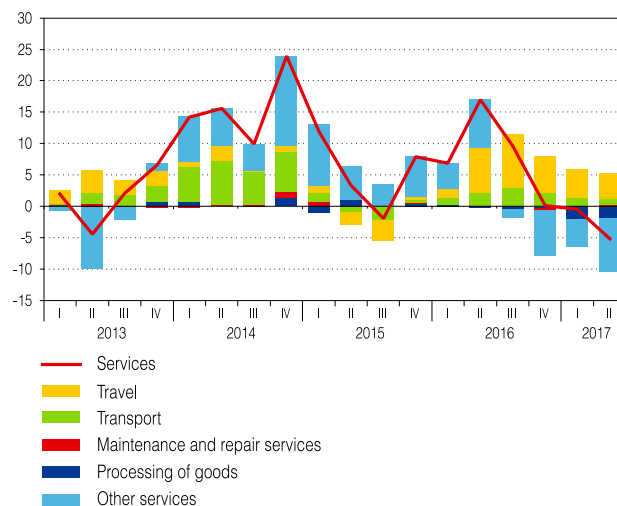
In the January to June 2017 period nominal imports of goods increased on an annual basis due both to higher imported physical volumes and higher import prices. By use, nominal growth was observed in all sub-groups. Raw materials, followed by energy resources contributed most to the annual increase in overall imports of goods, which could be explained by the price rise in these goods groups on international markets.

In the January–June 2017 period imports of goods from EU Member States rose by 10.2 per cent on the corresponding period of 2016, with imports from Romania and Germany having the most significant positive contribution. Imports from non-EU countries also reported an increase on an annual basis and came to 29.3 per cent. Imports from Russia consisting mainly of petroleum products had the largest positive contribution to this development and remained strongly influenced by the petrol price rise. In the January to June 2017 the share of imports from EU countries declined on an annual basis from 55.8 per cent in the first half of 2016 to 51.9 per cent. On the other hand, the share of imports from countries outside the EU increased from 44.2 per cent between January and June 2016 to 48.1 per cent in the corresponding period of 2017.

In the first half of 2017 imports of energy resources went up sizeably compared with the first half of 2016, reflecting the significant year-on-year growth of imported physical volumes which was more pronounced in the first quarter of the current year. Higher international prices

Annual Change of Exports of Services and Contribution by Sub-components

(per cent, percentage points)



Source: the BNB.

Imports of Commodity Groups by Use, January – June 2017

	EUR million	Change* (EUR million)	Growth** (per cent)	Contribution** (percentage points)
Consumer goods	3 103.1	294.0	10.5	2.4
Raw materials	5 427.4	880.2	19.4	7.2
Investment goods	3 745.6	397.7	11.9	3.2
Energy resources	2 220.2	709.2	46.9	5.8
Other imports	74.2	5.1	7.3	0.0
Total imports (cif)	14 570.5	2 286.1	18.6	

* Change on the corresponding period of previous year.

** Growth/contribution to total import growth over the period on an annual basis.

Source: the BNB.

of oil products⁴⁵ also added positively to this. Imports from Russia continued to contribute most to higher imports of petroleum products. As a result of the expected moderation in the increase in oil prices in dollars in the fourth quarter of 2017 and decline in the first quarter of 2018, nominal imports of energy products is expected to continue to increase on an annual basis albeit at a lower rate compared with that recorded in the first half-year.

The sizeable annual increase in the imports of raw materials group in the first half of 2017 reflected the increase in import prices and higher imported physical volumes⁴⁶. Imports of metal ores had the greatest positive nominal contribution due to the recovery in the production of a key undertaking for the sector⁴⁷ and the recorded annual increase in imported metal ores prices⁴⁸. At the end of 2017 and in early 2018 imports of raw materials are expected to continue to increase, but the growth rate is likely to moderate due to the expected fall in the prices of raw materials in euro.

The upward trend in imports of consumer goods on an annual basis observed in 2016 continued in the first half of 2017 which was in line with growing consumer demand. Food and pharmaceuticals and cosmetics sub-groups had the largest contribution to this growth. Given that private consumption increases, imports of the group are expected to continue to grow in the fourth quarter of 2017 and the first quarter of 2018.

Nominal imports of investment goods also went up on an annual basis in the first half of 2017, with the group's growth accelerating compared with 2016. In the first half of 2017 investment goods imports dynamics was in line with the observed annual growth in investment as indicated by non-seasonally adjusted GDP

⁴⁵ The quarterly export deflators for the mineral fuels, oils and related products group under the SITC were used to estimate the price effect in the first and second quarters of 2017.

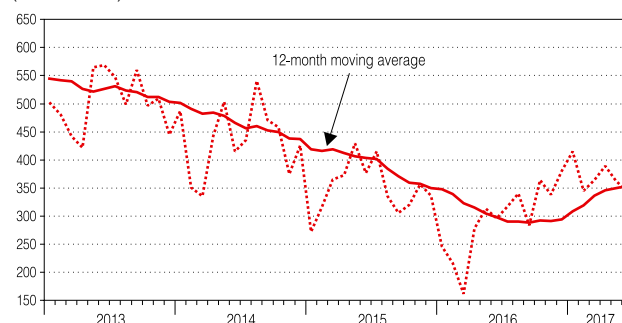
⁴⁶ The quarterly import deflators of the groups of food and live animals, inedible (crude) materials (excluding fuels); chemicals and chemical products and manufactured goods classified chiefly by materials under the SITC were used to estimate the price effect in the first and second quarters of 2017.

⁴⁷ See footnote 39.

⁴⁸ The quarterly import deflators for the metal ores and metal scrap group under SITC were used to estimate the price effect in the first and second quarters of 2017.

Imports of Energy Resources

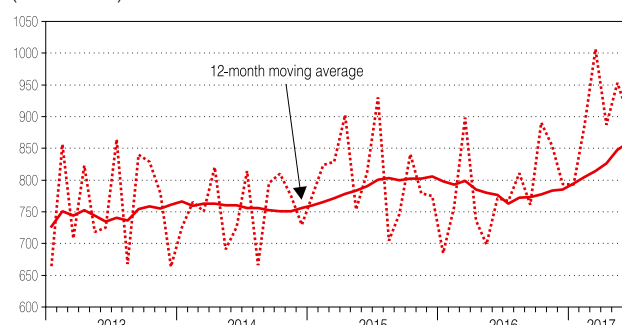
(EUR million)



Source: the BNB.

Imports of Raw Materials

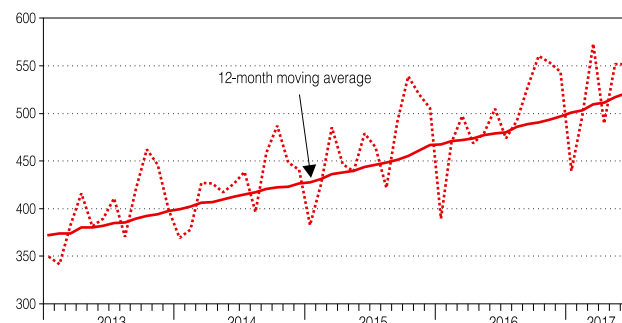
(EUR million)



Source: the BNB.

Imports of Consumer Goods

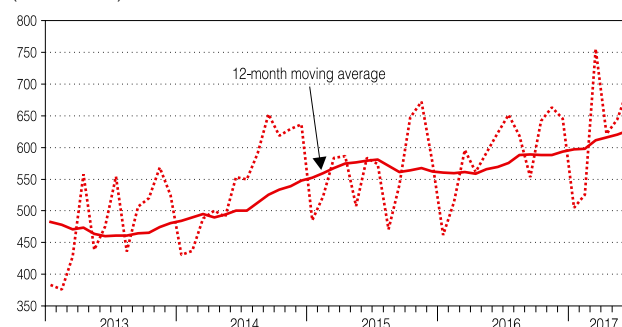
(EUR million)



Source: the BNB.

Imports of Investment Goods

(EUR million)



Source: the BNB.

data. The assessment of price changes shows that the increase in the group's imports was due both to the increase in import prices and imported volumes.⁴⁹ Our forecasts for the end of 2017 and the beginning of 2018 point to a continuous upward trend in nominal exports of investment goods with a view to the expected annual growth in investment in Bulgaria.

According to balance of payments data, imports of services declined by 11.4 per cent on an annual basis in the January and July 2017 period irrespective of the higher expenditure of Bulgarian residents' travel abroad over the same period of 2016. According to NSI data, Bulgarian residents' travel abroad for the first seven months of the year increased by 17.5 per cent on an annual basis, with visits to Greece, Romania and Turkey having the most significant contribution to growth.

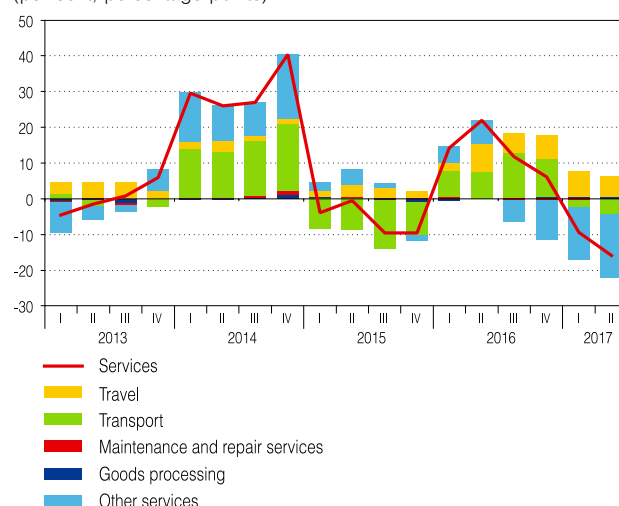
Behaviour of Firms and Competitiveness

Over the second quarter of 2017 gross value added continued to increase in real terms, rising 0.9 per cent on the previous quarter. Value added in industry went up 1.0 per cent in real terms and both manufacturing and construction contributed to this growth, whereas value added in agriculture still had a neutral contribution to total gross value added. NSI short-term business statistics data corresponded to the trend observed in the national accounts, the annual indices of both industrial turnover and construction production reporting an improvement in the second quarter of 2017 compared with the previous one. Gross value added in the services sector increased by 0.5 per cent, with slight negative contribution to the quarter-on-quarter growth recorded only by the public services sector⁵⁰. Enhanced demand was observed in retail trade, transport and information and communication as measured by trade volumes of the corresponding sectors on a quarterly basis.

NSI data on short-term business statistics (turnover in industry, trade and construction) for July and August indicate an increase in gross

Annual Change of Imports of Services and Contribution by Sub-components

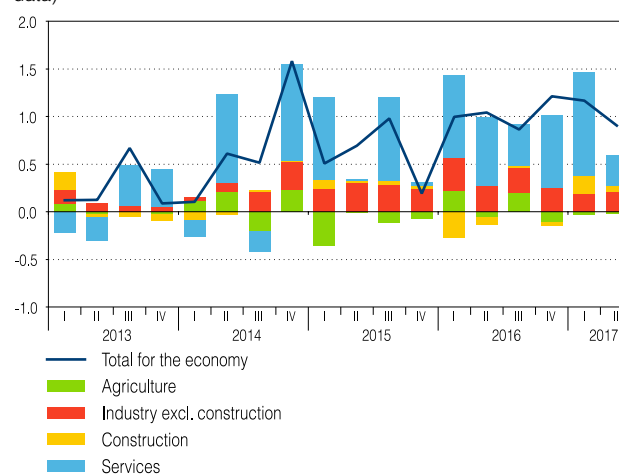
(per cent, percentage points)



Source: the BNB.

Value Added Growth and Contribution by Sector

(per cent, percentage points, quarter-on-quarter; seasonally adjusted data)



Note: Non-additive data on contributions due to direct seasonal adjustment of value added and its components.

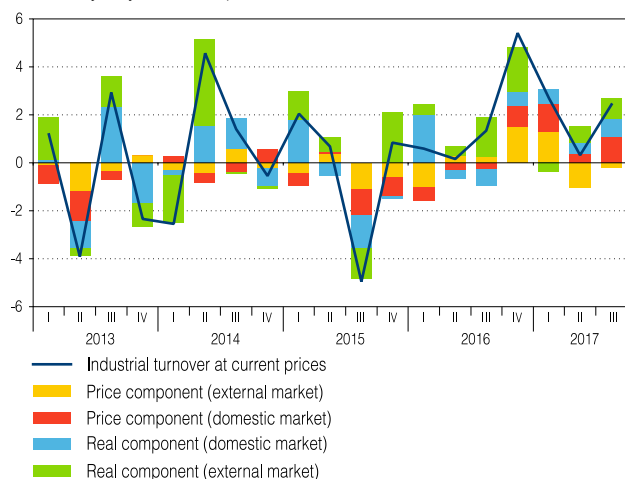
Sources: the NSI, BNB calculations.

⁴⁹ The quarterly import deflators for the machines, equipment and vehicles group under SITC were used to estimate the price effect in the first and second quarters of 2017.

⁵⁰ Public administration and defence, compulsory social security; education, human health and social work activities sector by A10 breakdown of economic activities.

Industrial Turnover Dynamics

(per cent, percentage points, quarter-on-quarter; seasonally adjusted data)



Note: Data for the third quarter of 2017 are averaged for the July–August period.

Sources: the NSI, BNB calculations.

value added in the respective sectors in the third quarter of 2017. In line with enhanced industrial production, industrial turnover went up on average in the July to August period from the second quarter of 2017, with real volumes of both external and domestic market reporting an increase. Over the same period the retail trade at constant prices and construction production index continued to increase on a quarterly basis.

In the second quarter of 2017 employment growth decelerated slightly compared to the previous quarter, rising 0.1 per cent. The services and industry sectors contributed positively to growth, while agriculture and construction contributed negatively. Among the services sub-sectors trade⁵¹, public services and information and communication⁵² had a positive contribution. In line with the improving firm expectations about the staff and gradually increasing number of job vacancies, higher labour demand by enterprises is expected to contribute to an increase in employment by the end of 2017 and in the first quarter of 2018.

Labour productivity in the total economy retained its upward dynamics in the second

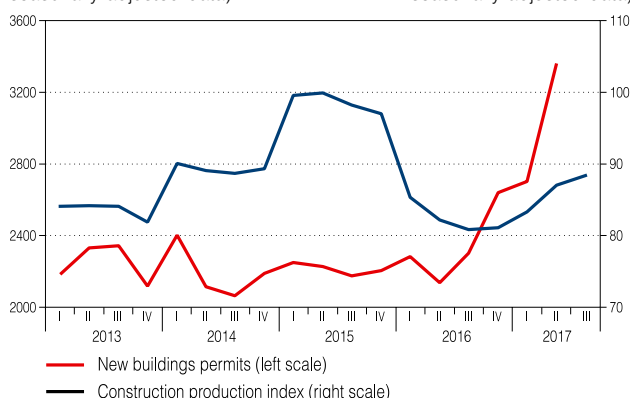
⁵¹ Wholesale and retail trade, repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities sector by A10 breakdown of economic activities.

⁵² Information and communication sector by A10 breakdown of economic activities.

Construction Production Dynamics and New Buildings Permits Issued

(number of buildings; seasonally adjusted data)

(2010 = 100; seasonally adjusted data)

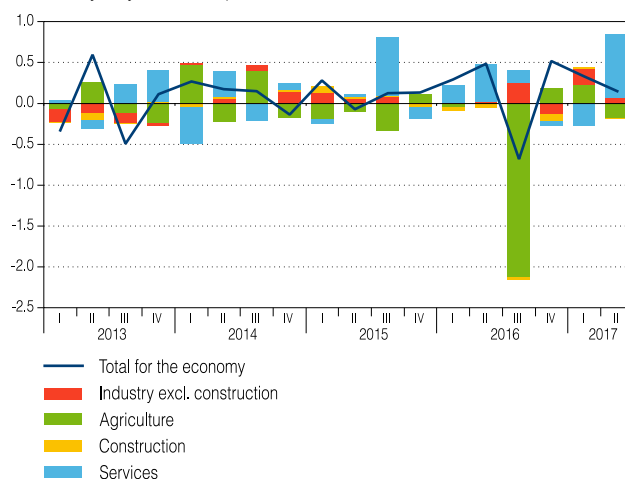


Note: Data for the third quarter of 2017 are averaged for the July–August period.

Sources: the NSI, BNB calculations.

Contribution to Changes in the Number of Employed by Economic Sector

(per cent, percentage points, quarter-on-quarter; seasonally adjusted data)

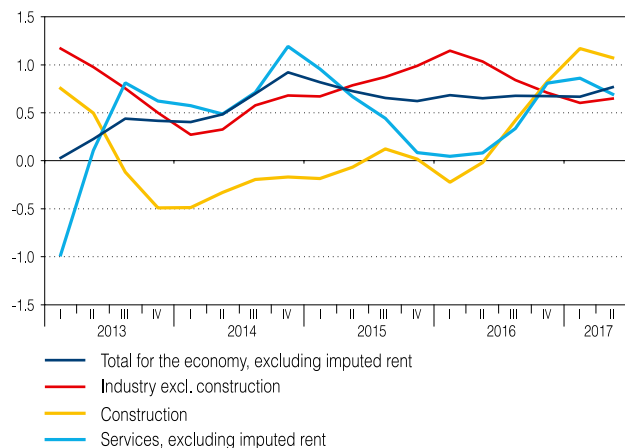


Note: Non-additive data on contributions due to direct seasonal adjustment of the total amount and its components.

Sources: the NSI, BNB calculations.

Labour Productivity Developments (Value Added per Employee)

(per cent, quarter-on-quarter; seasonally adjusted data)



Sources: the NSI, BNB calculations.

quarter of 2017, posting an increase of 0.8 per cent on a quarterly basis. Labour productivity increased in all sectors but the agricultural one where it declined.

Compensation *per* employee for the total economy, in nominal terms, accelerated its growth rate in the second quarter of 2017. All sectors excluding the agricultural one reported an increase. In the fourth quarter of 2017 and the first quarter of 2018 compensation *per* employee is expected to continue to increase at rates similar to that of the first half of 2017. The increase in the beginning of 2018 is likely to be more pronounced than projected mainly due to possible wage rises in the public sector.

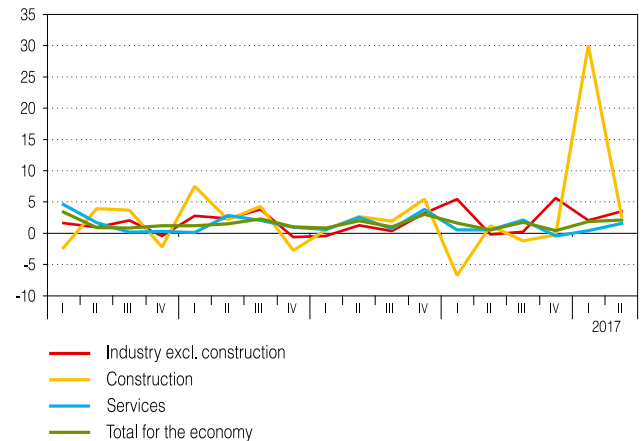
Unit labour costs for the total economy went up in the second quarter of 2017 in both nominal and real terms reflecting slower labour productivity growth compared to that in the compensation *per* employee

In the second quarter gross operating surplus for the total economy increased by 2.8 per cent on a quarter-on-quarter basis. Industry and agricultural sectors contributed to this growth, while services had a negative contribution. In addition to the gross operating surplus which is the main source of financing of firms' activities, foreign direct investment also increased in all sectors in the second quarter. As regards external liabilities other than intercompany loans, the trend toward repayment of obligations, which is more pronounced in manufacturing and services, continued except in financial intermediation and public services. The trend toward an increase in the volume of bank loans to non-financial corporations which started in mid-2016 continued and in the second quarter of 2017 the lower volume of loans to industry was offset by the increase in loans to all other economic sectors.

The breakdown of GDP growth by production factors shows that in the second quarter of 2017 all subcomponents made a positive contribution. Against the backdrop of still high capacity utilisation, total factor productivity and capital remained the main contributors to growth. As a result of the higher total number of worked man-hours in economy in the second quarter, labour increased its positive contribution to economic growth compared to the previous quarter.

Compensation *per* Employee at Current Prices

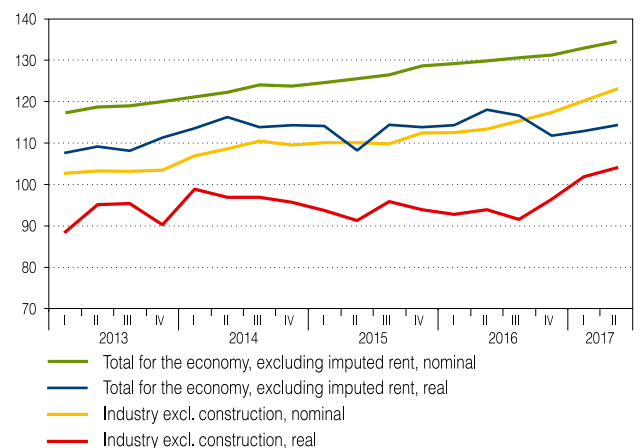
(per cent, quarter-on-quarter; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Unit Labour Costs

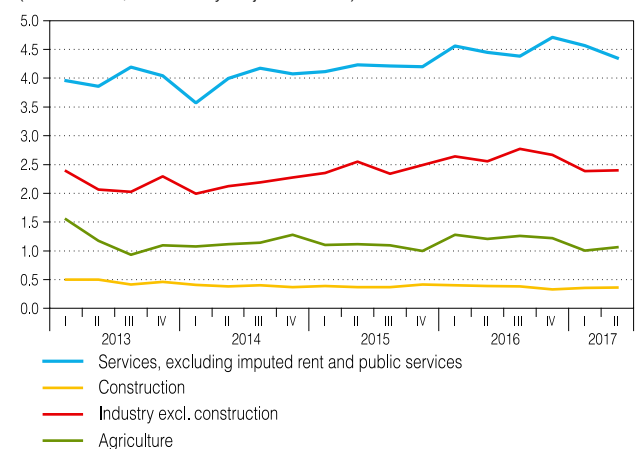
(2010 = 100; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Gross Operating Surplus at Current Prices

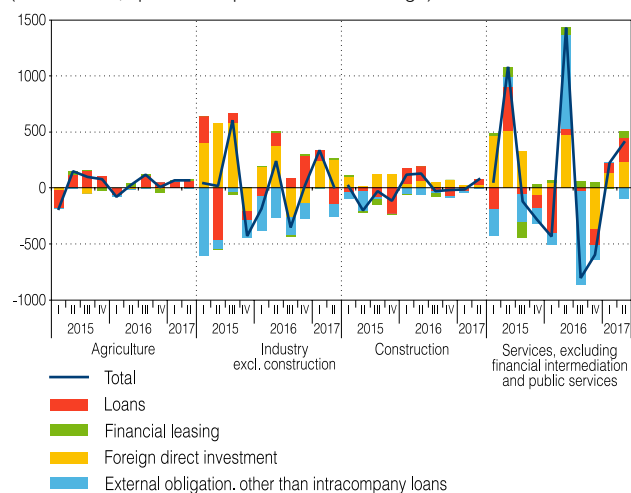
(BGN billion; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Sources of Financing*

(BGN million, quarter-on-quarter volume change)

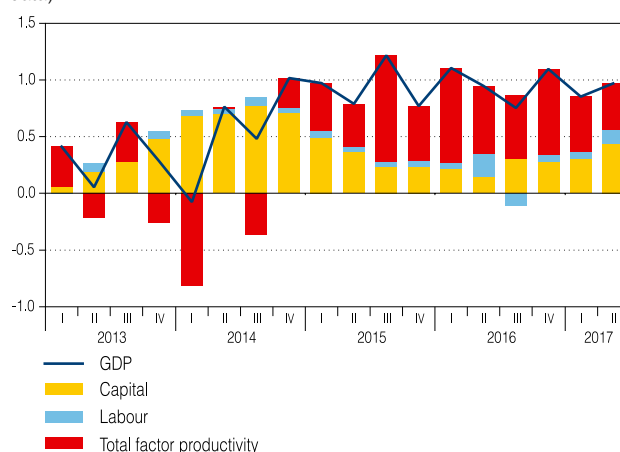


*Sources of financing other than gross operating surplus.

Source: the BNB.

Contribution of Changes in Production Factors to GDP Growth

(per cent, percentage points, quarter-on-quarter; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Gross Value Added Growth

(per cent, quarter-on-quarter; real rate, seasonally adjusted data)

	2014				2015				2016				2017	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
Agriculture, forestry and fishing	2.5	4.6	-4.1	5.2	-7.6	-0.2	-2.6	-1.8	5.3	-1.4	4.9	-2.6	-0.7	-0.6
Mining and quarrying, manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities	0.2	0.5	1.0	1.3	1.1	1.4	1.3	1.1	1.5	1.2	1.1	1.1	0.8	0.9
Construction	-1.5	-0.5	0.2	0.2	1.4	0.4	0.7	0.5	-4.4	-1.4	0.3	-0.8	3.4	1.2
Wholesale and retail trade; repair of motor vehicles and motorcycles, transportation and storage; accommodation and food service activities	-1.5	2.1	-0.4	1.9	2.8	0.3	1.5	-0.6	-0.5	2.4	0.6	1.6	1.9	0.1
Information and communications	0.1	0.4	0.6	0.9	0.3	0.0	0.3	0.2	20.8	-4.0	-2.4	-1.1	-0.8	0.2
Financial and insurance activities	-1.1	2.9	-3.4	0.2	0.1	-3.9	5.1	-0.8	3.7	2.5	-0.1	2.3	0.1	1.5
Real estate activities	0.1	0.2	0.9	1.3	1.0	1.3	1.3	0.9	1.4	1.4	1.5	1.9	1.8	1.8
Professional, scientific and technical activities; administrative and support service activities	0.2	0.1	1.6	0.5	3.6	0.9	1.4	2.2	-1.6	1.4	0.5	0.4	1.8	0.8
Public administration and defence; compulsory social securities; education, human health and social work activities	2.5	1.0	-1.4	2.7	-0.5	-0.2	0.0	-0.5	-3.2	0.2	1.8	0.3	3.4	-0.7
Arts, entertainment and recreation, repair of household goods and other services	-5.3	3.6	2.8	1.1	-0.2	2.0	-2.4	1.4	-2.4	0.6	1.6	0.7	-0.4	-0.4
Gross value added, total for the economy	0.1	0.6	0.5	1.6	0.5	0.7	1.0	0.2	1.0	1.0	0.9	1.2	1.2	0.9

Source: the NSI.

Household Behaviour

Higher income from remuneration and the positive development in the labour market in the second quarter of 2017 had a favourable effect on labour supply by households and continued to support consumer confidence.

According to the NSI Labour Force Survey⁵³ in the second quarter of 2017 labour supply measured by the labour force dynamics increased significantly as new persons joined the labour force and the share of discouraged persons outside the labour force contracted. As a result, the participation rate⁵⁴ went up on the previous quarter. Growing labour demand, measured by the improved business expectations about the number of personnel, is expected to motivate new working-age population to join labour force in the following quarters.

The Labour Force Survey shows that in the second quarter of 2017 the unemployment rate⁵⁵ continued its downward trend, reaching 6.1 per cent (according to non-seasonally adjusted data: 6.3 per cent). This was due to the lower number of long-term unemployed (unemployed for more than a year). The seasonally adjusted unemployment rate⁵⁶ calculated using the Employment Agency data also continued to decline, reaching 7.2 per cent in August 2017 (6.7 per cent according to non-seasonally adjusted data).

Driven by the improved economic situation in Bulgaria in the second quarter of 2017, wages continued to increase (both annually according to non-seasonally adjusted data on the wage bill and average wage *per* employee and quarterly according to seasonally adjusted national accounts data).

At the same time, consumer confidence indicator went up in July 2017 according to the NSI

⁵³ The labour force (currently economically active population) comprises persons aged 15 and older who provide the supply of labour for the production of goods or services. The labour force includes both employed and unemployed persons.

⁵⁴ The labour force participation rate is the proportion between economically active persons (labour force) and the population of the same age.

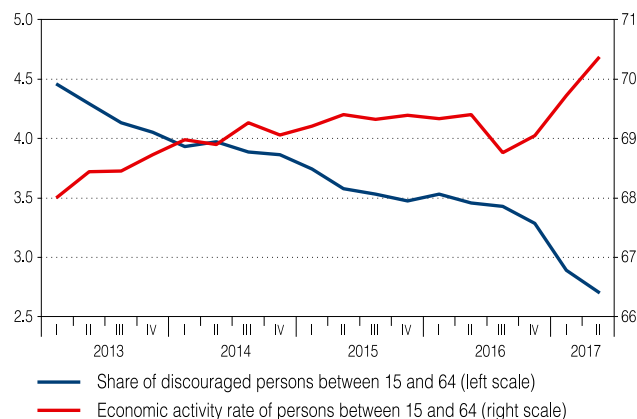
⁵⁵ Unemployment rate is the proportion between the number of unemployed and the labour force based on Labour Force Survey data.

⁵⁶ The definition of the unemployment rate according to the Employment Agency corresponds to that referred to in the previous footnote, but using a constant rate of labour force comprising the number of persons in the respective age group since the last census of the population.

Economic Activity and Share of Discouraged Persons

(per cent, seasonally adjusted data)

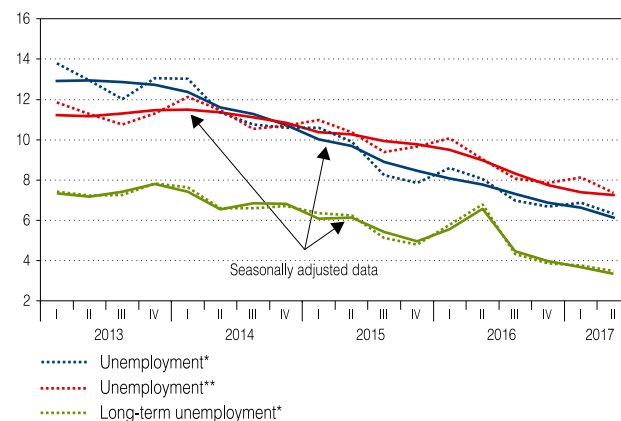
(per cent, seasonally adjusted data)



Sources: NSI Labour Force Survey, BNB calculations.

Unemployment Rate

(per cent, share of the labour force)



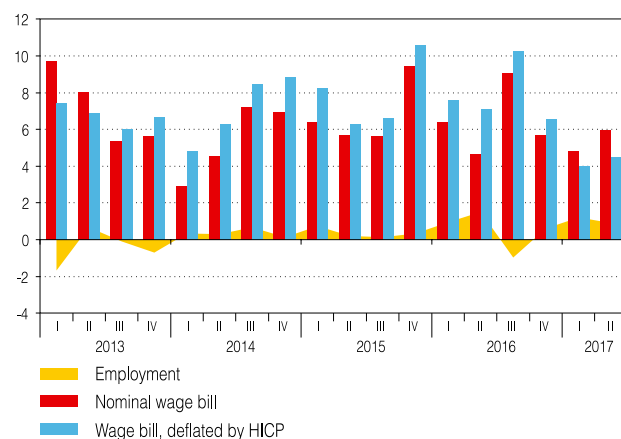
* NSI data.

** Employment Agency data.

Sources: NSI Labour Force Survey, Employment Agency, BNB calculations.

Employment and Nominal Wage Bill

(annual change, per cent)



Sources: the NSI – SNA, BNB calculations.

Consumer Survey, reflecting improved expectations of households about their financial positions and the overall economic situation.⁵⁷

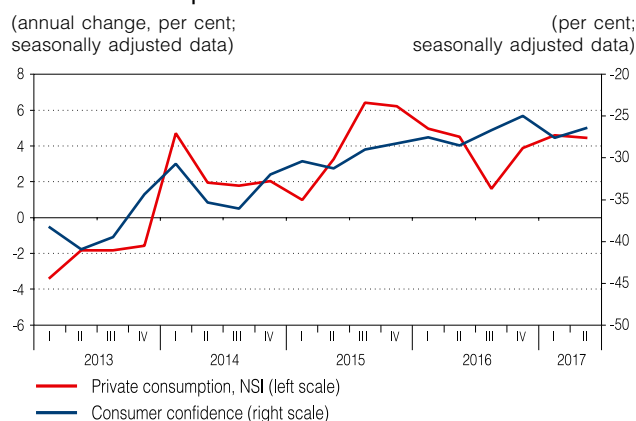
Improved household expectations and growing labour income were the main drivers behind enhanced consumer demand. According to national accounts data, household consumption continued to increase on both annual and quarterly basis in the second quarter of 2017. According to seasonally adjusted NSI data on household consumption, the second quarter of 2017 saw a stronger positive contribution of durable goods. Retail trade turnover also increased on a quarter-on-quarter basis, with a more sizeable contribution reported by the trade in household appliances, furniture and other household goods, and computer and communication equipment and other consumer goods in the July to August 2017 period. Consumer inflation expectations increased in July (according to EC seasonally-adjusted data), which coupled with the data on consumption seems to indicate higher household consumption resulting from the expectations about higher consumer goods prices. The continued growth in new consumer loans in August 2017 is also expected to help boost consumer demand.

The factors above are likely to contribute to the increase in consumption in the fourth quarter of 2017 and first quarter of 2018.

The NSI Household Budget Survey data show that the share of savings in household disposable income declined slightly in the second quarter of 2017 but remained at relatively low levels (according to seasonally-adjusted data). The share of households, which intend to increase their savings in the following 12 months, remained also high (according to the Consumer Survey of July 2017). In the second quarter of 2017 households' net assets measured through their net position *vis-à-vis* the banking system (based on BNB monetary statistics data) decreased slightly as a result of incurred new debt.

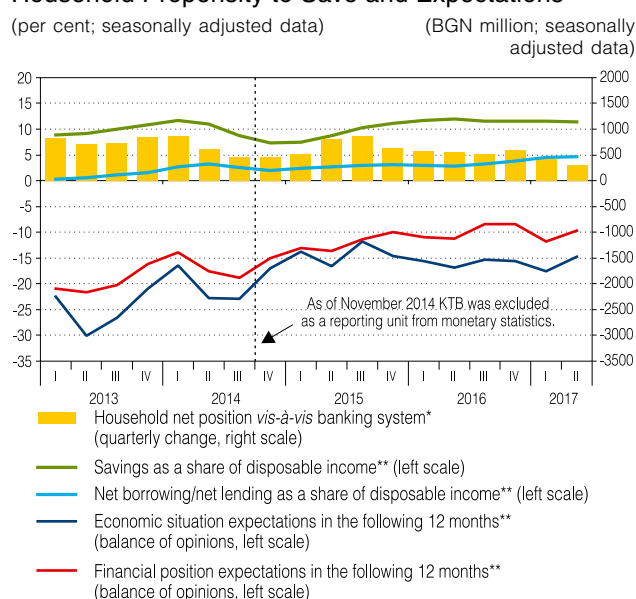
⁵⁷ Final results of the Consumer Survey represent balances of opinions calculated as a difference between the relative shares of positive and negative opinions on raised issues. The composite consumer confidence indicator is calculated as the arithmetic mean of expectation balances in the following 12 months for the development of: financial position and savings of households, the overall economic situation in the country and unemployment (the latter with the sign reversed).

Private Consumption and Consumer Confidence



Sources: the NSI, BNB calculations.

Household Propensity to Save and Expectations



* BNB data.

** NSI data.

Sources: NSI Household Budget Survey, NSI Consumer Survey, BNB.

Employment and Income Dynamics

	2013				2014				2015				2016				2017	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
(per cent, quarter-on-quarter; seasonally adjusted data)																		
Employed persons	-0.3	0.6	-0.5	0.1	0.3	0.2	0.2	-0.1	0.3	-0.1	0.1	0.1	0.3	0.5	-0.7	0.5	0.3	0.1
Nominal wage <i>per</i> employee*	3.2	0.8	0.6	1.7	1.0	1.6	2.3	0.6	1.5	1.7	0.8	2.1	0.7	0.5	1.6	0.3	1.3	1.9
Real wage <i>per</i> employee**	2.7	1.4	1.1	1.5	1.9	2.3	2.3	1.6	0.7	1.9	1.8	2.3	1.5	0.3	1.3	0.3	2.1	2.4
Wage bill, nominal terms	3.1	0.7	0.4	1.7	0.8	1.9	2.1	0.6	2.2	1.8	1.2	2.3	0.8	1.2	1.8	0.9	1.3	1.6
Wage bill, real terms**	2.6	1.3	0.8	1.5	1.7	2.6	2.1	1.6	1.4	2.0	2.2	2.5	1.6	1.0	1.5	0.9	2.0	2.1
(per cent, on corresponding quarter of previous year, non-seasonally adjusted data)																		
Employed persons	-1.7	0.7	-0.1	-0.7	0.3	0.3	0.7	0.1	0.8	0.2	0.2	0.3	0.9	1.5	-1.0	0.6	1.2	0.9
Nominal wage <i>per</i> employee*	12.3	8.6	6.2	6.6	3.5	4.3	7.3	7.3	5.5	5.1	4.2	8.1	4.8	2.5	7.4	3.6	3.8	6.1
Real wage <i>per</i> employee**	9.9	7.4	6.9	7.7	5.4	6.1	8.5	9.2	7.4	5.8	5.2	9.2	5.9	5.0	8.6	4.4	3.0	4.6
Wage bill, nominal terms	9.7	8.0	5.3	5.6	2.9	4.5	7.2	6.9	6.4	5.7	5.6	9.5	6.4	4.6	9.1	5.7	4.8	6.0
Wage bill, real terms**	7.4	6.9	6.0	6.7	4.8	6.3	8.5	8.8	8.3	6.3	6.6	10.6	7.6	7.1	10.3	6.5	4.0	4.5

* The wage is calculated according to NSI data (SNA), with social security contributions paid by the employer deducted from the compensation *per* employee. The difference is divided by the number of employees.

**Data deflated by HICP.

Sources: the NSI – SNA, BNB calculations, Eurostat.

Retail Trade Turnover

(per cent, quarter-on-quarter; seasonally adjusted data at constant prices)

	2013				2014				2015				2016				2017		
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III*
Retail trade, excluding motor vehicles and motorcycles	0.9	4.2	0.1	1.1	7.4	0.8	1.1	0.0	0.3	-0.1	-0.1	0.5	2.2	0.8	1.4	0.8	1.0	0.8	0.3
incl.																			
Food, drinks and tobacco products	-4.6	3.7	3.3	-0.5	19.8	1.3	-1.0	-1.4	0.6	-0.3	-1.1	-0.6	16.6	-3.5	-1.8	1.5	1.5	1.0	0.8
Textile, clothing, footwear and leather	-0.3	7.4	6.0	-2.3	0.0	4.7	3.8	-2.6	-7.4	2.1	-0.3	2.4	7.5	-0.3	-0.8	3.1	4.5	0.6	-4.2
Household appliances, furniture and other household goods	1.6	2.6	2.0	2.0	-0.9	0.7	0.4	2.1	2.4	-0.2	0.4	-1.1	0.4	1.0	-0.3	-0.3	3.2	4.4	0.9
Computer and communication equipment	11.4	-0.8	-2.8	8.5	-3.6	-3.2	-1.3	-0.1	0.7	-0.6	-0.6	-0.7	-12.9	9.6	1.5	5.9	0.0	5.3	2.6
Pharmaceutical and medical goods, cosmetics and toiletries	5.7	5.6	4.5	2.4	3.8	1.0	1.6	3.5	2.6	0.7	1.3	1.7	0.4	1.9	3.6	0.0	3.2	2.8	0.0
Unspecialized shops with different kinds of goods	-4.9	13.5	-3.2	0.6	1.9	2.1	1.4	-2.9	2.0	1.3	-0.5	-1.9	-1.6	0.7	-0.4	0.8	5.0	5.4	2.7
Automobile fuels and lubricants	-4.2	5.6	-5.2	-1.3	5.8	-1.2	9.3	-3.0	5.2	-5.4	-2.9	7.1	-3.9	3.3	-0.5	-3.0	-3.6	-5.0	-1.8

* Data for the third quarter of 2017 relate to the July–August period.

Source: the NSI, short-term business statistics.

Impact of Fiscal Policy on the Economy

Consolidated fiscal programme surplus increased further to reach BGN 2151.5 million (2.2 per cent of projected GDP)⁵⁸ by end-August. Its decrease from the January to August 2016 period was BGN 1165 million, reflecting mainly the lower balance under EU programmes for the first eight months of 2017.⁵⁹

In August the annual rate of change in total budget revenue turned positive (1.2 per cent) as progressively accelerating growth in tax revenue (8.4 per cent) could fully compensate the fall in EU grants (-55.1 per cent) and non-tax revenue remained close to its level of the corresponding period in 2016 (-0.2 per cent). Favourable tax revenue developments reflected the positive trends in the labour market, rising operating surplus of firms and relatively high growth rates of domestic consumption. In August 2017 the annual growth of tax revenue was mainly driven by social security and health insurance contributions which increased by 14.3 per cent as a result of both employment and wage increases and pension contribution changes since early 2017.⁶⁰ Indirect tax growth (5.5 per cent) was similar to the nominal change in private consumption for the half year (4.7 per cent), with buoyant VAT revenue (up 7.6 per cent) offsetting lower growth in excise duties (1.7 per cent). Annual growth in corporate tax revenue (8.0 per cent) and personal income taxes (8.5 per cent) followed the accelerated growth rates in gross operating surplus and compensation *per* employee in the economy.

Total consolidated fiscal programme expenditure rose by 7.3 per cent in August 2017, driven by the increase in all major categories of current expenditure. Increased current expenditure was largely due to the changes in pension and social policy (since 1 January and 1 July 2017) and growth in minimum wage and fund-

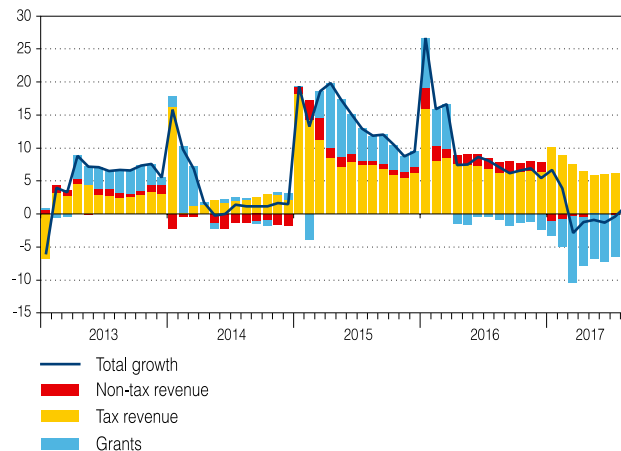
⁵⁸ GDP forecasts of the Ministry of Finance for 2017 based on the autumn macroeconomic forecast for the 2017–2020 period, published in October 2017.

⁵⁹ The balance under EU programmes was BGN 6.7 million in August 2017, from BGN 1403.9 million in August 2016, reflecting largely significant reimbursements of the European Commission to Bulgaria on expenses made at the end of 2015, albeit covering the 2007–2013 programme period, as well as higher EC advance payments in 2016 for the 2014–2020 programme period.

⁶⁰ For further information, see the box *Basic Parameters of the 2017–2019 Budgetary Framework*, Economic Review, 4/2016.

Contribution of Major Groups of Revenue to Growth in Total Revenue and Grants, Cumulatively

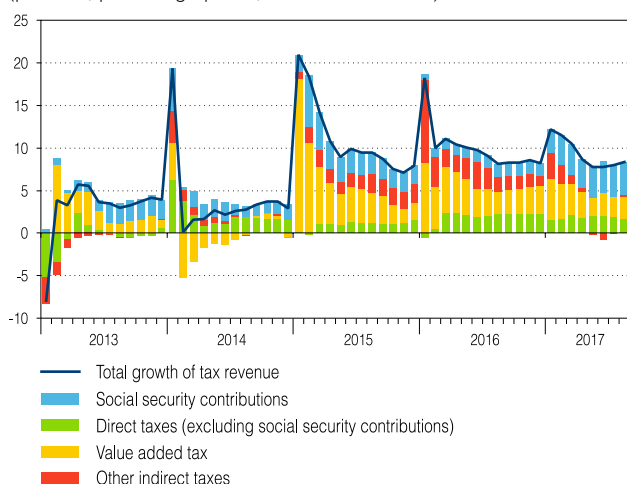
(per cent; percentage points; on an annual basis)



Sources: the MF, BNB calculations.

Contribution of Major Tax Groups to Tax Revenue Growth, Cumulatively

(per cent; percentage points; on an annual basis)



Sources: the MF, BNB calculations.

ing standards for education since early 2017. Personnel costs⁶¹ and operating expenditure grew by 10.1 and 9.4 per cent, jointly contributing 3.3 percentage points to the increase in total budget expenditure. Following the 12.5 per cent increase in the minimum old age pension since 1 July 2017 (from BGN 161.4 to BGN 180) and the 2.4 per cent increase in all other pensions awarded before the end of 2016, growth in social and health insurance payments accelerated to 4.4 per cent, affecting favourably disposable income dynamics.

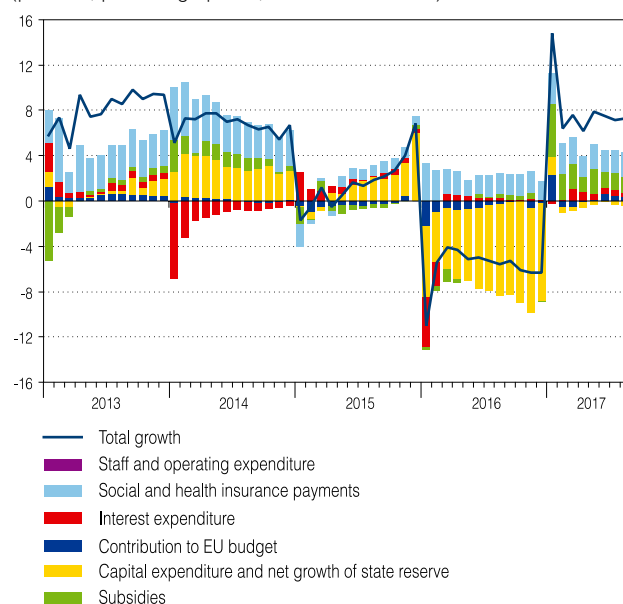
For the first eight months of 2017, capital expenditure under the consolidated fiscal programme declined by 9.6 per cent. Despite its strong year-on-year growth (32.1 per cent), capital expenditure under EU programmes remained at low levels which were not sufficient to compensate the drop in capital expenditure under national budget (-31.2 per cent). Subdued dynamics in capital expenses between January and August shows a negative contribution of public investment to gross capital formation growth.

In the second quarter government consumption had a neutral contribution to the quarterly growth in the previous four quarters. Year on year, government consumption picked up in both real and nominal terms, reflecting the

⁶¹ Including expenditure on wages and social security and health insurance contributions and other remunerations.

Contribution of Major Groups of Expenditure to Total Expenditure Growth, Cumulatively

(per cent; percentage points; on an annual basis)

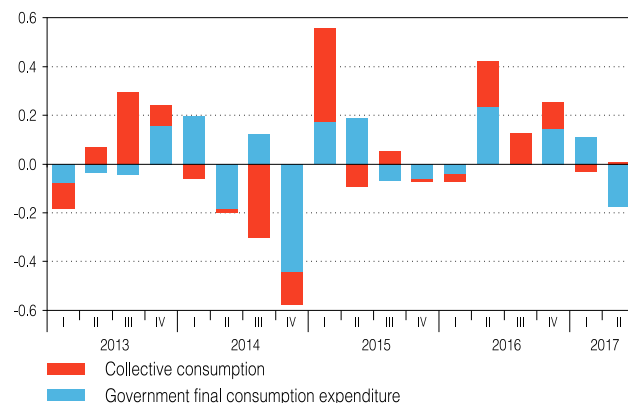


Note: In the January 2016 to August 2017 reports under the Consolidated Fiscal Programme, staff expenditure include wages, social security contributions and other remunerations, while in the reports for previous periods, the latter were included in operating expenditure. Aggregate data on staff expenditure and current expenditure are presented in the chart with a view to avoiding incomparability of data before and after 2016, resulting from the methodological change made. For a separate representation, see the table on page 47.

Sources: MF, BNB calculations.

Contribution of Government Consumption Components to Real GDP Growth

(percentage points, quarter-on-quarter, seasonally adjusted data)



Sources: the NSI, BNB calculations.

Key Budget Indicators Performance for 2016–2017

Consolidated Fiscal Programme	2016 January – August ¹		2017 January – August ¹	
	BGN million	per cent ²	BGN million	per cent ²
Total revenue and grants	23 015	7.1	23 285	1.2
Tax revenue	17 906	8.2	19 403	8.4
incl. social security and health insurance contributions	4 757	5.4	5 439	14.3
Non-tax revenue	2 892	13.7	2 887	-0.2
Grants	2 217	-7.4	995	-55.1
Total expenditure (incl. the contribution to EU budget)	19 698	-5.6	21 133	7.3
Staff ³	4 578		5 040	10.1
Operating expenditure ³	2 099		2 294	9.3
Interest	546	11.1	615	12.7
Social expenditure, scholarships	9 571	4.1	9 987	4.4
Subsidies	1 064	7.7	1 354	27.2
Capital expenditure and government reserve growth	1 303	-56.6	1 236	-5.1
incl. capital expenditure	1 362		1 230	-9.6
Contribution to general budget of the European Union	536	-10.1	607	13.2
	BGN million	difference ⁴ (BGN million)	BGN million	difference ⁴ (BGN million)
Budget balance, on a cash basis	3 317	2 695	2 152	-1 165
Tax revenue under the state budget	2016 January – August ⁵		2017 January – August ⁵	
	BGN million	per cent ²	BGN million	per cent ²
Tax revenue	12 517	8.8	13 302	6.3
Corporate tax	1 298	10.2	1 401	8.0
Income tax for individuals	1 974	8.4	2 141	8.5
Value added tax	5 835	8.3	6 276	7.6
Excise duties	3 164	9.3	3 217	1.7
Customs duties	116	16.7	124	7.2
Insurance premia tax	23	18.6	25	9.2
Other taxes	108	2.7	118	9.6

Note: The difference between the sum of individual components and total sum is due to rounding.

¹ Based on monthly reports on cash-based performance of the Consolidated Fiscal Programme.

² Annual rate of change on the same period of previous year.

³ No annual rates of change for 2016 have been calculated for these expenditure items due to data inconsistencies for 2015 and 2016 or lack of data on relevant indicators for 2015.

⁴ The change of the budget balance in million levs on the corresponding period of the previous year.

⁵ Based on monthly reports on cash-based budget performance.

Source: the MF.

increased expenditure on compensation of employees, operating costs and health insurance payments.

Over the last quarter of 2017 and first quarter of 2018 positive developments in the labour market and strong domestic demand are expected to continue supporting tax revenue dynamics. In addition, budget revenue will be positively affected by already adopted legislative changes providing for an increase in social contributions (by 1 percentage point) and excise duties on cigarettes since January 2018. Reflecting the approved additional increase of wages in the education sector since September and in the minimum pension since October 2017 along

with a subsequent increase in teachers' wages since early 2018 (according to the medium-term budget projection of May 2017), government's expenditure policy is expected to affect positively domestic demand. This is anticipated to occur through both higher disposable income of households and higher government consumption. Fiscal stimuli in the expenditure side of the budget are projected to prevail over the potential negative effects of increased pension contributions and excise duties (since early 2018) on economic activity.

At the end of 2017 we also foresee more pronounced strengthening in government investment due to higher investment under EU projects and national budget. Capital expenditure acceleration in the last months of the year will contribute to the positive growth of total public investment for 2017, though its volume will remain significantly lower than the highest levels achieved in 2014 and 2015. Over the first quarter of 2018 the positive contribution of public investment to the annual growth in total capital formation is likely to be retained, reflecting mainly projections of accelerating absorption of EU funds.

4. INFLATION

Since early 2017 the Harmonised Index of Consumer Prices (HICP) followed an upward trend on an annual basis, and inflation came to 0.7 per cent in August. Higher crude oil and commodity prices on international markets and their direct and indirect effect on domestic prices were the main inflation drivers. In addition, higher import and domestic prices of some agricultural products also made a positive contribution to inflation, reflecting the increase in food prices since the year start. The increase in tobacco excise duty since early 2017 was a factor having a weak inflationary effect. The internal factors related to the sustained long-term trend toward cheaper telecommunication services, air transport and durable goods helped lower inflation.

Reflecting higher food prices and a lower negative contribution of core inflation, domestic inflation is expected to increase in the fourth quarter of 2017 and first quarter of 2018. Goods and services with administratively controlled prices are also expected to make a positive contribution to the overall inflation.

In the first eight months of 2017 a year-on-year increase was observed in the Harmonised Index of Consumer Prices, and inflation came to 0.7 per cent in August (from -0.5 per cent in December 2016).⁶² This upward dynamics was driven by the strong increase in crude oil and commodity prices in international markets and its pass-through to domestic prices of fuels, transport services and some goods and services with administratively controlled prices. Increased prices of imported products and higher production costs in agriculture⁶³ over the first half year contributed to the rise in food prices since early 2017, with this group making a comparatively high positive contribution to the overall inflation. Farmers' higher expenditure on electricity and fuels contributed positively to the increased production costs. Specific factors related to the long-term trend toward cheaper telecommunication services, air transport and durable goods contributed to retaining the downward trend in core inflation. The decrease in telecommunication and transport services was influenced by the enhanced competition in these sectors.

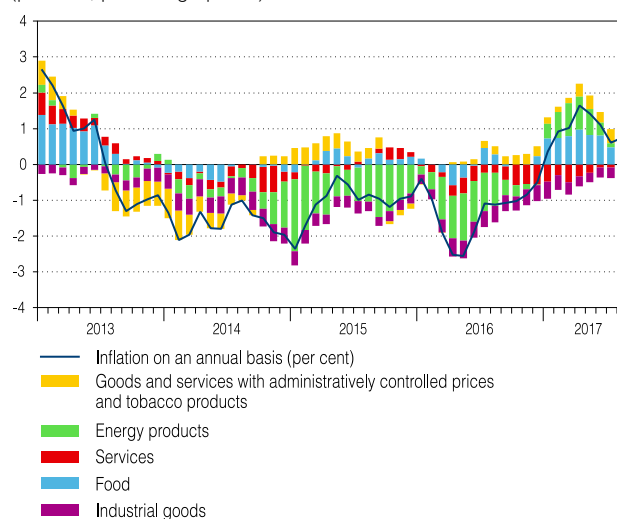
The effect of international fuels, food and commodities prices on inflation may be seen through price developments of goods imported in Bulgaria and their spillover through the supply chain. In the first half of 2017 on average, imports of goods deflator reported growth of 6.7 per cent on an annual basis

⁶² The analysis in this Chapter employs NSI data on HICP.

⁶³ NSI data on price indices of goods and services intended for current consumption in agriculture are used in the analysis.

Annual Inflation and Contributions of Major Commodities and Services Groups to It

(per cent; percentage points)



Notes: This structure corresponds to the Eurostat classification; tobacco products and goods and services with administratively controlled prices are presented separately. The index of goods and services with administratively controlled prices is calculated through the elementary aggregates level in the consumer basket.

Sources: the NSI, BNB calculations.

(against -7.2 per cent on average for 2016),⁶⁴ thereby reversing the 2013–2016 tendency toward cheaper imported goods. This reflects mainly rises in imported prices of fuels,⁶⁵ food⁶⁶ and various types of materials,⁶⁷ as well as some more expensive finished products. Higher imported prices of these goods were rapidly transmitted through the supply chain on domestic producer prices and consequently on consumer goods prices. At the same time, the appreciation of the Bulgarian lev against the currencies of Bulgaria's major trading partners⁶⁸ (by 1.2 per cent on average for the first eight months of 2017) helped partially limit the effect of rising international prices of imported goods on firms' production costs, producer prices and final consumer prices.

Since the year start producer prices in the domestic market largely followed the upward international oil, food and metal price developments.⁶⁹ In the first seven months of 2017 the producer price index (PPI) started to increase on an annual basis at an accelerating pace, reaching 5.9 per cent in August (compared with 0.6 per cent at the end of 2016). The sub-sectoral breakdown shows that the increase in producer prices was driven mainly by manufacturing and production and distribution of electricity and heating sub-sectors.⁷⁰ Higher industrial production prices related to the manufacture of refined petroleum products, metals, food and tobacco products⁷¹ contributed mostly to this. Higher prices of processed petroleum products translated rapidly into final transport fuel prices which led to acceleration in the annual inflation rate of this group to 3 per cent in August (from

⁶⁴ Imports data under the Standard International Trade Classification (SITC).

⁶⁵ This refers to the oil and refined petroleum products group.

⁶⁶ This refers to the food and live animals, and animal and vegetable fats, oils and waxes groups.

⁶⁷ This refers to the inedible (crude) materials (excluding fuels), manufactured goods classified chiefly by materials groups.

⁶⁸ The analysis employs ECB data on the nominal effective exchange rate of the lev against the currencies of 38 major trading partners.

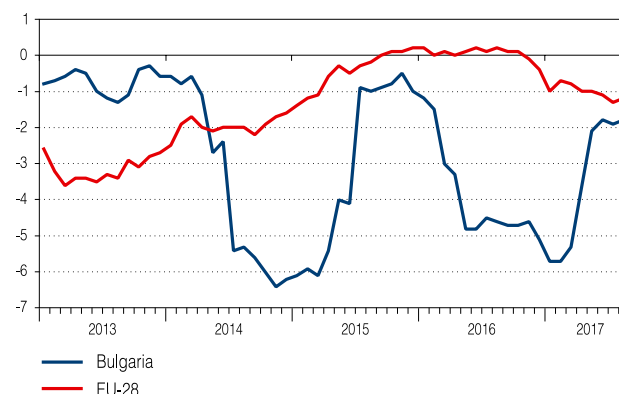
⁶⁹ For more information on commodity price developments, see the Section 'International Commodity Prices' in Chapter 1.

⁷⁰ This refers to the production and distribution of electricity, heating, gaseous fuels.

⁷¹ This refers to the production of coke and refined petroleum products, the manufacture of basic metals and fabricated metal products, except machinery and equipment, and the manufacture of food products, beverages and tobacco groups.

Rate of Change in Telecommunications Prices in Bulgaria and the EU

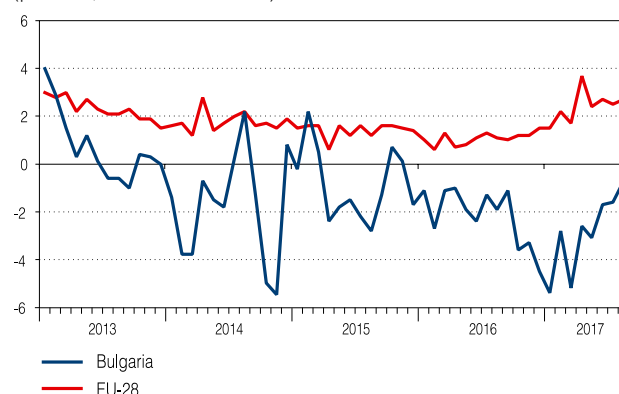
(per cent; on an annual basis)



Source: Eurostat.

Rate of Change in Transport Prices in Bulgaria and the EU

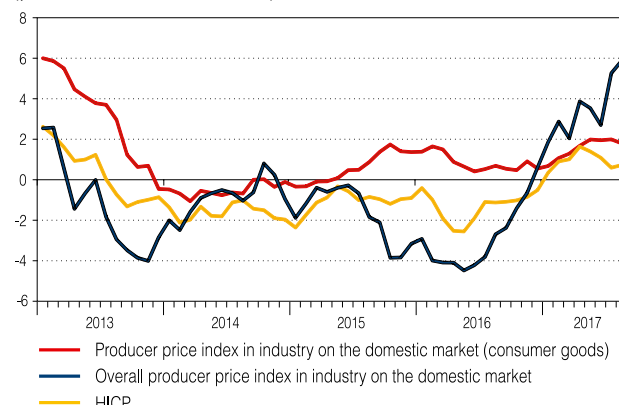
(per cent; on an annual basis)



Source: Eurostat.

Rate of Change in Manufacturing PPI and HICP

(per cent; on an annual basis)



Source: the NSI.

-0.4 per cent at the end of 2016). Higher prices in the sub-sector of production and distribution of electricity, heating and gas⁷² were driven by price rises of alternative fuels in international markets, on the basis of which the EWRC raised the regulated prices of natural gas (since early January, April and July 2017),⁷³ heating and electricity (since early April and July 2017).⁷⁴

According to the end-use classification, the PPI increase in the January to August 2017 period was mainly due to the higher energy and intermediate consumption product prices which (together with labour costs) account for a substantial part of firms' production costs. Retention of the upward trend in these prices over the following months will be a prerequisite for an upward pressure on final consumer prices. In the first eight months producer prices of consumer non-durables and durables in manufacturing increased further. Consumer non-durable price rises were largely due to the increased prices of some food and drinks, tobacco products, and partly clothing. Higher producer prices of food and drinks were swiftly passed on to final consumer prices of processed food which reported year-on-year growth of 2.3 per cent in August (0.5 per cent at the end of 2016).

Between January and August 2017 unprocessed food inflation was characterised by comparatively high volatility, reaching 1.8 per cent in August (1.9 per cent at the end of 2016). Since early 2017 meat and meat product prices have followed a trend toward a gradual increase which corresponded to the upward dynamics in international meat prices.⁷⁵ Higher prices of imported products and increased costs of domestic production were the reasons behind the acceleration of inflation in vegetables and fruit groups. However, the good domestic harvest helped reverse this trend, leading to a negative contribution of these products to unprocessed food inflation in August. This exerted a downward pressure on unprocessed food inflation in the July to August 2017 period.

⁷² This refers to the production and distribution of electricity, heating, and gaseous fuels group.

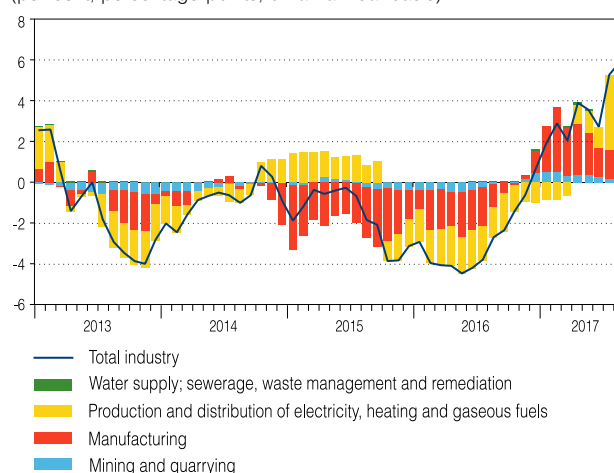
⁷³ For more details, see: <http://old.dker.bg/newsbg.php?n=2846>, <http://old.dker.bg/newsbg.php?n=2869>, <http://old.dker.bg/newsbg.php?n=2790>

⁷⁴ For more details, see: <http://old.dker.bg/newsbg.php?n=2872>, <http://old.dker.bg/newsbg.php?n=2896>

⁷⁵ The analysis employs FAO information on the meat price index in international markets.

Rate of Change in PPI on the Domestic Market and Contribution by Major Sub-sectors

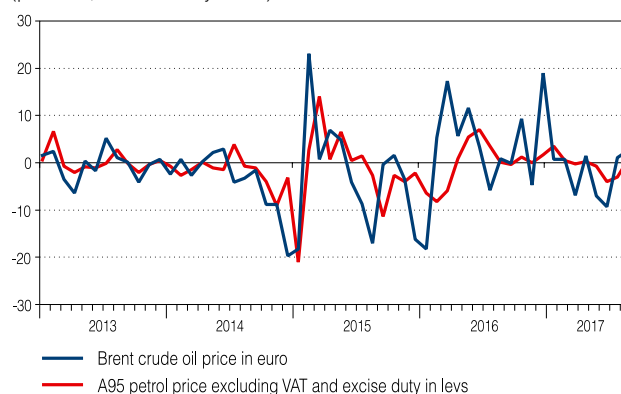
(per cent; percentage points; on an annual basis)



Source: the NSI.

Rate of Change in the Prices of Brent Crude Oil and A95 Petrol

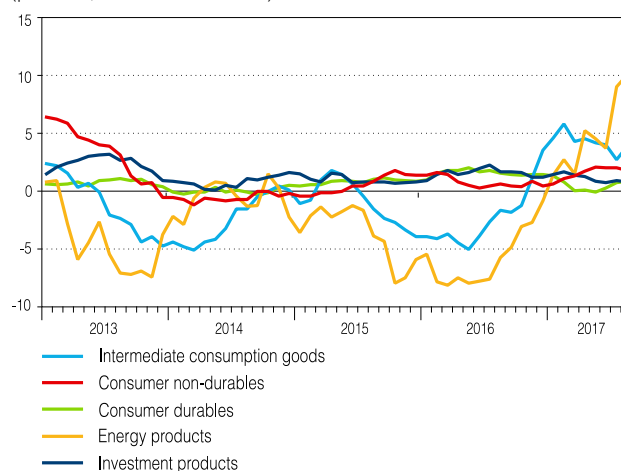
(per cent; on a monthly basis)



Sources: the ECB, the NSI, BNB calculations.

Rate of Change in Producer Prices on the Domestic Market by Major Industrial Groupings

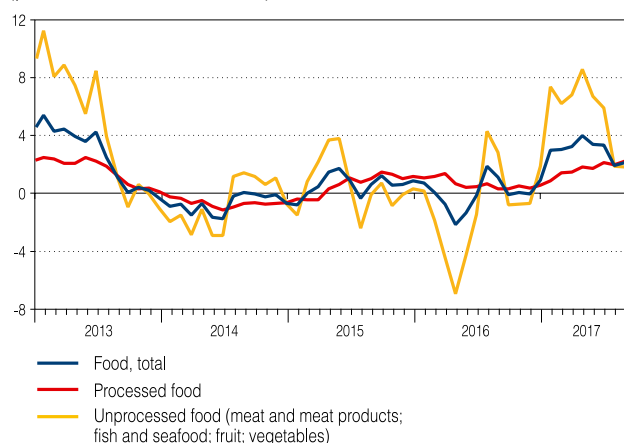
(per cent; on an annual basis)



Source: the NSI.

Rate of Change of Food Price Index

(per cent; on an annual basis)



Sources: the NSI, BNB calculations.

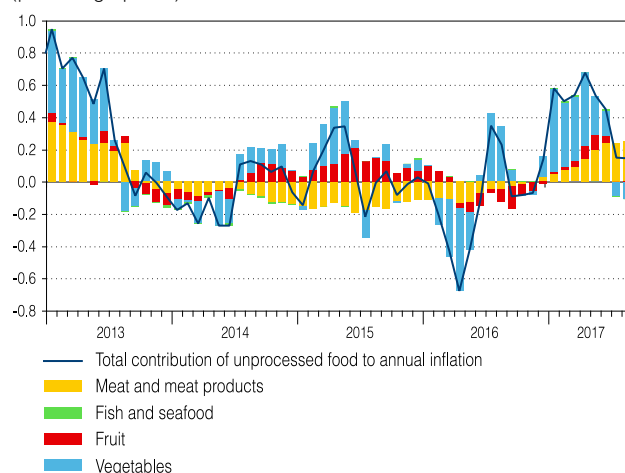
The slight increase in producer prices of durables and non-durables observed in the first eight months had no material effect on final consumer prices of non-food goods. Inflation in this group was negative at -1.6 per cent in August (from -1.9 per cent by end-2016). The deflationary trend in durable goods prices was due primarily to the continuing price falls in used cars. From the start of the year, the negative contribution of other durables (excluding automobiles), most of them imported, significantly declined in consistency with price rises in imported finished products over the second quarter of 2017. Non-durable goods had a low negative contribution to the overall inflation in the first eight months of the year, reflecting largely lower prices of clothing and footwear.

In the first eight months core inflation (measuring price changes in services and non-food goods) remained negative, though tending to decelerate: -0.8 per cent on an annual basis in August (-2.1 per cent at the end of 2016). Moderation of price declines in core HICP components reflected the slowdown in services deflation since the beginning of 2017.

In August deflation in services (excluding those with administratively controlled prices) declined to -0.1 per cent (-2.1 per cent at the close of 2016). Decreased telecommunications and air transport prices amid the strong price competition in these sectors continued exerting downward pressures on services prices. Concurrently, low positive inflation was recorded in catering prices, tending to gradually increase under the influence of rising food prices.

Contribution of Major Sub-groups of Unprocessed Food to Overall Inflation

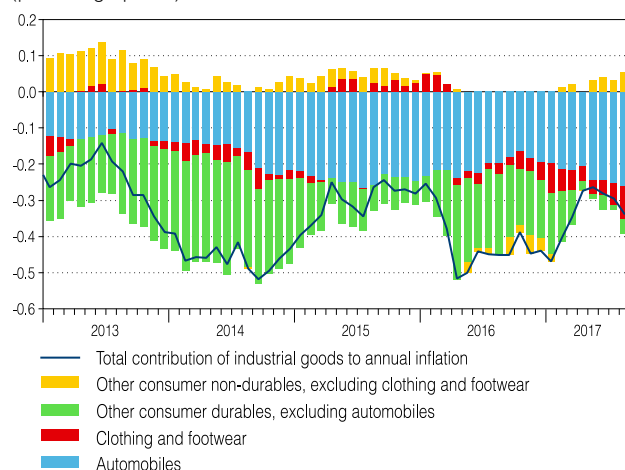
(percentage points)



Sources: the NSI, BNB calculations.

Contribution of Non-food Goods (Excluding Energy Products) and Major Goods Sub-groups to Overall Inflation

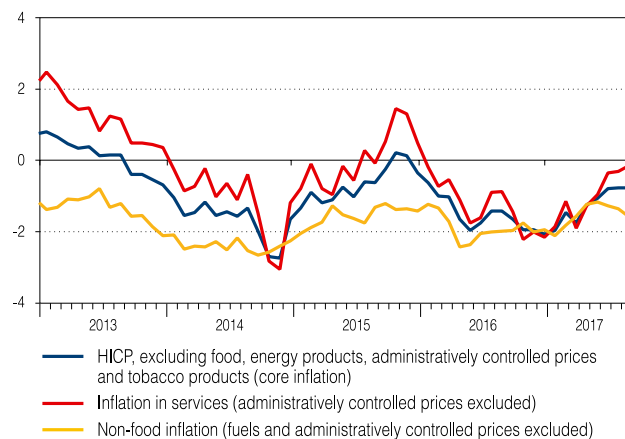
(percentage points)



Sources: the NSI, BNB calculations.

Core Inflation

(per cent; on an annual basis)



Sources: the NSI, BNB calculations.

In the first eight months of 2017 administratively controlled prices continued to increase on an annual basis. Between January and August the positive contribution of tobacco prices to annual inflation was sustained, reflecting the increased excise duty on cigarettes since early 2017.⁷⁶ Rises in regulated prices of natural gas, heating and electricity which are indirectly affected by international oil prices appeared to be another contributing factor for inflation acceleration in the group of goods and services with administratively controlled prices.

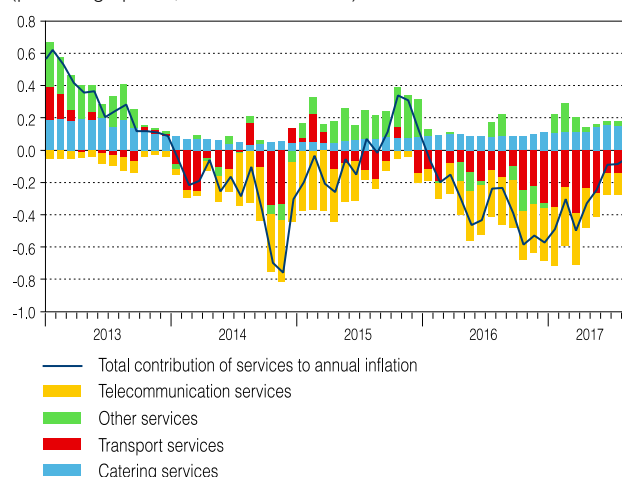
In the first eight months of 2017 the number of goods and services with rising prices went up and that of groups with more than 2 per cent price growth also increased, while the share of goods and services groups with falling prices on an annual basis decreased to 25.8 per cent compared with 38.7 per cent at the end of 2016. Diffusion index structure indicates that consumer prices are likely to continue rising in the following months.

According to the NSI business survey, in September most managers in industry (93.2 per cent), services (92.9 per cent) and retail trade (92.8 per cent) expect selling prices to remain stable over the coming three months. However, the balance of opinions in the three sectors was positive from the beginning of 2017, reflecting the larger share of managers expecting price rises as compared with those expecting price declines. As regards selling prices in the coming months, managers' sentiment in September corresponded to early 2017 price increases in intermediate consumption goods, energy products and some administratively controlled prices. According to the NSI business surveys, potential factors limiting firms' activities and affecting price-setting decisions in the first nine months of 2017 relate to the uncertain economic environment and competition, though the view of respondents indicates a downward trend in the negative effect of the former factor. In September 2017 the share of managers in industry and services, outlining insufficient demand as an obstacle to their business activity, decreased on end-2016, staying lower than the historical average value. Concurrently, in the retail trade

⁷⁶ From the beginning of 2017, the *ad-volarem* excise duty on cigarettes was raised from 25 to 27 per cent along with the minimum amount of the overall excise duty (specific and *ad-volarem*) from BGN 161 to BGN 168 per 1000 cigarettes.

Contribution of Services and Major Services Sub-groups to Overall Inflation

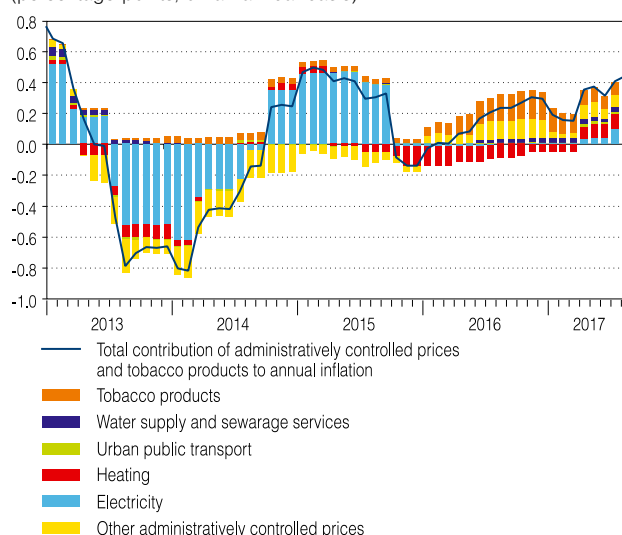
(percentage points; on an annual basis)



Sources: the NSI, BNB calculations.

Contribution of Major Sub-groups of Goods with Administratively Controlled Prices and Tobacco Products to Overall Inflation

(percentage points; on an annual basis)



Sources: the NSI, BNB calculations.

sector, which is the closest to end-users in the supply chain, a slight increase was reported in the share of managers pointing to insufficient demand as a factor limiting their activity.

In the fourth quarter of 2017 and first quarter of 2018 inflation is expected to remain positive, tending to increase above the current level, which will be driven by the positive food contribution and declining negative contribution of core inflation. It is expected that administratively controlled prices will make a further positive contribution to overall inflation, reflecting both the projected increase in excise duty on tobacco products since early 2018 and regulated price rises in natural gas, heating, electricity and some utility services since early April and July 2017.

Negative core inflation is projected to continue slowing down, its rate turning positive in the first quarter of 2018, which will reflect the exhausted effect of cheaper transport and telecommunication services. Projected increases in international food prices and sustained consumer demand growth will drive the price rise in catering and other services (excluding telecommunications and transport).

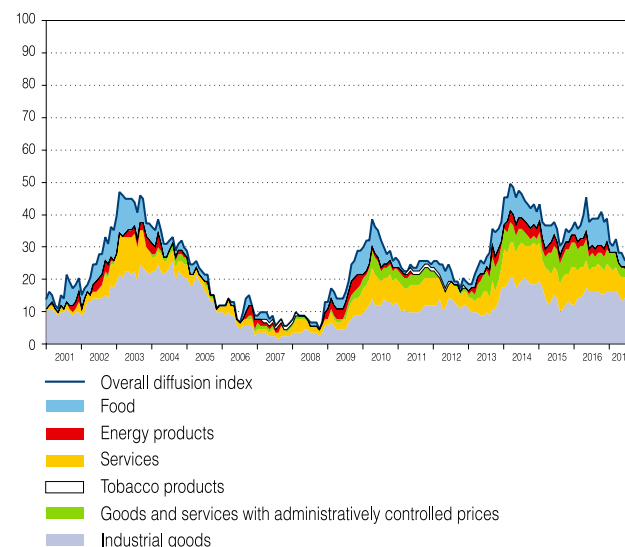
Risks to the projection are assessed as balanced. The main factors likely to affect inflation involve global crude oil and commodity price developments and the effect of their pass-through into domestic goods and services prices which are indirectly influenced by fuel prices. The 7.3 per cent reduction in regulated gas prices⁷⁷ since October 2017, as announced by the Energy and Water Regulatory Commission, will be a precondition for achieving lower than projected inflation. Additional uncertainty to the projection emerges from the possible pass-through of lower gas prices into the prices of other goods and services of the consumer basket.

In the second quarter of 2017 the house price index continued to increase on an annual basis to 8.6 per cent (from 8.1 per cent at the end of 2016), driven by price rises in both new and existing dwellings. Across geographical regions, similar dynamics was observed, with higher house prices reported in the six largest cities in

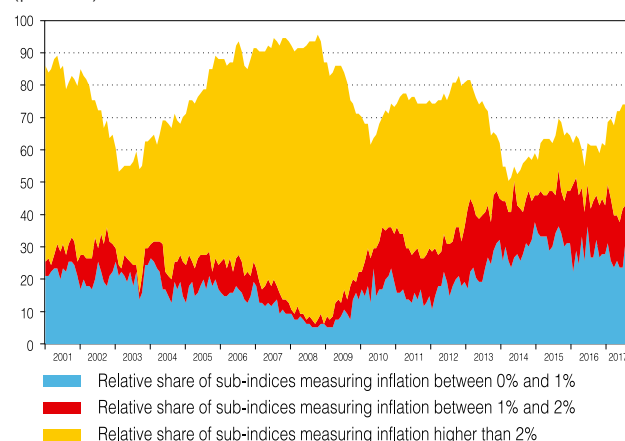
⁷⁷ <http://www.dker.bg/news/98/65/kevr-utvrđi-tsenata-na-prirodnaya-gaz-za-V-to-trimesechie-na-2017-g.html>

Diffusion Index of Major Goods and Services Groups

a) relative shares of declining HICP sub-indices on an annual basis (per cent)



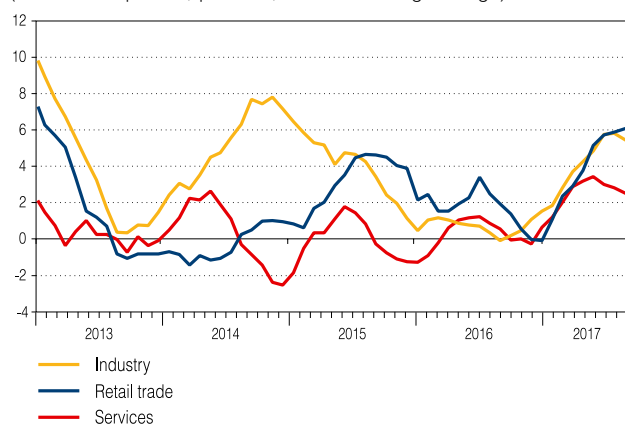
b) relative shares of increasing HICP sub-indices on an annual basis (per cent)



Note: Data on the HICP 4-digit level sub-indices (sub-classes according to the NSI methodology) have been used. The diffusion index shows the share of sub-indices reporting a change in value on an annual basis. When calculating the relative shares, the weight of the relevant sub-indices in the consumer basket is not taken into account. Sources: the NSI, BNB calculations.

Selling Prices Expectations in Industry, Retail Trade and Services over the Next Three Months

(balance of opinions, per cent, 6-month moving average)



Source: the NSI.

Bulgaria. In the second quarter of 2017, however, house prices remained still some 25 per cent lower than the maximum values recorded in the third quarter of 2008.

The upward dynamics of house prices corresponded to the increase in disposable income of households driven by favourable labour market developments. High household savings rates and continued downward trends in interest rates on new fixed-term deposits were the reasons behind enhanced household demand for housing. In the second quarter of 2017 the annual percentage rate of charge (APRC) on new mortgage loans declined further, reaching 4.4 per cent (from 5.4 per cent at the end of 2016).⁷⁸ Banks' policy towards easing household credit standards and conditions acted in the same direction.⁷⁹

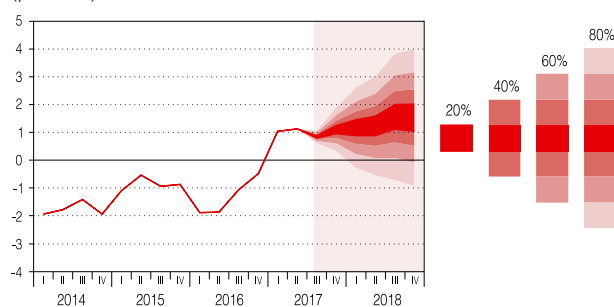
In addition, house price dynamics was influenced by the behaviour of firms in the construction sector. In the second quarter of 2017 real value added in this sector reported year-on-year growth of 10.8 per cent (against a fall of 6.8 per cent for 2016). The continued increase in house prices at rates higher than those of the firms' construction cost index is likely to result in a further increase of economic activity in this sector and higher supply of new dwellings, which will have a dampening effect on house price dynamics. An indication of that is the higher number of new residential building permits issued over the first half of 2017.

⁷⁸ Values indicating APRC on housing loans to households are averages weighted by the relevant volumes of new loans for a 12-month period.

⁷⁹ For further details, see the Monetary and Credit Aggregates Section in Chapter 2.

Fan Chart of the Expected Annual Rate of Change in Inflation at the End of the Corresponding Period

(per cent)

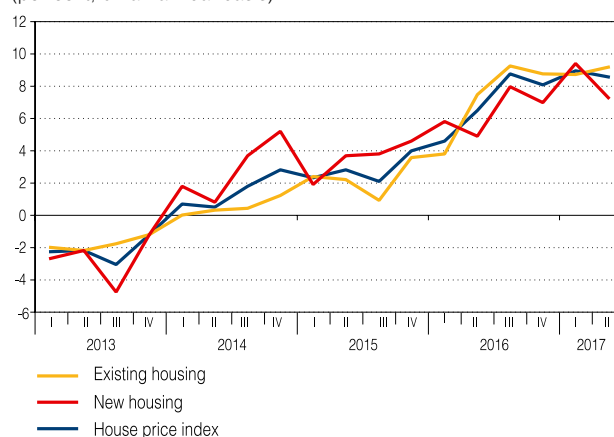


Note: The fan chart shows the expert views of the forecasters on the uncertainty surrounding the projected value based on a probability distribution. The middle band of the chart, depicted in the darkest colour, includes the central projection and the probability distribution shows 20 per cent probability for the actual value to fall in this band in each of the quarters. If neighbouring bands (in the same brighter colour) are added to the middle band, there would be a 40 per cent coverage of the probability mass. Thus, by adding each same colour couple of bands, the probability for the value to fall there would be increased by 20 percentage points to reach 80 per cent. The probability for the value to remain outside the coloured part of the chart is 20 per cent based on the distribution chosen.

Source: the BNB.

Rate of Change of House Price Index

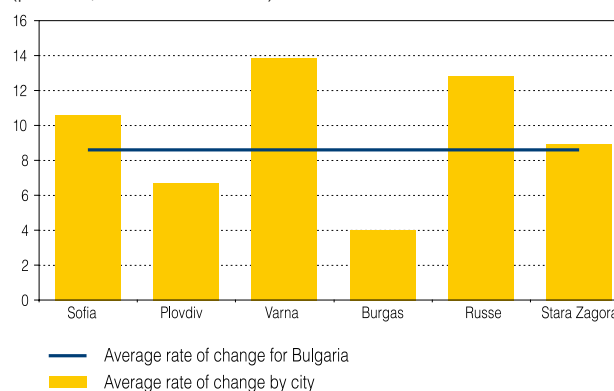
(per cent; on an annual basis)



Source: the NSI.

Rate of Change of the House Price Index in Cities with More than 120,000 Citizens in the Second Quarter of 2017

(per cent; on an annual basis)



Source: the NSI.

Key Indicators of Housing Market Developments in Bulgaria

(per cent; year-on-year change)

Indicators	2013	2014	2015	2016	2016		2017	
					III	IV	I	II
Prices								
House Price Index, total	-2.2	1.4	2.8	7.0	8.8	8.1	9.0	8.6
New dwellings	-2.7	2.8	3.5	6.4	8.0	7.0	9.4	7.3
Existing dwellings	-1.8	0.5	2.3	7.3	9.3	8.8	8.7	9.2
Inflation (HICP)	0.4	-1.6	-1.1	-1.3	-1.1	-0.8	0.8	1.4
House rentals, paid by tenants (HICP)	0.5	0.2	0.7	0.6	0.7	0.8	1.0	1.0
Lending								
New housing loans	6.0	9.7	39.7	18.9	18.5	38.9	45.6	49.1
Annual percentage rate of charge on new housing loans (per cent, at the end of the period)	7.9	7.4	6.4	5.4	5.4	5.0	4.7	4.4
Housing loans (outstanding amounts)	-0.2	-0.1	-1.8	0.5	0.9	1.4	2.4	4.4
Construction and investment								
Permits issued for the construction of new residential buildings (built area, square meters)	12.0	27.7	13.0	4.8	-2.9	15.1	17.0	29.2
Value added in construction (at average annual prices for 2010)	1.3	-3.1	2.8	-2.5	-0.1	-10.7	1.2	10.8
Constriction Production Index, building construction	-1.6	0.4	8.4	-16.5	-15.3	-13.1	5.9	14.2
Fixed investment; residential buildings	-4.0	-3.3	-10.3	-6.2	-9.1	-9.6	-1.1	0.5
New Buildings Construction Cost Index	1.7	1.0	1.3	1.5	1.6	0.8	1.9	2.0

Note: Values indicating APRC on housing loans to households are averages weighted by the relevant volumes of new loans for a 12-month period.

Sources: the NSI, the BNB, Eurostat.

Growth Rates of Major Goods and Services Groups Prices and Contributions of These Groups to Inflation

	Inflation accumulated as of August 2016 (December 2015 = 100)		Inflation accumulated as of August 2017 (December 2016 = 100)		Annual rate of inflation as of August 2017 (August 2016 = 100)	
Inflation (per cent)	-0.3		0.9		0.7	
	inflation rate by group (per cent)	contribution (percentage points)	inflation rate by group (per cent)	contribution (percentage points)	inflation rate by group (per cent)	contribution (percentage points)
Food	0.5	0.13	1.7	0.42	2.1	0.51
Processed food	0.1	0.02	1.8	0.30	2.3	0.37
Unprocessed food	1.5	0.11	1.5	0.12	1.8	0.14
Services	0.0	0.00	2.0	0.53	-0.1	-0.04
Catering services	1.0	0.06	1.7	0.10	2.6	0.16
Transport services	-3.1	-0.12	2.7	0.10	-2.9	-0.10
Telecommunication services	-4.8	-0.26	-1.1	-0.06	-2.5	-0.13
Other services	2.7	0.31	3.4	0.38	0.4	0.04
Energy products	-3.3	-0.19	-0.3	-0.02	3.0	0.17
Transport fuels	-3.7	-0.19	-0.4	-0.03	3.0	0.14
Industrial goods	-2.1	-0.49	-1.8	-0.38	-1.6	-0.34
Goods and services with administratively controlled prices*	0.5	0.09	1.9	0.32	2.0	0.33
Tobacco products	3.4	0.16	1.6	0.08	2.1	0.10

* The index of goods and services with administratively controlled prices is calculated through weighting the relevant elementary aggregates in the consumer basket.

Sources: the NSI, BNB calculations.

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