

BULGARIAN NATIONAL BANK



ECONOMIC REVIEW

1/2018



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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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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 PMI dynamics suggests that global economic activity continued to increase in the first quarter of 2018. In the first months of 2018, the 2017 trend towards an acceleration of annual growth rate of world trade was preserved with the strongest growth observed again in foreign trade flows of Asian emerging markets and Eastern European countries.

The increased global economic activity coupled with the effect of measures to limit the production of certain raw materials contributed to the year-on-year increase in petroleum products and metal prices on international markets. Lower oil supply continues to be driven by the agreement on production cuts between OPEC and other major oil producers until the end of 2018 while the negative impact on the supply of certain basic metals was sustained as a result of China's measures to reduce air pollution. Commodity price increases passed onto consumer prices and the global inflation reached 2.2 on an annual basis in February. Higher growth of consumer prices continues to be observed in developing countries.

In line with the global economic activity improvement, external demand for Bulgarian goods and services is expected to grow further at high rates in the second and third quarter of 2018. Over the same period international prices in euro of energy products are anticipated to rise while the non-energy product prices are expected to decline on an annual basis. Given the larger share of petroleum products in goods imports of Bulgaria compared to that in goods exports, developments of international commodity group prices are expected to worsen the terms of trade in Bulgaria over the projection horizon.

In 2017 the positive balance of BOP current and capital accounts expanded from 2016, reflecting the increased surpluses on services trade and net secondary income and a significant drop in net primary income deficit. The trade deficit increase and lower capital transfers under EU programmes limited growth in the positive overall balance on current and capital accounts. In the second and third quarters of 2018 the annual current account surplus is expected to decrease as a share of GDP, reflecting rising deficits on trade balance and net primary income. The positive capital account balance as a share of GDP is projected to pick up as a result of increased inflows of EU funds thanks to their better absorption.

In the beginning of 2018 broad money growth remained relatively high, with non-government sector's deposits again accounting for a major portion of total funds attracted by banks. Bank loans to the non-government sector tended to accelerate gradually, with the annual growth rate of household loans exceeding further that of credit to non-financial corporations in February 2018. Comparatively strong growth in deposits and ample banking system liquidity continued to be among the main factors holding down interest rates.

If the projected economic activity growth for the second and third quarters materialises, non-government sector's deposits are expected to slightly accelerate their growth rate. Our expectations show also a moderate growth increase in credit to non-financial corporations and households. In the second and third quarters of 2018 new time deposit and lending rates are expected to stay close to their current levels.

In the fourth quarter of 2017 real GDP increased by 0.7 per cent on a quarterly basis. Private consumption made the main positive contribution to growth. Government consumption and gross fixed capital formation also contributed positively to growth while the contribution of net exports was negative due to a stronger increase in imports of goods and services than in exports.

In the fourth quarter of 2017 quarter-on-quarter employment increased with the total number of employed in the economy rising by 0.4 per cent while unemployment continued to fall reaching

5.8 per cent (5.6 per cent according to non-seasonally adjusted data). The nominal compensation *per* employee continued to increase over the quarter at a rate close to the average annual rate, with all economic sectors contributing to this growth.

Positive developments in short-term economic indicators continued in the fourth quarter of 2017 and in early 2018, suggesting further improvement in the economic environment. Employment growth, increasing external and internal demand for goods and services and still low interest rates are expected to favour growth in both private consumption and investment activity of corporations. These factors are expected to add to the gradual acceleration of real GDP growth both annually and quarterly in the second and third quarters of 2018, with domestic demand contributing most to this effect. Risks to growth in terms of external environment are assessed as balanced. The possibility private consumption to grow faster than projected may result in higher than expected real economic growth.

Over the first three months of 2018 the annual inflation slightly accelerated compared with 2017, reaching 1.9 per cent in March. This was attributable to the increasing effect of domestic factors on consumer price dynamics. A trend towards a gradual acceleration of inflation in services which occurred at the close of the previous year, was sustained and this group had the largest positive contribution to overall inflation in March 2018. Goods and services with administratively controlled prices (including tobacco products) were another group which made a relatively large contribution to annual inflation in the beginning of the year. Energy products and food had a low positive contribution to inflation compared with 2017 given the slow increase in euro prices of petroleum and a decline in euro prices of food in international markets.

In the second and third quarters of 2018 inflation is expected to pick up gradually driven mainly by the positive contribution of core inflation and administratively controlled prices.

1. EXTERNAL ENVIRONMENT

Global PMI dynamics suggests that global economic activity continued to increase in the first quarter of 2018. In the first months of 2018, the 2017 trend towards an acceleration of annual growth rate of world trade was preserved with the strongest growth observed again in foreign trade flows of Asian emerging markets and Eastern European countries.

The increased global economic activity coupled with the effect of measures to limit the production of certain raw materials contributed to the year-on-year increase in petroleum products and metal prices on international markets. Lower oil supply continues to be driven by the agreement on production cuts between OPEC and other major oil producers until the end of 2018 while the negative impact on the supply of certain basic metals was sustained as a result of China's measures to reduce air pollution. Commodity price increases passed onto consumer prices and the global inflation reached 2.2 per cent on an annual basis in February. Higher growth of consumer prices continues to be observed in developing countries.

In line with the global economic activity improvement, external demand for Bulgarian goods and services is expected to grow further at high rates in the second and third quarter of 2018. Over the same period international prices in euro of energy products are anticipated to rise while the non-energy product prices are expected to decline on an annual basis. Given the larger share of petroleum products in goods imports of Bulgaria compared to that in goods exports, developments of international commodity group prices are expected to worsen the terms of trade in Bulgaria over the projection horizon.

Current Business Situation

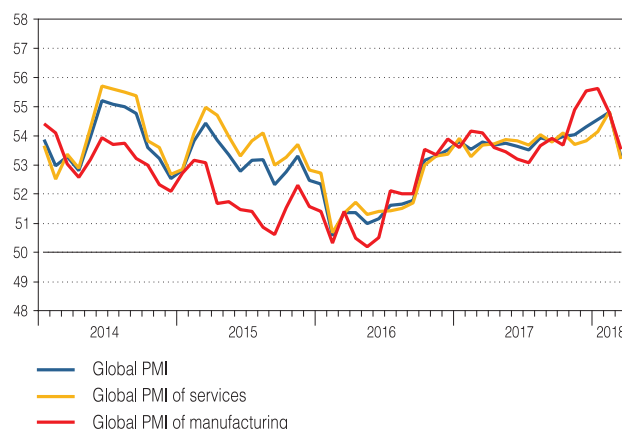
In the first quarter of 2018 the average value of the global economic indicator (global PMI) remained very close to the average value for the last quarter of 2017. In January and February 2018 global PMI increased, while in March it decreased, reflecting the fall in both the manufacturing index and the services index. Despite the broad-based decline in the global index in March the global PMI remained significantly over the neutral limit of 50, signalling a further increase in the global economic activity.

The world trade volume increased strongly¹ in 2017 compared with the previous year, with foreign trade growth accelerating in both developed and developing economies. The world trade continued to increase on an annual basis in early 2018. Growth in January was mainly due to developing countries, with the strongest annual increase reported in Asian emerging markets and Eastern European countries.² The euro area and Japan posted the strongest

¹ CPB Netherlands Bureau for Economic Policy Analysis data as of 22 March 2018.

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

Global PMIs



Source: JP Morgan.

annual growth in foreign trade flows of developed economies.

From the beginning of 2018 global inflation remained close to the end-2017 level, reaching 2.2 per cent on an annual basis in February.³ Higher growth in consumer prices was reported in developing countries compared with developed economies, reflecting the continuous year-on-year increase in prices of petroleum products and metals on international markets.

Given the developments in the global economic situation, in April 2018 the International Monetary Fund (IMF) revised upwards its October 2017 projections of global economic growth in 2018. IMF expectations show that global economic growth will accelerate from 3.8 per cent in 2017 to 3.9 per cent in 2018.⁴ Improved global growth prospects for 2018 compared with the IMF October prospects are entirely attributable to developed economies, while the October 2017 expectations for the economic activity in developing countries remained unchanged.

In line with the improved global economic activity, external demand for Bulgarian goods and services is expected to continue to grow at high rates in the second and third quarters of 2018.

International prices of energy goods are expected to increase in both dollars⁵ and euro in the second and third quarters of 2018 compared with the corresponding period of 2017. Concurrently, year-on-year international prices of non-energy products will decrease in euro despite the projected increase in US dollars due to the appreciation of the euro against the US dollar.⁶ Given the larger share of petroleum products in Bulgaria's imports of goods compared to that in exports of goods, developments of international commodity group prices are expected to worsen the terms of trade in Bulgaria over the projection horizon.

³ Based on World Bank data as of 12 April 2018.

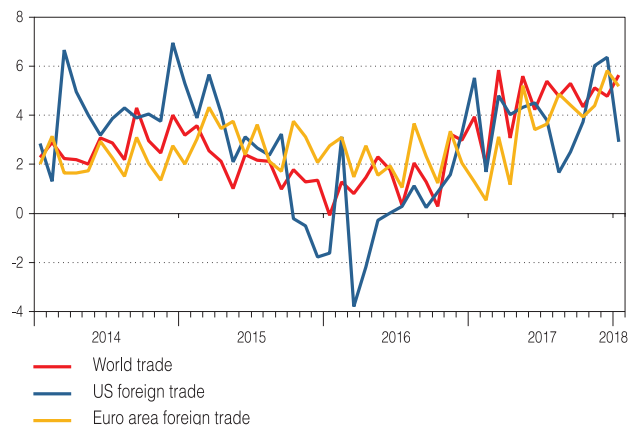
⁴ IMF data: World Economic Outlook, April 2018.

⁵ Hereinafter referred to as the US dollar.

⁶ The forecast of prices in euro is based on technical assumptions about the exchange rate of the euro to the US dollar. It is fixed at the average value for the last ten days on 12 March 2018, the date when the assumptions were made. In line with this technical assumption, the exchange rate of the euro to the US dollar will increase in the first and second quarters of 2018 compared with the corresponding periods of the previous year.

World Trade and Foreign Trade in Selected Regions

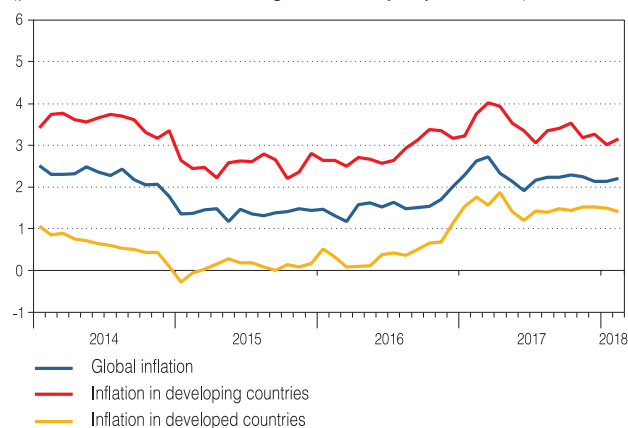
(annual rate of volume growth, per cent)



Source: CPB Netherlands Bureau for Economic Policy Analysis.

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.

Euro area

Annual real GDP growth in the euro area accelerated to 2.3 per cent in 2017 compared with 1.8 per cent in 2016.

The euro area real GDP grew by 0.6 per cent on a quarterly basis in the fourth quarter of 2017, after 0.7 per cent in the third quarter. Economic activity increased in all euro area countries, with growth in Germany, France, Italy and Spain amounting to 0.6, 0.7, 0.3 and 0.7 per cent, respectively. All GDP components contributed positively to economic growth with the exception of the change in inventories whose contribution was -0.2 percentage points.

In the first quarter of 2018 euro area leading economic indicators, including PMIs and EC indices, decreased but remained at relatively high levels signalling that economic growth will be close to that reported in the previous quarter.

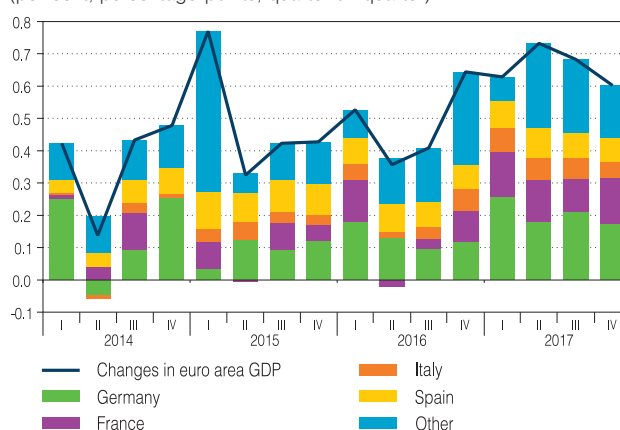
Labour market indicators continued to improve slowly, with the unemployment rate in the euro area going down to 8.5 per cent in February 2018. The indicator of the expected unemployment rate over the next twelve months included in the EC consumer confidence index showed an improvement in consumer expectations about labour market developments.

In 2017 euro area inflation increased to 1.5 per cent against 0.2 per cent in 2016. Despite the sustainable economic growth and improved labour market, euro area inflation remained at relatively low levels in the first months of 2018. In February the annual change of the HICP was 1.1 per cent, from 1.3 per cent in January, and according to Eurostat's preliminary estimate, the annual inflation rate in March was 1.5 per cent.

In March the ECB revised its forecast for euro area real GDP growth upwards to 2.4 per cent, from 2.3 per cent for 2018, leaving its growth expectations for 2019 and 2020 unchanged. According to the ECB, risks to the outlook for euro area economic growth are balanced, while risks to lower than expected growth are mainly associated with global factors, *i.e.* higher protectionist pressures and developments in foreign exchange and other financial markets.

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

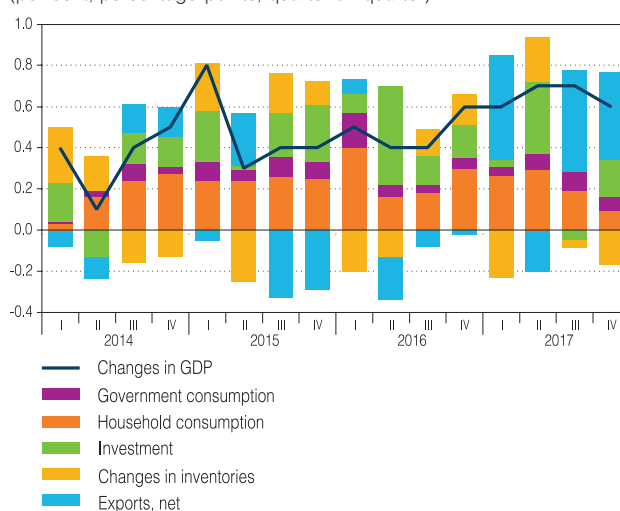
(per cent; percentage points; quarter-on-quarter)



Sources: Eurostat and BNB calculations.

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

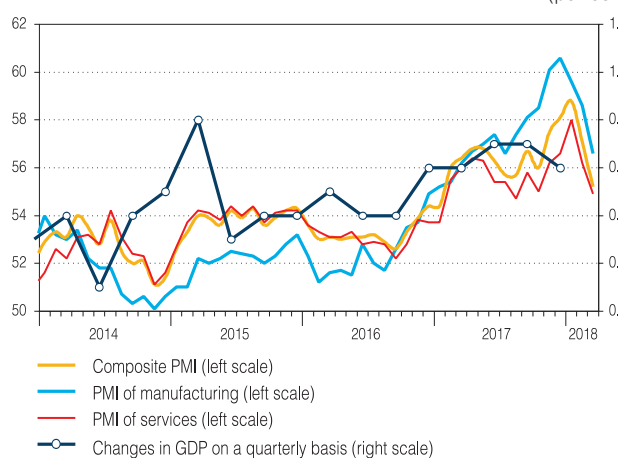
(per cent; percentage points; quarter-on-quarter)



Source: Eurostat.

GDP Change and Manufacturing and Services PMIs in the Euro Area

(per cent)



Sources: Eurostat, Markit .

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

(per cent)

Institution	Date of release	2018		2019		2020	
		latest	previous	latest	previous	latest	previous
the ECB	III.2018	2.4	2.3	1.9	1.9	1.7	1.7
EC	II.2018	2.3	2.1	2.0	1.9	-	-

Sources: the ECB, the EC.

Projections of Euro Area Annual Inflation Rate

(per cent)

Institution	Date of release	2018		2019		2020	
		latest	previous	latest	previous	latest	previous
the ECB	III.2018	1.4	1.4	1.4	1.5	1.7	1.7
EC	II.2018	1.5	1.4	1.6	1.6	-	-

Sources: the ECB, the EC.

ECB euro area inflation forecasts for 2018 and 2020 remained unchanged, while those for 2019 was revised downwards from 1.5 to 1.4 per cent. The lower contribution of the HICP energy component to inflation in 2018 and 2019 is expected to be offset by the accelerated rate of core inflation.

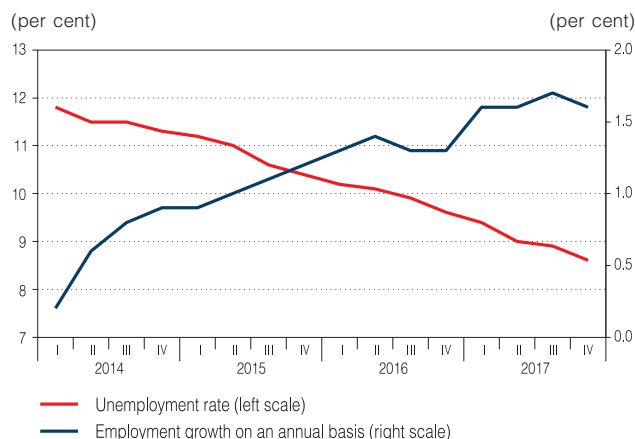
At its monetary policy meeting of 8 March 2018, the ECB left unchanged key interest rates but changed the forward guidance on the implementation of the extended Asset Purchase Programme (APP) by removing the opportunity to increase the amount of purchases under the programme in the future.

As of 6 April 2018 the cumulative amount of purchases under the APP totalled EUR 2379.1 billion, of which EUR 1953.5 billion under the Public Sector Purchase Programme (PSP), EUR 250.0 billion under the Covered Bond Purchase Programme 3 (CBPP3), EUR 26.2 billion under the Asset-backed Securities Purchase Programme (ABSPP) and EUR 149.5 billion under the Corporate Sector Purchase Programme (CSPP). As a result of continuing APP purchases, on 6 April 2018 the excess liquidity in the euro area banking system increased to EUR 1864.6 billion, from EUR 1779.1 billion by end-December 2017, the Eurosystem balance sheet figure reaching EUR 4.531 trillion.

The average value of EONIA rate came to -0.36 per cent for the 2 January to 6 April 2018 period, from -0.35 per cent in the fourth

Euro Area Unemployment Rate and Employment Growth

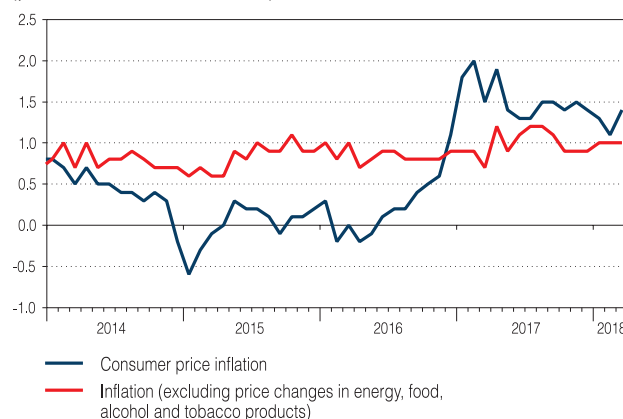
(per cent)



Source: Eurostat.

Euro Area Inflation Rate

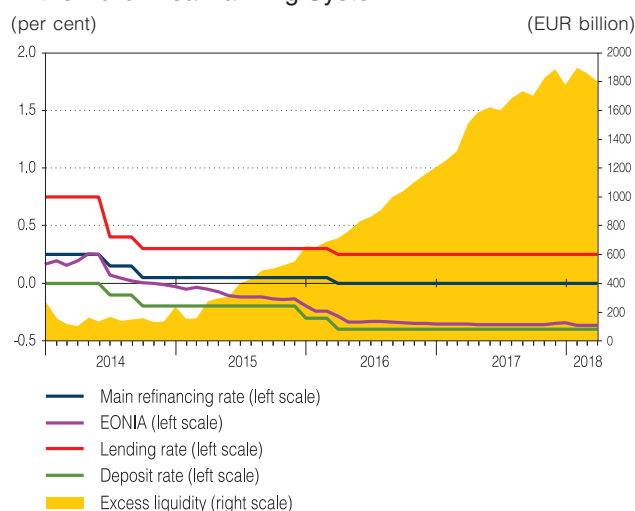
(per cent, on an annual basis)



Source: Eurostat.

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

(per cent)



Note: Average EONIA values for the month.

Source: the ECB.

quarter of 2017. The trade volume of overnight deposits on the interbank market in the euro area slightly decreased, with its daily average coming to EUR 5.0 billion for the 2 January to 6 April 2018 period (EUR 5.7 billion for the fourth quarter of 2017). EURIBOR rates remained unchanged in most maturity sectors. On 6 April 2018 one-month (-0.37 per cent) and six-months interest rates (-0.27 per cent) remained at their end-December 2017 levels, while twelve-month rates fell to -0.19 per cent (-1 basis points from end-December 2017).

United States

In 2017 the rate of US annual real GDP growth accelerated to 2.3 per cent, from 1.5 per cent in 2016.

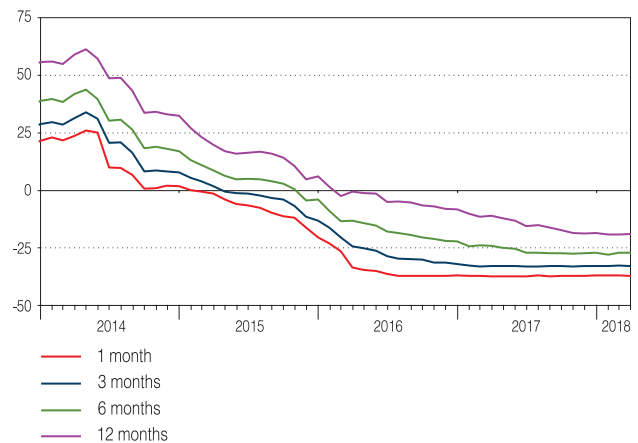
In the fourth quarter of 2017 real GDP growth in the USA decreased to 0.7 per cent on a quarterly basis, from 0.8 per cent in the third quarter. The slightly decelerating growth rate was mostly due to the lower contribution of net exports and inventories which was not fully offset by the accelerated increase in household consumption, business investment and public sector consumption and investment.

In the first quarter of 2018 changes in the US leading economic indicators were broadly positive, with some of them reaching historic highs. This was mainly attributable to the changes adopted by the US Congress at the end of 2017 to tax legislation providing for significantly lower tax burden for business and households. The Manufacturing ISM-PMI in the USA increased to its highest level for the last 30 years, and in January the relevant indicator for the services sector reached the highest value since August 2005. At the end of the quarter both indicators posted a decrease but remained higher than at the end of 2017.

The change in consumer confidence indicators over the first quarter was similar to that in the ISM-PMI, while the monthly rate of change in consumer expenditure and retail sales slowed down over the review period. Construction indicators recorded hesitant, but mostly negative changes over the first quarter, reflecting mainly the worsened weather conditions in the beginning of the year.

EURIBOR Dynamics

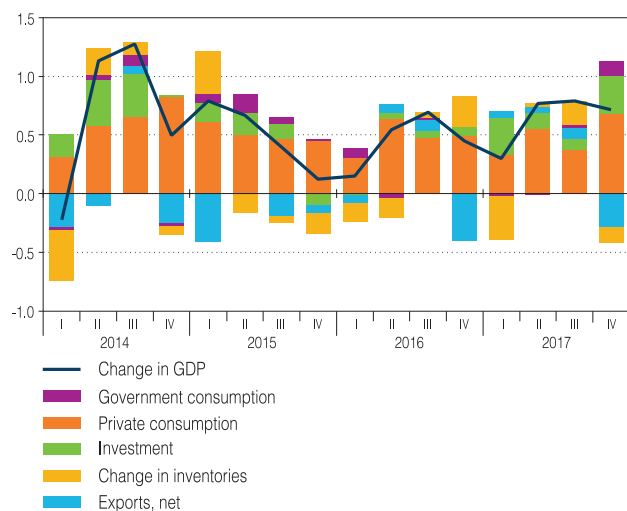
(basis points)



Source: the ECB.

Contribution to US GDP Growth by Component (Quarterly)

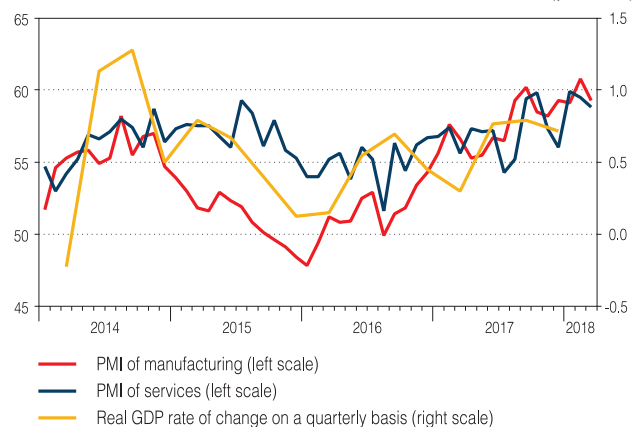
(per cent; percentage points)



Source: Bureau of Economic Analysis.

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

(per cent)



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

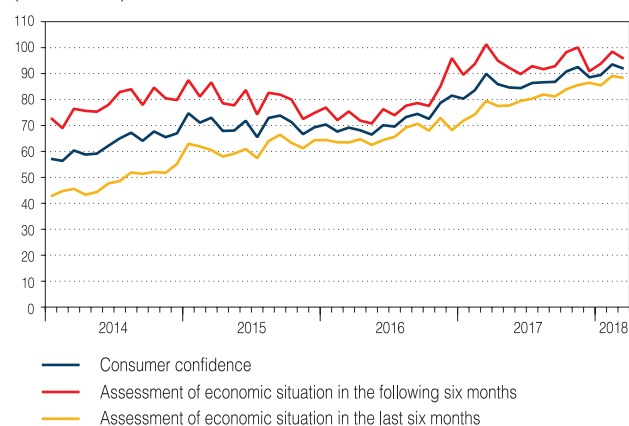
In February the annual rate of change of the price index of personal consumption expenditure (PCE) rose to 1.8 per cent, from 1.7 per cent in the previous three months. The annual growth rate of the core PCE price index (excluding food and fuels) rose to 1.6 per cent in February against 1.5 per cent in the previous four months. March 2018 CPI data point to acceleration in the annual rate of both overall inflation (up to 2.4 per cent from 2.2 per cent in February) and core inflation (up to 2.1 per cent from 1.9 per cent in February). March data on expectations of consumer price changes in one to five years ahead, which are part of the consumer confidence index of the University of Michigan, showed stabilisation in long-term and an increase in short-term inflation expectations.

US labour market conditions did not change substantially in the first quarter of 2018. The average quarterly number of new employees in the non-farm sector declined slightly from the fourth quarter of 2017. In March the US unemployment rate remained unchanged from the end of 2017, at 4.1 per cent. The leading economic activity indicators suggest that US labour market conditions will remain favourable.

On the basis of the reported and expected US labour market and inflation indicators, at its 20 and 21 March meeting, the US Federal Open Market Committee (FOMC) decided to raise by 25 basis points the federal funds rate corridor to 1.50–1.75 per cent. Despite positive revisions of FOMC members' forecasts of the US economy and labour market, their projections of the number of expected increases in the reference rate over the current year did not change (in three steps, according to the projection median). Concurrently, the FOMC members revised their forecast for the increase in the targeted rate in 2019 and 2020 upwards: according to the projection median, there will be three and two increases, correspondingly. The estimate of the long-run equilibrium level of the federal funds rate was also raised from 2.75 per cent to 2.88 per cent.

US Consumer Confidence Indices

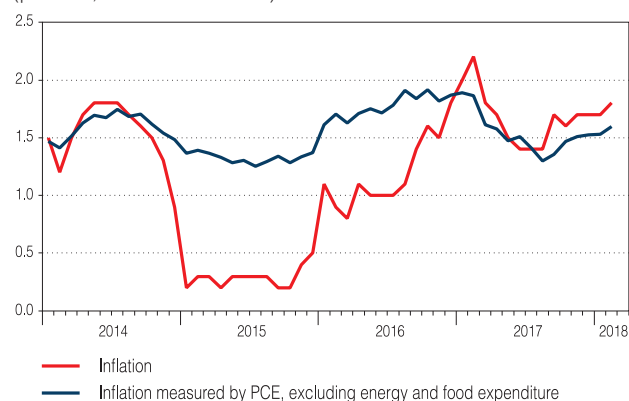
(2000 = 100)



Source: The Conference Board.

US Inflation Rate

(per cent; on an annual basis)



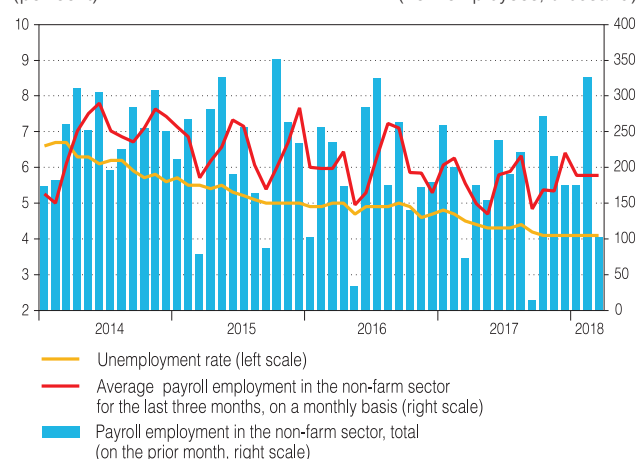
Note: Inflation is measured by the personal consumption expenditure deflator.

Source: Bureau of Economic Analysis.

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

(per cent)

(new employees, thousand)



Source: Bureau of Labour Statistics.

China

In the first quarter of 2018 China's economic growth was 6.8 per cent on an annual basis, exceeding the government's target of 6.5 per cent growth for 2018 announced in March. Quarter-on-quarter economic growth in China slowed down to 1.4 per cent in the first quarter of 2018, from 1.6 per cent in the fourth quarter of 2017. The dynamics of the leading economic indicators suggests that slightly moderating quarterly growth was due to a relatively stronger increase in imports than exports.

In the first quarter of 2018 PMI industrial production and services sectors and consumer confidence indices remained close to the average values for the fourth quarter of 2017. The February fall in industrial indicators is likely to reflect a series of holidays over the month due to celebrations of the Chinese New Year and may be considered as temporary.

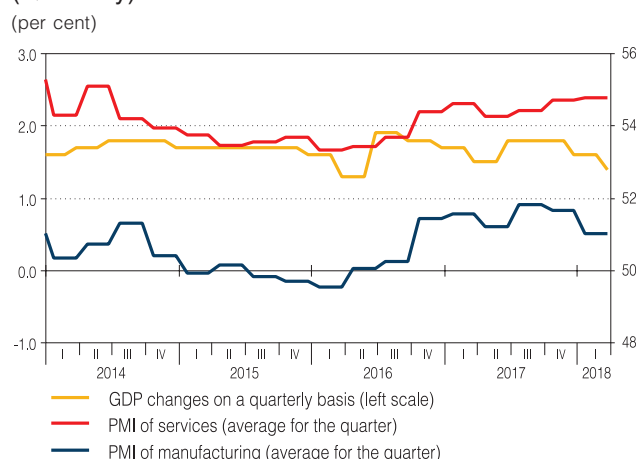
In the first quarter of 2018 the annual growth rate of industrial output and total investment in China slightly accelerated, reflecting mainly the improved global economic activity and increasing external demand for goods in China. Nominal exports of goods on an annual basis (in US dollars) rose by 14.0 per cent in the first quarter of 2018, from 9.6 per cent in the fourth quarter of 2017.

In the first three months of 2018 annual growth of nominal imports of goods to China (in US dollars) accelerated to 18.9 per cent, from 12.6 per cent in the last quarter of 2017 mainly as a result of higher household consumption attributable to stronger annual growth of retail sales from 9.4 per cent in December 2017 to 10.1 per cent in March 2018.

The annual increase of consumer prices accelerated to 2.9 per cent in February, from 1.5 per cent in January and slowed down to 2.1 per cent in March. The temporary rise in inflation in February was driven by increased consumption associated with the New Year celebration in China.

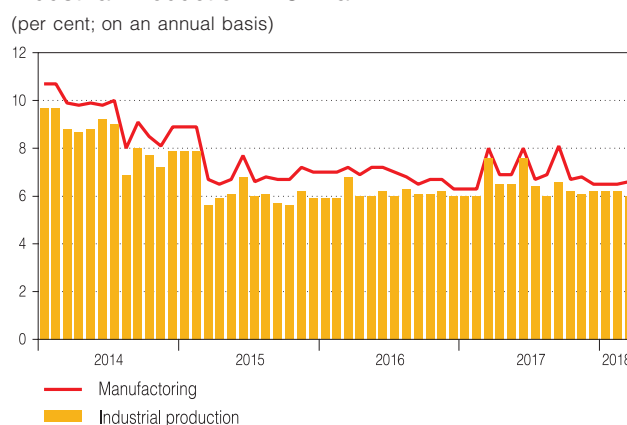
The downward trend in annual producer price growth was sustained in the first quarter due somewhat to a base effect from the strong price increase at the end of 2016 and in early 2017.

Manufacturing and Services PMIs and GDP Growth (Quarterly) in China



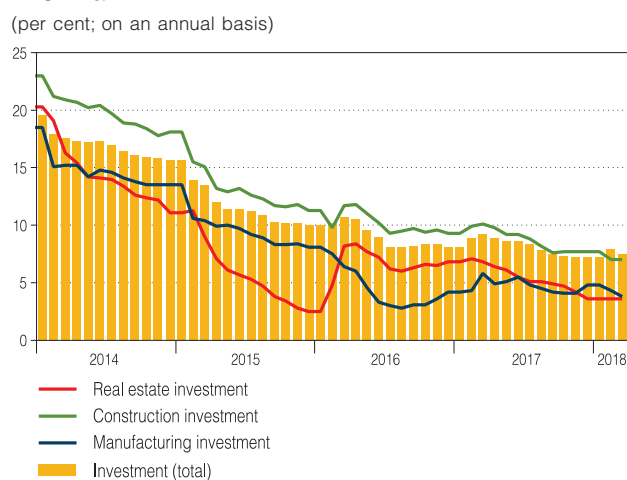
Sources: National Bureau of Statistics of China and China Federation of Logistics and Purchasing.

Industrial Production in China



Source: National Bureau of Statistics of China.

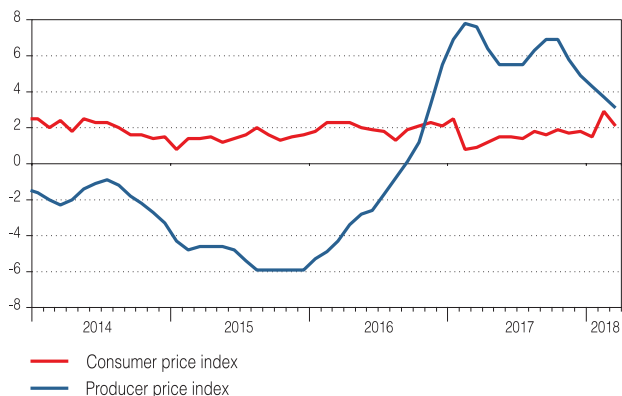
Fixed Capital Investment (Total) in Selected Sectors in China



Source: National Bureau of Statistics of China.

China's Inflation Rate

(per cent, on an annual basis)



Source: National Bureau of Statistics of China.

Annual growth of house prices in China remained relatively stable in the first months of 2018. In January and February house prices in big cities (from group 1) remained almost unchanged compared with the last three months of 2017.⁷

At the end of first quarter of 2018, the People's Bank of China raised interest rates on some of its instruments, including the interest rate on seven-day repo agreements (by 5 basis points to 2.55 per cent) thereby controlling banking system liquidity. Some market analysts suggest that these rate increases were intended to limit movements in the Chinese Yuan to US dollar exchange rate following the March increase in US Federal Reserve's target rates.

China's international reserves increased by USD 2.9 billion to USD 3.143 trillion. February saw a decline in international reserves on a monthly basis which was offset in March.

International Commodity Prices

Crude Oil

Crude oil prices on international markets soared strongly on an annual basis in the first quarter of 2018, reaching USD 67.0 *per barrel* (Brent). Higher oil prices in the beginning of the year were due to both stronger demand and lower

⁷ Data on the dynamics of house prices in January and February 2018 are not fully comparable with those of previous periods since the National Bureau of Statistics of China changed the methodology of compiling indices in January and excluded the so-called subsidised 'affordable' housing from the index of selling prices.

House Prices in China

(per cent, on an annual basis)



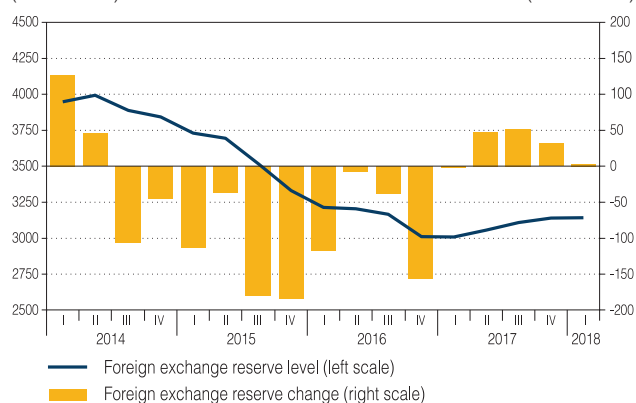
Note: Group 1 includes the four largest cities: Beijing, Shenzhen, Guangzhou, and Shanghai. Group 2 includes the capitals of the rest provinces.

Source: National Bureau of Statistics of China.

China's Foreign Reserves

(USD billion)

(USD billion)

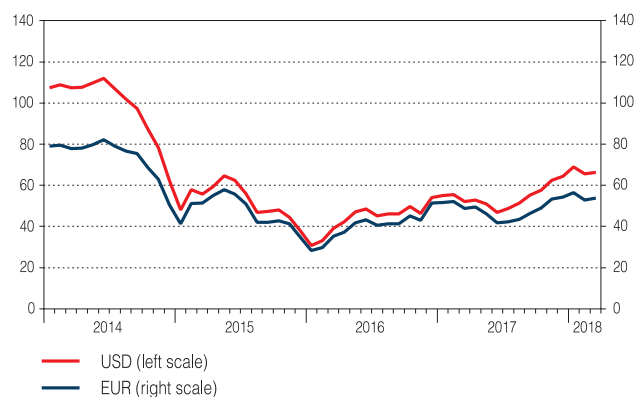


Source: People's Bank of China.

Brent Crude Oil Price

(USD *per barrel*)

(EUR *per barrel*)



Source: the World Bank.

supply. Global economic growth coupled with temporary factors such as unusually cold weather in the beginning of the year in North America, Asia and Europe pushed up significantly oil demand. The agreement on production cuts between OPEC and other major oil producers until the end of 2018, the confirmation of the commitment by Russia and Saudi Arabia in February 2018 and countries' readiness to extend the term of the agreement in 2019 remained the major factors on the supply side pushing up oil prices. In addition, speculations about new US sanctions to be imposed on Iran and the information released in March on discontinuing oil production from seven wells in the USA also added to the higher oil price.

International Energy Agency (IEA) data showed an increase in global crude oil demand in the first quarter of 2018 compared with the corresponding quarter of 2017. As a result of the favourable global economic development in 2017 and projections of sustainable global economic growth in 2018, in March the IEA revised upwards its crude oil demand forecasts.

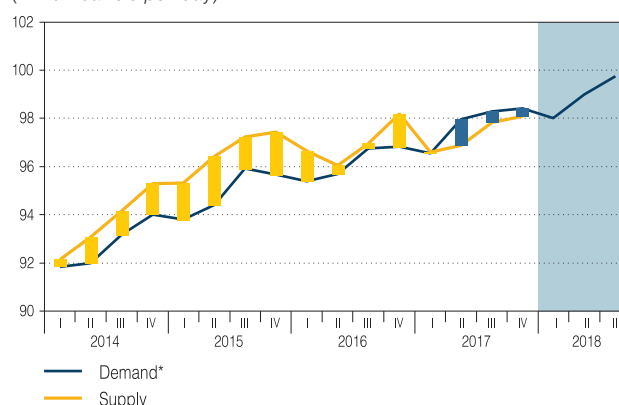
In March 2018 market expectations of oil prices in the first and second quarters of the year, embedded in futures prices, increased *vis-à-vis* December 2017 expectations. This was attributable to reported data on strong oil demand, high manufacturing PMIs and global industrial output growth. At the same time, given still high oil supply, market expectations of crude oil prices for the first and second quarters of 2018 point to a level of about USD 65 *per barrel*.

Commodity and Food Prices

In early 2018 metal prices continued to increase on an annual basis in US dollars, a trend which also occurred in 2017. Higher prices in US dollars reflected the enhanced demand as a result of strong global industrial production growth. In addition, China's measures to reduce air pollution in the country continued to have a negative effect on the supply of certain basic metals, such as aluminium. Weaker metal ore production in Indonesia and closure of zinc mines in Philippines contributed to higher metal prices. Despite the increased annual metal prices in US dollars in January, they went down in euro due to the depreciation of the US dollar against the euro.

World Crude Oil Supply and Demand* (Quarterly)

(million barrels *per day*)

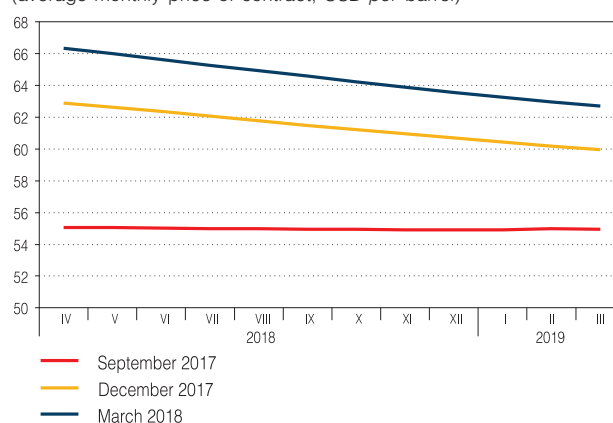


*Including IEA latest available data on crude oil demand in March 2018.

Source: IEA.

Brent Crude Oil Futures Prices

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



Source: JP Morgan.

The price of copper, which is of key importance to Bulgarian goods exports, posted a strong annual increase in early 2018 in both US dollars and euro. Stronger demand from China and weaker production in the world's second largest copper mine in Indonesia contributed to this rise. Concurrently, the risk of temporary disruptions in the production process in some important for the sector copper ore mines in Chilli and Peru also affected copper prices.

Year-on-year metal prices are expected to increase in the second and third quarters of 2018 in both US dollars and euro.

Following the fall in the overall food price index in 2017, in early 2018 prices continued to decrease in both US dollars and euro. January 2018 saw an annual decline in most food price index sub-components. Price of wheat, which is essential for the Bulgarian exports of goods, increased in US dollars despite the record high harvest worldwide. Factors responsible for this increase were lower market expectations of wheat yields in the USA and Argentina, the expected higher consumption in China and Indonesia and unfavourable weather conditions in Mexico at the end of 2017. In January 2018 wheat prices in euro decreased on an annual basis as a result of the depreciated US dollar against the euro in the second half of 2017 and in early 2018.

The food price forecasts in US dollar terms point to an annual increase in the first and second quarters of 2018 unlike the expected decline in euro terms as a result of the euro appreciation against the US dollar.⁸

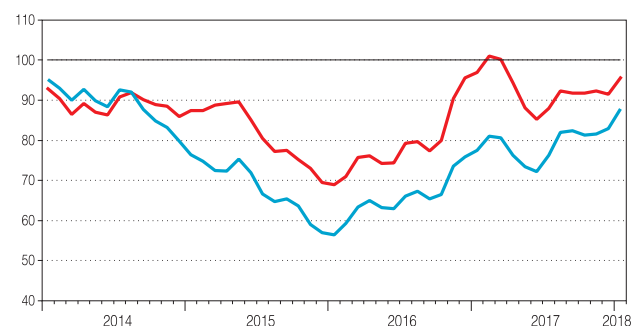
If market expectations of international oil, food and other commodity prices materialise, the terms of trade for Bulgaria are expected to worsen in the second and third quarters of 2018.

⁸ Please refer to footnote 6.

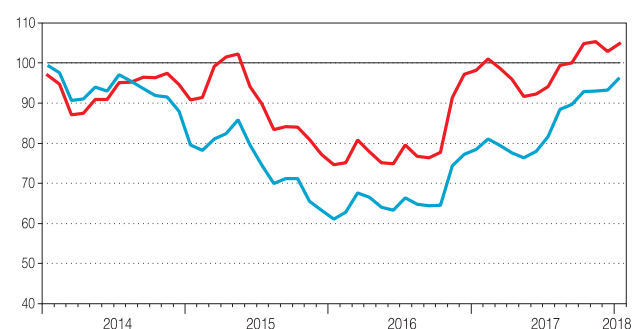
Price Indices of Major Raw Materials and Commodity Groups

(2013 = 100)

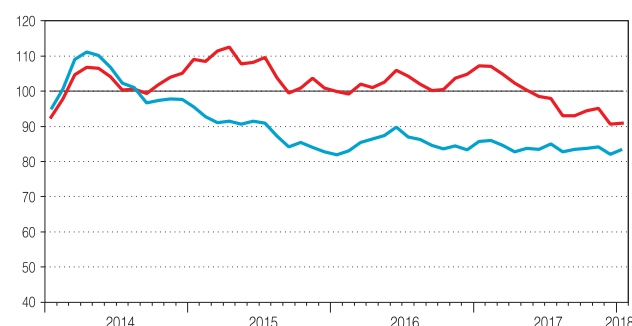
Metals



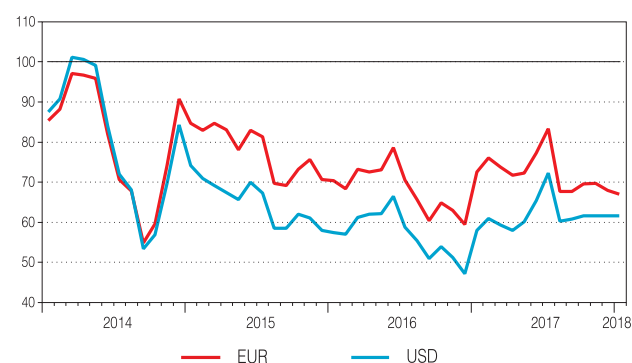
Copper



Food



Wheat



Sources: the ECB and BNB calculations.

2. FINANCIAL FLOWS, MONEY AND CREDIT

In 2017 the positive balance of BOP current and capital accounts expanded from 2016, reflecting the increased surpluses on services trade and net secondary income and a significant drop in net primary income deficit. The trade deficit increase and lower capital transfers under EU programmes limited growth in the positive overall balance on current and capital accounts. In the second and third quarters of 2018 the annual current account surplus is expected to decrease as a share of GDP, reflecting rising deficits on trade balance and net primary income. The positive capital account balance as a share of GDP is projected to pick up as a result of increased inflows of EU funds thanks to their better absorption.

In the beginning of 2018 broad money growth remained relatively high, with non-government sector's deposits again accounting for a major portion of total funds attracted by banks. Bank loans to the non-government sector tended to accelerate gradually, with the annual growth rate of household loans exceeding further that of credit to non-financial corporations in February 2018. Comparatively strong growth in deposits and ample banking system liquidity continued to be among the main factors holding down interest rates.

If the projected economic activity growth for the second and third quarters materialises, non-government sector's deposits are expected to slightly accelerate their growth rate. Our expectations show also a moderate growth increase in credit to non-financial corporations and households. In the second and third quarters of 2018 new time deposit and lending rates are expected to stay close to their current levels.

External Financial Flows

In 2017 BOP current and capital account balance was positive at EUR 2794.7 million, from EUR 2161.2 million in 2016.⁹ The current account surplus increased significantly unlike the capital account surplus which declined on 2016. An essential drop was observed in net primary income deficit, reflecting decreased reinvested earnings, paid dividends and distributed profits on the debit side.¹⁰ Surpluses in net secondary income and net trade in services recorded an increase. At the same time, trade deficit rose substantially, thereby limiting current account surplus growth *vis-à-vis* 2016.¹¹ Capital account declines were due to lower transfers under EU programmes. In February 2018 the total surplus accumulated for the last 12 months in the current and capital accounts fell from December 2017 due to continued growth in trade deficit.

In the second and third quarters of 2018 the positive current and capital account balance¹²

⁹ The analysis of balance of payments flows employs information from its analytical reporting. Data is preliminary and is subject to revisions.

¹⁰ Preliminary data subject to revision.

¹¹ For a more detailed analysis of exports and imports of goods and services, see Chapter 3.

¹² It should read the balance of the account for the last four quarters.

Flows on Major Balance of Payments Accounts

(EUR million)

	2016	2017	On an annual basis as of February 2018
Current account	1 091.1	2 268.9	2 129.7
Trade balance	-984.4	-2 074.2	-2 412.0
Services, net	2 936.9	3 015.9	3 081.8
Primary income, net	-2 445.9	-534.1	-373.1
Secondary income, net	1 584.6	1 861.3	1 833.0
Capital account	1 070.0	525.8	484.4
Financial account	579.4	2 320.5	4 013.3
Change in reserves	3 467.3	-98.9	-1 372.3

(per cent of GDP)

	2016	2017	On an annual basis as of February 2018
Current account	2.3	4.5	4.2
Trade balance	-2.0	-4.1	-4.8
Services, net	6.1	6.0	6.1
Primary income, net	-5.1	-1.1	-0.7
Secondary income, net	3.3	3.7	3.6
Capital account	2.2	1.0	1.0
Financial account	1.2	4.6	8.0
Change in reserves	7.2	-0.2	-2.7

Source: the BNB.

year on year is expected to retain its downward path driven by further growing trade deficit¹³ and the envisaged increase in net primary income deficit as a result of recent quarters' growth in gross operating surplus in the economy and the likely increase in reinvested earnings. Concurrently, the improved absorption of funds under EU-funded operational programmes for the 2014–2020 programming period would lead to increased EU fund inflows and growing annual capital account surplus as a share of GDP on the end of 2017.

In 2017 the financial account balance was positive driven by Bulgarian residents' foreign assets which increased stronger than foreign liabilities. Total foreign asset dynamics in 2017 resulted mainly from transactions of 'other sectors'¹⁴ which boosted their foreign assets by EUR 1751.8 million (primarily in the form of portfolio investment). Banks increased their foreign assets by EUR 1351.5 million in 2017.¹⁵ Higher foreign liabilities on the financial account were mainly recorded by 'other sectors' thanks to foreign direct investments attracted by them. In 2017 foreign liabilities of the general government sector posted a decline following Eurobond debt repayments in July and residents' purchases of Bulgarian government securities issued in international capital markets. Financial account trends continued in the beginning of 2018, with its surplus accumulated for the last 12 months increasing from December 2017 due to the stronger rise in foreign assets compared to foreign liabilities.

In 2017 foreign direct investment liabilities (reporting FDI inflows into Bulgaria) decreased slightly on 2016 to EUR 1446.8 million (EUR 1473.8 million in 2016).¹⁶ The strongest foreign direct investment inflows came from the Netherlands, Germany and Switzerland. In February 2018 inflows on direct investment liabilities accumulated for the last 12 months declined from December 2017.

¹³ For a more detailed analysis of foreign trade flows, see Chapter 3, Exports and Imports of Goods and Services Section.

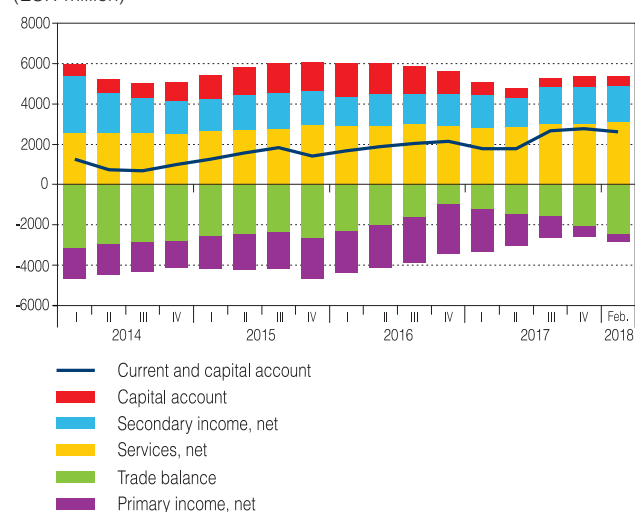
¹⁴ Sectors other than central banks, other monetary financial institutions and general government.

¹⁵ For a more detailed analysis of bank operations, see Chapter 2, Monetary and Credit Aggregates Section.

¹⁶ Preliminary data subject to revision.

Current and Capital Account Dynamics and Contributions of Individual Components (on an Annual Basis)

(EUR million)

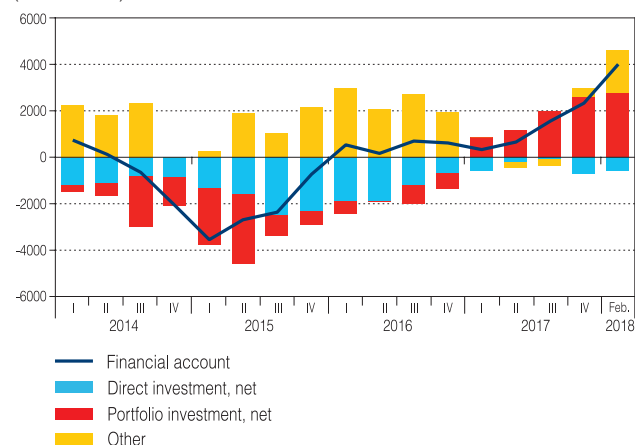


Note: For each quarter, the chart shows item balances accumulated in the last four quarters. February 2018 data on the chart are accumulated for the last 12 months.

Source: the BNB.

Financial Account Dynamics and Contributions of Individual Components (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. For each quarter, the chart shows item balances accumulated in the last four quarters. February 2018 data on the chart are accumulated for the last 12 months.

Source: the BNB.

Reflecting net current, capital and financial account flows, Bulgaria's gross international reserves¹⁷ decreased by EUR 98.9 million in 2017. In February 2018 the international reserve coverage of the average nominal imports of goods and non-factor services remained high (8.1 months) for the last 12 months, compared to 8.7 months in December 2017.

In 2017 Bulgaria's gross external debt declined from the end of 2016 in all economic sectors except for intercompany lending. In January 2018 this trend was sustained and Bulgaria's gross external debt dropped further from the end of 2017. Bank debt fell most significantly, while intercompany loans increased on December 2017. The share of long-term debt in Bulgaria's total gross external debt was 76.8 per cent in January 2018, remaining broadly unchanged from the end of 2017. New external debt held by Bulgarian residents in 2017 was lower than that in 2016. It displayed divergent dynamics across sectors. Unlike 2016 when the Bulgarian government issued Eurobonds, 2017 saw no new government debt issues in international financial markets, with the consequence that new external obligations of the general government sector were significantly lower than those in 2016. New external debt of banks and intercompany lending increased on 2016. In January 2018 newly assumed debt in the economy continued declining from January 2017.

Conditions for servicing foreign obligations of Bulgarian residents remained favourable. In 2017 foreign debt interest payments went down *vis-à-vis* 2016, with January 2018 data indicating their continuous fall.

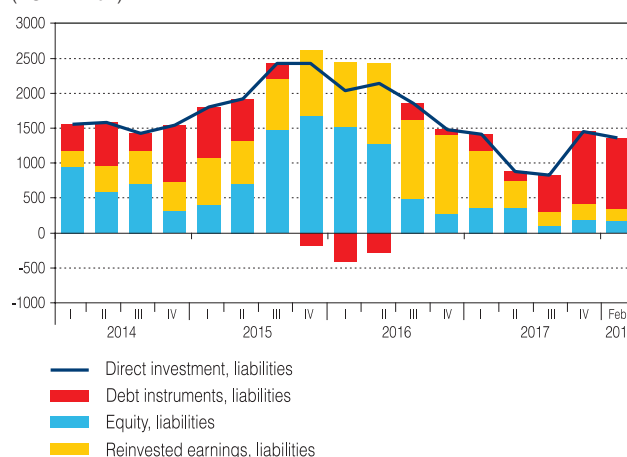
Monetary and Credit Aggregates

In the first two months of 2018 the broad monetary aggregate M3 retained its comparatively high rate of annual growth at 8.1 per cent (7.7 per cent at the end of 2017). Overnight deposits and, albeit to a lesser extent, money outside MFIs continued contributing positively to these dynamics, while quasi-money sustained its negative contribution. Retention of a comparatively high savings rate in the economy and economic agents' preferences for easier access to savings amid low deposit rates supported the

¹⁷ Valuation adjustments and price revaluation excluded.

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

(EUR million)



Notes: For each quarter, the chart shows item balances accumulated in the last four quarters. February 2018 data on the chart are accumulated for the last 12 months.

Source: the BNB.

Gross External Debt in January 2018

(EUR million)

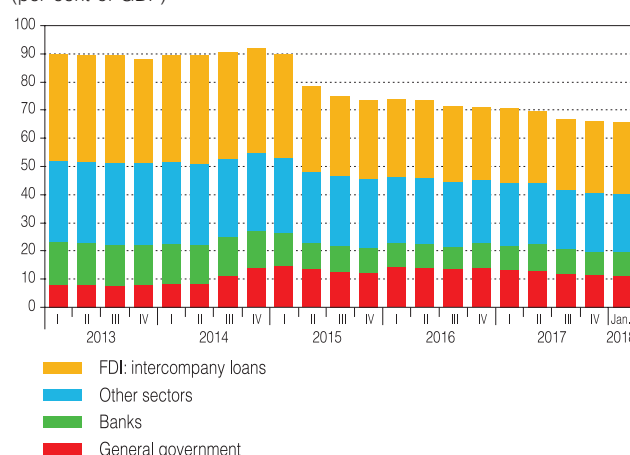
	Amount	Change	
		Since December 2017	For the last 12 months
General government	5 666.3	-52.9	-1 069.9
Central bank	0.0	0.0	0.0
Banks	4 201.8	-97.0	304.6
Other sectors	10 568.1	-41.5	-367.4
FDI – intercompany loans	12 702.2	21.0	341.9
Total	33 138.4	-170.4	-790.8

Note: More information about individual institutional sectors is available on the BNB website, Statistics, External Sector/Gross External Debt.

Source: the BNB.

Gross External Debt as a Share of GDP

(per cent of GDP)



Note: You can find more information about individual institutional sectors on the BNB website, Statistics, External Sector/Gross External Debt.

Source: the BNB.

trend in the structure of broad money depending essentially on overnight deposits.

Non-government sector's deposits continued to occupy the bulk of the total funds attracted by banks, their share reaching 87.4 per cent on average for the first two months of the year. In February non-government sector's deposits¹⁸ in the banking system rose on an annual basis by 5.6 per cent (6.2 per cent at the end of 2017), with deposits from households and non-financial corporations contributing most positively and deposits from financial corporations having a negative contribution to this growth. Household deposits maintained comparatively robust growth, increasing 5.4 per cent on an annual basis to BGN 48.0 billion. Deposits of non-financial corporations posted a 13.6 per cent annual increase to BGN 21.7 billion. Financial corporations' deposits tended further to decrease, declining in February by 32.4 per cent on an annual basis. In terms of the currency structure, lev-denominated deposits retained their high share at 61.8 per cent of all deposits from households and non-financial corporations.

In the beginning of 2018 the structure of attracted bank funds regarding the shares of resident and non-resident funds recorded no significant changes, thus maintaining the effective implicit rate of minimum required reserves¹⁹ at levels close to previous year's average. In March it was 9.40 per cent (9.41 per cent on average for 2017) with bank deposits with the BNB comprising 8.40 percentage points in the compliance with minimum reserves, and the remaining 1 percentage point formed by recognised cash balances.

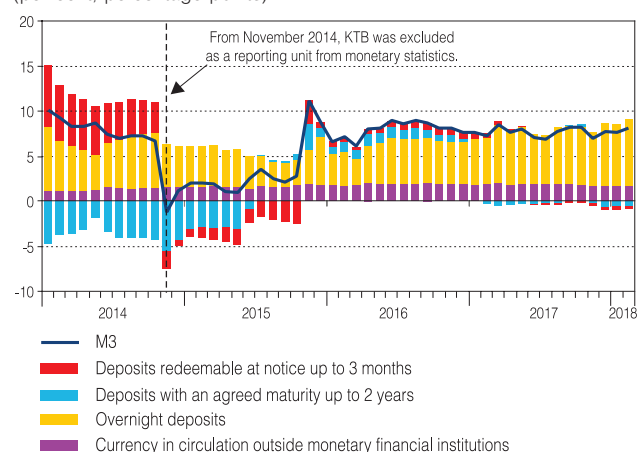
Reserve money continued their tendency of a decline, which began in October 2017, and registered a 3.4 per cent fall on an annual basis at the end of March 2018. This reflected decreased deposits of banks with the BNB, with

¹⁸ Non-government sector's deposits include deposits of households, non-financial corporations and financial corporations. Deposits of households and non-financial corporations comprise the largest share of all non-government sector's deposits (95.5 per cent on average for the last 12 months in February 2018) and therefore the analysis is focused on these two sectors.

¹⁹ According to Article 3 of BNB Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks, the minimum required reserve rate on funds attracted from residents is 10 per cent of the deposit base. The rates on funds from non-residents and local government budgets are 5 and 0 per cent, respectively

Annual Rate of Change in M3 and Contribution by Component

(per cent, percentage points)

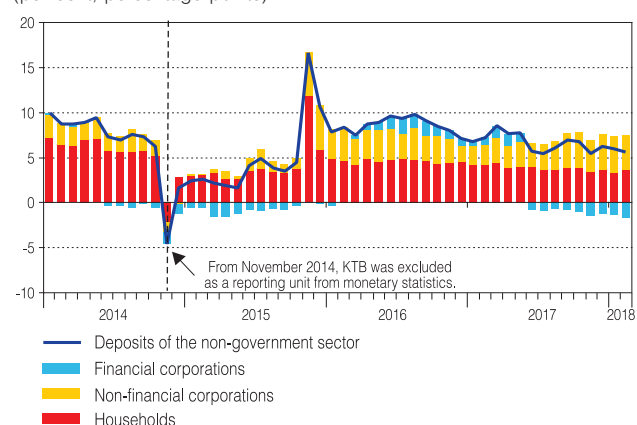


Note: The marketable instruments component is not shown on the chart due to its insignificant contribution to broad money growth.

Source: the BNB.

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

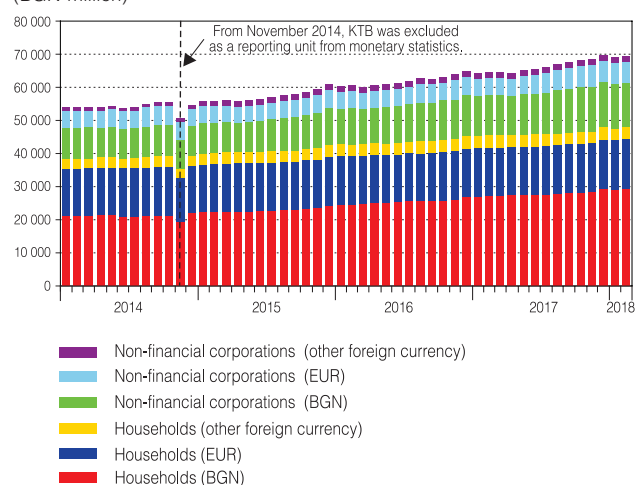
(per cent, percentage points)



Source: the BNB.

Currency Structure of Deposits of Non-financial Corporations and Households

(BGN million)



Source: the BNB.

their amount falling by 16.6 per cent by end-March 2018 (3.8 per cent by end-2017).

Dynamics of bank deposits with the BNB was entirely attributable to excess reserves which fell year on year by 41.6 per cent by the end of March, while minimum reserves increased by 6.3 per cent on an annual basis. Decreased excess reserves reflected the BNB Governing Council resolution of 4 October 2017 to change the methodology for calculating interest rates on accounts with the BNB.²⁰ In the first quarter of 2018 on average bank excess reserves with the BNB decreased by BGN 514 million on December 2017 to BGN 2759 million. In March the excess funds on banks' minimum reserve accounts over the required minimum of reserve assets under Ordinance No 21 was 41.5 per cent on an average daily basis. The decrease in bank deposits with the BNB following excess reserve declines was partially offset by the increased bank funds in TARGET2.

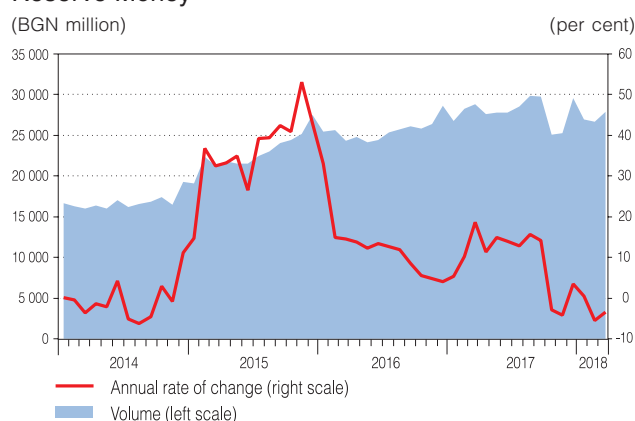
In the first three months of 2018 banknotes and coins in circulation maintained a relatively high annual growth rate driven mainly by growing private consumption amid improving labour market conditions, low deposit interest rates and savers' preferences to hold cash. Since the second half of 2017 annual growth of currency in circulation has tended to slow down, with money both outside and in bank vaults reporting lower growth rates. By the end of March 2018 banknotes and coins in bank vaults had a positive, but close to zero, contribution to the annual growth in currency in circulation.

Under the currency board arrangements, reserve currency (euro) trade with the BNB is the main tool for managing bank liquid resources. As of March BNB sales (net) to banks accounted for EUR 782 million on an annual basis.

In the first two months of 2018 banks continued to restructure their assets following the decrease in excess reserve rates, which led to a decline in their excess reserves and an increase in their foreign assets. In addition to bank foreign assets, growth in total assets (4.2 per cent on an annual basis in February 2018) was mainly driven by claims on the non-government sector. Meanwhile,

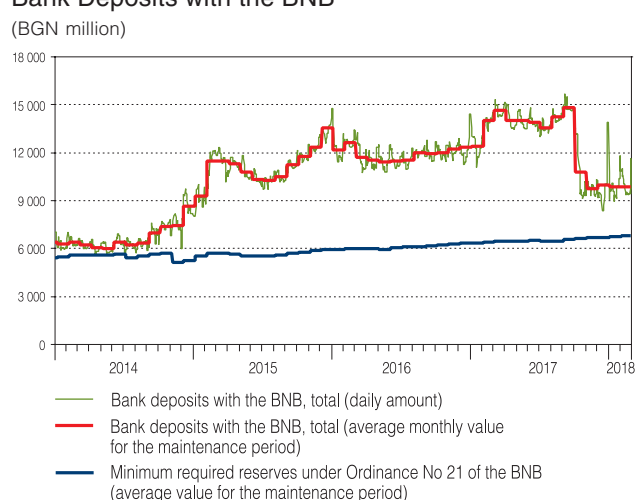
²⁰ Changes in the methodology refer to the interest rate on excess reserves of banks with the BNB which was reduced by 20 basis points below the ECB deposit facility rate.

Reserve Money



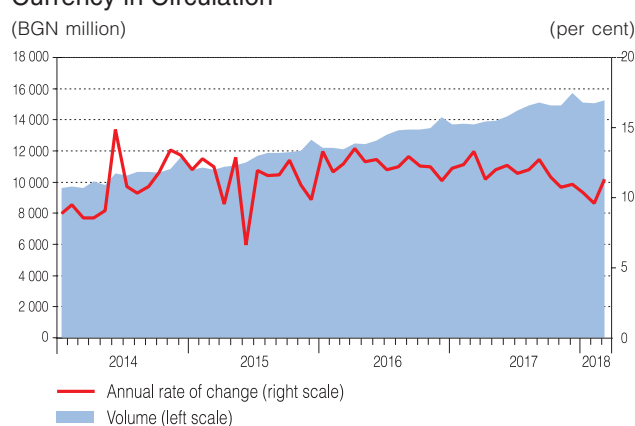
Source: the BNB.

Bank Deposits with the BNB



Source: the BNB.

Currency in Circulation



Source: the BNB.

a slight year-on-year fall was observed in bank claims on the general government sector over the first two months, reflecting largely the negative net issue of government securities.

Annual growth in credit to households and non-financial corporations²¹ continued to accelerate gradually to 3.6 per cent by end-February (3.3 per cent by end-2017). Favourable macro-economic environment and the retention of comparatively low interest rates on loans contributed to these developments. The dynamics of other household lending were strongly influenced by the loans extended under the National Programme for Multi-Occupant Residential Building Energy Efficiency (the energy efficiency programme) with this effect weakening in early 2018.

In February credit to non-financial corporations grew annually by 2.0 per cent from 1.6 per cent in December 2017 driven mainly by overdrafts (7.7 per cent annual growth) while loans excluding overdraft declined by 0.4 per cent on an annual basis.

In early 2018 new²² corporate loans remained at levels close to those of end-2017.²³ In February the share of newly extended corporate loans in levs rose on average for the last 12 months to 55.5 per cent, up 1 percentage point on December, entirely at the expense of the decreased contribution of new corporate loans in euro whose share was 43.2 per cent in February. New corporate loans in dollars comprised 1.3 per cent of all new loans to corporations (1.7 per cent at the close of 2017).

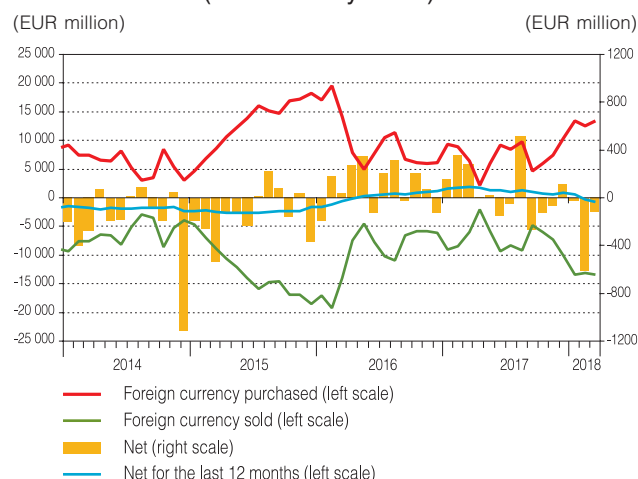
The annual growth rate of household loans remained comparatively high at levels close to those of end-2017, reaching 6.1 per cent in February 2018. Consumer and housing loans had the largest contributions, reporting 7.0 and 8.5

²¹ Loans represent the bulk of bank claims on the non-government sector with a share of 98.0 per cent on average for the last 12 months in February 2018, and the analysis is therefore focused on them. In addition to loans, claims include also repurchase agreements, securities other than shares, and shares and other equity instruments. 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 96.4 per cent on average in the last 12 months in February 2018; therefore, developments in these two sectors are discussed here.

²² The terms 'new' and 'newly extended' hereinafter referred to as the statistical category 'new business'.

²³ Based on 12-month moving average.

Foreign Currency Purchases and Sales between the BNB and Banks (on a monthly basis)

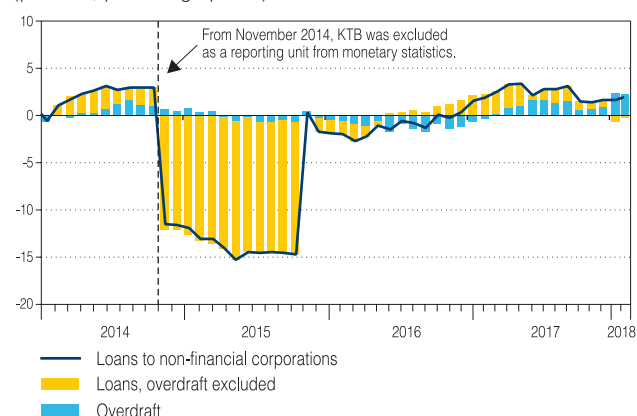


Notes: Net means currency purchased minus currency sold by the BNB. Data refer to all bank transactions in foreign currency including liquidity management operations related to the transfer of own funds from lev accounts with the BNB to own accounts with the BNB in euro and *vice versa*.

Source: the BNB.

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

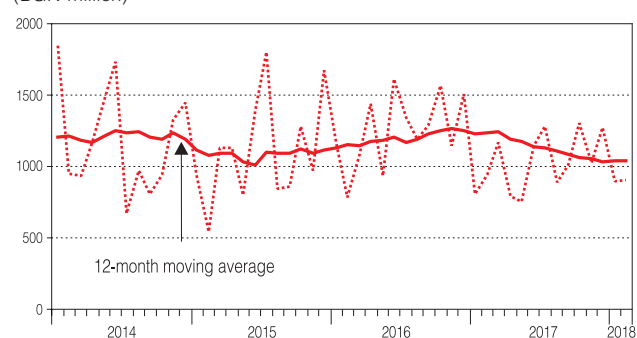
(per cent, percentage points)



Source: the BNB.

New Loans to Non-financial Corporations (Monthly Volumes)

(BGN million)



Note: For data characterised by a 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.

per cent annual growth, while overdrafts tended to decline further on an annual basis. Other loans to households also decreased (2.0 per cent on an annual basis). Loans extended under the energy efficiency programme reported low growth due to the high base in the same period of 2017 and to loan repayments made by the government in the middle of 2017. Newly extended consumer and housing loans to households retained their upward pattern over the first two months of 2018.

Results of the bank lending survey²⁴ of the fourth quarter of 2017 suggest that credit standards²⁵ remained almost unchanged in approving credit applications by small and medium-sized enterprises unlike large corporations where slight easing was observed. Household credit standards were eased for consumer loans and retained for housing loans. Lowered risk assessments have exerted the strongest pressure for easing bank credit policies²⁶ (lending standards and conditions).²⁷ Risk assessments reflected the overall macroeconomic environment improvement, the improved outlook for borrowers' solvency, favourable prospects in the housing market and lower collateral risk. In addition to risk perceptions, lending standards and conditions were also affected by the strong competition in the banking sector, continued growth in the volume and declines in the cost of attracted funds, and high banking liquidity. Between January and March banks expect further easing of the standards in extending credit to households, while keeping relatively unchanged the standards for corporations.

In the fourth quarter of 2017 banks registered enhanced demand for loans by both corporations and households, with the strongest growth recorded in housing loans. According to the

²⁴ Summarised results of the bank lending survey are presented through weighting bank responses by their market share in the relevant credit segment.

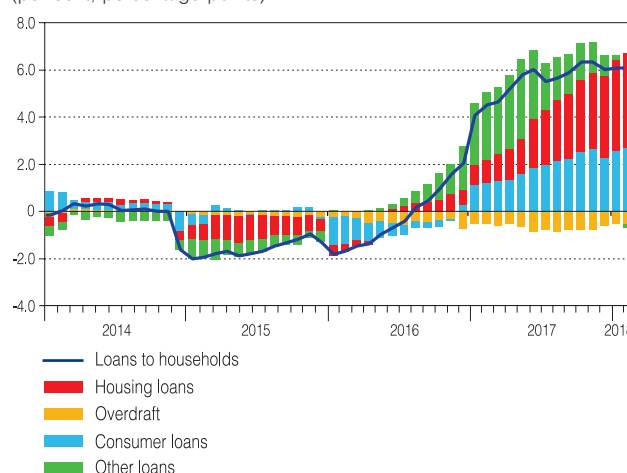
²⁵ Credit standards are understood as internal bank guidelines and criteria for loan approvals established prior to negotiating the terms of extended loans. Credit standards determine the type of the loan and collateral considered admissible by banks, taking into account specific priorities by sector, *etc.* Credit standards specify also all relevant conditions to be met by a borrower.

²⁶ Credit policy refers to credit standards and credit conditions applied by banks in extending loans.

²⁷ Credit conditions typically involve the reference interest rate surcharge, the loan amount, conditions for its utilisation and other conditions, as fees and commissions, collateral or guarantees to be provided by a borrower.

Annual Growth of Household Credit and Contributions of Individual Types of Loans

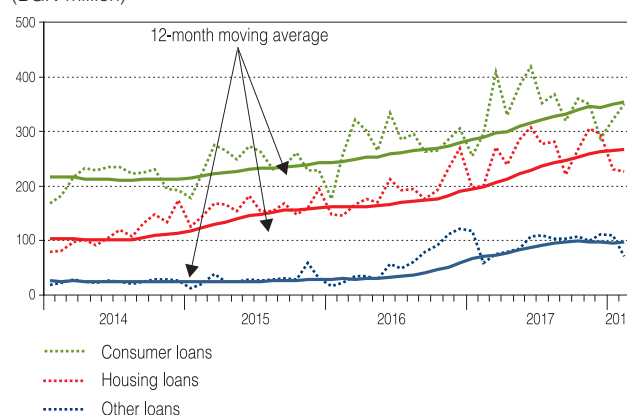
(per cent, percentage points)



Source: the BNB.

New Loans to Households (Monthly Volumes)

(BGN million)



Source: the BNB.

weighted balance of opinions, demand for investment funds was the main factor behind the higher demand for bank funds by corporations. The increased demand for consumer credit was primarily driven by positive consumer assessments of the macroeconomic environment and financial needs for purchasing goods intended for current consumption and durable goods, while housing loans enjoyed intensified demand thanks to the favourable housing market outlook. Bank expectations for the first quarter of 2018 show that demand for funds by corporations and households will further increase, with more significant growth projected in corporate lending.

In the second and third quarters annual growth of non-government sector's deposits is expected to accelerate slowly in the context of continued economic activity strengthening. Growth in credit to corporations and households is also anticipated to speed up moderately under the influence of the favourable macroeconomic environment and comparatively low lending rates. Over the projection horizon other loans' contribution to the overall growth of household loans is likely to decrease further, assuming the continuation of government repayments on energy efficiency loans and decreased volumes of new loans under this programme. Factors which could constrain credit growth in the second and third quarters include maintained bank policies of writing-off non-performing loans from balance sheets and potential sales of loans.

Interest Rates

The decrease of the interest rate on banks' excess reserves with the BNB by 20 basis points to -0.60 per cent with effect from 4 October 2017²⁸ affected the interest rate levels and volatility in the interbank overnight market. After the fourth quarter's decline,²⁹ in the first quarter of 2018 LEONIA Plus index fell slightly on the end of 2017, following EONIA drops, to reach in March -0.50 per cent (down 2 basis points on December 2017), while the LEONIA Plus/EONIA spread remained unchanged from December. Volumes traded in the interbank lev market

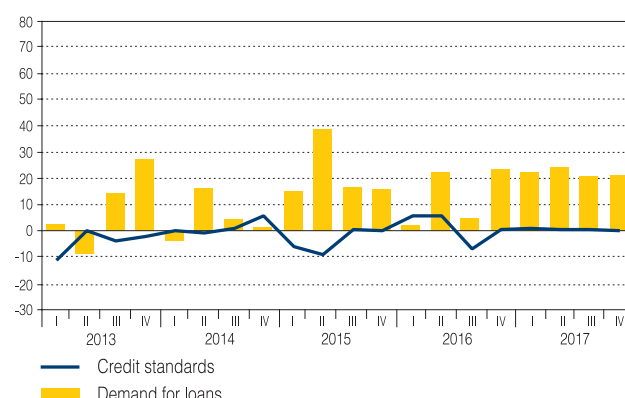
²⁸ See the Monetary and Credit Aggregates Section in Chapter 2, *Economic Review*, 4/2017.

²⁹ LEONIA Plus (LEv OverNight Interest Average Plus) is a reference rate of unsecured overnight deposit transactions in Bulgarian levs on the interbank market.

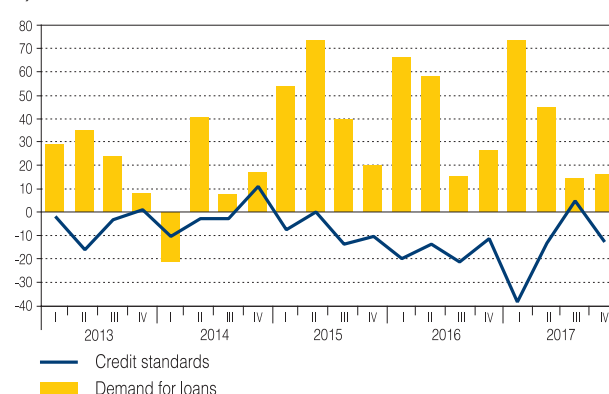
Changes in Demand and in Credit Standards

(balance of opinions; percentage points)

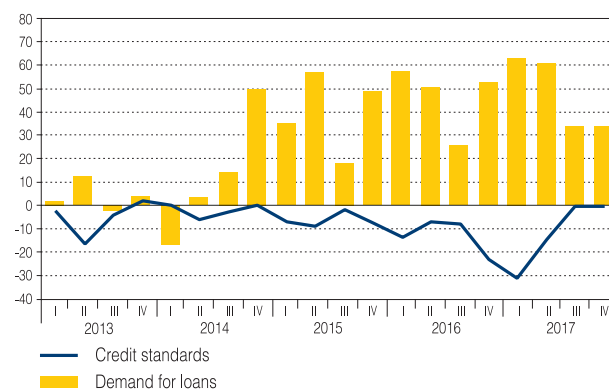
a) corporate loans



b) consumer loans



c) housing loans



Notes: 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.

which is dominated by overnight transactions continued to increase. In March 2018 overnight deposit volumes rose by BGN 0.7 billion compared to December 2017 and reached BGN 3.2 billion.

In the first quarter of 2018 interbank money market rates³⁰ based on SOFIBOR posted a decrease in all maturities, as reflected in the yield curve. In March 2018 unsecured three-month lev deposit rates declined on an annual basis by 10 basis points to 0.00 per cent, six-month rates fell by 11 basis points to 0.15 per cent and unsecured 12-month lev deposit rates dropped by 17 basis points to 0.56 per cent.

As a result of the stronger decline in the interbank money market quotations in Bulgaria compared to that in the euro area, the spreads between money market quotations in Bulgaria *vis-à-vis* the euro area continued to fall in the first quarter of 2018. Compared to December 2017, unsecured three and 12-month deposit rates declined by 4 and 8 basis points to 33 and 75 basis points, respectively.

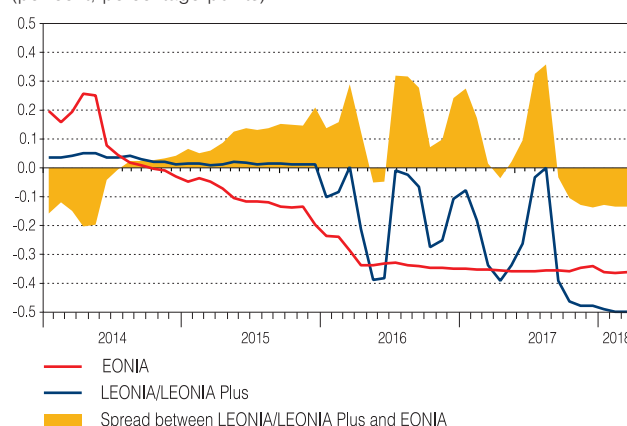
In the first two months of 2018 time deposit rates remained low. Comparatively strong growth in attracted funds and ample banking system liquidity continued to be among the main factors holding down deposit interest rates. In February the average weighted interest rate on new time deposits of non-financial corporations and households was 0.3 per cent, remaining close to previous year's average. Interest rates on non-financial corporations' deposits posted annual growth of 22 basis points to 0.5 per cent, which was offset by a fall in household deposit rates (down 11 basis points to 0.2 per cent). New time deposit rates in levs declined, with euro deposit rates remaining broadly unchanged and those in dollars increasing significantly (by 31 basis points) from the same month of 2017.

In February the breakdown of average weighted interest rates on new time household lev deposits by bank showed an increase from December 2017 in the number of banks with average interest rates ranging from 0.25 to 0.50 per cent at the expense of the reduced number of banks with rates ranging above 0.50 per cent. The standard deviation continued to contract, reflect-

³⁰ Interbank money market rates based on SOFIBOR are indicative in nature with no real transactions concluded.

Overnight Interbank Money Market Rates (Average Monthly Value)

(per cent, percentage points)

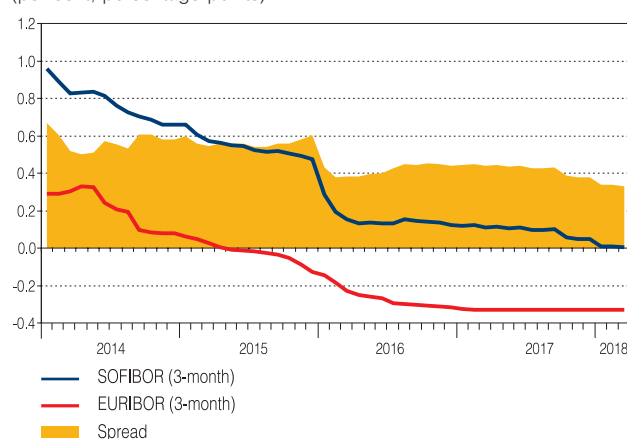


Note: With effect from 1 July 2017, LEONIA Plus index replaces LEONIA. LEONIA Plus monthly values are calculated as an arithmetic average for those days when unsecured lev overnight lending transactions are concluded in the interbank market.

Sources: the BNB, the ECB.

Three-Month Deposit Interest Rates

(per cent, percentage points)

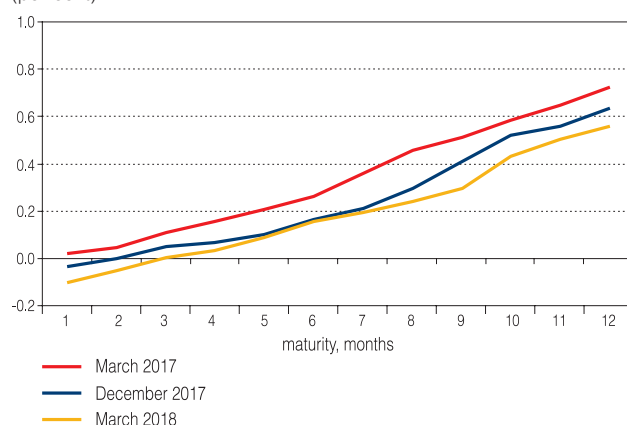


Note: Average monthly SOFIBOR for three-month deposits.

Sources: the BNB, the ECB.

Yield Curve of Interbank Money Market Instruments

(per cent)



Note: Average monthly SOFIBOR for the relevant maturity.

Source: the BNB.

ing the low variation of interest rates offered by banks on new time lev deposits of households.

The gradual downward trend in interest rates on new loans was retained in the first two months of 2018. Bank Lending Survey results show the major factors favouring these developments: the enhanced competition and high liquidity in the banking sector, increasing volumes and decreasing costs of attracted funds, as well as higher risk appetite of banks.

In February 2018 interest rates on new loans to non-financial corporations decreased on an annual basis by 62 basis points for lev-denominated loans, 165 basis points for euro-denominated loans and 200 basis points for dollar-denominated loans. In February interest rates on new loans to non-financial corporations in the three major currencies were 3.7 per cent in levs, 3.5 per cent in euro and 3.8 per cent in US dollars.³¹

The downward tendency in the annual percentage rate of charge (APRC) on household loans was also sustained. In February 2018, compared to the same month of 2017, the APRC on consumer loans fell by 68 basis points to 10.1 per cent, while that on housing loans went down by 91 basis points to 4.3 per cent.³² The APRC decline in both housing and consumer loans was mainly driven by the downward dynamics of the interest rate component of costs. The implicit rate of non-interest expenditure retained its upward dynamics in consumer credit and its downward path in housing loans.

In February 2018 the bank 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 in most banks. The standard deviation decreased by 19 basis points to 0.83 per cent compared with December 2017. Over the same period the average interest rate on new housing euro loans declined by 5 basis points to 4.05 per cent.

In the second and third quarters of 2018 new time deposit and lending rates are expected to remain close to their current levels. High inflows

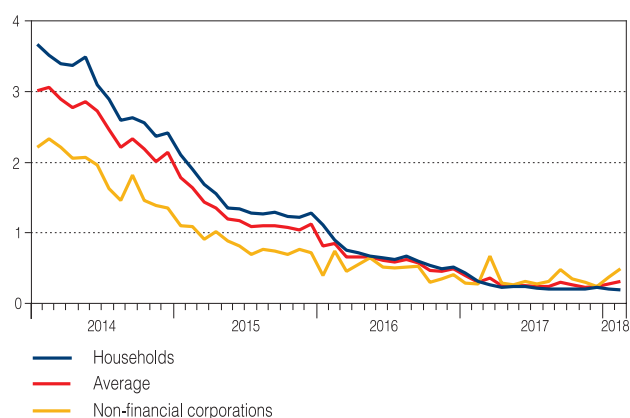
³¹ The above values of interest rates on loans to non-financial corporations are weighted averages on a 12-month basis.

³² 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

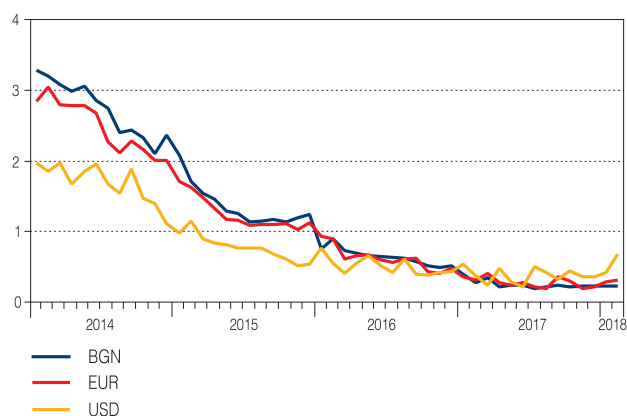
(per cent)

a) by sector



Notes: The average interest rate is calculated for all sectors, maturities and currencies weighted by the relevant volumes of new deposits. Average deposit rates for non-financial corporations and households are based on interest rates for all maturities and currencies weighted by relevant volumes of new business.

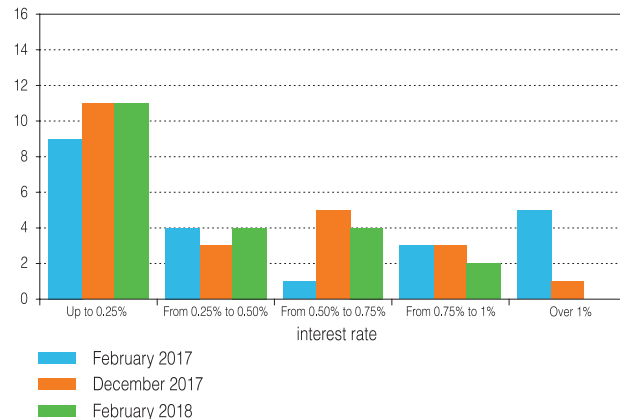
b) by currency



Note: The average interest rate by currency is based on rates for all sectors and maturities weighted by relevant volumes of new business. Source: the BNB.

Distribution of Interest Rates on New Household Time Lev Deposits

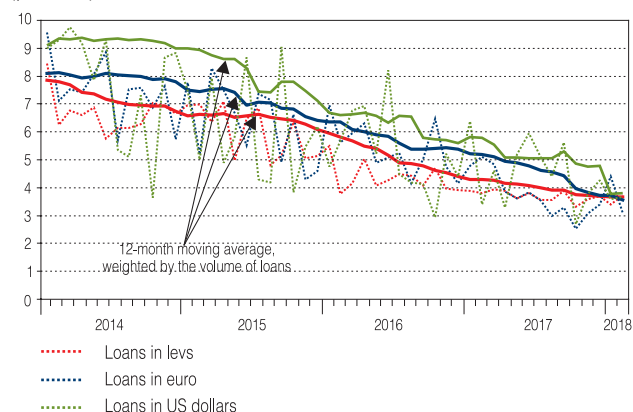
(frequency – number of banks)



Source: the BNB.

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

(per cent)



Source: the BNB.

of attracted funds and enhanced competition in the banking sector will foster retention of comparatively low interest rates close to the current values. Market expectations for keeping the ECB main interest rates unchanged over the projection horizon will be another factor for maintaining domestic interest rates close to the current levels.

Over the first quarter of 2018 the Ministry of Finance held only one government bond auction in the primary market, with all bids received being cancelled. An interest-bearing treasury bond issue with a maturity of 25 years was offered at a 1.40 coverage ratio and a 2.98 per cent yield.

Secondary market bond yields recorded an increase in the first quarter of 2018. In January the long-term interest rate used for assessing the degree of convergence dropped to 0.90 per cent, accelerating moderately in the following two months to reach 1.05 per cent in March. The yields of Bulgarian Eurobonds in international capital markets also followed upward dynamics in the first three months of 2018, most pronounced in the long end of the maturity curve. At the same time, spreads between yields on Bulgarian government bonds and German benchmark bonds increased in all maturities.

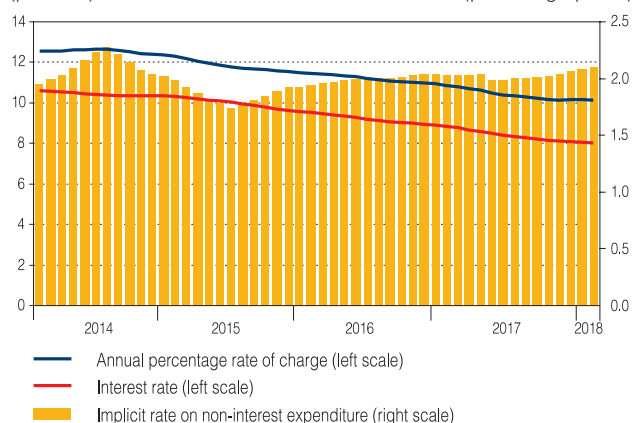
In the second and third quarters of 2018 Bulgarian government bond yields will further be driven by external and internal factors. External factors involve the ECB policy toward reducing

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

a) consumer loans

(per cent)

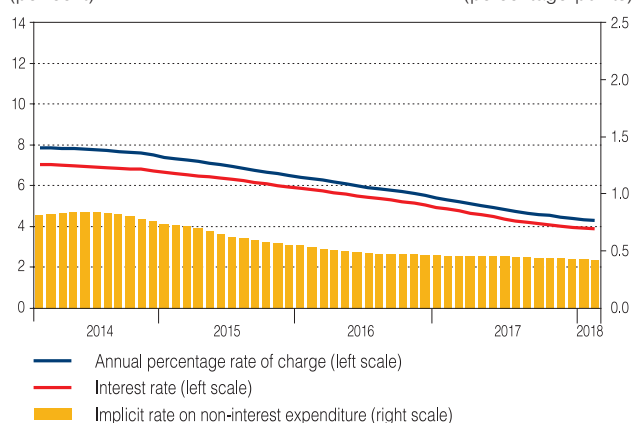
(percentage points)



b) housing loans

(per cent)

(percentage points)

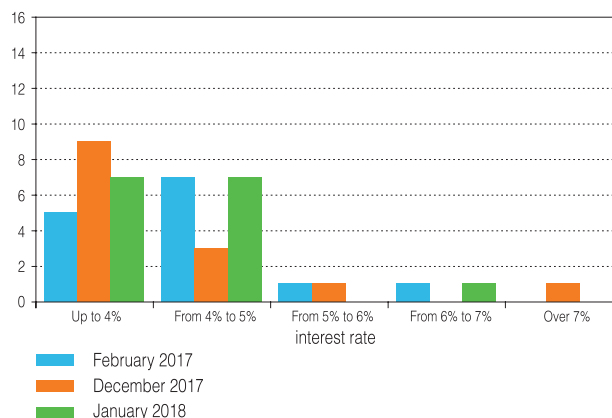


Notes: Interest rates in all maturities and currencies are weighted by the relevant volumes of new loans for a 12-month period. Implicit rate is the difference between the APRC and the relevant interest rates and reflects the approximate proportion of all non-interest service charges on loans (including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

Source: the BNB.

Distribution of Interest Rates on New Housing Loans in Euro

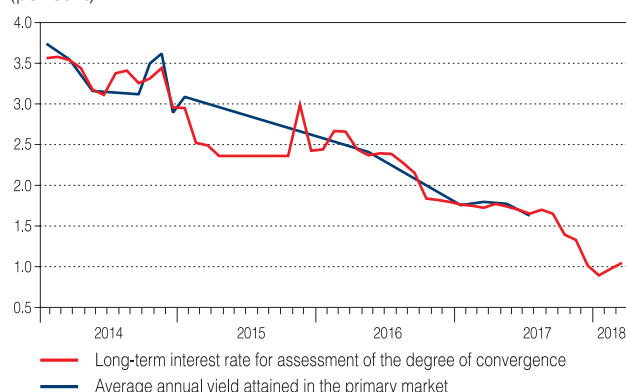
(frequency – number of banks)



Source: the BNB.

Ten-Year-and-Six-Month Government Bond Rates on the Primary and Secondary Markets

(per cent)



Source: the BNB.

APP³³ volumes, thereby boosting yields. Planned reductions in government bond supply under the MF 2018 issuing policy is likely to exert some dampening influence on government bond yields in Bulgaria.

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

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

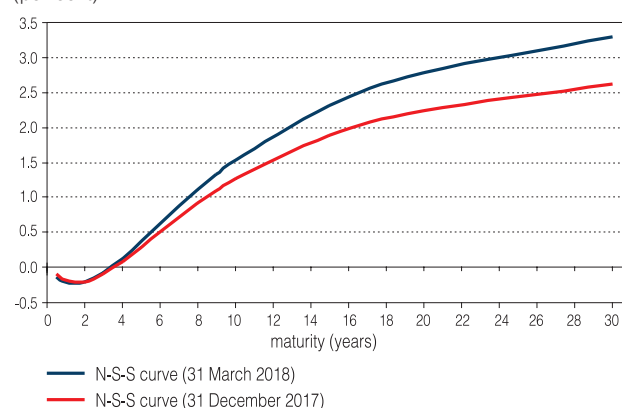
In the last quarter of 2017 government's fiscal policy had a strong effect on non-government non-bank sector's liquidity. This sector received funding to the amount of 7.4 per cent of GDP for the quarter, reflecting non-interest expenditure made on consolidated fiscal programme and EU subsidies paid to farmers.³⁴ Compared to the same period of 2017 financial flows to the non-government non-bank sector increased slightly, their funding ensured again almost entirely by the government deposit with the BNB which fell by BGN 1587.6 million (5.8 per cent of GDP for the fourth quarter of 2017) on end-September. Concurrently, the external sector was a net source of funds for the budget, though minimal (0.6 per cent of GDP for the quarter), with grants received under EU programmes

³³ For further details, see the External Environment Section in Chapter 1.

³⁴ In the last quarter of 2017 advance payments were made at the expense of the EU budget to the amount of BGN 775.1 million, the bulk of them (BGN 737.5 million) paid in December largely in the form of agricultural subsidies under the single area payment scheme.

Reference Government Securities Yield Curve in Bulgaria

(per cent)



Notes: The reference yield curve of Bulgarian government securities is based on own calculations under the extended version of *Nelson-Siegel-Svensson* model (1994). The yield change refers to the previous quarter.

The chart employs daily yield data on Bulgarian government securities issued and traded in international capital markets, published in the MF Central Government Debt and Guarantees Monthly Bulletin.

Sources: The MF, BNB calculations.

(BGN 470.9 million) and reimbursed funds from the EC under the EU Common Agricultural Policy (BGN 91.0 million) exceeding slightly EU budget contribution costs (BGN 211.6 million) and foreign debt payments (BGN 138.9 million). The flows of the financial sector (excluding the BNB) to the budget were also positive to the amount of 1.0 per cent of GDP for the quarter, resulting mainly from government securities (BGN 195 million) issued between October and December 2017 and lack of amortisation payments.

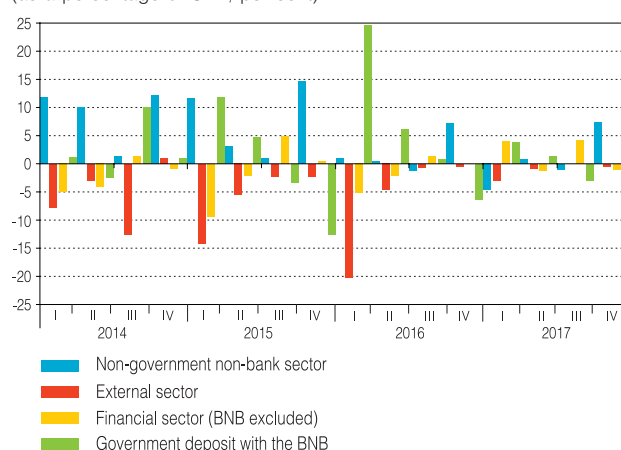
Based on preliminary MF data of April 2018, an assessment can be made for the first quarter that the financial sector (excluding the BNB) was the main beneficiary of liquidity from the budget due to early 2018 bulk of payments on matured government securities (BGN 1052 million) and lack of new bond issues. The liquid funds redirected from the budget to the financial sector were largely compensated by the inflow of liquidity from the external and non-government non-bank sectors to the budget.

Developments in financial flows generated in the process of external and internal economic factor interactions contributed to the decrease in gross international foreign exchange reserves. In March 2018 their market value (including valuation adjustments and price revaluations), an asset on the BNB Issue Department balance sheet, was EUR 22.6 billion (BGN 44.2 billion) posting a decrease of EUR 1.1 billion on end-2017. According to the currency board principles, the decline in international reserves corresponds to the drop in the balance sheet value of the Issue Department liabilities. Decreased liabilities in the first quarter reflected mainly lower bank excess reserves with the BNB and, to a less extent, declines in banknotes and coins in circulation and in government deposit.

In the second and third quarters of 2018 bank reserves with the BNB are expected to remain close to the levels observed at the end of March. Government deposit dynamics will be mainly determined by the consolidated fiscal programme performance and issuing policy. Currency in circulation is expected to further increase on an annual basis at comparatively high rates, reflecting primarily private consumption growth and deposit rates remaining at the current low levels.

Consolidated Budget Effect on Other Sectors' Liquidity (Quarterly)

(as a percentage of GDP, per cent)



Sources: the MF, the BNB.

3. ECONOMIC ACTIVITY

In the fourth quarter of 2017 real GDP increased by 0.7 per cent on a quarterly basis. Private consumption made the main positive contribution to growth. Government consumption and gross fixed capital formation also contributed positively to growth while the contribution of net exports was negative due to a stronger increase in imports of goods and services than in exports.

In the fourth quarter of 2017 quarter-on-quarter employment increased with the total number of employed in the economy rising by 0.4 per cent while unemployment continued to fall reaching 5.8 per cent (5.6 per cent according to non-seasonally adjusted data). The nominal compensation *per* employee continued to increase over the quarter at a rate close to the average annual rate, with all economic sectors contributing to this growth.

Positive developments in short-term economic indicators continued in the fourth quarter of 2017 and in early 2018, suggesting further improvement in the economic environment. Employment growth, increasing external and internal demand for goods and services and still low interest rates are expected to favour growth in both private consumption and investment activity of corporations. These factors are expected to add to the gradual acceleration of real GDP growth both annually and quarterly in the second and third quarters of 2018, with domestic demand contributing most to this effect. Risks to growth in terms of external environment are assessed as balanced. The possibility private consumption to grow faster than projected may result in higher than expected real economic growth.

Current Economic Environment

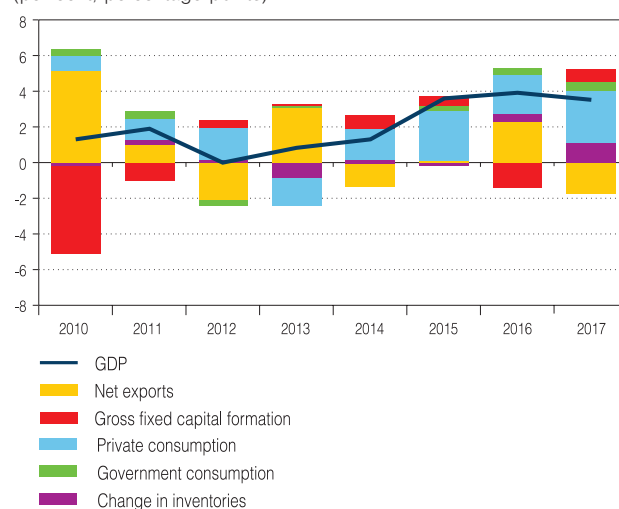
In 2017 the economic activity in Bulgaria increased by 3.6 per cent (3.9 per cent in 2016 and 3.6 per cent in 2015). Private consumption had the main positive contribution to growth. Government consumption and gross fixed capital formation also contributed positively, while the contribution of net exports was negative due to a stronger increase in imports of goods and services. The broad-based stable economic development observed in the domestic demand components, the improvement of the labour market and NSI economic indicators suggest that the economy is in the expansion phase.

According to seasonally adjusted NSI national account data, in the fourth quarter of 2017 real GDP increased by 0.7 per cent on a quarterly basis. This growth was attributable to the domestic demand, with private consumption contributing most, while government consumption and gross fixed capital formation contributed to a lesser extent. Net exports contributed negatively to the growth, reflecting the significant increase in imports of goods and services.

Accelerated private consumption growth in the fourth quarter was underpinned by consumer confidence remaining at high levels, rises in

Contribution to Annual GDP Growth by Final Use Component

(per cent, percentage points)



Sources: the NSI, BNB calculations.

both employment and households' labour income coupled with low interest rates pushing down the savings rate and boosting consumer credit demand. Government consumption dynamics was influenced mainly by measures aimed at increasing public sector employee compensation costs and, to a lesser extent, by rises in operating expenditure and health insurance contributions. Gross fixed capital formation increased slightly from the previous quarter, having a positive contribution to domestic demand growth. The BNB estimates³⁵ show that public investments contributed positively to the quarter-on-quarter real GDP growth in the fourth quarter of 2017. Imports growth rates accelerated throughout the year and in particular in the fourth quarter driven by the increasing household consumption and the recovery in gross fixed capital formation, characterised by a high share of expenditure on imported goods. As a result, net exports of goods and services contributed negatively to the quarterly growth rate of economic activity in the fourth quarter.

Firms and households' sentiment measured by indicators from the NSI business climate and consumer confidence surveys continued to improve in the first quarter of 2018. This reflected both improved assessments of firms' current business situation in industry, construction, services and retail trade, and more optimistic expectations of the future economic situation in Bulgaria.

Composite business climate indicator's value which exceeds its historical average coupled with positive quarter-on-quarter growth suggest that the economy is in the expansion phase of the business cycle.

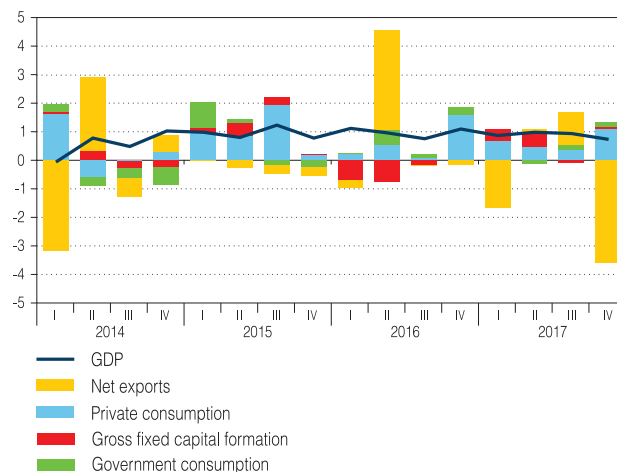
Consumer confidence is assessed as being high based on positive expectations of both the overall economic situation and improved financial position over the next 12 months. Consumers' optimistic expectations are also confirmed by the continued strong growth of food and non-food retail sales.³⁶ In the second and third quarters of 2018 higher labour demand by firms,

³⁵ The analysis employs data from quarterly non-financial account of the general government sector and reports on consolidated fiscal programme performance, published by the NSI and MF, respectively.

³⁶ For more details on developments in nominal retail trade, see the Household Behaviour Section in Chapter 3.

Contribution to GDP Growth by Final Use Component (Quarterly)

(per cent, percentage points; seasonally adjusted data)



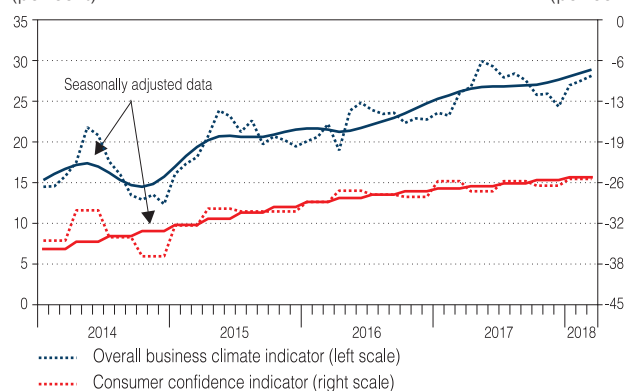
Note: Non-additive data due to direct chain-linked and seasonal adjustment of GDP and its components; the contribution of the change in inventories has not been included.

Sources: the NSI, BNB calculations.

Business Climate and Consumer Confidence

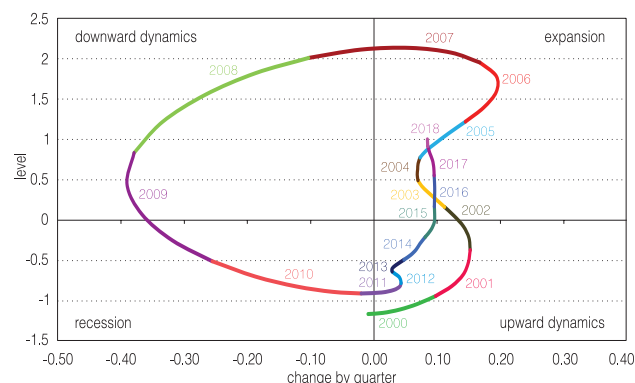
(per cent)

(per cent)



Sources: the NSI, BNB calculations.

Business Climate Indicator Dynamics



Notes: The chart compares the business climate level (the vertical axis) and its quarterly change (the horizontal axis). The business climate series has been smoothed using the HP filter (with a parameter $\lambda = 100$) in order to eliminate short-term fluctuations, after which it has been standardised.

The four chart grids allow to distinguish the four phases of the business cycle.

Sources: the NSI, BNB calculations.

growing nominal labour income of households, low inflation rates and optimistic consumer sentiment are expected to help maintain relatively high growth of private consumption.

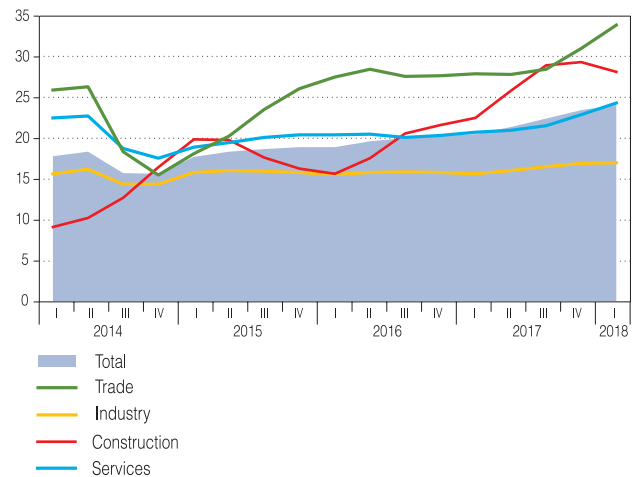
In the first quarter of 2018, as last year, increasingly smaller proportion of firms identified the uncertain economic environment as a major factor for limiting their activities, while the proportion of firms pointing to the labour shortage as a factor hampering their activity, increased. Optimistic expectations of firms' future economic activity also suggest that economic activity acceleration may be expected in the following three quarters with a more significant improvement to be observed in the trade and services sectors. In the beginning of 2018 the enterprises of all sectors concerned (industry, construction, trade and services) declared their intentions to increase the number of staff in the following three months. In the second and third quarters of 2018 firms may be expected to expand their investment activity and to recruit new employees given the improving economic indicators and high production capacity utilisation, supported by an environment of ample liquidity and low interest rates.

In the second and third quarters of 2018 government investment and consumption are forecast to contribute positively to GDP growth.

Exports of goods and services are anticipated to increase further in the second and third quarters of 2018 driven by strengthening external demand, though at slower rates than imports. Consequently, net exports will continue to have a negative contribution to growth.

Expectations about Future Economic Activity

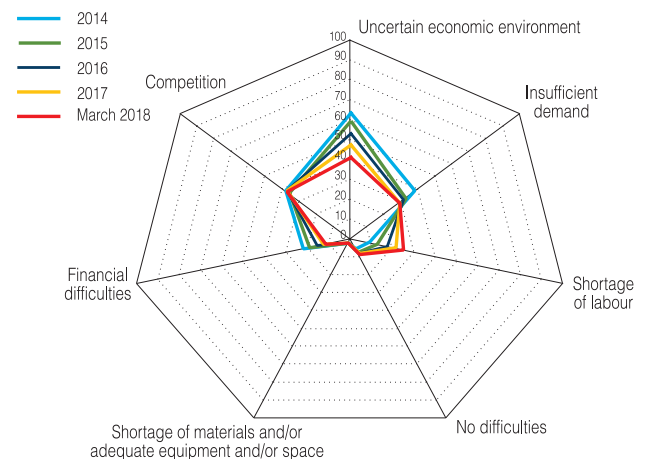
(balance of opinions, per cent; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Factors Limiting Economic Activities of Corporations

(relative share of all corporations)



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

Sources: the NSI, BNB calculations.

Real GDP Growth by Final Use Component

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

	2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Consumption incl.	1.5	1.2	2.0	0.4	0.3	1.4	0.4	1.8	1.0	0.5	0.9	1.3
Household consumption	1.4	1.3	2.9	0.3	0.3	0.8	0.1	2.5	1.1	0.7	0.5	1.7
Government final consumption expenditure	2.3	2.5	-0.9	-0.8	-0.6	3.2	0.0	1.9	1.5	-2.3	0.2	0.0
Collective consumption	4.9	-1.2	0.7	-0.1	-0.4	2.4	1.6	1.4	-0.4	0.1	0.8	1.2
Gross fixed capital formation	0.8	2.1	1.3	0.1	-3.2	-3.8	-0.8	0.0	2.1	2.6	-0.4	0.2
Exports of goods and non-factor services	2.2	-1.3	-2.2	3.3	2.9	3.1	2.5	1.0	-1.2	1.3	3.0	-1.0
Imports of goods and non-factor services	2.2	-0.8	-1.7	3.7	3.3	-2.2	2.7	1.3	1.3	1.1	1.3	4.4
GDP	1.1	0.8	1.2	0.8	1.1	0.9	0.8	1.1	0.9	1.0	0.9	0.7

Source: the NSI.

Based on these final use component developments, in the following two quarters real GDP growth is expected to accelerate slightly on both quarterly and annual basis. The higher contribution of domestic demand is anticipated to be partly offset by the increased negative contribution of net exports.

Risks to growth in terms of external environment are assessed as balanced. The possibility private consumption to grow faster than projected in the BNB forecast may result in higher than expected economic activity growth over the projection horizon. Such risks may also arise from higher than projected government capital expenditure.

Exports and Imports of Goods and Services

In 2017 nominal exports of goods increased by 10.7 per cent on an annual basis and nominal imports of goods rose by 15.5 per cent.³⁷

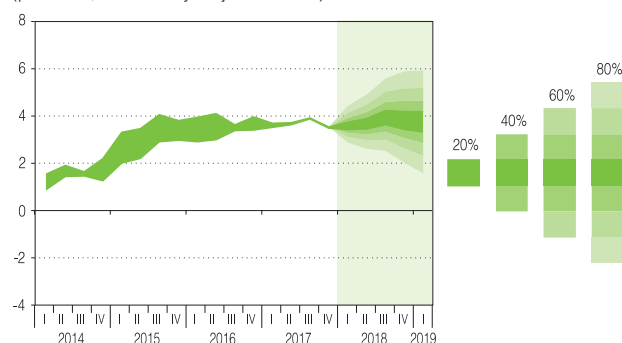
According to non-seasonally adjusted GDP data, in 2017 real annual growth in exports of goods came to 6.0 per cent on an annual basis, while real imports of goods increased by 9.1 per cent. Cross-checking the changes in exports and imports of goods in nominal and real terms suggests that global price dynamics in 2017 has contributed positively to nominal growth of international trade flows. Balance of payments data indicate a retained upward trend in nominal exports and imports of goods in the first two months of 2018.

In the second and third quarters of 2018 real exports and imports of goods are expected to continue increasing year on year, with growth in imports outpacing that in exports. Real exports of goods will reflect the expected increase in external demand. Concurrently, real imports dynamics will be determined by both projected acceleration in annual investment growth and continued increases in private consumption in Bulgaria.

According to balance of payments data, in 2017 exports of services increased slightly on an annual basis, while imports of services decreased compared to 2016.³⁸ According to national account data, in 2017 the price

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 around the projected value based on 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.

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

	Balance (EUR million)	Change* (EUR million)	GDP growth** (per cent)	Growth of imports** (per cent)
Consumer goods	191.5	-312.7	3.9	9.5
Raw materials	-572.5	-541.5	12.4	18.1
Investment goods	-938.1	418.8	19.7	10.0
Energy resources	-2 111.8	-1 032.5	1.3	30.1
Other exports	-100.4	-8.1	16.2	11.3
Total	-3 531.3	-1 476.0	10.7	15.5

* Balance change on the same period of previous year.

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

Source: the BNB.

³⁷ Foreign trade data.

³⁸ Preliminary data subject to revision.

increase of exports and imports of services had a positive effect on the nominal change in the international trade in services flows, while real volumes were lower compared to 2016. The balance of payments data for the January–February 2018 period suggest that the trend towards a decrease in nominal imports of services and an increase in nominal exports of services was retained on an annual basis. In the second and third quarters of 2018 the expected annual increase in prices of exports and imports of services along with the projected rise in the real volumes of external trade in the context of growing external and domestic demand are forecasted to boost exports and imports of services on an annual basis.

In 2017 exports of goods to EU Member States increased by 10.8 per cent on an annual basis reflecting the improvement of EU economic activity. Exports to Belgium and Germany contributed most to this growth. Exports of metals³⁹ and machines⁴⁰ contributed most significantly to the dynamics of exports to EU Member States by commodity group. In 2017 exports to non-EU countries rose by 10.6 per cent on an annual basis, with higher exports of metals being the major factor behind this increase. Exports to Russia contributed most significantly to the growth of exports to non-EU countries. In 2017 the share of exported goods to EU Member States remained almost unchanged on 2016 accounting for 66.1 per cent. In January 2018 exports of goods to EU Member States continued to grow on an annual basis, while exports to non-EU countries declined.

In 2017 exports of metals and machinery had the most sizeable positive contribution to year-on-year nominal growth of goods under the Combined Nomenclature. In early 2018 nominal exports of goods increased further on an annual basis driven by higher exports of the same groups of goods.

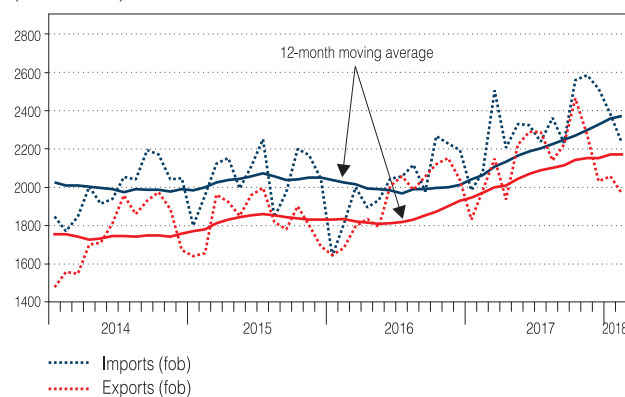
Nominal exports of goods continued to follow the observed trend towards growth in the last years, exceeding the world trade growth rate. Consequently, Bulgaria increased further its

³⁹ In this chapter, it should read the base metals and their products group under the Combined Nomenclature.

⁴⁰ In this chapter, it should read the machines, vehicles, appliances, instruments and weapons group under the Combined Nomenclature.

Dynamics of Exports and Imports of Goods

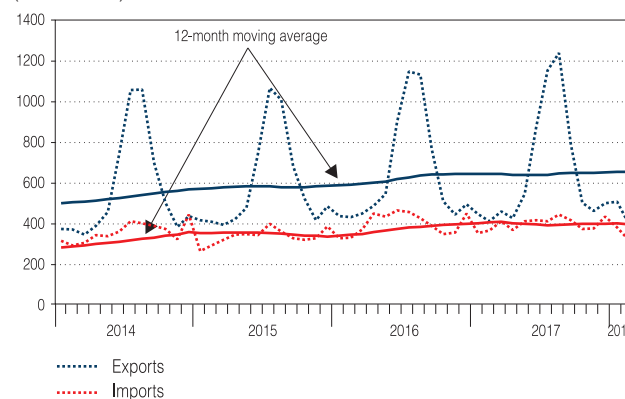
(EUR million)



Source: the BNB.

Dynamics of Exports and Imports of Services

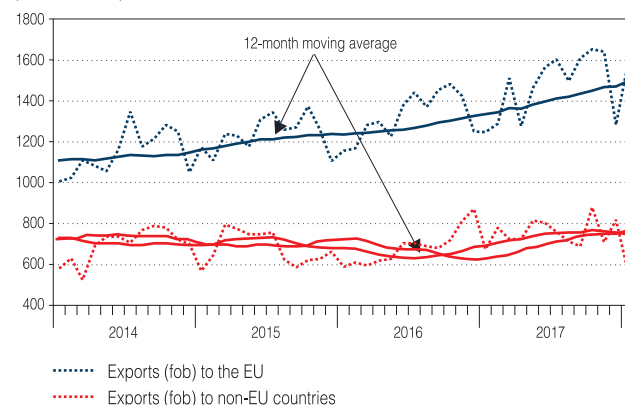
(EUR million)



Source: the BNB.

Dynamics of Exports to EU and non-EU Countries

(EUR million)



Source: the BNB.

market share in world trade in 2017, reflecting largely the improving competitiveness of Bulgarian economy. Against the backdrop of rising unit labour costs over the last years, it can be concluded that improving competitiveness was mainly attributable to non-price factors.

Exports of machines rose substantially in 2017 being again one of the major factors behind the overall exports growth – a trend observed also in the last years. A stronger increase was reported in exports to non-EU countries but significant year-on-year growth was also observed in exports to EU Member States. Machines exports dynamics in 2017 was driven by higher exported volumes, while prices exhibited a decrease.⁴¹ In January 2018 nominal exports of machines continued to increase year on year. Due to growing external demand, the upward trend in exports of machines is expected to be sustained in the second and third quarters of 2018.

In 2017 nominal exports of energy products⁴² declined for the fifth consecutive year entirely due to lower export volumes, while prices rose substantially compared to 2016.⁴³ The 2017 decline was attributable to exports to non-EU countries, while exports to EU Member States posted an increase on 2016. In January 2018 nominal exports of energy products dropped further on an annual basis. During the second and third quarters of 2018 the observed fall in nominal exports of mineral products is expected to contract significantly. This will be driven by the projected annual rise in petroleum products' prices in US dollars and euro in the international markets and the expected increase in external demand for Bulgarian goods.

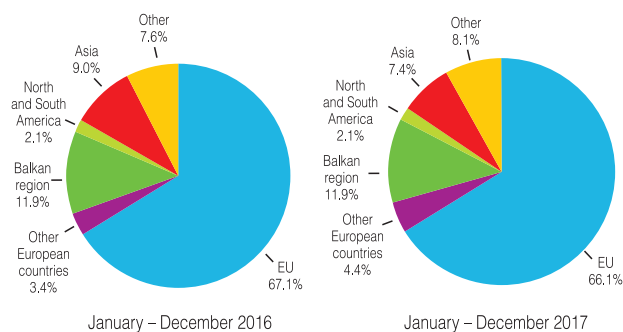
Exports of base metals registered the most sizeable annual growth in total annual exports of goods in 2017. This was partly due to the lower base from the previous year when copper production declined due to renovation and extension of the production capacity in a key

⁴¹ 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 2017.

⁴² In this chapter, it should read mineral products and fuels group under the Combined Nomenclature.

⁴³ The quarterly export deflators for the mineral fuels, oils and related products group under the SITC were used to estimate the price effect in 2017.

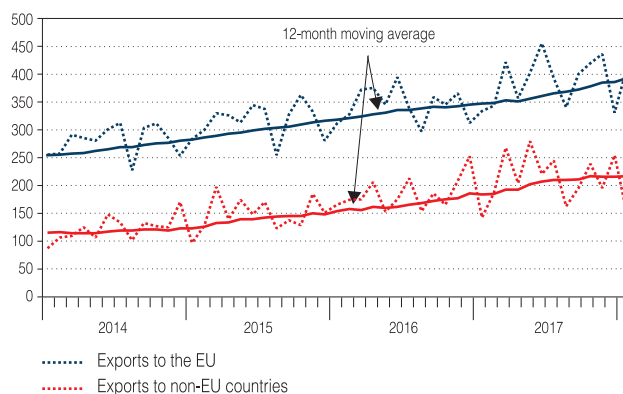
Exports of Goods: Geographical Breakdown



Source: the BNB.

Exports of Machines, Vehicles, Appliances, Instruments and Weapons

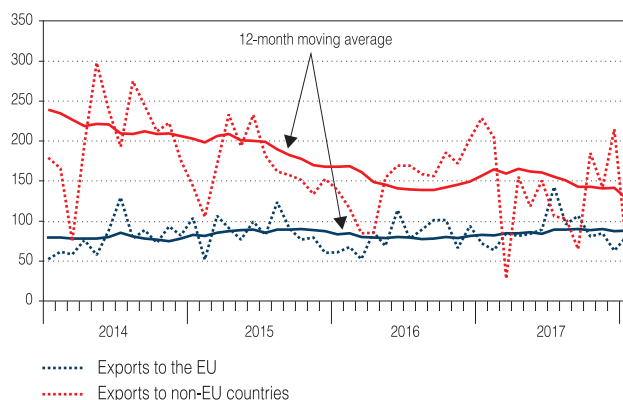
(EUR million)



Source: the BNB.

Exports of Mineral Products and Fuels

(EUR million)



Source: the BNB.

enterprise for this sector.⁴⁴ Metal prices, which increased⁴⁵ sizeably on an annual basis in 2017, had an additional positive effect. By geographical breakdown exports of metals rose markedly year on year to both EU and non-EU countries. In January 2018 nominal exports of metals continued to increase on an annual basis. In the second and third quarters of 2018 exports of metals are expected to continue growing in nominal terms on an annual basis impacted by the projected annual growth of metal prices in euro and US dollars in the international markets.

In 2017 nominal exports of animal and plant products decreased slightly on an annual basis due to lower exports of wheat⁴⁶. The fall in exports of products of animal and plant origin was registered in the trade with non-EU countries, while an increase in these exports to EU countries was observed on 2016. In January 2018 nominal exports of animal and plant products increased on an annual basis. In the second and third quarters of 2018 nominal exports of the group are expected to accelerate on an annual basis driven by higher external demand and expected good harvest in Bulgaria.⁴⁷

In 2017 exports of chemical products⁴⁸ increased in nominal terms on an annual basis, with exports of pharmaceutical products and plastics contributing most significantly. Growth was reported 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 compared to 2016.⁴⁹ In January 2018 nominal exports of chemical products continued to increase on an annual basis. In the second and third quarters of 2018 the observed upward trend in exported physical volumes is expected to continue to be a factor

⁴⁴ According to the press release published on 10 May 2016 on the Aurubis web site: <http://bulgaria.aurubis.com/bg/novini-i-publikacii/sobshchenija-za-mediite/aurubis-otchita-dobri-rezultati-za-shestmesechieto/>

⁴⁵ The quarterly export deflators for the precious and other non-ferrous metals under SITC were used to estimate the price effect in 2017.

⁴⁶ The quarterly export deflators for the food and live animals group under SITC were used to estimate the price effect in 2017.

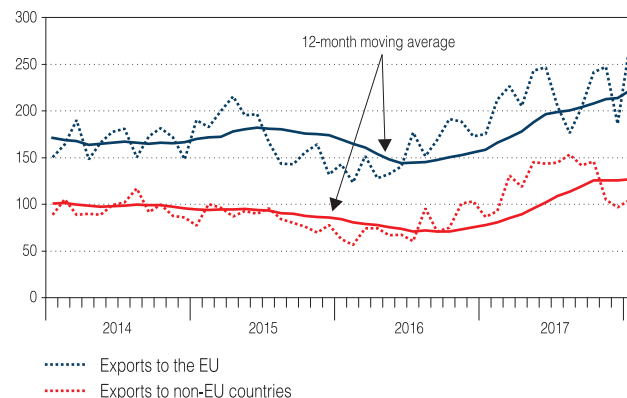
⁴⁷ For further details, see Wheat Outlook of USDA, March 2018, p 7.

⁴⁸ The chemical products, plastics and rubber group under the Combined Nomenclature.

⁴⁹ The quarterly export deflators for the chemicals and chemical products group under SITC were used to estimate the price effect in 2017.

Exports of Base Metals and Related Products

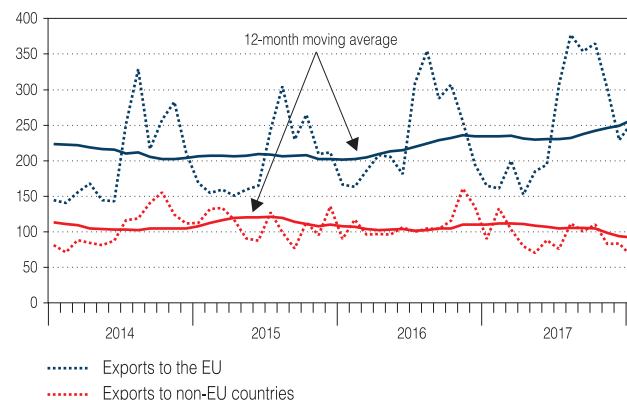
(EUR million)



Source: the BNB.

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

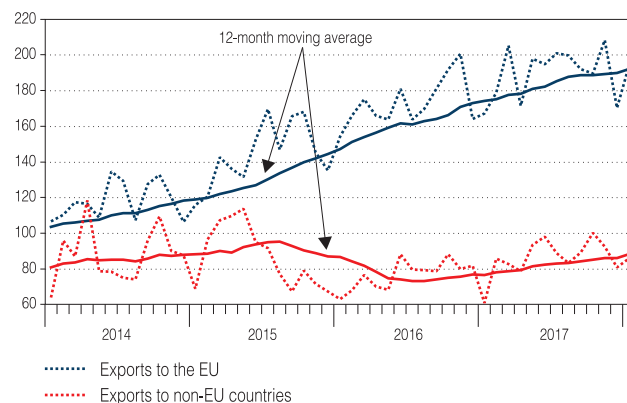
(EUR million)



Source: the BNB.

Exports of Chemical Products, Plastics and Rubber

(EUR million)



Source: the BNB.

behind the nominal growth of chemical product exports.

According to balance of payments data in 2017, exports of services increased by 0.8 per cent year on year, with the travel sub-item contributing most to this growth and, to a lesser extent, the transport sub-item. In 2017 year-on-year earnings from visits of foreign nationals to Bulgaria increased by 9.3 per cent. According to NSI data, visits of foreign tourists to Bulgaria in 2017 rose by 7.5 per cent on 2016, mainly due to the larger number of visits from Turkey and Germany. According to balance of payments data, in January and February 2018 exports of services rose on the corresponding period of 2017 mainly driven by higher earnings from 'other services' and tourism.

In 2017 nominal imports of goods increased on an annual basis due to both higher imported physical volumes and higher import prices. By use, nominal growth was observed in all sub-groups, with raw materials followed by energy resources contributing most significantly. In the beginning of 2018 imports of all groups excluding energy products posted an increase on an annual basis, with raw materials remaining the key contributor.

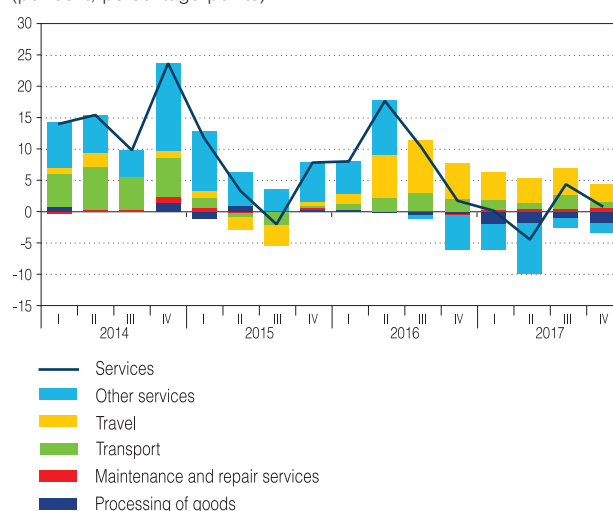
In 2017 imports of goods from EU Member States rose by 7.9 per cent on 2016, with imports from Romania having the most significant positive contribution. Imports from non-EU countries also reported a sizeable increase on an annual basis that came to 24.8 per cent. Imports from Russia consisting mainly of petroleum products had the largest positive contribution to these developments as oil price increases resulted in an increase in nominal imports of petroleum products. In 2017 the share of imports from the EU declined to 51.1 per cent (against 54.7 per cent in 2016). In January 2018 the annual growth of imports of goods from EU countries was similar to that from third countries.

In 2017 nominal imports of energy resources increased significantly on 2016, reflecting mainly the rise in international prices of petroleum products observed during the period and, to a lesser extent, the increase in real volumes of imports.⁵⁰

⁵⁰ The quarterly export deflators for the mineral fuels, oils and related products group under the SITC were used to estimate the price effect in 2017.

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

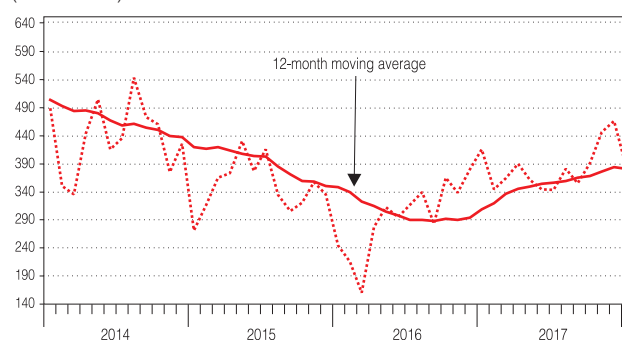
(per cent, percentage points)



Source: the BNB.

Imports of Energy Resources

(EUR million)



Source: the BNB.

Imports of Commodity Groups by Use, January–December 2017

	EUR million	Change* (EUR million)	Growth** (per cent)	Contribution** (percentage points)
Consumer goods	6 524.3	563.5	9.5	2.2
Raw materials	11 128.6	1 703.9	18.1	6.5
Investment goods	7 836.8	715.4	10.0	2.7
Energy resources	4 600.0	1 064.7	30.1	4.1
Other imports	154.8	15.7	11.3	0.1
Total imports (cif)	30 244.6	4 063.2	15.5	

* Change on the corresponding period of previous year.

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

Source: the BNB.

Imports from Russia continued to contribute most strongly to nominal growth of imports of petroleum products. In January 2018 nominal imports of energy resources dropped on an annual basis. Based on expectations of maintaining an annual high growth rate of international petroleum prices and a continuous increase in domestic demand, in the second and third quarters of 2018 nominal imports of energy products are projected to grow on an annual basis.

The raw materials group had the largest contribution to imports growth in 2017. This reflected both higher imported physical volumes and the increase in import prices.⁵¹ Increased imports of the raw materials group was supported by the accelerated economic activity in the manufacturing sector in Bulgaria.⁵² Imports of metal ores had the greatest positive nominal contribution due to the recovery of production in a key undertaking for the sector⁵³ and the recorded annual increase in the imported metal ores prices.⁵⁴ In the beginning of 2018 imports of raw materials retained their trend towards significant annual growth. In the second and third quarters of 2018 nominal imports of raw materials are expected to continue rising, but the growth rate is expected to moderate gradually due to a slower rise in the prices of these goods.

In 2017 nominal imports of consumer goods on an annual basis continued to follow an upward trend. This growth was in line with growing private consumption in both nominal and real terms according to non-seasonally adjusted GDP data. The food, drinks and tobacco sub-group contributed most markedly to the growth of consumer goods imports. In January 2018 nominal imports of consumer goods continued to increase significantly on an annual basis. Given the forecast of keeping high rates of real private consumption growth, in the second and third quarters of 2018 nominal imports in this group are expected to increase further on an annual basis.

⁵¹ 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 2017.

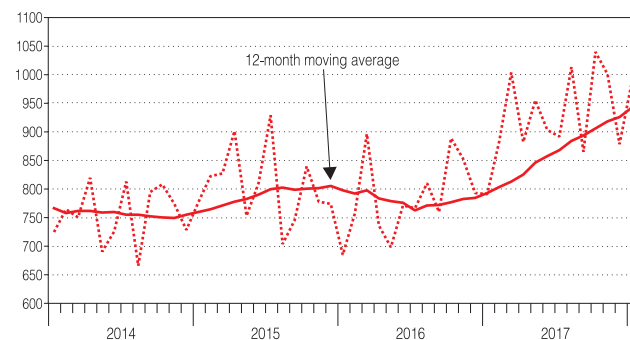
⁵² More detailed information is provided in the Behaviour of Firms and Competitiveness Section in Chapter 3.

⁵³ See footnote 44.

⁵⁴ The quarterly import deflators for the metal ores and metal scrap group under SITC were used to estimate the price effect in 2017.

Imports of Raw Materials

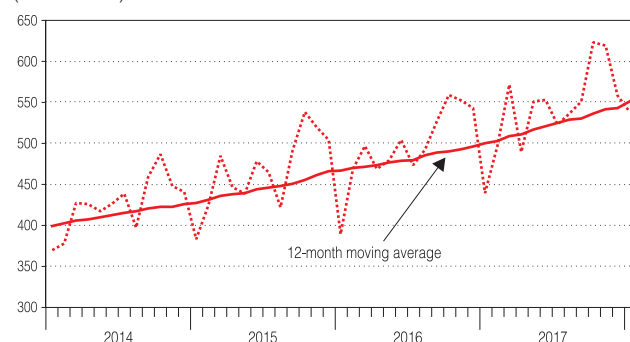
(EUR million)



Source: the BNB.

Imports of Consumer Goods

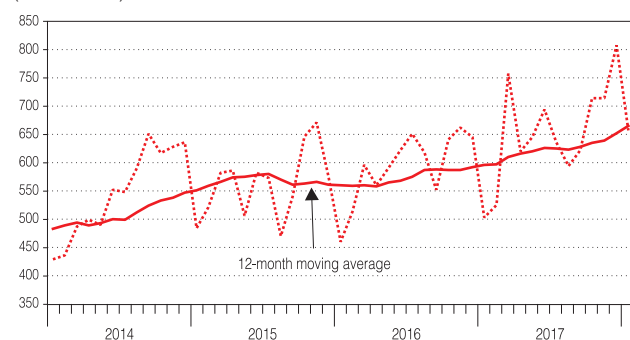
(EUR million)



Source: the BNB.

Imports of Investment Goods

(EUR million)



Source: the BNB.

Nominal imports of investment goods also exhibited a year-on-year increase in 2017, with their dynamics corresponding to the nominal and real growth of investment according to non-seasonally adjusted GDP data. Imports of machines and equipment were the major contributor to the growth of investment goods imports. The assessment of price changes shows that the increase in the group's imports was due to both rising import prices and higher imported physical volumes.⁵⁵ In the beginning of 2018 imports of investment goods posted a substantial increase on an annual basis. Our forecasts for the second and third quarters of 2018 point to a continuous upward trend in nominal imports of investment goods with a view to the expected acceleration in the investment growth rate in Bulgaria compared with the respective quarters of 2017.

According to balance of payments data, in 2017 imports of services decreased by 0.3 per cent year on year. Only expenditure of Bulgarian residents on travels abroad and other transport services posted a significant increase. All other sub-items of services imports reported a decline on 2016. According to NSI data, Bulgarians' visits abroad in 2017 increased by 15.5 per cent on an annual basis, with visits to Greece and Turkey having the most significant contribution to this growth. According to balance of payments data, between January and February 2018 imports of services fell on the corresponding period of 2017, while travel expenditures continued to increase.

Behaviour of Firms and Competitiveness

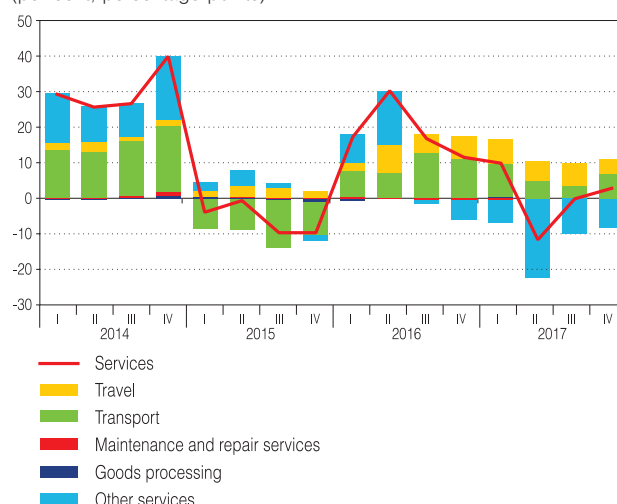
Real value added in the total economy accelerated its growth rate in the fourth quarter of 2017 increasing by 0.9 per cent on a quarterly basis (0.7 per cent in the previous quarter). All major sectors of the economy contributed positively to this growth over the quarter.

Value added in industry went up 0.8 per cent in the fourth quarter driven by the increased economic activity in both manufacturing and construction. In the course of 2017 these developments were also recorded in the industrial turnover and construction production indices

⁵⁵ The quarterly import deflators for the machines, equipment and vehicles group under SITC were used to estimate the price effect in 2017.

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

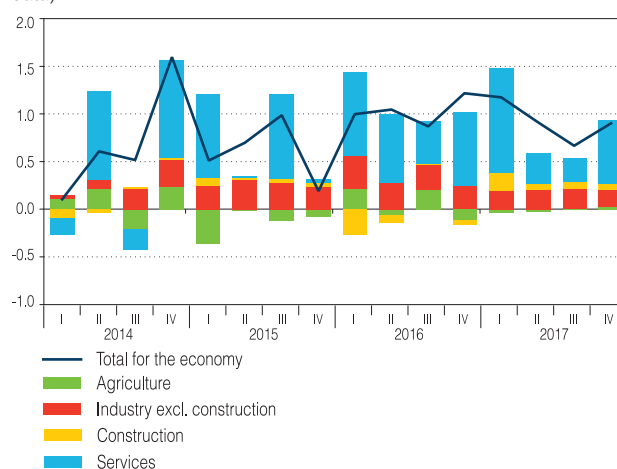
(per cent, percentage points)



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.

at constant prices, according to NSI short-term business statistics. Industrial turnover growth by geographical breakdown (at constant prices) in 2017 was registered mainly at international markets, with manufacturing and mining and quarrying playing a major role to this end. This dynamics was in line with the reported rise in exports of goods.⁵⁶

The increase in the construction production in the course of 2018 was entirely driven by the growth of building construction⁵⁷ and also supported by the upward trend in house prices since the beginning of 2014,⁵⁸ while civil and engineering construction⁵⁹ had a negative contribution and is likely to reflect the decline in public investments⁶⁰ in 2017.

Services value added continued its upward dynamics since early 2018, increasing by 1.0 per cent on a quarterly basis in the fourth quarter of 2017, from 0.4 per cent in the previous quarter. Real estate activities, wholesale and retail trade, transportation and storage, accommodation and food service activities⁶¹ and information and communication⁶² had the most sizeable positive contribution to its growth in the respective period.

Value added growth in trade was accompanied by the continuous upward trend in the retail trade turnover, suggesting enhanced demand for both food and non-food goods in the fourth quarter of 2017. Value added growth in the other services sub-sectors was in line with the preliminary NSI data on the turnover index in services in the fourth quarter, signalling a further increase in sales revenue generated by transportation, storage and posts, information and communica-

⁵⁶ For further information on goods exports, see Chapter 3, Exports and Imports of Goods and Services Section.

⁵⁷ Building construction includes construction of residential and non-residential buildings.

⁵⁸ For further information on housing price dynamics, see Chapter 4.

⁵⁹ Civil and engineering construction covers infrastructure construction of roads, bridges, pipes, power lines, gas pipelines, telecommunications and other construction works.

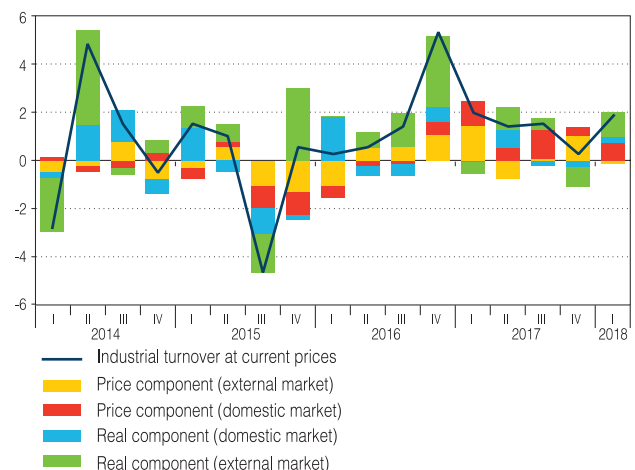
⁶⁰ For more details on BNB estimates of public investment developments, see the Current Economic Environment Section in Chapter 3.

⁶¹ Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities sector under the economic activities classification at level A10.

⁶² Information and communication sector under the economic activities classification at level A10.

Industrial Turnover Dynamics

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

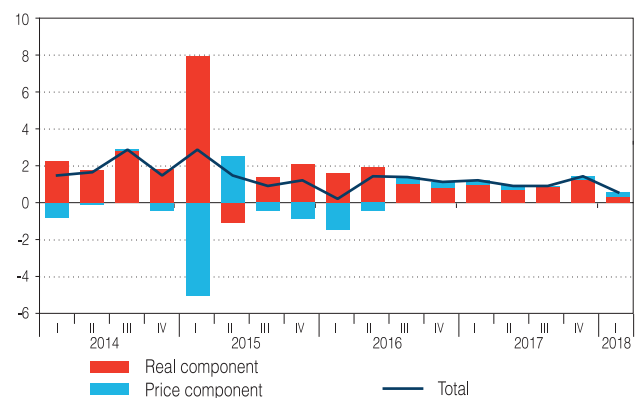


Note: Data for the first quarter of 2018 are averaged for the January–February period.

Sources: the NSI, BNB calculations.

Dynamics of the Nominal Retail Trade Turnover

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

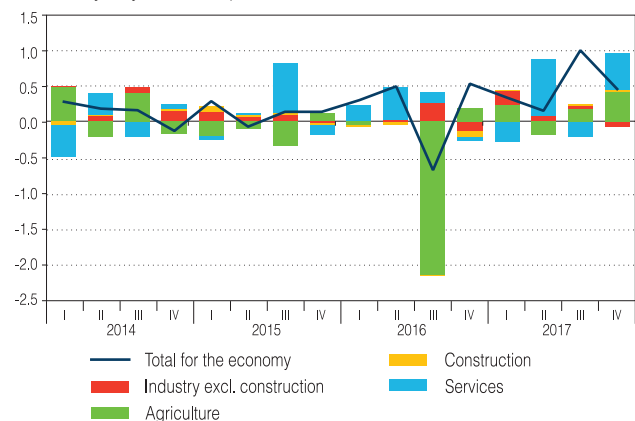


Note: Data for the first quarter of 2018 are averaged for the January–February period.

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.

tion, telecommunications and other business services.

The NSI short-term business statistics data on production and turnover in industry, trade and construction production in January and February gave positive signs of the change in gross value added in the respective sub-sectors over the first quarter of 2018. On average, over the January–February period the nominal industrial turnover increased on the fourth quarter of 2017 mainly as a result of the change in the real component in both domestic and external markets. The price component in the domestic market also contributed positively to the industrial turnover growth rate. Over the same period retail trade turnover increased further at both current and constant prices on a quarterly basis. The construction output index also improved from the previous quarter with a positive contribution of the building and civil construction.

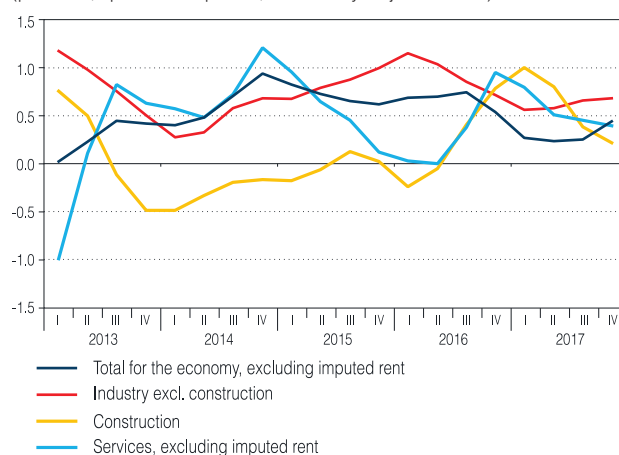
The improvement of the economic activity measured by value added dynamics predetermined the increased labour demand by firms. In the fourth quarter of 2017 employment accelerated on a quarterly basis with growth in the total economy of 0.4 per cent. As a result of the rise in the number of persons employed mainly in wholesale and retail trade, transportation and storage, accommodation and food service activities⁶³ and general government⁶⁴ sub-sectors, the services sector made the most important contribution to this growth. The agricultural sector also contributed positively to the change in the number of employed in the economy, while the industry sector had a negative contribution due to the manufacturing sector. The decline in the number of employed persons in the industry was partly offset by the increased hours worked *per* person. In the fourth quarter the employment in the construction continued growing at low rates. The data available for 2017 suggest that the long-term downward trend in employment in the construction, observed since 2009, has been reversed, reflecting the positive developments in this sub-sector.

⁶³ Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities sector under the economic activities classification at level A10.

⁶⁴ Public administration and defence; compulsory social security; education; human health and social work activities sector under the economic activities classification at level A10.

Labour Productivity Developments (Value Added *per* Employee)

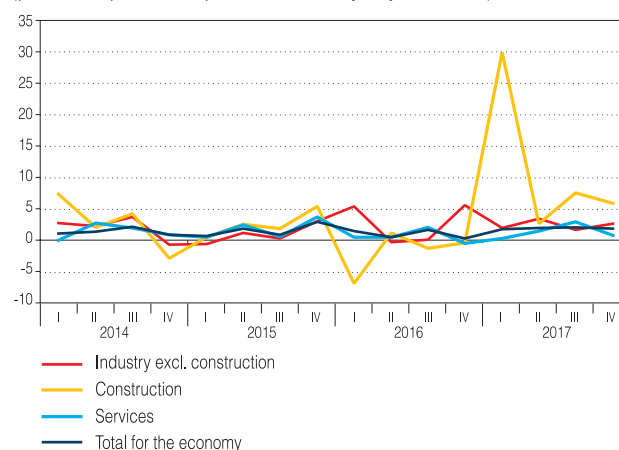
(per cent, quarter-on-quarter; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Compensation *per* Employee at Current Prices

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

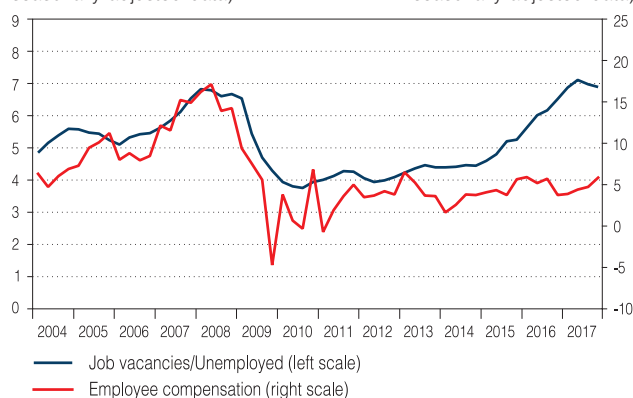


Sources: the NSI, BNB calculations.

Job Vacancies/Unemployed Ratio and Employee Compensation

(per cent, job vacancies/unemployed; seasonally adjusted data)

(per cent on corresponding quarter of the previous year; seasonally adjusted data)



Note: The quotient between job vacancies over the month and unemployed is an indicator of the labour market conditions. The increase in the indicator is interpreted as a limited potential of labour supply to satisfy demand as a smaller number of unemployed compete for one job.

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

Firms' optimistic expectations of future business climate in Bulgaria, anticipated higher demand for goods and services along with a gradually increasing number of job vacancies are indicative of higher labour demand by firms. Consequently, employment is expected to grow further in the second and third quarters of 2018.

Added value grew at faster rates than employment resulting in a further increase in labour productivity in the total economy throughout 2017. The improved labour productivity over the past year was favoured by private investment growth reflecting the increased share of managers who point to production expansion and rationalisation as investments' primary aim.⁶⁵ Positive developments were observed in all major sub-sectors of the economy, and accelerated growth rates of productivity *per* person employed was recorded in the industry, while productivity growth in the construction and services slowed down on the previous quarter.

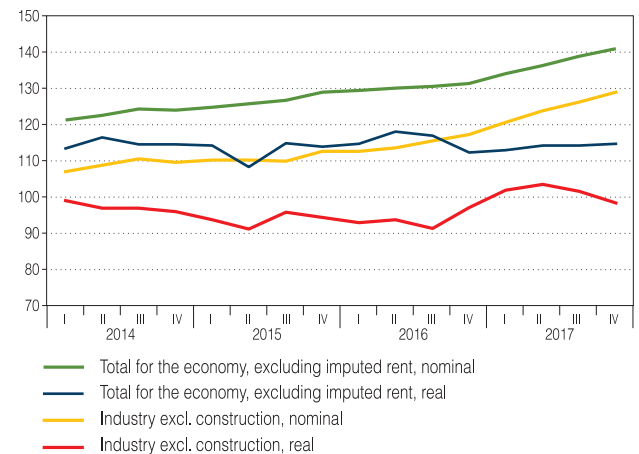
The nominal compensation *per* employee continued to increase over the fourth quarter of 2017 at a rate close to the average annual rate, with all economic sectors contributing to this growth. Compensation *per* employee growth in construction and services moderated on the previous quarter, while a slight acceleration in the industry was observed. Increasing labour demand by firms coupled with a decline in labour supply measured by the decreasing number of unemployed create conditions for growth in remuneration. The compensation *per* employee is expected to increase further in the second and third quarters of 2018 at a rate close to the rate observed in 2017.

Over the quarter labour productivity in the total economy increased at a slower pace compared with the nominal growth of the compensation *per* employee in the same period, leading to acceleration in unit labour costs in both nominal and real terms. These developments are in line with the expected effects of the nominal and real convergence in these indicators. In the long term, growth of the nominal compensation *per* employee may be expected to be higher than that of labour productivity without jeopardising the competitive-

⁶⁵ The analysis employs data derived from EC investment surveys.

Unit Labour Costs

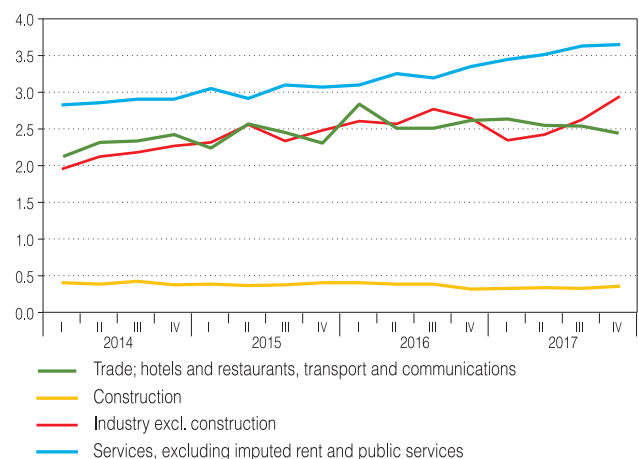
(2010 = 100; seasonally adjusted data)



Sources the NSI, BNB calculations.

Gross Operating Surplus at Current Prices

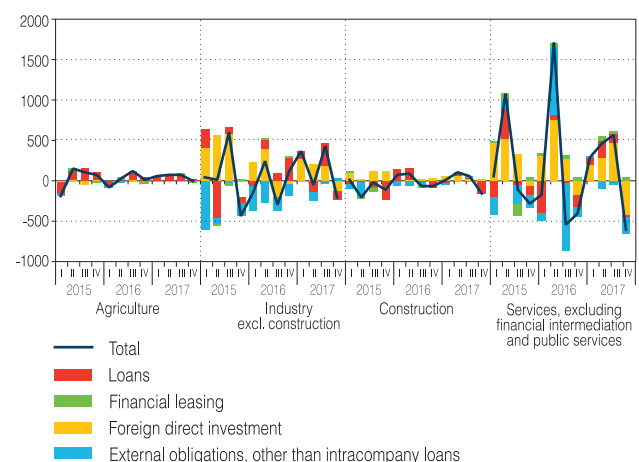
(BGN billion; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Financing Sources*

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



* Sources of financing other than gross operating surplus.

Source: the BNB.

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	III	IV
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	0.2	0.9
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	0.9	0.8
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	1.3	1.0
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	-0.2	0.9
Information and communication	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	0.6	2.0
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	2.1	0.4
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	0.4	2.8
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	0.0	0.6
Public administration, 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	0.3	-0.5
Culture, sport and entertainment; other activity; activities of households as employers; non-identified activities of households producing goods and services for own use; activities of extraterritorial organisations and bodies	-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	0.6	-0.1
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	0.7	0.9

Source: the NSI.

ness of the economy as it will also take account of the process of price convergence.⁶⁶

In the fourth quarter of 2017 gross operating surplus rose quarter on quarter in industry, unlike the agricultural sector and most services sub-sectors experiencing declines.

Funding attracted by firms from sources other than the gross operating surplus declined in all economic sectors. This fall was mainly due to the decreased foreign direct investment⁶⁷ attracted in Bulgaria and loans to non-financial corporations over the reviewed quarter.

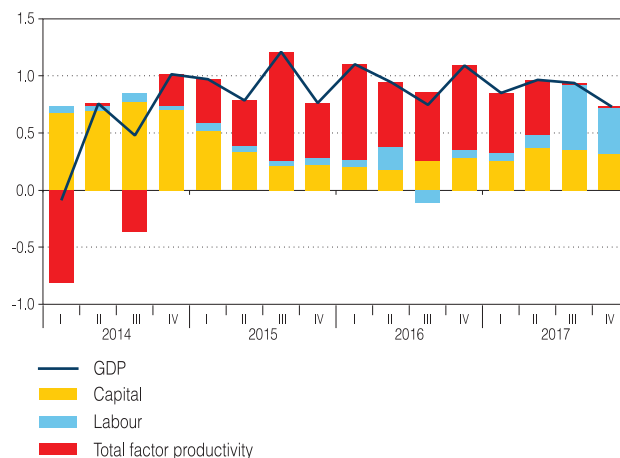
Growth decomposition by production factor suggests that labour remained the main contributor to the growth in the fourth quarter of 2017 as a result of the increased number of worked man-hours in the economy. The increased man-hours were due to both rising employment and higher man-hours *per* employee. Capital retained its strong positive contribution to the growth throughout the whole year, with total factor productivity contributing also, albeit at a significantly lower degree.

⁶⁶ For a more detailed analysis of competitiveness of goods and services exports, see Chapter 3, The Exports and Imports of Goods and Services Section.

⁶⁷ Preliminary data subject to revision (see note 9).

Contribution of Changes in Production Factors to GDP Growth

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



Sources: the NSI, BNB calculations.

Household Behaviour

In the fourth quarter of 2017 household consumption accelerated its quarter-on-quarter growth rate to 1.7 per cent in real terms, according to seasonally adjusted national account data. Major factors behind this growth involve the increasing wage income, improving labour market conditions in 2017, persistently low interest rates, optimistic household sentiment of the overall economic situation in Bulgaria and improving expectations of households for their financial position.

The NSI Labour Force Survey shows that in the fourth quarter of 2017 labour supply, as measured by the labour force,⁶⁸ continued to expand, as new persons joined the labour force and the share of discouraged persons outside the labour force contracted. As a result, the labour force participation rate⁶⁹ rose on the previous quarter.

The Labour Force Survey shows that in the fourth quarter of 2017 unemployment⁷⁰ continued to decrease, reaching 5.8 per cent (non-seasonally adjusted data: 5.6 per cent). Decreased short-term unemployment (up to one year) and, to a lesser extent, fewer persons unemployed more than a year contributed to the decline in the unemployment rate. The seasonally adjusted unemployment rate⁷¹ calculated using Employment Agency data also continued to decrease, reaching in March 6.2 per cent (6.8 per cent according to non-seasonally adjusted data).

Reflecting the favourable economic situation in Bulgaria coupled with rising labour demand and lack of qualified personnel in some economic

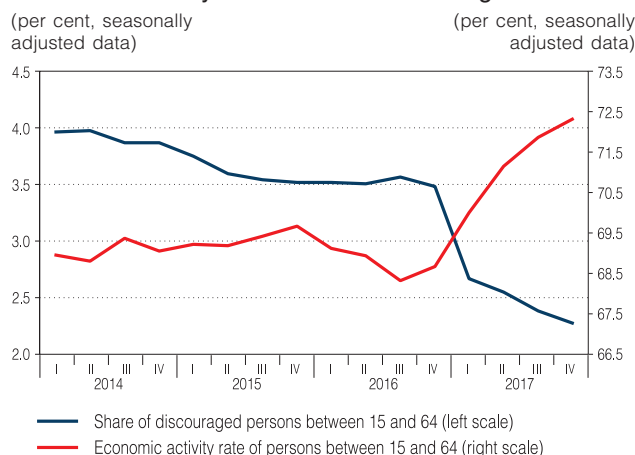
⁶⁸ The labour force (currently economically active population) comprises persons aged 15 and older who provide the supply of labour for the production of goods or services. Labour force includes both employed and unemployed persons.

⁶⁹ The labour force participation rate is the proportion between economically active persons (labour force) and the population of the same age.

⁷⁰ Unemployment rate is the proportion between the number of unemployed and the labour force based on Labour Force Survey data.

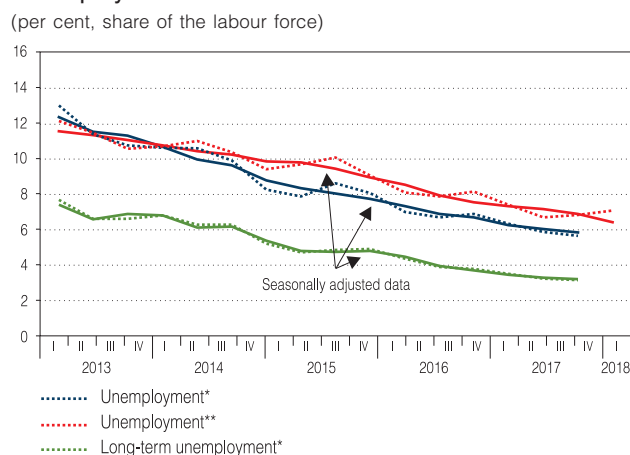
⁷¹ The definition of the unemployment rate according to the Employment Agency corresponds to that referred to in footnote 70, but using a constant rate of labour force comprising the number of persons in the respective age group since the last census of the population.

Economic Activity and Share of Discouraged Persons



Sources: NSI Labour Force Survey, BNB calculations.

Unemployment Rate

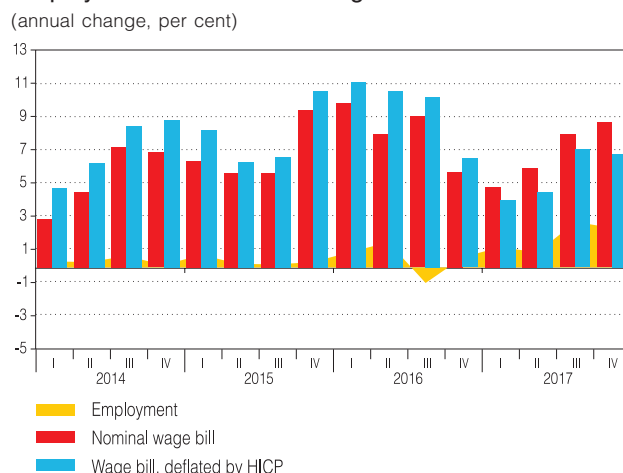


* NSI data.

** Employment Agency data.

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

Employment and Nominal Wage Bill



Sources: the NSI – SNA, BNB calculations.

sectors,⁷² labour remunerations continued to increase in the fourth quarter of 2017 (both annually according to non-seasonally adjusted data on the wage bill and average wage *per* employee and quarterly according to seasonally adjusted national account data).

The consumer confidence indicator went up in January 2018 due to the improving expectations of households for their financial position and the level of unemployment reported in the NSI Consumer Survey.⁷³ This was the reason for households to declare intentions to increase their expenses on all groups of durable goods in the following two years.

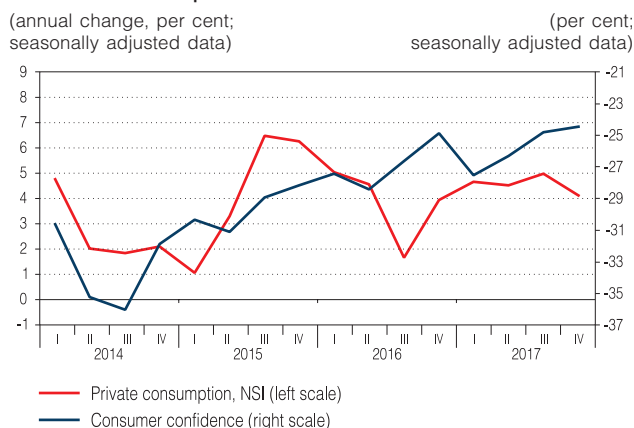
Improved household expectations and growing labour income were essential drivers behind enhanced consumer demand. According to seasonally adjusted national account data, in the fourth quarter of 2017 private consumption accelerated its growth rate on both annual and quarterly basis. Nominal retail trade volumes also increased their growth at the end of 2017, reflecting largely the rise in traded turnover in both food and non-food goods. Available data for the first two months of 2018 suggest retention of the upward dynamics in nominal retail trade volumes, indicating continuous strong growth in private consumption. Newly extended consumer loans continued to increase in February, which is likely to additionally stimulate consumer demand in the following months.

The NSI Household Budget Survey data show that the share of savings in household disposable income declined slightly. Nonetheless, the proportion of households intending to increase their savings in the following 12 months (according to the NSI Consumer Survey of January 2018) remained high. Household assets measured by their net position in the banking system grew in the fourth quarter of 2017.

⁷² The analysis employs NSI business survey data regarding the share of firms indicating the lack of labour force (skilled workers included) as a factor limiting their activity.

⁷³ 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).

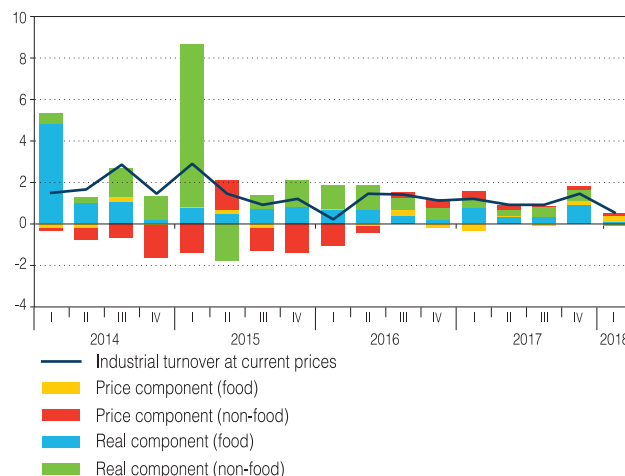
Private Consumption and Consumer Confidence



Sources: the NSI, BNB calculations.

Retail Trade Turnover

(seasonally adjusted data at current prices, per cent, on the previous quarter)

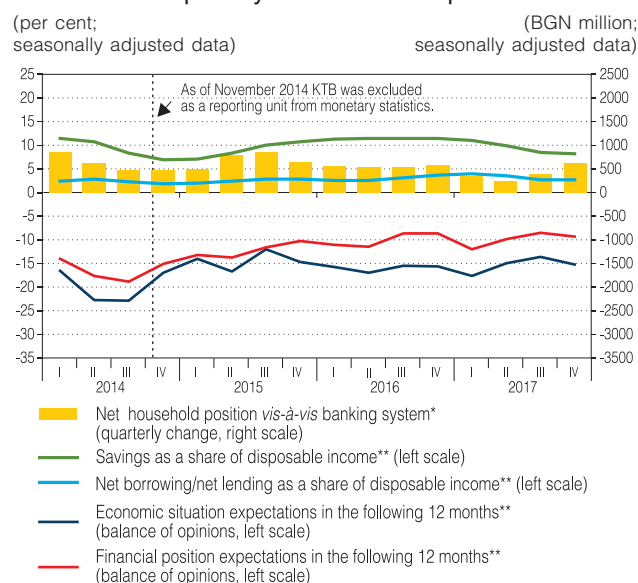


Note: Non-additive data on contributions due to direct seasonal adjustment of the total amount and its components. Data for the first quarter of 2018 are averaged for the January–February period.

Sources: the NSI, BNB calculations.

Projected growth in external and domestic demand over the next two quarters is anticipated to foster labour demand. The intensified labour demand along with raised minimum wage and minimum insurance thresholds in early 2018, as well as public sector wage increases approved by the government will support wage growth in the private sector. The continuing robust growth in wages is expected to reinforce working age population, involving more people in the labour force.

Household Propensity to Save and Expectations



* BNB data.

** NSI data.

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

Employment and Income Dynamics

	2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
(per cent, quarter-on-quarter; seasonally adjusted data)																
Employed persons	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	1.0	0.4
Nominal wage <i>per</i> employee*	1.1	1.6	2.2	0.9	0.9	2.0	1.2	3.0	2.0	0.5	1.6	0.3	1.3	1.9	1.9	1.9
Real wage <i>per</i> employee**	1.5	2.2	2.5	1.2	1.3	1.8	1.8	3.5	2.5	1.0	1.0	0.4	1.1	1.9	1.9	1.4
Wage bill, nominal terms	1.0	1.9	2.0	0.9	1.6	2.0	1.7	3.2	2.1	1.2	1.8	0.9	1.3	1.6	2.1	2.1
Wage bill, real terms**	1.4	2.5	2.3	1.2	1.9	1.8	2.2	3.7	2.6	1.7	1.2	1.0	1.0	1.6	2.1	1.5
(per cent, on corresponding quarter of previous year, non-seasonally adjusted data)																
Employed persons	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	2.7	2.4
Nominal wage <i>per</i> employee*	3.5	4.3	7.3	7.3	5.5	5.1	4.2	8.1	8.2	5.9	7.4	3.6	3.8	6.1	7.8	8.4
Real wage <i>per</i> employee**	5.4	6.1	8.5	9.2	7.4	5.8	5.2	9.2	9.4	8.4	8.6	4.4	3.0	4.6	6.9	6.6
Wage bill, nominal terms	2.9	4.5	7.2	6.9	6.4	5.7	5.6	9.5	9.9	8.0	9.1	5.7	4.8	6.0	8.0	8.7
Wage bill, real terms**	4.8	6.3	8.5	8.8	8.3	6.3	6.6	10.6	11.1	10.6	10.3	6.5	4.0	4.5	7.1	6.8

* 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: NSI – SNA, BNB calculations, Eurostat.

Retail Trade Turnover

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

	2014				2015				2016				2017				2018
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	January – February
Retail trade, excluding motor vehicles and motorcycles incl.	2.3	1.7	2.8	1.9	7.9	-1.1	1.4	2.1	1.6	1.9	1.1	0.8	1.0	0.7	0.9	1.3	0.3
Food, drinks and tobacco products	13.2	2.9	2.8	0.6	2.1	1.4	1.9	2.2	1.9	1.9	1.0	0.7	2.2	0.9	1.0	2.5	0.4
Textile, clothing, footwear and leather	-3.1	5.3	6.4	-2.3	-0.8	0.1	3.9	2.9	2.5	2.9	1.3	-0.2	8.1	-1.2	-5.4	1.9	-4.7
Household appliances, furniture and other household goods	-0.8	0.8	-0.1	2.1	0.7	-0.1	1.8	-0.2	2.3	0.3	1.2	2.0	1.5	2.8	1.5	1.7	1.0
Computer and communication equipment	-4.8	-4.1	0.4	-0.3	16.4	-5.5	0.3	-2.7	-1.8	5.3	1.9	7.7	2.4	1.5	1.4	1.9	-2.3
Pharmaceutical and medical goods, cosmetics and toiletries	3.8	1.6	2.1	3.3	2.4	1.6	1.9	2.5	2.0	3.5	3.6	0.9	3.5	1.3	0.9	1.0	5.9
Unspecialised shops with different kinds of goods	0.7	1.0	0.3	0.8	1.3	0.4	1.5	2.3	0.0	1.2	2.5	1.4	5.2	3.4	2.5	1.8	-3.7
Automobile fuels and lubricants	6.1	-1.7	10.2	-3.4	38.6	-6.5	-0.4	5.4	0.8	1.5	-2.2	-3.0	-7.1	-2.7	-1.1	-0.5	1.6

* Data for the first quarter of 2018 are averaged for the January–February period.

Source: the NSI. Short-term statistics.

Fiscal Policy Effects on the Economy

Quarterly data on consolidated fiscal programme performance show that the cash-based budget surplus for 2017 was BGN 845.6 million (0.9 per cent of GDP). Revenue dynamics over the year was driven by the sustainable strong performance of tax revenue, whereas proceeds from grants were significantly lower than in the previous year when the European Commission made substantial reimbursements on end-2015 expenses for the 2007–2013 period. Despite the gradual increase of EU programme expenditure in 2017, capital expenditure dynamics remained subdued. General government sector's investment declined from 2016, exerting a dampening effect on economic activity, while current non-interest expenditure rose essentially, contributing positively to domestic demand developments in terms of both higher government consumption expenditure and larger transfers to households.

In February the CFP cash balance was again positive, its surplus reaching BGN 752 million (0.7 per cent of projected GDP),⁷⁴ reporting a minimum decline of BGN 80 million (0.1 per cent of GDP) compared to the same period of 2017.

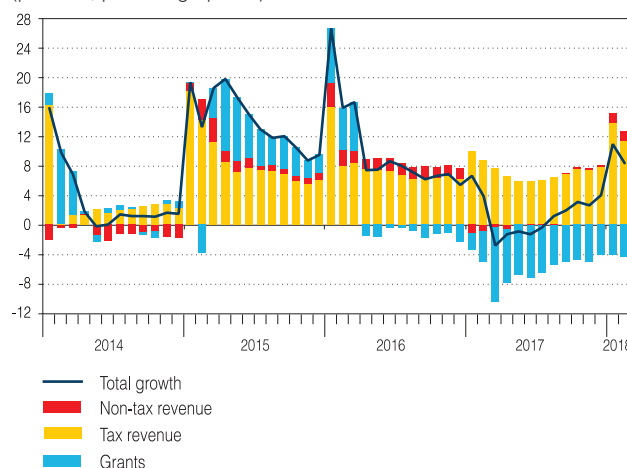
In February total budget revenue rose by 8.4 per cent driven mainly by tax revenue (11.5 percentage points) and, to a lesser degree, non-tax revenue (1.2 percentage points). The annual growth rate of tax revenue was 14.0 per cent in the first two months of 2018, reflecting favourable developments in almost all major tax groups, with higher receipts from indirect taxation (growth of 10.0 per cent) and social and health contributions (growth of 15.9 per cent) contributing most strongly to this growth. After accelerating in January, VAT revenue growth moderated in February to reach 10.9 per cent.

Excise revenue growth was 6.6 per cent annually, driven entirely by the increased income from excise duties on cigarettes (probably a result of excessive stockpiling in the commercial network with cigarettes, for which the pre-2018 tax increase rate applies).

⁷⁴ GDP forecasts for 2018 based on the MF spring macroeconomic forecast for the 2018–2021 period, published in April 2018.

Contributions of Major Groups of Revenue to Growth in Total Revenue and Grants, Cumulatively (on an Annual Basis)

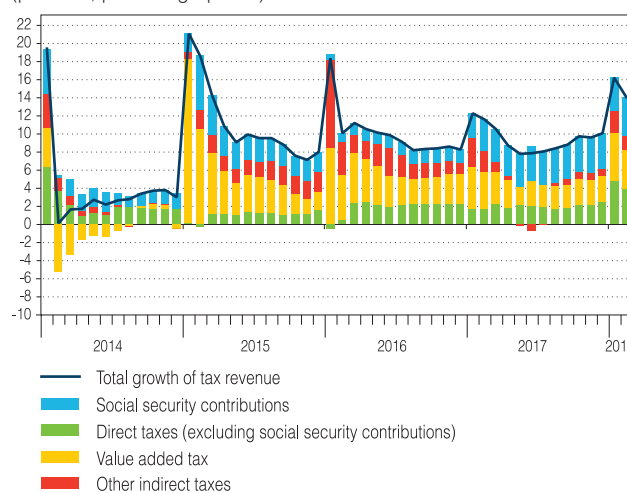
(per cent; percentage points)



Sources: the MF, BNB calculations.

Contributions of Major Tax Groups to Tax Revenue Growth, Cumulatively (on an Annual Basis)

(per cent; percentage points)



Sources: the MF, BNB calculations.

The sustainable growth in revenue from social and health contributions reflected the favourable labour market dynamics and increased pension contributions (by 1 percentage point) and minimum wage and minimum social security income in force as from early 2018.⁷⁵

Significant acceleration was also reported in direct tax revenue growth, with personal income tax and corporate tax receipts rising by 28.9 and 37.4 per cent, respectively. Direct tax revenue growth benefited not only from the continued growth in household income and gross operating surplus of firms but also from persistent positive budget effects of the measures to boost tax collection.⁷⁶

In the first two months insignificant funds were repaid by the EC on EU funded programmes which led to a further decline in grant revenue. This drop should have a temporary nature, given the recent months' acceleration of spending on EU programmes.

In February the annual growth in total CFP expenditure accelerated significantly from the end of the previous year to reach 11.4 per cent. This upward pattern originated from both strengthening growth in major categories of non-interest expenditure and a more substantial increase in capital expenses. Staff costs (3.0 percentage points) and social payments (2.5 percentage points) contributed most to current expenditure growth, reflecting mainly wage increases, most pronounced in education, and the two rises in minimum pension over the second half of 2017. Operating costs also grew rapidly by 15.0 per cent for the first two months of the year.

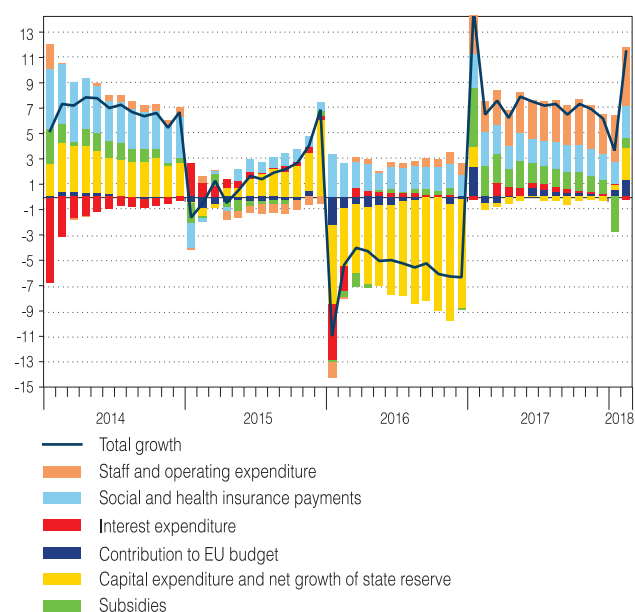
Accelerated growth in staff expenditure over the last quarter of 2017 was the main factor behind the increased positive contribution of government consumption to GDP growth. Taking into account the effects of new expenditure measures under the 2018 budgetary framework, current non-interest expenditure may additionally strengthen its growth, with developments

⁷⁵ See the Basic Parameters of the 2018–2020 Budgetary Framework box, *Economic Review*, 4/2017.

⁷⁶ For example, the CFP Performance Monthly Bulletin of the Ministry of Finance reported continuous positive effects on revenue from dividend taxes in the first months of 2018 as a result of the NRA campaign for control over business entities and non-profit institutions with sizeable cash balances reported in their 2016 financial statements.

Contributions of Major Groups of Expenditure to Total Expenditure Growth, Cumulatively (on an Annual Basis)

(per cent; percentage points)



Note: In the Consolidated Fiscal Programme reports of January 2016, staff expenditure includes wage, insurance and other remuneration expenditure, while in the reports for past periods, the latter were included in operating expenditure. To prevent data inconsistencies prior to and after January 2016 resulting from the methodological change, staff and operating expenditures are presented aggregately in the chart and separately in the table *Key Budget Indicators Performance for 2017–2018*.

Sources: the MF, BNB calculations.

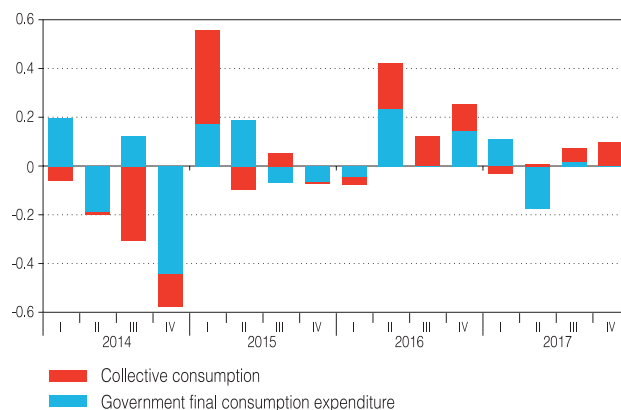
observed over the first two months indicating that government consumption will continue to contribute positively to real GDP growth in the first quarter of 2018. In addition, the robust growth in social payments in early 2018 also suggests retention of positive fiscal policy effects on economic activity through disposable income of households.

In February 2018 capital expenditure rose by 44.1 per cent on an annual basis and the downward trend observed in most of 2017 was reversed in the beginning of 2018. Upward movements in capital expenditure were entirely due to significantly accelerated growth of capital expenditure under EU programmes. These developments are indicative of the positive contribution of government investment to quarter-on-quarter GDP growth in the first quarter of 2018.

In the second and third quarters of 2018 the favourable upward trend in tax and social security revenue is expected to be sustained. Growth of excise duty receipts alone may slow down somewhat as a result of exhausted effects of the practice of overstocking retailers with cigarettes. Concurrently, the accelerated absorption of funds under the EU programmes will result in an increase of receipts from grants with a certain lag. If the upward dynamics of current non-interest expenditure is sustained, the fiscal policy will continue to have a positive effect on economic activity both in terms of higher government consumption and higher household transfers. If the acceleration in expenditure under EU programmes observed in the first months of the year is sustained and the expectations for recovering national investment expenditure materialise, government investment would have a stronger positive effect on economic growth in the second and third quarters of 2018.

Contributions 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 2017–2018

Consolidated Fiscal Programme	2017 January–February ¹		2018 January–February ¹	
	BGN million	per cent ²	BGN million	per cent ²
Total revenue and grants	5 732	3.9	6 212	8.4
Tax revenue	4 721	11.5	5 381	14.0
incl. social security and health insurance contributions	1 253	13.2	1 452	15.9
Non-tax revenue	726	-6.4	795	9.5
Grants	285	-44.2	36	-87.3
 Total expenditure (incl. the contribution to EU budget)	 4 900	 6.4	 5 460	 11.4
Staff expenditure	1 158	6.1	1 304	12.6
Operating expenditure	502	9.6	577	15.0
Interest	119	1.5	105	-11.1
Social expenditure, scholarships	2 467	5.3	2 595	5.2
Subsidies	294	59.4	331	12.5
Capital expenditure and government reserve growth	206	-10.5	327	58.7
incl. capital expenditure	227	-	327	44.1
Contribution to general budget of the European Union	154	-14.1	220	42.6
	BGN million	difference ³ (BGN million)	BGN million	difference ³ (BGN million)
Budget balance, on a cash basis	832	-83	752	-80
Tax revenue under the state budget	2017 January–February ⁴		2018 January–February ⁴	
	BGN million	per cent ²	BGN million	per cent ²
Tax revenue	3 349	11.0	3 791	13.2
Corporate tax	67	21.1	93	37.4
Income tax for individuals	477	11.6	615	28.9
Value added tax	1 869	10.1	2 074	10.9
Excise duties	880	11.8	938	6.6
Customs duties	28	9.6	43	51.3
Insurance premia tax	8	30.5	9	10.1
Other taxes	19	12.7	19	1.5

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 The change of the budget balance on the same period of previous year.

⁴ Based on monthly reports on the implementation of the state budget.

Source: the MF.

4. INFLATION

Over the first three months of 2018 the annual inflation slightly accelerated compared with 2017, reaching 1.9 per cent in March. This was attributable to the increasing effect of domestic factors on consumer price dynamics. A trend towards a gradual acceleration of inflation in services which occurred at the close of the previous year, was sustained and this group had the largest positive contribution to overall inflation in March 2018. Goods and services with administratively controlled prices (including tobacco products) were another group which made a relatively large contribution to annual inflation in the beginning of the year. Energy products and food had a low positive contribution to inflation compared with 2017 given the slow increase in euro prices of petroleum and a decline in euro prices of food in international markets.

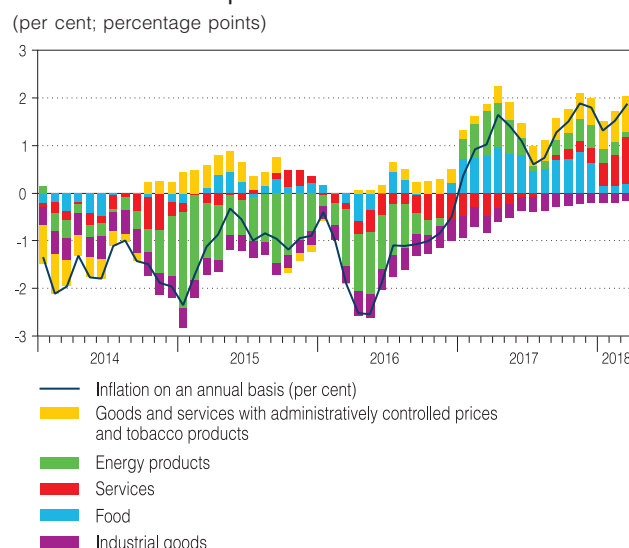
In the second and third quarters of 2018 inflation is expected to pick up gradually driven mainly by the positive contribution of core inflation and administratively controlled prices.

Over the first three months of 2018 annual inflation slightly accelerated compared with 2017, reaching 1.9 per cent in March (from 1.8 per cent in December 2017).⁷⁷ Since early 2018 consumer price growth was mainly driven by the increasing pressure of internal rather than external factors. Energy products and food within the context of slower growth of euro prices of petroleum and declines in euro prices of food on the international markets had a lower positive contribution on end-2017.

The domestic environment which was characterised by strengthening of consumer demand and increased labour costs of firms throughout 2017 predetermined the acceleration of inflation in services. In the fourth quarter of 2017 nominal unit labour costs posted annual growth of 7.9 per cent in the economy on average (from 5.5 per cent on average in 2017).⁷⁸ Goods and services with administratively controlled prices were another group which made a relatively large contribution to annual inflation, mainly reflecting price rises in electricity, heating and water supply in 2017. Tobacco product prices increased further on an annual basis due mainly to raised tobacco excise duties since the beginning of 2018 for a third consecutive year.

The effect of international prices of fuels, food and commodities on inflation may be seen through price developments of goods imported

Annual Inflation and Contribution of Major Commodity 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.

⁷⁷ The analysis in this section employs NSI HICP data.

⁷⁸ For more details, see the Behaviour of Firms and Competitiveness Section in Chapter 3.

in Bulgaria. In the fourth quarter of 2017 annual growth of imports of goods deflator stayed unchanged at 6.9 per cent on the previous quarter.⁷⁹ However, the price growth rate of imported food⁸⁰ and fuels⁸¹, having a direct effect on HICP, tended to slow down compared with the first three quarters of 2017. These developments were rapidly transmitted through the supply chain on domestic producer prices and consequently on consumer prices.

Since the beginning of 2018 the total producer price index (PPI) has continued increasing on an annual basis, though displaying a trend towards gradual deceleration that started in September 2017, reflecting international oil, food and metal price dynamics.⁸² As of February 2018 the annual HICP growth rate accounted for 4.4 per cent, from 5.1 per cent at the end of 2017. The sub-sectoral breakdown shows that the increases in producer prices were driven mainly by production and distribution of electricity and heating sub-sector⁸³, which was in line with natural gas price increases since early 2018.⁸⁴ In February 2018 the positive contribution of manufacturing sub-sector declined significantly mainly due to the lower industrial production prices related to the manufacture of food⁸⁵ and refined petroleum products⁸⁶ and slower annual growth of metal⁸⁷ and chemical product prices⁸⁸.

⁷⁹ Import data under the SITC.

⁸⁰ This refers to the food and live animals and animal and vegetable fats, oils and waxes groups.

⁸¹ This refers to the oil and refined petroleum products group.

⁸² For more details on price developments in major raw materials, see the International Commodity Prices Section in Chapter 1.

⁸³ This refers to the production and distribution of electricity, heating, and gaseous fuels group.

⁸⁴ The changes in natural gas prices in the first quarter of 2018 as approved by the Energy and Water Regulatory Commission (EWRC) by the end of 2017 reflect the price dynamics of oil and alternative fuels of gas on the international markets over the last nine months including changes in the exchange rate of the US dollar to the Bulgarian lev. For more details see: <http://www.dker.bg/news/143/65/komisiyata-za-energijno-i-vodno-regulirane-utvr-di-tsenata-na-prirodniya-gaz-za-prvoto-trimesechie-na-2018-g.html>

⁸⁵ This refers to the production of food, beverages and tobacco products group.

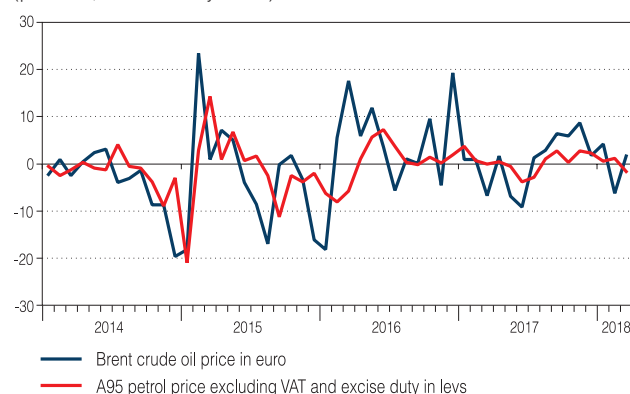
⁸⁶ This refers to the production of coke and refined petroleum products group.

⁸⁷ This refers to the manufacture of basic metals and fabricated metal products, except machinery and equipment group.

⁸⁸ This refers to the manufacture of chemicals group.

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

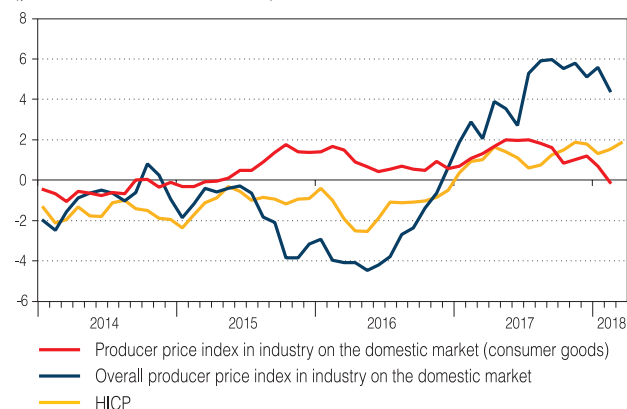
(per cent; on a monthly basis)



Sources: the ECB, the NSI, BNB calculations.

Rate of Change in Manufacturing CPI and HICP

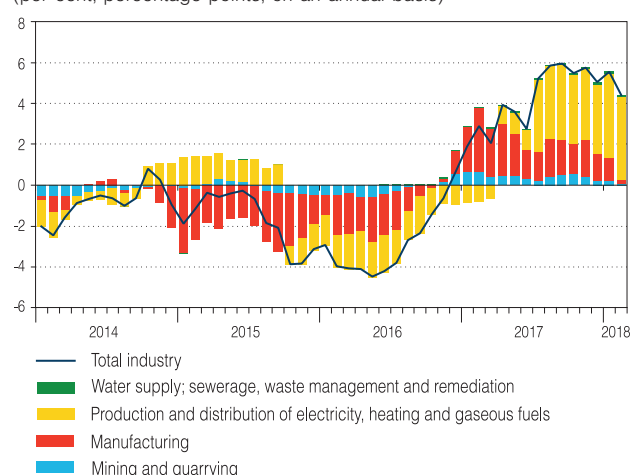
(per cent; on an annual basis)



Source: the NSI.

Rate of Change in CPI on the Domestic Market and Contribution by Major Sub-sectors (Quarterly)

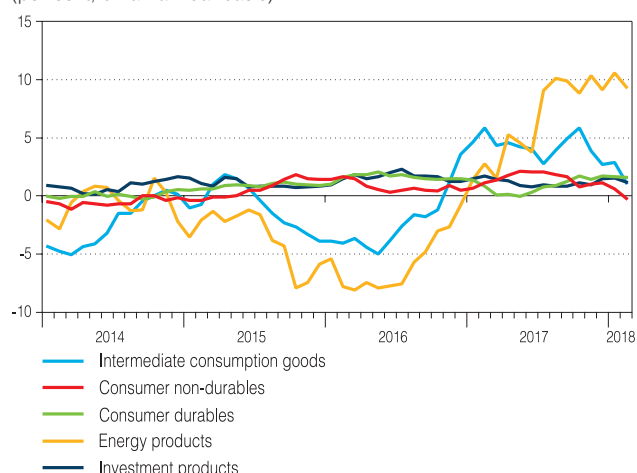
(per cent; percentage points; on an annual basis)



Source: the NSI.

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

(per cent; on an annual basis)



Source: the NSI.

According to the end-use classification, the PPI increase in the January to February 2018 period was mainly driven by higher energy product prices which account for a substantial part of firms' production costs in some sectors of manufacturing and mining and quarrying,⁸⁹ as well as in services⁹⁰. Retention of the upward trend in these prices over the following months will be a prerequisite for an increasing pressure on final consumer prices.

In February 2018 a decline in the producer prices of non-durable consumer products was reported on an annual basis which was attributable to the price decreases in some food and tobacco products. These developments were rapidly passed onto final consumer prices of processed food whose inflation slowed down to 1.5 per cent on an annual basis in March 2018 (from 2.5 per cent at the end of 2017).

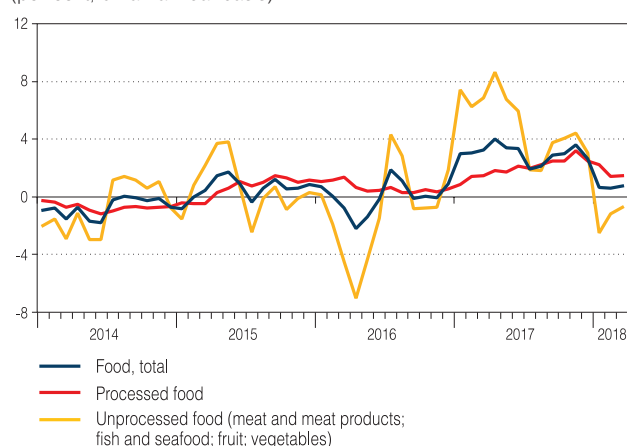
In March 2018 unprocessed food posted lower prices on an annual basis (-0.8 per cent). These prices reflect to a significant extent the respective international price dynamics and the weather conditions in Bulgaria that impact production costs and supply of domestic products. In the

⁸⁹ According to data from Supply and Use tables for 2014, such sectors are, for example, manufacture of paper and paper products, manufacture of basic metals, manufacture of chemicals, manufacture of basic pharmaceutical products and pharmaceutical preparations, manufacture of electrical equipment. For more details, see: <http://www.wiod.org/home>

⁹⁰ According to data from Supply and Use tables for 2014, such sectors are, for example, trade, repair of motor vehicles and motorcycles, air transport and road transport. For more details, see: <http://www.wiod.org/home>

Rate of Change of Food Price Index

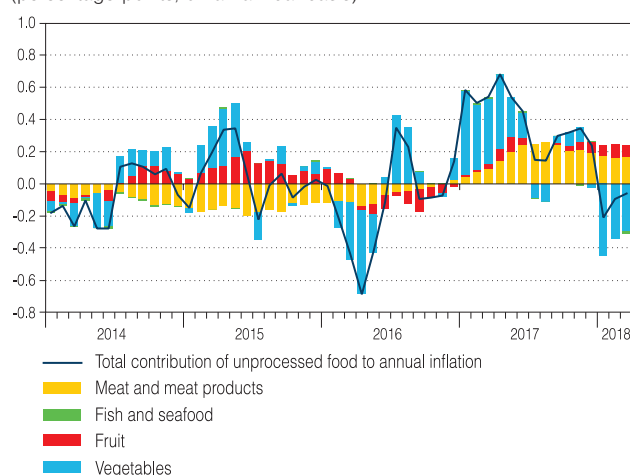
(per cent; on an annual basis)



Sources: the NSI, BNB calculations.

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

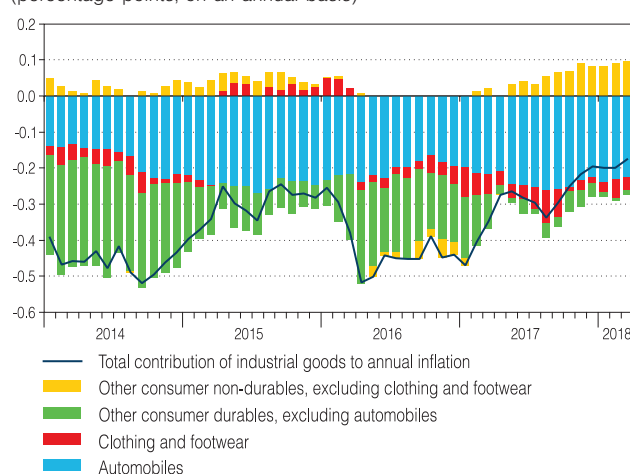
(percentage points; on an annual basis)



Sources: the NSI, BNB calculations.

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

(percentage points; on an annual basis)



Sources: the NSI, BNB calculations.

first three months of 2018 divergent price developments by component of unprocessed food group were reported. Meat and meat products and fruit sub-groups had a positive contribution to the overall inflation, while the vegetables sub-group posted a negative contribution. The decrease in vegetable prices followed the pattern of domestic producer prices of these products at the end of 2017, while food price increases in meat and meat products sub-group reflected the upward dynamics in international meat prices⁹¹.

Producer prices of durable goods on the domestic market reported low positive year-on-year growth in the first two months of 2018, without substantially affecting end prices of non-food goods. The downward trend was sustained with an annual decline reaching in March 0.9 per cent as of the end of 2017. Lower prices of used cars continued to contribute substantially to the downward price dynamics in the durables group. Slight price increases were observed on an annual basis in the other durables and non-durables (excluding clothing and footwear). Developments in nominal retail trade are indicative of continued growth of demand by households. In February 2018 nominal retail trade in non-food goods⁹² posted annual growth of 5.0 per cent largely driven by higher realised volumes.

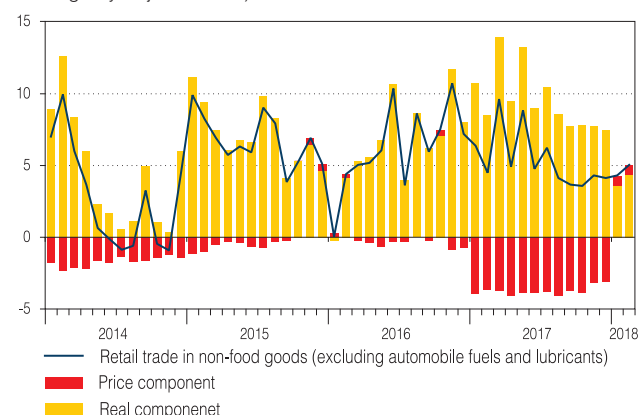
In the first three months of 2018 core inflation (including services and non-food goods prices) continued to accelerate gradually mainly due to the upward dynamics of services prices. In March 2018 inflation in services reached 4.0 per cent (1.2 per cent at the end of 2017), which was consistent with the accelerated households' consumer demand. The increase in unit labour costs in 2017 is another potential factor impacting inflation dynamics in services. By services component, catering and other services sub-groups (excluding catering, telecommunications and transport services) had the largest positive contribution to overall inflation. In the first quarter of 2018 the long-term deflationary trend in telecommunication and transport services was

⁹¹ The analysis employs FAO (Food and Agriculture Organization of the United Nations) information on the meat price index in international markets.

⁹² Retail trade in non-food goods excluding automobile fuels and lubricants.

Growth Rate of Nominal Retail Trade in Non-food Goods Excluding Trade in Motor Vehicles and Lubricants

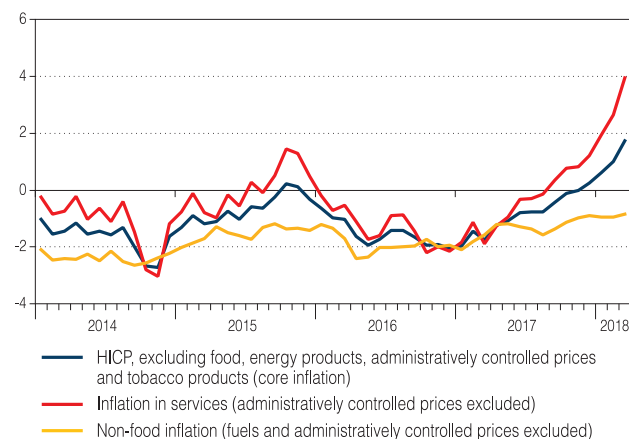
(per cent; percentage points; on an annual basis; working-day adjusted data)



Sources: the NSI, BNB calculations.

Core Inflation

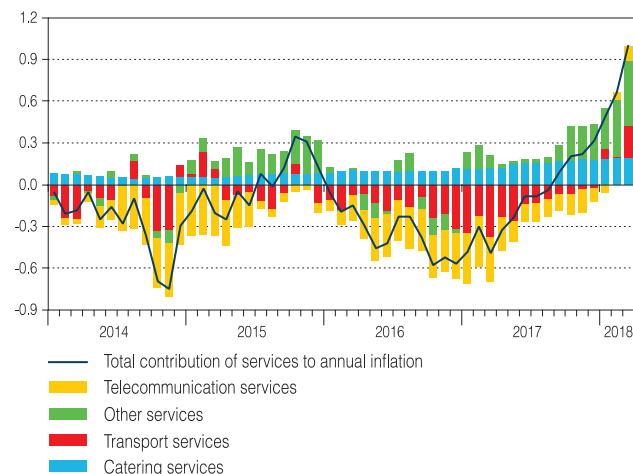
(per cent; on an annual basis)



Sources: the NSI, BNB calculations.

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

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



Sources: the NSI, BNB calculations.

reversed. In the telecommunication services, this was due to the exhaustion of the effect of one-off declines in the prices of these services in 2017, reflecting the increased competition in the sector and the abolition of roaming charges in the EU, initiated by the European Commission. Transport services price increases were attributable to changes in the air transport prices consistent with the higher fuel prices on an annual basis. Catering contributed positively to overall inflation, which was in line with unprocessed food price increases.

In the first three months of 2018 administratively controlled prices continued to increase on an annual basis at an accelerated pace. The positive significant contribution of tobacco products to annual inflation was sustained, reflecting the increased excise duty on cigarettes for the third consecutive year since early 2018.⁹³ EWRC rises in regulated prices of natural gas⁹⁴, heating and electricity⁹⁵ in 2017 which are indirectly affected by international oil prices added further to the inflation growth in administratively controlled price group. In early 2018 the EWRC approved increases in the prices of water and sewerage services in 14 districts in Bulgaria⁹⁶, which contributed to the accelerating growth rate of administratively controlled prices.

As of March the diffusion index, showing the share of groups of goods and services with declining prices on an annual basis, rose slightly to 23.7 per cent against 22.6 per cent at the end of 2017. This reflected the increased number of food and industrial goods sub-groups with declining prices. In the beginning of the year the gradual upward trend from last year in the number of goods and services sub-groups which posted a price rise of above 2 per cent was retained, helping the upward HICP infla-

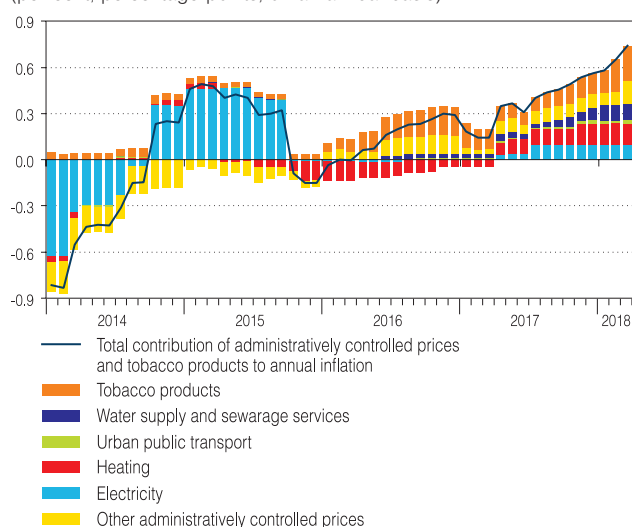
⁹³ An increase in the specific tobacco excise duty from BGN 101 to BGN 109 *per* 1000 cigarettes; a decrease of the *ad volarem* excise duty from 27 to 25 per cent; and an increase in the minimum overall excise duty (specific and *ad volarem*) from BGN 168 to BGN 177 *per* 1000 cigarettes became effective as from early 2018.

⁹⁴ 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>

⁹⁵ For more details, see: <http://old.dker.bg/newsbg.php?n=2872>, <http://old.dker.bg/newsbg.php?n=2896>

⁹⁶ For more details, see: <http://www.dker.bg/uploads/documents/vik/vik-tseni-2018.pdf>

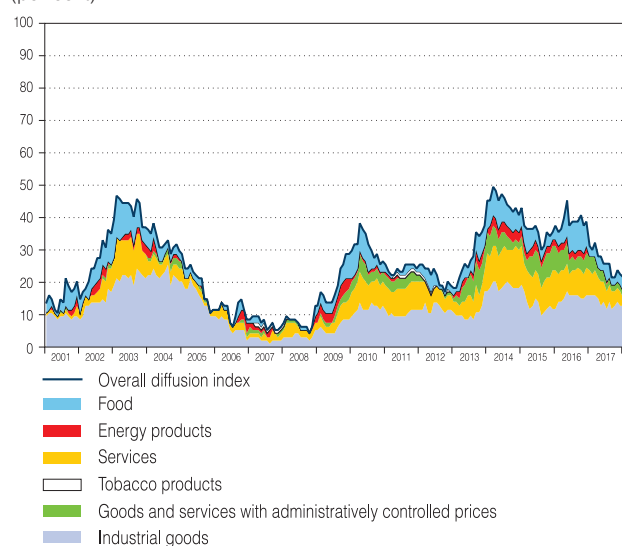
Contribution of Major Sub-groups of Goods with Administratively Controlled and Tobacco Prices to Overall Inflation
(per cent; percentage points; on an annual basis)



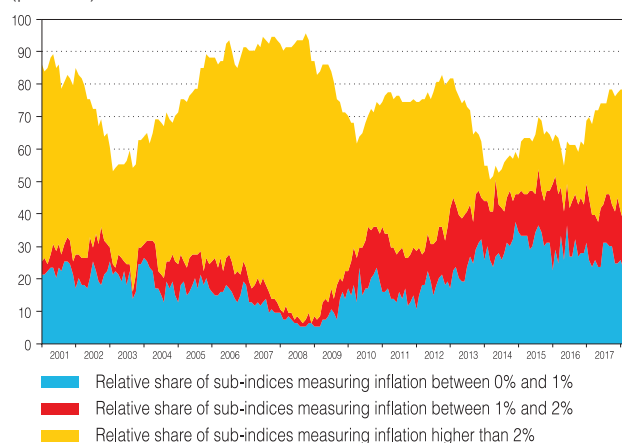
Sources: the NSI, BNB calculations.

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 declining HICP sub-indices on an annual basis
(per cent)



Sources: the NSI, BNB calculations.

tion dynamics remain sustained in the coming months.

According to the NSI business surveys, in March 2018 most managers in industry (92.8 per cent), services (88.8 per cent) and retail trade (91.9 per cent) expect selling prices to remain stable over the coming three months. However, the balance of opinions in the three sectors was positive in the beginning of 2018, due to the larger share of managers expecting price rises as compared with those expecting price declines. In March 2018 NSI surveys show that the relative share of managers pointing to insufficient demand and sector competition as obstacles to the business activity remained unchanged from the end of 2017. In the retail trade 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 and sector competition as factors limiting their activity.

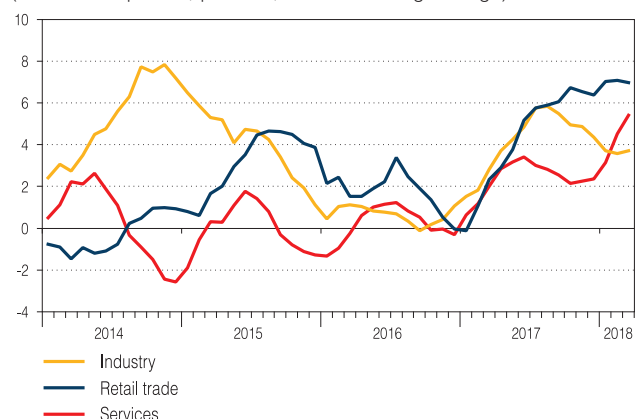
Inflation expectations for the second and third quarters of 2018 and related uncertainty are presented in the fan chart on the annual rate of HICP changes on p. 59.⁹⁷ Inflation is expected to follow a gradual upward trend over the coming two quarters largely underpinned by core inflation. The core HICP component price increase will be mainly driven by services, reflecting the projected improvement of labour market conditions and households' consumer demand in the following two quarters. Administratively controlled prices are also expected to make a significant positive contribution to overall inflation, reflecting largely the effect of the increased excise duty on tobacco products since the start of the year and, to a lesser extent, the January 2018 water and sewerage services price rises. Domestic food and energy prices are expected to follow the dynamics of the international food and oil prices in euro, with these groups of products having a minor contribution to overall inflation.

There are risks of higher than projected inflation to occur in case of unforeseen rises in administratively controlled prices and international oil

⁹⁷ For further details, see the box entitled Measurement and Presentation of Uncertainty in Forecasting Economic Indicators, *Economic Review*, 1/2012.

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

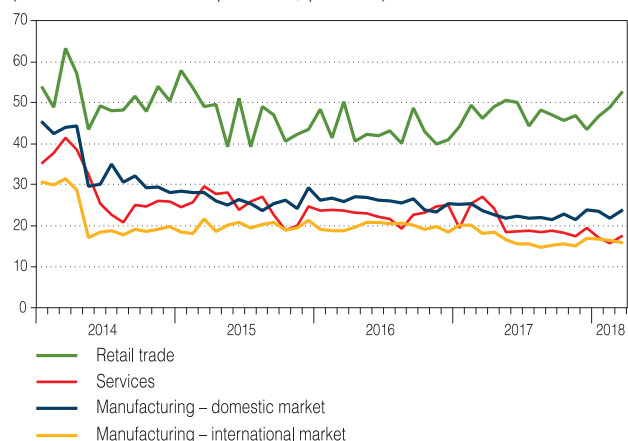
(balance of opinions, per cent, 6-month moving average)



Source: the NSI.

Share of Firms by Sectors Pointing to Insufficient Demand as a Factor Limiting Their Activity

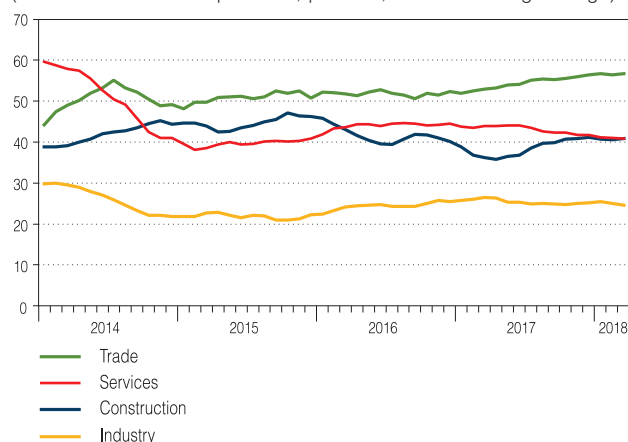
(relative share of all corporations, per cent)



Sources: the NSI, BNB calculations.

Share of Firms by Sectors Pointing to Sector Competition as a Factor Limiting Their Activity

(relative share of all corporations, per cent, 6-month moving average)



Sources: the NSI, BNB calculations.

and commodity prices. Higher than expected oil prices are likely to result in a faster than projected rise in fuel prices along with price increases in the other components of the consumer basket as a result of firms' higher production costs. If a higher than projected increase in consumer demand materialises, core inflation is likely to be higher than expected.

In the fourth quarter of 2017 House Price Index (HPI) continued increasing, though displaying a trend towards gradual deceleration. At the end of 2017 HPI rose by 8.2 per cent on an annual basis compared with 8.7 on average for the year. The increase in house prices was due to the higher prices of existing and, to a lower extent, new dwellings. Across geographical regions, similar dynamics was observed, with higher house prices in the fourth quarter reported in all six largest cities in Bulgaria (cities with a population of over 120,000 citizens). Despite these developments, at the end of 2017 house prices remained still 22 per cent lower than the maximum values recorded in the third quarter of 2008.

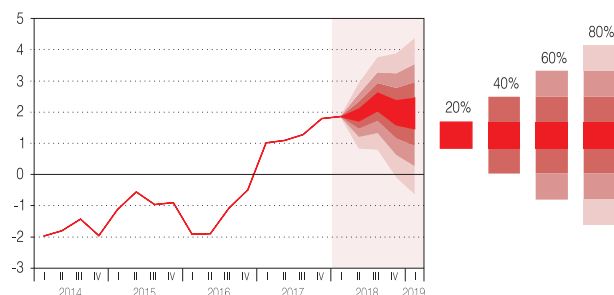
The upward dynamics of house prices corresponded to the improved consumer confidence and the increased disposable income of households, reflecting favourable labour market developments. High household savings rates and sustained comparatively low interest rates on new time deposits were the reasons behind enhanced household demand for housing. In 2017 the annual percentage rate of charge (APRC) on new mortgage loans declined further, reaching 4.2 per cent in the fourth quarter (against 5.0 per cent at the end of 2016).⁹⁸ Banks' policy towards easing credit standards and conditions for households also acted in this direction.⁹⁹

In addition, house price dynamics was influenced by the behaviour of firms in the construction sector. In 2017 real value added in this sector reported year-on-year growth of 5.9 per cent (against a fall of 6.8 per cent for 2016). The continued increase in house prices at rates

⁹⁸ Values indicating APRC on housing loans to households are averages weighted by the relevant volumes of new loans for a 12-month period.

⁹⁹ For further details, see the Monetary and Credit Aggregates section in Chapter 2.

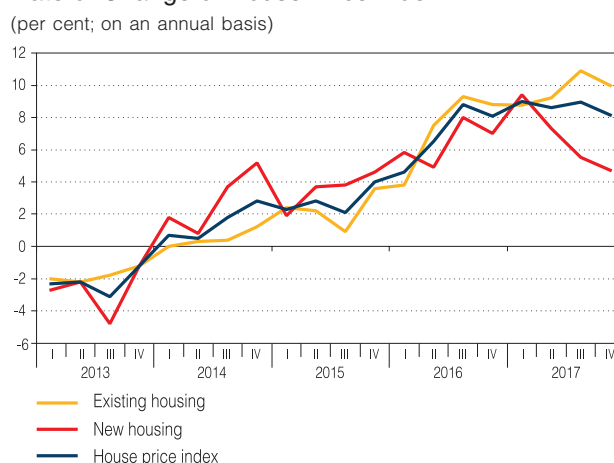
Fan Chart of the Expected Annual Rate of Change in Inflation at the End of the Corresponding Period (per cent)



Note: The fan chart shows the expert views of the forecasters on the uncertainty around the projected value based on 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.

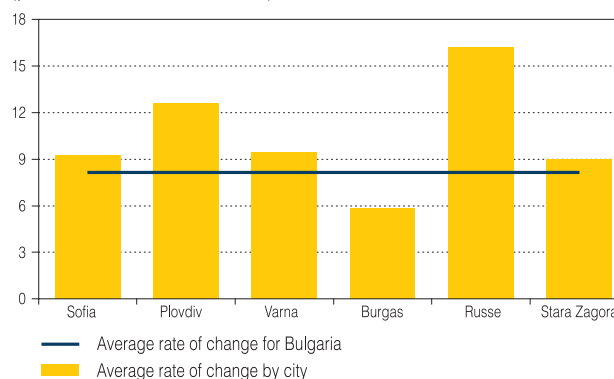
Rate of Change of House Price Index (per cent; on an annual basis)



Source: the NSI.

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

(per cent; on an annual basis)



Source: the NSI.

higher than those of the firms' construction cost index is likely to result in a further increase of economic activity in the construction sector and higher supply of new dwellings, which will have a dampening effect on house price dynamics. An indication of that is the 33.1 per cent increase in the number of new residential building permits issued over the fourth quarter of 2017 (against 15.1 per cent at the end of 2016).

Construction Production Dynamics and New Residential Building Permits Issued

(number of buildings; seasonally adjusted data) (2010 = 100; seasonally adjusted data)



Note: Data for the first quarter of 2018 are averaged for the January–February period.

Sources: the NSI, BNB calculations.

Key Indicators of the Housing Market Development in Bulgaria

(per cent; year-on-year change)

Indicators	2014	2015	2016	2017	2017			
					I	II	III	IV
Prices								
House price index, total	1.4	2.8	7.0	8.7	9.0	8.6	9.0	8.2
New dwellings	2.8	3.5	6.4	6.7	9.4	7.3	5.5	4.7
Existing dwellings	0.5	2.3	7.3	9.7	8.7	9.2	10.9	10.0
Inflation (HICP)	-1.6	-1.1	-1.3	1.2	0.8	1.4	0.9	1.7
House rentals, paid by tenants (HICP)	0.2	0.7	0.6	1.0	1.0	1.0	1.0	1.0
Lending								
New housing loans	9.7	39.7	18.9	38.4	45.6	49.1	38.5	25.1
Annual percentage rate of charge on new housing loans (per cent, at end of period)	7.4	6.4	5.4	4.4	4.7	4.4	4.3	4.2
Housing loans balances	-0.1	-1.8	0.5	5.0	2.4	4.4	5.8	7.4
Construction and investment								
Permits issued for the construction of new residential buildings (built area, square meters)	29.1	8.9	5.2	37.5	36.6	31.0	44.5	37.0
Value added in construction (at average annual prices for 2010)	-3.1	2.8	-6.8	5.9	7.6	10.8	3.6	2.1
Constriction production index, building construction	0.1	8.9	-16.1	10.8	3.8	15.3	15.6	8.2
Fixed investment; residential buildings	-3.3	-10.3	102.1	3.9	2.5	4.2	4.4	4.2
New buildings construction cost index	1.0	1.3	1.5	2.7	1.9	2.0	2.6	4.4

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 March 2017 (December 2016 = 100)		Inflation accumulated as of March 2018 (December 2017 = 100)		Annual rate of inflation as of March 2018 (March 2017 = 100)	
Inflation (per cent)	0.2		0.2		1.9	
	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	2.5	0.60	0.6	0.15	0.8	0.19
Processed food	0.9	0.15	-0.1	-0.01	1.5	0.25
Unprocessed food	5.8	0.46	1.9	0.16	-0.8	-0.06
Services	-2.0	-0.51	0.7	0.17	4.0	1.00
Catering	0.6	0.04	0.9	0.05	3.3	0.19
Transport services	-9.0	-0.33	-2.2	-0.07	6.7	0.23
Telecommunication services	-2.4	-0.12	1.9	0.08	2.4	0.11
Other services	-0.8	-0.10	1.0	0.12	4.1	0.46
Energy products	4.6	0.32	-0.5	-0.04	1.6	0.11
Transport fuels	4.6	0.28	-0.9	-0.06	1.1	0.07
Industrial goods	-1.1	-0.23	-1.0	-0.21	-0.9	-0.18
Goods and services with administratively controlled prices*	0.0	0.00	0.5	0.08	3.1	0.51
Tobacco products	0.0	0.00	2.2	0.10	4.9	0.23

* 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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