

BULGARIAN NATIONAL BANK



ECONOMIC REVIEW

4/2018



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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

ABSP	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
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
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

In the fourth quarter of 2018 global PMIs continued to indicate a slowdown in global economic growth. This downward dynamics is probably due to the introduction of protectionist measures in international trade, the uncertainty surrounding expectations of a rise in federal funds rates, and the political and economic uncertainty in some major economies. Global inflation remained close to the end-2017 level, reaching in November 2.3 per cent on an annual basis.

In the fourth quarter the ECB Governing Council left unchanged the euro area interest rate levels as expected, and confirmed that the Eurosystem's net purchases under the Asset Purchase Programme (APP) would end in December 2018. The US Federal Open Market Committee decided in December, also in line with market expectations, to raise by 25 basis points the federal funds rate corridor to 2.25–2.50 per cent.

In the light of these economic developments, external demand for Bulgarian goods and services is likely to slow down in the first half of 2019. Factors that will contribute to this slowdown include both already implemented and future US foreign trade protectionist measures, the uncertainties over Brexit, and the economic situation in Turkey and Italy.

In the January–November 2018 period the overall current and capital account balance was positive, indicating a lower surplus compared with the same period of the previous year, due to the significant increase in Bulgaria's trade balance deficit. In the first and second quarters of 2019 the surplus of the overall current and capital account balance is expected to decrease further as a share of GDP on an annual basis. The major factor behind this will be the anticipated increase in the trade balance deficit due to both higher growth in real goods imports compared to that of exports and unfavourable terms of trade for the Bulgarian economy.

In the context of continuously improving economic activity and increased labour income, the sustained high savings rate in the economy contributed to the relatively high growth rates of non-government sector's deposits in 2018. Credit growth to non-financial corporations and households accelerated further, mainly driven by increasing domestic demand and low lending rates.

In the first half of 2019 amid increased uncertainty stemming from the external environment, continued labour income growth and the lack of a sufficiently safe alternative to bank savings, non-government sector's deposits are expected to further increase at comparatively high rates. After the significantly accelerated growth of loans to the non-government sector in 2018, partly due to the inclusion of a new reporting unit in the monetary statistics, loan growth is expected to continue in the first half of 2019, though at lower rates compared with the current ones.

In the third quarter of 2018 real GDP increased by 0.7 per cent on a quarterly basis, with net exports and private consumption contributing most significantly to the improved economic activity, and investment contributing negatively.

In the third quarter of 2018 the seasonally adjusted number of employed decreased in the total economy mainly due to the services sector. Concurrently, the unemployment rate further declined, reaching 5.1 per cent, while labour force decreased from the previous quarter. The nominal compensation *per* employee rose on average by 1.5 per cent on a quarterly basis.

In the first half of 2019 real GDP is expected to grow further quarter on quarter, with domestic demand contributing most to this effect. This will mainly reflect the projected increase in government investment, and to a lesser extent, that of private consumption. Wage growth and concurrent rises in disposable

income of households, coupled with persistently low interest rates, are expected to continue favouring private consumption growth, while weakening of consumer confidence by end-2018 will limit its dynamics. The external environment will be a source of an uncertainty, dampening investment activity of corporations and limiting export growth.

At the end of 2018 annual inflation rose by 0.5 percentage points on end-2017 to 2.3 per cent. The increase in inflation throughout the year was largely driven by services and energy products. At the end of 2018 inflation slowed down compared to the third quarter, reflecting the significant decrease of international oil prices. Food, goods and services with administratively controlled prices, and tobacco products contributed positively to overall inflation in December.

Over the first two quarters of 2019 the annual inflation rate is expected to accelerate, relative to the end of 2018, mainly driven by food and services prices. The inflation increase will be limited to some extent by the expected moderation in energy product prices and goods and services with administratively controlled prices. In the first half of the year core inflation is expected to make a positive contribution to the overall inflation reflecting service price dynamics.

This issue of Economic Review includes the BNB forecast of key macroeconomic indicators for the 2018–2020 period. It is based on information published as of 18 December 2018 and employs European Central Bank (ECB), European Commission (EC) and International Monetary Fund (IMF) assumptions of global economic developments and international commodity price dynamics as of 14 December 2018.

Based on ECB, EC and IMF forecasts, in the 2018–2020 period the growth rate of external demand for Bulgarian goods and services is expected to slow down compared with that reported in 2017. The baseline scenario for external demand does not include new global foreign trade protectionist measures, and a sustainable slowdown in the growth in Germany, the main trading partner of Bulgaria. International prices of energy products in US dollars and in euro are anticipated to rise in 2019 from 2018, followed by a decline in petroleum product prices in 2020 driven by growing supply and slowing demand. Non-energy product price projections in US dollars point to a slight decline in 2019 and recovering growth in 2020.

Over the projection horizon, Bulgaria's economic activity will continue growing in terms of domestic demand, while net exports' contribution is expected to be negative. In 2018 real GDP growth will decelerate compared to the previous year due to lower exports of goods, while private consumption and public investment growth will exceed that in 2017. Real GDP growth is expected to accelerate in 2019 and 2020, compared to 2018, as a result of the reduced negative contribution of net exports, offsetting the projected slower domestic demand. Real GDP growth is expected to be lower over the forecast horizon than projections published in the Economic Review, issue 2 of 2018.

The annual inflation, mainly driven by international oil and food prices in euro, is expected to accelerate slightly at the end of 2019 before moderating gradually to 2.1 per cent at the end of 2020. The overall inflation forecast in 2019 has been revised upwards, while a lower inflation rate is expected for 2020 *vis-à-vis* the previous forecast.

Risks to the macroeconomic outlook are assessed as oriented towards lower real GDP growth, mainly stemming from the external environment, including the uncertainty about economic growth in some trading partners important for Bulgaria, the possibility of the UK leaving the EU without a deal, and the potential introduction of additional protectionist trade measures. An internal factor creating uncertainty to the outlook is dynamics of public investment co-financed by the EU and the national budget. Potential delay in the implementation of large infrastructure projects would impede GDP growth in 2019, and may at the same time lead to higher public investment in 2020. Risks to the inflation outlook are assessed as balanced.

1. EXTERNAL ENVIRONMENT

In the fourth quarter of 2018 global PMIs retained their downward trend since the beginning of the year, signalling further global economic activity slowdown in both industrial production and services sectors. Data on annual world trade growth also reflect the decelerating trend in global economic growth in the January to October 2018 period. This downward dynamics is probably due to the introduction of protectionist measures in international trade, the expectations of an increase in Federal Reserve's key rates, and the political and economic uncertainty in some major economies. Global inflation remained close to the end-2017 level, reaching in November 2.3 per cent on an annual basis.

In the fourth quarter the ECB Governing Council left unchanged the euro area interest rate levels as expected, and confirmed that the Eurosystem's net purchases under the Asset Purchase Programme (APP) would end in December 2018. The US Federal Open Market Committee decided in December, also in line with market expectations, to raise by 25 basis points the federal funds rate corridor to 2.25–2.50 per cent.

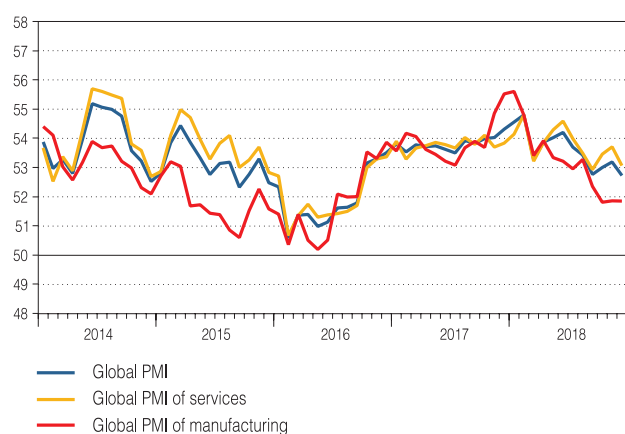
In the light of these economic developments, external demand for Bulgarian goods and services is likely to slow down in the first half of 2019. Factors that will contribute to this slowdown include the implemented US trade protectionist measures, uncertainties over Brexit, and the economic situation in Turkey and Italy.

Current Business Situation

In 2018 the average value of global economic indicator (global PMI) slightly decreased compared with 2017, still staying above the neutral limit of 50 points. Following the peaks recorded in early 2018 global PMI started to gradually fall to reach 52.7 points in December. The decline of global PMI was mainly driven by the worsened index for the manufacturing sector and, to a lesser degree, by the services sector. The dynamics of PMI index signalled a gradual slowdown of global economic activity, which may be due to uncertainty related to the unsolved trade dispute between the USA and China and the protectionist measures launched by both states. In the second half of 2018 across regions PMI decreased on a quarterly basis in developed countries and, to a lesser extent, in developing economies. The index worsened significantly in the euro area and the UK and, to a lesser degree, in China and the USA.

Between January and October 2018 the annual increase in the volume of world trade¹ slowed down compared with the corresponding period of the previous year, a result of the lower positive contribution reported in both developed and

Global PMIs



Source: JP Morgan.

¹ CPB Netherlands Bureau for Economic Policy Analysis data as of 21 December 2018.

developing economies.² The euro area and Japan contributed most strongly to the lower increase in foreign trade flows of developed economies. Between January and October 2018 emerging market economies from Central and Eastern Europe and Asia also reported a slower growth rate on an annual basis. Concurrently, the volume of trade in the USA increased over the review period.

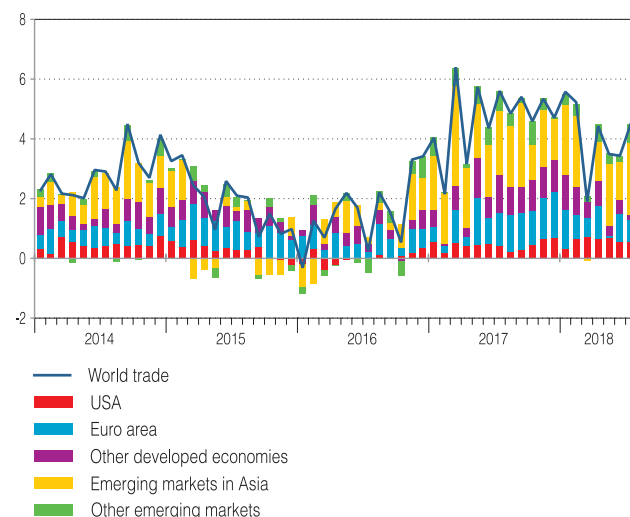
In November 2018 global inflation remained close to the end-2017 level, accounting for 2.3 per cent.³ Annual inflation in developed economies slightly accelerated from the end of the prior year, while in developing countries it slightly slowed down. In November inflation moderated in both developed and developing economies due to significantly lower prices of energy products.

Based on recent developments in the global economic situation, in January 2019 the IMF revised downwards its October 2018 projections of global economic growth in 2019 (by 0.2 percentage points to 3.5 per cent) and in 2020 (by 0.1 percentage points to 3.6 per cent).⁴ The expectations for 2019 worsened more markedly about developing economies, with the strongest revision made to the outlook of Europe's developing markets. This reflects to a large degree the forecasts of a strong decline in the economic activity in Turkey. Concurrently, based on IMF expectations for developed economies in 2019, the strongest decline in growth compared with the October forecast is projected in euro area states, particularly in Germany, Italy and France. Revisions of the projections about world economic growth in 2020 reflect the lower private investment in Mexico and the slower than projected in October 2018 recovery of Turkey's economy.

In the light of international market developments, external demand for Bulgarian goods and services is expected to slow down its growth in the first half of 2019 compared with the rates reported in the corresponding period of 2018. Major factors responsible for slower demand in the baseline scenario of the forecast relate to trade protectionist measures, the uncertainty over

World Trade

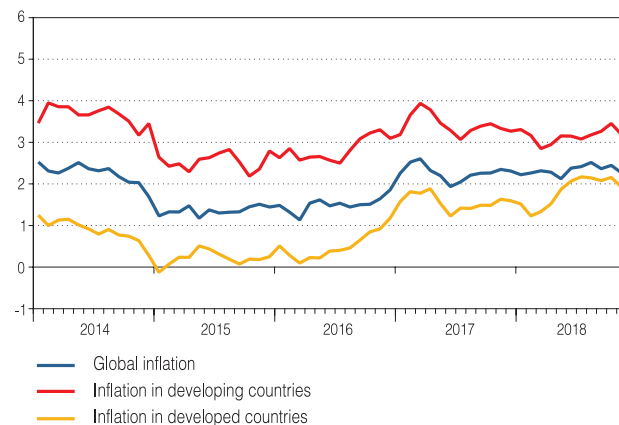
(annual rate of volume growth, per cent, contribution of individual economies, percentage points)



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. Real GDP based on purchasing power parity is used to calculate country weights. Groups include only World Bank Member States classified by the World Bank as developing and developed countries.

Source: the World Bank.

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

³ Based on World Bank data as of 14 January 2019.

⁴ IMF data: World Economic Outlook, January 2019.

Brexit, and the economic situation in Turkey and Italy. The baseline scenario does not provide for further escalation of foreign trade conflicts globally and a continuous weakening of economic activity in Germany.⁵

Euro Area

In the third quarter of 2018 quarterly growth of real GDP decelerated to 0.2 per cent against 0.4 per cent in the second quarter. The lower rate reflected mainly the negative contribution of net exports, while all other major GDP components contributed positively to economic growth on a quarterly basis. Economic activity in Germany and Italy slowed down from the previous quarter by 0.2 and 0.1 per cent (previously reported growth by 0.5 and 0.2 per cent). In France, real GDP growth rate accelerated on a quarterly basis to 0.3 per cent, from 0.2 per cent in the second quarter, while in Spain, it stood unchanged at 0.6 per cent from the beginning of the year. Growth in inventories in some euro area countries reflected the higher requirements for new emissions tests, which become mandatory from September 2018 in registering new cars in the EU.⁶ These requirements led to an accumulation of significant inventories in the car industry.

The downward trend in euro area leading economic indicators, including PMI and EC indices, was sustained over the fourth quarter of 2018. This decrease suggests a slowdown in euro area economic growth compared to relatively high rates recorded in 2017.

Labour market indicators continued to improve gradually, with the unemployment rate in the euro area reaching 7.9 per cent in November 2018 against 8.6 per cent in December 2017. The indicator of the expected unemployment rate over the following 12 months included in the EC consumer confidence index showed a deterioration in consumer expectations of labour market developments in the second half of the year.

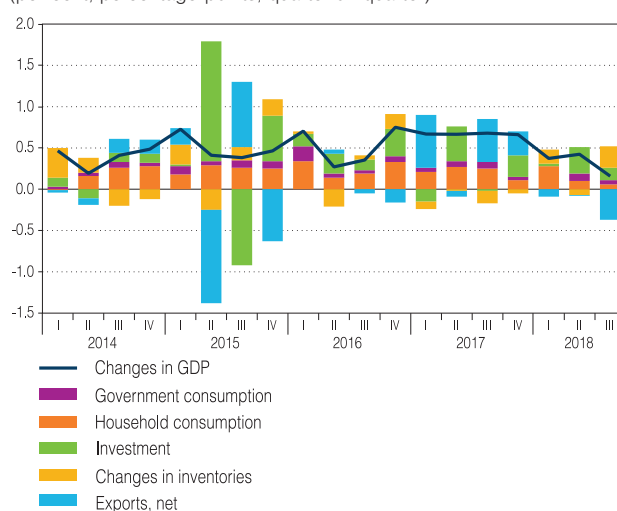
In November and December 2018 euro area inflation rate moderated due to lower growth of

⁵ In the third quarter of 2018 annual GDP growth in Germany slowed down, reflecting the effect of temporary factors in car industry. For more details see: <https://www.ecb.europa.eu/pub/pdf/ecbu/eb201808.en.pdf>

⁶ For more details, see: <http://wltfacts.eu/>

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

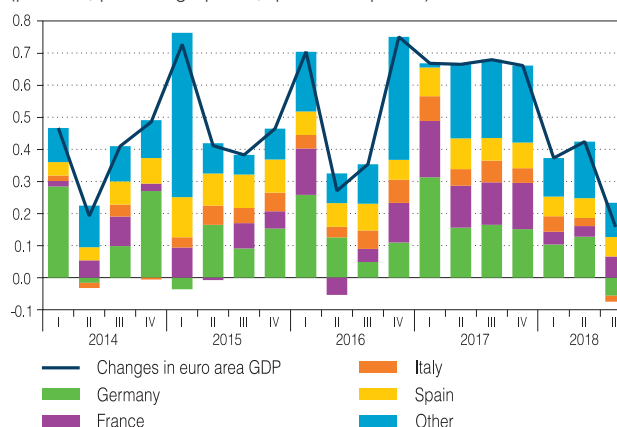
(per cent; percentage points; quarter-on-quarter)



Source: Eurostat.

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

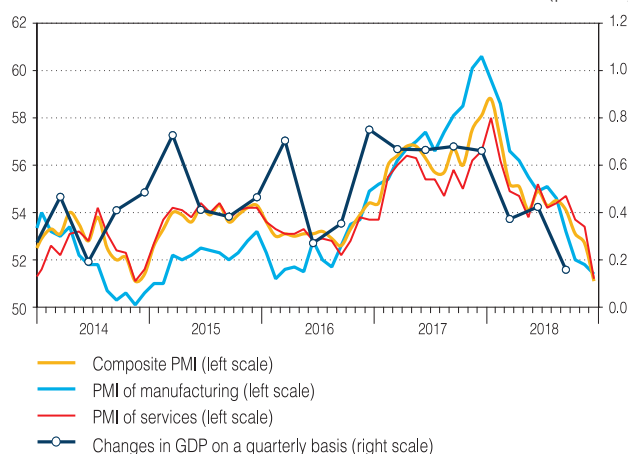
(per cent; percentage points; quarter-on-quarter)



Sources: Eurostat and BNB calculations.

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	2019		2020		2021	
		latest	previous	latest	previous	latest	previous
ECB	XII.2018	1.7	1.8	1.7	1.7	1.5	-
EC	XI.2018	1.9	2.0	1.7	-	-	-

Sources: the ECB, the EC.

Projections of Euro Area Annual Inflation Rate

(per cent)

Institution	Date of release	2019		2020		2021	
		latest	previous	latest	previous	latest	previous
ECB	XII.2018	1.6	1.7	1.7	1.7	1.8	-
EC	XI.2018	1.8	1.6	1.6	-	-	-

Sources: the ECB, the EC.

the HICP energy component. In December the annual change in HICP was 1.6 per cent, from 1.9 per cent in November.

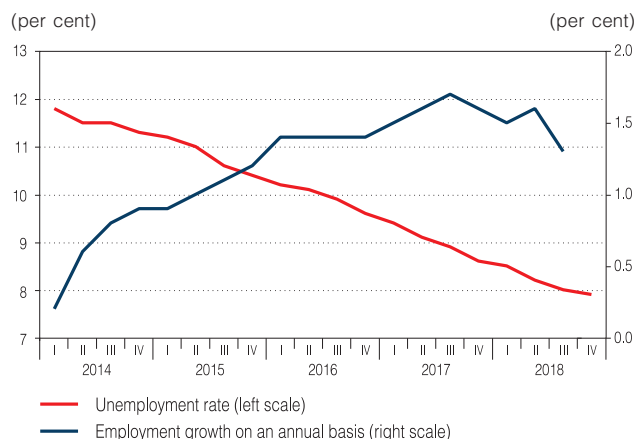
In December the ECB revised downwards its euro area real GDP growth forecast for 2018 and 2019 (by 0.1 percentage points) leaving its expectations for 2020 unchanged. In 2021 economic growth is anticipated to slow down to 1.5 per cent. Risks to euro area economic growth prospects are still assessed as balanced by the ECB. However, the balance of risks is tilted downward due to continuing uncertainty related to geopolitical factors, a possible introduction of new protectionist measures, the vulnerability of emerging markets and financial market fluctuations.

The ECB euro area inflation forecast was revised downwards to 1.6 per cent for 2019 (previous projection for 1.7 per cent) and remained unchanged for 2020. The ECB expects the inflation in 2021 to increase to 1.8 per cent.

At its monetary policy meeting of 13 December 2018, the ECB Governing Council made no changes to the reference interest rates and the forward guidance for changing these rates in the future. The Governing Council of the ECB confirmed that net purchases under the Asset Purchase Programme (APP) would end in December 2018 and the forward guidance on reinvesting principal payments from maturing securities of the Eurosystem portfolio acquired under the programme was further developed. The addition made links the period of reinvestment to the first rise in the ECB interest rates. A decision was made on the technical parameters on reinvest-

Euro Area Unemployment Rate and Employment Growth

(per cent)

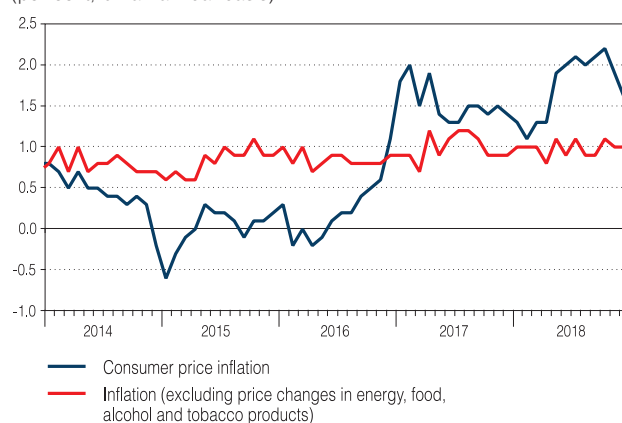


Note: The chart on unemployment in the fourth quarter of 2018 does not include data for December.

Source: Eurostat.

Euro Area Inflation Rate

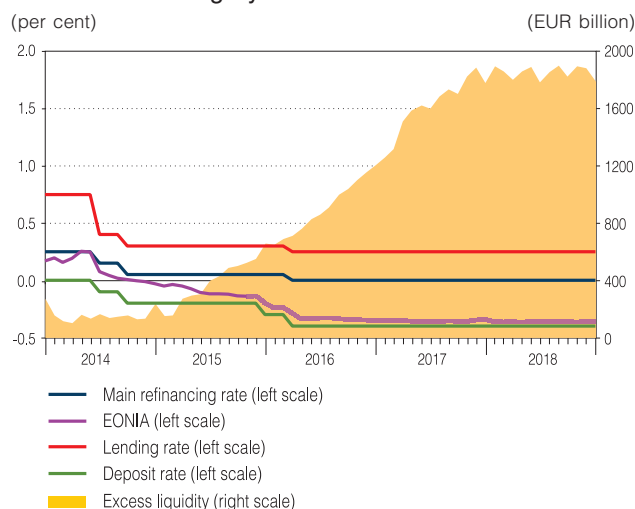
(per cent, on an annual basis)



Source: Eurostat.

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

(per cent)



Note: Average EONIA data for the month.

Source: the ECB.

ments under the APP. Reinvestments under the Public Sector Purchase Programme (PSPP) will be made in the same jurisdictions, in which securities matured, and funds will be gradually distributed on the basis of the new shares of the national central banks in the ECB capital.⁷

As of 11 January 2019 the cumulative amount of purchases under the Eurosystem's extended asset purchase programme totalled EUR 2569.8 billion, up EUR 283.7 billion on the end of 2017. The increase was due mainly to purchases under the Public Sector Purchase Programme (PSPP), the cumulative amount increasing by EUR 212.4 billion on the end of 2017. As of 11 January 2019 the excess liquidity in the euro area banking system rose to EUR 1898.7 billion against EUR 1824.6 billion at the end of September 2018, and the Eurosystem balance sheet figure reached EUR 4703 billion.

Between 1 October 2018 and 11 January 2019 the average EONIA (the effective overnight reference rate) remained at -0.36 per cent. Overnight interbank deposit trading in the euro area decreased, with its daily average coming to EUR 2.8 billion (against EUR 3.8 billion for the third quarter of 2018). EURIBOR unsecured deposit rates increased. On 11 January 2019 one-month deposit rates (-0.38 per cent) matched the end-September 2018 rates, while six-month and twelve-month rates rose by 3 and 4 basis points to -0.24 and -0.12 per cent.

United States

In the third quarter of 2018 US real GDP growth moderated to 0.8 per cent quarter on quarter against 1.0 per cent in the second quarter. Lower growth reflected mainly the strong decline in net exports and, to a lesser degree, the slower increase in business investments and private consumption. At the same time, inventories increased substantially in the third quarter. Strong fluctuations in inventories and net exports in the second and third quarters of the year reflected the dynamics of trade flows between

⁷ On 3 December 2018 the ECB published NCBs' adjusted shares in the ECB capital which become effective from 1 January 2019. The five-yearly update is made on the basis of data on Member States' population and GDP. For more details see: <https://www.ecb.europa.eu/press/pr/date/2018/html/ecb.pr181203.en.html>

Eurosystem Cumulative Asset Purchases

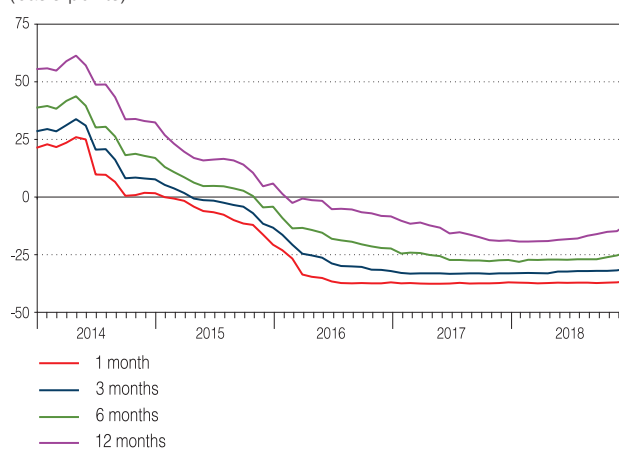
(EUR billions)

	31 December 2017	30 September 2018	11 January 2019
APP	2 286.1	2 532.1	2 569.8
PSPP	1 888.8	2 075.5	2 101.2
CBPP3	240.7	259.3	262.8
ABSPP	25.0	26.9	27.5
CSPP	131.6	170.4	178.2

Source: the ECB.

EURIBOR Dynamics

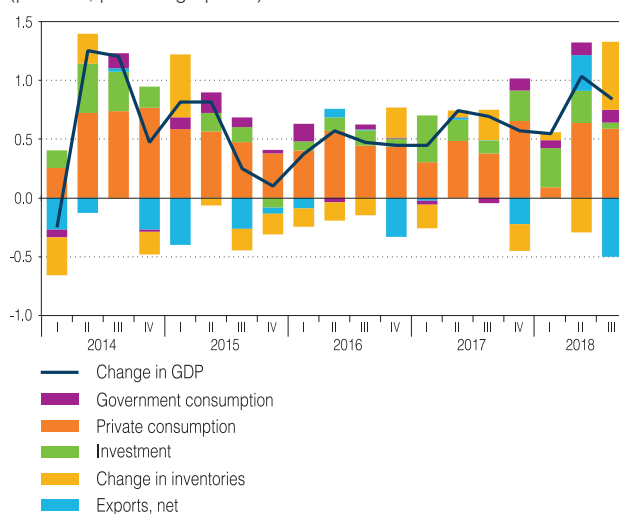
(basis points)



Source: the ECB.

Contribution to US GDP Growth by Component (Quarterly)

(per cent; percentage points)



Source: Bureau of Economic Analysis.

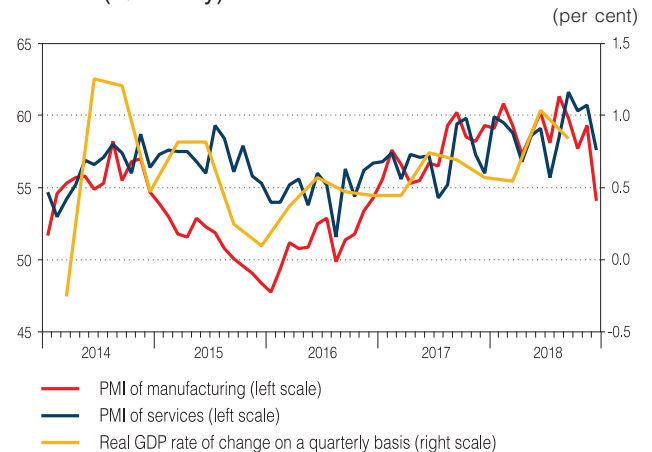
the USA and China as a result of protectionist measures introduced by both countries.

In the third quarter of 2018 the change in the US leading economic indicators was volatile, with most of them decreasing significantly at the end of the period. Following the historical highs recorded in the third quarter of 2018 ISM-PMI manufacturing and services indices fell sharply in December but remained above the 50 percentage point limit. Consumer confidence indicators underwent similar changes over the fourth quarter. In contrast, monthly data on US household consumption and retail sales showed relatively high growth in the fourth quarter. Construction indicators recorded a slowdown of activity compared with the third quarter of 2018. In general, data on the US economy available in early January 2019 signal a some moderation of US GDP growth in the last quarter of 2018.

In the fourth quarter of 2018 the annual inflation rate slowed down. In November the price index of personal consumption expenditure (PCE) was lower on an annual basis and reached 1.8 per cent against 2.0 per cent in the previous two months. Core inflation (excluding food and fuel prices) slightly accelerated in November to 1.9 per cent on an annual basis against 1.8 per cent in October but remained under the 2.0 per cent level attained at the end of the third quarter. Similar dynamics was also recorded in the consumer price index (CPI). In December 2018 the annual rate of overall inflation slowed down to 1.9 per cent, from 2.2 per cent in November and 2.5 in October, while the annual growth rate of core inflation stabilised at 2.2 per cent for a fifth consecutive month. December data on expectations of consumer price changes one to five years ahead, which are part of the University of Michigan consumer confidence index, showed a decline in both long-term and short-term inflationary expectations.

US labour market indicators underwent no essential changes in the fourth quarter of 2018. The average quarterly number of new employees in the US non-farm sector increased from the third quarter. On the other hand, in December the unemployment rate rose to 3.9 per cent, from 3.7 per cent in November and 3.8 per cent in October due to the higher rate of economically active population (to 63.1 per cent against

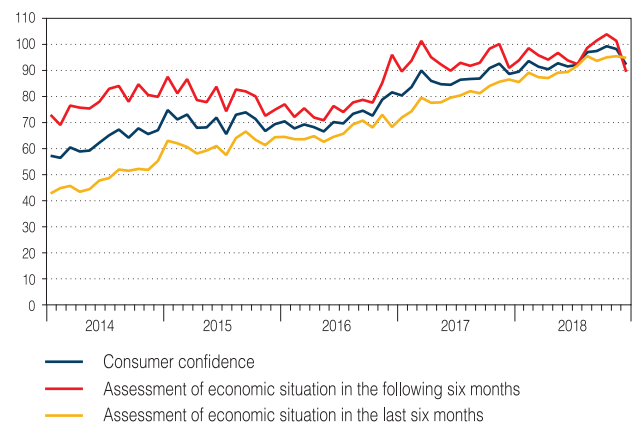
US Manufacturing and Services ISM-PMIs and GDP Growth (Quarterly)



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

US Consumer Confidence Indices

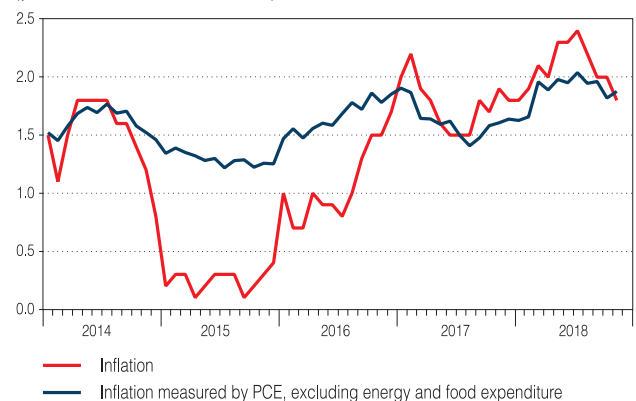
(2000 = 100)



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.

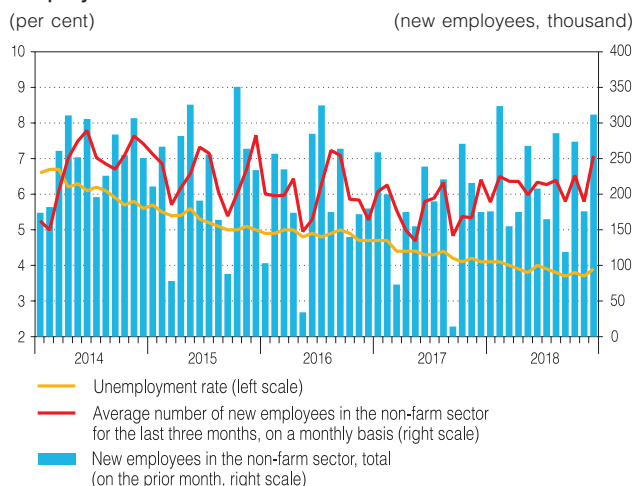
62.9 per cent in November and October). The leading economic activity indicators suggest that US labour market prospects will remain favourable.

Based on reported and expected US labour market and inflation indicators, at its 18 and 19 December meeting, the Federal Open Market Committee (FOMC) took a decision to raise by 25 basis points the federal funds rate corridor to 2.25–2.50 per cent. After the meeting, additional changes were also announced in the monetary policy framework involving a technical adjustment to the IOER rate that was cut by another 5 basis points to a total of 10 basis points below the top of the FOMC's target range for the federal funds rate. As stated in the press release of the meeting, a few more increases in the federal funds rate target will be justified with a view to sustainable growth of economic activity. As stressed in the document, the FOMC assesses risks to US economic growth as balanced, but it will continue to monitor processes and changes in the global economy and financial markets, as well as their impact on the economic outlook to the US economy. The Committee members' summarised forecasts on economic growth and inflation in 2019 were revised downwards compared with those announced in September, while the forecast on the long-run equilibrium economic growth was revised upwards. Economic data released after the September meeting of the Committee led the members to revise their forecasts on the increases of the federal funds rate target in 2019 downwards (from three to two) and to leave the forecast for one more rise in 2020 unchanged. No new increases of the federal funds rate target are projected in 2021. The forecast of the long-run equilibrium level of federal funds rate was revised downwards from 3.00 per cent to 2.75 per cent.

China

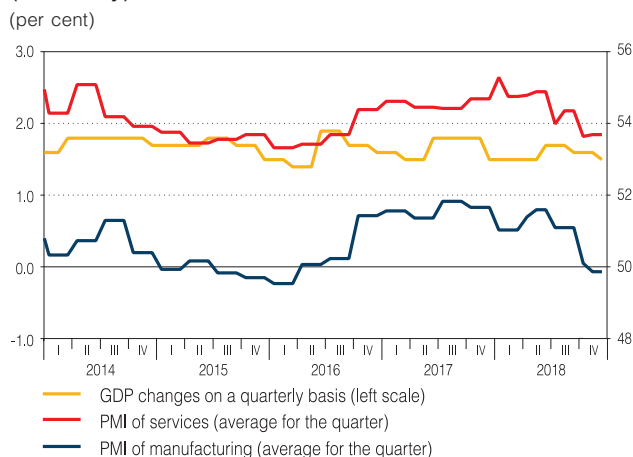
Over the last quarter of 2018 China's GDP increased by 6.4 per cent on an annual basis and 1.5 per cent on a quarterly basis. Economic growth throughout the year was 6.6 per cent, slightly exceeding the 6.5 per cent target set by the government. In the fourth quarter of 2018 the average values of services and manufacturing PMI in China declined, signalling a further slowdown in economic growth in the first half

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



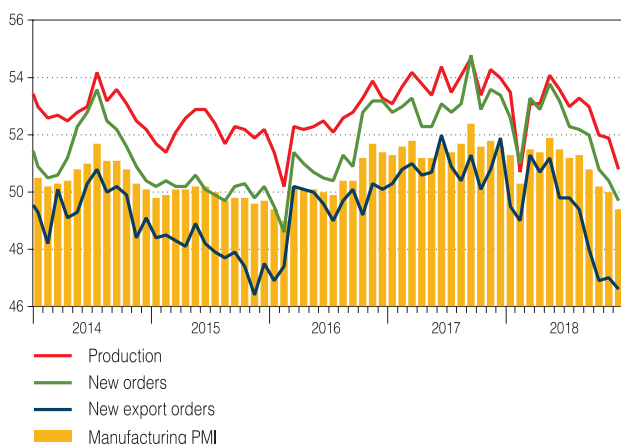
Source: Bureau of Labour Statistics.

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



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

Manufacturing PMI in China and Major Components



Source: China Federation of Logistics and Purchasing.

of 2019. In December the new export orders index, a sub-component of manufacturing PMI, fell to 46.6 points. The index level under the neutral limit of 50 points is likely to reflect the tariffs imposed by the USA on goods imported from China in early 2018 and weaker domestic demand.

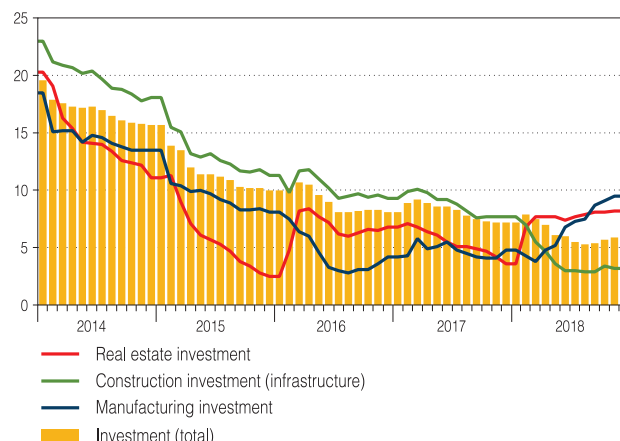
In the last quarter of 2018 the annual growth rate of industrial production in China continued to slow down, while growth in total investment in the economy accelerated. The slowdown was due mainly to export-oriented industries as production of computers/electronics and vehicles. Accelerated growth of investments reflected mainly the measures launched by the government to stimulate the economy due to increasing concerns about a slowdown of economic activity and worsening of the global trade situation.

Over the fourth quarter of 2018 Chinese CPI dynamics was largely driven by slowing growth in food prices in November and December and lower oil and metal prices. In December producer price growth moderated to 0.9 per cent on an annual basis, reflecting mainly the price dynamics in both the energy component of the index in recent months and commodities and certain products for final consumption. Over the fourth quarter of 2018 house prices in China slightly increased on an annual basis as a result of a house price hike in smaller towns (group 2), while house prices in larger cities (group 1) changed insignificantly on an annual basis.

In January the People's Bank of China cut in two steps minimum reserve rates by 50 basis points for the largest banks to 13.5 per cent.

Fixed Capital Investment (Total) and in Selected Sectors in China

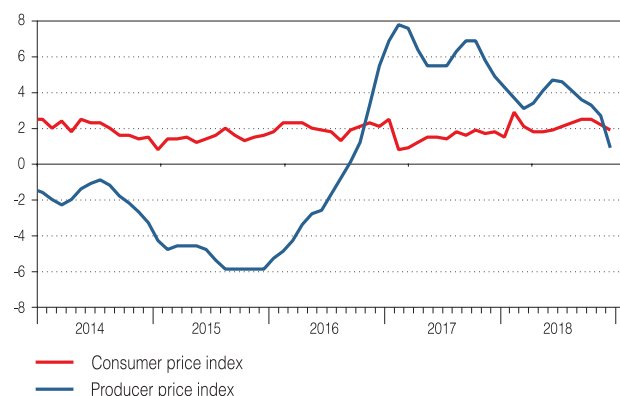
(per cent; on an annual basis)



Source: National Bureau of Statistics of China.

China's Inflation Rate

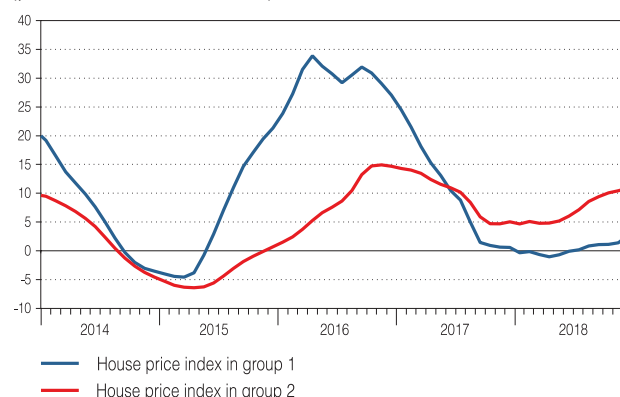
(per cent; on an annual basis)



Source: National Bureau of Statistics of China.

House Prices in China

(per cent; on an annual basis)



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

Source: National Bureau of Statistics of China.

According to the bank, this measure will release liquid funds of about CNY 800 billion (USD 116 billion⁸) to be used for lending to small and medium-sized enterprises. The net effect for the economy is expected to be relatively limited as about the half of the funds (CNY 389 billion) will be used for repayment of medium-term lending facilities maturing on 15 January 2019 extended by the central bank to commercial banks.

In the fourth quarter of 2018 China's international reserves slightly decreased (by USD 14 billion) to USD 3.07 trillion mainly attributable to the stabilisation of the exchange rate of the yuan against the US dollar. Reserves declined by USD 67 billion throughout 2018. According to the State Administration of Foreign Exchange (SAFE), China's international reserves will remain relatively stable in 2019.

International Commodity Prices

Crude Oil

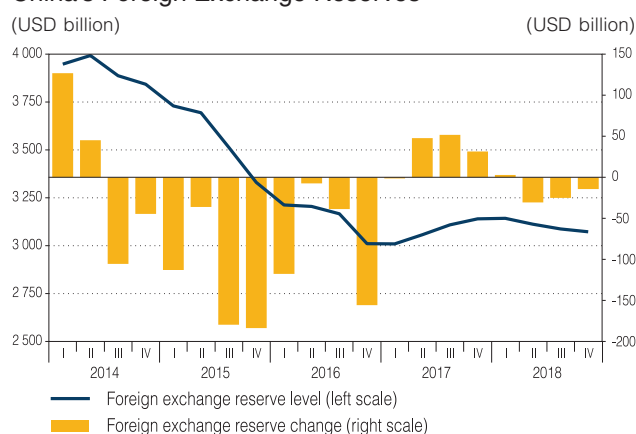
International Energy Agency (IEA) data in the second and third quarters of 2018 showed a significant increase in global crude oil supply compared with the corresponding period of the previous year, exceeding oil demand. Across countries, Saudi Arabia, Russia and the USA contributed most strongly to higher global oil production. As a result, the upward trend in crude oil prices, which started in mid-2017, was reversed in the last two months of 2018, with Brent crude oil price falling to USD 56.5 *per* barrel in December. In November the USA imposed partial restrictions on oil exports from Iran, which did not cut oil supply substantially as expected by market participants. Consequently, this contributed additionally to the fall in oil prices.⁹ Concurrently, trying to limit the decrease in oil prices in early December, OPEC and Russia agreed on crude oil production cuts¹⁰, which slowed the price decline.

⁸ Hereinafter referred to as the US dollar.

⁹ In early May 2018 the USA announced that sanctions would be imposed against Iran for its nuclear programme. Following the launch of the sanctions on 4 November 2018, eight large buyers of Iranian oil – China, India, South Korea, Japan, Italy, Greece, Taiwan and Turkey, were temporarily excluded (for a period of 180 days) from the sanctions imposed by Washington.

¹⁰ On 6 December 2018 OPEC and Russia agreed on reducing daily oil production by 1.2 million barrels in the first six months of 2019.

China's Foreign Exchange Reserves



Source: People's Bank of China.

As a result of these developments, in December market expectations about crude oil prices for the first half of 2019 were significantly lower than prevailing expectations in September 2018 and accounted for around USD 58.2 *per barrel* irrespective of the measures launched to cut production.

Commodity and Food Prices

In 2018 metal prices in US dollars increased by 4.4 per cent compared with 2017, while prices in euro posted a slight decrease (-0.3 per cent) due to euro appreciation against the US dollar.

In the first six months the average metal price in US dollars rose compared with the corresponding period of 2017. The major factor behind this was the lower supply, reflecting China's measures against air pollution, reduced aluminium production in Brazil, and the US sanctions imposed on the world's second largest aluminium producer.

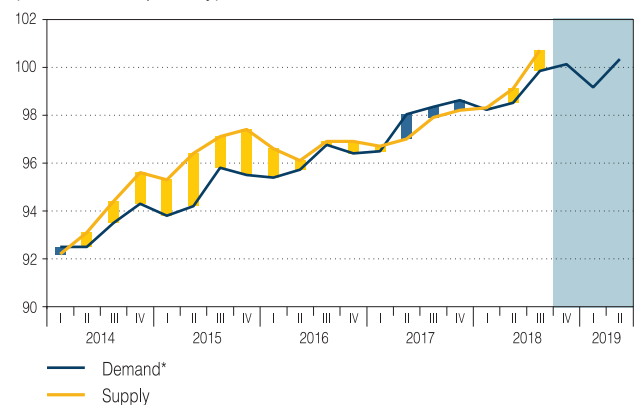
In the second half of 2018 the upward trend in metal prices was reversed, and prices decreased compared with the second half of 2017. This reflected the slowdown in annual growth of global industrial production. China's lower demand, partially recovered production of the world aluminium production leader in Brazil and the expected implications of the trade war between the USA and China also impacted strongly metal price dynamics in the second half of 2018.

By sub-component the zinc price posted the largest decline on an annual basis in the second half of the year driven by both the weaker demand and increased yields in new and existing mines. The copper price, which is of key importance for Bulgaria's goods exports, also decreased. The lower price of copper reflected the higher production, mainly in Chilli, and also the effect of the protectionist measures in world trade.

In the first half of 2019 metal prices in US dollars are expected to decrease on an annual basis, which will reflect the expectations for a slowdown in global economic growth and particularly the lower rate of global industrial production. Concurrently, the forecast of metal prices in euro is for growth on an annual basis

World Crude Oil Supply and Demand (Quarterly)

(million barrels *per day*)



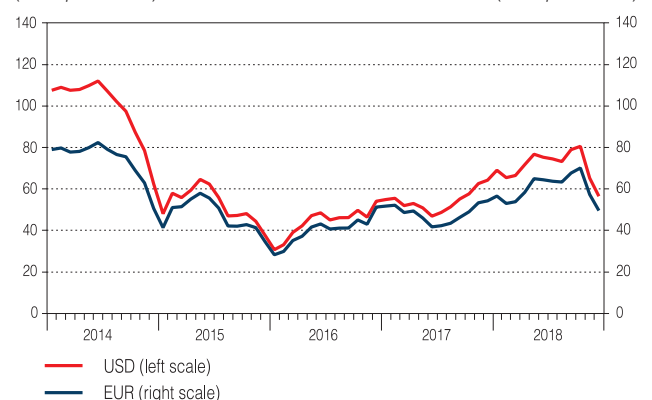
*Including IAE latest available data on crude oil demand in December 2018.

Source: the IAE.

Brent Crude Oil Price

(USD *per barrel*)

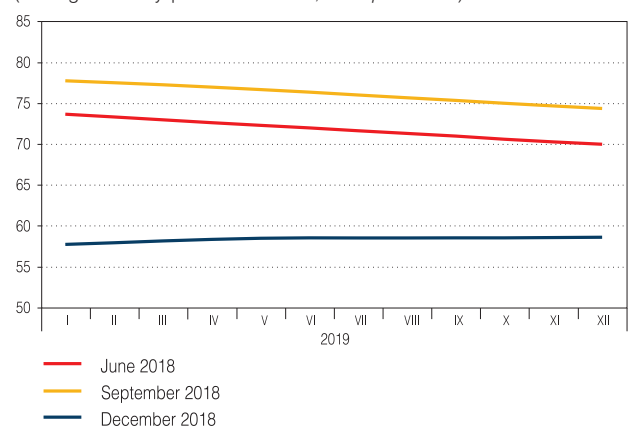
(EUR *per barrel*)



Source: the World Bank.

Brent Crude Oil Futures Prices

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



Source: JP Morgan.

due to the anticipated depreciation of the euro against the US dollar.¹¹

In 2018 on average, the global food price index in US dollars and euro decreased from 2017, with a stronger fall reported in euro prices than those in dollars due to the appreciation of the euro against the US dollar. The second quarter saw a stronger year-on-year decline throughout 2018. The dynamics across index sub-components was divergent. Prices of wheat, which is essential for the Bulgarian exports of goods, rose in US dollars and euro on an annual basis. The price increase reflected the expectations of lower harvest worldwide as a result of unfavourable weather conditions in Australia and the lower EU exports of wheat.

The food price forecast in US dollars points to a decrease on an annual basis in the first half of 2019, unlike the expected rise in euro as a result of the dollar appreciation against the euro.¹²

If market expectations of international fuel, commodity and food price dynamics materialise, the terms of trade in Bulgaria are expected to remain unfavourable in the first half of 2019.

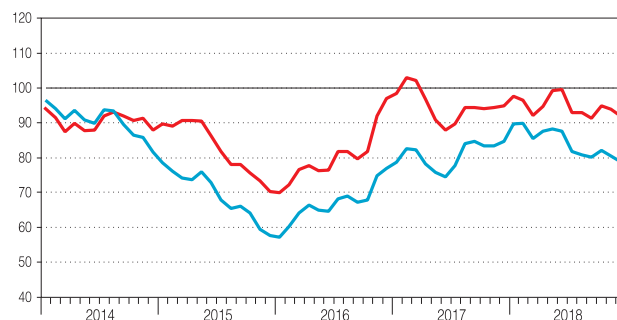
¹¹ The euro price forecast is based on the technical assumption about the EUR/USD exchange rate. It is fixed at the average value for the last ten days on 14 December 2018, the date when the assumptions on the external environment for the forecast period were made. In line with the technical assumption, the EUR/USD exchange rate will decrease in the first half of 2019 compared with the corresponding periods of the previous year.

¹² See footnote. 11.

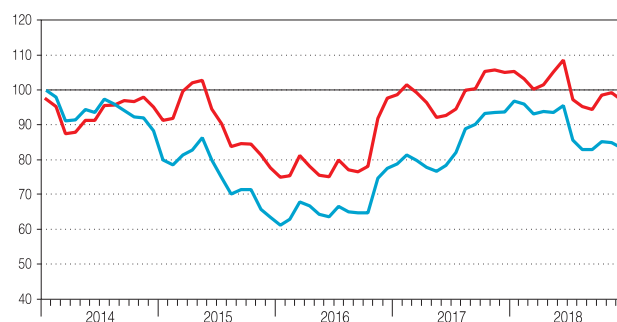
Price Indices of Major Raw Materials and Commodity Groups

(2013 = 100)

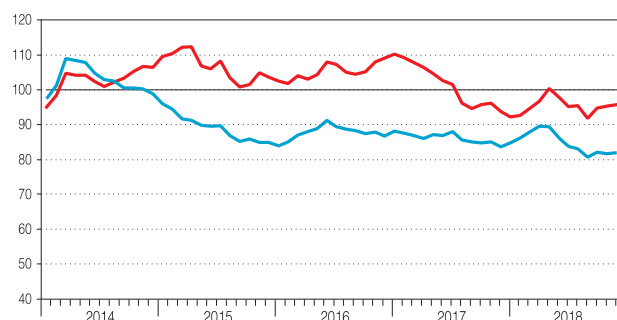
Metals



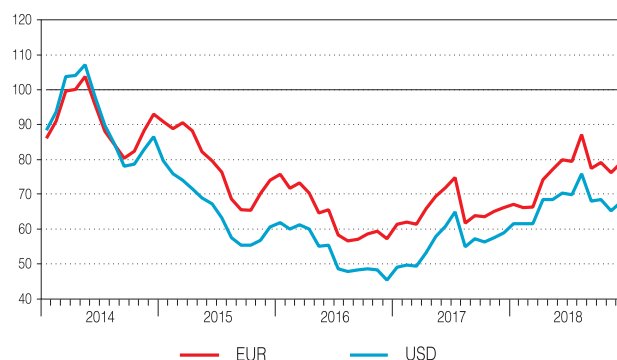
Copper



Food



Wheat



Sources: the ECB and BNB calculations.

2. FINANCIAL FLOWS, MONEY AND CREDIT

In the January–November 2018 period, the overall current and capital account balance was positive, indicating a lower surplus compared with the same period of the previous year due to the significant increase in Bulgaria's trade balance deficit. In the first and second quarters of 2019 the surplus of the overall current and capital account balance is expected to decrease further as a share of GDP on an annual basis. The major factor behind this will be the anticipated increase in the trade balance deficit due to both higher growth in real goods imports compared to that of exports and unfavourable terms of trade for the Bulgarian economy.

In the context of continuously improving economic activity and increased labour income, the sustained high savings rate in the economy contributed to the relatively high growth rates of non-government sector's deposits in 2018. Credit growth to non-financial corporations and households accelerated further, mainly driven by increasing domestic demand and low lending rates.

In the first half of 2019 amid increased uncertainty stemming from the external environment, continued labour income growth and the lack of a sufficiently safe alternative to bank savings, non-government sector's deposits are expected to further increase at comparatively high rates. After the significantly accelerated growth of loans to the non-government sector in 2018, partly due to the inclusion of a new reporting unit in the monetary statistics, loan growth is expected to continue in the first half of 2019, though at lower rates compared with the current ones.

External Financial Flows

Between January and November 2018 the overall current and capital account balance was positive at EUR 3257 million, with a surplus decline observed against the corresponding period of the prior year.¹³ The lower surplus resulted from current account flow dynamics, while the capital account recorded a higher surplus due mainly to transfers to the general government sector related to greenhouse allowances. The main factor behind the decreased positive current account balance *vis-à-vis* the same period of 2017 was the strong increase in the trade balance deficit¹⁴ as a result of decreased real goods exports and increased real goods imports along with worsened terms of trade for the Bulgarian economy.

The increase in the surplus on net services trade and, to a lesser extent, on net secondary income limited the contraction in positive current account balance. The higher surplus on net services trade for January–November 2018 *vis-à-vis* the same period of 2017 reflected largely increased earnings from visits of foreign nationals to Bulgaria.

¹³ The analysis of balance of payments flows employs information from its analytical reporting. Preliminary data.

¹⁴ For a more detailed analysis of foreign trade flows, see Chapter 3, The Exports and Imports of Goods and Services Section.

Flows on Major Balance of Payments Accounts

(EUR million)

	2016	2017	On an annual basis as of November 2018
Current account	1 244.0	3 367.9	2 374.9
Trade balance	-984.4	-765.8	-2 392.8
Services, net	3 060.4	2 765.2	3 239.8
Primary Income, net	-2 416.5	-496.0	-424.5
Secondary income, net	1 584.6	1 864.5	1 952.4
Capital account	1 070.9	529.7	698.6
Financial account	667.6	2 260.1	1 086.2
Change in reserves	3 467.3	-98.9	1 991.8

(per cent of GDP)

	2016	2017	On an annual basis as of November 2018
Current account	2.6	6.5	4.4
Trade balance	-2.0	-1.5	-4.4
Services, net	6.4	5.4	6.0
Primary Income, net	-5.0	-1.0	-0.8
Вторичен доход, нето	3.3	3.6	3.6
Capital account	2.2	1.0	1.3
Financial account	1.4	4.4	2.0
Change in reserves	7.2	-0.2	3.7

Source: the BNB.

Net secondary income recorded an increased surplus generated by the higher year-on-year amount of funds reimbursed under the EU Common Agricultural Policy. At the same time, Bulgaria's larger contribution to the EU budget for the first eleven months of the year contained the rise in net secondary income surplus. Net primary income deficit contracted slightly against the relevant period of 2017.¹⁵

Reflecting the above developments in current and capital account flows, in November 2018 the total surplus accumulated for the last 12 months declined from December 2017, driven entirely by the trade balance deficit growth.

Taking into account November 2018 data, the overall current and capital account surplus in the first and second quarters of 2019 is expected to decrease further as a share of GDP on an annual basis.¹⁶ The major factor behind this will be the anticipated increase in the trade balance deficit, likely to reflect both higher growth in real goods imports compared to goods exports and unfavourable terms of trade for the Bulgarian economy. Growth in net primary income deficit, driven by the increase in gross operating surplus in the economy over the first nine months of 2018 and its projected rise until the end of the year, will further contribute to the contraction of the overall current and capital account surplus. In addition, with EU project implementation for the 2014–2020 period entering a more advanced stage, we expect that the improved absorption of funds under EU-funded operational programmes will continue and capital account surplus as a share of GDP will grow on an annual basis *vis-à-vis* the end of 2017.

In the January–November 2018 period, the financial account balance was positive (EUR 2083 million) driven by the stronger increase in foreign assets compared with foreign liabilities. Transactions of other sectors¹⁷ and banks¹⁸ contributed most significantly to foreign asset dynamics in the first eleven months of 2018. An increase in

¹⁵ Preliminary data subject to revision; revisions usually show an increase in outflows to residents.

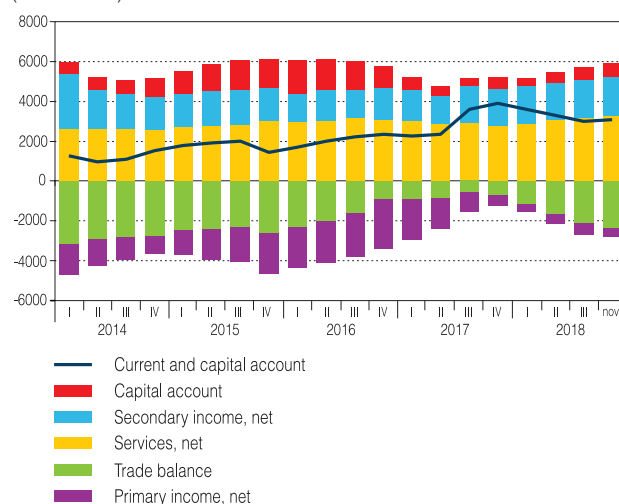
¹⁶ It should read the account balance for the last four quarters.

¹⁷ Sectors other than central banks, other monetary financial institutions and general government.

¹⁸ Further details on bank operations are provided in the Monetary and Credit Aggregates Section of Chapter 2.

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

(EUR million)



Notes: For each quarter, the chart shows item balances accumulated in the last four quarters. Chart data as of November 2018 are accumulated for the last 12 months.

Source: the BNB.

foreign liabilities on the financial account over the period was reported mainly in other sectors, especially in the form of foreign direct investment. Financial account liabilities growth was affected, though to a smaller extent, by transactions of banks which boosted their foreign liabilities in the form of other investment.

As a result of described flow movements in BOP financial account components, the balance accumulated for the last 12 months was positive, recording a fall from December 2017 due to the rise in foreign liabilities and a decline in foreign assets.

Between January and November 2018 direct investment liabilities (reporting FDI inflows into Bulgaria) decreased from the corresponding period of 2017 to EUR 1185.9 million (against EUR 1491.0 million in the same period of 2017).¹⁹ In the first eleven months of the year the strongest foreign direct investment inflows were reported from the Netherlands, Germany and Belgium. In November 2018 inflows on direct investment liabilities accumulated for the last 12 months declined from the end-2017 level.

Reflecting net current, capital and financial account flows on the balance of payments, Bulgaria's gross international reserves²⁰ increased by EUR 519.0 million in January–November 2018. In November 2018 the international reserve coverage of average nominal imports of goods and non-factor services remained high at 8.3 months for the last 12 months, posting a slight decrease from December 2017 (8.7 months).

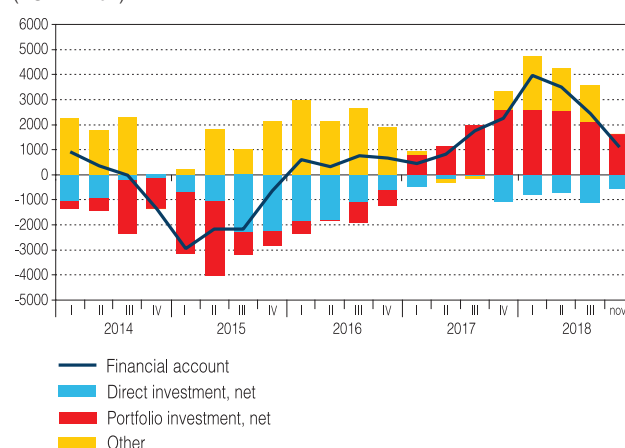
In October gross external debt of Bulgaria increased by EUR 585.2 million from the end of 2017 to EUR 33,982.5 million. An increase was reported by banks, other sectors and intercompany lending. The share of long-term debt in Bulgaria's total gross external debt was 76.2 per cent in October, remaining broadly unchanged from the end of the previous year. The new external debt held by Bulgarian residents in the January–October 2018 period increased compared with the corresponding period of 2017 due primarily to the higher new external debt of other sectors.

¹⁹ Preliminary data subject to revisions which usually show an increase in foreign direct investment liabilities.

²⁰ Valuation adjustments and price revaluation excluded.

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

(EUR million)

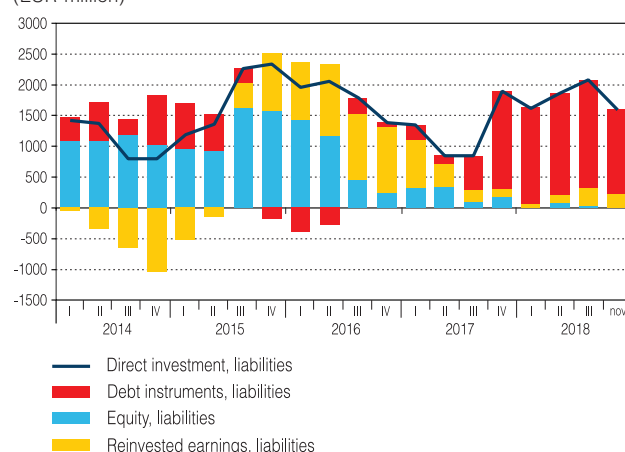


Notes: The Other item includes Other Investments, Net, and Financial Derivatives (Other than Reserves) and Employee Stock Options, Net. For each quarter, the chart shows item balances accumulated in the last four quarters. Chart data as of November 2018 are accumulated for the last 12 months.

Source: the BNB.

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. Chart data as of November 2018 are accumulated for the last 12 months.

Source: the BNB.

Gross External Debt as of October 2018

(EUR million)

	Amount	Change	
		Since December 2017	For the last 12 months
General government	5 604.4	-114.8	-316.0
Central bank	0.0	0.0	0.0
Banks	4 688.0	389.2	698.2
Other sectors	10 854.2	173.5	30.6
FDI – intercompany loans	12 855.9	137.2	466.0
Total	33 982.5	585.2	878.8

Note: Further details on individual institutional sectors are available on the BNB website, Statistics, External sector/Gross External Debt.

Source: the BNB.

In the first ten months of 2018 external debt interest payments grew slightly year on year, but yet favourable debt service conditions were retained amid persistently low interest rates in the euro area and the debt currency structure.

Monetary and Credit Aggregates

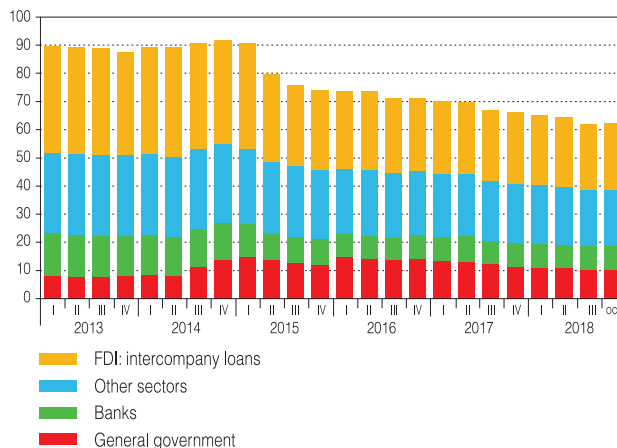
In 2018 the annual growth rate of broad money remained comparatively high, reaching 8.8 per cent in December, from 7.7 per cent at the end of 2017. This dynamics was mainly driven by the retained high savings rate in the economy in the context of increasingly improving economic activity and rising labour income. Overnight deposits continued to contribute most significantly to M3 growth since they are a preferred form of saving for both firms and households due to low deposit rates and the flexibility they provide in savings withdrawals. The second half of 2018 saw a slight downward trend in the contribution of overnight deposits to the total growth of broad money. Concurrently, the positive contribution of quasi-money observed since April increased by the end of the year. The contribution of money outside MFI remained stable throughout the year.

Non-government sector's deposits²¹ continued to occupy the bulk of attracted funds in the banking system, with their share reaching 87 per cent on average for 2018. The upward trend in non-government sector's deposits rising at comparatively high rates continued, with some acceleration observed since the end of the second quarter, driven mainly by non-financial corporations' deposits. The stronger increase in non-financial corporations' deposits is explained to a certain extent by one-off factors whose effect was exhausted in November. The annual growth rate of non-financial corporations' deposits was 5.2 per cent in December (13.8 per cent by end 2017), their total amount reaching BGN 23.2 billion. Household deposits had an increasing positive contribution to the overall growth in non-government sector's deposits. By end-2018 total household deposits reached BGN 51.5 billion, and their annual growth accelerated moderately

²¹ Non-government sector's deposits include deposits of households, non-financial corporations and financial corporations. Deposits of households and non-financial corporations comprised the largest share of all non-government sector's deposits (96.4 per cent on average for the last 12 months as of December 2018), and therefore the analysis is focused on these two sectors.

Gross External Debt as a Share of GDP

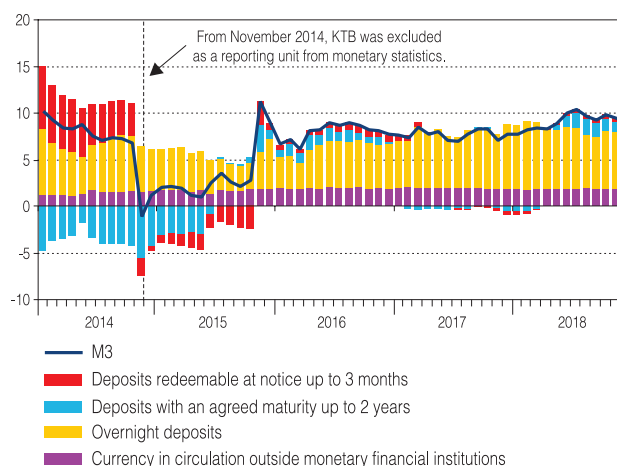
(per cent of GDP)



Source: the BNB.

Annual Rate of Change in M3 and Contribution by Component

(per cent, percentage points)

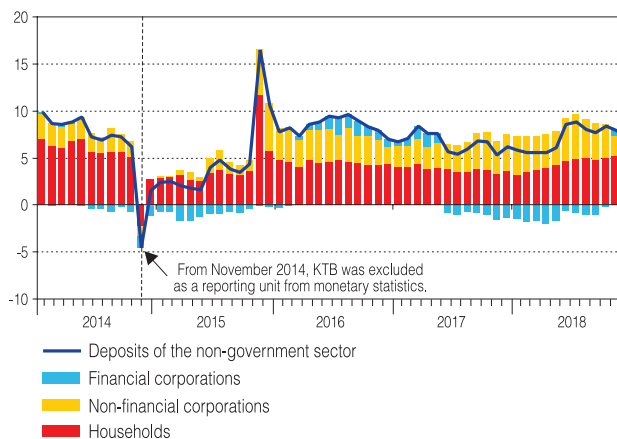


Note: The marketable instruments component is not shown on the chart due to its insignificant contribution to broad money growth.

Source: the BNB.

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

(per cent, percentage points)



Source: the BNB.

to 7.7 per cent (from 5.4 per cent at the end of 2017), with deposits with an agreed maturity tending to increase their positive contribution over the year. In terms of currency, both corporations and households continued to save primarily in levs, with such deposits comprising 63.0 per cent of all non-government sector's deposits in December 2018.

The effective implicit rate of minimum required reserves²² remained at levels similar to the previous year's average levels, reflecting the retained high inflow of attracted funds in the banking system over 2018. In December it was 9.40 per cent (9.41 per cent on average for 2017) with bank deposits with the BNB comprising 8.29 percentage points in the fulfilment of minimum required reserves, and the remaining 1.11 percentage points forming recognised cash balances.

Reserve money developments were mainly driven by banks' deposits with the BNB. In December 2018 the monetary base grew by 10.1 per cent on an annual basis (3.5 per cent at the end of 2017). The strong acceleration in growth was largely due to the exhausted base effect of excess reserve declines in October 2017, reflecting the changed methodology for calculating interest rates on BNB accounts.²³ Following the one-off drop in bank excess reserves in October 2017, since the beginning of 2018 their level has stabilised, tending to decrease gradually in the second half of the year. In December 2018 excess funds on banks' minimum reserve accounts over the required minimum of reserve assets under Ordinance No 21 comprised 33.12 per cent on an average daily basis, from 44.9 per cent in December 2017. Decreased bank excess reserves in the second half year were entirely offset by the increased bank minimum required reserves as a result of rising deposit base and higher bank funds in TARGET2.

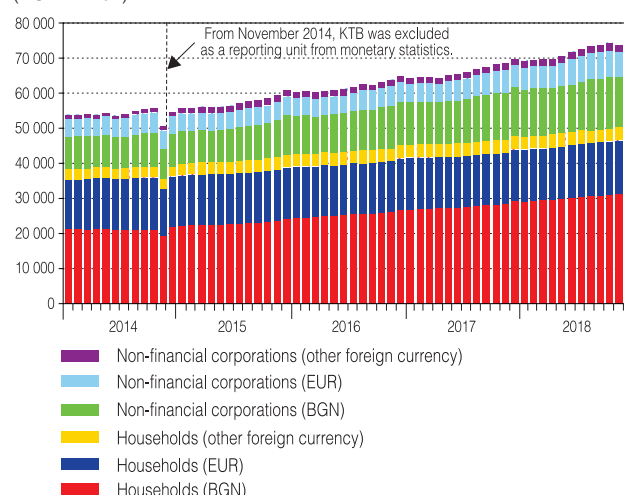
The contribution of currency in circulation to monetary base dynamics in 2018 remained relatively

²² According to Article 3 of BNB Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks, the rate of minimum required reserves on funds attracted from residents is 10 per cent of the deposit base, from non-residents 5 per cent and from the state and local government budgets 0 per cent.

²³ On 4 October 2017 changes in the methodology for calculating interest rates on accounts with the BNB came into force. They 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.

Currency Structure of Deposits of Non-financial Corporations and Households

(BGN million)

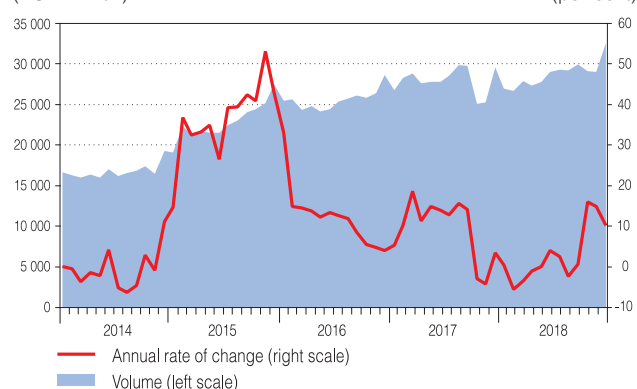


Source: the BNB.

Reserve Money

(BGN million)

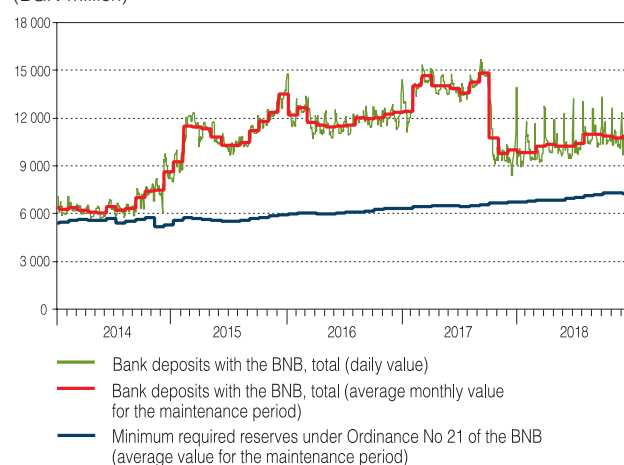
(per cent)



Source: the BNB.

Bank Deposits with the BNB

(BGN million)



Source: the BNB.

stable, with year-on-year growth in December accounting for 10.3 per cent (11.0 per cent at the end of 2017). Relatively high growth rates of currency in circulation reflected again the expanding private consumption and low deposit rates.

Under currency board arrangements, foreign currency trade with the BNB is the main tool to manage bank liquid resources. In December 2018 net BNB purchases of euro from banks amounted to EUR 1417.4 million on an annual basis.

Bank assets grew 7.9 per cent on an annual basis by end-December 2018.²⁴ Claims on the non-government sector and, to a lesser extent, increased foreign assets and bank deposits with the BNB contributed most substantially to the growth of bank assets. Concurrently, a decline was observed in claims on the general government sector. In 2018 foreign liabilities of banks increased after remaining at comparatively stable levels over the previous year.

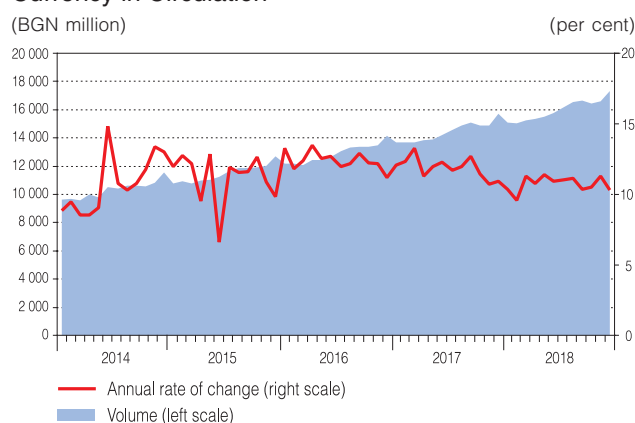
The annual growth in credit to non-financial corporations and households²⁵ tended to accelerate in 2018, reaching 7.7 per cent by end-year (3.3 per cent by the end of 2017). The increased domestic demand and low interest rates on loans contributed to these developments. BNB lending survey data show that in the first three quarters of the year banks reported further easing credit conditions for corporations and households in terms of interest rates and spreads. At the same time, low interest rates were one of the main factors considered by banks as drivers for the higher credit demand. In addition to interest rates, demand for investment purpose funds, the overall improvement of macroeconomic environment and favourable housing market prospects contributed to the credit activity.

Annual growth of loans to non-financial corporations accelerated to 5.4 per cent in December

²⁴ Data from the analytical reporting of other monetary financial institutions were used.

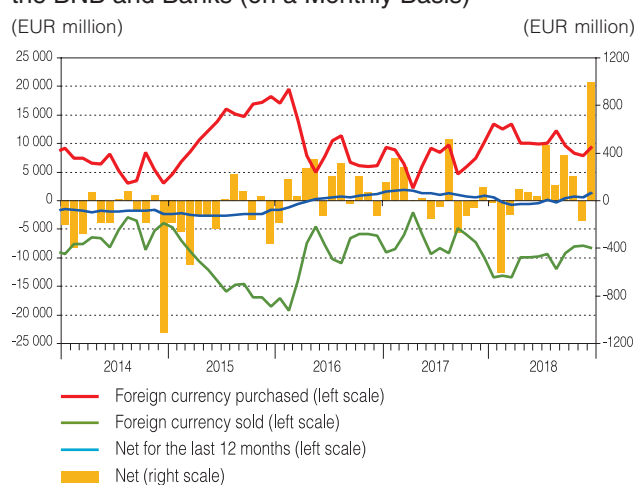
²⁵ Loans represent the bulk of bank claims on the non-government sector with a share of 97.8 per cent on average for the last 12 months as of December 2018, and the analysis was therefore focused on them. In addition to loans, claims include also repurchase agreements, securities other than shares, and shares and other equity instruments. Non-government sector's deposits, in turn, include loans to households, non-financial corporations and financial corporations. The share of loans to households and non-financial corporations in total loans to the non-government sector accounted for 95.5 per cent on average in the last 12 months as of December 2018, and therefore developments in these two sectors are addressed.

Currency in Circulation



Source: the BNB.

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

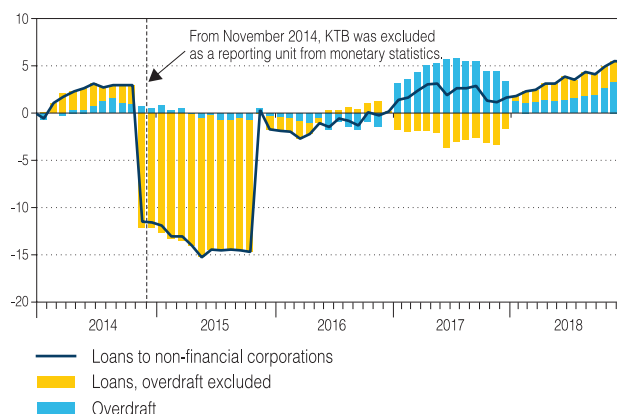


Notes: Net means currency purchased minus currency sold by the BNB. Data refer to all bank transactions in foreign currency including liquidity management operations related to the transfer of own funds from lev accounts with the BNB to own accounts with the BNB in euro and *vice versa*.

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.

2018, compared with 1.6 per cent at the end of the previous year, with loans other than overdraft and overdrafts contributing positively to this dynamics. In the first eleven months of 2018 volumes of new²⁶ loans to non-financial corporations remained at levels close to those of end-2017.²⁷ In terms of the currency structure, a slight increase was recorded in the share of newly extended corporate loans in euro at the expense of leva and US dollars. Accordingly, the share of leva-denominated loans (for the last 12 months on average) was 52.5 per cent of total new corporate loans, that of euro loans 45.9 per cent and dollar-denominated loans 1.5 per cent.

Household credit growth also tended to increase, reaching on an annual basis 11.2 per cent by end-2018 (6.0 per cent by the end of 2017). This dynamics reflected mainly positive contributions of consumer and housing loans, while the contribution of other household loans was negative. Accelerated year-on-year growth of consumer loans (17.7 per cent in December 2018) was strongly influenced by the inclusion of a new reporting unit in the scope of monetary statistics from April 2018.²⁸ Concurrently, the negative contribution of other loans was largely explained by the government payments on loans already extended under the National Program for Energy Efficiency of Multi-family Residential Buildings (the National Energy Efficiency Programme) which exceeded the volume of new loans. Over the first eleven months of 2018 newly extended consumer loans exhibited an upward dynamics, while new housing loans remained close to end-2017's levels.

Summarised results of the BNB lending survey²⁹ for the third quarter of 2018 suggest that credit

²⁶ The terms 'new' and 'newly extended' hereinafter referred to as the statistical category 'new business'.

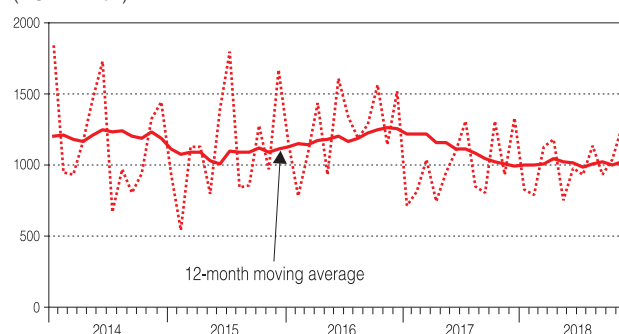
²⁷ Based on 12-month moving average.

²⁸ With effect from April 2018, the other monetary financial institutions sector includes also BNP Paribas Personal Finance S.A. – Bulgaria branch, with balances reclassified from the sector of other financial intermediaries. The reclassification results from BNP Paribas Personal Finance EAD specialised in lending being transformed through merger into the new credit institution. Until March 2018, it was included in the sector of other financial intermediaries for the purposes of monetary statistics.

²⁹ Summarised results of the bank lending survey are presented through weighting bank responses by their market share in the relevant credit segment.

New Loans to Non-financial Corporations (Monthly Volumes)

(BGN million)

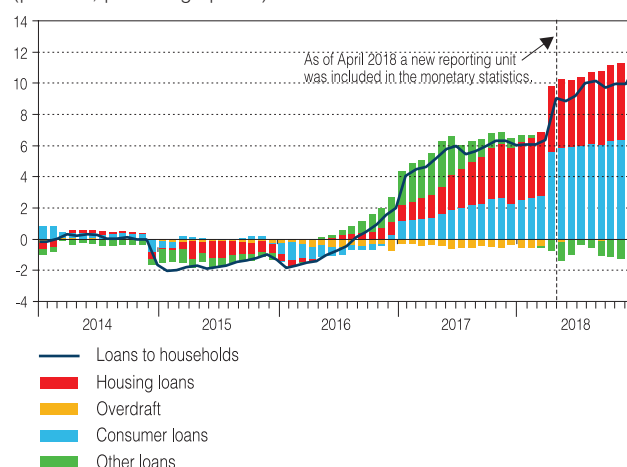


Note: For data characterised by significant volatility, additionally moving averages computed for suitably selected periods are provided in order to smooth the fluctuations in corresponding time series and present the trends in their development.

Source: the BNB.

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

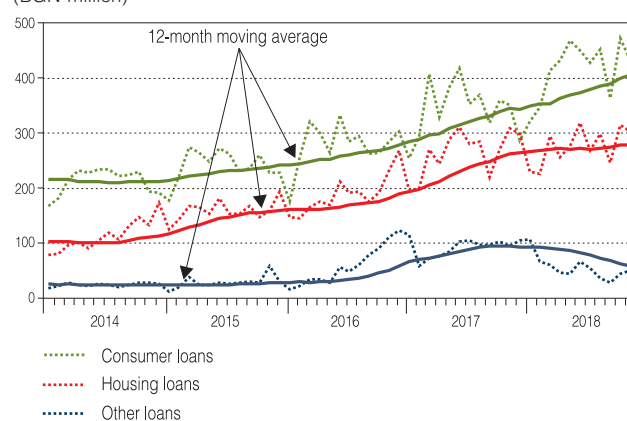
(per cent, percentage points)



Source: the BNB.

New Loans to Households (Monthly Volumes)

(BGN million)



Source: the BNB.

standards³⁰ experienced no essential changes in approving credit applications by corporations. Household credit standards were eased for consumer loans and slightly tightened for housing loans. Banks reported further easing of credit conditions³¹ for corporations and households in terms of interest rates. Strong competition in the banking sector and lowered risk assessments were the main drivers for easing lending policy (credit standards and conditions) for corporations and households over the period. In particular, risk assessments reflected the overall macroeconomic environment improvement, increased borrowers' solvency, favourable prospects in the housing market and lower collateral risk. Concurrently, bank risk aversion was a factor for tighter policies regarding small- and medium-sized corporations and households during the quarter. Bank expectations for October–December 2018 show retention of corporate credit standards, certain easing of consumer and slight tightening of housing loan standards.

Banks also report that credit demand further increased in the third quarter of 2018, especially for corporate and housing loans. Stronger corporate credit demand reflected the need for investment resources and low interest levels. Rising demand for bank resources by corporations was also driven by their needs for working capital and inventories and for refinancing, restructuring or renegotiating debts. Major factors encouraging household demand for consumer loans were low interest rate levels and the need for funds used to purchase current consumption and durable goods. In addition to low interest rates, the overall improvement in the macroeconomic environment and favourable housing market prospects contributed substantially to the higher demand for housing loans over the quarter. Bank expectations for October to December 2018 suggest that demand for corporate and household loans will continue to increase.

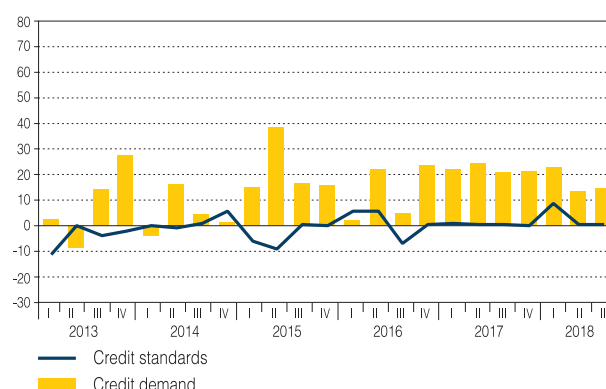
³⁰ Credit standards are understood as internal bank guidelines or criteria for loan approvals established prior to negotiating the terms of extended loans. Credit standards determine the type of the loan and collateral considered admissible by banks, taking into account specific priorities by sector, *etc.* Credit standards specify also all relevant conditions to be met by a borrower.

³¹ Credit conditions typically involve the reference interest rate surcharge, the loan amount, conditions for its utilisation and some other conditions, such as fees and commissions, collateral or guarantees to be provided by a borrower.

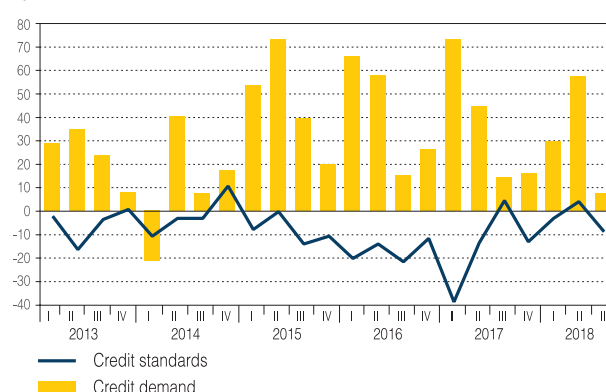
Changes in Demand and Credit Standards

(balance of opinions; percentage points)

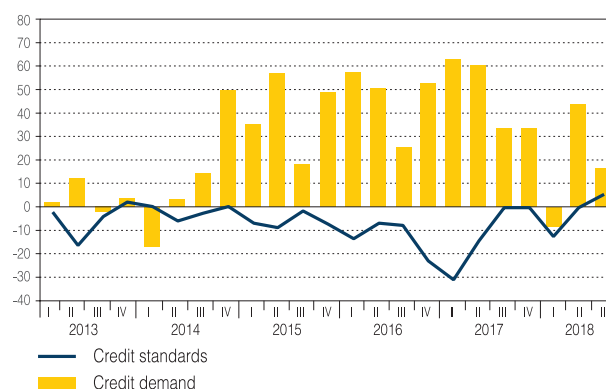
a) corporate loans



b) consumer loans



c) housing loans



Notes: As regards credit standards, the above charts present banks' balance of opinions defined as the 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.

In the first half of 2019 non-government sector's deposits are expected to further grow at comparatively high rates amid increased uncertainty stemming from the external environment, continuous labour income growth and the lack of a sufficiently safe alternative to bank savings. Credit to the non-government sector is expected to grow further, though at lower rates than those by end-2018. The projected continuous increase in domestic demand and retained comparatively low lending rates are the drivers behind credit growth over the projection horizon. At the same time, the factors which will limit credit growth are associated with continued government repayments on energy efficiency loans and decreased volumes of such new loans along with exhaustion in the second quarter of 2019 of the one-off effect of a new reporting unit included in the scope of monetary statistics. Retained bank policies of writing-off non-performing loans and selling credit portfolios along with the comprehensive assessment of six Bulgarian banks³² in the first half of 2019 would also have a possible limiting effect on credit dynamics. The activation of the countercyclical capital buffer from October 2019 announced by the BNB also constitutes a potential factor likely to exert a similar pressure.³³

Interest Rates

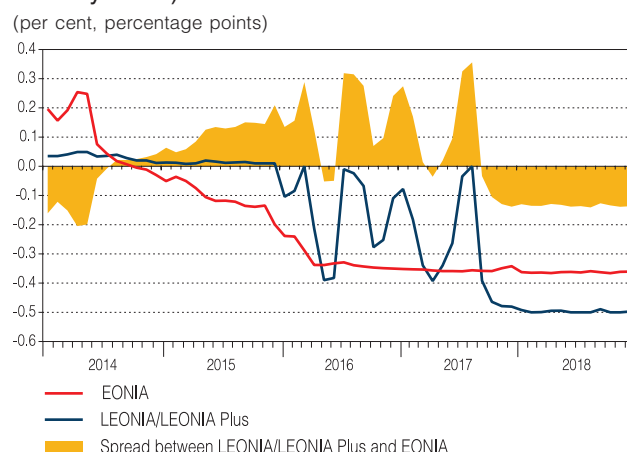
In 2018 LEONIA Plus index³⁴ remained at levels close to the end of 2017, reaching in December -0.50 per cent (down 2 basis points from December 2017). The EONIA index also remained stable over the year, and therefore the spread between the two indices recorded no changes from the end of 2017 to reach -14 basis points in December 2018. In 2018 volumes on the lev interbank money market rose significantly from 2017 levels,

³² Bulgaria's request of 18 July 2018 for accession to the Single Supervisory Mechanism (SSM) by establishing close cooperation with the ECB provides for a thorough assessment of six banks to be carried out by the ECB (an asset quality review and stress tests). The assessment began in November 2018, and its results are expected to be published in July 2019.

³³ In its resolution of 26 September 2018, the BNB Governing Council set in compliance with Article 5, paragraphs 3 and 4 of Ordinance No 8 on Banks' Capital Buffers a countercyclical buffer rate applicable to credit risk exposures in the Republic of Bulgaria at 0.5 per cent, effective from 1 October 2019. The resolution is notified no later than 12 months before its entry into force. For details, see http://www.bnb.bg/PressOffice/POPressReleases/POPRDate/PR_20180926_ACCB_BG.

³⁴ LEONIA Plus (LEv OverNight Interest Average Plus) is a reference rate of unsecured overnight deposit transactions in Bulgarian lev on the interbank market.

Overnight Interbank Money Market Rates (Average Monthly Value)

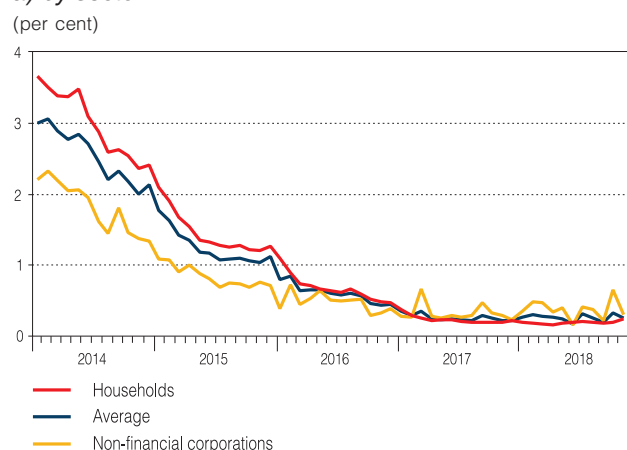


Note: With effect from 1 July 2017, LEONIA Plus index replaces LEONIA. LEONIA Plus monthly values are calculated as an arithmetic average for those days when overnight unsecured lending transactions are concluded in the interbank market in lev.

Sources: the BNB, the ECB.

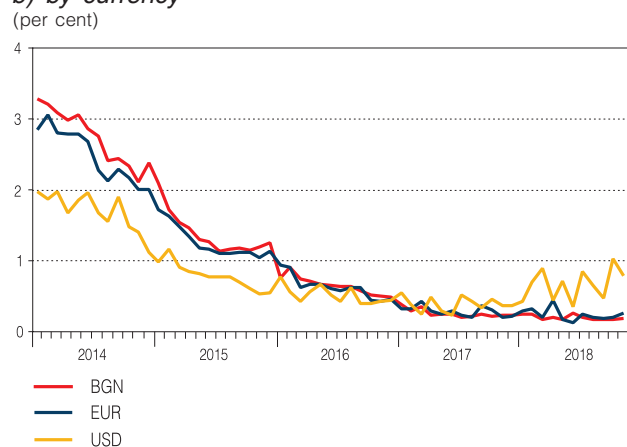
Interest Rates on New Time Deposits

a) by sector



Notes: The average interest rate is calculated for all sectors, maturities and currencies weighted by relevant volumes of new business. 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.

amounting to BGN 4.0 billion on average, from BGN 2.0 billion for 2017.

In the first eleven months time deposit rates remained at historically low levels. This dynamics was favoured by the sustained high inflow of attracted deposits and high liquidity in the banking system. In November the average weighted interest rate on new time deposits of non-financial corporations and households was 0.3 per cent, rising slightly by 4 basis points from the end of the previous year. Interest rates on non-financial corporations' deposits experienced greater fluctuations, increasing from the end of 2017 by 8 basis points to 0.3 per cent. These developments are broadly driven by the higher volatility of interest rates on dollar-denominated deposits of non-financial corporations. In the first eleven months of 2018 household deposit rates stabilised at the end-2017 levels (0.2 per cent in November 2018). In terms of currency, new time deposit rates in euro and leva remained almost unchanged, while those in US dollars increased from the end of the previous year.

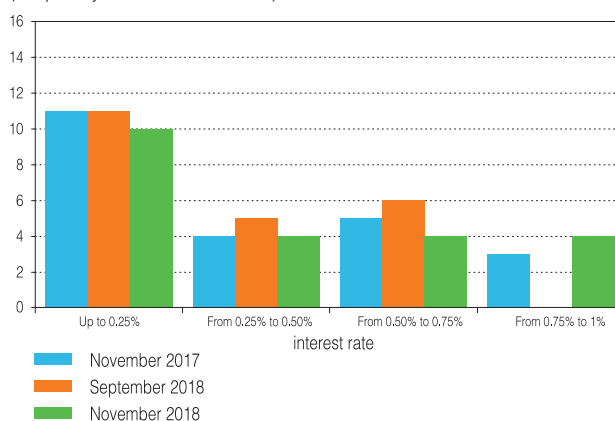
In November the breakdown by bank of average weighted interest rates on new time lev deposits of households showed a decrease on September in the number of banks with average interest rates of up to 0.25 per cent, from 0.25 to 0.50 per cent and from 0.50 to 0.75 per cent at the expense of the increased number of banks whose rates varied from 0.75 to 1.0 per cent. The standard deviation measuring the variation of interest rates offered by banks rose slightly.

Interest rates on new loans to corporations and new housing loans continued to decline gradually between January and November 2018. Interest rates on consumer loans have tended to rise somewhat since April 2018.³⁵ The BNB lending survey suggests that, according to banks, the strong banking competition and lowered risk assessments were the major factors affecting interest rate dynamics since the beginning of the year. Lowered risk assessments reflected the overall macroeconomic environment improvement, increased borrowers' solvency, favourable prospects in the housing market and lower collateral risk.

³⁵ The above values of lending interest rates are weighted averages on a 12-month basis.

Distribution of Interest Rates on New Household Time Lev Deposits

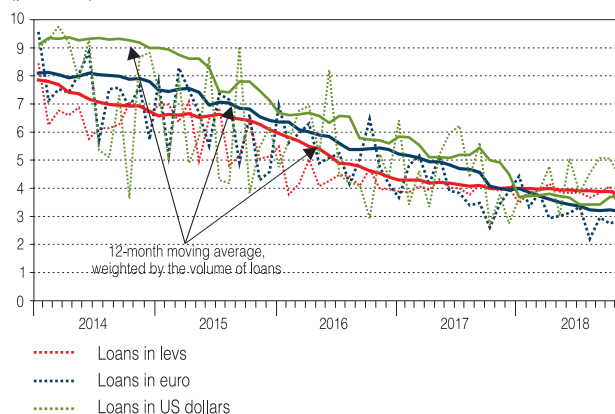
(frequency – number of banks)



Source: the BNB.

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

(per cent)



Source: the BNB.

In November interest rates on new loans to non-financial corporations were 3.2 per cent for lev-denominated, 2.9 per cent for euro-denominated and 4.4 per cent for dollar-denominated loans. Compared to the end of prior year, declines by 81 basis points in lev rates and by 97 basis points in euro rates were observed, while dollar rates rose by 164 basis points.³⁶

In the first eleven months of 2018 the annual percentage rate of charge (APRC) on housing loans continued to follow a downward trend, reaching 3.9 per cent³⁷ in November. The interest rate component of charges made the major contribution to this dynamics, while the implicit rate of non-interest service charges was retained at the end-2017 level. At the same time, the APRC on consumer loans have tended to increase since April 2018 to reach 0.5 per cent in November, with the interest rate component of charges contributing most significantly to this.

In November 2018 the breakdown by bank of average weighted interest rates on new housing euro loans showed a monthly increase in the number of banks offering average interest rates between 3.0 and 4.0 per cent and between 4.0 and 5.0 per cent at the expense of those with higher rates (from 5.0 to 6.0 per cent and over 6.0 per cent). The standard deviation reflecting variation of interest rates offered by banks went down 69 basis points to 0.93 per cent.

For the January to November period, spreads between lending rates on corporate and housing loans in Bulgaria and the corresponding euro area rates continued to contract to reach in November historical lows of 202 and 166 basis points, respectively.³⁸ Over the same period, corporate credit spreads fell by 39 basis points and housing by 47 basis points.

In the first half of 2019 new time deposit and lending rates are expected to remain at the achieved low levels. High inflows of attracted funds and banking competition will remain the internal driving factors for this. The main external

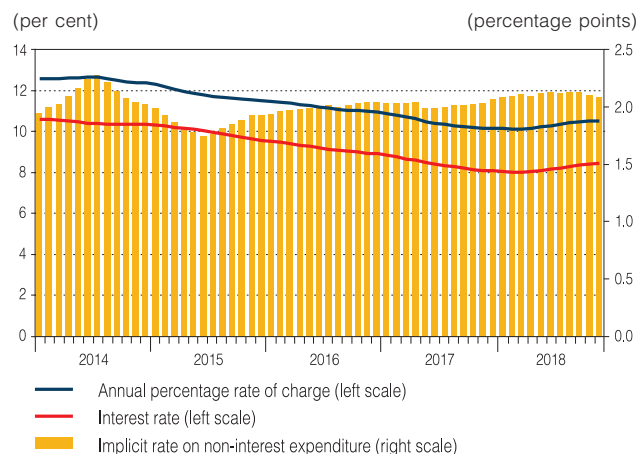
³⁶ The above values of lending rates for non-financial corporations are weighted averages on a 12-month basis.

³⁷ 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.

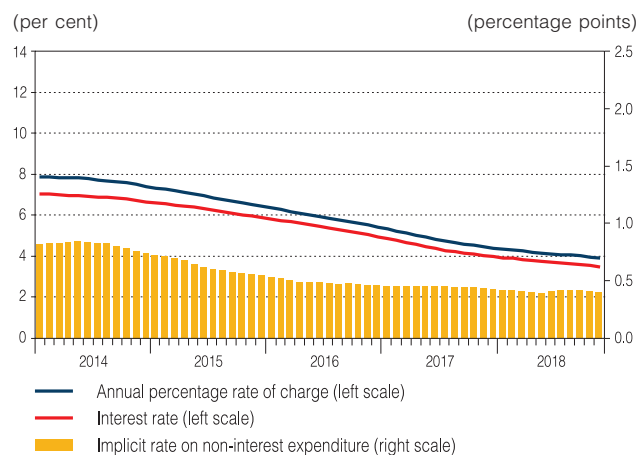
³⁸ Spreads are calculated as a difference between average interest rates in Bulgaria and in the euro area in all maturities for the relevant type of loan, total in national currency and euro, weighted by the relevant volumes of new loans for a 12-month period.

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

a) consumer loans



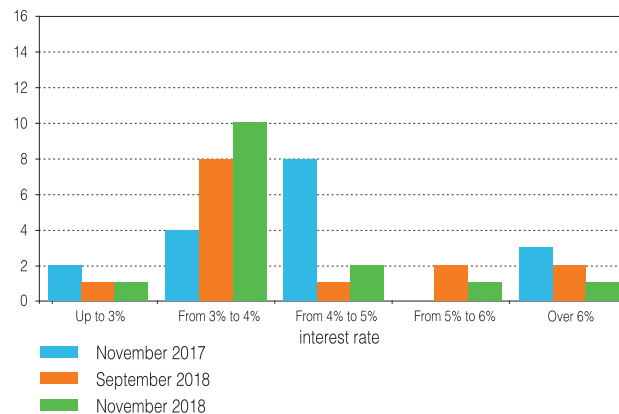
b) housing loans



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

Distribution of Interest Rates on New Housing Loans in Euro

(frequency – number of banks)



Source: the BNB.

factor which will affect interest rate dynamics will be the euro area interest rate cycle, with market expectations regarding three-month EURIBOR signalling its stabilisation at the current level over the first and second quarters of 2019.

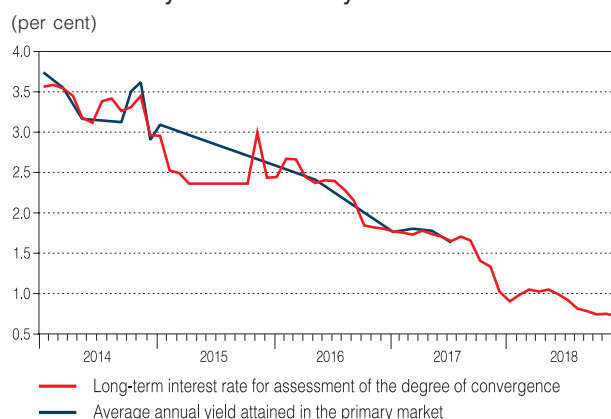
In the last quarter of 2018 again no government securities auctions were held in the primary market. Reflecting the lack of government bond supply in 2018 and sustained ample liquidity in the banking system, government bond demand in the secondary market remained higher than supply. This led to a quarter-on-quarter decline in the long-term interest rate used for assessing the degree of convergence (by 6 basis points to 0.72 per cent in December 2018).³⁹ Bulgarian Eurobond yields in international capital markets also remained broadly unchanged from the end of the third quarter, with an increase observed in the spread between Bulgarian bonds and government bond rates in Germany. The downward trend in euro area risk-free government bond yields was mainly due to a changed risk-taking behaviour of investors amid heightened economic and political uncertainty in key euro area economies.

In the first half of 2019 Bulgarian government bond yields are expected to reflect further external and specific internal factors. Continued investor flight to safety in the euro area in the context of increased uncertainty could exert an upward pressure on Bulgarian government bond yields in international capital markets. At the same time, the effect of internal factors favouring yield stabilisation is expected to be retained. Given the concentrated sizeable payments on government securities maturing in the first quarter of 2019 (BGN 0.9 billion) and planned limited bond supply in the primary market throughout the year,⁴⁰ demand for government bonds is expected to exceed supply, thus exerting a dampening effect on Bulgarian government securities yields.

³⁹ Due to the lack of new government securities issues in 2018, the residual maturity of the benchmark bond selected for calculating the long-term interest rate fell below nine years as of end of December 2018, which also had a downward effect on its yield.

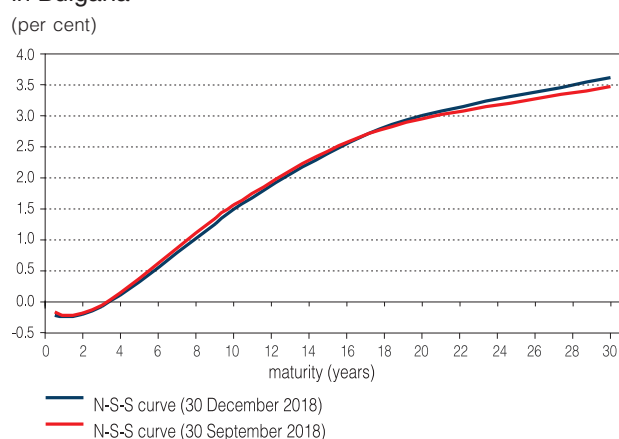
⁴⁰ Under the State Budget Law, the maximum amount of the new government debt that can be assumed over the year is BGN 1 billion. The issuing policy of the Ministry of Finance for 2019 provides that part of payments on government securities maturing over the year will be covered by new issues and another part by fiscal reserve funds.

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



Source: the BNB.

Reference Government Securities Yield Curve in Bulgaria



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.

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 third quarter of 2018 the external sector was again the main source of liquidity for the budget (3.4 per cent of GDP). Consolidated budget liquidity was positively affected by EU reimbursements under the Common Agricultural Policy (BGN 723.7 million) and increased revenue from grants under EU operational programmes (BGN 638.1 million) reflecting the accelerated project implementation in the 2014–2020 programme period. At the same time, liquid funds were redirected from the budget to the external sector following the EU budget contribution (BGN 246.6 million), repayments on foreign loans and interest payments to non-residents (BGN 97.7 million).⁴¹

The consolidated budget had a low positive effect (0.3 per cent of GDP for the third quarter) on the financial sector's liquidity (BNB excluded), reflecting largely government debt servicing, especially coupon payments on government securities to residents. The fiscal policy's effect on the non-government non-bank sector was limited in size, with liquidity to the amount of 0.6 per cent of GDP withdrawn from this sector during the quarter due mainly to government tax and non-tax revenue exceeding non-interest expenditure. Between July and September government's deposit with the BNB rose by BGN 1106.1 million (3.7 per cent of GDP for the quarter), reflecting primarily redirected liquidity from the external sector to the budget and, to a lesser extent, liquidity obtained from the non-government non-bank sector.

Based on monthly preliminary data as of middle of January 2019, it may be concluded that in the last quarter of 2018 the non-government non-banking sector was the main beneficiary of liquidity from the budget. Reallocation of significant resources to this sector is a normal operation

⁴¹ Interest payments to non-residents are estimated by adjusting external interest expenditure with payable interest payments to residents, as calculated on the basis of the value of Eurobonds held by residents, according to the MF Central Government Debt and Guarantees Monthly Bulletin as of 30 September 2018.

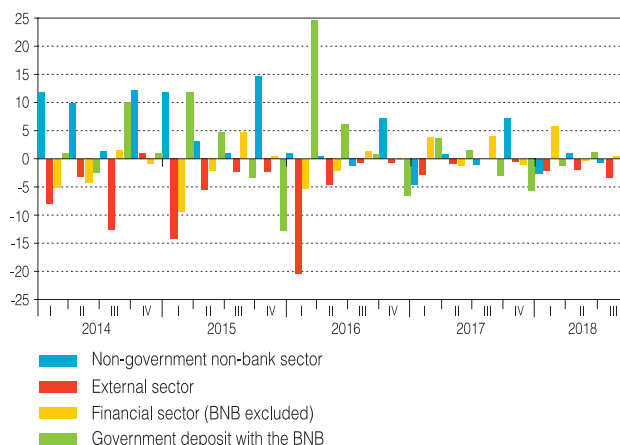
for the end of the year, explaining largely the significant fall in the government deposit with the BNB by BGN 1941.2 million compared to the end of the third quarter. The positive effect of consolidated budget on liquidity of the non-government non-bank sector in the fourth quarter is attributable to the excess of budgetary non-interest expenses and payments made from the budget under the Common Agricultural Policy over the amount of tax and non-tax revenue.

Developments in financial flows generated in the process of external and internal economic factor interaction contributed to the growth in international foreign exchange reserves. By end-December 2018 the market value of international reserves (including valuation adjustments and price revaluations), an asset on the BNB Issue Department balance sheet, rose by EUR 1.4 billion from the end of 2017 to EUR 25.1 billion (BGN 49.0 billion). According to the currency board principles, the increase in international reserves corresponds to the increase in the Issue Department balance sheet liabilities. Currency in circulation and banks' reserves with the BNB had the strongest positive contributions to Issue Department's liabilities dynamics in 2018.

In the first two quarters of 2019 bank reserves at BNB are expected to remain at levels close to their average value in the fourth quarter of 2018. Developments in the government deposit with the BNB will be mainly driven by projected positive budget balance in the first half of 2019 and domestic bond issuance policy. Government bond payments in the internal market are concentrated in the first quarter of 2019, their value reaching BGN 1.0 billion. Their downward effect on the government deposit with the BNB is expected to be partially offset by EU reimbursements of farm subsidies paid in December 2018. Over the projection horizon, currency in circulation is expected to further increase at comparatively high rates, reflecting rising private consumption and low deposit rates.

Consolidated Budget Effect on Other Sectors' Liquidity (Quarterly)

(share of GDP, per cent)



Sources: the MF, the BNB.

3. ECONOMIC ACTIVITY

In the third quarter of 2018 real GDP increased by 0.7 per cent on a quarterly basis, with net exports and private consumption contributing most significantly to the improved economic activity, and investment contributing negatively.

In the third quarter of 2018 the seasonally adjusted number of employed decreased in the total economy mainly due to the services sector. Concurrently, the unemployment rate further declined, reaching 5.1 per cent, while labour force decreased from the previous quarter. The nominal compensation per employee rose on average by 1.5 per cent on a quarterly basis.

In the first half of 2019 real GDP is expected to grow further quarter on quarter, with domestic demand contributing most to this effect. This will mainly reflect the projected increase in government investment, rather than the private consumption. Wage growth and concurrent rises in disposable income of households, coupled with persistently low interest rates, are expected to continue favouring private consumption growth, while weakening of consumer confidence by end-2018 will result in slowing its dynamics. The external environment will be a source of an uncertainty, dampening investment activity of corporations and limiting export growth.

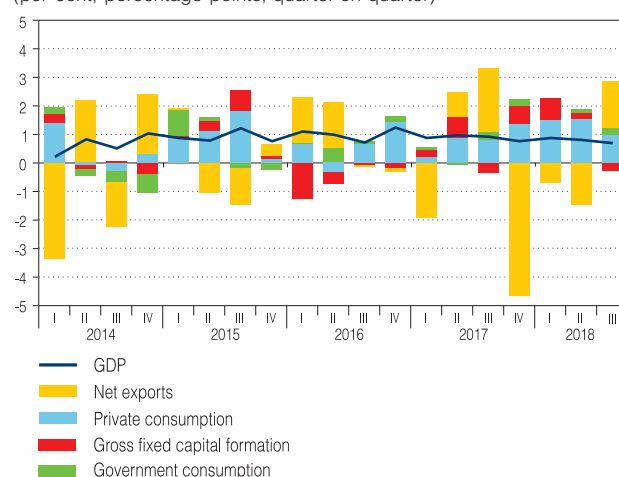
Current Economic Environment

According to seasonally adjusted NSI data, in the third quarter of 2018 the quarterly growth rate of real GDP decelerated slightly from the previous quarter to 0.7 per cent. Net exports, reflecting recovered growth in exports of goods after the fall in the first half of 2018 caused by the scheduled refurbishment of production facilities in key undertakings, contributed most strongly to the increased economic activity.⁴² Geographical breakdown of exports of goods suggests that despite quarter-on-quarter growth reported in the third quarter of 2018, unfavourable economic developments in Turkey had a dampening effect on growth dynamics. Domestic demand continued to contribute positively to the change in real GDP driven by stronger private and government consumption, while gross fixed capital formation had a slightly negative contribution.

In the third quarter of 2018 the favourable effect of main macroeconomic factors supporting private consumption sustainable growth was retained. These factors involved the increase in household labour income and low interest

⁴² NSI data on foreign trade and production and supply of energy products. For details, see Exports and Imports of Goods and Services Section in this Chapter.

Contribution to GDP Growth by Final Use Component
(per cent, percentage points; quarter-on-quarter)



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.

rates, which continued to stimulate demand for consumer loans. In the third quarter of 2018 gross fixed capital formation decreased from the previous quarter, contributing negatively to growth in domestic demand. BNB estimates⁴³ indicate that the decrease in investment is driven by the quarter-on-quarter fall in private investment, while public investment recorded an increase. Private investment dynamics is in line with the external demand slowdown in the third quarter of 2018 and the results of the NSI October survey on the investment activity in industry, which suggest that entrepreneurs expect less investments in 2018 compared with 2017. The degree of using the facilities and sales prospects, the access to financial resources for investment (including the expected profit) are the major factors influencing corporations' investment decisions.

The average business climate indicator tracking business sentiment went down in the fourth quarter *vis-à-vis* the third quarter of 2018,⁴⁴ reflecting largely more unfavourable assessments of managers on current business situation in Bulgaria in services, industry, trade and construction. Business climate dynamics in industry was in line with the recorded slowdown in external demand growth in the third quarter of 2018 and the increase in the uncertainty indicator constructed by the BNB, though it remains below its long-term level. These developments indicate potential risks of lower than projected growth of economic activity in Bulgaria in the following quarters.

In the fourth quarter of 2018 a smaller share of corporations identified the labour shortage as a factor hampering their business.⁴⁵ However, according to BNB assessments⁴⁶ firms continued to experience difficulties in recruiting appropriate staff, which is in line with the long-term downward trend in labour force due to negative

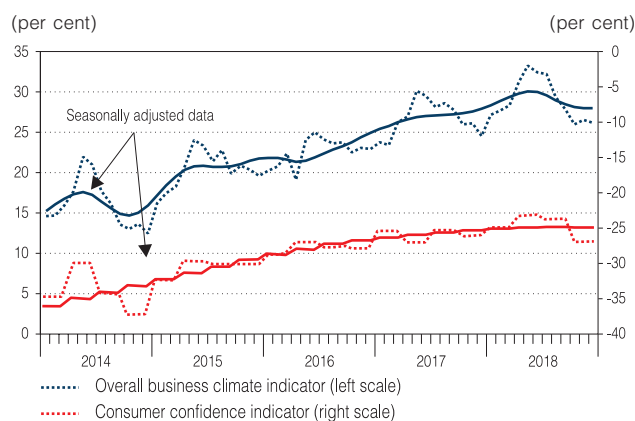
⁴³ The analysis employs data from quarterly non-financial account of the general government sector and reports on the implementation of the Consolidated Fiscal Programme, published by NSI and MF respectively.

⁴⁴ Seasonally adjusted data.

⁴⁵ According to the EC seasonally adjusted data, in the fourth quarter of 2018 the long-term trend in industry and services towards an increase in the share of firms pointing to the labour shortage as a factor hampering their activity was sustained.

⁴⁶ Assessments are made by applying appropriate statistical techniques for seasonal adjustment of the time series.

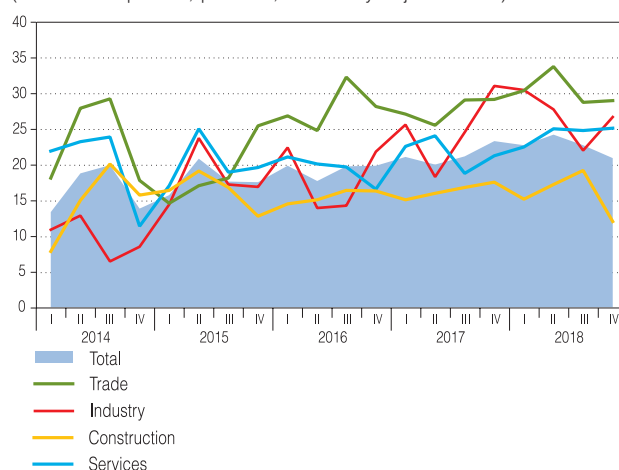
Business Climate and Consumer Confidence



Sources: the NSI, BNB calculations.

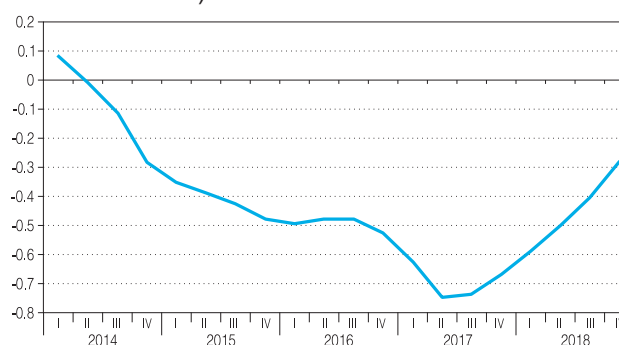
Expectations about Future Economic Activity

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



Sources: the NSI, BNB calculations.

Uncertainty Indicator in the Economy (Corporations and Households)



Notes: Higher values of this indicator should be interpreted as an increase in uncertainty. Positive/negative values indicate that the uncertainty is above/below its long-run level. This indicator is constructed under a methodology presented in: Ivanov, E. "Constructing an Uncertainty Indicator for Bulgaria", BNB Discussion Papers 109/2018, and corresponds to the indicator U1 constructed in the paper.

Sources: the EC, BNB calculations.

demographic trends in Bulgaria. Worsened expectations of corporations about the business situation and labour shortage are likely to be a reason for a smaller share of corporations to project an increase in their staff over the following three months, signalling that employment will grow at relatively slow rates in the first half of 2019.

Despite the moderate deterioration in the economic situation, in the fourth quarter of 2018 the trend of the composite business climate indicator remained above its historical average value⁴⁷ and continued to improve. This suggests that the economy continues to be in an expansion phase.

The October 2018 NSI Consumer Survey showed that consumer confidence deteriorated due to lower customer expectations of the overall economic situation in the next 12 months, their financial position, labour market developments and their ability to save. More negative consumer sentiments were in line with the enhanced uncertainty in the international environment, higher fuel prices and inflation in Bulgaria at the time of the survey and also the quarter-on-quarter decline in employment in the third quarter of 2018. Lower consumer confidence at the close of the year did not affect adversely retail sales, which continued to grow increasingly on an annual basis in both food and non-food goods.⁴⁸ In the first half of 2019 private consumption is expected to continue growing due to increasing nominal and real labour income of employees. Concurrently, lower labour demand by firms and weaker consumer confidence will contribute to slower growth in final consumption expenditure of households.

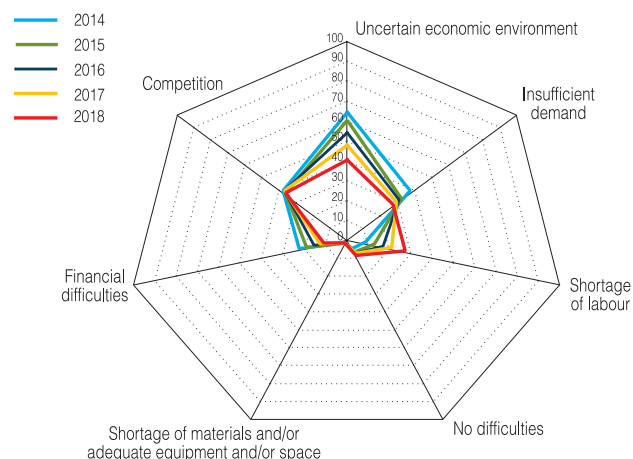
In the first half of 2019 real GDP is expected to continue growing quarter on quarter. In addition to private consumption, government consumption and the projected increase in public investment will contribute positively to higher domestic demand. Private investment is expected to have

⁴⁷ The time series of the business situation indicator starts from March 1997.

⁴⁸ For more details on developments in nominal retail trade volumes, see the Household Behaviour Section in this Chapter.

Factors Limiting Economic Activities of Corporations

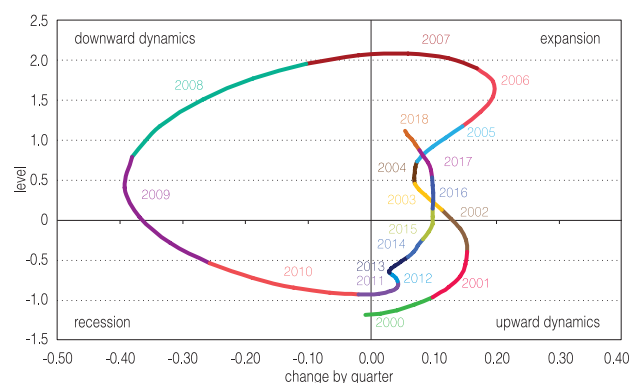
(relative share of all corporations)



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

Sources: the NSI, BNB calculations.

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 transformed 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.

a relatively low positive contribution to domestic demand, which will reflect mainly the existing high capacity utilisation, expected growth in domestic and external demand, retained favourable financing conditions and improved corporate profitability. Factors, which are anticipated to hamper quarter-on-quarter growth in private investment in the first half of 2019 will relate to the uncertain external environment.

Exports of goods and services are expected to increase in the first and second quarters of 2019 supported by increasing external demand and recovered production of refined petroleum products. Concurrently, slower domestic demand growth will limit imports of both goods and services. As a result, the contribution of net exports to real GDP growth on a quarterly basis is projected to become positive in the second quarter of 2019.

There are risks for lower than projected growth in real GDP, reflecting primarily the external environment and government investment. Potentially less favourable developments in Turkey's economic situation and other important trading partners for Bulgaria compared to the baseline scenario of projected external demand, increasing uncertainty over Brexit, as well as a possible further escalation of global trade conflicts are the main sources of risks to external demand for Bulgarian goods and services. Possible lower than projected growth in government investment is another factor for achieving weaker than expected economic growth over the projection horizon.

Real GDP Growth by Final Use Component

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

	2015				2016				2017				2018		
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III
Consumption incl.	1.4	1.4	2.0	0.2	0.9	0.4	0.7	1.8	0.5	1.1	1.4	1.7	1.8	1.8	1.4
Household consumption	1.2	1.7	2.8	0.2	1.0	-0.5	1.0	2.2	0.3	1.3	1.2	2.1	2.3	2.2	1.4
Government final consumption expenditure	2.0	2.3	-0.9	-0.5	-0.9	3.2	0.0	2.2	1.3	-1.9	1.4	0.3	1.0	0.1	0.5
Collective consumption	5.0	-1.2	0.7	-0.1	-0.5	2.6	1.3	1.1	1.0	0.3	1.9	1.7	-0.1	1.0	1.0
Gross fixed capital formation	0.5	1.5	3.5	0.4	-5.9	-2.2	-0.3	-0.9	1.2	4.0	-1.9	3.2	4.1	1.1	-1.5
Exports of goods and non-factor services	2.2	-0.8	-3.3	3.9	3.0	4.0	0.7	1.9	0.7	1.4	3.5	-2.1	-1.7	-1.6	1.7
Imports of goods and non-factor services	2.1	0.8	-1.3	3.1	0.4	1.5	0.8	2.1	3.5	0.1	0.2	4.8	-0.7	0.7	-0.8
GDP	0.9	0.8	1.2	0.8	1.1	1.0	0.7	1.2	0.9	1.0	0.9	0.7	0.9	0.8	0.7

Source: the NSI.

Exports and Imports of Goods and Services

Between January and October 2018 nominal exports of goods increased by 1.5 per cent on an annual basis, and nominal imports of goods by 8.2 per cent.⁴⁹

According to non-seasonally adjusted national account GDP data, in the first nine months of the year real exports of goods fell by 3.0 per cent on an annual basis. This decrease was mainly driven by one-off factors related to mineral products and fuels⁵⁰ and precious metals and other non-ferrous metals groups⁵¹. At the same time, real imports of goods posted year-on-year growth of 5.1 per cent in the first three quarters of 2018 in line with the observed accelerated growth of domestic demand.

The comparison of exports and imports of goods in nominal and real terms suggests that global price dynamics in the first nine months of 2018 had a positive contribution to their nominal growth. Balance of payments data for November 2018 indicate a retained annual upward trend in nominal exports and imports of goods in the last quarter of the year.

The year-on-year fall in exports of goods recorded in the first nine months of 2018 is expected to reverse in the first half of 2019. This will reflect both the recovery in exports of mineral products and continuous rise in external demand, though at lower rates than in the same period of 2018. Over the projection horizon, real imports of goods are expected to increase further on an annual basis at a lower pace compared to that recorded in the January to September 2018 period due to projected slower domestic demand growth. As a result of this dynamics, growth in exports of goods is expected to gradually exceed that of imports. In the first half of 2019, the year-on-year increase in imports and exports prices will have a posi-

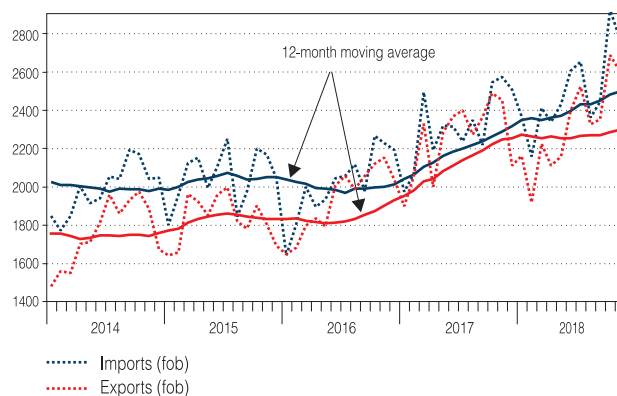
⁴⁹ Foreign trade data.

⁵⁰ Based on NSI data on production and supplies of oil and oil products of 28 December 2018, a significant fall in production and supply of oil products has been reported in March and April 2018 due to a scheduled repair of production facilities in Bulgaria.

⁵¹ In 2016 the production of copper products was temporarily limited due to repair works and expansion of the production capacity of an enterprise of key importance for the sector. Following resumption of production processes in 2017, in the precious metal exports a base effect was observed, which in 2018 was exhausted. For more details, see: <http://bulgaria.aurubis.com/bg/novini-i-publikacii/sobshchenija-za-mediite/aurubis-otchita-dobri-rezultati-za-shestmesechieto/>

Dynamics of Exports and Imports of Goods

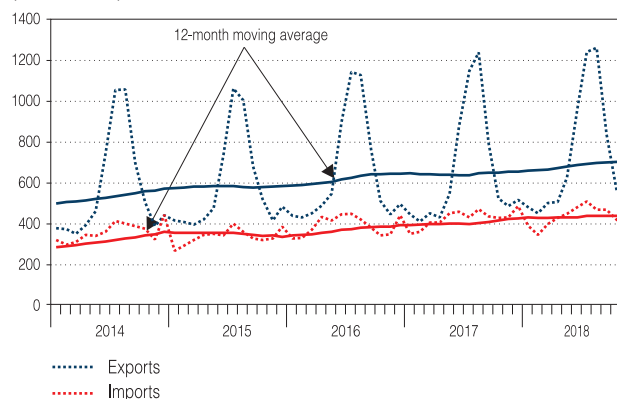
(EUR million)



Source: the BNB.

Dynamics of Exports and Imports of Services

(EUR million)



Source: the BNB.

Net Exports of Commodity Groups by Use, January–October 2018

	Balance (EUR million)	Change* (EUR million)	Growth of exports** (per cent)	Growth of imports** (per cent)
Consumer goods	63.1	-287.5	1.7	7.1
Raw materials	-592.6	-389.8	4.3	8.4
Investment goods	-1133.5	-695.1	0.9	11.8
Energy resources	-1477.5	-304.6	-7.6	3.0
Other exports	-89.1	-8.8	5.9	9.1
Total	-3229.5	-1685.8	1.5	8.2

* Balance change on the same period of previous year.

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

Source: the BNB.

Exports by Commodity Group, January–October 2018

	Value (EUR million)	Change* (EUR million)	Growth** (per cent)	Contribution**, percentage points
Wood products, paper, ceramics and glass	1 106.6	23.4	2.2	0.1
Machines, vehicles, appliances, instruments and weapons	6 273.8	192.1	3.2	0.8
Mineral products and fuels	2 641.1	-146.6	-5.3	-0.6
Base metals and related products	4 188.1	80.8	2.0	0.3
Animal and vegetable products, food, drinks and tobacco	3 545.8	83.3	2.4	0.4
Textiles, leather, clothing, footwear and other consumer goods	2 868.1	25.3	0.9	0.1
Chemical products, plastics and rubber	2 924.9	84.3	3.0	0.4
Total exports	23 548.4	342.6	1.5	-

* Change on the corresponding period of previous year.

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

Source: the BNB.

tive contribution to the nominal change in both goods exports and imports.

According to balance of payments data for the January–November 2018 period, exports and imports of services increased on an annual basis from the corresponding period of 2017, with growth of exported services outpacing that of imported ones. According to national account data, both increasing volumes and rising prices year on year had positive contributions to growth in nominal exports and imports of services in the first nine months of 2018. In the first half of 2019 exports and imports of services are expected to continue to increase on an annual basis. This will be driven by both the retained trend toward an annual increase in the price components and the projected rise in real trading volumes amid growing external and domestic demand.

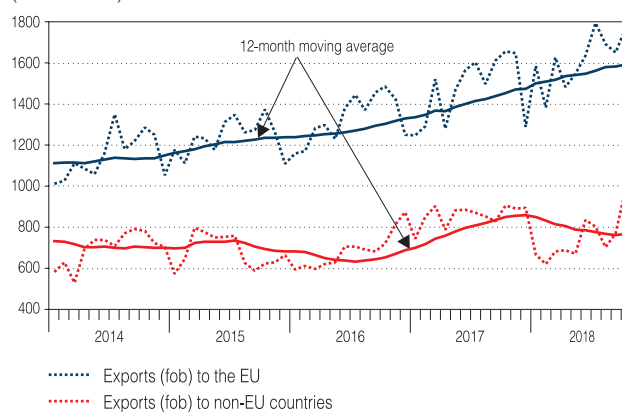
Between January and October 2018 exports of goods to EU Member States continued to increase by 9.7 per cent on an annual basis, with exports to Germany making the major contribution. Exports to the EU in all commodity groups rose year on year, with the most sizeable contribution reported by machines⁵² and animal and vegetable products⁵³. In the first ten months of 2018, exports to non-EU countries declined by 12.9 per cent on an annual basis driven by weaker exports to Russia and Turkey. From January to October 2018 the share of

⁵² In this chapter, it should read the machines, vehicles, appliances, instruments and weapons group under the Combined Nomenclature.

⁵³ In this chapter, it should read the animal and vegetable products, food, drinks and tobacco group under the Combined Nomenclature.

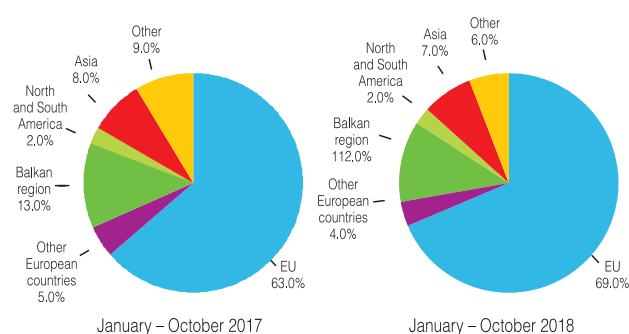
Dynamics of Exports to EU and non-EU Countries

(EUR million)



Source: the BNB.

Exports of Goods: Geographical Breakdown



Source: the BNB.

exported goods to EU Member States increased by 5.2 percentage points on the same period of 2017 to 68.6 per cent.

In the first ten months of the year nominal exports of goods posted year-on-year growth. However, quarter-on-quarter divergent dynamics was observed, reflecting to a large extent the impact of specific factors related to exports of mineral products. In the January to October 2018 period the nominal exports of all commodity groups under the Combined Nomenclature (excluding mineral products) rose on an annual basis, with machines and animal and vegetable products making the largest positive contribution.

In 2017 Bulgaria continued to increase its market share in world trade, reflecting largely the improving competitiveness of the economy. Against the backdrop of rising unit labour costs over the recent years, it can be concluded that this improvement was largely attributable to non-price factors.

In the first ten months of 2018 exports of machines increased on an annual basis driven by exports to EU Member States, while exports of machines to third countries declined from the January to October 2017 period. Higher exports of machines reflected the increase in exported volumes, while prices fell on an annual basis.⁵⁴ The electrical machinery and equipment sub-group contributed most strongly to nominal growth of machine exports. The upward trend in exports of machines is expected to be sustained also in the first half of 2019 due to growing external demand.

Exports of energy products declined substantially in the first ten months of 2018 *vis-à-vis* the corresponding period of 2017, having a limiting effect on total nominal exports growth. The decline was due to lower exported volumes⁵⁵ and reported in the first half of the year. The main reason was the significant fall in oil product output due to a scheduled repair of production capacities in Bulgaria in March and April 2018.⁵⁶

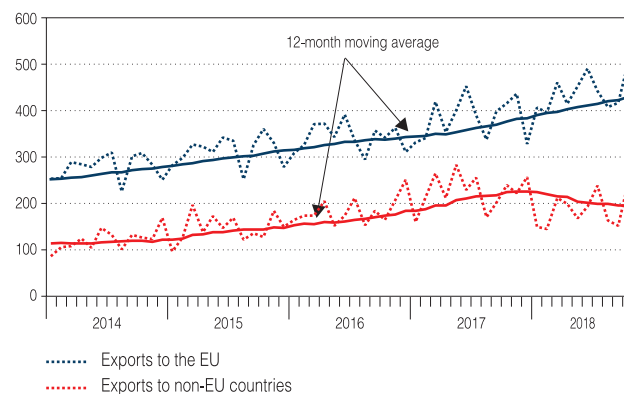
⁵⁴ Quarterly export deflators for the machines, equipment and vehicles group under the Standard International Trade Classification (SITC) were used to estimate the price effect in the first three quarters of 2018.

⁵⁵ The quarterly export deflators for the mineral fuels, oils and related products group under the SITC were used to estimate the price effect in the first three quarters of 2018.

⁵⁶ See footnote 50.

Exports of Machines, Vehicles, Appliances, Instruments and Weapons

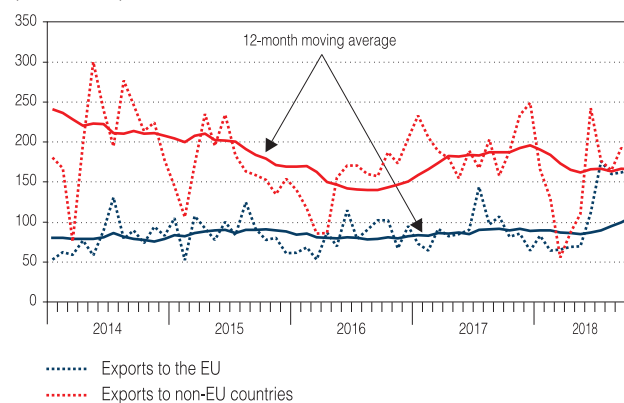
(EUR million)



Source: the BNB.

Exports of Mineral Products and Fuels

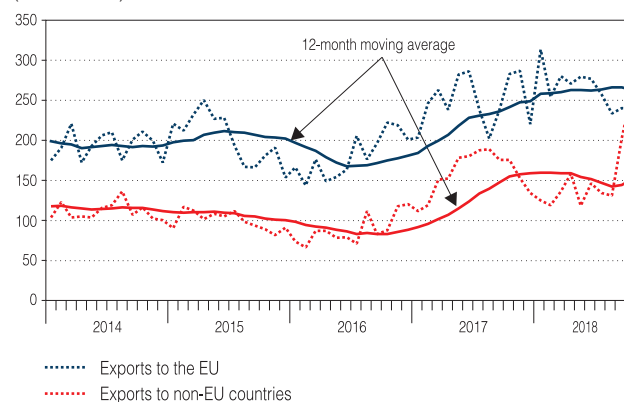
(EUR million)



Source: the BNB.

Exports of Base Metals and Related Products

(EUR million)



Source: the BNB.

With the completion of the repair works and given the annual increase in petroleum product prices in euro, nominal exports of mineral products are expected to grow year on year.

Nominal exports of base metals posted an increase on an annual basis between January and October 2018 due to price increases, while exported real volumes decreased.⁵⁷ By geographical breakdown, exports of metals to EU Member States rose year on year, while those to non-EU countries decreased. In the first half of 2019, annual nominal growth in the group is expected to be limited by the projected decline in international metal prices in US dollars and euro.

Nominal exports of animal and vegetable products increased also on an annual basis over the period from January to October 2018, with exports to EU Member States reporting growth and those to non-EU countries showing a decline. Increased exports in the group were driven by higher real exported volumes, while export prices fell on an annual basis.⁵⁸ Exports of cereal products had the largest positive contribution to the group's dynamics. In the first half of 2019 the annual growth rate of exports of animal and vegetable products is expected to slow down due to the projected lower exports of wheat related to the anticipated poorer harvest.⁵⁹

In the first ten months of 2018 nominal exports of chemical products⁶⁰ rose on annual basis, with plastic and inorganic products contributing most strongly to this growth. Export growth in the group was ascribed to the year-on-year increase in export prices, while exported volumes posted a slight decline.⁶¹ In the January–October 2018 period exports of chemical product to EU Member States alone increased, while those to non-EU countries reported a year-on-year decline. In the first half of 2019 the

⁵⁷ Quarterly export deflators for the precious and other non-ferrous metals under SITC were used to estimate the price effect in the first three quarters of 2018.

⁵⁸ The quarterly export deflators for the food and live animals group under SITC were used to estimate the price effect in the first three quarters of 2018.

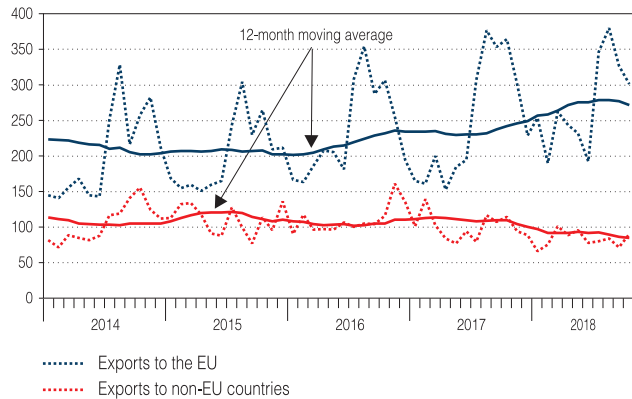
⁵⁹ For further details see Wheat Outlook of USDA, December 2018, p. 11.

⁶⁰ The chemical products, plastics and rubber group under the Combined Nomenclature.

⁶¹ The quarterly export deflators for the chemicals and chemical products group under SITC were used to estimate the price effect in the first three quarters of 2018.

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

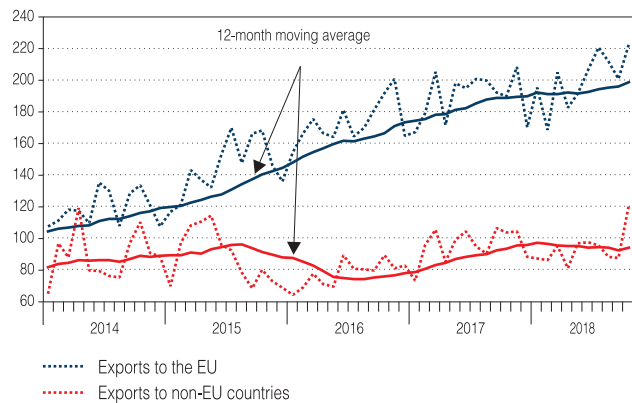
(EUR million)



Source: the BNB.

Exports of Chemical Products, Plastics and Rubber

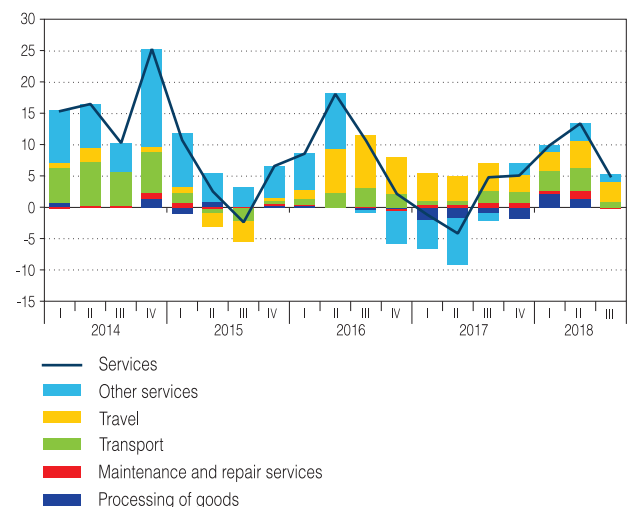
(EUR million)



Source: the BNB.

Annual Change of Services Exports and Contribution by Sub-component

(per cent, percentage points)



Source: the BNB.

stronger external demand is expected to further contribute to the increase in exports of chemical products on an annual basis.

According to balance of payments data, in the January–November 2018 period services exports increased by 7.9 per cent year on year, with travel sub-item contributing most to growth. Travel earnings from foreign visits in Bulgaria rose to 6.6 per cent on an annual basis. According to NSI data, foreign visits to Bulgaria in the January–November 2018 period increased by 6.8 per cent on the corresponding period of 2017, with visits from Turkey and Ukraine contributing most to this growth.

From January to November 2018 nominal goods imports picked up on an annual basis. By use, growth was reported in all sub-groups. Raw materials, followed by investment goods contributed most substantially to growth of total imports.

In the first ten months of 2018 imports of goods from EU Member States rose by 7.2 per cent on the same period of 2017, with imports from Germany contributing most strongly to this growth. Imports from non-EU countries also rose (by 9.2 per cent) on an annual basis, with imports from China making the largest positive contribution to this dynamics. In the January to October 2018 period imports from the EU slightly decreased their share to 50.9 per cent (51.4 per cent in the corresponding period in 2017).

Despite the reported temporary decline in the first quarter of the year, between January and October the nominal imports of energy resources increased on the same period of 2017.⁶² In the first nine months of the year group's imports growth was driven by higher import prices, while the physical volumes posted a decrease on an annual basis.⁶³ Given the completion of repair works in the sector and the expected increases in international petroleum prices, nominal imports of energy products are expected to grow on an annual basis over the projection horizon.

The raw materials group had the largest contribution to the annual growth in the January–

⁶² See footnote 50.

⁶³ The quarterly import deflators for the mineral fuels, oils and related products group under the SITC were used to estimate the price effect in the first three quarters of 2018.

Imports of Commodity Groups by Use, January–October 2018

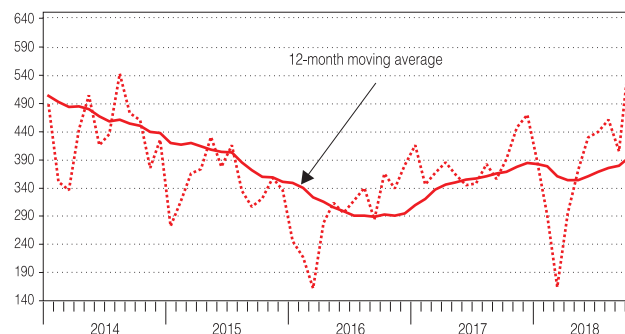
	Value (EUR million)	Change* (EUR million)	Growth** (per cent)	Contribution** (percentage points)
Consumer goods	5 726.7	381.6	7.1	1.5
Raw materials	10 044.8	776.2	8.4	3.1
Investment goods	7 062.1	747.0	11.8	3.0
Energy resources	3 806.0	112.0	3.0	0.5
Other imports	138.4	11.6	9.1	0.0
Total imports (cif)	26 777.9	2 028.4	8.2	-

* Change on the corresponding period of previous year.

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

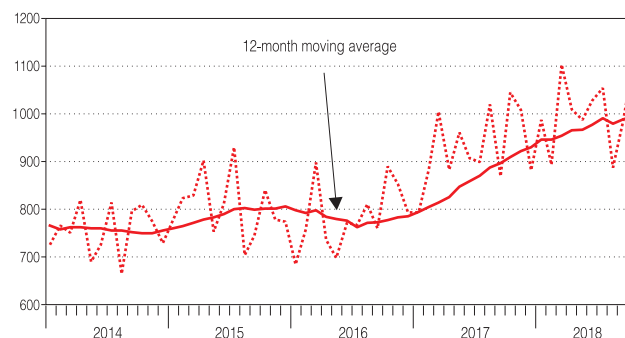
Source: the BNB.

Imports of Energy Resources (EUR million)



Source: the BNB.

Imports of Raw Materials (EUR million)



Source: the BNB.

October 2018 period. This reflected both higher imported physical volumes and an increase in import prices.⁶⁴ Imports of ores had the most positive contribution in nominal terms. Considering the projected increase in international food and commodity prices in euro, nominal imports of raw materials are expected to grow further on an annual basis in the first half of 2019.

Between January and October 2018 year-on-year imports of consumer goods also increased in line with accelerated growth of private consumption in both nominal and real terms, according to non-seasonally adjusted GDP data. Food, drinks and tobacco sub-group made the major positive contribution to the change in imports of consumer goods. Projected slower annual growth of private consumption in the first half of 2019 is expected to be a factor for lower imports of these goods compared to currently reported rates.

Between January and October 2018 imports of investment goods increased significantly on an annual basis, with their dynamics corresponding to nominal and real growth of investment, according to non-seasonally adjusted GDP data. Imports of machines and equipment, followed by spare parts and equipment continued to be the major contributors to growth of imported investment goods. The assessment of price changes suggests that the higher imports in the group reflected the increase in traded physical volumes, while import prices dropped slightly.⁶⁵ Our forecasts for the first half of 2019 point to a continuous upward trend in nominal imports of investment goods on an annual basis given the sustained higher investment growth rates in Bulgaria.

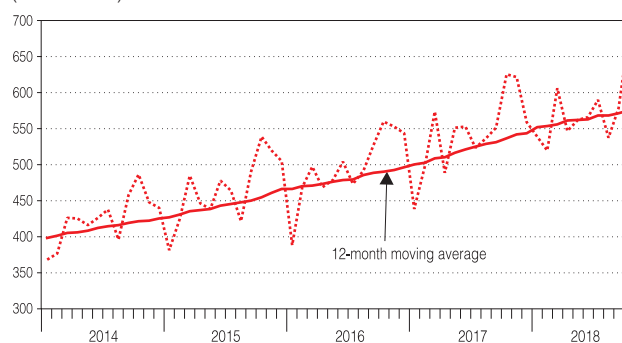
According to balance of payments data, in the January–November 2018 period services imports increased by 2.2 per cent year on year, mainly driven by increased transport services and to a lesser extent by travel expenditure. According to NSI data, Bulgarian visits abroad increased by 7.8 per cent on an annual basis in the first eleven months, with those to Turkey and Greece making the largest contribution to this growth.

⁶⁴ The quarterly import deflators of the groups of food and live animals, inedible (crude) materials (excluding fuels); chemicals and chemical products and manufactured goods classified chiefly by materials under the SITC were used to estimate the price effect in the first three quarters of 2018.

⁶⁵ The quarterly import deflators for the machines, equipment and vehicles group under SITC were used to estimate the price effect in the first three quarters of 2018.

Imports of Consumer Goods

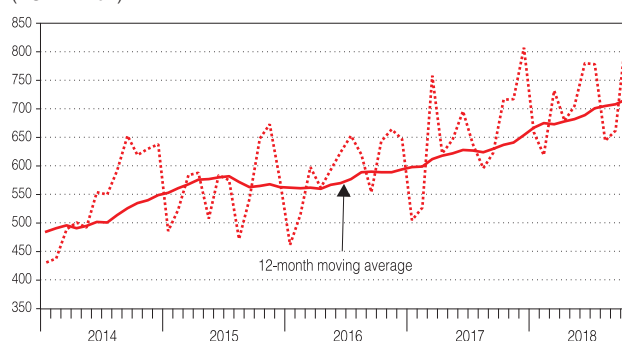
(EUR million)



Source: the BNB.

Imports of Investment Goods

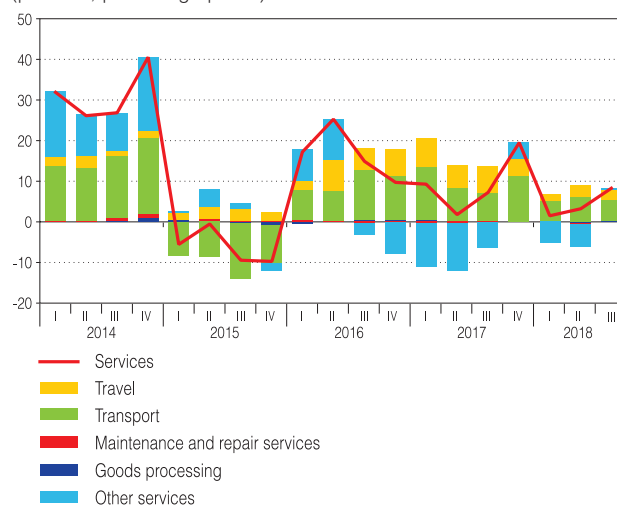
(EUR million)



Source: the BNB.

Annual Change of Services Imports and Contribution by Sub-component

(per cent, percentage points)



Source: the BNB.

Behaviour of Firms and Competitiveness

In the third quarter of 2018 total real value added continued to increase at rates close to those observed since the beginning of the year and the growth rate came to 0.7 per cent on a quarterly basis. Services sector continued to have a major contribution to the value added growth, with other sectors also making a positive contribution, but to a lesser extent.

Increased economic activity in both manufacturing and construction contributed to the value added growth in the industry by 0.4 per cent on a quarterly basis. The NSI short-term statistics data on industrial turnover and construction production, which are indicators helping to explain value added dynamics, are not fully consistent with national account data, with industrial turnover slightly increasing over the quarter and construction production declining somewhat against the previous quarter.

In the third quarter of 2018 the real component of international market contributed more significantly to the quarter-on-quarter growth of industrial turnover at current prices, which was in line with the increased exports of goods as compared to the second quarter of 2018.⁶⁶

Quarter-on-quarter declines in construction production over the third quarter was driven by the drop in building construction⁶⁷, while civil/engineering construction⁶⁸ increased in line with public investment growth⁶⁹ over the quarter.

In the third quarter of 2018 gross value added in the services sector increased by 0.9 per cent on a quarterly basis, with all sub-sectors contributing positively to the growth. Real estate activities had the major positive contribution to value added dynamics. Value added growth in trade, transport and accommodation and food service activities⁷⁰ was supported by the continuous upward trend in retail trade turnovers at

⁶⁶ NSI seasonally adjusted data.

⁶⁷ Building construction includes construction of residential and non-residential buildings.

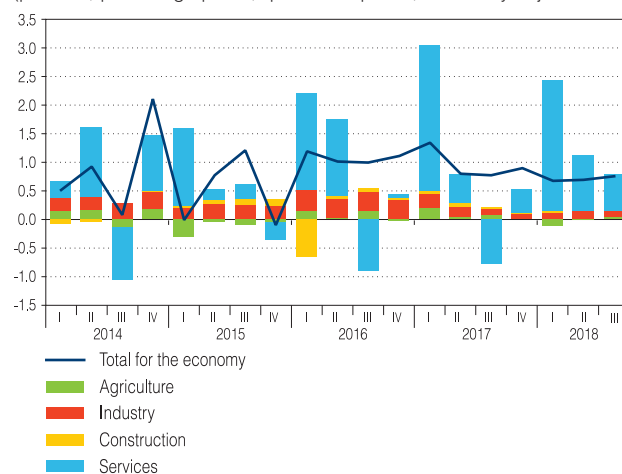
⁶⁸ Civil and engineering construction covers infrastructure construction of roads, bridges, pipes, power lines, gas pipelines, telecommunications and other construction works.

⁶⁹ For details, see Current Economic Environment Section in this Chapter.

⁷⁰ Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities sector by A10 breakdown of economic activities.

Value Added Growth in Real Terms and Contribution by Sector

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

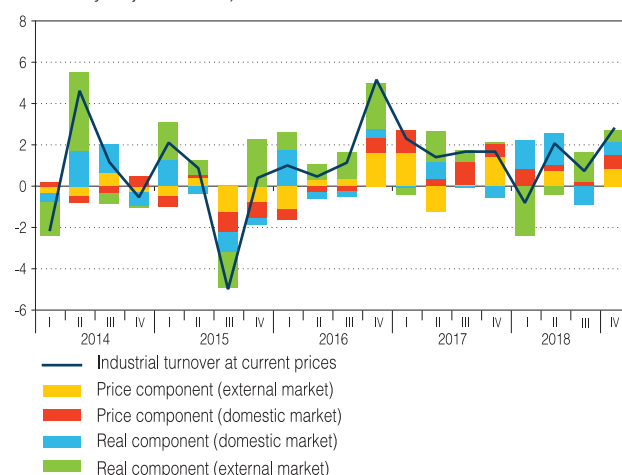


Note: Non-additive data on contributions due to direct seasonal adjustment of value added and its components.

Sources: the NSI, BNB calculations.

Industrial Turnover Dynamics

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

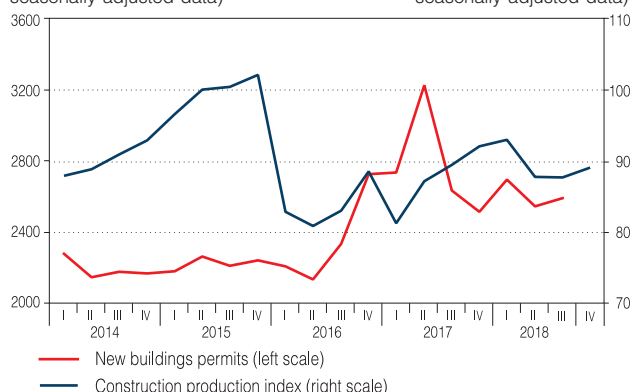


Note: Data for the fourth quarter of 2018 are for October and November.

Sources: the NSI, BNB calculations.

Construction Production Dynamics and New Building Permits Issued

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



Note: Data for the fourth quarter of 2018 are for October and November.
Sources: the NSI, BNB calculations.

constant prices, more pronounced in non-food goods.

In the third quarter of 2018 the turnover index in services was in line with value added growth in the other services sub-sectors: transportation, storage and posts, information and communication, telecommunications and some other business services.

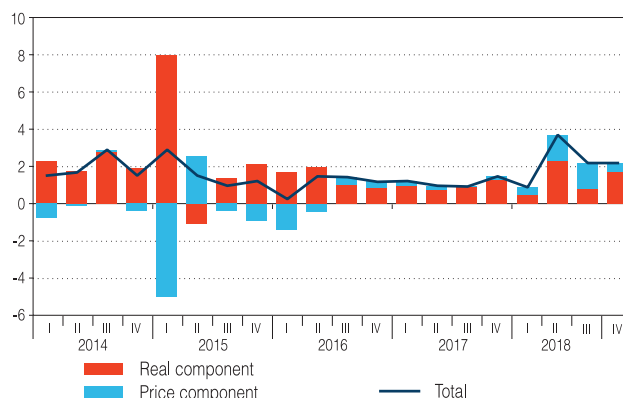
Data on turnover in industry, construction and trade for October and November give mostly positive signals about the fourth quarter of 2018. However, managers' assessments of the current business situation in the fourth quarter are worse compared to the previous quarter, thus creating potential risks for lower than projected growth of economic activity in the next quarters.

According to the NSI business survey results, in December managers' assessments of the expected business situation in the following six months remain relatively favourable, with entrepreneurs in trade alone being more pessimistic. This indicates a possible slowdown in the economic activity in trade in the first half of 2019.

In the third quarter of 2018 employment in the total economy fell by 0.3 per cent from the previous quarter, according to seasonally adjusted NSI national account data. The decline was entirely due to the drop in employment in services sector, while industry and agriculture had a slightly positive contribution. Across services sub-sectors, employment growth was

Dynamics of Nominal Retail Trade Turnovers

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

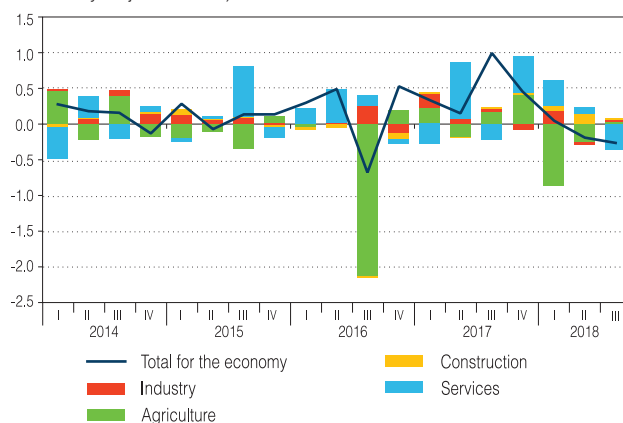


Note: Non-additive data on contributions due to direct seasonal adjustment of the total amount and its components. Data for the fourth quarter of 2018 are for October and November.

Sources: the NSI, BNB calculations.

Growth Rate of Employment in the Total Economy and Contribution to Changes in the Number of Employed by Economic Sector

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

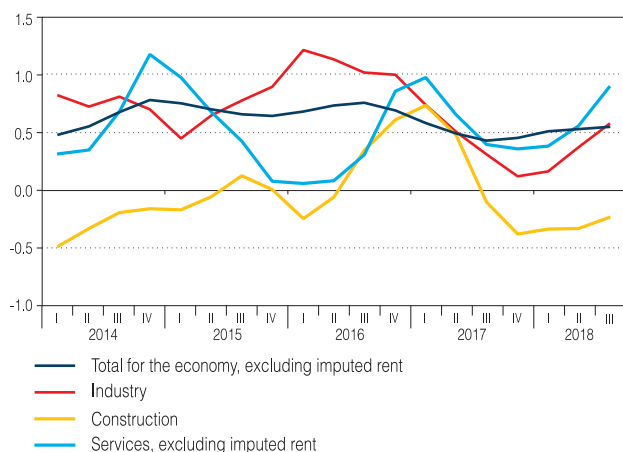


Note: Non-additive data on contributions due to direct seasonal adjustment of the total amount and its components.

Sources: the NSI, BNB calculations.

Labour Productivity Developments (Value Added per Employee)

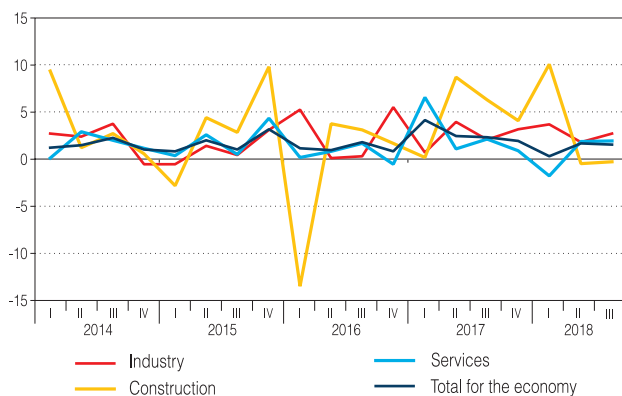
(per cent, quarter-on-quarter; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Compensation per Employee at Current Prices

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



Sources: the NSI, BNB calculations.

supported by the general government⁷¹, professional, scientific and technical activities⁷² and culture, sport and entertainment sectors⁷³, while the other sub-sectors reported declines on a quarterly basis.

In the third quarter of 2018 labour productivity accelerated its growth rate on a quarterly basis due to the reported value added growth along with a decline in employment. All main sectors contributed positively to labour productivity growth, with the highest increase reported in services sector.

In the context of still sustained labour demand coupled with labour supply declines in the third quarter,⁷⁴ nominal compensation *per* employee continued to grow on a quarterly basis over the third quarter of 2018, with all major economic sectors contributing to this growth. Wage increases in the public sector⁷⁵ continued to have a positive impact on labour remunerations in the total economy.

Faster growth of nominal compensation *per* employee than of labour productivity resulted

⁷¹ General government, education, and human health and social work activities sector by A10 breakdown of economic activities.

⁷² Professional, scientific and technical activities; administrative and support service activities sector by A10 breakdown of economic activities.

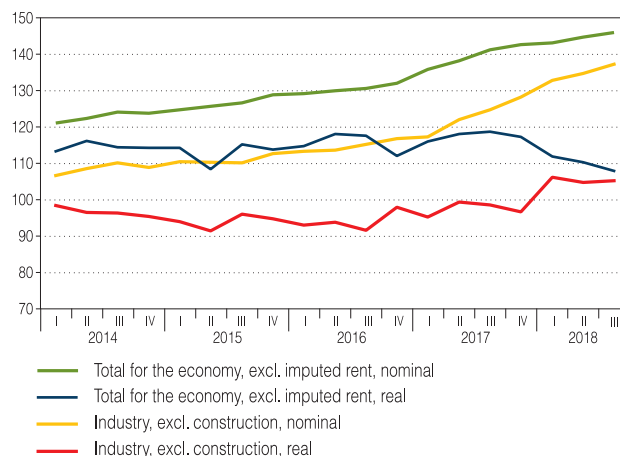
⁷³ Culture, sport and entertainment; other activity; activities of households as employers; non-identified activities of households producing goods and services for own use; activities of extraterritorial organisations and bodies by A10 breakdown of economic activities

⁷⁴ Labour supply is measured by seasonally adjusted labour force.

⁷⁵ For details, see Fiscal Policy Effects on the Economy Section in Chapter 3.

Unit Labour Costs

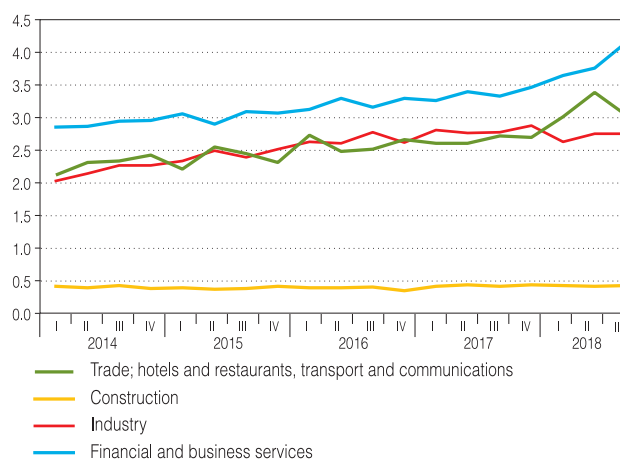
(2010 = 100; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Gross Operating Surplus at Current Prices

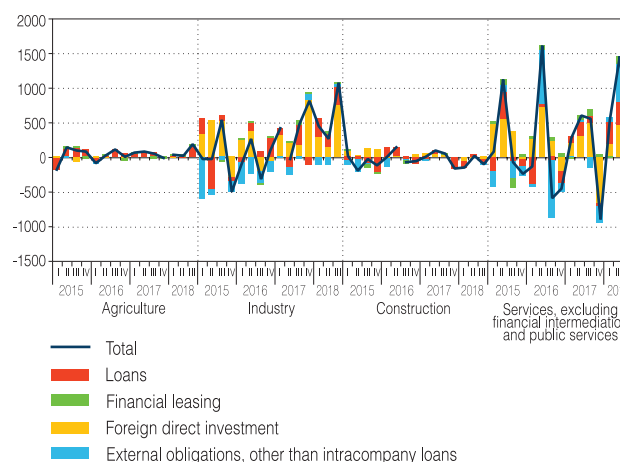
(BGN billion; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Financing Sources*

(million BGN, 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)

	2015				2016				2017				2018		
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III
Agriculture, forestry and fishing	-6.6	-0.8	-1.9	-1.4	3.5	0.5	3.3	-0.6	4.9	1.0	1.8	0.3	-2.7	-0.4	0.9
Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities	0.8	1.2	1.1	1.0	1.6	1.4	1.5	1.5	1.0	0.7	0.4	0.3	0.4	0.6	0.4
Construction	0.7	1.3	1.9	2.1	-10.2	1.1	1.2	1.0	1.0	1.2	0.4	0.4	1.0	0.4	0.5
Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities	2.7	-0.2	2.1	-0.8	0.1	1.8	0.5	1.2	0.6	0.6	0.2	0.8	1.0	0.4	0.5
Information and communication	0.2	0.3	0.9	1.0	15.3	-1.7	-0.4	1.0	1.7	2.1	1.7	1.6	1.2	1.6	0.8
Financial and insurance activities	-1.7	-4.6	6.0	1.6	1.9	2.9	-0.3	-1.3	1.9	-2.4	1.0	0.7	4.2	-0.3	0.6
Real estate activities	5.5	3.6	-5.4	-3.2	11.0	5.3	-8.3	-2.0	14.4	4.5	-9.4	-0.4	13.6	4.6	2.7
Professional, scientific and technical activities; administrative and support service activities	3.6	0.9	1.5	2.1	-1.4	1.3	0.3	-0.6	1.2	-0.3	0.6	1.4	0.5	1.3	0.4
Public administration, education, human health and social work activities	0.1	0.0	0.0	-0.6	-3.2	0.8	1.2	0.5	3.4	-1.2	1.4	0.6	0.8	0.8	0.2
Culture, sport and entertainment; other activities; activities of households as employers; non-identified activities of households producing goods and services for own use; activities of extraterritorial organisations and bodies	2.1	2.0	-2.2	1.4	-1.9	0.2	-0.9	1.5	2.1	-0.1	3.5	-0.1	-2.6	0.8	0.1
Gross value added, total for the economy	0.0	0.8	1.2	-0.1	1.2	1.0	1.0	1.1	1.3	0.8	0.8	0.9	0.7	0.7	0.7

Source: the NSI.

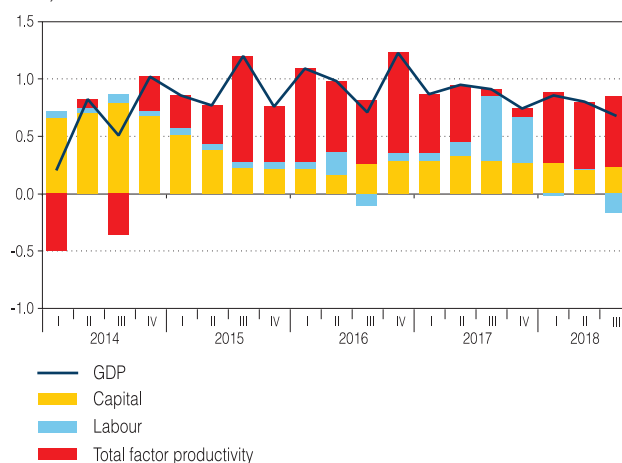
in increased unit labour costs in nominal terms, according to seasonally adjusted data. This trend was more pronounced in industry. In real terms, unit labour costs in the total economy decreased their growth rate.

Seasonally adjusted data show that the level of gross operating surplus remained unchanged from the second quarter of 2018. This reflected a decline of the indicator in the information and communication services sub-sector⁷⁶, while in all other sectors profit increased. Funding attracted by firms from sources other than the gross operating surplus rose in almost all sectors except for construction, with highest concentration of attracted financing in the industrial and services sectors (excluding public services and financial intermediation). The growth of attracted funds was largely due to received

⁷⁶ Information and communication by A10 breakdown of economic activities.

Contribution of Changes in Factors of Production to GDP Growth

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



Sources: the NSI, BNB calculations.

loans and increased foreign direct investment⁷⁷ into Bulgaria during the reviewed quarter.

Growth decomposition by production factor suggests that total factor productivity was the main contributor to the real GDP growth in the third quarter of 2018. Capital continued to be a positive driver for the economic activity growth, while labour contributed negatively reflecting the decline in the number of working hours over the quarter, according to NSI seasonally adjusted data.

In the first half 2019, as a result of the expected increase in both domestic and external demand, gross value added in the total economy is projected to continue growing on a quarterly basis.

Household Behaviour

Household consumer behaviour in the third quarter of 2018 continued to reflect the clear trend of growing income in the context of a further decrease in the unemployment rate. Concurrently, in October a decline in consumer confidence was registered, suggesting a slow-down of household consumption in the future.

Based on seasonally adjusted data from NSI's Labour Force Survey, the labour force participation rate⁷⁸ went up in the third quarter compared to the previous one, reflecting labour remuneration increases and a lower unemployment rate. At the same time, the number of discouraged persons outside the labour force declined further. Reflecting the long-term decline in working-age population, labour supply, measured by the labour force⁷⁹, dropped further from the previous quarter.

The unemployment rate⁸⁰ continued falling in the third quarter of 2018 and according to Labour Force Survey seasonally adjusted data,

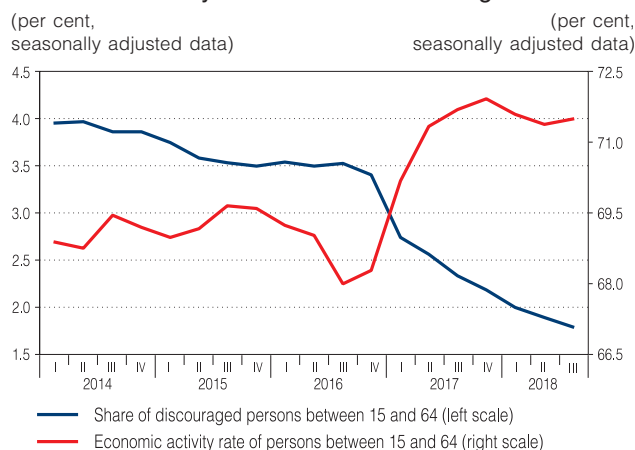
⁷⁷ Preliminary data subject to revision.

⁷⁸ The labour force participation rate is the proportion between economically active persons (labour force) and the population of the same age.

⁷⁹ 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.

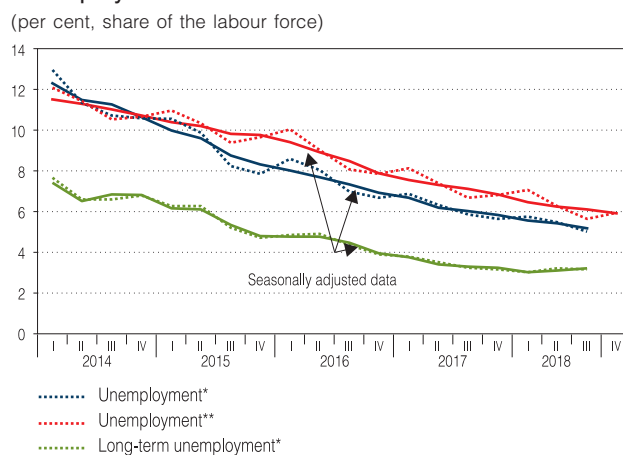
⁸⁰ Unemployment rate is the proportion between the number of unemployed and the labour force based on Labour Force Survey data.

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.

reached 5.1 per cent. Seasonally adjusted administrative statistics data of the Employment Agency show similar dynamics. According to these data, unemployment went down to 6.1 per cent at the end of the third quarter of 2018 and to 5.8 per cent in December. Consequently, the annual average unemployment rate for 2018 came to 6.2 per cent, down by 1 percentage point compared to 2017.

Labour income rose further in the third quarter of 2018, with average wage NSI data showing an increase both on an annual basis (according to non-seasonally adjusted data), and on a quarterly basis (according to NSI seasonally adjusted data), reflecting the limited labour supply in the economy and the productivity growth.

Households' assessments of their budget situation⁸¹ remained relatively favourable, which coupled with high consumer confidence and low interest rates on consumer loans, were decisive factors behind the continuous rise in consumer demand on a quarterly basis in the third quarter of 2018 (NSI seasonally adjusted data). In the same period, food and non-food goods contributed to the increase in the retail trade turnover in real terms.

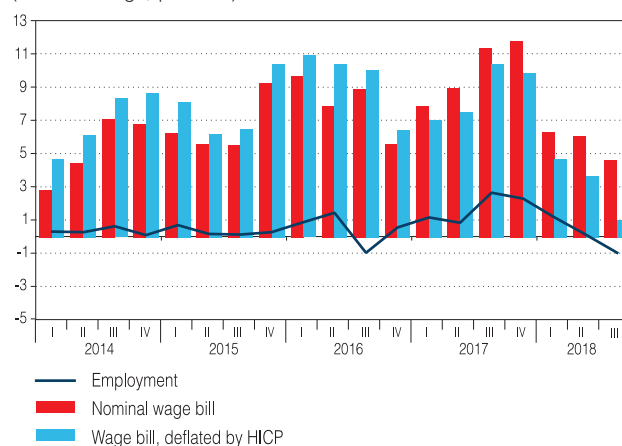
Concurrently, in October 2018 the NSI indicator measuring consumer confidence continued to follow its quarter-on-quarter downward trend since July 2018 mainly driven by the deterioration in consumers' expectations regarding their financial situation in the following 12 months. Households' more pessimistic expectations corresponded to the worsened sentiments of firms. Between July and October their assessment of the business climate deteriorated gradually largely due to the adverse developments in both external environment and increased economic uncertainty.

Over the third quarter of 2018 households remained a net creditor to the banking system as a result of a higher increase in deposits compared to their loans. At the same time, the share of households, which intend to increase their savings in the following 12 months is still relatively high.

⁸¹ According to the NSI Consumer Survey of October 2018.

Employment and Nominal Wage Bill

(annual change, per cent)

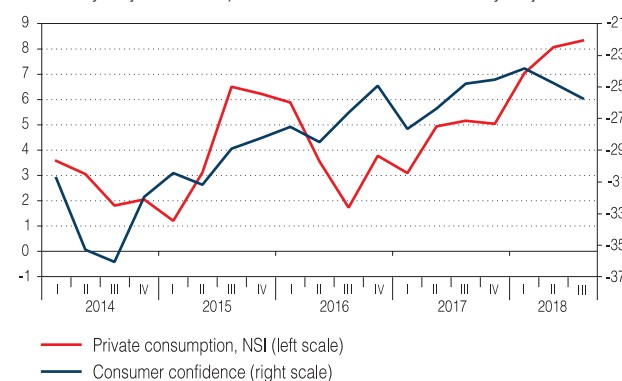


Sources: the NSI – SNA, BNB calculations.

Private Consumption and Consumer Confidence

(annual change, per cent;
seasonally adjusted data)

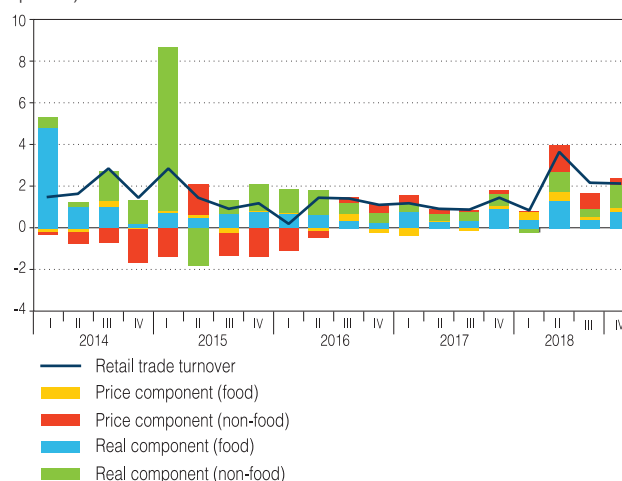
(per cent;
seasonally adjusted data)



Sources: the NSI, BNB calculations.

Retail Trade Turnover

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

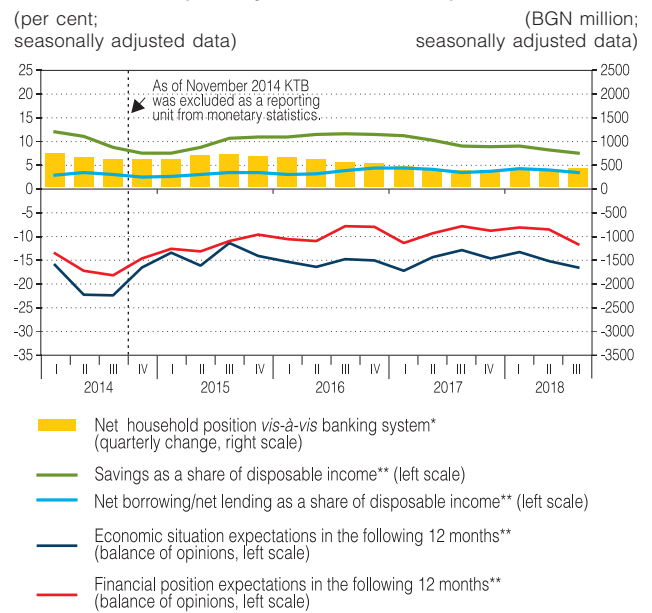


Note: Non-additive data on contributions due to direct seasonal adjustment of the total amount and its components. Data for the fourth quarter of 2018 are for October and November.

Sources: the NSI, BNB calculations.

In the first half of 2019 growth in wages is expected to remain sustainable reflecting the projected wage rises in the public sector and increased minimum wage since the beginning of 2019. Wage growth is expected to activate the working age population, involving more people in labour force. On the other hand, the reversal of the long-term trend to improving consumer confidence indicates a slowdown in the quarter-on-quarter private consumption growth.

Household Propensity to Save and Expectations



* BNB data.

** NSI data.

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

Employment and Income Dynamics

	2015				2016				2017				2018		
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III
(per cent, quarter-on-quarter; seasonally adjusted data)															
Employed persons	0.3	-0.1	0.1	0.1	0.3	0.5	-0.7	0.5	0.3	0.1	1.0	0.4	0.0	-0.2	-0.3
Nominal wage per employee*	0.9	2.0	1.3	3.1	1.6	0.8	1.7	0.8	3.6	2.6	2.1	1.8	0.2	1.4	1.6
Real wage per employee**	1.5	1.9	1.6	3.4	1.8	1.5	1.6	0.8	3.2	1.8	2.3	0.9	-0.6	0.6	0.5
Wage bill, nominal terms	1.6	2.0	1.7	3.2	1.6	1.5	1.9	1.4	3.5	2.3	2.4	2.0	0.8	1.6	1.2
Wage bill, real terms**	2.1	2.0	2.1	3.5	1.9	2.2	1.8	1.4	3.1	1.5	2.5	1.1	0.0	0.8	0.1
(per cent, on corresponding quarter of previous year, non-seasonally adjusted data)															
Employed persons	0.8	0.2	0.2	0.3	0.9	1.5	-1.0	0.6	1.2	0.9	2.7	2.4	1.2	0.2	-0.9
Nominal wage per employee*	5.5	5.1	4.2	8.1	8.2	5.9	7.4	3.6	6.9	9.3	11.3	11.7	5.0	4.7	4.7
Real wage per employee**	7.4	5.8	5.2	9.2	9.4	8.4	8.6	4.4	6.1	7.8	10.4	9.8	3.4	2.3	1.0
Wage bill, nominal terms	6.4	5.7	5.6	9.5	9.9	8.0	9.1	5.7	8.0	9.1	11.5	12.0	6.4	6.2	4.7
Wage bill, real terms**	8.3	6.3	6.6	10.6	11.1	10.6	10.3	6.5	7.2	7.6	10.6	10.1	4.8	3.7	1.1

* 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)

	2015				2016				2017				2018			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Retail trade, excluding motor vehicles and motorcycles	7.9	-1.1	1.4	2.1	1.6	1.9	1.1	0.8	1.0	0.7	0.9	1.3	0.5	2.3	0.8	0.9
incl.																
Food, drinks and tobacco products	2.1	1.4	1.9	2.2	1.9	1.9	1.0	0.7	2.2	0.9	1.0	2.5	1.2	3.6	1.1	1.0
Textile, clothing, footwear and leather	-0.8	0.1	3.9	2.9	2.5	2.9	1.3	-0.2	8.1	-1.2	-5.4	1.9	-3.2	3.3	0.7	0.3
Household appliances, furniture and other household goods	0.7	-0.1	1.8	-0.2	2.3	0.3	1.2	2.0	1.5	2.8	1.5	1.7	0.9	1.7	1.9	2.7
Computer and communication equipment	16.4	-5.5	0.3	-2.7	-1.8	5.3	1.9	7.7	2.4	1.5	1.4	1.9	-5.0	2.0	-1.4	-3.6
Pharmaceutical and medical goods, cosmetics and toiletries	2.4	1.6	1.9	2.5	2.0	3.5	3.6	0.9	3.5	1.3	0.9	1.0	7.2	2.0	2.5	4.6
Unspecialised shops with different kinds of goods	1.3	0.4	1.5	2.3	0.0	1.2	2.5	1.4	5.2	3.4	2.5	1.8	-3.0	1.2	-0.1	1.3
Automobile fuels and lubricants	38.6	-6.5	-0.4	5.4	0.8	1.5	-2.2	-3.0	-7.1	-2.7	-1.1	-0.5	-0.3	1.5	-2.5	-0.2

Note: Data for the fourth quarter of 2018 are for October and November.

Source: NSI Short-term Business Statistics.

Fiscal Policy Effects on the Economy

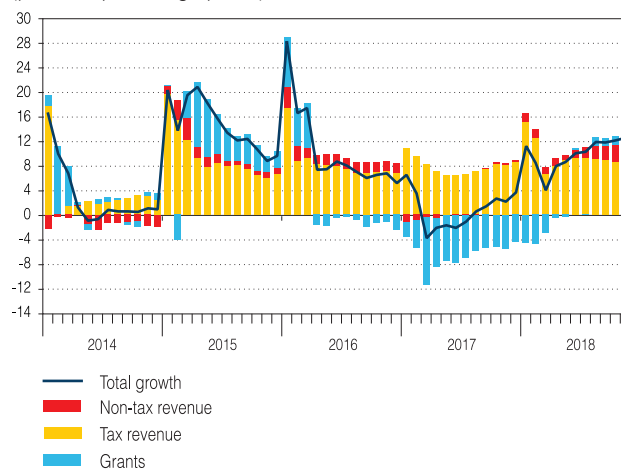
As of the end of November 2018 the consolidated fiscal programme surplus came to BGN 2896.5 million (2.7 per cent of projected GDP).⁸² The budget balance posted an increase by BGN 511 million compared to the same period of last year.

For the first eleven months of the year total budget revenue rose by 12.2 per cent on an annual basis, with tax revenue (7.8 percentage points) making the largest contribution to this growth. Concurrently, the accelerated growth in total budget revenue, as reported from the end of the first half, is explained by the upward dynamics in the receipts from grants and non-tax revenue.

The trend towards accelerated growth in non-tax income observed in the second half of 2018 was mainly driven by the changes in the budget of the Security of the Electricity System Fund⁸³, which resulted in an equivalent increase

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.

⁸² GDP forecasts of the Ministry of Finance for 2018 based on the autumn macroeconomic forecast for the 2018–2021 period published in October 2018.

⁸³ As of 1 July 2018 the revenue to the budget of the Security of the Electricity System Fund includes the revenue from 'obligation to the society' fee under Article 30, paragraph 1, item 17 of the Law on Energy (through which all participants connected to the electrical power system participate in the compensation of estimated non-refundable expenses referred to in Articles 34 and 35 of the Law on Energy). The increased market price of exhaust emission allowances since early 2018 contributes to the growth of this revenue.

in subsidy payments and had a nil net effect on the budget balance. A significant increase in grants under the consolidated fiscal programme was also reported for the same period, reflecting the accelerated project implementation under EU 2014–2020 operational programmes.

In the January to November 2018 period the annual growth of tax revenue remained relatively high (9.3 per cent), still mainly underpinned by the increased revenue from social and health insurance contributions by 13.2 per cent and indirect taxes by 7.4 per cent. Tax revenue growth posted a certain slowdown from the end of the first half year, most pronounced in personal income tax due to the base effect of the significant receipts in October 2017.⁸⁴

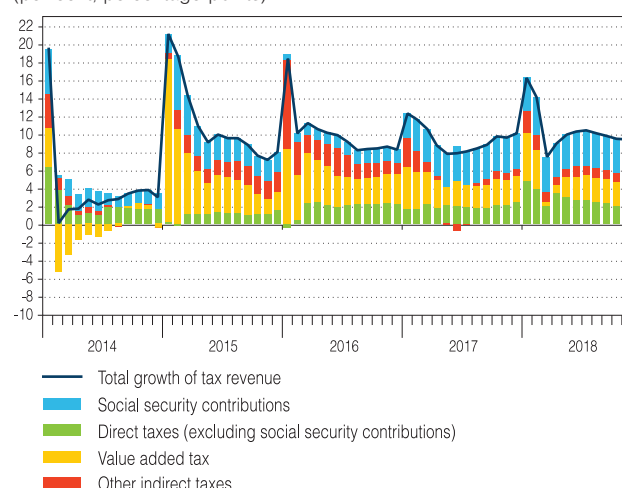
Dynamics in the compensation of employees in the total economy (annual growth of 6.4 per cent for the first nine months against 7.0 per cent for the half year) contributed also to the slower growth in the revenue from personal income tax and social and health insurance contributions, as reported by the end of November. Corporate tax revenue also continued to increase at a slower pace, with an annual growth rate by end November (6.8 per cent) similar to that of the gross operating surplus for the first nine months (7.0 per cent).

In the January–November 2018 period revenue from indirect taxes increased at sustainable rates, corresponding to a large extent to the sustained dynamics in the nominal private consumption for the first nine months: growth of 11.5 per cent on an annual basis for the first nine months against 11.8 per cent for half year. By component, dynamics of indirect taxes remained divergent with some acceleration of annual growth of VAT receipts up to 8.3 per cent and slower growth of excise revenue up to 5.1 per cent, as compared to the end of the first half.

The annual growth rate of total expenditure on consolidated fiscal programme for the first eleven months of 2018 was 11.5 per cent. Capital expenditure (2.9 percentage points), social expenses (2.9 percentage points) and

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

(per cent; percentage points)



Sources: the MF, BNB calculations.

⁸⁴ The increase results from the NRA campaign to control business entities and non-profit organisations designating sizeable cash balances in their 2016 financial statements.

personnel costs (2.7 percentage points) contributed most substantially to the total expenditure growth. Its rate remained almost unchanged as compared to the first half of the year, while the continuous increase in subsidy payments driven by the changes in the budget of the Security of the Electricity System Fund fully offsetted the lower growth of capital expenditure and all other non-interest expenditure.

Between January and November 2018 social payments⁸⁵ rose by 6.7 per cent on an annual basis. In the second half of the year their dynamics was influenced by the 3.8 per cent increase in pensions since the beginning of July and the exhausted effect of minimum pension increases since July and September 2017. The growth rate of social payments in the first eleven months of the year remained high, continuing to contribute positively to the dynamics of households' disposable income, despite the reported slowdown compared to the end of the first half of the year.

In the July–September 2018 period government consumption rose further, increasing gradually its contribution to real GDP growth on a quarterly basis. Government consumption dynamics, which underpins economic growth, reflected the sustained relatively high growth rates of personnel costs, operating expenditure and health insurance payments⁸⁶, which by the end of November stood at 11.2 per cent, 7.1 per cent and 8.7 per cent on an annual basis.

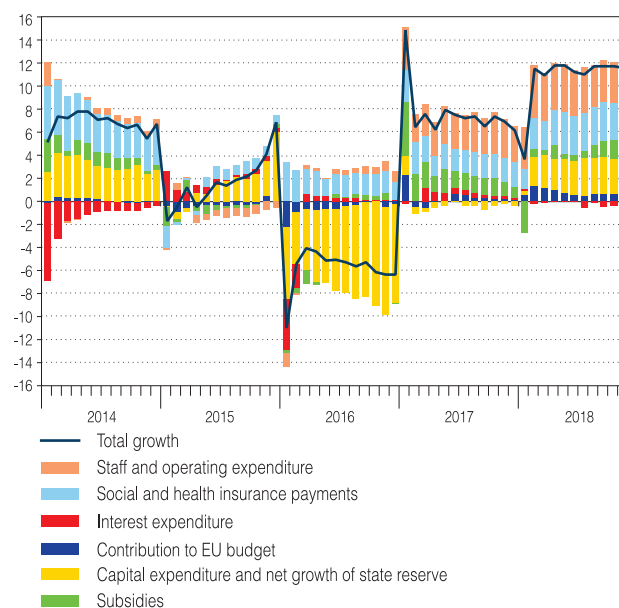
In the first eleven months of 2018 capital expenditure on the consolidated fiscal programme accounted for 42.9 per cent, mainly driven by the increasing spending under EU programmes related to the advanced stage of implementing projects of the 2014–2020 programming period. The very high rates of capital expenditure growth in the first half of 2018 due to a base effect of the weak capital expenditure dynamics in the same period of 2017 were

⁸⁵ Including also expenses on current and capital transfers which in 2018 were presented as a separate item in the expenditure side of monthly reports on CFP cash-based performance.

⁸⁶ Based on data related to expenditure incurred under the budget of social security funds from Ministry of Finance Monthly Bulletin on Budget Performance and Major Indicators under the Consolidated Fiscal Programme for November 2018.

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

(per cent; percentage points)



Note: The Consolidated Fiscal Programme reports of January 2016, including staff expenditure, cover wage, insurance and other remuneration expenditure, while in the reports for past periods, the latter were not included in operating expenditure. To prevent data inconsistencies prior to and after January 2016 resulting from the methodological change, staff and operating expenditure are presented aggregately in the chart and separately in the table Key Budget Indicators Performance for 2017–2018.

Sources: the MF, BNB calculations.

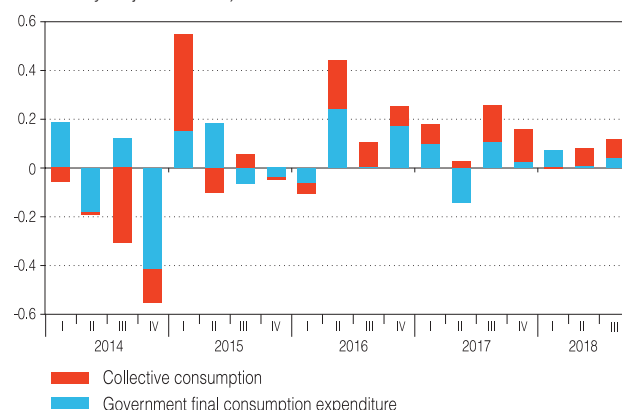
followed by an expected growth slowdown. Concurrently, monthly payments on investment co-financed by the EU and national budget remained at relatively high levels, indicating the government investment's positive contribution to GDP growth in the first nine months of 2018.

In the first half of 2019 tax and social security revenue growth is expected to be mainly driven by the developments in the labour market and consumption. Amendments to the tax and social security legislation as projected in the budgetary framework are expected to have a lesser impact. Among these amendments, the increase in the maximum amount of social security income, the minimum wage and the minimum social security income are planned to have the most significant budget effect.⁸⁷ The government's plans for public sector wage growth coupled with the expected increase in operating expenditure and health insurance contributions will result in a sustainable relatively high contribution of government consumption to GDP growth. Social payments are expected to increase further at rates similar to those of November 2018. Their developments in the first six months of 2019 will reflect mainly the pensions updated from 1 July 2018 and the higher transfers to disabled and socially disadvantaged people in force from early 2019. The government's capital expenditure co-financed by both the EU and national budget are expected to make a substantial positive contribution to the economic growth in the first two quarters of 2019. The upward dynamics in national capital expenditure is expected to be driven by the expenditure for the construction of a Hemus motorway section as approved by the government at end-2018 and the additional funds for maintenance of the road infrastructure, which will be allocated from the toll charge revenue introduced in early 2019. The effect of these additional investments is expected to be more tangible by the middle of 2019. The risks of delay inherent to the implementation of large infrastructure projects create conditions for lower than expected public investment and consequently lower GDP growth in the first half of 2019.

⁸⁷ For further information, see the Basic Parameters of the 2019–2021 Budgetary Framework box.

Contribution of Government Consumption Components to Real GDP Growth

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



Sources: the NSI, BNB calculations.

Key Budget Indicators Performance for 2017–2018

Consolidated Fiscal Programme	2017 January–November ¹		2018 January–November ¹	
	BGN million	per cent ²	BGN million	per cent ²
Total revenue and grants	31 903	2.6	35 810	12.2
Tax revenue	26 778	9.6	29 273	9.3
incl. social security and health insurance contributions	7 583	14.4	8 586	13.2
Non-tax revenue	3 880	1.5	4 834	24.6
Grants	1 245	-55.8	1 703	36.8
Total expenditure (incl. the contribution to EU budget)	29 518	6.9	32 913	11.5
Staff	7 068	10.5	7 859	11.2
Operating expenditure	3 294	8.6	3 527	7.1
Interest	759	9.1	653	-14.0
Social expenditure, scholarships ³	13 765	4.3	14 681	6.7
Subsidies	1 801	24.4	2 318	28.7
Capital expenditure and government reserve growth	2 014	-3.3	2 881	43.1
incl. capital expenditure	2 004	-2.7	2 864	42.9
Contribution to general budget of the European Union	816	7.1	994	21.8
	BGN million	difference ⁴ (BGN million)	BGN million	difference ⁴ (BGN million)
Budget balance, on a cash basis	2 386	-1 079	2 897	511
Tax revenue under the state budget	2017 January–November ⁵		2018 January–November ⁵	
	BGN million	per cent ²	BGN million	per cent ²
Tax revenue	18 345	7.9	19 772	7.8
Corporate tax	1 753	8.4	1 872	6.8
Income tax for individuals	3 049	12.6	3 359	10.2
Value added tax	8 591	8.3	9 302	8.3
Excise duties	4 610	4.0	4 845	5.1
Customs duties	174	7.7	213	22.3
Insurance premia tax	33	10.8	37	12.9
Other taxes	135	8.2	144	6.6

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

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

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

³ Including also current and capital transfers, which in 2018 are presented in monthly reports on cash-based performance of the Consolidated Fiscal Programme as a separate item on the expenditure side of the budget.

⁴ The change of the budget balance on the same period of previous year.

⁵ Based on monthly reports on cash-based performance of the state budget.

Source: the MF.

Main Parameters of the 2019–2021 Budgetary Framework

The updated medium-term budgetary forecast of the government for the 2019–2021 period,¹ which complies with 2019 budget and tax law parameters adopted by the National Assembly, sets the cash deficit on the consolidated fiscal programme (CFP) for 2019 at BGN 600 million (-0.5 per cent of projected GDP). In 2020 the budget balance is projected to improve, reaching a balanced budget position to be maintained in 2021, as well. In 2019 the ESA 2010 budget balance of the general government sector is expected to be slightly negative (-0.2 per cent of projected GDP), while surpluses of 0.5 and 0.6 per cent of GDP are set as a budgetary objective in 2020 and 2021. Based on Ministry of Finance (MF) estimates of the current and expected dynamics of the structural budget balance, the fiscal policy effect on economic activity in Bulgaria is foreseen to be stimulating in 2018 and 2019, restrictive in 2020 and neutral in 2021. The budgetary objectives of the updated medium-term budgetary forecast on a cash and accrual basis are fully consistent with the fiscal rules provided for in the Law on Public Finances and EU economic policy coordination framework.

In 2019 the increase in CFP budget revenue is projected to be 11.9 per cent compared to its expected performance for 2018,² with tax and social security revenue (6.3 percentage points) contributing most to this increase, and to a lesser extent, non-tax revenue (4.0 percentage points) and grants (1.6 percentage points). The projected increase in tax and social security revenue (by 7.7 per cent) reflects mainly domestic demand, wages and employment dynamics, as projected by the MF. Positive budget effects related to tax and social security revenue are expected mainly from the increase in maximum social security income (from BGN 2600 to BGN 3000) and minimum wage and minimum insurance income rises (from BGN 510 to BGN 560).³ The planned growth of non-tax revenue (by 30.9 per cent *vis-à-vis* the anticipated 2018 performance) is mainly due to the discretionary measure effects, which will be fully used for funding specific expenditure policies (through subsidies and capital expenditure) and therefore are expected to have a neutral effect on the budget balance. Discretionary measures related to non-tax revenue include anticipated additional funds to the budget of the Security of the Electricity System Fund, revenue from the introduction of a toll charge and electronic vignette and one-off receipts from Sofia airport concession. The planned increase in revenue from grants by 30.1 per cent *vis-à-vis* its expected performance for 2018 is consistent with the government's priority of advancing project implementation under EU 2014–2020 operational programmes.

Total CFP expenditure for 2019 (including the contribution to the EU budget) is planned to rise by 15.1 per cent against the expected performance for 2018, reflecting mainly the projected increase in capital expenditure (by 38.8 per cent, or BGN 1.8 billion), social payments (by 7.5 per cent, or BGN 1.2 billion), subsidies (by 43.6 per cent, or BGN 1.2 billion) and staff costs (by 9.9 per cent, or BGN 0.9 billion). Implementation of investment projects remains a top priority of the government's expenditure policy, with an increase expected in both EU co-financed and national capital expenditure (including funds for defence modernisation). Social payment dynamics (including National Health Insurance Fund reserve) reflects changes in the amount of pensions paid⁴ and additional funds for healthcare and household benefits and allowances.⁵ Projections of increased subsidies mainly result from the changes in the budget of the Security of the Electricity System Fund, as mentioned above. In 2019 planned staff costs exceed substantially the resources required to continue the policy of

¹ The updated medium-term budget forecast for the 2019–2021 period is drawn up in October 2018 and constitutes the motives to the 2019 draft State Budget Law. It was adopted by the Council of Ministers with Decision No 768 of 28 October 2018. To ensure compliance with the parameters of 2019 final budget and tax laws adopted by the National Assembly, amendments to the updated medium-term budget forecast were made and approved by the Council of Ministers with Decision No 928 of 20 December 2018. This box discusses the government's medium-term budget forecast parameters approved on 20 December 2018.

² The October 2018 budget revenue estimate for 2018 remained unchanged in the updated medium-term budget forecast approved on 20 December 2018.

³ The increase in minimum insurance income applies to all self-employed persons, excluding farmers and tobacco producers, for whom it was raised from BGN 350 to BGN 400. Minimum insurance thresholds of employees for whom the threshold coincides with the minimum wage are also expected to rise.

⁴ From 1 July 2019 pensions awarded by 31 December 2018 are planned to increase by 5.7 per cent, and the maximum amount of the pensions received by one person will be raised to BGN 1200 (40 per cent of the maximum social security income for the relevant year).

⁵ Social benefits and compensations include mainly BGN 150 million to disabled people and BGN 40.4 million for targeted heating allowances.

wage increases in the education sector and to cover additional budget expenditure as a result of the changes in the minimum wage and social security policy with the aim to achieve wage increases in all budget sectors. As in the previous year, the updated medium-term budgetary forecast of the government for 2019 sets declines in other staff payments (by 21.1 per cent against the expected performance for 2018) in order to limit partly the funds necessary to implement the policy of wage bill increases in the budget sector.

Planned fiscal consolidation in 2020 incorporates lower budget expenditure as a share of GDP in terms of both capital and current expenditure. In 2021 the process of reducing current expenditure is expected to continue, while projecting a similar change on the revenue side of the budget, so that the budget balance target remains unchanged from 2020.

Planned CFP primary surpluses and a favourable differential between the projected nominal rate of GDP growth and the implicit interest rate on public debt in the 2019–2021 period will contribute to the decline in the government debt to GDP ratio from 19.1 per cent in 2019 to 16.5 per cent in 2021. A reduction in the consolidated debt of the general government sector is projected also for the same period from 20.5 per cent of GDP to 17.7 per cent of GDP, accordingly. The MF issuing policy in 2019 provides for negative net debt financing, with a portion of maturing government debt payments expected to be financed by fiscal reserve funds.

Risks to the achievement of the budgetary targets under the updated forecast for the 2019–2021 period are mainly associated with economic and financial developments at a global and EU-wide level. In case of a less favourable international environment compared to the assumptions used in the MF macroeconomic forecast, tax and social security revenue would remain below the estimated levels, thus hampering the achievement of government budgetary targets, particularly in view of the fact that an essential part of the projected 2019 increase in the budget expenditure side is hard to be reversed. Risks to the 2019 budgetary framework could arise in implementing measures with an expected positive budget effect, which have been postponed on several occasions due to a failure to apply them in preceding years. The Sofia airport concession and projected declines in other staff payments are examples of such measures.

4. INFLATION

At the end of 2018 annual inflation rose by 0.5 percentage points on end-2017 to 2.3 per cent. The increase in inflation throughout the year was largely driven by the services group with price rises due to specific one-off factors, and the energy products group. At the end of 2018 annual inflation slowed down compared to the third quarter, reflecting the significant decrease of international oil prices. Food, goods and services with administratively controlled prices, and tobacco products contributed positively to the overall inflation in December.

Over the first two quarters of 2019 the annual inflation rate is expected to accelerate, relative to the end of 2018, mainly driven by food and services prices. The inflation increase will be partially limited by the expected moderation in energy product prices and goods and services with administratively controlled prices. In the first half of the year core inflation is expected to make a positive contribution to overall inflation reflecting in service prices dynamics.

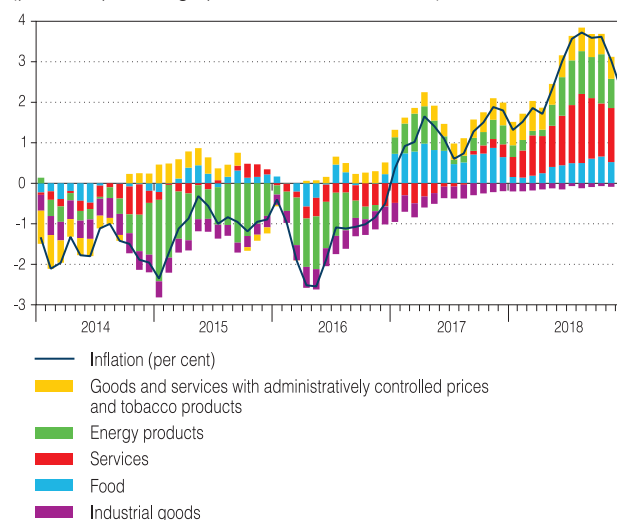
In December 2018 annual inflation was 2.3 per cent (1.8 per cent in December 2017).⁸⁸ By HICP component, services and food had the largest positive contribution. Since energy prices were the major factor for the acceleration of inflation rates throughout most of 2018, their contribution decreased substantially at the end of the year, reflecting the strong decrease in international oil prices.

On average, international oil prices in euro increased in 2018, pushing up energy product prices including firms' production costs and producer prices. In December 2018 the international oil price in euro registered a significant fall by 8.6 per cent compared to December 2017. This development resulted in lower prices of both fuel and other HICP components at the end of the year.

Higher production costs in agriculture coupled with weaker wheat harvests had an upward effect on food prices, thus contributing positively to inflation throughout the year. Concurrently, international food prices in euro declined by 6.3 per cent in 2018, limiting somewhat inflation growth in Bulgaria. Accelerated price rises in services were driven by specific factors related to accommodation services and insurance connected with travel, indirect effects of oil price increases recorded during the year and higher consumer demand. The increased tobacco excise duties for the third consecutive

Inflation and Contribution of Major Commodity and Services Groups to It

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



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.

⁸⁸ The analysis in this Section employs NSI data on HICP.

year also contributed to inflation rising since the beginning of the year.

Price developments of goods imported in Bulgaria are directly affected by international prices of fuels, food and commodities, their spillover through the supply chain being one of the major factors behind inflation in Bulgaria. According to national account data, annual growth in the price deflator for imported goods was 2.7 per cent on average in the first three quarters of 2018 against 8.2 per cent on average for the same period of 2017.⁸⁹ There were divergent dynamics across individual components. Mineral fuels⁹⁰ and unprocessed raw materials⁹¹ had positive contributions to the change in imported goods prices, whereas the import deflator of food⁹² and some finished products⁹³ marked a year-on-year decline. Downward dynamics since the second half of 2017 in imported food prices in Bulgaria corresponded to the downward trend in the ECB overall index of international food commodity prices in euro on an annual basis.

Over the January to November 2018 period the growth of the total producer price index (PPI) in the domestic market continued to slow down on an annual basis, reaching in November 3.5 per cent, from 5.1 per cent at the end of 2017. The deceleration throughout the year was largely due to lower international food and metal prices in euro. The downward dynamics in international oil prices by the end of 2018 also had a limiting effect on producer prices. The economic sub-sectors contributing most significantly to the annual growth rate of producer prices were manufacturing and production and distribution of electricity and heating⁹⁴, mainly due to the industrial goods prices associated with the production of coke and refined petroleum products. BNB estimates based on data from Supply and

⁸⁹ Based on Standard International Trade Classification (SITC) import data.

⁹⁰ This refers to the group of mineral fuels, oils and related products under the SITC.

⁹¹ This refers to the group of inedible (crude) materials (excluding fuels) under the SITC.

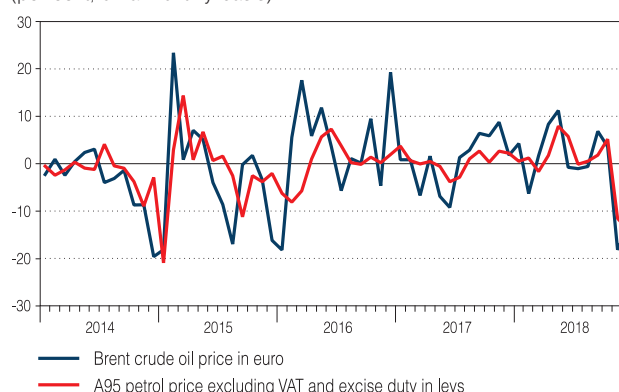
⁹² This refers to the groups of food and live animals and animal and vegetable fats, oils and waxes under the SITC.

⁹³ This refers to the group of miscellaneous finished products n.e.c. under the SITC.

⁹⁴ This refers to the group of production and distribution of electricity, heating, and gaseous fuels.

Rate of Change in Brent Crude Oil and A95 Petrol Prices

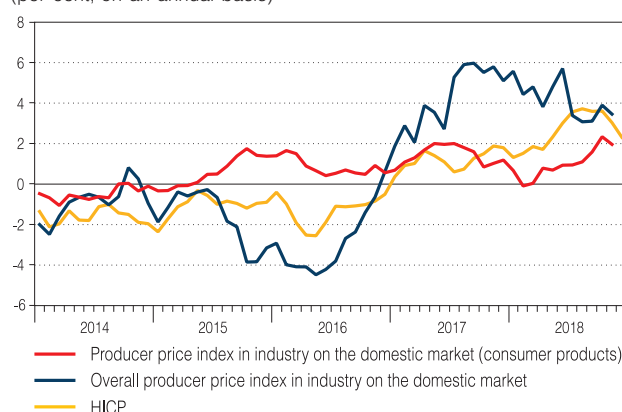
(per cent; on a monthly basis)



Sources: the ECB, the NSI, BNB calculations.

Rate of Change in PPI in Industry and HICP

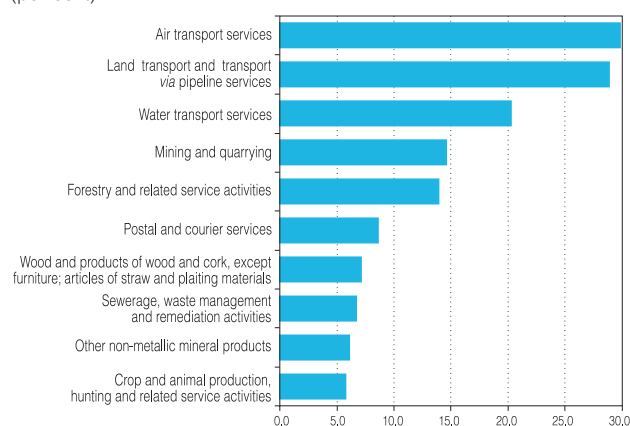
(per cent; on an annual basis)



Source: the NSI.

Sectors of the Bulgarian Economy with Highest Shares in the Intermediate Consumption of Coke and Refined Petroleum Products (2014)

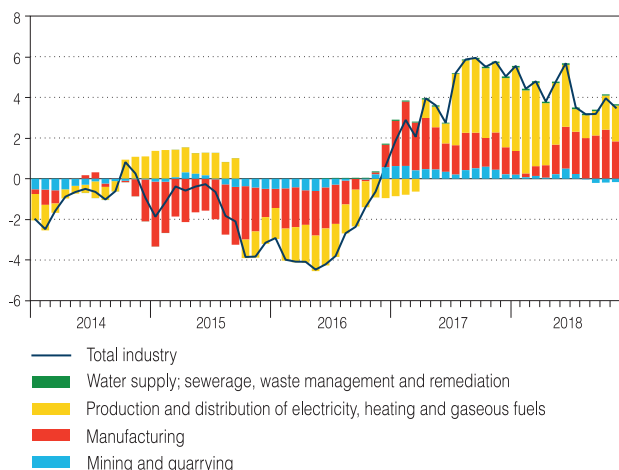
(per cent)



Source: Own calculations according to the [world supply and use tables \(2014\)](#).

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

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



Source: the NSI.

Use tables for the Bulgarian economy suggest that road and air transport, mining and quarrying, and to a lesser extent, agriculture are the worst affected by higher refined petroleum prices.

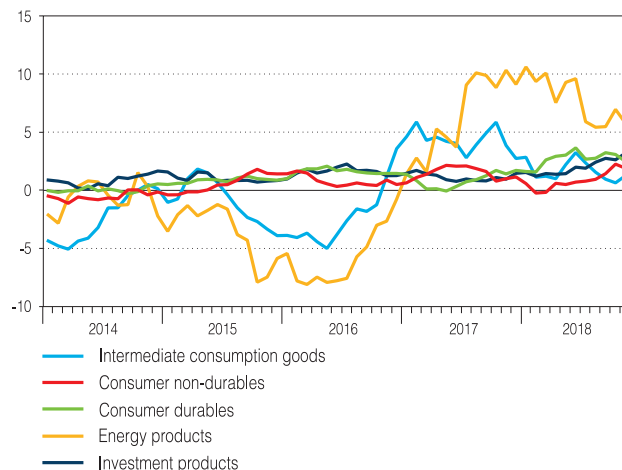
According to the end-use classification, the PPI increase in the first eleven months of 2018 was mainly driven by energy products (electricity, natural gas and refined petroleum products), which account for a significant part of firms' production costs. Thus, the upward trend in those product prices in 2018 implies also a subsequent increase in final consumer prices.

In the first eleven months of 2018 producer prices of non-durable consumer goods posted an increase compared to end-2017, which was most pronounced in the last months of the period under review. The manufacture of bakery and farinaceous products group was the major driver of this increase which was consistent with higher prices of imported cereals. This development had a bearing on inflation in the group of foods.

In 2018 food prices showed a certain volatility, which was more pronounced in unprocessed food. The accelerated price growth rate of most unprocessed food in the first eight months was followed by a slowdown at the end of the year primarily due to internal factors, while import prices remained lower compared to the same period of 2017. An exception to this were cereals and mill products, which showed a year-on-

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

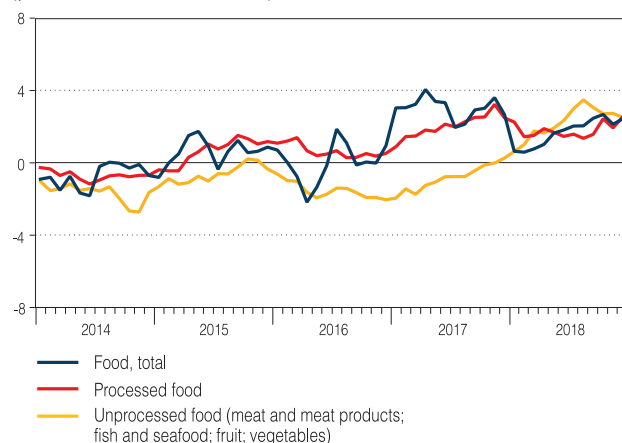
(per cent; on an annual basis)



Source: the NSI.

Rate of Change of Food Price Index

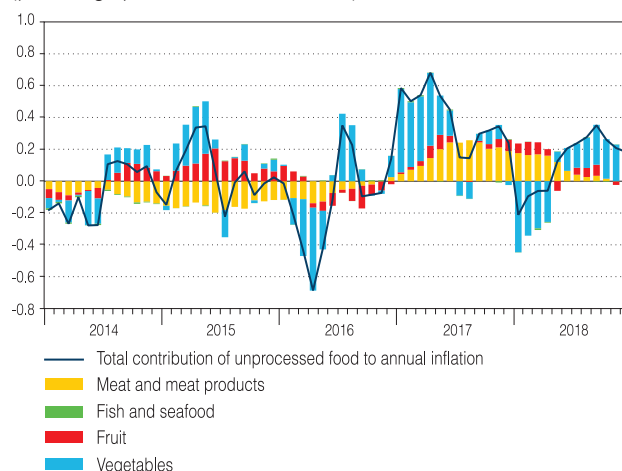
(per cent; on an annual basis)



Sources: the NSI, BNB calculations.

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

(percentage points; on an annual basis)



Sources: the NSI, BNB calculations.

year increase in both import and final consumer prices. Poor wheat harvests in Bulgaria and worldwide were behind this increase, exerting upward pressure on the bread and cereals group, which contributed substantially to processed food inflation in the last quarter of 2018.

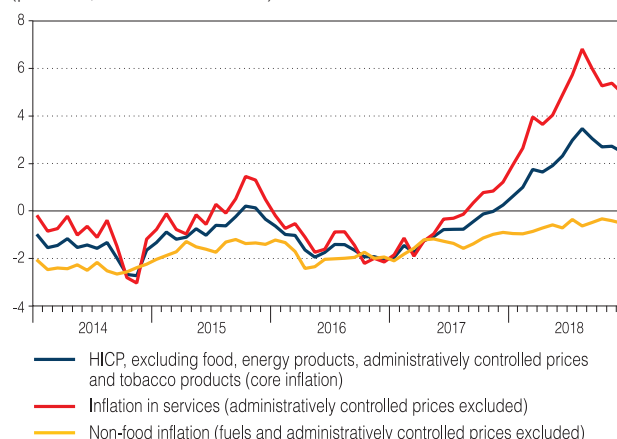
In 2018 the upward trend in core inflation, which started in 2017, was retained, reaching 2.5 per cent in December against 0.3 per cent in the same month of 2017. In the last four months of the year it moderated somewhat, reflecting the lower positive contribution of some services groups and the sustained deflation in non-food goods.

Following the significant acceleration over the first eight months of 2018, services inflation slowed down as of the end of the year on a quarterly basis and was 5.0 per cent in December from 1.2 percent at the end of 2017. These developments were mainly driven by the change in prices of accommodation services⁹⁵ and insurance connected with travel, with price rises due to one-off factors. The prices of insurance connected with travel increased in 2018 following a decision of the Supreme Court of Cassation made in the first half of 2018,⁹⁶ which expands the circle of persons entitled to claim compensation for death of a relative. Another potential factor behind the price increase in insurance connected with travel was the increased demand resulting from the termination of an insurance company's activities in August.⁹⁷ In 2018 transport services had a major positive contribution to services inflation, slightly moderating by the end of the year as a result of lower oil prices. Catering prices also added to services inflation, in consistency with the upward trend in processed food prices.

In 2018 non-food goods continued to contribute negatively to core inflation although the annual decline in the prices of this group moderated by the end of the year (-0.5 per cent in December, from -0.9 per cent at the end of 2017). The continued decline in non-food prices

Core Inflation

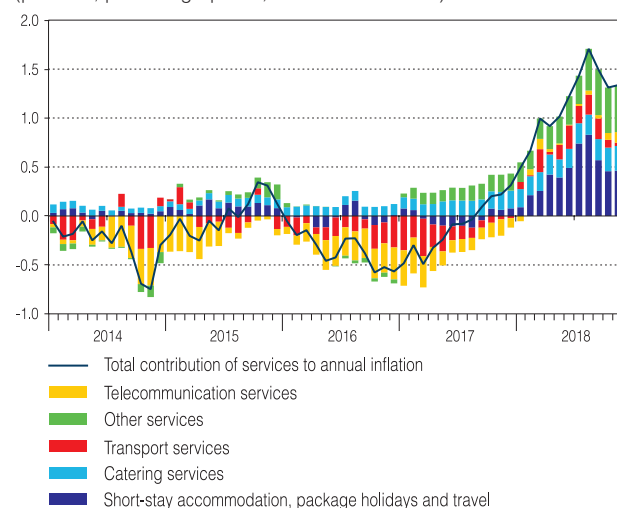
(per cent; on an annual basis)



Sources: the NSI, BNB calculations.

Contribution of Services and Major Services Subgroups to Overall Inflation

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



Sources: the NSI, BNB calculations.

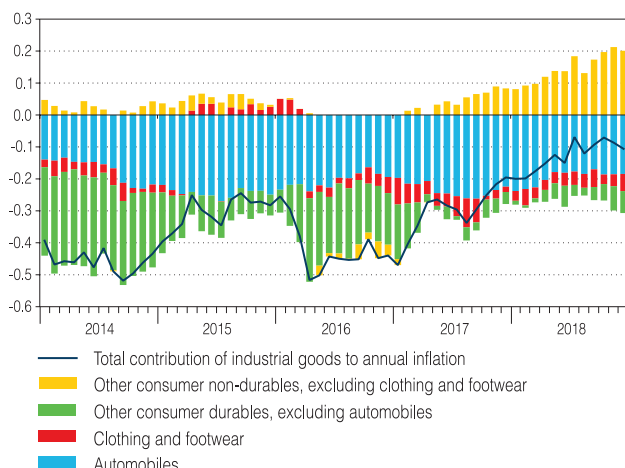
⁹⁵ The higher inflation rate in accommodation services reflect the methodological change in calculating the price index in this group.

⁹⁶ For more details, see: http://www.vks.bg/vks_p02_0500.htm

⁹⁷ For more details, see: <http://www.fsc.bg/bg/novini/dogovorite-po-grazhdanska-otgovornost-sklyucheni-s-klona-na-zk-olimpik-shte-badat-avtomatichno-prekrateni-9044.html>

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

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



Sources: the NSI, BNB calculations.

in 2018 is likely due to lower prices of imported finished products⁹⁸ and euro appreciation against the dollar.⁹⁹ Durable goods (automobiles and television equipment) were a major factor behind the decreased non-food prices. Non-durable goods posted a price increase on an annual basis in sync with developments in the price component of retail trade volumes.

In 2018 tobacco products and goods and services with administratively controlled prices continued contributing positively to overall inflation. As a result of the increased excise duty on cigarettes for the third consecutive year,¹⁰⁰ tobacco product prices rose on average for 2018, with inflation reaching 4.1 per cent in December against 2.7 per cent at end-2017. Administratively controlled price increases were mainly driven by higher heating prices for the consumers of eight cities in Bulgaria¹⁰¹ as approved by the EWRC on 1 October 2018, and the EWRC decision to raise water supply

⁹⁸ The analysis employs data on imported goods prices in group 'miscellaneous finished products n.e.c.' under the SITC.

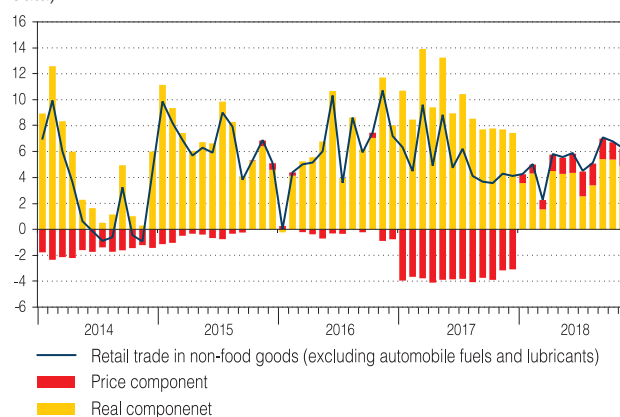
⁹⁹ BNB estimates show that by 2014 approximately 27 per cent of final household consumption expenditure was spent on imported goods other than food and energy products ([according to the world supply and use tables](#)).

¹⁰⁰ An increase in the specific excise duty from BGN 101 to BGN 109 *per* 1000 cigarettes, a decrease in 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 from the beginning of 2018.

¹⁰¹ For more details see: <http://www.dker.bg/news/253/65/kevr-utvrdi-okonchatelnite-tseni-ot-1-oktomvri-na-toplinnata-energiya-i-na-elektricheskata-energiya-ot-visokoefektivno-kombinirano-proizvodstvo.html>

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

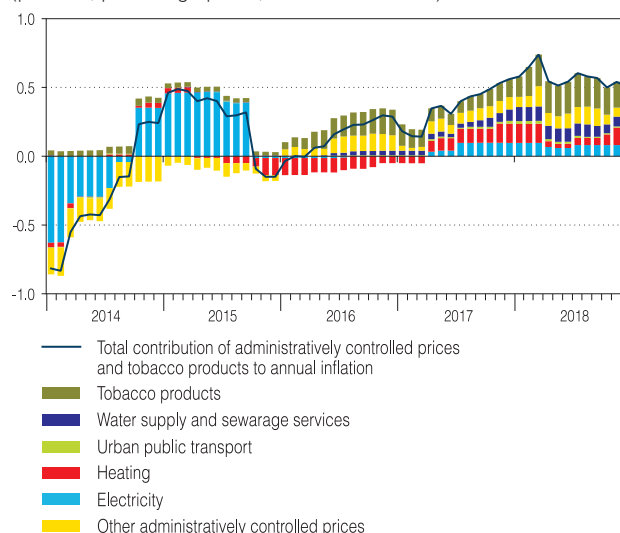
(per cent; percentage points; on an annual basis; working-day adjusted data)



Sources: the NSI, BNB calculations.

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

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



Sources: the NSI, BNB calculations.

prices in 14 regions¹⁰² from the beginning of 2018.

In December 2018 the diffusion index, showing the share of groups of goods and services with declining prices on an annual basis, increased to 29.0 per cent, from 22.6 per cent at the end of 2017. The higher number of goods and services with more than 2 per cent price growth in December 2018 compared to the end of 2017 is a prerequisite for overall inflation to continue increasing in the following year.

According to the NSI business survey results, in December 2018 most managers in industry (87.5 per cent), services (88.8 per cent) and retail trade (85.9 per cent) expect stagnation in selling prices over the coming three months despite the positive balance of opinions in all three sectors since the beginning of 2018.

In the first three quarters of 2018 the House Price Index (HPI) continued to increase on an annual basis, though its growth rate tended to slow down compared to the HPI observed in 2017. In the third quarter of 2018 HPI annual growth was 6.3 per cent, from 8.7 per cent on average in 2017, with existing housing prices driving the slowdown in this quarter. The third quarter of 2018 saw year-on-year growth in house prices in each of the six largest cities in Bulgaria (cities with a population of over 120,000 citizens). Despite the continuous price growth in the third quarter of 2018, house prices remained still 18.8 per cent lower than the maximum values recorded in the third quarter of 2008.

This dynamics was consistent with the trend from the second half of 2017 towards improvement of household sentiments for housing purchases in the following 12 months.¹⁰³ The annual percentage rate of charge (APRC) on new mortgage loans continued to decline, reaching 4.0 per cent in the third quarter (against 4.4 per cent on average for 2017),¹⁰⁴ thus increasing household housing accessibility. Low

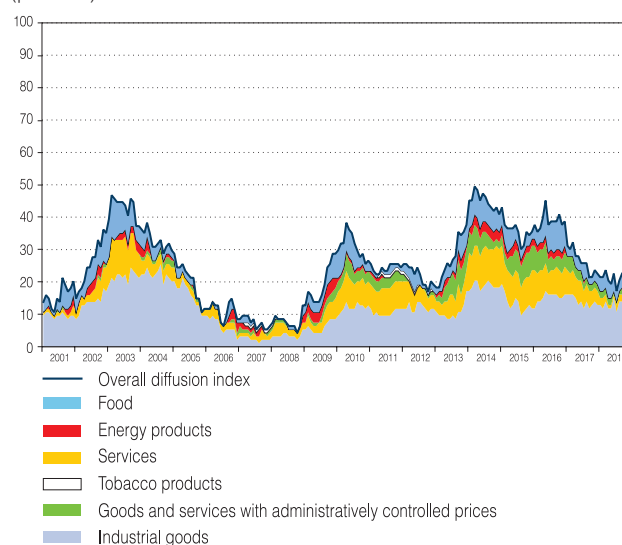
¹⁰² For more details, see: <http://www.dker.bg/uploads/documents/vik/vik-tseni-2018.pdf>

¹⁰³ Seasonally adjusted data for a 12-month period from NSI surveys.

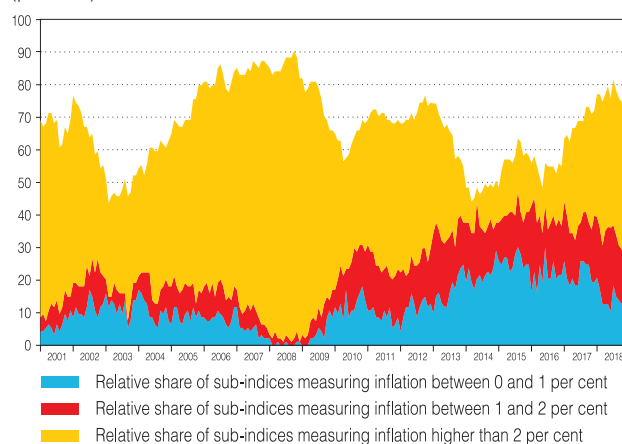
¹⁰⁴ Data on the APRC on housing loans to households are averages weighted by the relevant volumes of new loans for a 12-month period.

Diffusion Index of Major Goods and Services Groups

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



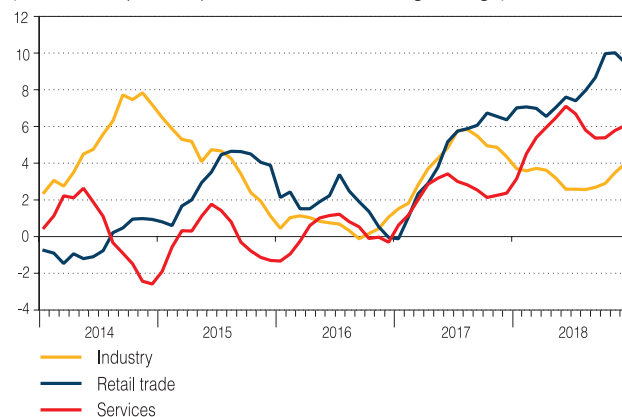
b) relative shares of increasing HICP sub-indices on an annual basis (per cent)



Sources: the NSI, BNB calculations.

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.

levels of new time deposit rates were also a driver for the enhanced household demand for housing, as they motivate households to look for alternative investment opportunities in the form of real estate purchases. According to the results of the BNB quarterly lending survey,¹⁰⁵ in the third quarter of 2018 credit standards applied to housing loans to households have slightly tightened.¹⁰⁶ The maintenance of this policy by banks and the possible further decline in the consumer confidence index could result in lower housing price growth¹⁰⁷ in the first two quarters of 2019.

House price dynamics also influenced the behaviour of firms in the construction sector. The increase in housing prices at rates higher than those of the construction costs in the first three quarters of 2018 is a precondition for enhanced economic activity in the sector. In the first nine months of 2018 real value added in this sector reported year-on-year growth of 4.0 per cent (against 7.1 per cent for the corresponding period of 2017).¹⁰⁸ Concurrently, residential building permits issued over the third quarter of 2018 (measured by building floor area) increased by 25.6 per cent on the corresponding quarter of the previous year. This development indicates that increased supply of new housing may be expected in the following months, which is likely to result in a further slowdown in the annual housing price growth.

In the first half of 2019 inflation is expected to increase, driven mainly by the positive contribution of core inflation and food. Projected acceleration of food inflation is consistent with the assumptions about international price rises in this commodity group. Service price dynamics will be a decisive factor behind the inflation in core HICP components. The projected rise in labour costs, household consumer demand and also indirect effects of international commodity prices on firms' production costs are expected to have a significant impact on inflation in this group. Services inflation growth will be limited by the anticipated gradual exhaustion of base

¹⁰⁵ For details, see Interest Rates section in Chapter 2.

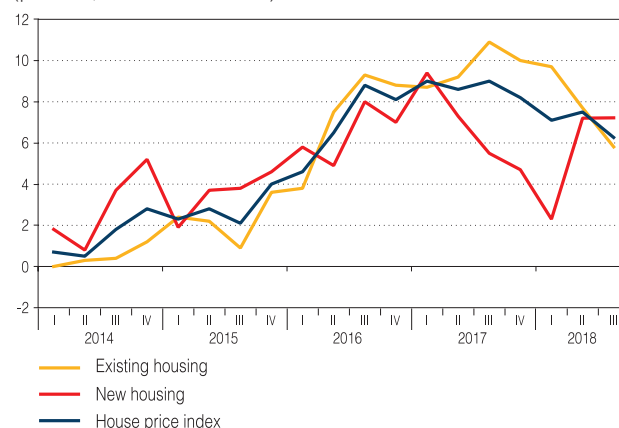
¹⁰⁶ For details, see Monetary Aggregates section in Chapter 2.

¹⁰⁷ For details, see Household behaviour section in Chapter 3.

¹⁰⁸ For details, see the Behaviour of Firms and Competitiveness Section in Chapter 3.

Rate of Change of the House Price Index

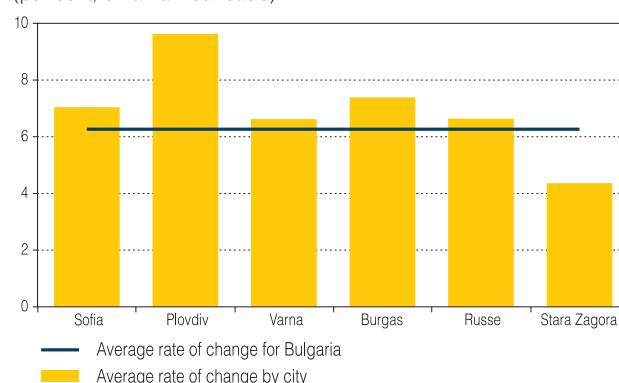
(per cent; on an annual basis)



Source: the NSI.

Rate of Change in the House Price Index in Cities of More Than 120,000 Inhabitants over the Third Quarter of 2018

(per cent; on an annual basis)



Source: the NSI.

Household Home Purchase Sentiment in the Following 12 Months

(balance of opinions)



Sources: the NSI, BNB calculations.

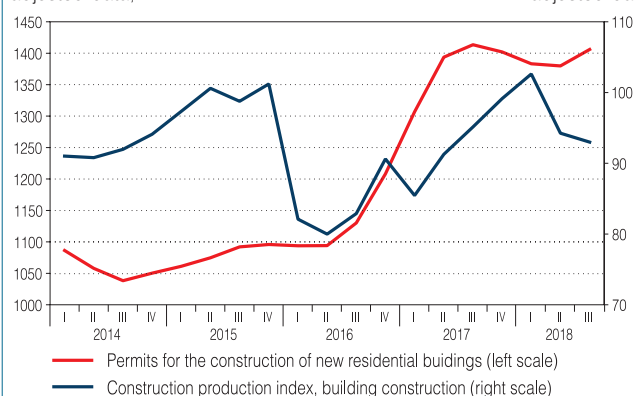
effects in accommodation services from the beginning of 2019 and insurance connected with travel since the second quarter of the year. The effect of heating and water supply price rises is expected to be less noticeable in early 2019, and services with administratively controlled prices are anticipated to contribute less to overall inflation. Energy prices are expected to moderate their growth as a result of the projected downward dynamics in international oil prices.

There are balanced risks to the inflation outlook in the first half of 2019, which are mainly related to the uncertainty surrounding international oil price dynamics, affecting directly energy product prices and indirectly mainly transport services. A higher than projected increase in labour costs is another factor that may have an impact on services inflation. At the same time, lower than projected private consumption growth could potentially decrease firms' propensity to pass on higher production costs onto consumer prices.

Construction Production Dynamics and New Residential Building Permits Issued

(number of buildings; seasonally adjusted data,

(2015 = 100; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Key indicators of the Housing Market Developments in Bulgaria

(per cent; year-on-year change)

Indicators	2014	2015	2016	2017	2017	2018		
					IV	I	II	III
Prices								
House price index, total	1.4	2.8	7.0	8.7	8.2	7.1	7.5	6.3
New dwellings	2.8	3.5	6.4	6.7	4.7	2.3	7.2	7.2
Existing dwellings	0.5	2.3	7.3	9.7	10.0	9.7	7.7	5.8
Inflation (HICP)	-1.6	-1.1	-1.3	1.2	1.7	1.6	2.4	3.6
House rentals, paid by tenants (HICP)	0.2	0.7	0.6	1.0	1.0	1.3	1.6	2.2
Lending								
New housing loans	4.4	39.2	17.0	38.1	40.0	31.6	18.2	10.3
Annual percentage rate of charge on new housing loans (per cent, at the end of the period)	7.4	6.4	5.4	4.4	4.4	4.3	4.1	4.0
Housing loans balances	-0.1	-1.8	0.6	5.3	7.4	8.7	9.0	9.9
Construction and investment								
Permits issued for the construction of new residential buildings (square meters)	27.7	13.0	4.8	32.5	33.1	37.1	31.0	25.6
Value added in construction (at average annual prices for 2010)	-3.1	2.8	-6.8	4.4	-4.1	9.1	0.7	2.1
Constriction production Index, building construction	0.1	8.9	-16.1	10.8	8.2	12.6	0.5	-2.5
Fixed investment; residential buildings	-3.3	-10.3	102.1	19.2	22.0	19.7	15.4	11.2
Construction cost index for new buildings	1.0	1.3	1.5	2.7	3.6	2.0	3.6	4.0

Note: Values indicating the amount of new housing loans and the 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.

Rates of Change in Major Goods and Services Groups Prices and Contribution of These Groups to Inflation

	Inflation accumulated as of December 2017 (December 2016 = 100)		Inflation accumulated as of December 2018 (December 2017 = 100)		Annual rate of inflation as of December 2018 (December 2017 = 100)	
Inflation (per cent)	1.8		2.3		2.3	
	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	2.7	0.65	2.4	0.60	2.4	0.60
Processed food	2.5	0.40	2.5	0.42	2.5	0.42
Unprocessed food	3.0	0.24	2.2	0.18	2.2	0.18
Services	1.2	0.31	5.0	1.24	5.0	1.24
Catering	3.0	0.18	4.3	0.24	4.3	0.24
Transport services	-0.6	-0.02	3.6	0.12	3.6	0.12
Telecommunication services	-2.0	-0.10	2.4	0.11	2.4	0.11
Other services	2.2	0.25	6.7	0.77	6.7	0.77
Energy products	6.9	0.47	1.0	0.08	1.0	0.08
Transport fuels	6.7	0.41	-0.4	-0.03	-0.4	-0.03
Industrial goods	-0.9	-0.20	-0.5	-0.11	-0.5	-0.11
Goods and services with administratively controlled prices*	2.6	0.43	1.9	0.32	1.9	0.32
Tobacco products	2.7	0.13	4.1	0.19	4.1	0.19

* 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.

5. BULGARIAN NATIONAL BANK FORECAST OF KEY MACROECONOMIC INDICATORS FOR 2018–2020

This issue of *Economic Review* includes the BNB forecast of key macroeconomic indicators for the 2018–2020 period. It is based on information published as of 18 December 2018 and employs European Central Bank (ECB), European Commission (EC) and International Monetary Fund (IMF) assumptions of global economic developments and international commodity price dynamics as of 14 December 2018.

Based on ECB, EC and IMF forecasts, in the 2018–2020 period the growth rate of external demand for Bulgarian goods and services is expected to slow down compared with that reported in 2017. The base-line scenario for external demand does not include new global foreign trade protectionist measures, and a prolonged slowdown in the growth in Germany, the main trading partner of Bulgaria. International prices of energy products in US dollars and in euro are anticipated to rise in 2019 from 2018, followed by a decline in petroleum product prices in 2020 driven by growing supply and slowing demand. Non-energy product price projections in US dollars point to a slight decline in 2019 and recovering growth in 2020.

Over the projection horizon, Bulgaria's economic activity will continue growing in terms of domestic demand, while net exports' contribution is expected to be negative. In 2018 real GDP growth will decelerate compared to the previous year due to lower exports of goods, while private consumption and public investment growth will exceed that in 2017. Real GDP growth is expected to accelerate in 2019 and 2020, compared to 2018, as a result of the reduced negative contribution of net exports, offsetting the projected slower domestic demand. Real GDP growth is expected to be lower over the forecast horizon than projections published in the *Economic Review*, issue 2 of 2018.

The annual inflation, mainly driven by international oil and food prices in euro, is expected to accelerate slightly at the end of 2019 before moderating gradually to 2.1 per cent at the end of 2020. The overall inflation forecast in 2019 has been revised upwards, while a lower inflation rate is expected for 2020 *vis-à-vis* the previous forecast.

Risks to the macroeconomic outlook are assessed as oriented towards lower real GDP growth, mainly stemming from the external environment, including the uncertainty about economic growth in some trading partners important for Bulgaria, the possibility of the UK leaving the EU without a deal, and the potential introduction of additional protectionist trade measures. An internal factor creating uncertainty to the outlook is dynamics of public investment co-financed by the EU and the national budget. Potential delay in the implementation of large infrastructure projects would impede GDP growth in 2019, and may at the same time lead to higher public investment in 2020. Risks to the inflation outlook are assessed as balanced.

Forecast

The BNB forecast of key macroeconomic indicators is based on data published as of 18 December 2018. ECB, EC and IMF assumptions on global economic developments and the dynamics of international prices of major commodity groups as of 14 December 2018 are used. Based on these assumptions global economic growth in 2018 is expected to remain close to growth reported in 2017 but with significant differences across countries and regions. These differences reflect the subdued economic activity in some advanced economies, negative effects of the global foreign trade protectionist measures already implemented or discussed to be introduced in the future and worsened expectations about growth in some developing economies as a result of geopolitical conflicts and the impact of tightened US monetary policy. In 2019 and 2020 global growth is expected to slow down from 2018 with the closure of positive output gaps in some advanced economies. This will partly reflect the normalisation of the monetary policy of some leading central banks and the exhausted economic effect of the US fiscal stimulus.

Between 2018 and 2019 growth of external demand for Bulgarian goods and services is expected to slow down due to the unfavourable economic situation in Turkey, the uncertainty surrounding Brexit, expected lower growth in Italy and the impact of the foreign trade tariffs introduced by the USA. With the

weakening of the negative contribution of Turkey growth of external demand for Bulgarian goods and services is anticipated to increase in 2020 but to remain lower than in 2017. The baseline scenario of external demand takes into account the impact of the foreign trade tariffs introduced by the USA but it does not include a further escalation of international trade conflicts during the forecast period and prolonged slowdown in the economic growth in Germany.¹⁰⁹

Year-on-year prices of energy products increased significantly in 2018 in US dollars and in euro which was attributable to both enhanced oil demand and oil production cuts under the agreement between OPEC and other large oil producing countries. The expectations of lower supply of petroleum products following the US sanctions related to Iran's nuclear programme additionally pushed up international oil prices. Despite the weaker oil demand and exemptions for some countries from the sanctions imposed by the USA against oil imports from Iran the oil price in 2019 is expected to slightly increase compared with 2018. This will reflect mainly the new agreement reached in December between OPEC and other leading oil-producing countries on production cuts in the first six months of 2019. With the expiry of the agreement limiting oil production the forecasts are for a decrease in international oil prices over 2020.

International non-energy product prices exhibited a divergent dynamics both in euro and US dollars in 2018 reflecting the depreciation of the US dollar against the euro. Higher non-energy product prices in US dollars were attributable to agricultural commodities and metals (due mainly to temporary constraints on the supply side), while food prices posted a decrease. US dollar international prices of non-energy products are expected to decrease slightly from 2018 and to increase again in 2020. Due to technical assumptions for retaining the exchange rate unchanged over the forecast horizon¹¹⁰ the forecast for euro prices of non-energy products points to growth in the 2019–2020 period which will be most strongly pronounced in food prices.

In 2018 economic growth in Bulgaria will slow down from 2017 owing to the strong negative contribution of net exports. Exports of goods are expected to decrease for 2018 due to a temporary decline in production of oil products as a result of a scheduled refurbishment of production facilities in a key undertaking for the energy sector.¹¹¹ An additional factor which will limit exports of goods and services at the close of the year will be the projected slowdown in annual growth of external demand. Imports of goods and services will slow down its rate of real growth in 2018 due mainly to slower growth in imports of services and lower imports of mineral products. Concurrently, the contribution of domestic demand to real GDP growth in 2018 is expected to increase, reflecting stronger growth both in private consumption and gross fixed capital formation. Private consumption growth will be supported by the persistent long-term upward trend in nominal and real household labour income and low interest rates, which stimulate credit growth. Improvements in investment activity will be driven mainly by the significant increase projected in public investments.

Between 2019 and 2020 real GDP growth is expected to gradually accelerate compared with 2018, reaching 3.8 per cent in the last year of the forecast horizon. This will depend on the decrease in the negative contribution of net exports, while the positive contribution of domestic demand to real GDP growth will slow down, particularly in terms of private consumption. The projected slower increase in household real disposable income as compared with 2018 will be the main factor behind the slowdown in private consumption. Gross fixed capital formation will keep a relatively high growth rate driven by the expected increase in public investment due to both the planned national investment expenditure and the spending under EU programmes associated with the advanced stage of implementing projects of

¹⁰⁹ In the third quarter of 2018 annual GDP growth in Germany slowed down, reflecting the effect of temporary factors in the car industry. For more details see: <https://www.ecb.europa.eu/pub/pdf/ecbu/eb201808.en.pdf?432086776247c2ae18646606b5c441d1>

¹¹⁰ The euro price forecast is based on the technical assumption about the EUR/USD exchange rate. It is fixed at the average value for the last ten days on 14 December 2018, the date when the assumptions on the external environment were made. In line with the technical assumption, the EUR/USD exchange rate will decrease over the forecast horizon.

¹¹¹ NSI data on production and supplies of oil and oil products as of 27 June 2018.

the 2014–2020 programming period. At the same time, the uncertain international environment will be a factor limiting corporate investment. Expected growth in expenditure on staff remuneration, intermediate consumption and healthcare will have the main contribution to higher government consumption in the 2019–2020 period. In line with the stronger public sector wage increases in 2019 projected in the budgetary framework, government consumption growth is expected to accelerate in 2019 compared with the end of the forecast horizon. The negative contribution of net exports to the change in real GDP will decrease driven by the recovery in exports of oil products in 2019 and demand for Bulgarian goods and services by Turkey in 2020. Exports of goods and services are projected to increase faster than external demand in the 2019–2020 period due to competitive advantages of Bulgarian exporters, which will help increase further Bulgaria's market share in world trade. In 2019 imports are expected to accelerate their growth from 2018 in line with the projected slight acceleration of growth in investments in Bulgaria, but in 2020 it will slow down due to a weaker increase in domestic demand.

In 2018 the negative trade balance is anticipated to increase as a percentage of GDP due to projected worsening in the terms of trade for Bulgaria (measuring the change in prices of exported goods against prices of imported goods) in combination with the expected decline in exports and an increase in imports of goods in real terms. Trade deficit will further grow in 2019 driven by stronger growth in imports than exports of goods. This trend will be reversed at the end of the forecast horizon in line with the expected improvement in the terms of trade. The services trade balance in 2018 is projected to record a higher surplus as a percentage of GDP against 2017 amid stronger growth projected in exports than imports of services. Between 2019 and 2020 the surplus in services trade as a percentage of GDP is expected to stabilise. Enhanced economic activity in Bulgaria is expected to boost companies' profits which will result in a gradual increase in the payments of dividends to non-residents, and correspondingly, in a rise in the deficit of the balance of payments primary income current account over the forecast horizon. In 2018 net transfers on the balance of payments secondary income account are projected to decrease as a percentage of GDP compared with 2017 and to remain close to those in the 2019–2020 period. As a result of the component dynamics, the surplus on the balance of payments current account will significantly decrease as a percentage of GDP in 2018 and 2019 compared with 2017, and in 2020 it will turn from surplus to low deficit.

The growth rate of employment in the total economy is expected to slow down significantly in 2018 as a result of a lower number of the self-employed in agriculture which is supposed to be a one-off factor. In 2019 employment is expected to slightly accelerate its growth and to increase at a subsiding rate until the end of the forecast horizon, reflecting the negative demographic trends. The unemployment rate will decline further over the whole forecast horizon but at slower rates than those observed in the 2015–2017 period. Labour productivity growth will accelerate as a result of the expected slight rise in employment and relatively constant dynamics of real GDP. The compensation *per* employee will continue to increase due to higher public sector remuneration in 2018 and 2019 and constraints in labour supply. By the end of the forecast horizon the growth rate of compensation *per* employee will moderate due to a lower public sector wage rise projected in the budgetary framework in 2020 as compared with 2019. Unit labour costs will match the pattern of compensation *per* employ. The indicator is expected to exhibit stronger growth in 2019 followed by a slower increase in 2020.

Annual inflation is expected to increase slightly to 2.6 per cent at the end of 2019 before moderating to 2.1 per cent at the end of 2020 in line with the projected dynamics in international oil and food prices in euro. Core inflation is anticipated to have a positive contribution to overall inflation over the forecast horizon mainly driven by developments in services prices. The inflation of services prices will be affected by the projected rise in labour costs, household consumer demand and also indirect effects of international commodity prices on firms' production costs. Administratively controlled prices are expected to have a low positive contribution to overall inflation over the forecast horizon, which will reflect the increase in prices

of gas in the beginning of 2019 and water supply services in the 2019–2020 period as announced by the Energy and Water Regulatory Commission (EWRC).¹¹²

Over the forecast horizon deposits in the banking system are expected to grow at a rate of around 7.0 per cent. Corporations and households are expected to keep the savings rate high amid increased uncertainty ensuing from the external environment and continuously increasing labour income. Although deposit rates are anticipated to remain at low levels, the lack of sufficiently safe alternatives to bank savings will also contribute to comparatively high growth rates of attracted funds in the banking system. The cost of funds attracted by banks and the euro area interest rate cycle will be the main factors behind lending rate developments. Market expectations for a three-month EURIBOR are for retaining its level close to its current levels until mid-2019 and a slight increase in the second half of 2019 and in 2020. In line with the expected deposit rate dynamics in Bulgaria and in the euro area, lending rates are anticipated to start gradually increasing from the second half of 2019. Following the significantly accelerated growth of credit to the non-government sector in 2018, partly due to the inclusion of a new reporting unit in the monetary statistics¹¹³, credit to the private sector between 2019 and 2020 is expected to increase at a rate of about 6.0–7.0 per cent with a positive contribution of loans to both corporations and households. These developments will be driven by continuously increasing private consumption and investments, and relatively low lending rates. Concurrently, a factor which is expected to have a dampening effect on credit growth is the continuing payment by the government of loans extended under the National Program for Energy Efficiency of Multi-family Residential Buildings (the National Energy Efficiency Programme), and a significant decrease in the volume of new loans under this programme. The comprehensive assessment of six Bulgarian banks in the first half of 2019¹¹⁴ and the activation of the countercyclical capital buffer from October 2019 announced by the BNB may also have a limiting effect on credit dynamics.¹¹⁵

Forecast Revisions

Real GDP growth is expected to be lower over the forecast horizon compared to the projection published in the *Economic Review*, issue 2 of 2018.

The most significant growth revision was made in 2018 due mainly to a decline in exports over the first nine months, driven by short-term factors and NSI national account data revisions.¹¹⁶ Current external assumptions indicate weaker external demand *vis-à-vis* the previous projection, which is reflected in lower export growth rates in the 2019 and 2020 projection. The weaker external demand, increased uncertainty surrounding the external environment and worsened business climate in the second half of 2018 are prerequisites for downside revisions in the growth of private investment over the forecast horizon. Data revisions and higher than expected growth in private consumption over the second and third quarters led to an upward revision of the forecast for this component in 2018. At the same time, worsening consumer

¹¹² For more details see:

<http://www.dker.bg/news/289/65/otkrito-zasedanie-po-zayavlenieto-na-bulgargaz-ead-za-tsenata-na-prirodniya-gaz-za-to-trimesechie-na-2019-g.html>

<http://www.dker.bg/news/294/65/kevr-prie-reshenie-za-izmenenie-na-odobrenite-s-biznesplanovete-tseni-na-uslugi-na-vik-druzhestvata-za-2019-g.html>

¹¹³ From April 2018 other monetary financial institutions include also BNP Paribas Personal Finance S.A. – Bulgaria branch, with balances reclassified from the sector of other financial intermediaries. The reclassification results from the transformation through the merger of BNP Paribas Personal Finance EAD specialised in lending and reported until now for the purposes of monetary statistics in the sector of other financial intermediaries.

¹¹⁴ Bulgaria's request of 18 July 2018 for accession to the Single Supervisory Mechanism (SSM) by establishing close cooperation with the ECB provides for a thorough assessment of six banks to be carried out by the ECB (an asset quality review and stress tests). The assessment began in November 2018, and its results are expected to be published in July 2019.

¹¹⁵ In its resolution of 26 September 2018, the BNB Governing Council set in compliance with Article 5, paragraphs 3 and 4 of Ordinance No 8 on Banks' Capital Buffers a countercyclical buffer rate applicable to credit risk exposures in the Republic of Bulgaria at 0.5 per cent, effective from 1 October 2019. The resolution is published no later than 12 months before its entry into force, according to Article 5, paragraph 5 of BNB Ordinance No 8. For details, see <http://www.bnb.bg/PressOffice/POPressReleases>.

¹¹⁶ Revisions were published on the NSI website on 3 October 2018 according to the NSI schedule on statistical survey releases and refer to the period from the first quarter of 2013 to the second quarter of 2018.

sentiment in the last months of 2018 and projected slower growth in disposable income related to a lower expected increase in the number of employed are the main drivers for the downward revision in private consumption growth for 2019 and 2020.

Changed assumptions about international oil and food prices in euro over the projection horizon are the main reason for our upward revision of expected overall inflation in 2019 and a downward revision in 2020. In 2019 core inflation is revised insignificantly upwards, reflecting an indirect effect of higher global prices of commodities and some services, including catering and transport services. This effect will be significantly weaker in 2020, which in combination with lower private consumption and labour costs growth in the 2019–2020 period give grounds to expect lower core inflation at the end of the forecast horizon compared to the projection published in the *Economic Review*, issue 2.

GDP and Inflation Forecast Revisions (21 December 2018 vis-à-vis 21 June 2018)

Annual rate of change, per cent	Forecast as of 21 December 2018				Forecast as of 21 June 2018				Revision (percentage points)			
	2017	2018	2019	2020	2017	2018	2019	2020	2017*	2018	2019	2020
GDP at constant prices	3.8	3.2	3.6	3.8	3.6	3.9	4.0	4.0	0.2	-0.7	-0.4	-0.2
Private consumption	4.5	7.6	4.0	3.9	4.8	4.5	4.4	4.2	-0.3	3.1	-0.4	-0.3
Government consumption	3.7	3.8	3.6	3.0	3.2	3.5	2.6	2.6	0.5	0.3	1.0	0.4
Gross fixed capital formation	3.2	6.7	6.9	5.0	3.8	13.1	8.5	8.5	-0.6	-6.4	-1.6	-3.5
Exports (goods and services)	5.8	-1.6	3.8	4.1	4.0	5.5	5.4	5.3	1.8	-7.1	-1.6	-1.2
Imports (goods and services)	7.5	4.6	5.1	4.3	7.2	8.2	6.7	6.5	0.3	-3.6	-1.6	-2.2
HICP at end of period**	1.8	2.3	2.6	2.1	1.8	2.6	2.2	2.4	0.0	-0.3	0.4	-0.3
Core inflation	0.3	2.5	2.9	2.6	0.3	1.9	2.8	3.0	0.0	0.6	0.1	-0.4
Energy	6.9	1.0	1.0	0.7	6.9	11.1	-0.7	0.3	0.0	-10.1	1.7	0.4
Food	2.7	2.4	4.9	3.2	2.7	2.5	3.5	3.5	0.0	-0.1	1.4	-0.3
Goods and services with administratively controlled prices and tobacco products	2.6	2.3	-0.2	0.1	2.6	1.0	0.1	0.1	0.0	1.3	-0.3	0.0

* Changes in historical GDP series for 2017 reflect the NSI data revision published on 3 October 2018.

** Reporting data on inflation for 2018.

Source: the BNB.

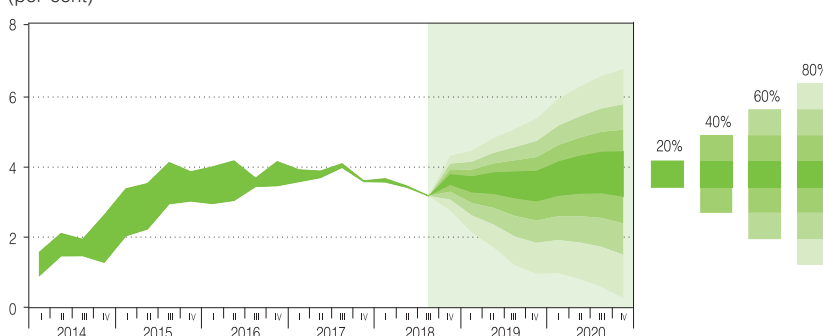
Risks to the Forecast

Major risks to the forecast of economic growth stem from the uncertainty surrounding external demand and investments. The balance of risks is tilted to lower than expected real GDP growth in Bulgaria.

A lower than projected external demand for Bulgarian goods and services is likely to materialise if the economic growth in important trading partners of Bulgaria, such as Germany, Italy, France and Turkey, is lower than the baseline scenario. Additional downside risks to external demand stem from the UK possibly leaving the EU without agreeing to a deal and the potential impact of

Expected Annual Rate of Change in Real GDP

(per cent)



Note: The fan chart shows expert views of the forecasters on the uncertainty around the projected value based on probability distribution. The reporting period includes revised GDP growth estimates, with the latest reporting periods revised on fewer occasions, thus narrowing the band. The middle band of the chart, depicted in the darkest colour, includes the central projection, and the probability distribution shows a 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.

additional protectionist trade measures by the USA. The baseline scenario of projected external demand for Bulgarian goods and services involves no escalation of already existing trade conflicts and introduction of new protectionist measures, as well as longer-term economic growth weakening in Germany, the main trading partner of Bulgaria.

Where any delay is observed in government investment projects co-financed by EU and national funds in 2019, the projected growth in public investment would be lower, which could exert a dampening effect on real GDP growth. It can reasonably be expected that such delay in project implementation would result in higher growth in public investment over 2020. Worsened external environment could have a negative effect on firms seeking to invest, posing a risk to the growth projection of private investment.

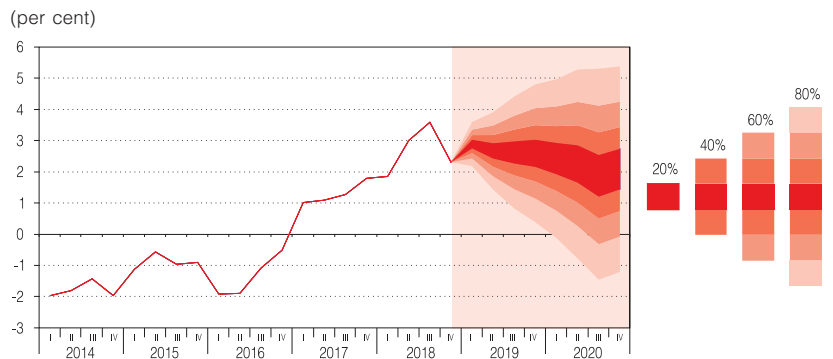
The uncertainty over the outlook for a particular indicator may be graphically illustrated by means of a fan chart. Chart bands marked with a specific colour set an interval in which a projected value is most likely to fall (for further details, see the GDP growth note to the chart). Each interval widens with the increase in the forecast horizon, reflecting the increasing uncertainty further into the future. The fan chart on the annual GDP growth shows, for example, that there is a 60 per cent probability for the annual GDP growth to range from 1.8 to 4.7 per cent for the last quarter of 2019.

Risks to the inflation outlook are assessed as balanced, arising mainly from the uncertainty surrounding international oil price dynamics, which in turn affects directly energy products prices and indirectly prices of certain services, such as transportation. More significant changes in international oil prices would eventually cause changes in administratively controlled prices of natural gas, electricity and heating. Risks to the food price projection are broadly balanced and stem largely from international food price developments and crop conditions in Bulgaria. There is a risk of higher than projected inflation in case of stronger than anticipated increases in unit labour costs and possible spillover effects on consumer prices, especially of services. The balance of risks regarding inflation is graphically presented in the relevant fan chart. It suggests that there is a 60 per cent probability for annual HICP growth to range between 1.1 and 4.0 per cent at the end of 2019.

A key source of uncertainty to the balance of payments projection is the external environment, *i.e.* external demand and international commodity price dynamics could have a significant effect on the trade balance and current account, accordingly. If any of the above risks to the external environment materialise, a higher than projected trade balance deficit and relevant deterioration in current account balance may be expected.

The outlook for the non-government sector credit growth is marked by uncertainties regarding the policy of banks, subject to an overall assessment in the first half of 2019, potential sales of credit portfolios, writing-off NPLs and extending new loans. There is also an uncertainty about the future impact of the National Programme for Energy Efficiency on the growth rates of household loans and the countercyclical capital buffer's effect on overall domestic lending.

Expected Annual Rate of Change in Inflation at the End of the Period



Note: The fan chart shows 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 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.

Forecast of Key Macroeconomic Indicators for 2018–2020

(per cent)

	2016	2017	2018	2019	2020
<i>Annual rate of change</i>					
GDP at constant prices	3.9	3.8	3.2	3.6	3.8
Private consumption	3.6	4.5	7.6	4.0	3.9
Government consumption	2.2	3.7	3.8	3.6	3.0
Gross fixed capital formation	-6.6	3.2	6.7	6.9	5.0
Exports (goods and services)	8.1	5.8	-1.6	3.8	4.1
Imports (goods and services)	4.5	7.5	4.6	5.1	4.3
HICP at end of period	-0.5	1.8	2.3	2.6	2.1
Core inflation	-2.1	0.3	2.5	2.9	2.6
Energy	-0.2	6.9	1.0	1.0	0.7
Food	0.9	2.7	2.4	4.9	3.2
Goods and services with administratively controlled prices and tobacco products	1.4	2.6	2.3	-0.2	0.1
Employment	0.5	1.8	0.1	0.3	0.2
Unit labour costs	2.3	8.4	2.3	3.0	2.3
Labour productivity	3.4	2.0	3.0	3.2	3.5
Unemployment rate (share of labour force, per cent)	7.6	6.2	5.2	4.8	4.3
Claims on non-government sector*	1.8	4.5	8.9	6.5	6.7
Claims on corporations**	0.4	1.5	6.4	5.7	6.0
Claims on households	2.0	6.1	11.2	5.8	6.9
Deposits of the non-government sector*	7.0	6.2	7.3	7.0	7.1
<i>Share of GDP</i>					
Balance of payments current account	2.6	6.5	2.6	0.6	-0.2
Trade balance	-2.0	-1.5	-5.1	-5.9	-5.6
Services, net	6.4	5.4	5.7	5.6	5.6
Primary income, net	-5.0	-1.0	-1.3	-2.3	-3.2
Secondary income, net	3.3	3.6	3.4	3.2	3.0
<i>Annual rate of change</i>					
External assumptions					
External demand	3.1	6.4	3.5	2.8	3.9
Average annual Brent oil price (in USD)*	-15.9	23.5	30.7	0.8	-6.2
Average annual price of non-energy products (in USD)*	-2.4	7.9	3.9	-0.6	3.4
Brent oil price at the end of period (in USD)*	15.3	22.7	9.6	4.4	-4.4
Price of non-energy products at the end of period (in USD)*	9.1	5.4	-1.2	4.9	2.7

* Reporting data for 2018.

** Data refer to non-financial corporations.

Source: the BNB.

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