

BULGARIAN NATIONAL BANK



ECONOMIC REVIEW

2/2020



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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. External environment developments are also analysed since they directly affect Bulgarian economy. The Review contains quantitative assessments of short-run developments in major macroeconomic indicators like inflation, growth, exports, imports, trade balance and the balance of payments current account, foreign direct investment, monetary and credit aggregates dynamics.

The Economic Review, issue 2/2020 was presented to the BNB Governing Council at its 13 August 2020 meeting. It employs statistical data published up to 10 July 2020. Given the enormous scale of the economic shock resulting from the spread of COVID-19, the charts in this issue and in other 2020 issues will encompass the period from early 2008, which will allow to compare the change in economic variables during the global financial and economic crisis in 2008–2009.

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ABBREVIATIONS

ABSPP	Asset-Backed Securities Purchase Programme
APP	Asset Purchase Programme
APRC	Annual percentage rate of charge
BIR	Base interest rate
BOP	Balance of Payments
BTC	Bulgarian Telecommunications Company
b.p.	basis points
CBPP3	Covered Bond Purchase Programme
CEECs	Central and East European countries
CEFTA	Central European Free Trade Association
CFP	Consolidated Fiscal Programme
CIF	Cost, insurance, freight
CNY	Chinese Yuan
CPI	Consumer Price Index
DXY	an index measuring the exchange rate of the US dollar against the basket of six major currencies
EA	Employment Agency
EC	European Commission
ECB	European Central Bank
EIB	European Investment Bank
EMBI	Emerging Markets Bond Index
EONIA	Euro OverNight Index Average
ESA 2010	European System of National and Regional Accounts
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
€STR	Euro Short-Term Rate

SUMMARY

Following the global economic shock in March and April 2020 caused by the containment measures against the spread of COVID-19, in May and June a partial recovery in the economic activity was observed in both the industrial and services sectors. However, economic sentiments indicators point to a significant decline in the economic activity in all major economies, with the exception of China, in the second quarter of 2020 compared to the first quarter. In May and June the ECB and the US Federal Reserve System continued to adjust their monetary policy in order to provide favourable financing conditions to governments, banks, corporations and households.

In the second quarter of 2020 external demand for Bulgarian goods and services is expected to post a strong fall on an annual basis, which will moderate in the third and fourth quarters, reflecting the projected lift of a number of COVID-19 containment measures in Bulgaria's major trading partners.

The initial COVID-19 crisis effects on Bulgaria's external flows resulted in growth of the overall current and capital account surplus between January and April 2020 due to a stronger fall in nominal imports of goods than in nominal exports. At the same time, a net inflow of funds on Bulgaria's financial account was reported due to decreased foreign assets of banks as a result of BNB measures initiated to enhance further the banking system liquidity. Over the second half of 2020 the positive current and capital account balance is expected to increase compared to the second quarter of 2020 under the assumption of a partial recovery of external demand for Bulgarian goods and services and sustained positive terms of trade.

Non-government sector deposits in Bulgaria's banking system continued growing relatively fast in the April–May 2020 period. Limited possibilities for household consumption of certain goods and services during the state of emergency contributed to the increased bank savings amid the lack of safe and low-risk alternatives of bank deposits. Subsequently, the postponed household consumption and firms' investment projects also contributed to growth of deposits due to the higher uncertainty about the future macroeconomic environment caused by the COVID-19 pandemic. The annual growth rate of credit to non-financial corporations moderated gradually from March, reflecting both demand and supply factors.

In the second half of the year, we expect the generation of precautionary savings to continue boosting attracted funds in the banking system. Annual credit growth to the non-government sector is projected to decelerate gradually, resulting from the weaker demand for loans in the context of a deteriorated macroeconomic environment and uncertainty surrounding the duration of the pandemic. The slowdown in credit growth is also likely to be driven by further tightening of banks' lending standards and conditions, and their lower risk appetite.

In the first quarter of 2020 real GDP growth slowed down to 0.3 per cent on a quarterly basis. The COVID-19 containment measures introduced at the end of the quarter resulted in a decline in all main components of domestic demand while goods and services exports grew on a quarterly basis. Labour market conditions deteriorated. According to seasonally adjusted national accounts data, between January and March 2020 the total number of employed in the economy fell by 0.9 per cent quarter on quarter.

As a result of the COVID-19 containment measures introduced in Bulgaria and abroad, over the second quarter of 2020 business climate and consumer confidence indicators deteriorated significantly. These developments reflected the higher uncertainty surrounding the Bulgarian economy, strong decreases on a quarterly basis in retail sales, turnover in industry and industrial production and services indices coupled with the rapid increase in the unemployment rate to 9.0 per cent in May according to Employment Agency data. Short-term business statistics indicators give signals about real GDP falling over the second quarter of 2020 both on a quarterly and annual basis.

Under the assumptions of no second wave of COVID-19 and new tightening of containment measures, in the second half of the year the economic activity is expected to start gradually recovering on a quarterly basis, but real GDP is projected to remain significantly below its level for the corresponding period of 2019.

Under the influence of COVID-19 effects and containment measures, annual inflation decelerated significantly from the end of 2019, reaching 1.0 per cent in May. The negative contribution of energy products, with their downward dynamics, impacted by the strong fall in international oil prices, played a key role for the slowdown in overall inflation. Inflation moderation was reported in core HICP components and in the group of goods and services with administratively controlled prices. Lower inflation in the food group was driven mainly by internal factors, whereas the effect of the spread of COVID-19 on the price dynamics in the group remained limited.

In the third and fourth quarters of 2020 inflation is expected to decelerate slightly from its current level. Core inflation is projected to moderate due to lower demand and uncertain economic environment, while the negative contribution of energy products will shrink, reflecting mainly the market expectations about developments in international oil prices in euro. However, food inflation is expected to slow down somewhat driven mainly by meat and cereal products groups.

This issue of Economic Review includes the BNB forecast of key macroeconomic indicators for the 2020–2022 period. It is based on information published as of 17 June 2020 and employs assumptions of global economic developments and international commodity price dynamics as of 9 June 2020.

The global spread of COVID-19 since the beginning of 2020 and the containment measures launched in a number of countries have strong negative effects on Bulgaria's economic activity in terms of both aggregate demand and supply. Given the unprecedented nature and scale of the economic shock globally and in Bulgaria caused by the containment measures intended to curb the spread of COVID-19, and the uncertainty about future developments in the epidemic situation, the forecast for the development of the Bulgarian economy is surrounded by a high degree of uncertainty, including in the short run. The data available as of 17 June, on the basis of which the forecast have been prepared, suggest that one of the strongest historical falls in Bulgaria's GDP is to be expected, but there is great uncertainty regarding the scale of the economic shock over the period. Given the uncertainty about future developments in the epidemic situation, the uncertainty surrounding the GDP dynamics in the second half of the year is also significant. Consequently, according to the constructed probability distribution around the central forecast for the change in GDP in 2020 (-8.5 per cent) the estimate as of 17 June shows that there is a 60 per cent probability for the decline in real GDP to be within -4.1 per cent and -13.1 per cent in the current year.

According to the baseline forecast the fall in Bulgaria's real GDP by 8.5 per cent in 2020 will be mainly driven by a fall in private consumption (contributing by -3.4 percentage points) and gross fixed capital investment (contributing by -3.2 percentage points) and to a lower degree by the negative contribution of net exports (contributing by -2.6 percentage points). Fiscal policy is expected to have a positive contribution to the economic activity through higher national and EU co-financed expenditure on government consumption and investment. In accordance with the assumptions about external environment developments and containment of the pandemic in the 2021–2022 period, a gradual recovery in the economic activity is projected, and at the end of the forecast horizon real GDP is expected to reach its 2019 level. Private consumption and exports of goods, as well as the projected strong increase in public investment, will contribute most to GDP growth over the period.

Annual inflation is expected to slow down substantially to 0.8 per cent at the close of 2020, reflecting the strong fall in international oil prices in euro and the negative effects from declining private consumption, which are expected to result in lower inflation in services and a decrease in industrial goods price index. Overall Inflation is expected to accelerate to 1.4 per cent at the end of 2021, reflecting mainly the assumption of higher oil prices, and to remain at similar levels in 2022.

The balance of risks to the macroeconomic outlook are assessed as being on the downside, suggesting a possibly larger decline in real GDP over 2020 and a slower subsequent recovery of economic growth. Such risks would materialise in the event of a continued spread of COVID-19 in Bulgaria and worldwide due to the failure to contain it effectively, which would be a reason for extending the existing anti-epidemic measures or introducing new more restrictive measures. Risks to the inflation outlook are assessed as being on the downside, arising mostly from possibly lower inflation in energy products and core HICP components.

1. EXTERNAL ENVIRONMENT

Following the global economic shock in March and April 2020 caused by the containment measures against the spread of COVID-19, in May and June a partial recovery in the economic activity was observed in both the industrial and services sectors. However, economic sentiment indicators point to a significant decline in the economic activity in all major economies, with the exception of China, in the second quarter of 2020 compared to the first quarter. Global inflation fell to 1.3 per cent on an annual basis in May as a result of declining energy prices, which reflected the strong fall in international oil prices.

In May and June the ECB and the US Federal Reserve System continued to adjust their monetary policy in order to provide favourable financing conditions to governments, banks, corporations and households. Over the review period the ECB Governing Council did not change reference rates, but increased the new Pandemic Emergency Purchase Programme by EUR 600 billion to EUR 1350 billion. Concurrently, the US Federal Reserve System continued to introduce the instruments and programmes adopted earlier in the year for providing credit and liquidity maintaining the current target range for the federal funds rate at 0.00–0.25 per cent.

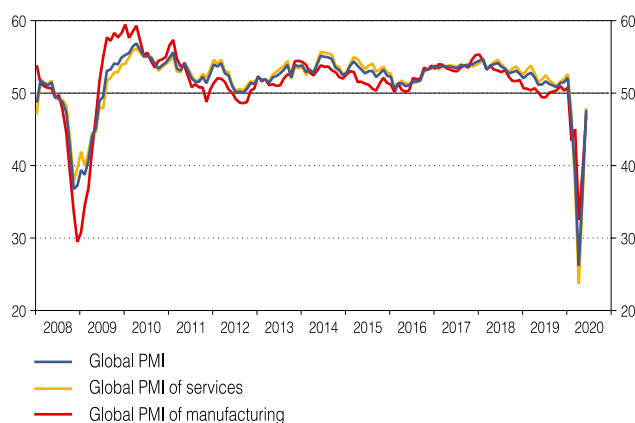
In the second quarter of 2020 external demand for Bulgarian goods and services is expected to post a strong fall on an annual basis, which will moderate in the third and fourth quarters, reflecting the projected lift of a number of COVID-19 containment measures in Bulgaria's major trading partners. Negative risks to these expectations stem mostly from the possible deterioration of the epidemic situation and the subsequent tightening of measures against the virus spread both in Bulgaria's trade partners and in Bulgaria.

Current Business Situation

The composite global economic indicator (global Purchasing Managers' Index PMI) posted a strong increase in May and June 2020 and fell to its historically lowest level due to the economic shock resulting from measures to curb the spread of the coronavirus SARS-COV-2. The global PMI reached 47.7 points in June 2020, exhibiting a faster rate of recovery than that observed after the global financial and economic crisis in 2008.

A partial recovery was reported in both services and manufacturing sectors, still remaining below the neutral limit of 50 points in June. The dynamics of the services index sub-components in June suggested a slower recovery in catering, tourism and transport services. By country, the improvement in business environment in May and June 2020 was broad-based. China continued to report a recovery in the economic activity, with the composite PMI reaching a level above the neutral limit of 50 points. The euro area global PMI posted significant monthly growth, but remained below the 50 points level over the same period.

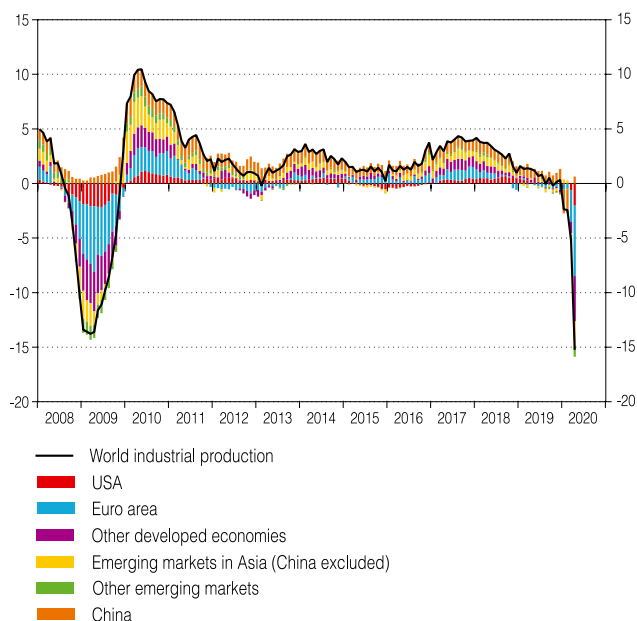
Global PMIs



Source: JP Morgan.

Global Industrial Production

(annual rate of volume change and contribution by region, per cent)



Source: CPB Netherlands Bureau for Economic Policy Analysis.

The change in global industrial output volume in March and April 2020 was in line with the global economic indicator dynamics in the corresponding period. In April the decline in industrial output reached 15.3 per cent on an annual basis due to the measures launched against the spread of COVID-19, which led to a disruption of all production processes in the regions hit by the virus. The euro area and the USA contributed most, while the earlier recovery of China's economy resulted in industrial output growth in the country in April.

In line with the fall in industrial output, the world trade volume¹ decreased strongly. Advanced economies, especially the euro area, had the main contribution to a 16.2 per cent annual decline in global trade.

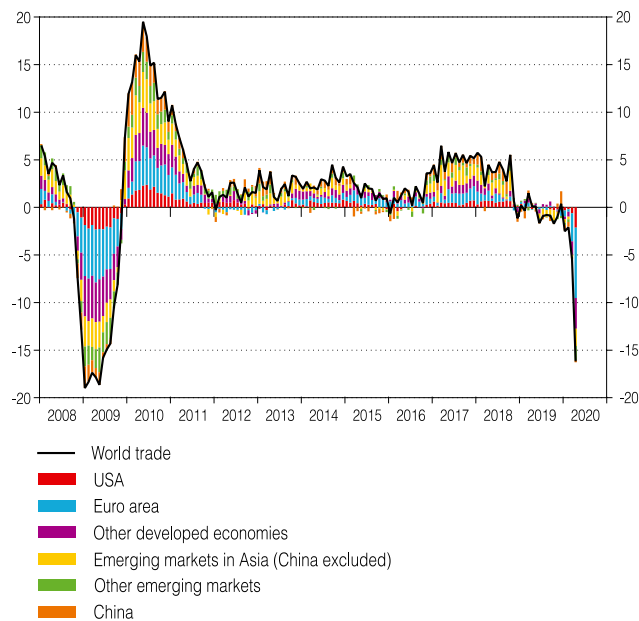
In May 2020 annual global inflation decreased to 1.3 per cent from 2.2 per cent in March and 1.7 per cent in April.² A lower inflation rate was observed in both developing and developed economies, where the annual growth rate of consumer price index accounted for 0.0 per cent on average in April and May. The decrease in global inflation was mainly driven by the significant fall in energy prices on an annual basis.

¹ CPB Netherlands Bureau for Economic Policy Analysis data as of 24 June 2020.

² Based on the World Bank data as of 10 July 2020.

World Trade

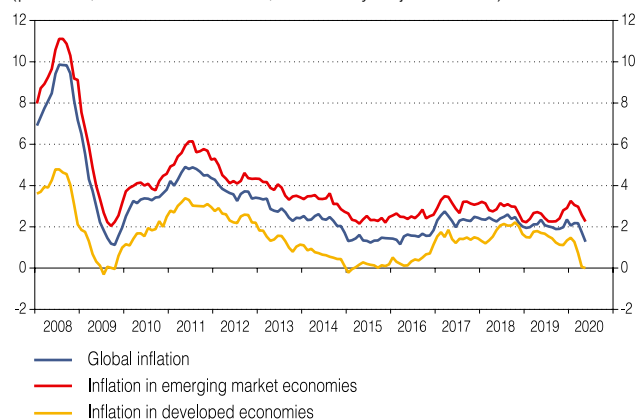
(annual rate of volume change and contribution by region, per cent)



Source: CPB Netherlands Bureau for Economic Policy Analysis.

Inflation Measured through CPI

(per cent, on an annual basis, seasonally adjusted data)



Notes: 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 emerging market economies and developed economies.

Source: the World Bank.

In line with the dynamics of economic indicators, in the second quarter of 2020 external demand for Bulgarian goods and services is anticipated to decline strongly in the second quarter of 2020 reflecting the negative economic shocks caused by COVID-19 pandemic, whereas in the third and fourth quarters the fall is expected to moderate due to a gradual easing of a number of containment measures both in Bulgaria's trading partners and in Bulgaria. Negative risks to these expectations stem mostly from the possible deterioration of the epidemic situation and the subsequent tightening of measures against the virus spread both in Bulgaria's trade partners and in Bulgaria.

Euro Area

As a result of COVID-19 containment measures, euro area real GDP posted a strong fall over the first quarter of 2020. Real GDP quarterly decline came to -3.6 per cent, household consumption and investment contributing most by -2.5 percentage points and -1.0 percentage point respectively.

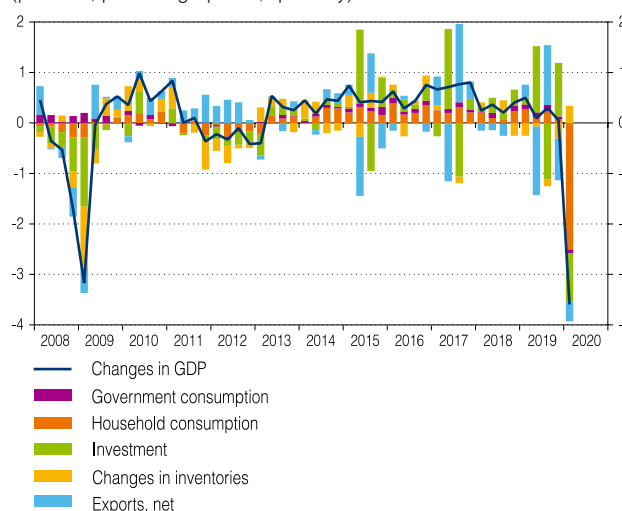
The four largest euro area economies reported a significant decline in real GDP on a quarterly basis: Germany by -2.2 per cent, France by -5.3 per cent, Italy by -5.3 per cent, and Spain by -5.2 per cent.

After reaching their historical lows in April 2020, the euro area PMI rose in May and June, but remained below the neutral level of 50 points. In the second quarter the average value of the composite PMI remained significantly below that of the previous period, exhibiting a considerable drop in the euro area economic activity.

Labour market conditions in the euro area also deteriorated. The unemployment rate in the euro area increased to 7.4 per cent, up by 0.3 percentage points from March. The downward trend in employment growth, which started in 2018, strengthened in the first quarter of 2020. A relatively modest increase in the unemployment rate may be explained by the implementation of large-scale programmes for subsidised employment in the euro area countries. Concurrently, consumer expectations of the unemployment rate over the next 12 months measured by the EC consumer confidence index deteriorated sharply in the second quarter of 2020 compared to the previous period.

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

(per cent; percentage points, quarterly)



Source: Eurostat.

Over the second quarter euro area inflation moderated significantly, reaching 0.3 per cent year on year in June from 0.1 per cent in May and 1.1 per cent on average in the first quarter. The lower inflation was driven mainly by the depreciation of energy products, falling by 9.4 per cent on an annual basis in June against 1.0 per cent on average in the first quarter. Core inflation, excluding food and energy products, also decreased in the second quarter coming to 0.8 per cent on an annual basis in June (against 0.9 per cent in May and 1.1 per cent in the previous quarter).

In June the ECB revised significantly downwards its euro area GDP growth projections for 2020 (by -9.5 percentage points to -8.7 per cent) and upwards its projection for the following two years (by 3.9 percentage points and 1.9 percentage points to 5.2 and 3.3 per cent respectively). According to the ECB, the balance of risks to the growth outlook is seen to remain on the downside. Given the high uncertainty about the economic effects of the measures curbing the spread of COVID-19 and the future development of the epidemic situation, two alternative macroeconomic scenarios for the current and the following two years were published by the institution. The more favourable scenario envisaged a 5.9 per cent decline of real GDP in 2020, while the more unfavourable a 12.6 per cent decline.

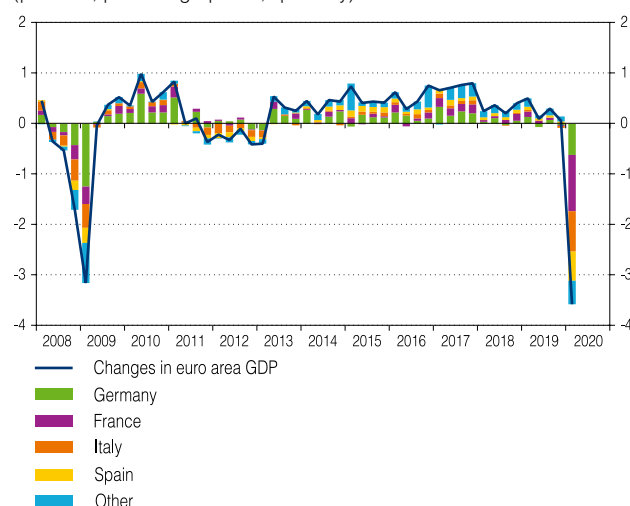
The ECB euro area harmonized inflation forecast for 2020, 2021 and 2022 was also revised significantly downwards to 0.3, 0.8 and 1.3 per cent, reflecting the change in expected price developments of energy products.

At its meeting of 4 June 2020 the ECB Governing Council kept unchanged the reference interest rates and the forward guidance for changing these rates in the future. The ECB Governing Council decided to keep net purchases at a monthly pace of EUR 20 billion under the Asset Purchase Programme (APP) along with the temporary purchases under the programme³ at EUR 120 billion until the end of the year. Reinvestments of the principal payments from maturing securities purchased under the asset purchase programme are projected to continue, in full, for an extended period of time past the

³ For further details, see Monetary Policy Measures in the Euro Area and the United States Related to the COVID-19 Pandemic, Economic Review, 1/2020.

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

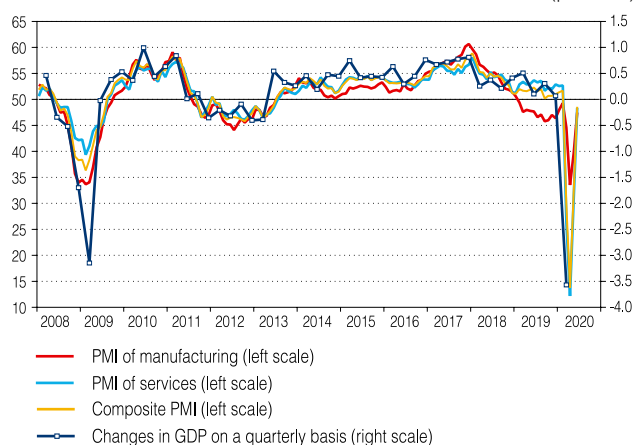
(per cent; percentage points, quarterly)



Sources: Eurostat and BNB calculations.

PMI and the Change in Real GDP in the Euro Area

(per cent)

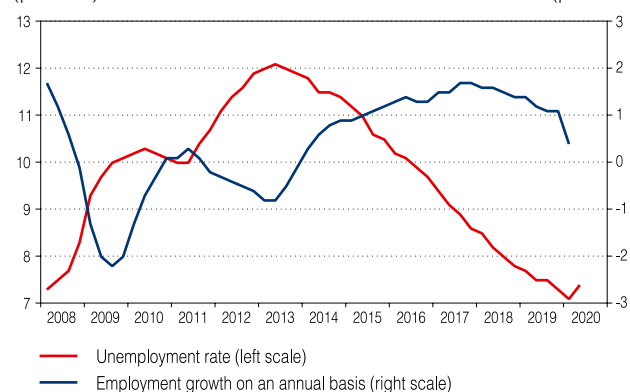


Sources: Eurostat, Markit.

Euro Area Unemployment Rate and Employment Growth

(per cent)

(per cent)



Source: Eurostat.

date when the ECB Governing Council will start raising the key interest rates. The Governing Council modified some of the parameters of the Pandemic Emergency Purchase Programme (PEPP) by increasing its size by EUR 600 billion to a total of EUR 1350 billion. The horizon of net asset purchases was extended by six months to at least the end of June 2021, or until the ECB Governing Council judges that the impacts of the COVID-19 crisis are over. The principal payments from maturing securities purchased under the PEPP will be reinvested until at least the end of 2022. The ECB Governing Council declared its readiness to adjust all of its instruments as appropriate to move towards its aim.

On 18 June 2020 the ECB conducted the fourth operation of the third series of targeted longer-term refinancing operations (TLTRO III). Favourable conditions for the operations⁴ led to a higher interest among banks, 742 banks got EUR 1308 billion. The net effect on euro area banking system liquidity amounted to EUR 548.5 billion, as the operation coincided with the repayment of the LTRO at EUR 760 billion.

As of 30 June 2020 the cumulative amount of purchases under the Eurosystem's extended asset purchase programme totalled EUR 2775 billion, up EUR 108.7 billion on 31 March 2020. As of 3 July 2020 the cumulative amount of purchases under the Pandemic Emergency Purchase Programme (PEPP) announced on 18 March 2020 totalled EUR 365.7 billion.

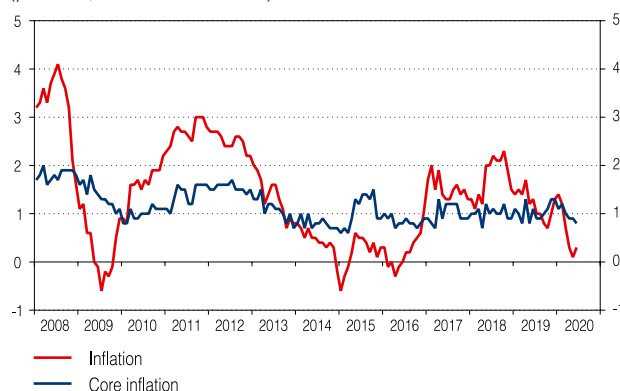
As a result of continuing asset purchases and allocation of funds under TLTRO III, as of 30 June excess liquidity in the euro area banking system increased significantly to EUR 2715 billion from EUR 1910 billion at the end of March 2020. Concurrently, the Eurosystem's balance sheet figure rose to EUR 6289 billion (52.8 per cent of GDP in 2019) on 3 July 2020 from EUR 5063 billion (42.5 per cent of GDP in 2019) on 27 March 2020.

The increased excess liquidity in the euro area banking system was the main factor holding down €STR and unsecured deposit interest rates in the second quarter. In the April–June 2020 period the average value of the €STR was -0.54 per cent and remained unchanged

⁴ Ibid.

Euro Area Inflation Rate

(per cent, on an annual basis)



Notes: Inflation Measured through HICP. Core inflation is based on HICP, excluding energy products, food, alcohol and tobacco products. Source: Eurostat.

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

(per cent)

Institution	Date of release	2020		2021		2022	
		latest	previous	latest	previous	latest	previous
the ECB	VI.2020	-8.7	0.8	5.2	1.3	3.3	1.4
the EC	VII.2020	-8.7	-7.7	6.1	6.3	-	-

Sources: the ECB, the EC.

Projections of Euro Area Annual Inflation Rate

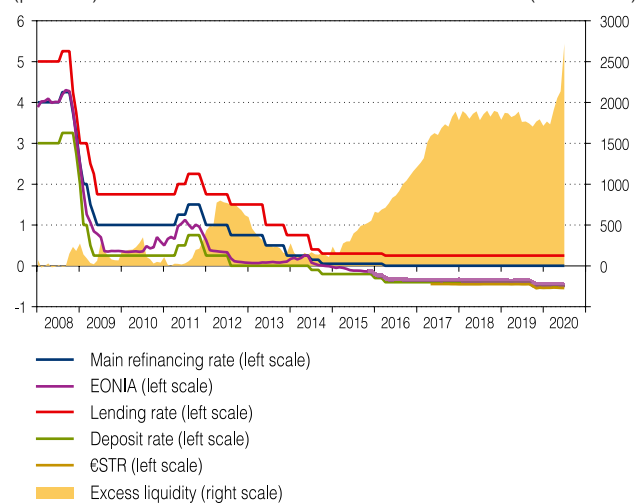
(per cent)

Institution	Date of release	2020		2021		2022	
		latest	previous	latest	previous	latest	previous
the ECB	VI.2020	0.3	1.1	0.8	1.4	1.3	1.6
the EC	VII.2020	0.3	0.2	1.1	1.1	-	-

Sources: the ECB, the EC.

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

(per cent)



Notes: Between 15 March 2017 and 30 September 2019 €STR data are on the preliminary €STR interest rate (pre-€STR). EONIA and €STR data are average for the month.

Source: the ECB.

from the first quarter of 2020. Over the same period the average value of EONIA, computed since 2 October 2019 by applying a fixed spread of 8.5 basis points to the €STR⁵ was -0.46 per cent against -0.45 per cent in the first quarter. The trade volume of overnight deposits in the unsecured money market in the second quarter increased, with its daily average over the period coming to EUR 44.5 billion (against EUR 35.4 billion in the first quarter). Over the review period EURIBOR unsecured deposit rates decreased. On 30 June 2020 one-month deposit rates were -0.51 per cent against -0.42 per cent by end-March 2020, while six-month and twelve-month deposit rates were -0.31 per cent and -0.23 per cent respectively against -0.29 per cent and -0.17 per cent by end-March 2020.

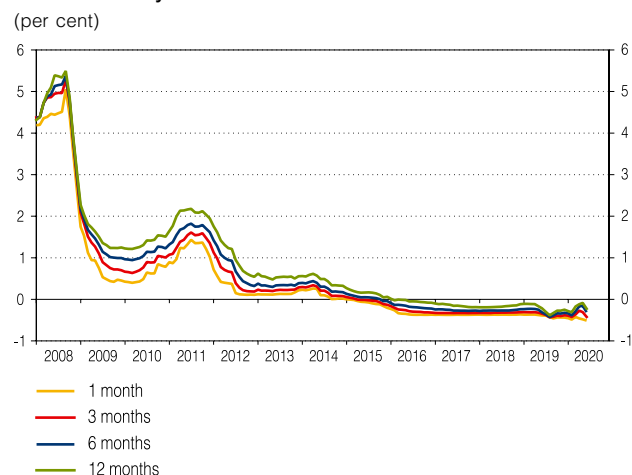
The USA

In the first quarter of 2020 the US real GDP fell by 1.3 per cent on a quarterly basis, from 0.5 per cent in the last quarter of 2019. The GDP fall in the first quarter, exhibiting the strongest quarterly decline since the previous economic crisis in 2008, reflected primarily the contraction in household consumption.

In April leading economic indicators deteriorated sharply, but in May and especially in June recovered partially or fully. After declining in April to 41.5 points (the lowest level since April 2009), ISM-PMI manufacturing index increased to 52.6 per cent in the following two months to reach 52.6 points in June. The decline in ISM-PMI services index was sharper in April, while the recovery was more pronounced at the end of the second quarter. In June the indicator picked up to 57.1 points: the highest level since February 2020. Consumer confidence indicators recorded a significant fall in April and an increase in the following two months without reaching their levels of the first quarter prior to the COVID-19 pandemic. Data for April and May on individual consumption and retail sales posted the strongest monthly fall followed by the strongest monthly rise of the indicators from a historical perspective. Data on the construction sector also pointed to a sharp drop in April and a partial recovery in May and June. Overall, early July data showed a much stronger decline

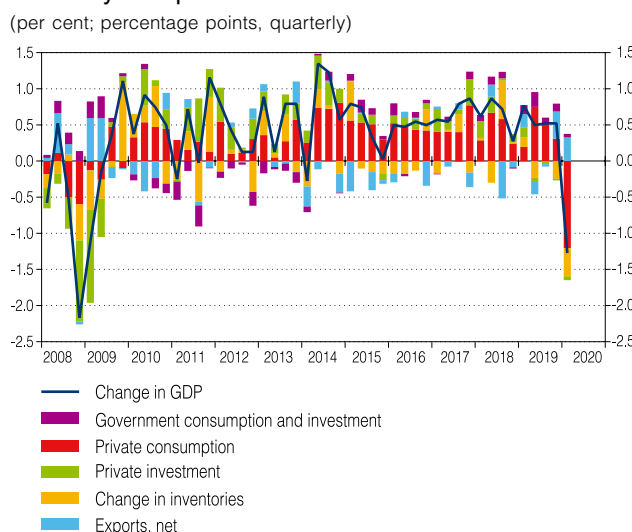
⁵ For further details, see Key Characteristics of the €STR, the New Euro Unsecured Overnight Rate, Economic Review, 3/2019.

EURIBOR Dynamics



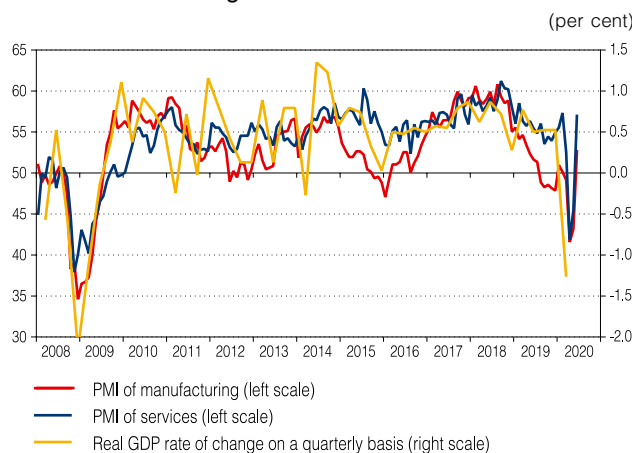
Source: the ECB.

Contribution to the Change in Real GDP in the United States by Component



Source: Bureau of Economic Analysis.

ISM-PMI and Change in US Real GDP



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

of real GDP in the second than in the first quarter of 2020.

Over the second quarter of 2020 the annual consumption inflation slowed down significantly, the annual rate of change of the price index of personal consumer expenditure (PCE) observed by the Federal Reserve falling well below the target of 2 per cent. In May its annual rate of change moderated to 0.5 per cent, down from 1.6 per cent on average in the first quarter of 2020. The annual rate of core inflation (excluding food and fuels) decelerated to 1.0 per cent in April, remaining unchanged in May from 1.7 per cent on average in the first quarter. May CPI data – the other key US inflation indicator – also point to a slowdown in the annual inflation rate from 0.3 per cent in April to 0.1 per cent and 2.1 per cent on average in the first quarter of 2020. The annual growth rate of the core CPI price index (excluding food and energy products) also slowed significantly in May to 1.2 per cent from 1.4 per cent in April and 2.2 per cent on average in the first quarter of 2020.

US labour market conditions deteriorated strongly in the second quarter of 2020. In April employment in the non-agricultural sector declined by around 20.7 million jobs, posting the strongest monthly fall of the indicator in perspective and matching job growth for the period since the financial crisis of 2008. The national unemployment rate in April hit 14.7 per cent, the post-World-War II era high, up from 3.5 per cent in February, exhibiting the lowest level in the last 50 years. In May and June the employment went up by a total of 7.5 million jobs, with the unemployment rate going down to 13.3 and 11.1 per cent. The US economically active population rose to 61.5 per cent in June from 60.2 per cent in April, recording the lowest level since 1973.

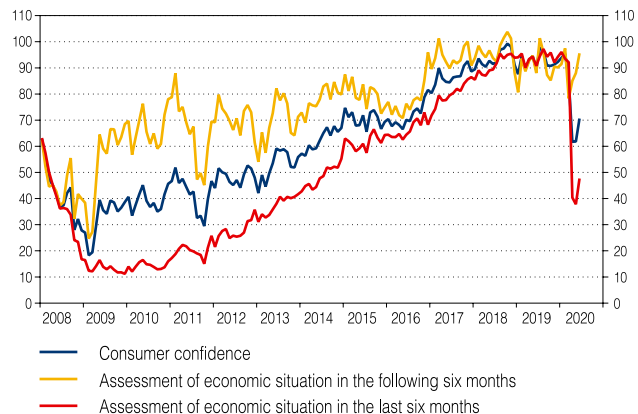
Over the second quarter of 2020 the Federal Open Market Committee (FOMC) continued to introduce the instruments adopted earlier over the year and programmes for providing credit and liquidity⁶. At its April and June meetings, it decided to maintain the current target range for the federal funds rate at 0.00–0.25 per cent.

At its June meeting, for the first time this year, the FOMC published the summarised economic projections of its members. The projection medi-

⁶ See footnote 3.

US Consumer Confidence Indices

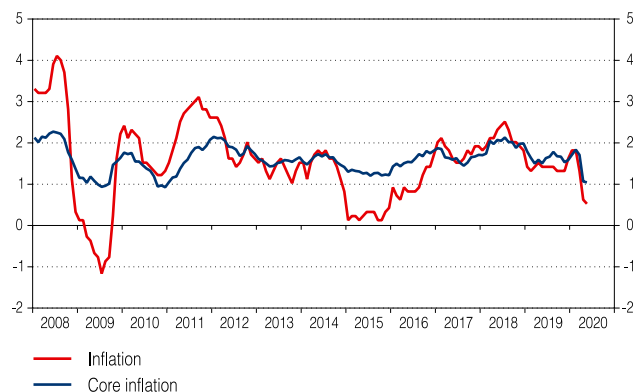
(2000 = 100)



Source: the Conference Board.

US Inflation Rate

(per cent; on an annual basis)



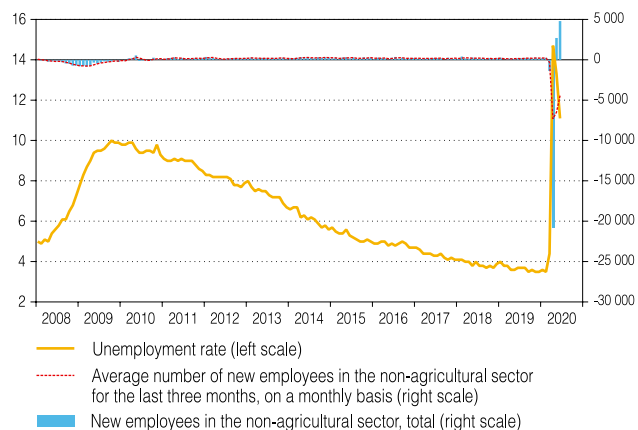
Notes: Inflation is measured by the personal consumption expenditure indicator. Core inflation is measured by the personal consumption expenditure, excluding food and energy expenditure.

Source: Bureau of Economic Analysis.

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

(per cent)

(new employees, thousand)



Source: Bureau of Labour Statistics.

an showed that in 2020 real GDP is expected to decline by 6.5 per cent and inflation measured by the personal consumption expenditure indicator to slow down to 0.8 per cent, while in 2021 real GDP is expected to grow by 5.0 per cent and inflation to accelerate to 1.6 per cent. Concurrently, long-run equilibrium value assessments of unemployment and inflation rate remained unchanged, while the estimate of potential US growth was slightly decreased. Overall, FOMC members' individual projections were wider than usual, even compared with the projections of the global financial crisis start in October 2008. Their larger variation reflected the increased uncertainty surrounding the current crisis. In contrast to macroeconomic indicators' estimates, FOMC members' individual forecasts about the expected level of the federal funds rate showed almost complete consensus about leaving the target range for the federal funds rate at 0.00–0.25 per cent in 2020, 2021 and 2022, while only two of its members expected a higher level of the reference rate at the end of 2022. The estimate of the long-run equilibrium level of federal funds rate remained unchanged at 2.5 per cent.

In the second quarter of 2020 the total assets in the Federal Reserve balance sheet rose from USD 5.8 trillion (27.1 per cent of GDP in 2019) to USD 7.0 trillion (33.0 per cent of GDP in 2019).

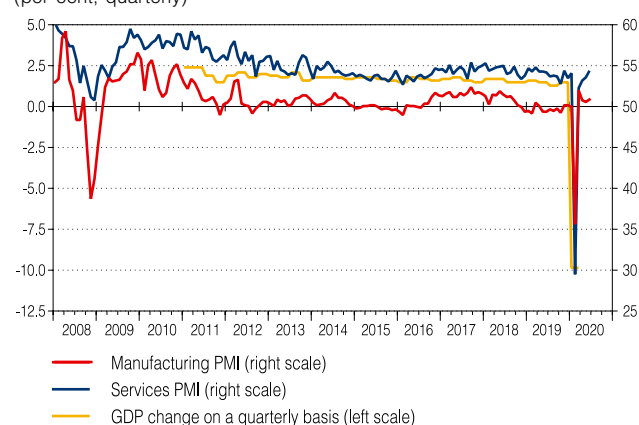
China

PMIs in China recovered rapidly after reaching their historical minimum values in February. The values of services and manufacturing PMI were above the neutral limit of 50 points in the March to June 2020 period. In June the value of manufacturing PMI came to 50.9 points and services PMI to 54.4 points. Components of current output and new orders contributed to this increase. Overall, economic indicators exhibited a recovery in China's economic activity in the second quarter, but the uncertainty about growth outlook remained high. In May at the National People's Congress of the Communist Party of China for the first time since 1990 no target for economic growth for the current year was announced.

Despite signs of a recovery in business climate, private consumption in China remained significantly weaker than that before the COVID-19 crisis. In May retail sales continued to decline (by 3.7 per cent on an annual basis in real

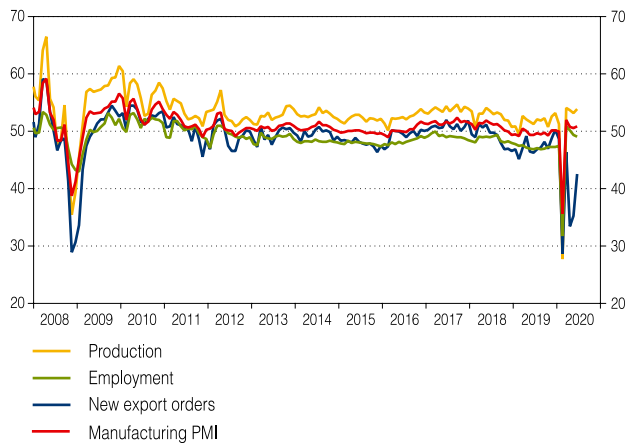
Manufacturing and Services PMIs and Change in China's Real GDP

(per cent, quarterly)



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

Manufacturing PMI in China and Major Components



terms), although at a slower pace than in March (18.1 per cent).

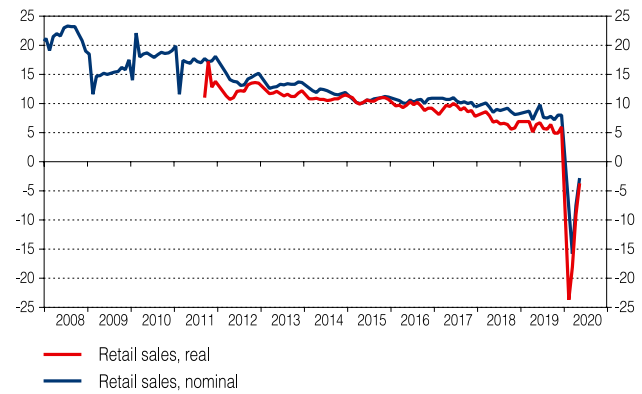
Total investment in China also continued to decrease on an annual basis, posting a 6.3 per cent fall from 16.1 per cent in March. Concurrently, a recovery was observed in industrial output, growing 4.4 per cent on an annual basis compared to a decline of 1.1 per cent in March. A faster recovery was observed in manufacturing, which increased by 5.2 per cent in May on an annual basis compared to a 1.8 per cent decrease in March.

In the second quarter of 2020 inflation in China continued to moderate, reaching 2.5 per cent in June from 4.3 per cent in March. Slower food price rises from 18.3 per cent in March to 11.1 per cent in June, reflecting developments in meat prices, contributed most to the downward inflation dynamics. China started to gradually recover its pigmeat production capacity after the sharp contraction due to the spread of African swine fever in China in the second half of 2019. Sub-indices of non-food goods and energy products had an additional contribution to inflation slowdown.

The People's Bank of China continued to initiate measures aimed at supporting the economic recovery following the COVID-19 crisis. On 1 June the central bank announced two regulatory changes in order to improve credit conditions for firms. The first change provides a grace period to service the debt to micro, small and medium-sized enterprises. Firms may postpone principal and interest payments until

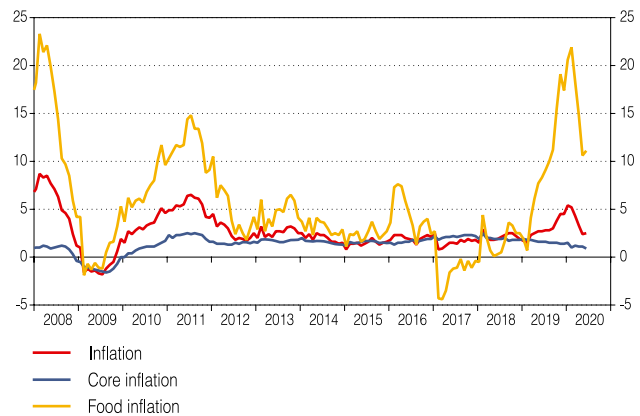
Retail Sales in China

(per cent; on an annual basis)



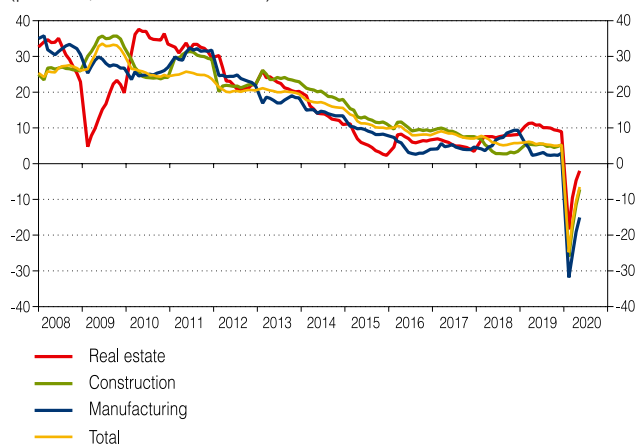
China's Inflation Rate

(per cent; on an annual basis)



Fixed Capital Investment in China by Sector

(per cent; on an annual basis)



31 March 2021 without interest penalty, if they retain the number of employed. According to the assessment of the central bank, this measure will include loans to the amount of CNY 7 trillion. The second instrument is a Plan in Support of Lending to Micro- and Small-sized Enterprises, which will allow certain firms to borrow at looser collateral requirements.

International Commodity Prices

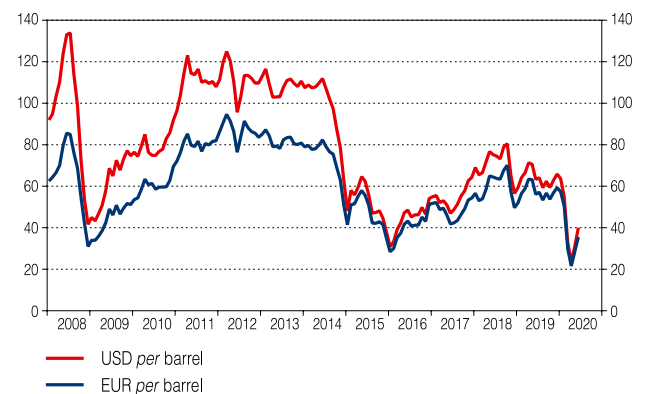
Crude Oil

In April 2020 Brent crude oil price reached its lowest average monthly value from February 2002 as a consequence of the negative effects from the spread of COVID-19 on oil demand and the break-up in negotiations among the members of OPEC+ on oil-production cuts. In the following two months the crude oil price partially recovered reaching USD 39.9 *per barrel* in June. Crude oil price rises were driven by both supply and demand factors. Beyond the end of April the demand started significantly increasing as a result of the easing of COVID-19 containment measures in leading economies. The rigorous implementation of the agreement reached between OPEC+ members on historical output cuts⁷ remained the major factor on the supply side, with Saudi Arabia, the USA and Canada delivering further supply cuts. Following the unusual negative levels of WTI oil prices by end-April 2020, in May and June the price of WTI contracts stabilised at levels close to that of Brent crude oil.

In the first half of July 2020 market expectations about oil prices in the third and fourth quarters of 2020 varied within the range of USD 43.0–43.7 *per barrel*. This was in line with the International Energy Agency expectations (IEA) of the strongest fall in global demand for crude oil in the second quarter of 2020, with oil demand exceeding supply in the second half of the year.

⁷ On 12 April 2020 OPEC, Russia and other oil producing countries agreed on output curbs in daily oil-production to 9.7 million barrels, with effect from 1 May 2020, initially for two months with lower curbs after this period.

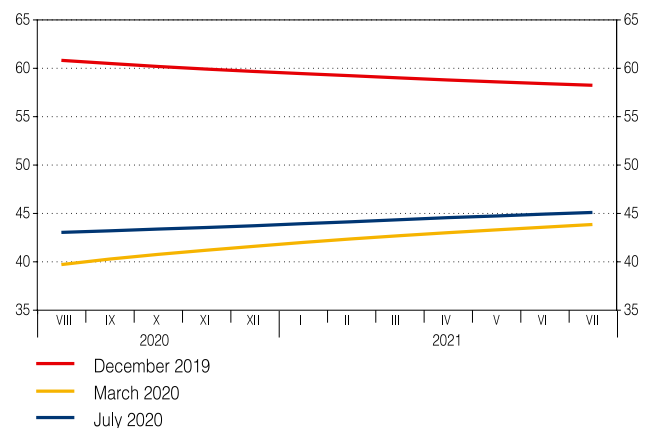
Brent Crude Oil Prices



Source: the World Bank.

Brent Crude Oil Futures Prices

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



Note: July 2020 data refer to the first half of the month.

Source: JP Morgan.

Basic Metals and Food Prices

In May 2020 metal prices in US dollars rose 4.4 per cent on a quarterly basis (4.0 per cent in euro). Metal price rises were driven by the gradual recovery of global economic activity following the easing of containment measures launched globally against the spread of COVID-19. In the second quarter of 2020 metal demand from China increased substantially due to the recovery of China's industrial output. This was a strong positive factor behind the reported rise in international metal prices. Concurrently, the disruption in supply chains in the rest of the world, where COVID-19 spread in the second quarter of 2020, continued to impede supply of metals.

In May 2020 almost all major metals recorded quarterly growth across the metal price index sub-components on an annual basis. The price of copper posting a strong increase both in dollars and euro, contributed most significantly to the growth in overall index. The rise in the price of copper, which is of key importance to Bulgarian exports of goods, reflected the enhanced demand due to the renewed Chinese industrial production. Price rises were also driven by the temporary production disruptions in some of the world's largest copper mines due to the containment measures. Aluminium price, which was adversely affected by the COVID-19 pandemic in April 2020, posted quarterly growth in May both in dollars and euro. Limited aluminium production in China in April 2020 was the reason for its appreciation.

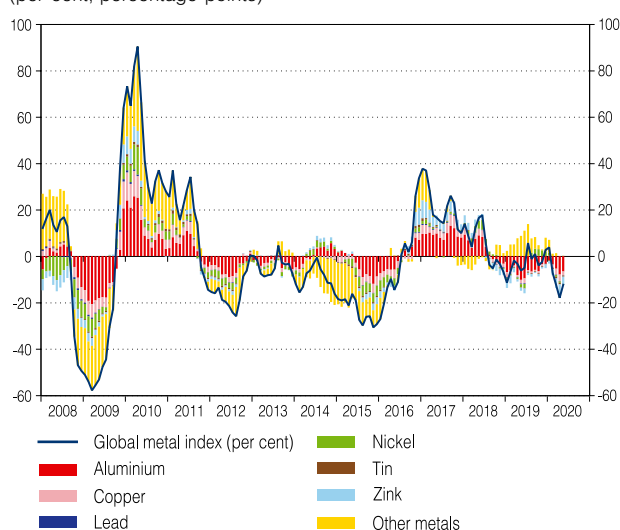
Metal prices in the third and fourth quarters of 2020 are expected to decline year on year both in US dollars and euro.

In May 2020 the global food price index in US dollars reported a slight increase of 0.4 per cent (unchanged in euro) compared to April 2020. As a whole, containment measures launched globally against the spread of COVID-19 prompted no significant changes in food prices. The slight quarterly growth in May was driven by the pigmeat and beef prices, as meat processing was constrained by the spread of COVID-19 in some of the major meat product exporting countries. The price of wheat, which is essential for Bulgaria's exports of goods, recorded a strong month-on-month fall in US dollars and in euro in May 2020. A factor behind the price drop was

Price Indices of Major Raw Materials and Commodity Groups

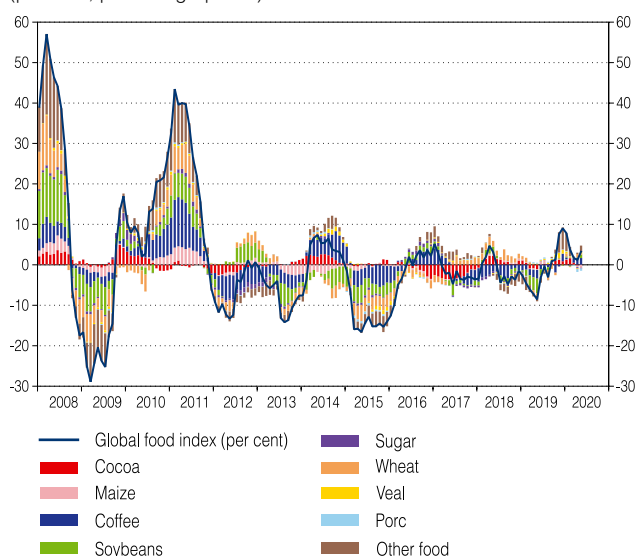
Metals

(per cent; percentage points)



Food

(per cent; percentage points)



Note: Annual rate of change (per cent) and contribution (percentage points) by sub-component of respective price indices measured in US dollars.

Sources: the ECB and BNB calculations.

the lower stockpiling of staple goods in regions with cases of COVID-19 infection. In addition, a better harvest in most large wheat exporters, such as Russia, Kazakhstan and Canada, was expected in 2020–2021 compared to the previous season.⁸

Market participants' expectations of food prices over the projection period point to a rise both in US dollars and euro on an annual basis.

Based on the international metal and food price dynamics, developments in the terms of trade in Bulgaria were favourable in the second quarter of 2020. If exchange rates are assumed to remain unchanged and market expectations of international commodity and food price dynamics materialise, the terms of trade for Bulgaria are expected to improve in the third and fourth quarters of 2020.

⁸ For further details see the regular publication of the United States Department of Agriculture Wheat Outlook: May 2020.

2. FINANCIAL FLOWS, MONEY AND CREDIT

The initial COVID-19 crisis effects on Bulgaria's external flows resulted in growth of the overall current and capital account surplus between January and April 2020 due to a stronger fall in nominal imports of goods than in nominal exports. At the same time, a net inflow of funds on Bulgaria's financial account was reported due to decreased foreign assets of banks as a result of BNB measures initiated to enhance further the banking system liquidity. Over the second half of 2020 the positive current and capital account balance is expected to increase compared to the second quarter of 2020 under the assumption of a partial recovery of external demand for Bulgarian goods and services and sustained positive terms of trade.

Non-government sector deposits in the banking system continued growing comparatively fast in the April–May 2020 period. Limited possibilities for household consumption of certain goods and services during the state of emergency in Bulgaria contributed to the increased bank savings amid the lack of safe and low-risk alternatives of bank deposits. Subsequently, the postponed household consumption and firms' investment projects also contribute to growth of deposits due to the increased uncertainty about the future macroeconomic environment caused by the COVID-19 pandemic. The annual growth rate of credit to non-financial corporations moderated gradually from March, reflecting both demand and supply factors.

In the second half of the year, we expect the generation of precautionary savings to continue boosting attracted funds in the banking system. Annual credit growth to the non-government sector is projected to decelerate gradually, resulting from the weaker demand for loans in the context of a deteriorated macroeconomic environment and uncertainty surrounding the duration of the pandemic. The slowdown in credit growth is also likely to be driven by further tightening of banks' lending standards and conditions, and their lower risk appetite.

External Financial Flows

Data for January–April 2020 indicate that the initial COVID-19 crisis effects on Bulgaria's foreign trade flows are reflected in continuous surplus growth on overall current account⁹, following the trend observed in 2019. Current account surplus growth in the first four months of the year was driven mainly by the lower trade balance deficit and net primary income deficit.

The decrease in trade balance deficit reflected a stronger fall in nominal imports of goods than in nominal exports. Declines in foreign trade flows was most pronounced in March and April, with the pace of annual decline accelerating by month (in April 2020 nominal imports of goods dropped by 18.0 per cent on April 2019, and nominal exports by 29.8 per cent respectively). These developments reflected mainly the negative effects on economic activity and foreign trade flows of the COVID-19 containment measures introduced in March and April 2020 in Bulgaria and globally, as well as the strong fall in international oil prices, reflecting the fact that

⁹ The analysis of balance of payments flows employs information from its analytical reporting. Preliminary data.

Bulgaria is a net importer of petroleum products. Growth of real exports of goods year on year¹⁰ in the first quarter of 2020 contributed to the lower trade balance deficit strongly influenced by results in the first two months of the year, when firms' production was still assured with a high level of export orders from other countries.¹¹ In the first quarter of 2020 real imports of goods rose at a slower pace than annual exports in line with the strong deceleration of domestic demand growth.

The deficit on the net primary income item decreased in the first four months of the year mainly due to the lower dividends paid and distributed profits to non-residents, which was most pronounced in April.¹² The lower dividends paid on the primary income debit side was impacted mainly by the banks with no dividend distribution as a result of BNB measures initiated to enhance additionally banking system liquidity and capital.

The contracted surplus under the net secondary income and the positive balance on net trade in services limited the current account surplus rise in the first four months of 2020 compared with the corresponding period of 2019. The reported decrease in the net secondary income item was driven mainly by lower remittances from Bulgarian citizens working abroad in March and April 2020, probably reflecting the subdued economic activity internationally due to the COVID-19 spread. Lower surplus on the net services sub-item in January–April 2020 compared to the corresponding period of 2019 reflected the stronger decline in nominal exports than imports of services.¹³ The fall in foreign trade flows related to services was primarily driven by the annual decline reported in March and mostly in April 2020, when services exports fell by 57.3 per cent and imports by 59.5 per cent. Travel followed by transport services, which are among the sectors most affected by the measures against the COVID-19 pandemic, posted the strongest fall both in services exports and imports.

¹⁰ Non-seasonally adjusted national account GDP data.

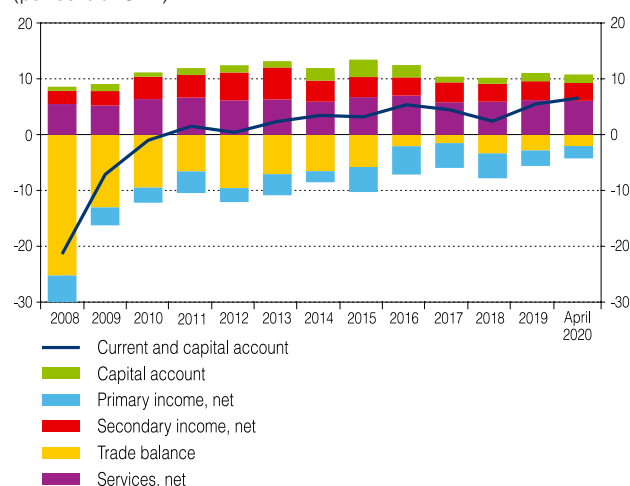
¹¹ NSI Business Situation Survey data.

¹² Preliminary data subject to revision; revisions usually show an increase in outflows to non-residents.

¹³ These developments resulted in a higher decline in annual imports of services in percentage terms in January–April 2020 due to lower flows of imports of services compared to exports of services.

Current and Capital Account Flow Dynamics and Contributions of Individual Components

(per cent of GDP)



Notes: April 2020 data on the current and capital account are accumulated for the last 12 months. GDP data for the last four quarters through the first quarter of this year inclusive, are used in calculating current and capital account flows to GDP ratio for April 2020.

Sources: the ECB, the NSI, BNB calculations.

Flows on Major Balance of Payments Accounts

(EUR million)

	2019	January–April 2020	Change compared to January–April 2019
Current account	2 452.3	625.7	645.4
Trade balance	-1 685.7	-95.1	474.2
Services, net	3 763.7	467.0	-45.8
Primary income, net	-1 680.2	-313.5	325.1
Secondary income, net	2 054.6	567.3	-108.1
Capital account	891.3	311.0	31.4
Financial account	3 122.0	-1 563.0	-2 050.1
Change in reserves	-559.4	2 354.1	

Source: the BNB.

Positive balance on the capital account rose in the January–April 2020 period mainly as a result of higher capital transfers received under EU operational programmes and lack of outflows under capital transfers for the same period. This effect was almost entirely offset by greenhouse gas emission allowance purchases over the period.¹⁴

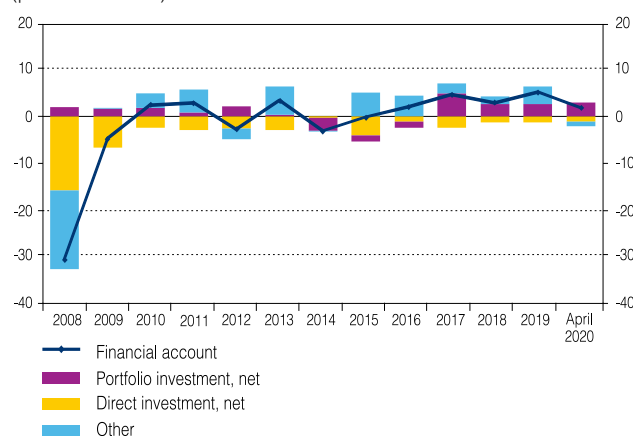
Reflecting the above developments in current and capital account flows, in April 2020 the total surplus accumulated for the last 12 months rose from December 2019, with the trade deficit decline contributing most substantially.

Given the fact that COVID-19 containment measures were most comprehensive and stringent between March and May 2020 and only partially eased in June, it is expected that the negative effects on Bulgaria's foreign trade flows will be concentrated especially in the second quarter of 2020, resulting in a fall in the current account surplus in the remainder of the second quarter. The lower current account surplus will be mainly driven by the expected significant negative contribution of net exports of goods and services to real GDP growth, irrespective of the retained positive terms of trade for Bulgaria. Expectations for the third and fourth quarters of 2020 are based on the assumption of gradual overcoming the pandemic spread and more significant easing of containment measures. In line with these assumptions the trade in goods and services is expected to shift from deficit in the second quarter into surplus in the remainder of the year, this being of key importance for the projected increase in current account surplus. Positive goods and services trade balance will reflect the assumption of a partial recovery of external demand (without reaching its levels of the corresponding period of the previous year), resulting in quarter-on-quarter growth of real exports of goods and services. At the same time, imports growth will be limited by the dampened investment dynamics in Bulgaria, characterised by a relatively high import component. The maintenance of favourable trading conditions will also contribute to goods and services trade surplus. An increase in the current account balance over the projected horizon is expected to be reported on an annual basis as

¹⁴ Payments for emission allowance purchases were recorded in gross acquisition/disposal of non-produced non-financial assets, debit of capital account item.

Financial Account Flow Dynamics and Contributions of Individual Components

(per cent of GDP)



Notes: The Other item includes Other Investments, Net, and Financial Derivatives (Other than Reserves) and Employee Stock Options, Net. April 2020 data on financial account flows are accumulated for the last 12 months. GDP data for the last four quarters through the first quarter of this year inclusive, are used in calculating financial account to GDP ratio for April 2020.

Sources: the BNB, the NSI, BNB calculations.

well (cumulatively for the last four months) as a percentage of GDP compared to the first half of 2020 and will be further impacted by the forecast of a contraction in Bulgaria's real economic activity.¹⁵ In the third and fourth quarters of the year the capital account surplus is expected to rise both in nominal terms and as percentage of GDP compared to the second quarter of 2020, which will be underpinned by the EC decision to redirect funds under EU operational programmes to address the consequences of the COVID-19 spread. A portion of these funds is likely to be in the form of capital transfers to Bulgaria.

Between January and April 2020 a net inflow of funds on Bulgaria's financial account in the amount of EUR 1.6 billion was reported. The negative financial account balance reflected largely the decline in banks' foreign assets in March 2020 as a result of BNB measures announced on 19 March aimed at further enhancing Bulgarian banking system liquidity in relation to the COVID-19 pandemic. The increase in government's and other sectors foreign liabilities¹⁶ contributed to a much lesser extent to the formation of a negative balance on the financial account over the period. In April the financial account balance accumulated over the last 12 months was positive although it posted a significant decline compared to the end of 2019 mainly due to the marked decrease in foreign assets.

Between January and April 2020 direct investment liabilities (reporting FDI inflows into Bulgaria) decreased from the corresponding period of 2019 to EUR 178.1 million against EUR 330.7 million in the same period of 2019.¹⁷ At the end of the first quarter of the year total stock of FDI in Bulgaria accounted for 75.3 per cent of GDP. Breakdown by economic sector shows that real estate activities, manufacturing and financial and insurance activities remained the sectors with the highest stock of FDI.

As a result of net flows on the current, capital and financial account, according to the balance of payments data for the last 12 months gross

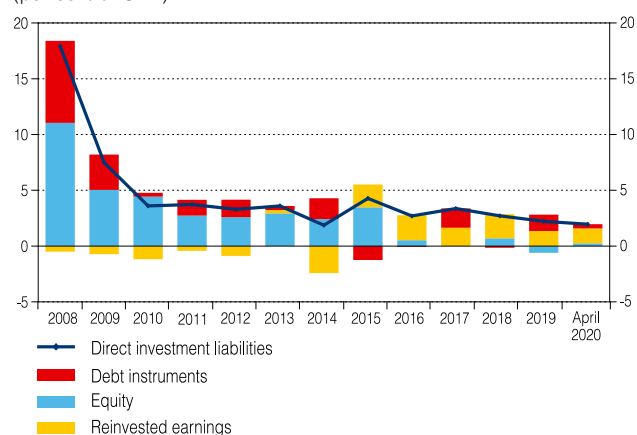
¹⁵ GDP data refer to the last four quarters, *i.e.* to the third and fourth quarters of 2020, respectively.

¹⁶ It should read sectors other than general government, banks and the central bank.

¹⁷ Preliminary data subject to revisions which usually show an increase in foreign direct investment liabilities.

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

(per cent of GDP)



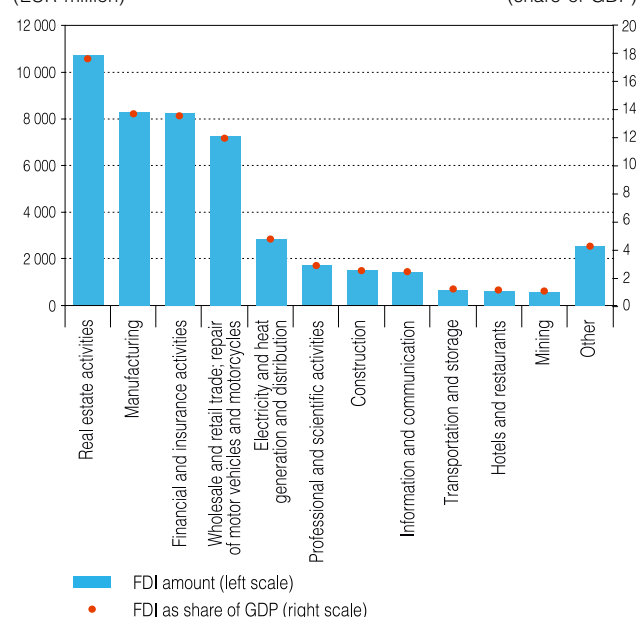
Notes: April 2020 data on flows on direct investment liabilities are accumulated for the last 12 months. GDP data for the last four quarters through the first quarter of this year inclusive, are used in calculating direct investment liabilities to GDP ratio for April 2020.

Sources: the BNB, the NSI, BNB calculations.

FDI by Sector as of the End of the First Quarter of 2020

(EUR million)

(share of GDP)



Note: GDP data for the last four quarters, through the first quarter of this year inclusive, are used in calculating the investment to GDP ratio for the first quarter of 2020.

Sources: the BNB, the NSI, BNB calculations.

international reserves rose significantly by April 2020¹⁸ from the end of 2019 mainly reflecting BNB measures to boost banking system liquidity. In April the coverage of average nominal imports of goods and non-factor services for the last 12 months increased to 9.3 months against 8.2 months in December 2019. Bulgaria's international reserves¹⁹ to short-term external debt ratio was also high accounting for 341.1 per cent in April 2020 against 294.8 per cent in December 2019.

In April 2020 Bulgaria's gross external debt increased on the end of 2019 to EUR 34.2 billion (56.0 per cent of GDP). The highest rise was reported in general government debt and to a much lesser extent in intercompany lending and other sectors' debt. Government external debt grew mainly as a result of new tranches disbursed under loan agreements signed with the European Investment Bank and the Council of Europe Development Bank in April 2020 worth EUR 400 million. The increase in Bulgaria's gross external debt by April 2020 compared to previous year end was partly limited by the decrease in banks' foreign debt.

In terms of maturity structure, the high share of long-term debt in Bulgaria's total gross external debt accounting for 76.4 per cent in April 2020, has reduced economy's vulnerability to potential volatility of international capital flows as a result of the COVID-19 crisis. The downward trend in foreign debt interest payments on an annual basis persisted in April 2020. This suggests that the current terms for servicing external obligations by Bulgarian residents remain favourable.

Monetary and Credit Aggregates

In the first five months of 2020 non-government sector deposits²⁰ in the banking system continued to increase at comparatively high rates, the annual growth rate accounting for 8.6 per cent in May against 9.7 per cent at the end of 2019.

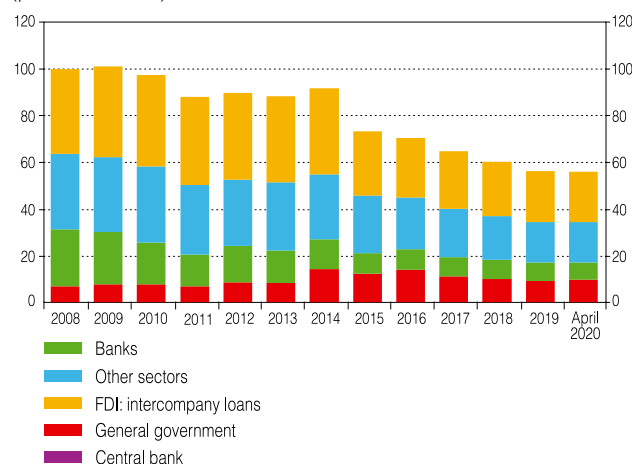
¹⁸ Valuation adjustments and price revaluation excluded.

¹⁹ The analysis is based on gross international reserves on the BNB Issue Department balance sheet. The market value of international reserves includes changes stemming from transactions, valuation adjustments and price revaluation.

²⁰ Non-government sector deposits include deposits of households, non-financial corporations and financial corporations. Deposits of households and non-financial corporations comprise the largest share of all non-government sector deposits (96.2 per cent on average for the last 12 months in May 2020) and therefore the analysis is focused on these two sectors.

Gross External Debt

(per cent of GDP)



Notes: Further details on individual institutional sectors are available on the BNB website, Statistics, External sector/Gross External Debt. Nominal GDP for the last four quarters through the first quarter of this year inclusive, is used in calculating gross external debt to GDP ratio for April 2020.

Sources: the BNB, the NSI, BNB calculations.

Gross External Debt as of April 2020

(EUR million)

	Amount	Change	
		Since December 2019	For the last 12 months
General government	5 786.0	358.4	404.7
Central bank	0.0	0.0	0.0
Banks	4 560.5	-340.9	-207.0
Other sectors	10 525.6	11.7	-306.2
FDI – intercompany loans	13 300.9	72.4	-187.1
Total	34 172.9	101.6	-295.6

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

Source: the BNB.

Following the introduction of a state of emergency in the country on 13 March 2020, this dynamics was mainly driven by the impossibility to make certain consumer and investment expenditure due to the nature of the measures to contain the spread of COVID-19 intended to restrict social contacts and mobility of people. This, in turn, resulted in an increase in bank savings in the absence of a safe and low-risk alternative to bank deposits. Following the gradual easing of containment measures, deposit growth is likely to reflect the postponement of consumption by households and investment projects by corporations due to the heightened uncertainty surrounding the macroeconomic environment future development owing to the COVID-19 pandemic. In the first five months of the year household deposits continued to comprise the bulk of non-government sector deposits, with their share amounting to 65.9 per cent in May. The maintenance of very low interest rates on deposits prompted both firms and households to continue to save mainly in the form of overnight deposits. In terms of currency, over the first five months the share of non-government sector deposits in foreign currency increased somewhat, especially in euro, while that in levs declined. However, deposits in national currency still comprised the bulk of non-government sector deposits accounting for 60.7 per cent as of May 2020.

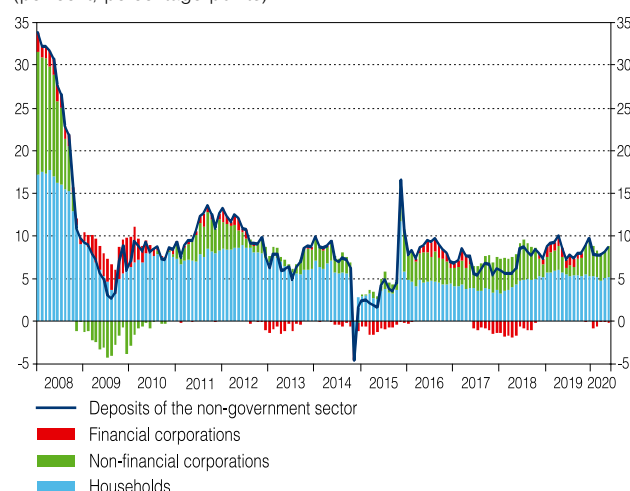
The effective implicit rate of minimum required reserves²¹ remained at levels similar to the previous year's ones, reflecting the continuing high inflow of attracted funds from residents in the banking system between January and May 2020. In May this rate was 9.37 per cent (9.43 per cent in December 2019) with bank deposits with the BNB comprising 8.25 percentage points in the fulfilment of minimum required reserves, and the remaining 1.12 percentage points forming recognised cash balances.

Annual growth of reserve money accelerated significantly to 15.0 per cent in May (-0.3 per cent at the end of 2019). This dynamics reflected the year-on-year substantial rise in banks' reserves due to an increase in banks' excess reserves.

²¹ 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 reserve base, 5 per cent from non-residents and 0 per cent from the state and local government budgets.

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

(per cent, percentage points)



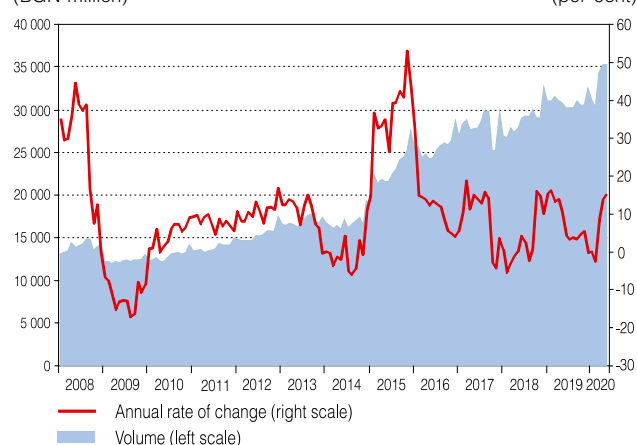
Note: The annual growth rate of non-government sector deposits in November 2015 reflects the exhausted base effect of KTB removal as a reporting unit from the monetary statistics in November 2014.

Source: the BNB.

Reserve Money

(BGN million)

(per cent)



Note: Data for 2020 cover the period to May inclusive.

Source: the BNB.

In May 2020 excess funds on banks' minimum reserve accounts over the required minimum of reserve assets under Ordinance No 21 was 82.4 per cent on an average daily basis, from 29.8 per cent in December 2019. The significant increase in banks' excess reserves was entirely driven by the BNB package of measures introduced on 19 March 2020 aiming at further strengthening banks capital and liquidity to limit the negative effects of the COVID-19 pandemic on the banking system and economic activity.²² In the period under review minimum required reserves continued to grow due to a rise in the deposit base.

Annual growth of currency in circulation slowed down slightly in the first four months of the year before increasing in May close to its rate in December 2019 and reaching 10.0 per cent against 10.3 per cent at end-2019. Despite the projected decline in private consumption in the second quarter of the year, the maintenance of reserve funds by some economic agents in the form of cash amid increased uncertainty may contribute to the strong dynamics of currency in circulation.

Reserve currency (euro) transactions with the BNB is the banks' main lev liquidity management instrument under currency board arrangements. In the first five months of 2020 BNB net sales of euro to banks were EUR 1.3 billion.

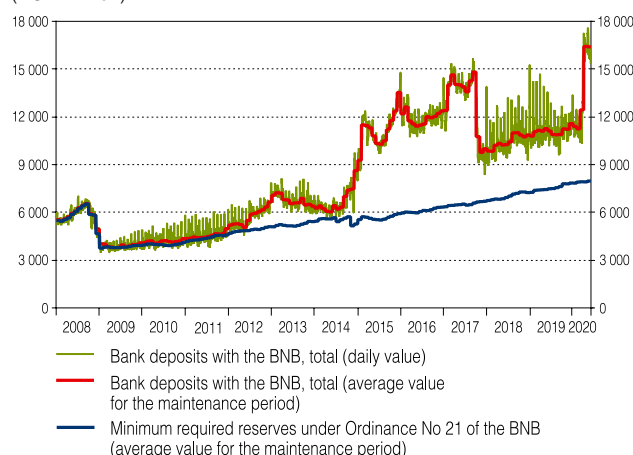
Bank assets grew 5.7 per cent on an annual basis in May 2020.²³ Claims on the non-government sector contributed most substantially to growth in bank assets. Growth in total assets was driven to a lesser extent by higher banks' excess reserves and portfolios in Bulgarian government securities. At the same time, banks' foreign assets declined year on year as a result of BNB implemented measures.

²² For further details, see BNB [press release](#) of 19 March 2020.

²³ Data from the sectoral monthly reporting of other monetary financial institutions were used.

Bank Deposits with the BNB

(BGN million)



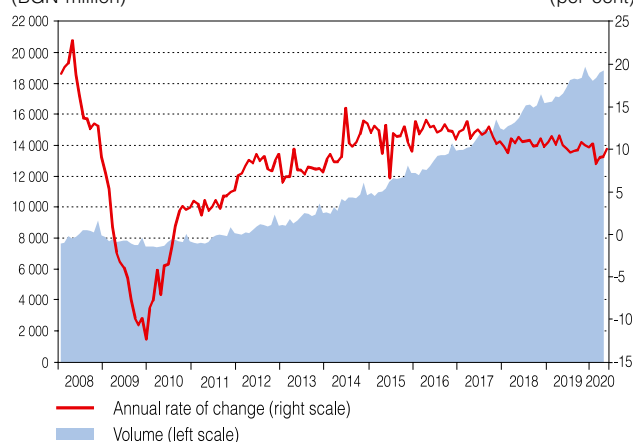
Note: Data for 2020 cover the period to May inclusive.

Source: the BNB.

Currency in Circulation

(BGN million)

(per cent)



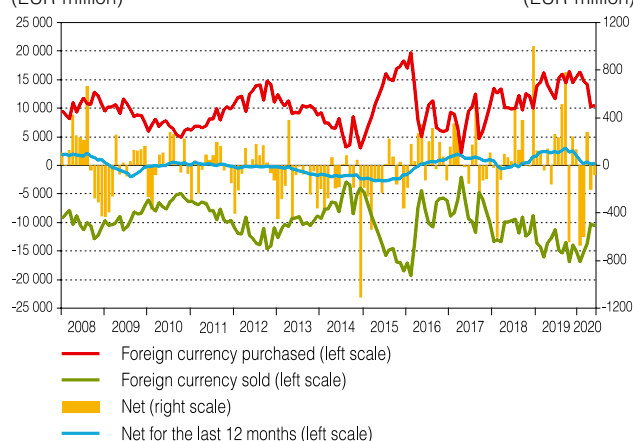
Note: Data for 2020 cover the period to May inclusive.

Source: the BNB.

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

(EUR million)

(EUR million)



Notes: Data for 2020 cover the period to May inclusive.

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.

Growth of credit to non-financial corporations and households²⁴ has moderated gradually to reach 5.0 on an annual basis in May (7.4 per cent by end-2019). Private sector credit trends were shaped by factors involving both demand and supply. Deteriorated macroeconomic environment, lower domestic demand and uncertainty surrounding the duration of the pandemic limit credit demand. The uncertainty about future earnings and profits leading to uncertainty regarding the ability to service existing debts is an additional factor that is likely to decrease loan demand by households and corporations. Concurrently, the results of the BNB quarterly bank lending survey suggest tightening of lending policies in approving credit applications of corporations and households, the main factor behind this, according to banks, being their lower risk appetite.

In May 2020 credit growth to non-financial corporations slowed down to 2.9 per cent on an annual basis (5.9 per cent in December 2019). Loans, excluding overdrafts, continued to contribute positively to the developments in loans extended to corporations while the contribution of overdraft was negative. The volumes of newly extended²⁵ corporate loans decreased in April and May 2020²⁶ and so did new loans in all currencies. At the same time, the share of lev-denominated loans in total new loans to non-financial corporations continued to increase since the first quarter of 2020 at the expense of the share of loans in euro. In May loans in national currency reached 49.4 per cent of total new corporate loans, while euro-denominated loans amounted to 49.0 per cent.

In March 2020 annual growth of loans to households also tended to moderate amounting to 8.2 per cent in May against 9.5 per cent

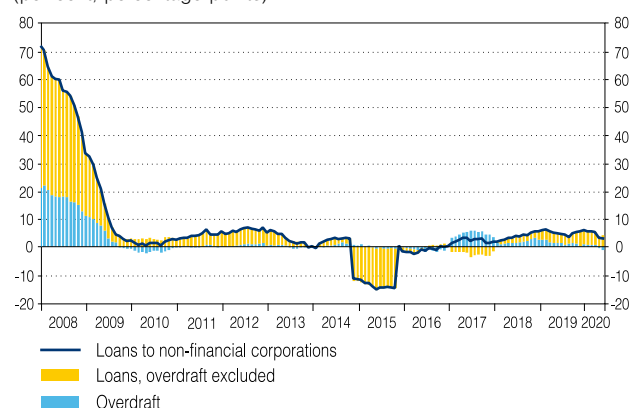
²⁴ Loans represent the bulk of bank claims on the non-government sector with a share of 97.3 per cent on average for the last 12 months as of May 2020, and the analysis was therefore focused on them. In addition to loans, claims also include repurchase agreements, securities other than shares, and shares and other equity instruments. Non-government sector 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 94.0 per cent on average in the last 12 months as of May 2020 and therefore trends and developments in lending of these two sectors are addressed.

²⁵ The terms 'new' and 'newly extended' are hereinafter referred to as the statistical category 'new business'.

²⁶ Based on monthly data.

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

(per cent, percentage points)

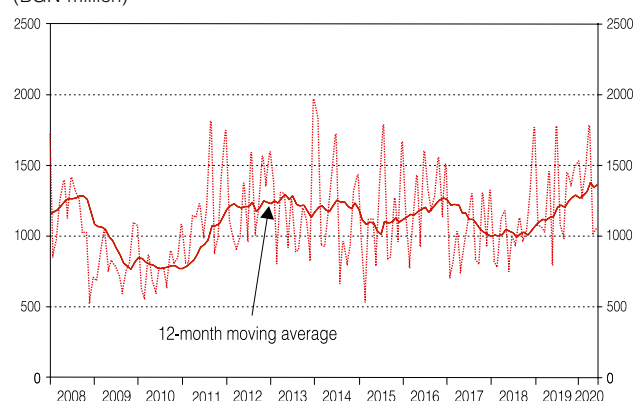


Note: The annual growth rate of loans to non-financial corporations in November 2015 reflects the exhausted base effect of KTB removal as a reporting unit from the monetary statistics in November 2014.

Source: the BNB.

New Loans to Non-financial Corporations (Monthly Volumes)

(BGN million)



Notes: Data for 2020 cover the period to May inclusive.

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.

at end-2019. Growth rates of both consumer and housing loans slowed down with consumer loans decelerating more significantly. Dynamics of other loans to households continued to be mainly driven by government repayment of loans extended under the National Programme for Energy Efficiency of Multi-family Residential Buildings which exceeded the volume of new loans under this programme. In April and May 2020 the volumes of new consumer and housing loans declined, with new consumer loans exhibiting a more substantial decrease.²⁷

Summarised results of the bank lending survey²⁸ in the first quarter of 2020 suggest tightening of credit standards²⁹ in approving credit applications of corporations and households, and most significantly for housing loans. Corporate credit conditions³⁰ tightened most in terms of collateral requirements, fees and commissions and additional requirements to borrowers. Furthermore, lending standards for consumer and housing loans tightened also in terms of the maximum amount and term of the loan, and premia for riskier loans. Banks' lower risk appetite was the main reason behind the stricter credit policy (credit standards and conditions) and to a lesser extent the deterioration of the overall macroeconomic environment and business climate in the sectors with a large share in the credit portfolio, lower creditworthiness of borrowers and higher collateral risk. Bank expectations for the second quarter of 2020 show that credit standards for corporate, consumer and housing loans will tighten further.

In the first quarter of 2020 banks report lower demand for loans by households and small- and medium-sized enterprises. Loan demand by large corporations slightly increased mainly in the segment of short-term loans. The main factor behind lower demand for bank resources was

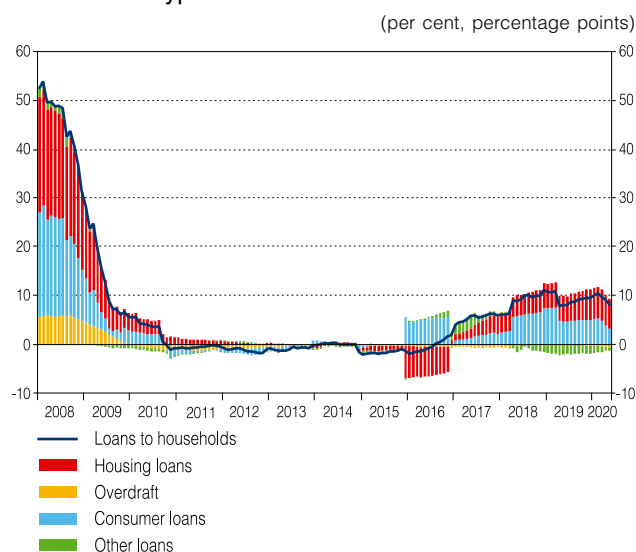
²⁷ Based on monthly data.

²⁸ Bank Lending Survey in Bulgaria is carried out by the BNB on a quarterly basis. Summarised results of the survey are presented through weighting bank responses by their market share in the relevant credit segment.

²⁹ 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 eligible by banks, taking into account specific priorities by sector, *etc.* Credit standards specify also all relevant conditions to be met by a borrower.

³⁰ Credit conditions typically involve the reference interest rate surcharge, the loan amount, conditions for its utilisation and other conditions, fees and commissions, collateral or guarantees to be provided by a borrower.

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

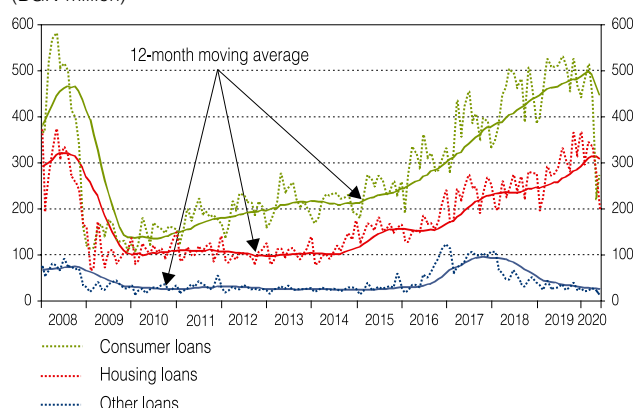


Note: Based on additional information received from reporting units, a revision of household loans was carried out according to their purpose of use in the period December 2015 – August 2019.

Source: the BNB.

New Loans to Households (Monthly Volumes)

(BGN million)



Note: Data for 2020 cover the period to May inclusive.

Source: the BNB.

the deteriorating macroeconomic environment. At the same time, persistently low interest rates continued to push up demand. Between April and June 2020 demand for both corporate loans and consumer and housing loans is expected to decline further.

In March and April 2020 banks reported the negative consequences of the COVID-19 pandemic involving a substantial decline in the credit demand by corporations and households and a considerable decrease in the amount of newly extended loans. Significant tightening of credit standards, especially for housing loans, was observed over the same period. Banks' expectations until the end of the year point to a further decline in demand, however weaker than that in March and April 2020, lower tightening of credit standards and shrinking contraction on new loans. Concurrently, banks expect an increase in interest rates, particularly on corporate loans.

In the second half of the year, we expect the generation of precautionary savings to continue to boost attracted funds in the banking system. Annual credit growth to the non-government sector is projected to decelerate gradually, resulting from the weaker demand for loans in the context of a deteriorated macroeconomic environment and uncertainty surrounding the duration of the pandemic. The slowdown in credit growth is also likely to be driven by further tightening of banks' lending standards and conditions, and their lower lending risk appetite.³¹

Interest Rates

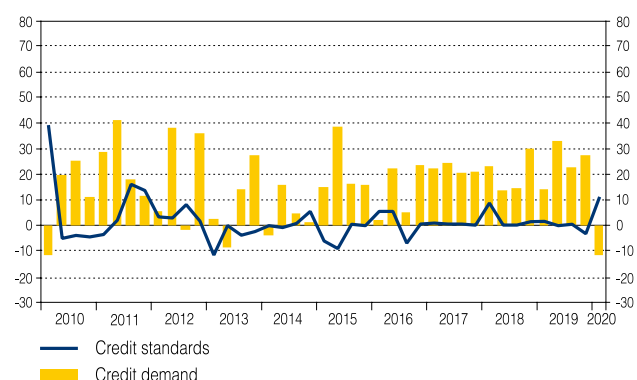
The dynamics of interbank money market rates by the end of March reflected the measures implemented by the BNB to enhance the banking system liquidity. The significant increase in liquidity maintained mainly as an excess reserve with the BNB discouraged banks to trade in interbank markets. This contributed to bringing LEONIA Plus index to the level of the interest rate on banks' excess reserves and to a significant decline in traded volumes in the interbank

³¹ The projection of credit growth has been prepared without taking account of the amount of loans to individuals and firms guaranteed by the Bulgarian Development Bank and deferred loans under the BNB Procedure for Deferral and Settlement of Liabilities Payable to Banks and their Subsidiaries – Financial Institutions in relation to the state of emergency enforced by the National Assembly on 13 March 2020.

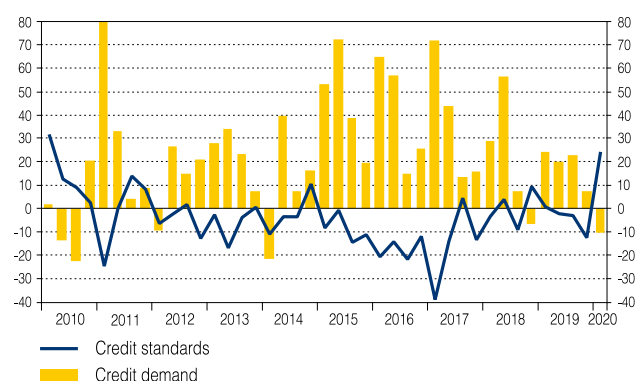
Changes in Demand and Credit Standards

(balance of opinions; percentage points)

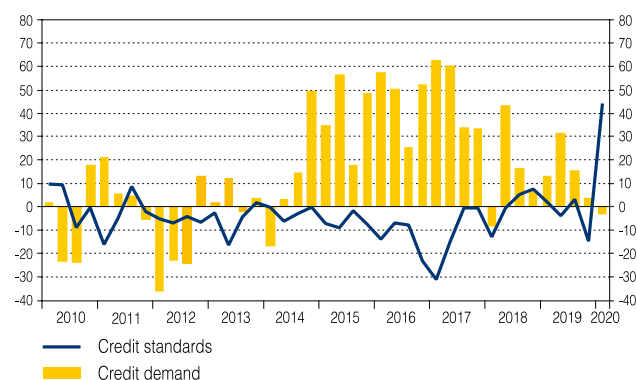
a) corporate loans



b) consumer loans



c) housing loans



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

Source: the BNB.

market in the second quarter of the year. In June LEONIA Plus index accounted for -0.68 per cent, dropping by 12 basis points from March while traded volumes declined by 63.0 per cent over the same period. As a result of LEONIA Plus fall, while keeping €STR largely unchanged, the negative spread between the two indices widened out, amounting to -13 basis points in June 2020 (-3 basis points in March).

In May 2020 the average weighted interest rate on new time deposits of non-financial corporations and households declined by 9 basis points from its March level to 0.09 per cent. This dynamics reflected the greater decrease in the average weighted interest rate on new time deposits to non-financial corporations to 0.06 per cent in May (0.33 per cent in March 2020). By currency breakdown, interest rates on US dollar-denominated deposits to corporations and households posted a more significant decline, but it should be taken into account that historically US dollar interest rates are relatively more volatile. Concurrently, while negative interest rates on corporate deposits in euro were reported on single occasions for individual months of 2019 and 2020, in May 2020 a negative interest rate was recorded for the first time on corporate deposits in local currency, which may be due to one-off transactions.

Interest rates on new loans to non-financial corporations continued to decline gradually in April and May 2020.³² Interest rates on new housing loans remained at their low levels, while interest rates on new consumer loans increased. Factors which are likely to contribute to growth of consumer loan interest rates include a possible rise in the risk premia and worsened creditworthiness of borrowers.

In May 2020 the interest rate on new corporate loans came to 3.1 per cent for lev-denominated, and to 2.4 per cent for euro-denominated loans, declining by 10 basis points from their March levels.³³ Interest rates on new loans to non-financial corporations remained broadly unchanged over the same period.

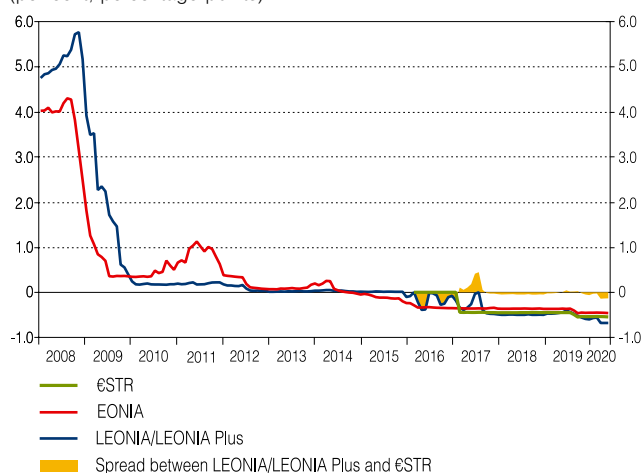
The annual percentage rate of charges (APRC) on new consumer loans rose to 10.0 per cent in

³² Based on data for the last 12 months through May 2020 inclusive.

³³ The above values of interest rates on loans to non-financial corporations are weighted averages on a 12-month basis.

Overnight Interbank Money Market Rates (Average Monthly Value)

(per cent, percentage points)



Notes: Data for 2020 cover the period to May inclusive. With effect from 2 October 2019 €STR replaced EONIA. EONIA will be computed by applying a fixed spread to the €STR and published until the end of 2021.

LEONIA Plus replaced LEONIA on 1 July 2017. LEONIA Plus monthly values are calculated as an arithmetic average for days when overnight unsecured lending transactions are concluded in the interbank market in levs.

Sources: the BNB, the ECB.

May (9.9 per cent in March 2020).³⁴ This dynamics was driven to a larger extent by the rising interest rate component of charges and to a significantly smaller extent by the increase in the implicit rate of non-interest service charges.

In May APRC on new housing loans remained at the historically low level of 3.4 per cent. The low levels attained were maintained in both interest rate component of charges and implicit rate of non-interest service charges.

The spread between lending rates on new loans to corporations in Bulgaria and in the euro area continued to decline gradually in April and May 2020. However, the interest rate spread widened in new loans to households and in particular in consumer loans. These developments were driven by the steady and even increasing downward trend in lending rates on consumer loans in the euro area in April and May, while lending rates on the same type of loans increased in Bulgaria over the same period.³⁵

In the second half of 2020 interest rates on deposits are expected to remain at the attained very low levels. The main factor that will affect the low interest rates on deposits is the maintenance of high liquidity in the banking system as a result of the continuing high inflow of attracted funds from residents, some of them for a precautionary reason. Despite the low cost of attracted resources, the interest rates on new loans are expected to increase somewhat in the second half of 2020. Their upward dynamics will reflect the overall deterioration of the economic environment and business climate coupled with the potential rise in risk premia due to lower creditworthiness of borrowers and heightened collateral risk. The increase in non-performing loans in the banking system due to the contraction of economic activity may also contribute to the rise in interest rates on new loans.³⁶

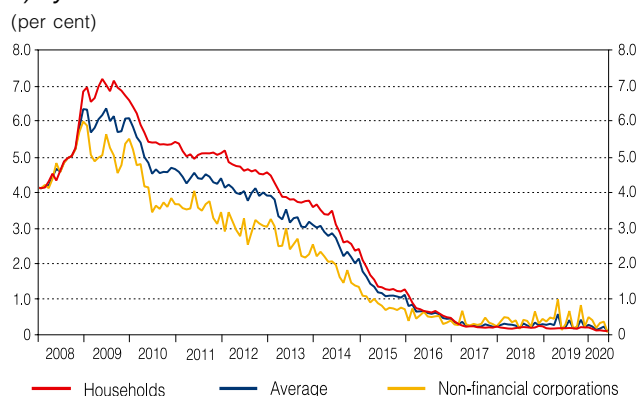
³⁴ Values indicating the APRC and interest rates are weighted averages of the interest rates on household consumer and housing loans on a 12-month basis.

³⁵ 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, overall in national currency and euro, weighted by the relevant volumes of new loans for a 12-month period.

³⁶ The projection of interest rates has been prepared without taking into account the effect of interest-free loans extended to individuals under the Programme for guaranteeing interest-free loans adopted by Decision of the Council of Ministers No 257 of 14 April 2020 as part of Bulgarian government's anti-crisis measures supporting people deprived of the possibility to work due to the COVID-19 pandemic.

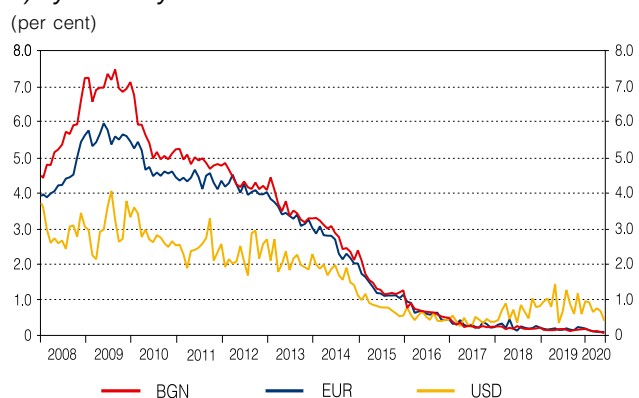
Interest Rates on New Time Deposits

a) by sector



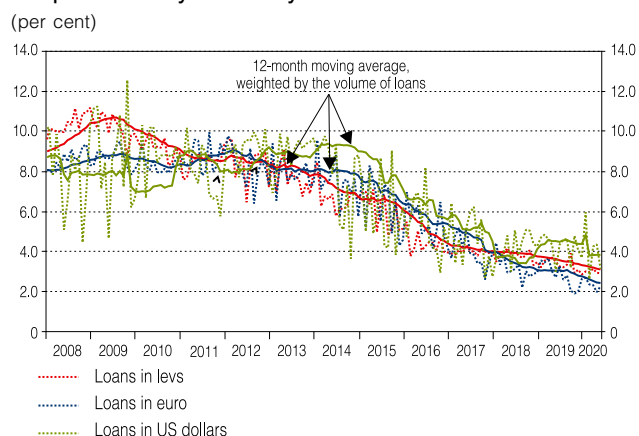
Notes: Data for 2020 cover the period to May inclusive. The average interest rate is calculated for all sectors, maturities and currencies weighted by the relevant volumes of new deposits. Average deposit rates for non-financial corporations and households are based on interest rates for all maturities and currencies weighted by relevant volumes of new business.

b) by currency



Notes: Data for 2020 cover the period to May inclusive. 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.

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



Note: Data for 2020 cover the period to May inclusive. Source: the BNB.

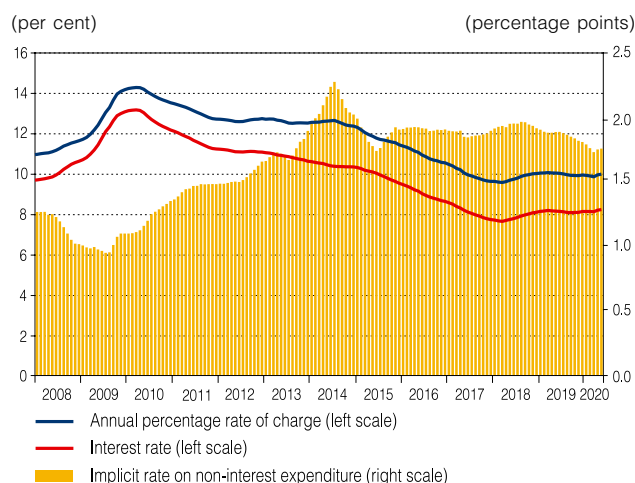
Between May and June 2020 no government securities auctions were held in the primary market. The long-term interest rate used to assess the degree of convergence remained unchanged from the previous month at 0.20 per cent in May, increasing by 48 basis points to 0.68 per cent in June. In the context of a limited number of transactions in the secondary market of government securities, which are taken in account when determining the long-term interest rate, the dynamics of this indicator reflected, with some lag, the increased yield on government securities in the primary market auctions in April. At the same time, the volatility in government securities, issued in international capital markets, remained high. The yields on these securities, started to increase after the introduction of the state of emergency on 13 March in Bulgaria, but saw a significant downward correction since last week of May. Consequently, yields in the medium-term end of the maturity curve were lower at the end of the second quarter compared with end-March. Concurrently, the spread between the yields on long-term and short-term securities widened in the second quarter, whereby a majority of euro area countries reported a similar increase in the slope of the maturity curve as a result of the heightened global uncertainty due to the COVID-19 pandemic effects.

The downward trend in the yields on Bulgarian government securities, issued on international markets and the accompanying narrowing of the spread between yields on Bulgarian and German government bonds could be explained by the significant increase in the volume of securities purchases by the ECB which affected the entire market of euro-denominated fixed income securities, and by the BNB measures initiated to enhance additionally the banking system liquidity, which lead to an increase in banks' excess reserves in Bulgaria.

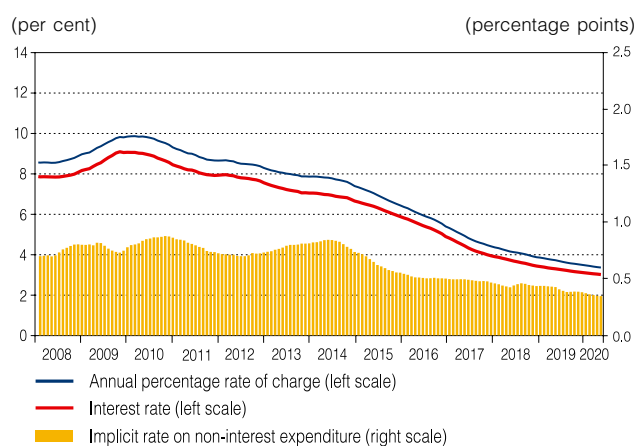
Significant uncertainty persists with regard to the expected dynamics of Bulgarian government securities yields in the third and fourth quarters of 2020. In terms of external factors, a stronger financial market volatility is likely to be observed both in case of slower containment of the pandemic globally and an extension of the existing or introduction of new restrictive measures, and due to the uncertainty surrounding the future of the pan-European initiatives to tackle the COVID-19 crisis. Heightened uncertainty also

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

a) consumer loans



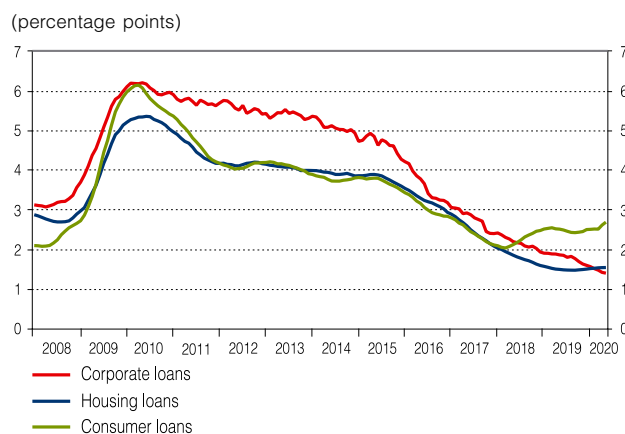
b) housing loans



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

Source: the BNB.

Interest Rates on New Corporate and New Housing Loans: the Spread between Bulgaria and the Euro Area

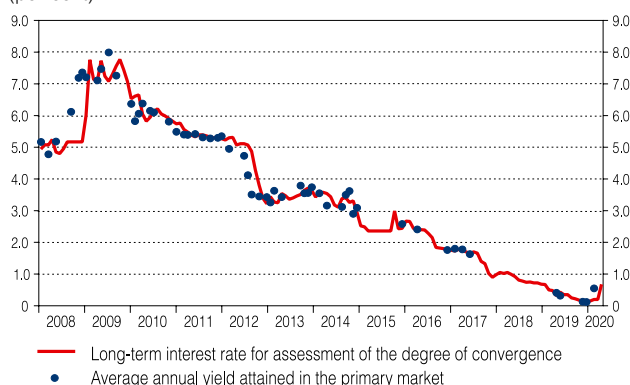


Note: Data for 2020 cover the period to May inclusive.

Sources: the BNB, the ECB.

Long-term Interest Rates in the Primary and Secondary Markets of Government Securities

(per cent)



Note: The chart shows the yields reported on the primary and secondary markets of government bonds with ten-year-and-six-month original maturity. The frequency of auctions for issues with this maturity corresponds to the number of observations marked in blue.

Source: the BNB.

remains over the internal factors in terms of both supply and demand for government securities by resident financial institutions.

Financial Flows between the Consolidated Budget and Other Sectors of the Economy

Government revenue and expenditure policy, and budget financing operations affect the allocation of liquidity across economic sectors³⁷.

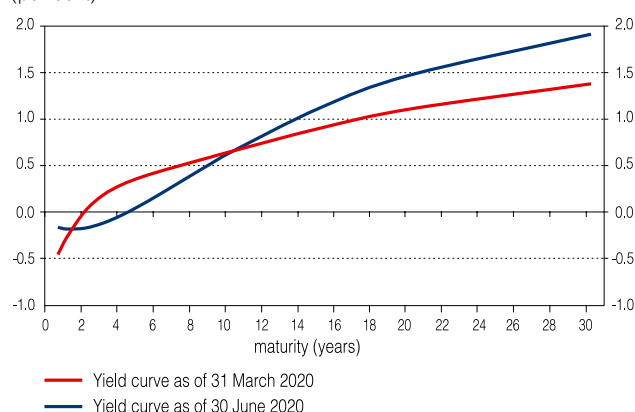
During the period from the introduction of the state of emergency in Bulgaria to the end of May the non-government non-bank sector was a net beneficiary of gradually rising liquidity from the budget as a result of the increasingly tangible effect of budget automatic stabilisers operation and government's discretionary measures³⁸ to support businesses and households in the context of the COVID-19 crisis. The liquidity of this sector was positively affected by the advance payments worth BGN 728 million from the budget (most of them made in April) under

³⁷ The division of economic sectors in this section is based on the information in the monthly reports under the Consolidated Fiscal Programme and therefore does not match the sector classification used in the National System of Accounts.

³⁸ For further information on government's discretionary measures resulting from the COVID-19 crisis, see the research topic on the Impact of the COVID-19 Crisis on Public Finances, published in *Economic Review*, issue 1 of 2020. It should be noted that the capital increase of the Bulgarian Development Bank by BGN 700 million for the purpose of providing guaranteed loans to households and corporation is reported as an increase in non-government non-bank sector's liquidity as the ultimate purpose of these funds is taken into account.

Reference Government Securities Yield Curve in Bulgaria

(per cent)



Notes: The reference yield curve of Bulgarian government securities is based on BNB 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.

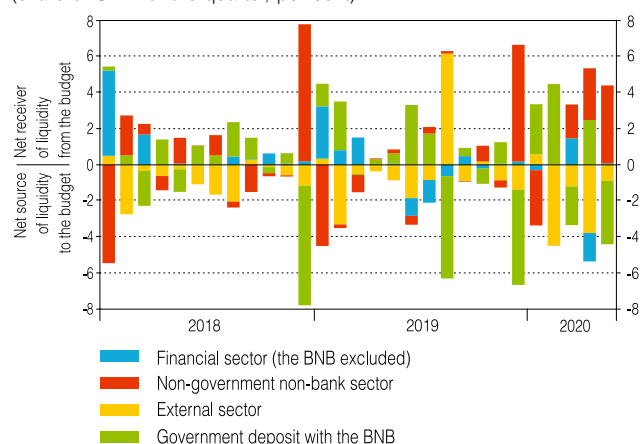
Sources: the MF, BNB calculations.

the EU Common Agricultural Policy. Total liquidity allocated to non-government non-bank sector in the first two months of the second quarter accounted for 7.2 per cent of the projected GDP³⁹ for the quarter. In April the main sources of liquidity for the budget included the external and financial sector (BNB excluded) mainly due to the increased debt financing (as a result of new tranches disbursed under loan agreements signed with the European Investment Bank and the Council of Europe Development Bank worth EUR 400 million and domestic government securities with nominal value BGN 400 million, respectively). Redirected liquidity from these two sectors to the budget in April (totalling 5.4 per cent of the projected GDP for the quarter) exceeded the net financial flows to non-government non-bank sector for the month (accounting for 2.9 per cent of the projected GDP for the quarter), resulting in an increase in government deposit with the BNB by 2.5 per cent of the projected GDP for the quarter. In May government deposit declined by 3.5 per cent of the projected GDP for the second quarter, being the main source for redirecting liquidity from the budget to the non-government non-bank sector over that period.

Based on data available as of mid-July it may be concluded that as a whole for the second quarter the non-government non-bank sector is a main beneficiary of liquidity from the budget, while the external sector continues to be the main source of liquidity as a result of new debt financing, grants under EU programmes and reimbursements for advanced payments from the budget under the EU Common Agriculture Policy (mainly in June). The financial sector (BNB excluded) and government deposit with the BNB (a decline by BGN 93 million from end-March to BGN 9311 million as of June 2020) were, to a much lesser extent, sources of liquidity for the budget. In the second half of the year the budgetary policy impact on non-government sector liquidity is expected to remain positive and reflect mainly the effects of automatic stabilisers' operation and government's discretionary measures. Positive financial flows from the external sector to the budget are anticipated to be sustained and expected positive impact of the redirected funds under EU programmes

Consolidated Budget Effect on Other Sectors' Liquidity (Monthly)

(share of GDP for the quarter, per cent)



Notes: This chart is based on monthly data of CFP implementation by including also information obtained from MF monthly bulletins on state budget performance and major CFP indicators and MF Central Government Debt and Guarantees monthly bulletins. GDP data for the second quarter of 2020 from BNB macroeconomic forecast prepared in June 2020 are used to assess liquid flows in May and April 2020.

Sources: the NSI, the BNB, BNB calculations.

³⁹ BNB macroeconomic forecast of June 2020 is used.

to address the economic consequences of the COVID-19 crisis.

In the second quarter of 2020 the long-term upward trend in international reserves continued, their market value (including valuation adjustments and price revaluations) rising by EUR 3.2 billion on end-2019 to EUR 28.0 billion (BGN 54.8 billion). The amount of gross international reserves reflects the dynamics of financial flows generated in the process of external and internal economic factors interaction, and according to the currency board principles corresponds to the BNB Issue Department balance sheet liabilities. Higher banks' reserves with the BNB, and in particular their excess reserves as a result of the BNB implemented measures, contributed most substantially to the increased liabilities of the BNB Issue Department at the end of the first half year of 2020 period *vis-à-vis* December 2019. These developments were driven to a lesser extent by the increased government deposit with the BNB mainly due to the budgetary surplus reported in that period and the positive net debt financing through external loans and domestic government securities.

In the second half of 2020 bank reserves with the BNB are expected to remain at high levels contributing to year-on-year growth of gross international reserves. As regards currency in circulation, some slowdown in annual growth may be expected due to weakening private consumption in consequence of the contraction in economic activity. The continued operation of the automatic stabilisers and possible higher discretionary expenditure at year end are expected to result into a decline in government deposit with the BNB over the projection horizon, which could be partly offset by the increased amount of grants under EU programmes. In the event of a more active issuing policy of the government, the expected negative budgetary balance in the second half of the year is not likely to lead to a similar decline in government deposit with the BNB.

3. ECONOMIC ACTIVITY

In the first quarter of 2020 real GDP growth slowed down to 0.3 per cent on a quarterly basis. The COVID-19 containment measures introduced at the end of the quarter resulted in a decline in all main components of domestic demand while goods and services exports grew on a quarterly basis. Labour market conditions deteriorated. According to seasonally adjusted national accounts data, between January and March 2020 the total number of employed in the economy fell by 0.9 per cent quarter on quarter.

As a result of the COVID-19 containment measures in Bulgaria and abroad, over the second quarter of 2020 business climate and consumer confidence indicators deteriorated significantly. These developments reflected the increased uncertainty surrounding the Bulgarian economy, strong decreases on a quarterly basis in retail sales, turnover in industry and industrial production and services indices coupled with the rapid increase in the unemployment rate to 9.0 per cent in May according to Employment Agency data. Short-term business statistics indicators give signals about real GDP falling over the second quarter of 2020 both on a quarterly and annual basis.

Under the assumptions of no second wave of COVID-19 and new tightening of containment of measures, in the second half of the year the economic activity is expected to start gradually recovering on a quarterly basis, but real GDP is projected to remain significantly below its level for the corresponding period of 2019.

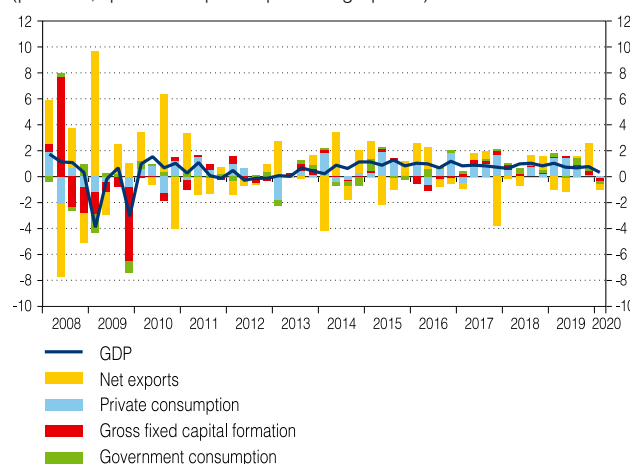
Current Economic Environment

In the first quarter of 2020 quarterly growth of real GDP decelerated from the previous quarter to 0.3 per cent (seasonally adjusted NSI national account data). Exports of goods and services contributed positively to growth due to the fact that COVID-19 cases were mostly concentrated at the end of the quarter and corporations were provided with sufficient orders from other countries in the first two months of the year. Concurrently, all major components of domestic demand posted a decrease compared with the fourth quarter of 2019: the strongest fall was reported in gross fixed capital formation followed by government consumption and household final consumption expenditure.

The increase in total exports between January and March 2020 was attributable to the group of goods, while services reported a fall consistent with the restrictions on cross-border movement of goods and people.⁴⁰ According to the end-use breakdown of goods quarterly growth was reported in imports of goods for intermediate use, while consumer and investment goods posted a decline.

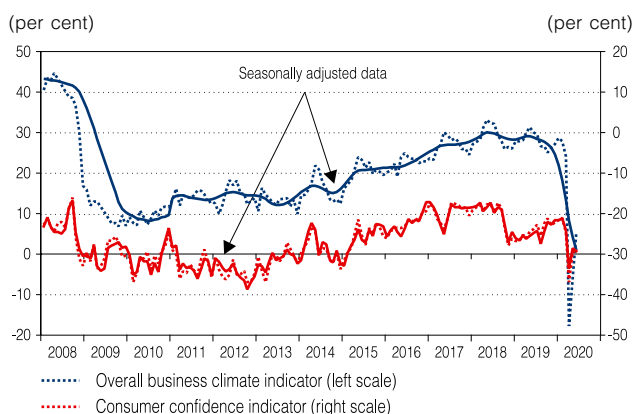
⁴⁰ Based on the balance of payments data the reported fall in exports of services in the first quarter of the year was due to the group of services related to travel and transport, and business services. For details, see Chapter 3, Exports and Imports of Goods and Services Section.

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



Sources: the NSI, BNB calculations.

Business Climate and Consumer Confidence



Sources: the NSI, the EC.

The downward dynamics of domestic demand reflected the worsening of the macroeconomic environment since the beginning of the year as a result of the spread of COVID-19 worldwide. The first quarter of 2020 saw a decline in private consumption quarter on quarter. The fall in real disposable income of households contributed to this effect due to the reported decrease in employment in all major economic sectors (agriculture, industry and services), as well as to the more cautious economic behaviour of agents and the impossibility to consume some categories of goods and services during the national state of emergency⁴¹. In terms of the structure, the drop in private consumption was attributable to lower expenditure on durable goods in the context of retained high household savings rates (12.7 per cent compared with 10.2 per cent in the fourth quarter of 2019)⁴² mostly in the form of deposits in banks. This possibly reflected the worsened consumer confidence⁴³ and increased uncertainty, which was more strongly pronounced at the end of the quarter. The negative contribution of government consumption to GDP growth was due to the fact that wage, healthcare and operating expenses incurred as a result of the pandemic were offset by savings in other items of government expenditure.⁴⁴

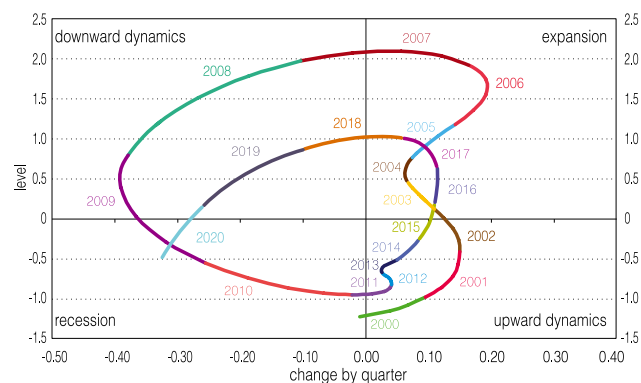
⁴¹ For more information on the effects of COVID-19 on GDP components, see the research topic entitled Main Transmission Channels of the COVID-19 Pandemic to Economic Activity in Bulgaria, Economic Review, 1/2020.

⁴² NSI household budget survey data are used, which have been consequently seasonally adjusted by the BNB. For details, see Chapter 3, Household Behaviour Section.

⁴³ EC seasonally adjusted data.

⁴⁴ For further details, see Chapter 3, Fiscal Policy Impact on the Economy Section.

Business Climate Indicator Dynamics



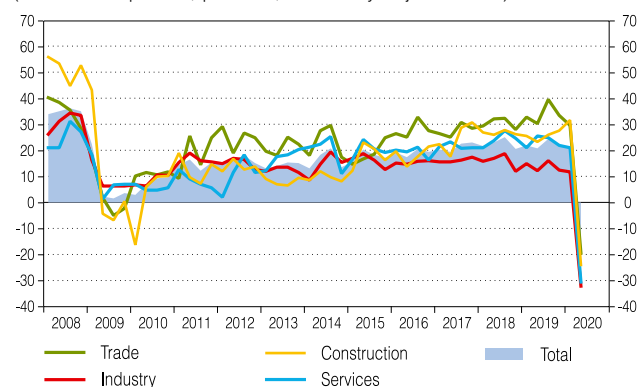
Notes: The chart compares the business climate level (the vertical axis) and its quarterly change (the horizontal axis). The business climate series has been transformed using the HP filter (with a parameter $\lambda = 100$) in order to eliminate short-term fluctuations, after which it has been standardised.

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

Sources: the NSI, BNB calculations.

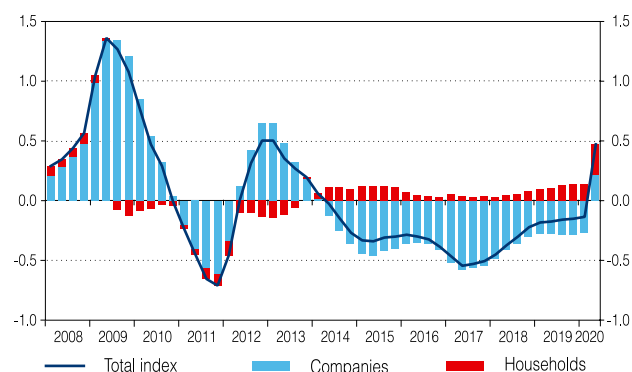
Expectations about Future Economic Activity

(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 of the global indicator show that the uncertainty in economy 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: EC, BNB calculations.

Over the quarter gross fixed capital formation also decreased on a quarterly basis. BNB estimates⁴⁵ suggest that this was entirely due to private investment, whereas public investment posted substantial growth. Lower private investment was in line with the industrial corporations' policy to face new orders from Bulgaria and abroad by higher capacity utilisation of existing capital rather than its expansion, as well as with the worsened expectations of managers in industry about future production activity due to uncertainty caused by the spread of COVID-19. Public investment growth reflected mainly the increase in capital expenditure financed by EU funds.

The measures to curb the spread of COVID-19 in Bulgaria and abroad were the reason behind the significantly worsened economic indicators in the second quarter of 2020. The overall business climate indicator declined by 32.8 points on average from the previous quarter⁴⁶ and stayed well below its long-term average, signalling that the economy plunges into recession. The dynamics of the business climate indicator was driven by more unfavourable assessments of managers on the business situation in all economic sectors, with the negative sentiment being most strongly pronounced in the services sector, which is associated with the nature of the social distancing measures introduced by the government to curb the spread of COVID-19. In this environment, the most serious difficulties faced by firms are related to the uncertain economic environment and insufficient demand. The monthly EC Consumer Survey shows that between April and June 2020 the consumer confidence indicator posted a substantial fall (by 8.1 points on average⁴⁷), reflecting also the lower propensity of households to buy durable goods. These developments reflect the strongly increased household pessimism about the future economic situation in Bulgaria and the labour market conditions. In the second quarter of 2020 the uncertainty indicator constructed by the BNB exceeded its long-term level, which was driven by both corporations and households.

Between April and May 2020 NSI data on the retail trade turnover at constant prices show

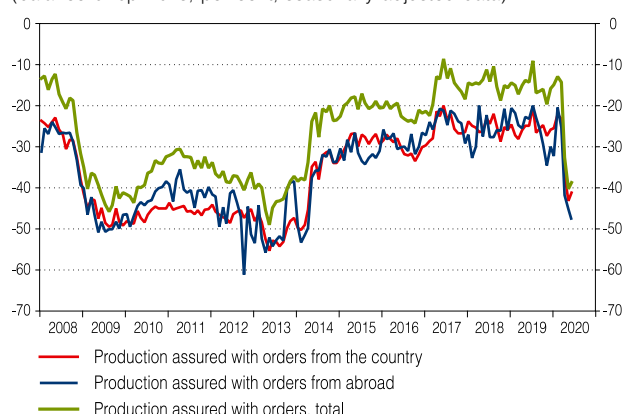
⁴⁵ The analysis employs data derived from quarterly non-financial accounts of the general government sector and Consolidated Fiscal Programme implementation reports published by the NSI and MF, respectively.

⁴⁶ Using the BNB seasonally adjusted data, the decline accounts for 27.0 points.

⁴⁷ EC seasonally adjusted data.

Production Assured with Orders from Other Countries and Finished Goods Inventories

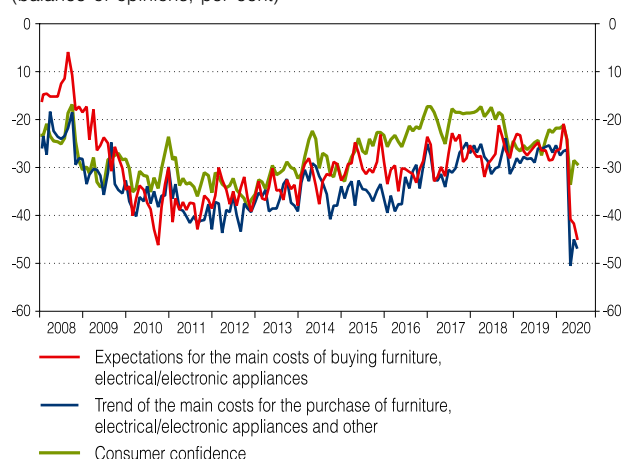
(balance of opinions, per cent; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Consumer Confidence and Sentiment for Purchases of Durables

(balance of opinions, per cent)



Source: the EC.

a decline in real sales both on a quarterly (-15.8 per cent) and annual basis (-21.4 per cent). At the same time, the industrial production index decreased by -14.5 per cent compared with the first quarter. All industrial sub-sectors contributed to this decline⁴⁸. Manufacturing, which is mostly export-oriented, posted a decline in production in most major sub-sectors compared with the previous month. Exceptions are several sub-sectors, such as the manufacture of basic pharmaceutical products and pharmaceutical preparations, which have been positively affected by higher demand during the pandemic. Nominal industrial turnover data show that the decline in sales of corporations was due to both lower volumes and price falls, with domestic and international markets contributing to this effect. The construction sector also recorded negative changes, with the construction production index reporting a decline by -9.7 per cent on a quarterly basis between April and May due to both building and civil/engineering construction activities.

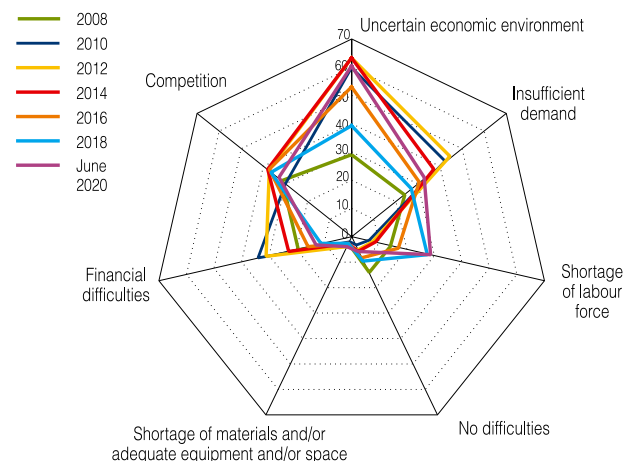
According to Eurostat data the index of services production in April slowed down by -9.5 per cent on a quarterly basis, with all main sectors contributing to this effect. The strongest fall was reported in accommodation and food service activities (-40.1 per cent) and transportation and storage (-20.9 per cent).

Taking into account the effect of containment measures against the spread of COVID-19 between March and May 2020 and easing of the measures from June 2020, the negative effects in terms of demand and supply are expected to occur primarily in the second quarter of the year, which will result in a substantial fall in real GDP on a quarterly basis. Under the assumptions of no second wave of COVID-19 and new tightening of containment measures, in the second half of the year the economic activity is expected to start gradually recovering on a quarterly basis, but real GDP is projected to remain significantly below its level for the corresponding period of 2019. The gradual containment of the spread of COVID-19 and easing of the restrictive measures globally will help recover external demand to some extent in the second half of the year and to report quarterly growth, accordingly. Concur-

⁴⁸ These are mining and quarrying; manufacturing; and production and distribution of electricity, heating and gas.

Factors Limiting Economic Activities of Corporations

(relative share of all corporations)



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

Sources: the NSI, BNB calculations.

Real GDP Growth by Final Use Component

(per cent, on a quarterly basis; seasonally adjusted data)

	2016				2017				2018				2019				2020
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I
Consumption	1.3	-0.1	0.7	2.1	-0.1	1.5	1.2	1.8	1.0	0.8	1.2	0.6	1.9	1.6	1.5	1.1	-0.1
incl.																	
Household consumption	1.4	-1.1	0.8	3.0	-0.9	1.4	1.5	2.7	0.7	0.0	1.1	0.3	2.3	2.3	1.2	0.2	-0.2
Government final consumption expenditure	-0.8	3.1	0.1	2.2	0.9	-1.0	0.6	0.8	3.3	2.2	0.5	-0.4	2.0	-0.2	2.5	3.0	-1.7
Collective consumption	-0.8	2.7	1.5	1.1	1.9	0.5	1.3	1.3	-0.4	3.2	0.4	2.5	2.2	0.1	2.4	0.5	1.1
Gross fixed capital formation	-3.0	-2.3	-1.1	-0.8	1.1	2.3	1.1	1.5	2.2	0.5	0.2	0.4	0.3	0.7	0.8	1.3	-1.5
Exports of goods and non-factor services	2.9	4.5	0.2	1.1	1.8	1.9	2.0	-2.4	0.4	0.9	0.1	4.0	-1.3	-2.0	3.6	-0.5	0.9
Imports of goods and non-factor services	0.4	2.1	1.2	1.9	2.5	1.2	1.1	3.2	0.7	1.9	-1.0	2.4	0.2	-0.5	3.4	-3.1	1.5
GDP	1.0	1.0	0.7	1.1	0.8	0.8	0.8	0.7	0.6	0.9	1.0	0.8	1.0	0.7	0.7	0.8	0.3

Source: the NSI.

Real GDP Growth by Final Use Component

(per cent, on an annual basis)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Consumption	2.7	-3.9	0.5	2.0	1.8	-1.6	1.8	2.7	2.5	3.0	3.5	4.4
incl.												
Household consumption	2.3	-2.9	0.1	1.7	2.0	-1.7	1.8	2.2	2.1	2.2	2.5	3.4
Government final consumption expenditure	1.0	-0.8	-0.2	0.3	-0.3	0.0	0.1	0.0	0.1	0.2	0.5	0.4
Collective consumption	-0.7	-0.2	0.6	0.1	0.0	0.1	-0.1	0.3	0.2	0.4	0.4	0.5
Gross fixed capital formation	6.2	-5.8	-4.9	-1.0	0.4	0.1	0.7	0.6	-1.4	0.6	1.0	0.4
Exports of goods and non-factor services	1.3	-6.2	4.7	6.3	1.2	5.8	2.0	4.2	5.5	3.7	1.1	1.3
Imports of goods and non-factor services	-3.5	15.5	0.5	-5.3	-3.3	-2.8	-3.4	-3.1	-3.3	-4.4	-3.6	-1.5
GDP	6.1	-3.4	0.6	2.4	0.4	0.3	1.9	4.0	3.8	3.5	3.1	3.4

Source: the NSI.

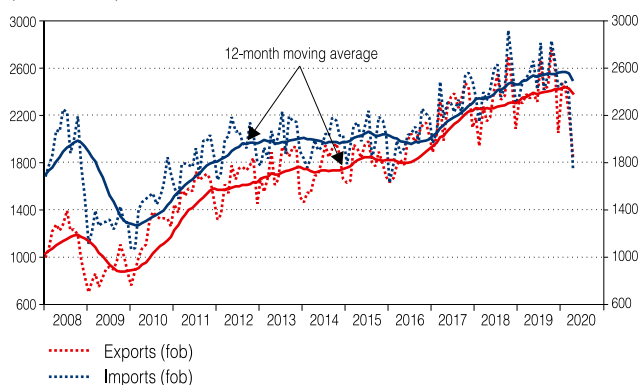
rently, weakening of economic uncertainty and the projected partial recovery in lost jobs during the state of emergency will be a precondition for private consumption growth compared with the second quarter of the year. Fiscal policy is expected to have a positive contribution to the economic activity through higher national and EU co-financed expenditure on government consumption and investment.

Risks to the macroeconomic outlook are assessed as being on the downside and arise mainly from a possibly further spread of COVID-19 in Bulgaria and globally, which will be a reason for extending the existing measures and introducing new ones.

Exports and Imports of Goods and Services

The significant deterioration of global economic indicators due to the spread of COVID-19 and the measures to curb it had a strong negative effect on Bulgaria's foreign trade flows. At the time of preparing this issue of Economic Review

Dynamics of Nominal Exports and Imports of Goods (EUR million)



Source: the BNB.

Exports by Commodity Group, January–March 2020

	Value (EUR million)	Change* (EUR million)	Growth** (per cent)	Contribution**, percentage points
Wood products, paper, ceramics and glass	339.4	-3.0	-0.9	0.0
Machines, vehicles, appliances, instruments and weapons	1 993.7	-15.5	-0.8	-0.2
Mineral products and fuels	770.5	-58.9	-7.1	-0.8
Base metals and related products	1 122.8	-28.7	-2.5	-0.4
Animal and vegetable products, food, drinks and tobacco	1 216.5	136.0	12.6	1.9
Textiles, leather, clothing, footwear and other consumer goods	855.9	-33.8	-3.8	-0.5
Chemical products, plastics and rubber	981.7	11.0	1.1	0.2
Total exports	7 280.4	7.1	0.1	

* Change on the corresponding period of the previous year.

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

Source: the BNB.

detailed data on foreign trade are available only until March 2020, the first month of a wider spread of the infection in Bulgaria and Bulgaria's major trading partners. Reported data on Bulgaria's exports of goods for the January–March 2020 period showed nominal annual growth of 0.1 per cent, but March saw a significant fall compared to March 2019. According to non-seasonally adjusted national account GDP data, in the first quarter nominal growth was attributable to the increased real volumes between January and March 2020 on an annual basis, whereas export prices fell compared to the first quarter of 2019. Animal and plant products⁴⁹ contributed most substantially to nominal growth of exported goods, while chemical products added to this effect to a much lower degree.⁵⁰ BNB calculations⁵¹ on growth of exported animal and plant products show that increased real volumes were the major factor behind this growth, while in the group of chemical products only the price component rose and real volumes posted a decline. Mineral products and fuels⁵² had the largest negative contribution to the change in exports of goods on an annual basis in the first quarter

⁴⁹ In this chapter it should read the animal and plant products, food, drinks and tobacco group under the Combined Nomenclature.

⁵⁰ In this chapter, it should read chemical products, plastics and rubber under the Combined Nomenclature.

⁵¹ Real volumes of imports have been constructed under the commodity groups of the Standard International Trade Classification (SITC) by using NSI data on export prices and nominal values of exports under the SITC.

⁵² In this chapter, it should read mineral products and fuels group under the Combined Nomenclature. The decline in exports of petroleum products in early 2020 could be partly explained by a drop in annual petroleum prices for the January–March 2020 period on average.

of 2020, reflecting the severe drop in crude oil prices in March. Real volumes of exported goods posted year-on-year growth.

In the first three months of 2020 exports of goods to EU countries⁵³ fell by 0.2 per cent on an annual basis due to the groups of textiles, leather materials and products⁵⁴, and machines⁵⁵. The share of exports to the EU in total Bulgarian exports of goods remained similar to that reported in the same period of the previous year. The first quarter of 2020 saw a substantial year-on-year drop in exports to Balkan countries. This was mainly ascribable to the groups of mineral products and fuels, and machines. Nominal drops in exports to the EU and Balkan countries were offset mostly by growth recorded in Asia's regions, non-EU countries and the Balkans.

The balance of payments data for April 2020 indicate a strong year-on-year decline in exports of goods in nominal terms (-19.6 per cent), which is likely to be sustained in the rest of the second quarter, reflecting the strictest measures to curb the pandemic introduced over this period in Bulgaria's major trading partners.

In the third and fourth quarters of 2020 real exports of goods are expected to fall strongly on an annual basis driven by weaker external demand due to the spread of COVID-19 in Bulgaria's major trading partners. The strongest drop in exports is anticipated in the second quarter of the year. In the third and the fourth quarters the drop is expected to gradually decrease under the assumptions of no second wave of the infection and a new introduction of social distancing measures. In the third and fourth quarters of 2020 the price component is projected to fall substantially on an annual basis. However, this fall is expected to be weaker than that in the second quarter of the year, when the Brent crude oil price recorded its lowest level since February 2002.

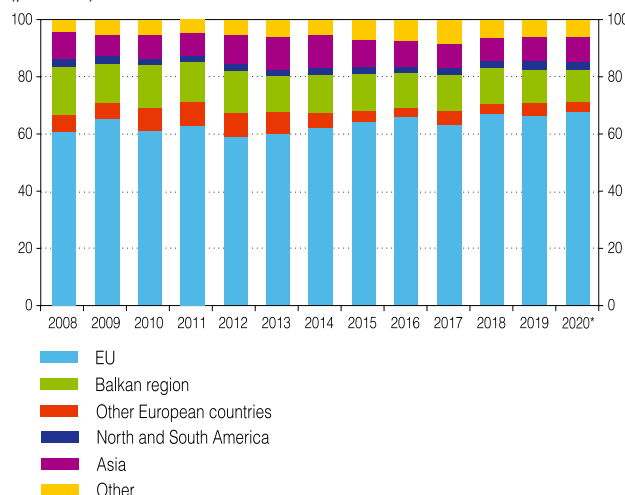
⁵³ Data on EU include the UK due to comparisons with previous years and due to the fact that there are no significant changes in trade relations in the transition period after the UK had left the EU.

⁵⁴ In this chapter it should read the textiles, leather, clothing, footwear and other consumer goods group under the Combined Nomenclature.

⁵⁵ In this chapter, it should read the machines, vehicles, appliances, instruments and weapons group under the Combined Nomenclature.

Exports of Goods: Geographical Breakdown

(per cent)

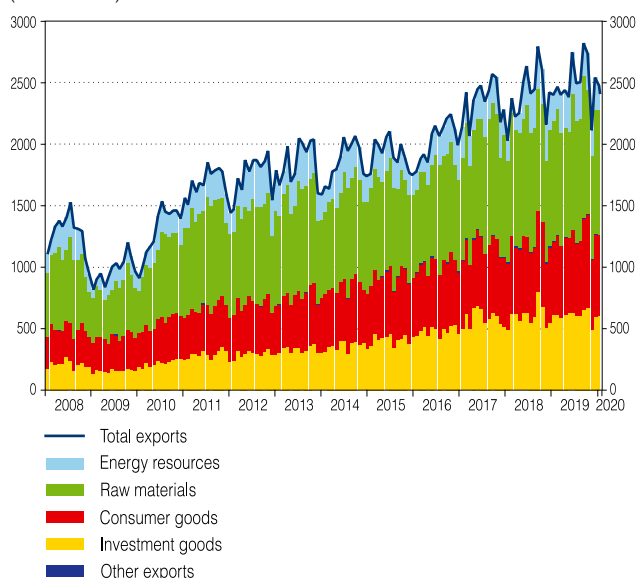


* Data for 2020 refer to January–March.

Source: the BNB.

Exports of Commodity Groups by Use

(EUR million)



Source: the BNB.

In the first quarter of 2020 nominal imports of goods declined by 0.8 per cent on an annual basis, reflecting entirely the drop in import prices amid higher real volumes on an annual basis⁵⁶. The fall in nominal imports of goods between January and March 2020 was mostly attributable to mineral products due to the sharp decline in international crude oil prices⁵⁷, whereas real volumes posted growth on an annual basis. Decreased real volumes of imported investment goods⁵⁸ and lower import prices of raw materials on an annual basis⁵⁹ contributed to a lower degree to the decline in nominal imports of goods.

The gradual increase in the share of imported goods from the EU in Bulgaria, which started in 2018, was sustained in early 2020, with imports from the EU between January and March 2020 accounting for 52.5 per cent of total imports. In the first quarter of 2020 imports of goods from EU Member States increased by 2.6 per cent compared with the corresponding period of 2019, with imports from Greece and Romania contributing most to growth. Concurrently, between January and March 2020 imports from non-EU countries declined by 4.3 per cent on an annual basis, reflecting mostly the lower imports of petroleum products from Russia and contracted imports from Turkey reported in most major commodity groups.

The balance of payments data for April 2020 indicate an increasing year-on-year nominal decline in imports of goods in Bulgaria (-32.4 per cent) in line with the worsening economic activity in Bulgaria due to the spread of COVID-19 and the measures to curb it.

In the third and fourth quarters of 2020 real imports of goods are expected to decline strongly year on year, with the fall being lower than that in the second quarter. This forecast is

⁵⁶ Non-seasonally adjusted national account GDP data.

⁵⁷ The break-up in negotiations among the members of OPEC+ on oil-production cuts was followed by a price war between Saudi Arabia and Russia in March 2020. Concurrently, the containment measures to mitigate the spread of COVID-19 had a strong negative effect on crude oil demand.

⁵⁸ Real volumes of imports have been constructed under the commodity groups of SITC by using NSI data on import prices and nominal values of imports under the SITC.

⁵⁹ Quarterly import deflators for the groups of 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 quarter of 2020.

Imports of Commodity Groups by Use, January – March 2020

	Value (EUR million)	Change* (EUR million)	Growth** (per cent)	Contribution** (percentage points)
Consumer goods	1 908.1	129.6	7.3	1.6
Raw materials	3 023.9	-12.9	-0.4	-0.2
Investment goods	2 020.7	-69.7	-3.3	-0.9
Energy resources	961.7	-119.7	-11.1	-1.5
Other imports	49.7	7.8	18.7	0.1
Total imports (cif)	7 964.1	-64.8	-0.8	

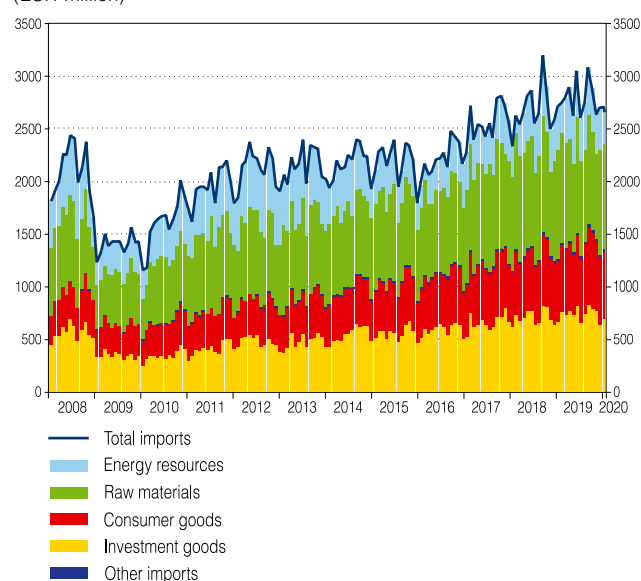
* Change on the corresponding period of previous year.

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

Source: the BNB.

Imports of Commodity Groups by Use

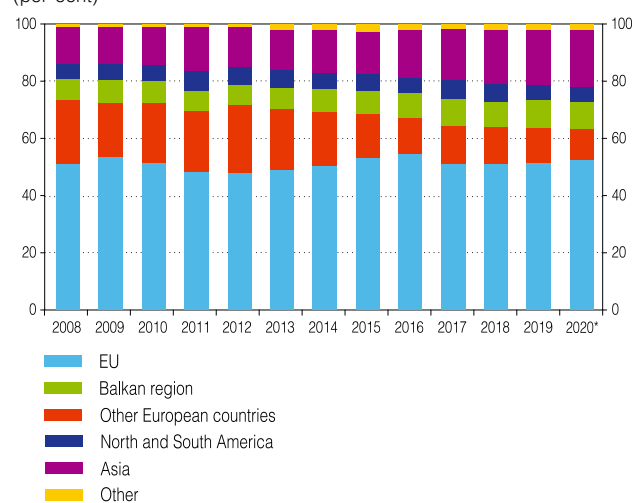
(EUR million)



Source: the BNB.

Imports of Goods: Geographical Breakdown

(per cent)



* Data for 2020 refer to January–March.

Source: the BNB.

based on our expectations for subdued household consumption and deterioration of investment activity as a result of the COVID-19 pandemic and the measures taken to contain it. In the second half of 2020 the fall in the price component is expected to be significant on an annual basis but similar to the projected prices of Bulgaria's exports of goods.

According to balance of payments data for the January–April 2020 period exports and imports of services decreased substantially on an annual basis. According to national account data, in the first quarter of 2020 the real component contributed negatively to the nominal change of exports and imports of services on an annual basis, while the price component had a positive effect on the nominal change of foreign trade flows in services on an annual basis.

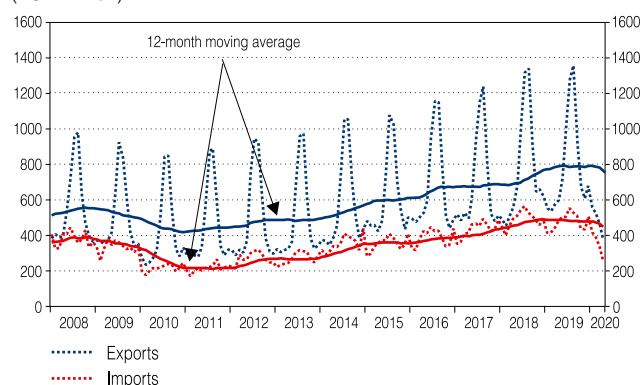
Exports of services fell by 20.2 per cent nominally in the January–April 2020 period compared to the corresponding period of the previous year, with the drop in travel and transport revenue contributing most strongly to this reduction. This could be explained mainly by tight restrictions on accommodation establishments and impeded travel services due to the COVID-19 pandemic. Based on data on the number of flights performed on the territory of Bulgaria for the period from May to early July 2020, there are no signs of recovery compared with the same period of the last year, with the fall accounting for 75.3 per cent on an annual basis. According to NSI data, visits of foreign citizens in Bulgaria between January and May 2020 decreased by 50.3 per cent on an annual basis and the fall was observed across all Bulgaria's partners. In addition, according to the NSI survey conducted in June among managers of accommodation establishments about 44.4 per cent of respondents reported a decline in revenue in May as compared with April 2020.

Between January and April 2020 imports of services fell nominally by 23.6 per cent on an annual basis. This reflects mostly the reduced expenditure of Bulgarians on travel and transport abroad. NSI data for the January–May 2020 period suggest a 52.9 per cent annual drop in total number of Bulgarians' visits abroad.

In the third and fourth quarters of 2020 trade flows in services in real terms are expected to remain much lower compared with the cor-

Dynamics of Exports and Imports of Services

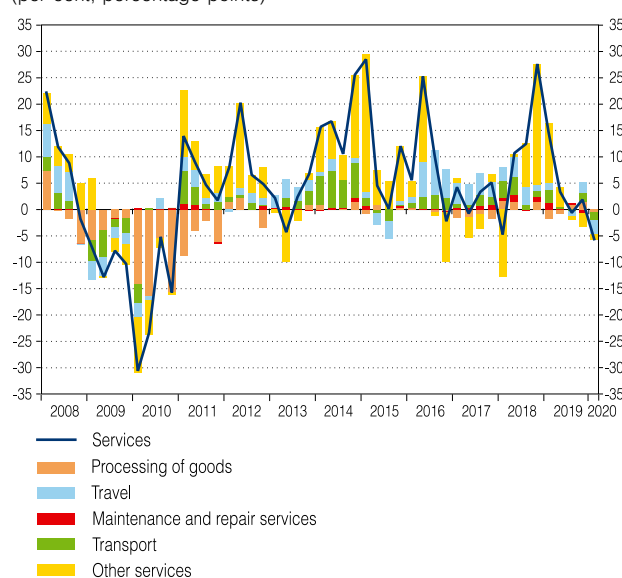
(EUR million)



Source: the BNB.

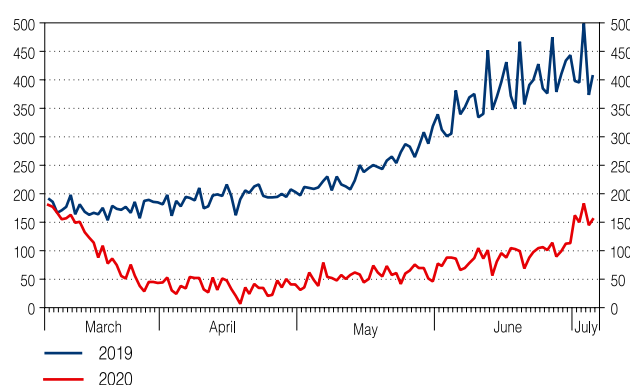
Annual Change of Services Exports and Contribution by Sub-component

(per cent, percentage points)



Source: the BNB.

Number of Flights at the Sofia Airport



Source: European Organization for the Safety of Air Navigation.

responding period of the previous year, and the annual decline is projected to gradually moderate from the second quarter of 2020. The gradual easing of the measures against the spread of COVID-19 under the assumption of no second wave of the infection will contribute to this effect. The sharpest drop is expected in tourist and passenger transport services.

Behaviour of Firms and Competitiveness

In the first quarter of 2020 the growth rate of real value added for the total economy slowed down to 0.1 per cent compared to the previous quarter. The services sector contributed most substantially to growth as a result of the strong increase in the economic activity in the first two months of the year, thus offsetting the fallout in March caused by the imposed containment measures in Bulgaria to mitigate the spread of COVID-19. The sectors of agriculture and industry had a negative contribution to the quarterly change in the value added between January and March 2020.

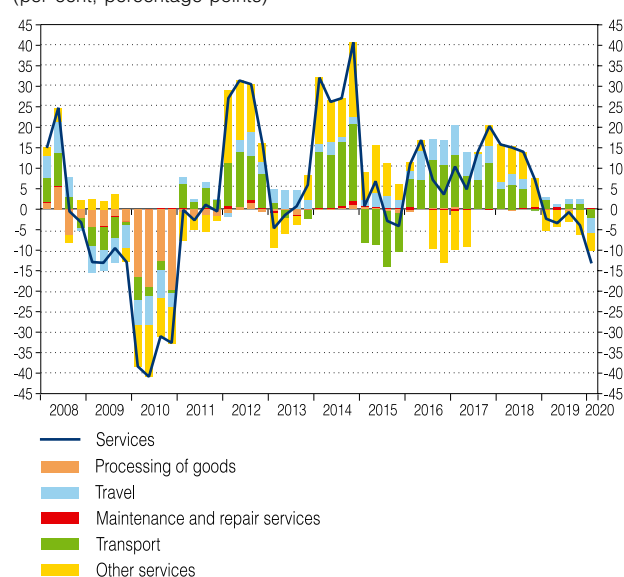
Value added in industry went down by 0.7 per cent on a quarterly basis in the first quarter, which was ascribable to the manufacturing sub-sector, whereas construction posted a slight increase in the economic activity. The value added in manufacturing was in line with the fall in the industrial production index and NSI data on short-term business statistics turnover in industry. In the first quarter the industrial production index decreased by -0.4 per cent on a quarterly basis, which was attributable to manufacturing amid a decline in external demand for Bulgarian goods. Concurrently, mining and quarrying, and the production and distribution of electricity and heating sub-sector posted slight quarterly output growth in January–March 2020. In terms of product type, a decline in production was recorded in consumer durables and non-durables in the context of a fall in household final consumption expenditure in Bulgaria and abroad.⁶⁰

In the first quarter gross value added in the services sector increased by 0.6 per cent on a quarterly basis, with all sub-sectors contributing to growth. The trade, transportation and storage, and accommodation and food service activities sub-sector had the strongest positive contribution

⁶⁰ For further details, see Chapter 3, Fiscal Policy Impact on the Economy Section.

Annual Change of Services Imports and Contribution by Sub-component

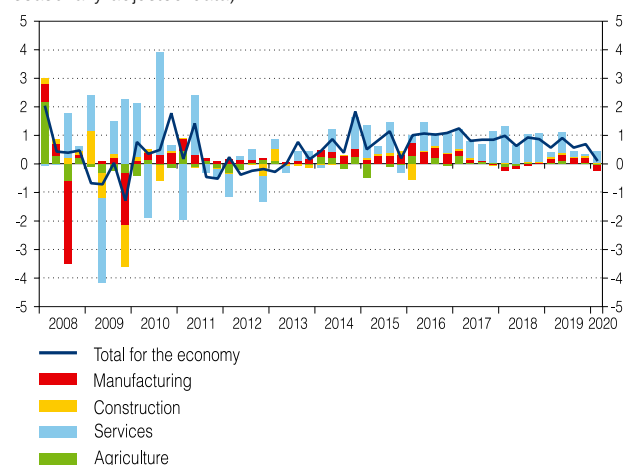
(per cent, percentage points)



Source: the BNB.

Value Added Growth and Contribution by Sector

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



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

Sources: the NSI, BNB calculations.

to the value added dynamics over the period. However, the developments within the sub-sector were divergent. Data on the nominal turnover in services and the index of services production, for which more detailed breakdown is available, signal an increase in the economic activity in services related to transportation and storage, which offset the decline in the economic activity in services related to trade, accommodation and food service activities.

Economic indicators on the dynamics of production and turnover in manufacturing, construction and services for April and May 2020 give mostly negative signals about the change in gross value added in the respective sectors in the second quarter of the year. In April and May the nominal turnover in manufacturing fell by -18.0 per cent from the first quarter, reflecting the drop in both volumes and prices. Both domestic and international markets contributed to the lower turnover. These changes were in line with the downward dynamics of the industrial production index. In April and May 2020 the construction production index fell by -9.7 per cent on a quarterly basis, reflecting both the decline in building construction⁶¹ and civil/engineering⁶² construction. In April output in services declined in all major sub-sectors compared with March 2020⁶³, with the strongest fall exhibited in accommodation and food service activities (-40.1 per cent) and transportation and storage (-20.9 per cent) as they were directly affected by the COVID-19 crisis. According to the NSI survey on corporations' activities in the context of the state of emergency, in May 2020 all economic sectors posted a significant drop in sales compared with the previous month.

Despite the economic activity improvement, measured by the value added dynamics, in the first quarter of 2020 employment for the total economy fell by 0.9 per cent on a quarterly basis, according to seasonally adjusted NSI national account data. All main sectors contributed to this fall, with agriculture having the largest negative contribution followed by industry and services. The employment fall

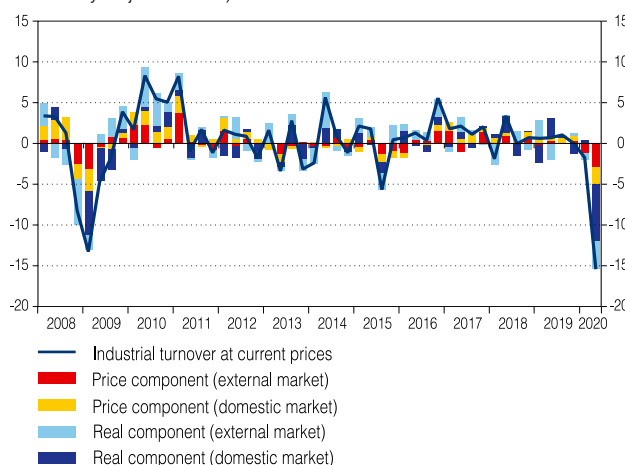
⁶¹ Building construction includes construction of residential and non-residential buildings.

⁶² Civil/engineering construction covers infrastructure construction of roads, bridges, pipes, power lines, gas pipelines, telecommunications and other construction works.

⁶³ Eurostat seasonally adjusted data.

Industrial Turnover Dynamics

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

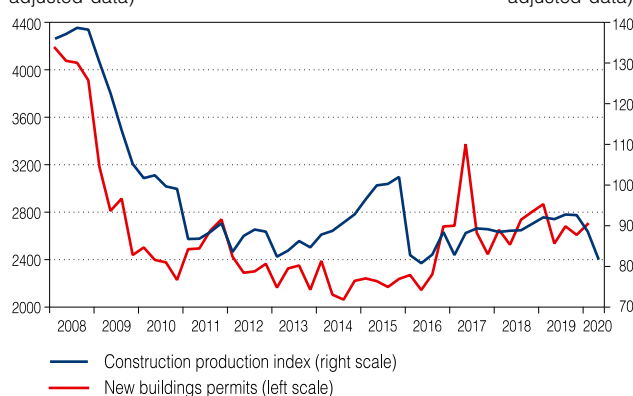


Sources: the NSI, BNB calculations.

Construction Production Dynamics and New Buildings Permits Issued

(number of buildings; seasonally adjusted data)

(2015 = 100; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Index of Services Production

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

Economic sector	2019				2020	
	I	II	III	IV	I	April
Trade, cars and motorcycles repair	-2.8	-0.9	1.6	-1.3	-5.2	-14.9
Transportation and storage	-1.5	-0.6	-0.6	0.6	0.8	-22.1
Hotels and restaurants	-9.0	-4.6	-4.4	3.7	-4.8	-57.8
Information and communication	-0.9	4.0	3.0	3.1	2.3	-0.4
Real estate activities	-9.6	-3.3	0.9	-9.5	3.1	-18.3
Professional, scientific and technical activities	-5.5	5.2	-1.4	-2.7	7.5	-18.5
Administrative and support service activities	-3.4	2.7	1.2	-1.8	2.4	-3.5

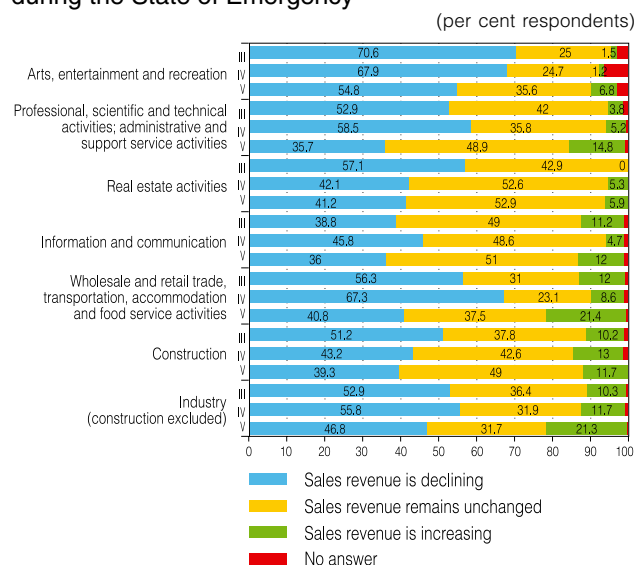
Source: Eurostat.

across services and industry sub-sectors was concentrated in manufacturing and in the trade, transport, accommodation and food service activities sub-sector. The containment measures against COVID-19 were the reason for the second quarter to see significantly higher than usual for this period of the year increase in newly registered unemployed according to the Employment Agency⁶⁴, which is likely to be reflected in lower employment in the April–June 2020 period. The projected partial recovery of the economic activity in the third and fourth quarters of 2020 will be a precondition for an increase in the number of employed on a quarterly basis, but their number will remain below that reported in the corresponding period of the previous year.

In the first quarter of 2020 labour productivity increased on a quarterly basis due to reported value added growth along with a decline in employment. All main sectors contributed positively to labour productivity growth, with agriculture reporting the highest increase. The spread of COVID-19 in Bulgaria is a precondition for a lower labour productivity *per person* employed in the second quarter of the year, reflecting the effect of temporary factors such as reduced working hours, difficulties associated with moving to the workplace, reorganisation of work (switching to teleworking). The weakening negative impact of these factors in the second half of the year is expected to support labour productivity growth on a quarterly basis.

⁶⁴ However, the government program intended to preserve jobs in Bulgaria through subsidised employment (the so-called 60/40 employment support measure) play an important role in mitigating the negative effects of COVID-19 on employment. Data regularly provided by the National Social Security Institute on the payments effected under the measure give initial indications that the measure helped preserve the jobs of about 163 thousand employees between January and June 2020 (based on BNB assessments).

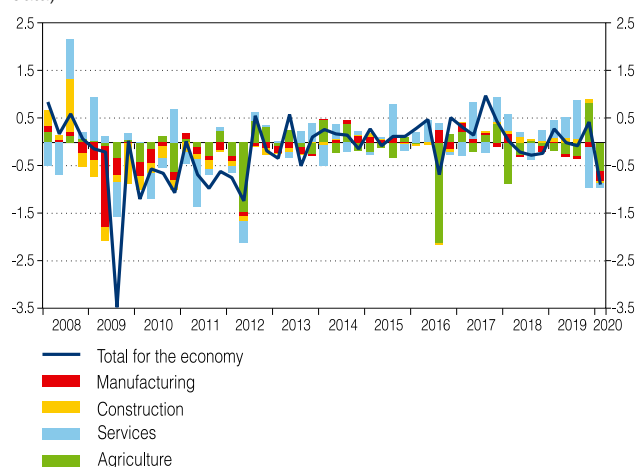
Changes in Firms' Revenue from Sales (Compared to the Previous Month) in March, April and May 2020 during the State of Emergency



Source: the NSI.

Contribution to Changes in the Number of Employed by Economic Sector

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

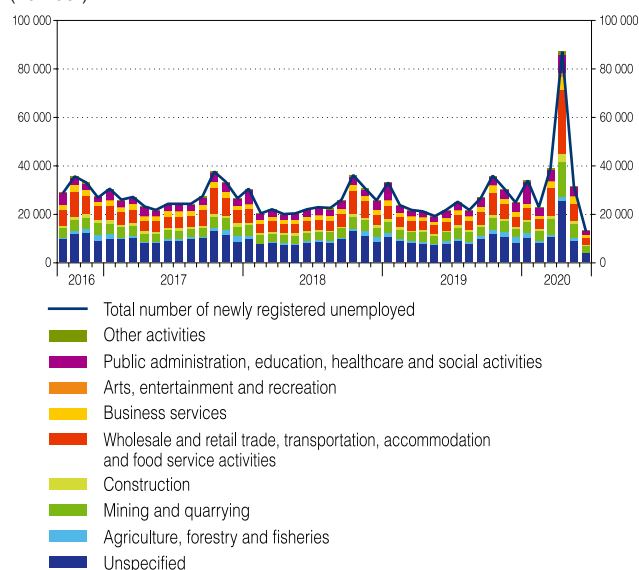


Note: Non-additive data on contributions due to direct seasonal adjustment of the total amount and its components.

Sources: the NSI, BNB calculations.

Newly Registered Unemployed in Labour Offices

(number)



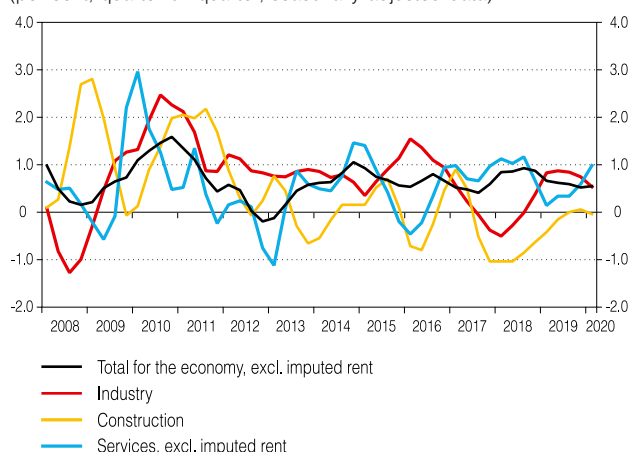
Compensation *per* employee in nominal terms continued to increase on a quarterly basis in the first quarter of 2020. This reflected the positive effect of the increased minimum wage and minimum insurance income for self-employed persons by 8.9 per cent since early 2020 (from BGN 560 to BGN 610⁶⁵), higher minimum insurance income by main economic activity and occupational group (by about 5.4 per cent on average), wage rises in the budget sector, as well as higher labour demand compared with supply in particular economic sectors and professions.

The COVID-19 pandemic is likely to result in a decline in compensation *per* employee in the second quarter in line with the expected decrease in the worked man-hours. However, in the third and fourth quarters of 2020 this process is expected to gradually reverse driven by the projected partial recovery of the economic activity and labour productivity, accordingly. A pay decrease, along with a reduced number of employees, is one of the main tools for firms to respond to the worsening economic situation in Bulgaria. The NSI survey on the performance of firms in May show that about 13.6 per cent of managers initiated measures to dismiss staff, in 6.5 per cent of companies employee wages were reduced, while in 23.8 per cent of companies a certain number of employees were asked to take an unpaid leave.

⁶⁵ CM Decree No 350 of 19 December 2019.

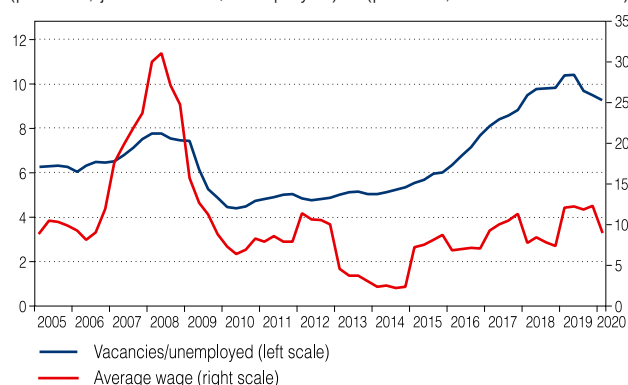
Labour Productivity Dynamics (Value Added *per* Employee)

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



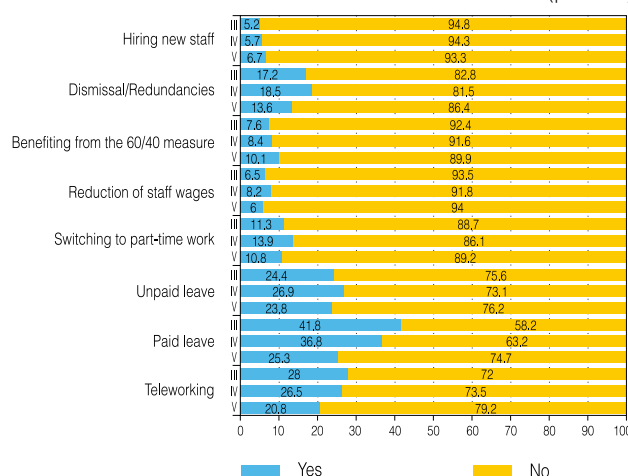
Job Vacancies/Unemployed Ratio and Average Wage

(per cent, job vacancies/unemployed) (per cent, on an annual basis)



Measures Taken by the Firms in Relation to Their Staff in March–May 2020 under the State of Emergency

(per cent)



Gross Value Added Change

(per cent, on a quarterly basis; real rate, seasonally adjusted data)

	2016				2017				2018				2019				2020
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I
Agriculture, forestry and fishing	5.7	0.0	4.3	-1.0	5.5	0.8	1.3	0.9	-2.7	-1.4	0.9	0.2	0.6	2.5	0.2	0.4	-1.1
Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities	2.0	1.7	1.6	1.4	0.9	0.5	0.1	-0.3	-0.6	-0.4	-0.2	0.2	0.7	0.8	1.0	0.9	-0.9
Construction	-12.3	1.6	1.6	1.2	1.0	1.1	0.0	-0.3	0.6	-0.4	0.5	0.8	0.8	1.4	1.0	1.1	0.2
Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities	-1.2	2.2	1.0	0.9	0.6	0.5	0.4	1.6	1.4	0.4	0.8	1.3	-0.2	-0.2	0.0	-0.6	0.8
Information and communication	7.9	1.5	0.9	1.7	-0.5	3.3	2.7	2.8	3.0	2.4	1.5	1.5	-0.2	0.7	0.6	0.5	1.3
Financial and insurance activities	3.6	2.9	-1.7	2.2	-1.0	-0.3	2.0	-1.7	1.7	0.2	1.2	2.7	0.2	2.0	0.4	1.0	0.6
Real estate activities	3.2	0.8	1.9	1.1	2.1	2.5	-0.6	4.6	3.4	1.9	2.8	2.1	0.2	2.6	0.5	-0.5	0.7
Professional, scientific and technical activities; administrative and support service activities	-1.7	1.5	0.1	-0.3	0.4	0.1	1.2	1.8	3.8	1.2	2.1	0.9	-0.4	1.6	-0.1	1.1	0.3
Public administration, education, human health and social work activities	-2.1	0.5	0.9	1.0	2.7	0.2	0.9	0.9	0.6	0.8	1.1	1.0	1.4	1.3	0.5	0.4	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	-1.6	0.3	-0.9	1.3	2.3	0.6	2.7	0.3	0.4	0.0	1.4	0.9	0.4	1.6	-0.2	-0.1	0.2
Gross value added, total for the economy	1.0	1.1	1.0	1.1	1.3	0.8	0.8	0.9	1.0	0.6	0.9	0.9	0.6	0.9	0.6	0.7	0.1

Source: the NSI.

Gross Value Added Change

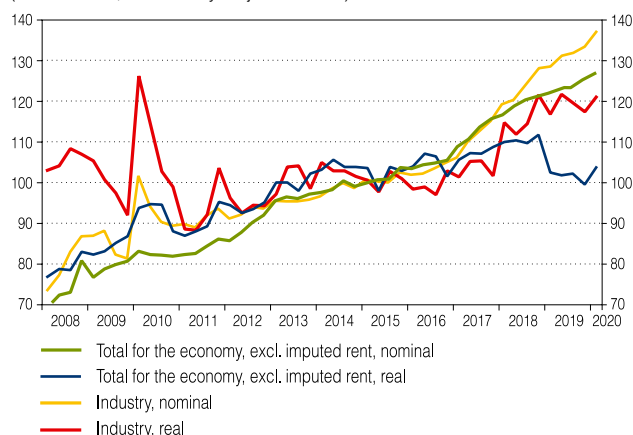
(per cent, on an annual basis)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Agriculture, forestry and fishing	31.8	-8.9	-11.9	5.9	-11.1	3.5	7.0	-7.9	7.7	9.0	-2.0	3.6
Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities	2.3	-7.4	-4.9	7.7	3.0	0.1	3.8	3.2	7.3	3.3	-1.5	2.6
Construction	15.1	6.8	-18.7	-4.0	-4.5	0.3	-3.4	4.3	-7.3	4.5	1.4	3.4
Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities	-2.9	-4.3	13.6	3.1	-0.2	3.7	0.7	7.1	1.0	2.8	3.9	0.5
Information and communication	74.2	-2.5	0.3	12.4	-3.2	2.1	0.7	2.2	16.5	6.1	10.6	2.5
Financial and insurance activities	10.5	13.2	24.7	-3.3	-4.7	-7.5	0.0	-0.9	6.9	1.0	2.7	4.8
Real estate activities	-5.0	1.2	3.6	0.0	2.9	-2.2	2.2	2.4	5.9	7.2	11.4	5.6
Professional, scientific and technical activities; administrative and support service activities	-7.8	7.7	-7.1	2.6	-3.8	3.3	1.0	9.8	1.7	1.3	9.0	2.7
Public administration, education, human health and social work activities	1.0	0.9	2.8	-2.6	3.0	-5.1	4.1	2.2	-3.1	5.8	3.1	4.6
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	33.9	7.1	-15.2	15.6	-6.1	1.7	2.4	8.7	-0.2	5.5	2.6	2.9
Gross value added, total for the economy	6.2	-1.0	0.8	2.6	-0.4	-0.2	2.2	3.5	3.5	4.2	3.5	3.0

Source: the NSI.

Unit Labour Costs

(2015 = 100; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Labour productivity growth in the total economy at rates slower than compensation *per* employee growth in the first quarter of 2020 resulted in higher unit labour costs in nominal terms according to seasonally adjusted data. This dynamics was more pronounced in manufacturing. In real terms, unit labour costs in the total economy also increased on a quarterly basis in the first quarter of 2020.

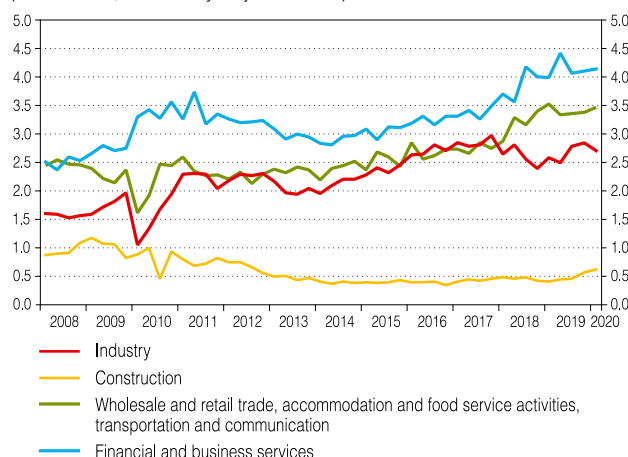
Seasonally adjusted data show that in the first quarter of 2020 the gross operating surplus at current prices decreased from the previous quarter, reflecting the fall in the manufacturing sub-sector, while profits in agriculture, construction and services rose. Between January and March 2020 external funds attracted by firms to finance their activity (sources of financing other than gross operating surplus) posted a quarter-on-quarter increase. Firms of all economic sectors contributed to this effect and attracted financing was most strongly concentrated in the services sectors (excluding public services and financial intermediation). As regards the source type, growth of attracted financing was largely due to received loans and increased foreign direct investment⁶⁶ into Bulgaria during the reviewed quarter.

GDP growth decomposition by production factor suggests that the capital contributed most substantially to growth in the first quarter of 2020, and total factor productivity, to a lesser extent. The capital factor dynamics was positively influenced by higher production capacity utilisation

⁶⁶ Preliminary data subject to revision.

Gross Operating Surplus at Current Prices

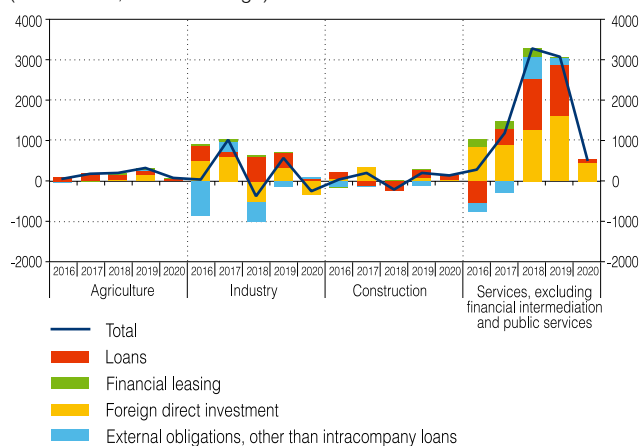
(BGN billion; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Financing Sources*

(BGN million, volume change)



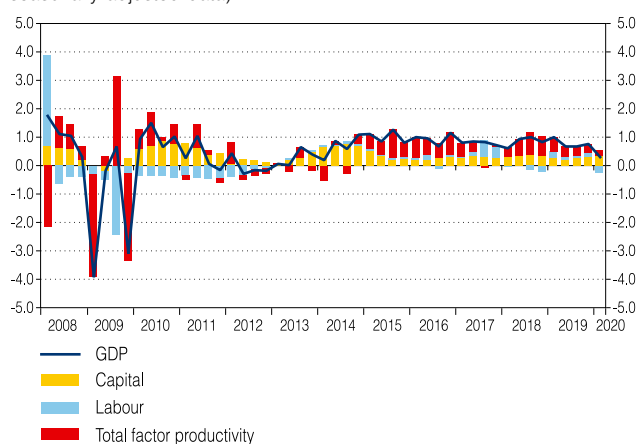
* Sources of financing other than gross operating surplus.

Note: Data for 2020 refer to the first quarter.

Source: the BNB.

Contribution of Changes in Production Factors to GDP Growth

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



Sources: the NSI, BNB calculations.

in the January–March 2020 period. Seasonally adjusted NSI data show a negative contribution of labour to growth as a result of a lower total number of employed in the economy, which was partially offset by the increased worked man-hours *per* employee.

Household Behaviour

Between January and March 2020 household consumption shrank due to deteriorated labour market conditions and increased uncertainty caused by the spread of COVID-19 in Bulgaria at the end of the quarter and the measures launched to curb it.

The NSI Labour Force Survey shows that in the first quarter of 2020 labour supply, as measured by the labour force⁶⁷, declined reflecting the long-term decrease in working-age population and partly the worsening economic activity in some sectors at the end of the quarter. Concurrently, the labour force participation rate⁶⁸ declined on the previous quarter and the share of discouraged persons slightly increased.

The Labour Force Survey shows that in the first quarter of 2020 the seasonally adjusted unemployment rate⁶⁹ rose to 4.2 per cent compared with 4.1 per cent in the last quarter of 2019 (according to non-seasonally adjusted data unemployment was 4.6 per cent). At the same time, Employment Agency data suggest⁷⁰ that in May 2020 unemployment rose to 9.2 per cent⁷¹ (9.0 per cent according non-seasonally adjusted data) from 5.9 per cent in February, prior to the outbreak of the pandemic in Bulgaria. The government measures intended to maintain employ-

⁶⁷ The labour force (currently economically active population) comprises persons aged 15 and older who provide or supply labour for the production of goods or services. Labour force includes both employed and unemployed persons.

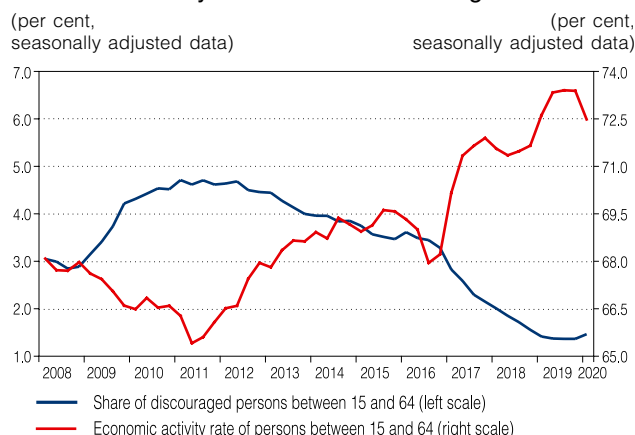
⁶⁸ The labour force participation rate is the proportion between economically active persons (labour force) and the population of the same age.

⁶⁹ Unemployment rate is the proportion between the number of unemployed and the labour force based on Labour Force Survey data.

⁷⁰ The definition of the unemployment rate according to the Employment Agency corresponds to that referred to in note 69; however, the analysis employs a constant rate of labour force comprising the number of persons in the respective age group since the last census of population.

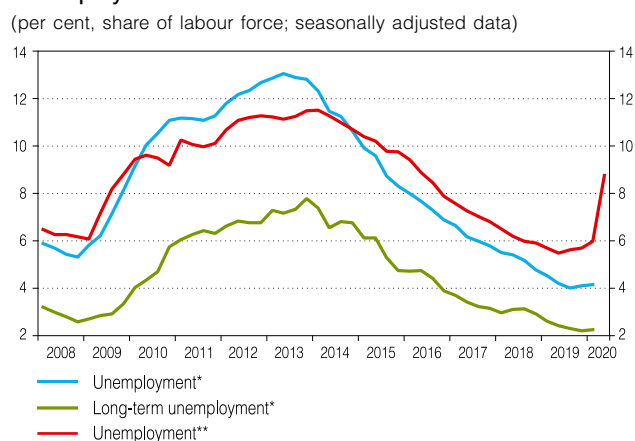
⁷¹ BNB seasonally adjusted data.

Economic Activity and Share of Discouraged Persons



Sources: NSI Labour Force Survey, BNB calculations.

Unemployment Rate



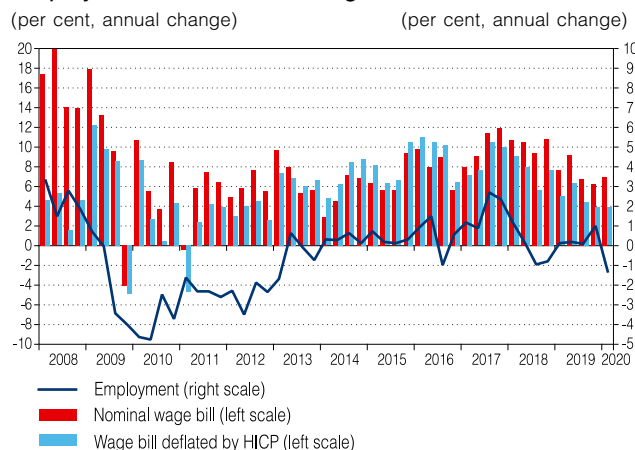
* NSI data.

** Employment Agency data.

Note: Quarterly data, with values for May presented for the second quarter of 2020.

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

Employment and Nominal Wage Bill



Sources: the NSI – SNA, BNB calculations.

ment helped limit the increase in the number of unemployed⁷².

In the first quarter of 2020 labour income of employees continued to increase nominally both on an annual and quarterly basis according to NSI national account data on the wage bill and short-term labour costs statistics data on the average wage. This was mostly attributable to the minimum wage rise from 1 January 2020 and further pay increases in the budget sector⁷³.

Despite higher nominal labour income of employees over the review period, household real disposable income in Bulgaria posted a decline on a quarterly basis. This reflected both price hikes and the loss of jobs and income of self-employed, which limited household consumption, and coupled with heightened uncertainty led to a private consumption decline on a quarterly basis in the first quarter of 2020. The retail trade turnover also posted a fall in the first quarter. A decline in sales was reported in all groups, with durable and semi-durable goods having the main negative contribution. Data for the April–May 2020 period show further falls across all groups, which was attributable to a decline in real volumes and, to a lesser extent, to price decreases.

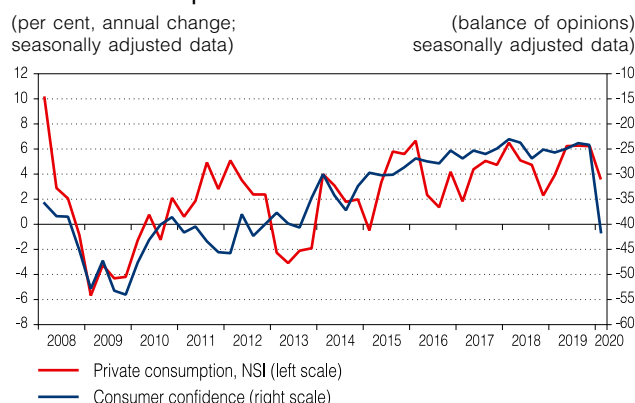
According to the NSI Consumer Survey of April 2020, the consumer confidence indicator declined significantly as a result of more pessimistic assessments of households about the economic situation in Bulgaria, the labour market development and their financial position. In addition, consumers are more reticent about their intentions to purchase durable goods, and it would very likely take longer for the recovery of consumer demand.

The NSI Household Budget Survey shows that the share of savings in household disposable income rose in the first quarter of 2020 in line with the increased uncertainty and the quarterly decline in private consumption. Yet, in the first quarter of 2020 growth in household assets measured by their net position in the banking system slowed down, reflecting a lower increase of the deposit base in March, given the loss of labour income in part of the households.

⁷² For details, see Chapter 3, Behaviour of Firms and Competitiveness Section.

⁷³ For further information, see *ibid*.

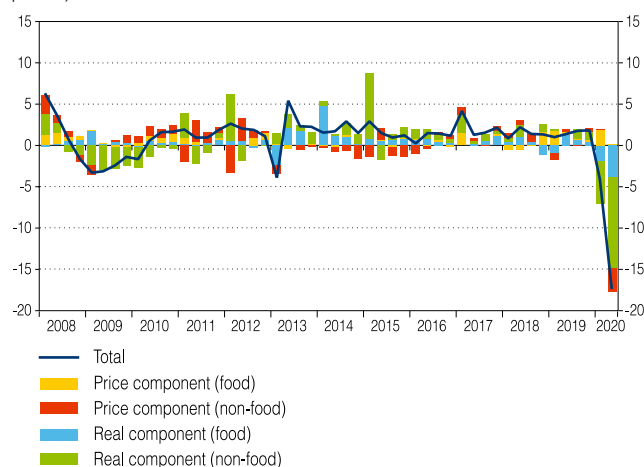
Private Consumption and Consumer Confidence



Sources: the NSI, BNB calculations.

Retail Trade Turnover

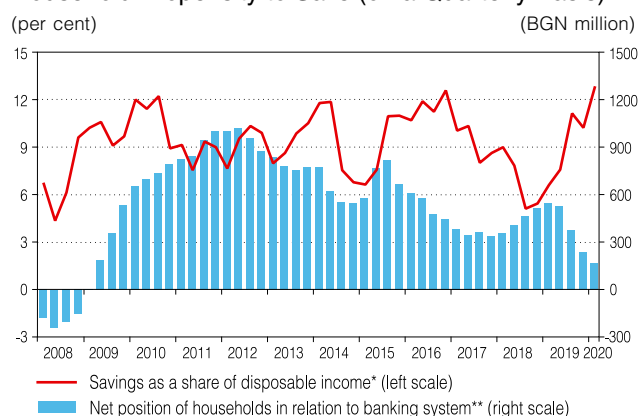
(per cent, quarter on quarter; seasonally adjusted data at current prices)



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

Sources: the NSI, BNB calculations.

Household Propensity to Save (on a Quarterly Basis)



* BNB data.

** NSI data.

Note: Data are seasonally adjusted.

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

Employment and Income Dynamics

	2016				2017				2018				2019				2020
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I
(per cent, quarter on quarter; seasonally adjusted data)																	
Employed persons	0.3	0.5	-0.7	0.5	0.3	0.1	1.0	0.4	0.0	-0.2	-0.3	-0.2	0.3	0.0	-0.1	0.4	-0.9
Nominal wage <i>per employee</i> *	1.6	0.8	1.7	1.0	3.0	2.9	2.9	2.1	2.2	1.8	2.9	2.0	1.0	1.3	0.5	1.7	2.1
Real wage <i>per employee</i> **	1.9	1.4	1.4	0.9	2.5	2.4	2.9	1.0	1.8	1.0	1.9	1.6	0.4	0.7	-0.1	1.3	1.5
Wage bill, nominal terms	1.7	1.5	1.9	1.5	2.9	2.7	3.1	2.3	2.8	2.0	2.4	2.4	1.3	2.1	1.3	1.5	1.8
Wage bill, real terms**	2.0	2.1	1.6	1.5	2.5	2.1	3.2	1.3	2.4	1.2	1.4	2.0	0.6	1.5	0.7	1.1	1.1
(per cent, on corresponding quarter of previous year, non-seasonally adjusted data)																	
Employed persons	0.9	1.5	-1.0	0.6	1.2	0.9	2.7	2.4	1.2	0.2	-0.9	-0.8	0.1	0.2	0.1	1.0	-1.3
Nominal wage <i>per employee</i> *	8.2	5.8	7.4	3.6	6.9	9.3	11.3	11.7	9.4	9.0	9.5	10.3	7.1	7.5	4.0	4.9	6.9
Real wage <i>per employee</i> **	9.4	8.4	8.6	4.4	6.1	7.8	10.4	9.8	7.7	6.5	5.6	7.1	4.5	4.6	1.7	2.5	3.8
Wage bill, nominal terms	9.9	8.0	9.0	5.7	8.0	9.1	11.5	12.0	10.9	10.6	9.5	10.9	7.6	9.3	6.8	6.2	7.0
Wage bill, real terms**	11.1	10.6	10.2	6.5	7.2	7.6	10.6	10.1	9.1	8.0	5.7	7.7	5.0	6.3	4.4	3.8	3.9

Employment and Income Dynamics

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Employed persons	2.4	-1.7	-3.9	-2.2	-2.5	-0.4	0.4	0.4	0.5	1.8	-0.1	0.3
Nominal wage <i>per employee</i> *	13.5	10.6	12.0	6.5	8.0	8.3	5.6	5.8	6.2	9.9	9.6	5.8
Real wage <i>per employee</i> **	1.6	8.1	8.7	3.0	5.4	8.0	7.4	6.9	7.6	8.6	6.7	3.3
Wage bill, nominal terms	16.3	8.3	7.1	4.9	6.0	7.1	5.4	6.8	8.1	10.2	10.5	7.4
Wage bill, real terms**	4.0	5.8	4.0	1.4	3.5	6.7	7.2	8.0	9.5	8.9	7.6	4.9

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

** Data deflated by HICP.

Sources: NSI – SNA, BNB calculations, Eurostat.

Over the second half of 2020 labour supply measured by labour force is expected to remain broadly unchanged compared to the first six months of the year. At the same time, hours worked *per person* are projected to increase on a quarterly basis, as the containment measures against the spread of COVID-19 were predominantly concentrated in the second quarter of 2020. Measures undertaken by the government to maintain employment were another factor likely to mitigate the negative effects of the pandemic on household income. The expected partial recovery in the labour market and lifting of containment measures will be the drivers for quarterly growth in household consumption in the third and fourth quarters of 2020. However, we are expecting the uncertainty to remain high, which will be a precondition for households to maintain a high precautionary savings rate.

Retail Trade Turnover

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

	2016				2017				2018				2019				2020	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II*
Retail trade, excluding motor vehicles and motorcycles incl.	1.6	1.9	1.1	0.8	2.4	0.5	1.4	1.1	0.1	1.5	0.2	1.0	0.8	0.6	1.3	0.9	-5.4	-15.8
Food, drinks and tobacco products	1.9	1.9	1.0	0.7	0.2	0.4	1.5	3.2	1.2	2.7	1.0	-3.0	-2.7	3.4	1.7	1.0	-5.5	-7.3
Textile, clothing, footwear and leather	2.5	2.9	1.3	-0.2	12.6	-2.7	-5.3	0.5	3.9	6.4	1.8	4.9	-12.6	0.5	7.0	4.7	-20.4	-61.0
Household appliances, furniture and other household goods	2.3	0.3	1.2	2.0	1.0	2.9	1.5	1.2	1.3	3.2	1.5	0.9	2.7	1.4	3.2	4.8	-7.2	-10.6
Computer and communication equipment, etc.	-1.8	5.3	1.9	7.7	-1.8	0.5	0.5	2.1	6.6	1.9	-1.9	-4.0	-2.5	-1.1	1.3	0.9	-11.9	-17.2
Pharmaceutical and medical goods, cosmetics and toiletries	2.0	3.5	3.6	0.9	0.9	2.4	1.3	1.3	-1.6	2.0	1.6	2.3	-2.3	0.9	1.1	2.6	4.8	-19.9
Unspecialised shops with different kinds of goods	0.0	1.2	2.5	1.4	4.2	2.0	2.1	0.3	4.2	2.9	0.3	0.1	-0.9	-1.0	0.5	1.4	-1.7	-7.2
Automobile fuels and lubricants	0.8	1.5	-2.2	-3.0	6.8	-2.3	1.2	-1.1	-7.6	3.5	-0.9	6.0	6.3	-2.3	1.4	-1.1	-11.6	-28.5

* Data refer to April and May.

Source: the NSI: short-term business statistics.

Retail Trade Turnover

(per cent, on an annual basis)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Retail trade, excluding motor vehicles and motorcycles incl.	8.9	-7.7	-8.4	0.6	5.3	3.8	10.2	11.8	6.1	5.4	3.3	3.3
Food, drinks and tobacco products	1.6	8.7	2.0	2.5	4.8	1.5	21.9	7.2	7.3	3.7	2.6	3.8
Textile, clothing, footwear and leather	19.7	-9.0	6.9	3.0	7.2	10.9	7.8	4.1	9.7	9.1	8.2	-2.6
Household appliances, furniture and other household goods	6.8	-23.3	-16.5	-4.8	10.0	4.3	1.9	3.0	5.1	7.1	6.5	8.7
Computer and communication equipment, etc.	17.3	-24.7	-1.6	-0.4	-4.8	5.9	-3.8	10.1	2.2	6.8	7.8	-5.8
Pharmaceutical and medical goods, cosmetics and toiletries	21.8	13.6	7.9	7.6	8.9	11.3	12.2	9.7	10.7	6.7	3.8	2.5
Unspecialised shops with different kinds of goods	31.0	59.0	21.1	6.5	5.7	5.6	5.7	4.3	5.0	11.2	7.7	-1.3
Automobile fuels and lubricants	5.3	-8.5	-29.6	-2.7	6.2	-1.6	6.7	34.6	2.5	1.9	-5.3	10.1

Source: the NSI: short-term business statistics.

Fiscal Policy Impact on the Economy

Data on consolidated fiscal programme (CFP) performance for January–May 2020 reflected even more sharply the negative effects of the crisis triggered by the spread of COVID-19. The CFP surplus in the first five months of the year was BGN 1313.2 million, with a national budget deficit of BGN 234 million generated in the months after the introduction of the state of emergency (April–May) compared to a BGN 1170 million surplus a year earlier. While deterioration of the budgetary position by end-March resulted mainly from temporary effects of extended deadlines for paying some tax obligations, in April and May the operation of the automatic stabilisers in terms of decreased tax and non-tax revenue and increased expenditure on household benefits and allowances had a decisive influence. Negative budget effects of gradually rising immediate expenses to contain the spread of COVID-19 (healthcare costs, wages and operating expenditure), as well as

payments on the subsidised employment measure were entirely compensated by savings on relevant expenditure items, with the growth rate of current non-interest expenses slowing down compared to the end of the first quarter.

By end-May 2020 total budget revenue declined by 5.8 per cent on an annual basis, and only for the April–May period tax and non-tax revenue dropped year on year by 13.4 and 38.8 per cent, respectively. Downward dynamics in tax revenue was mainly driven by the worsened macroeconomic environment and the effects of government discretionary measures taken to temporarily support liquidity of firms and households through extending payment deadlines of certain direct taxes⁷⁴. The limited or completely discontinued use of a number of public services (including rentals, trading establishments at market places and auctions, administrative services, kindergartens and nurseries) was the main factor for the sizeable decline in non-tax revenue of municipal budgets and the state budget (by 41.1 and 47.5 per cent for April–May) which, in turn, contributed strongly to a deeper fall in CFP non-tax revenue after the introduction of the state of emergency. The only component with a positive contribution to the budget revenue dynamics was the revenue from grants, with its growth *vis-à-vis* the first five months of 2019 reflecting continuous absorption of funds under ongoing EU programmes, received advance payments for 2020 and rechannelled funds from the EU budget to deal with the aftermath of the COVID-19 spread.

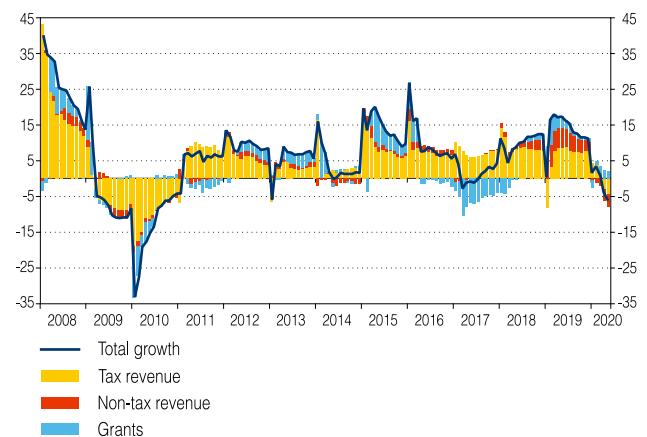
Following largely discretionary measures to temporarily support liquidity of corporations⁷⁵, corporate tax revenue had the strongest contribution to the decreased tax revenue in the period after the introduction of the state of emergency. Indirect taxes also had a significant negative contribution to the tax revenue reduction. By end-May VAT revenue posted a year-on-year drop of 4.8 per cent for January–May and 13.1 per cent

⁷⁴ These are tax obligations under the Corporate Income Tax Law, the Personal Income Tax Law and the Law on Local Taxes and Charges.

⁷⁵ Extension of the deadlines for declaring and paying of annual tax for 2019 up to 30 June 2020 explains significantly lower receipts in March, while the opportunity that is offered for advance payments on corporate tax for the first quarter of 2020, due by 15 April 2020, to be made on the basis of the expected tax profit for 2020 and without a submitted report for 2019 has a strong effect on the revenue from corporate tax for April.

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

(per cent; percentage points)



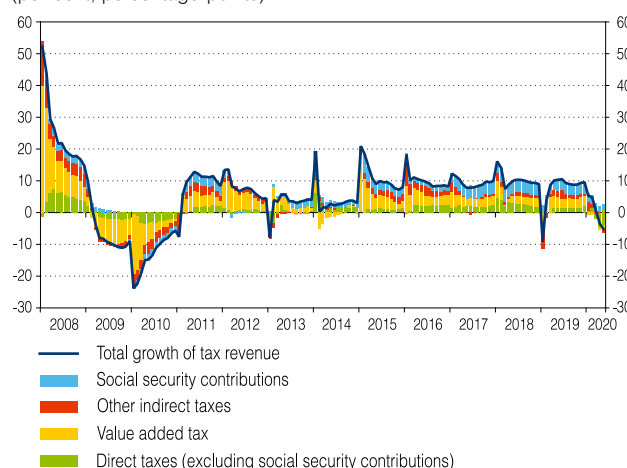
Sources: the MF, BNB calculations.

for April–May, due to VAT receipts from imports (-15.7 per cent for January–May and -31.1 per cent for April–May) amid declines in foreign trade flows, subdued domestic consumption and substantially falling crude oil prices. Domestic travel restrictions and decreased demand for transport services contributed largely to the decline in excise duties since the beginning of the second quarter (down 16.4 per cent for April–May, which explains their 4.9 per cent fall in the first five months of the year). Downward dynamics was also reported in revenue from personal income tax and social security contributions, though less pronounced compared to other tax revenue. Worsening labour market conditions, partially mitigated by government measures to support employment, led to a minimal drop of this revenue for April–May and to slowing, though still positive, cumulative growth since early 2020 (up 3.4 per cent on an annual basis in personal income tax and 4.1 per cent in social security contributions).

The annual growth rate of total CFP expenditure for the first five months of the year was 4.0 per cent, with the recorded slowdown on the end of the first quarter (5.5 per cent) reflecting mainly the substantial reduction in operating expenses (down 5.9 per cent by end-May against 5.8 per cent growth for the first quarter). Reduced growth in total CFP expenditure as of end-May was also driven by the weaker growth rate of personnel costs (up 10.1 per cent as of May and 12.4 per cent as of March) and decreased health insurance payments⁷⁶ and subsidies (a drop of 3.9 and 3.1 per cent, respectively, as of May against growth of 0.4 and 3.8 per cent, respectively, as of March). Downward developments in these current non-interest expenditure suggest that in the post-state-of-emergency period compensatory savings were made on relevant expenditure items to the amount exceeding both immediate expenses on prevention of the spread and treatment of COVID-19 and subsidised employment payments (the

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

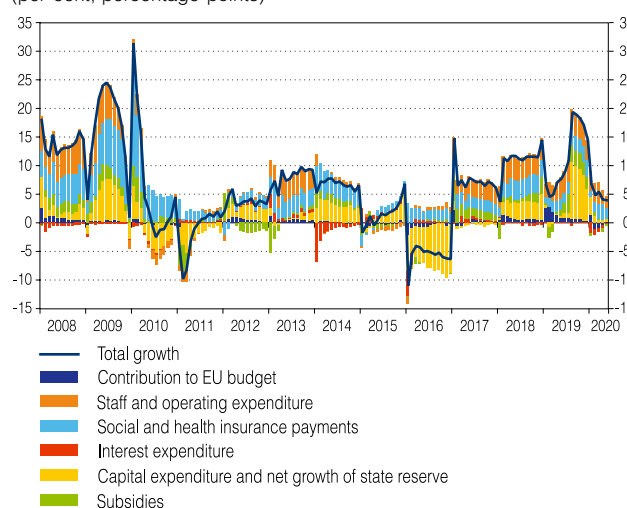
(per cent; percentage points)



Sources: the MF, BNB calculations.

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

(per cent; percentage points)



Notes: In Consolidated Fiscal Programme reports of January 2016, payroll costs include wage, insurance and other remunerations, while in the reports for past periods. The latter were included in operating expenditure. To prevent data inconsistencies prior to and after January 2016 resulting from the methodological change, staff and operating expenditure are presented aggregately in the chart and separately in the table 'Key Budget Indicators Performance for 2019 and 2020'.

Sources: the MF, BNB calculations.

⁷⁶ Based on Ministry of Finance Monthly Bulletins on state budget performance and major CFP indicators from January to May 2020. BNB calculations.

so-called 60/40 employment support measure).⁷⁷ Subdued dynamics of operating expenditure and health insurance payments, as well as slowing growth of personnel costs are likely to limit significantly the role of government consumption in smoothing the economic implications of the COVID-19 spread over the first half of 2020, and a quarterly decline may be seen in government consumption during the second quarter of the year.

In the first five months of the year expenditure on pensions and current transfers, household benefits and allowances under the National Social Security Institute budget increased by 7.5 and 13.0 per cent, respectively,⁷⁸ with accelerated growth in the latter group of payments after the introduction of the state of emergency resulting mainly from higher unemployment benefits due to the deteriorated labour market situation. Higher social payments and subsidies under the 60/40 programme are expected to partially mitigate the negative effects of the worsening macroeconomic environment on disposable income of households, with their effectiveness for supporting domestic demand dependent largely on the savings propensity of affected households.

Between January and May 2020 capital expenditure had a positive, but minimal, contribution to the total budget expenses (0.4 percentage points), driven entirely by the increase in EU co-financed investments (by 11.5 per cent on an annual basis). Given the relatively weak dynamics in capital expenditure, it should be expected that the general government sector will have a limited role in softening the drop in total investment over the second quarter of the year.

In the third and fourth quarters of 2020, more substantial deterioration in the budget position

⁷⁷ By a letter of the Minister of Finance of 4 May 2020, first level spending units, the National Social Security Institute, the National Health Insurance Fund and other units falling within the scope of the consolidated fiscal programme are obliged to submit monthly reporting information on the expenses made on the containment measures on COVID-19 spread and its treatment, business-support measures and social measures. Among the reporting units with published reports as of 31 May 2020, the largest COVID-19-related expenses were registered by the National Social Security Institute (mainly benefit payments under the 60/40 measure to the amount of BGN 52.5 million to 6096 employers for 100,358 employees), the Ministry of Health (BGN 34.6 million), the National Health Insurance Fund (BGN 30.4 million) and the Ministry of Interior (BGN 21.8 million).

⁷⁸ Based on monthly reports on cash-based performance of National Social Security Institute budget.

can be expected as a result primarily of the continued operation of the automatic stabilisers in the revenue and expenditure sides of the budget, the increasing influence of discretionary measures in the expenditure side, raised pensions from the beginning of July and increased capital expenditure typical of the second half year. The downward tendency in tax and non-tax revenue is expected to continue, albeit less pronounced compared to April–May declines. Still weak economic activity will continue to be a key factor behind the budget revenue dynamics. Following the expiry of extended deadlines for some tax obligations by the end of the first half year, operating discretionary measures on the revenue side will affect mainly VAT revenue, given the decreased VAT rates on certain goods and services since 1 July 2020.⁷⁹ In addition, we expect a continuous rise in grant revenue due to the progress in implementing EU co-financed programmes to support micro-, small- and medium-sized enterprises affected by the COVID-19.

The annual adjustment of pensions (by 6.7 per cent since 1 July) along with the expected increase in unemployment benefits and 60/40 programme payments⁸⁰ are expected to contribute to budget expenditure growth over the second half of the year. At the same time, there is an uncertainty what portion of the increase in these payments could be further compensated by savings on the expenditure side of the budget. Under a scenario of continuing reduction of current non-interest expenditure, a moderate positive contribution of the government consumption to economic activity growth would be anticipated in the second half year. Taking into account continuing implementation of existing investment projects financed under the national budget and EU programmes, it may be expected that public investment will have a positive contribution to the change in total investment in the economy over the third and fourth quarters of the year.

⁷⁹ With effect from 1 July, a reduced VAT rate of 9 per cent is levied on books, restaurants and catering services, baby food and diapers. The 9 per cent rate is temporary and will be valid until 31 December 2021.

⁸⁰ Based on daily data of the National Social Security Institute on payments made under the programme, as of 10 July 2020 the sum of BGN 148.6 million was paid, and 8767 companies received funds for one or more months. From early July, the validity of this measure was prolonged until 30 September, its scope was extended and conditions for admission eased simultaneously. At the same time, additional financing is envisaged for the firms of the hotels and restaurants sector under an EU operational programme along with financial incentives for hiring unemployed persons.

Key Budget Indicators Performance for 2019 and 2020

Consolidated Fiscal Programme	2019 January – May ¹		2020 January – May ¹	
	BGN million	per cent ²	BGN million	per cent ²
Total revenue and grants	18 720	17.2	17 637	-5.8
Tax revenue	14 777	10.2	13 997	-5.3
incl. social security and health insurance contributions	4 238	11.6	4 410	4.1
Non-tax revenue	2 953	41.6	2 282	-22.7
Grants	990	102.7	1 357	37.1
Total expenditure (incl. the contribution to EU budget)	15 694	7.8	16 323	4.0
Staff	3 954	13.9	4 352	10.1
Operating expenditure	1 648	2.9	1 551	-5.9
Interest	403	-2.2	346	-14.1
Social expenditure, scholarships	6 927	4.3	7 264	4.9
Subsidies	1 102	16.2	1 068	-3.1
Current and capital transfers to abroad	11	-56.8	12	4.8
Capital expenditure and government reserve growth	1 050	3.4	1 116	6.3
incl. capital expenditure	1 052	3.5	1 122	6.6
Contribution to the general budget of the European Union	599	31.3	615	2.7
	BGN million	difference ³ (BGN million)	BGN million	difference ³ (BGN million)
Budget balance, on a cash basis	3 026	1 604	1 313	-1 713
Tax revenue under the state budget	2019 January – May ⁴		2020 January – May ⁴	
	BGN million	per cent ²	BGN million	per cent ²
Tax revenue	10 010	9.9	9 168	-8.4
Corporate tax	1 229	3.3	698	-43.2
Personal income tax	1 695	9.7	1 753	3.4
Value added tax	4 648	10.1	4 425	-4.8
Excise duties	2 205	14.4	2 097	-4.9
Customs duties and taxes	97	-1.7	87	-10.2
Insurance premia tax	21	16.0	23	8.9
Other taxes	115	7.4	85	-26.5

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

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

² The annual rate of change on the same period of previous year.

³ The change of the budget balance on the same period of previous year.

⁴ Based on monthly reports on cash-based implementation of the state budget.

Source: the MF.

4. INFLATION

Under the influence of COVID-19 effects and containment measures, annual inflation decelerated significantly from the end of 2019, reaching 1.0 per cent in May. The negative contribution of energy products, with their downward dynamics, impacted by the strong fall in international oil prices, played a key role for the slowdown in overall inflation. Inflation moderation was reported in core HICP components and in the group of goods and services with administratively controlled prices. Lower inflation in the food group was driven mainly by internal factors, whereas the effect of the spread of COVID-19 on the price dynamics in the group remained limited.

In the third and fourth quarters of 2020 inflation is expected to decelerate slightly from its current level. Core inflation is projected to moderate due to lower demand and the uncertain economic environment, while the negative contribution of energy products will shrink, reflecting mainly the market expectations about developments in international oil prices in euro. However, food inflation is expected to slow down somewhat driven mainly by the meat and cereal products groups.

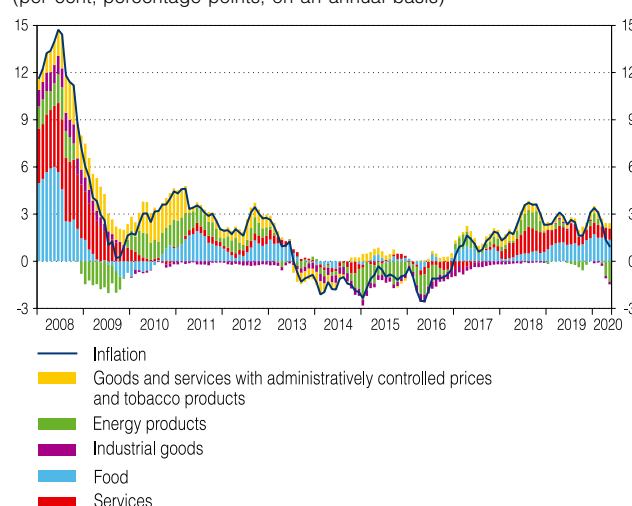
In May 2020 annual inflation slowed down significantly compared to the end of 2019 to reach 1.0 per cent⁸¹ (3.1 per cent in December 2019). A slowdown was observed in each of the main groups, which was largely driven by the spread of COVID-19 and introduced containment measures.

Energy products (excluding those with administratively controlled prices) had the largest negative contribution to inflation in May under the influence of COVID-19 spread effects and limited demand. In the context of the 55 per cent year-on-year drop of euro oil prices, transport fuels recorded deflation of 22.3 per cent. A slowdown in annual inflation was also observed in goods and services with administratively controlled prices and tobacco products, with the contribution of this group to the overall inflation decreasing over the quarter. Food and core HICP components continued to have the main positive contribution to the May inflation, although their price rise rates were lower than those at the end of 2019.

Food inflation in May slowed down to 5.7 per cent (from 6.2 per cent by end-2019) driven mainly by a decreased positive contribution of unprocessed food. At the same time, processed food inflation accelerated to 4.4 per cent in May (from 3.4 per cent by end-2019) due primarily to the group of milk and dairy products. The group

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.

⁸¹ The analysis in this Chapter employs NSI data on the Harmonised Index of Consumer Prices (HICP).

of food products not elsewhere classified kept its high positive contribution to processed food inflation. May inflation in this group was largely driven by ready-to-eat foods available in grocery stores and supermarkets, reflecting most likely meat price increases due to the spread of the African swine fever in Bulgaria.

As of May 2020 annual inflation in unprocessed food fell from the end of 2019 to 8.3 per cent (11.8 per cent in December 2019), reflecting mainly price declines in the vegetables group. Although meat and meat products inflation has slowed down somewhat since early 2020 to 13.2 per cent (16.3 per cent by end-2019), in May it continued to have the main positive contribution to inflation in unprocessed food. Higher pigmeat prices as of May were due to the higher producer⁸² and import prices, reflecting the spread of the African swine fever worldwide and in Bulgaria. In May inflation accelerated in the group of fruit, most likely due to the lower share of Bulgarian fruit on the domestic market and higher prices of imported fruit on an annual basis.⁸³

Core inflation (including services and non-food prices) slowed down from the end of 2019 (1.2 per cent in May 2020 *vis-à-vis* 1.8 per cent in December 2019) reflecting entirely deflation reported in industrial goods (compared to the low inflation in 2019), while the services group had a positive contribution.

Inflation in the group of services decreased slightly to reach 2.8 per cent in May (from 2.9 per cent in December 2019). Retention of a relatively high positive contribution of the catering and transport services groups may reflect, in part, difficulties in data collection for the purposes of the consumer price survey during the state of emergency.⁸⁴ Given the measures taken against the spread of COVID-19, supply of some services was strongly limited (catering, transport services) and entirely absent in

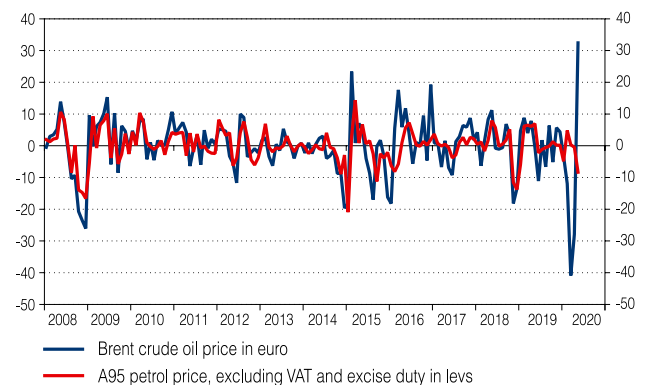
⁸² NSI data on producer prices and indices of agricultural produce for the first quarter of 2020.

⁸³ The analysis employs data on wholesale prices of foodstuff on commodity markets in Bulgaria for May 2020, obtained from the Monthly Bulletin of the Commodity Exchange and Wholesale Markets State Commission.

⁸⁴ For most of the period of the state of emergency (13 March – 13 May), the NSI functioned in a changed mode for collection of consumer prices. For details, see NSI's [press release](#) of 31 March 2020 on a changed organisation of work.

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

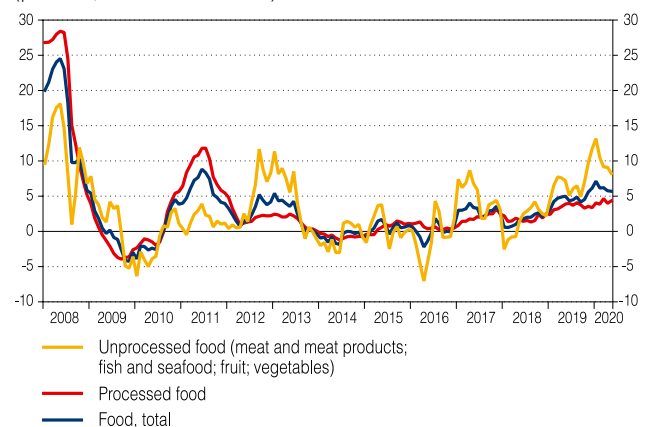
(per cent, on a monthly basis)



Sources: the ECB, the NSI, BNB calculations.

Rate of Change of Food Price Index

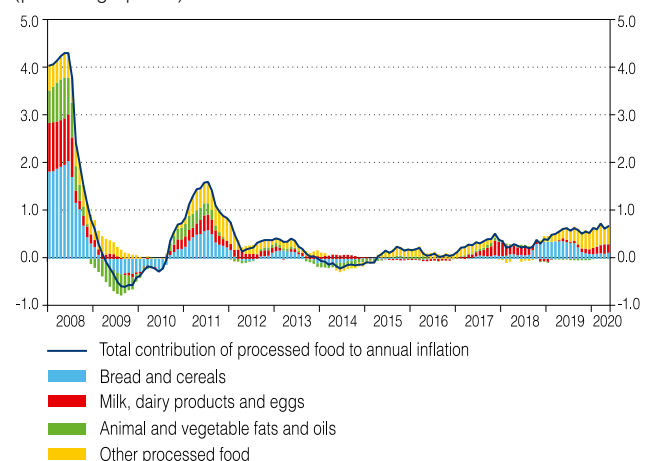
(per cent; on an annual basis)



Sources: the NSI, BNB calculations.

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

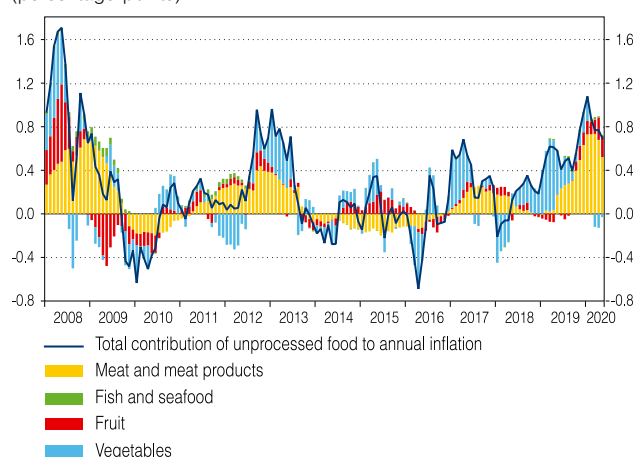
(percentage points)



Sources: the NSI, BNB calculations.

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

(percentage points)



Sources: the NSI, BNB calculations.

other (recreational and cultural services and accommodation services). According to NSI information, collection of price observations still remains challenging in May, with the largest share of missing observations reported in the sub-groups of education and catering services.⁸⁵ Price declines were recorded in recreational and cultural services characterised by a substantial share of missing observations, similarly to insurance. The continuous decline in telecommunication services prices also limited the price increase in the services group.

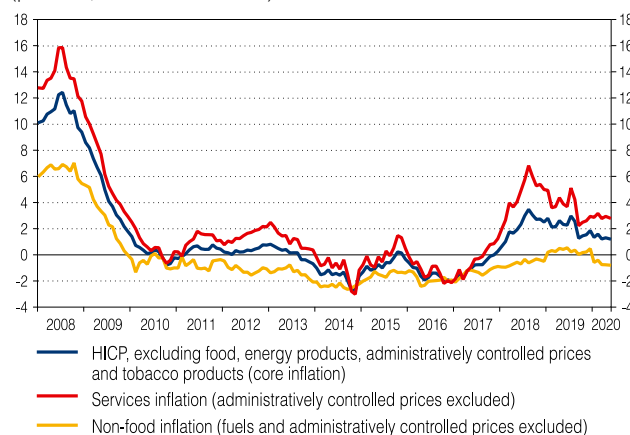
Following the 2019 reversal in non-energy industrial goods deflation observed since 2010, this group's prices have started to decline again since the beginning of 2020 in Bulgaria. Weaker demand for goods in this group stemming from the uncertain economic environment and limited business activity of most retail establishments contributed to the price decreases in the group, with deflation reaching -0.8 per cent in May (compared to 0.5 per cent inflation in December 2019). The increased negative contribution of core inflation was mainly driven by the motor vehicles group. In May deflation was also reported in the sub-group of clothing and footwear, with price declines expected to continue in the following months under the pressure of weaker consumer demand.

The growth rate of goods and services with administratively controlled prices and tobacco

⁸⁵ Methods of price imputation are used to estimate missing observations in line with Eurostat's methodological guidance, subject of national coordination between EU Member States. For details, see NSI's [press release](#) on inflation in May.

Core Inflation

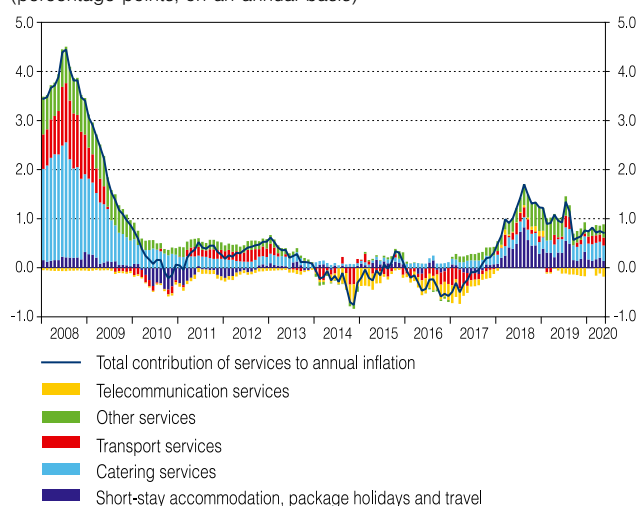
(per cent; on an annual basis)



Sources: the NSI, BNB calculations.

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

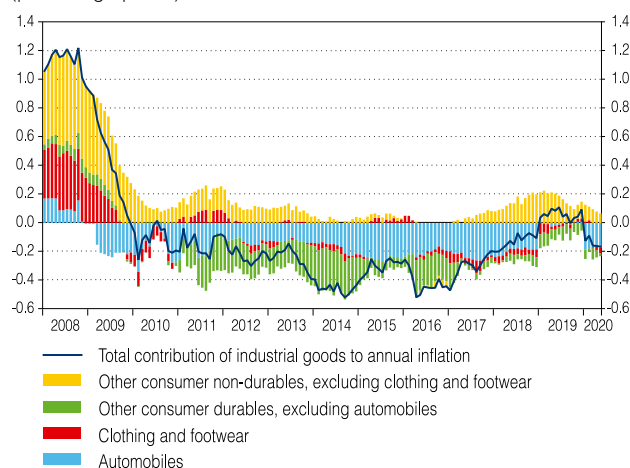
(percentage points; on an annual basis)



Sources: the NSI, BNB calculations.

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

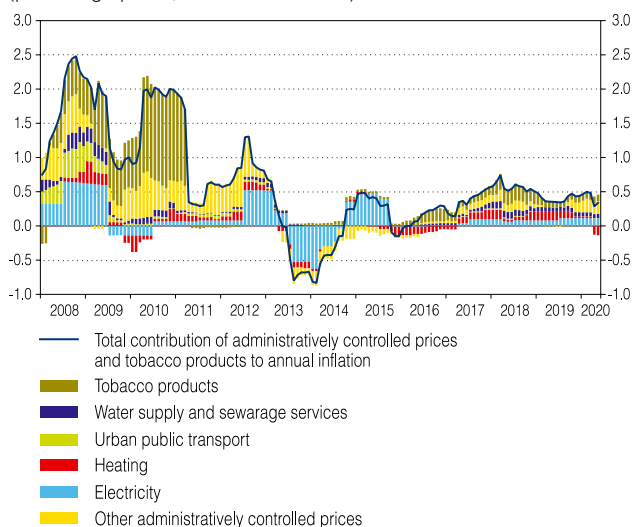
(percentage points)



Sources: the NSI, BNB calculations.

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

(percentage points; on an annual basis)



Sources: the NSI, BNB calculations.

products went down to 1.6 per cent in May, from 2.0 per cent at the end of 2019. The inflation slowdown in this group was largely driven by the lower growth rate of administratively controlled prices, while the recorded increase in tobacco product prices remained close to the level of end-2019 (2.1 per cent as of May 2020 against 2.2 per cent in December 2019). EWRC's cuts in natural gas prices by 43 per cent for April and by a further 11 per cent for May compared to the prices in force until the previous month⁸⁶ and related declines in heating prices by 22 and 4 per cent in the companies using natural gas as a main energy carrier⁸⁷ were essential drivers for the observed slowdown in this group's inflation. The upward trend in medicines and pharmaceuticals inflation that started in mid-2019 was sustained⁸⁸, with their positive contribution to administered price inflation increasing further.

The slowdown observed in headline inflation as of May was in line with the producer price dynamics. In May the overall producer price index (PPI) decreased year on year by 1.6 per cent, compared to an increase of 4.5 per cent in December 2019. This price drop reflected primarily the negative contribution of manufac-

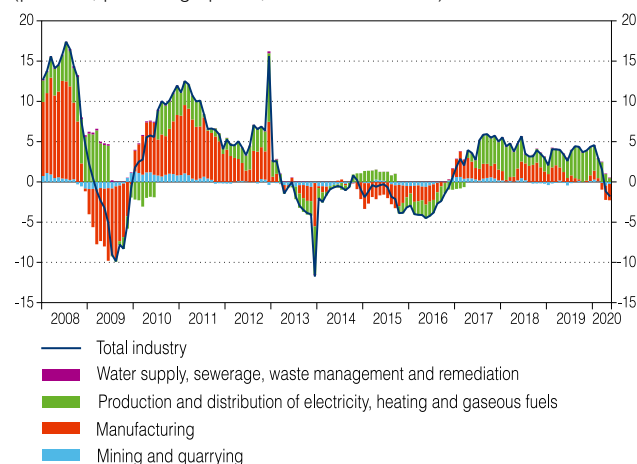
⁸⁶ The EWRC's press release of 1 April 2020 and the press release of 1 May 2020.

⁸⁷ The EWRC's press release of 1 April 2020 and the press release of 1 May 2020 on heating prices and resolutions.

⁸⁸ From 6 August 2019, amendments to the Ordinance on Terms, Rules and Procedures for Regulation and Registration of Prices of Medicinal Products entered into force.

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

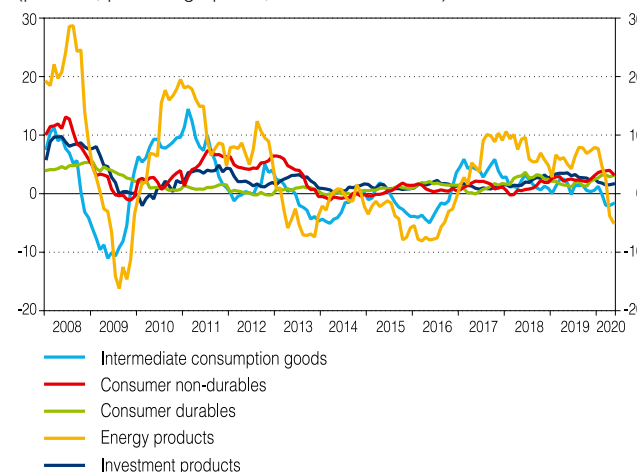
(per cent; percentage points; on an annual basis)



Source: the NSI.

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

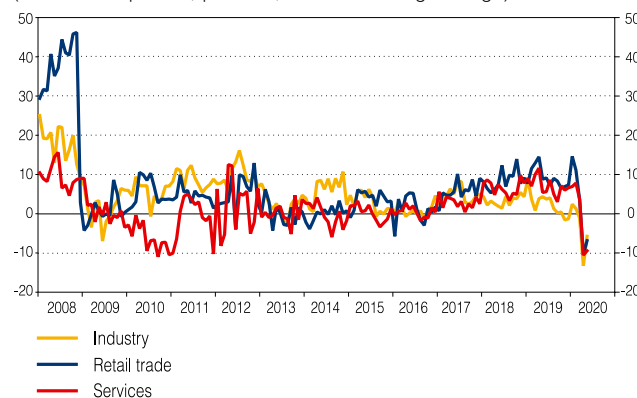
(per cent; percentage points; on an annual basis)



Source: the NSI.

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.

Key Indicators of the Housing Market in Bulgaria

(per cent; year-on-year change)

Indicators	2016	2017	2018	2019	2019			2020
					II	III	IV	I
Price developments								
House Price Index, total	7.0	8.7	6.6	6.0	5.0	5.6	6.2	4.7
New dwellings	6.4	6.7	5.7	8.5	7.5	5.8	8.7	2.0
Existing dwellings	7.3	9.7	7.0	4.8	3.8	5.5	4.9	6.3
Inflation (HICP)	-1.3	1.2	2.6	2.5	2.8	2.2	2.3	3.0
House rentals, paid by tenants (HICP)	0.6	1.0	1.9	3.3	3.7	3.3	3.0	3.2
Lending								
New housing loans	7.4	32.7	14.9	12.4	9.7	14.8	18.7	25.7
Annual percentage rate of charge on new housing loans (per cent, at the end of the period)*	5.4	4.4	3.9	3.5	3.7	3.6	3.5	3.4
Housing loans balances	-15.3	12.6	18.4	-1.4	0.2	13.6	14.5	14.8
Construction and investment								
Permits issued for the construction of new residential buildings (square meters)	4.8	32.5	39.0	-7.9	5.4	-5.4	-38.5	-21.1
Value added in construction (at average annual prices for 2015)	-7.3	4.5	1.4	3.4	6.6	3.2	5.3	1.1
Constriction Production Index, building construction	-16.1	10.9	2.6	8.4	7.8	9.7	5.7	-6.1
Fixed investment; residential buildings**	102.1	19.2	-2.2	1.5	0.2	0.2	4.8	-7.8
Construction cost index for new buildings	0.8	2.5	2.9	5.1	5.2	4.5	5.8	3.3

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

** High annual growth of fixed investment in 2016 is due to repayments under the Energy Efficiency of Multi-family Residential Buildings National Programme.

Sources: the NSI, the BNB, Eurostat.

turing and, more specifically, the sub-sector of production of coke and refined petroleum products. Lower consumer prices of transport fuels reflected these developments. In line with this dynamics, in May the end-use classification shows a year-on-year fall of 4.9 per cent in producer prices of energy products.

Price developments in Bulgaria also corresponded to the results from the NSI business surveys in May, reflecting the negative effect of the spread of COVID-19. As regards managers' expectations of selling prices over the coming three months, the share of managers expecting a decline in the services, industry and retail trade sectors increased significantly, indicating a continuing fall in consumer prices over the coming months.⁸⁹

In the first quarter of 2020, which included also the first two weeks of the state of emergency announced on 13 March, the house price index slowed down to reach 4.7 per cent, from 6.2 per

⁸⁹ Despite the observed fall of the balance of opinions, the NSI business survey results in May 2020 suggest that the share of managers in the sectors of services, industry and retail trade who expect selling prices to retain their present levels over the following three months remains much higher than the share of those who expect prices to fall.

cent at the end of 2019. This slowdown during the quarter was entirely due to the downward developments in prices of new houses. In early 2020 country-wide house prices remained 11.9 per cent lower than the maximum values recorded in the third quarter of 2008.

In the first quarter of 2020 the downward trend in the annual percentage rate of change (APRC) on new housing loans was retained and it reached 3.4 per cent (against 3.5 per cent by end-2019),⁹⁰ thus indicating improving housing affordability of households. Nevertheless, results of the BNB lending survey show that in the first quarter of 2020 credit standards applied to housing loans to households tightened significantly,⁹¹ and banks expect further tightening over the next quarter. These developments indicate worsening housing affordability of households, which is likely to be reflected in lower demand.

Over the first quarter of 2020 the construction production index decreased by 6.1 per cent on an annual basis (against growth of 5.7 per cent by end-2019) and value added growth in this sector slowed down to 1.1 per cent annually (5.3 per cent by end-2019). Concurrently, residential building permits (measured by building floor area) continued to decline (down 21.1 per cent annually for the first quarter). These developments signal that lower supply of new housing may be expected in the following months.

At the same time, estimates obtained on the basis of a BNB macroeconomic model⁹² suggest that in the first quarter of 2020 residential property prices in Bulgaria remained slightly above their long-term equilibrium value dependent on fundamental factors, such as the income level, interest rates on housing loans and FDI inflows. Over the first quarter of 2020 the price-to-rent ratio remained at a level higher than its long-term (historical) value.

Measures against the spread of COVID-19 are expected to have a negative effect on the growth rate of house prices. In the context of falling income for some households, a possible

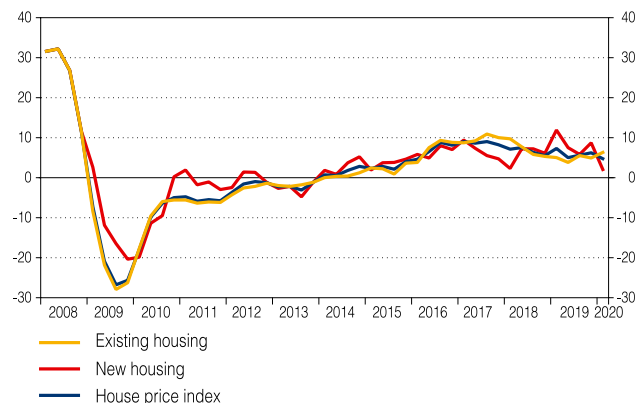
⁹⁰ Values indicating the APRC on housing loans to households are averages weighted by the relevant volumes of new loans for a 12-month period.

⁹¹ For details, see Chapter 2, Monetary and Credit Aggregates Section.

⁹² For additional information on this model, see the research topic Dynamics of House Prices in Bulgaria between 2000 and 2016, Economic Review, issue 1 of 2017.

Rate of Change of House Prices

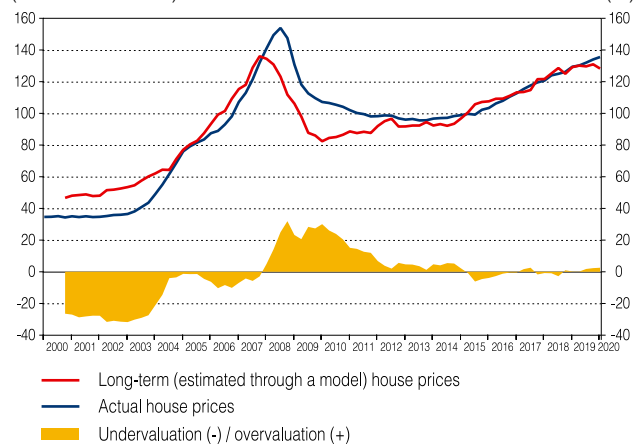
(per cent; on an annual basis)



Source: the NSI.

Actual and Equilibrium House Prices

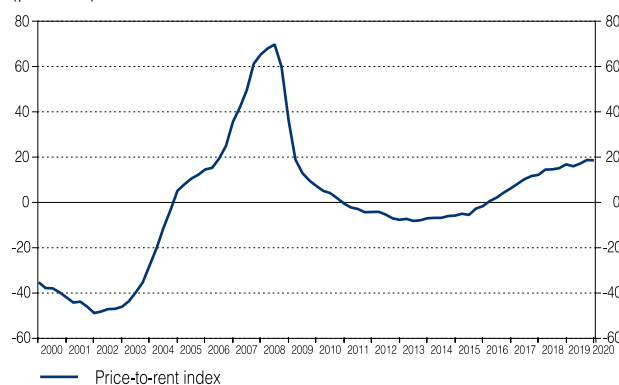
(index 2015 = 100)



Sources: the NSI, BNB calculations.

Price-to-Rent Ratio (Percentage Deviation from Long-term Average Value)

(per cent)



Sources: the NSI, BNB calculations.

increase of interest rates on housing loans and tightening credit standards, housing affordability is expected to worsen which could exert downward pressure on the house price increase in the second and third quarters of 2020.

Our forecast for a slight decline in headline inflation over the third and fourth quarters of 2020 reflects primarily our expectations of price dynamics in core HICP components. Energy products are expected to have the main negative contribution to overall inflation until the end of the year under the influence of international oil price declines on an annual basis, although their negative contribution may shrink gradually *per* quarter in line with the assumptions. The projected slowdown in services inflation and continuous downward trends in non-energy industrial goods prices reflect our expectations of weaker private consumption. The additional significant cut in the natural gas price announced by the EWRC (by 9 per cent for June against the price in force up to May)⁹³ is also anticipated to contribute to the slowdown in overall inflation. Food inflation is projected to decelerate, with this dynamics most pronounced in the group of meat and meat products due to a base effect resulting from price increases in this group over the last year. The strong price decrease in natural gas which is the main energy source for most of bread producers is likely to contribute to lower inflation in bread and cereal products. The projected slowdown in food inflation is likely to affect catering prices, contributing to the moderation in services inflation.

Risks to the inflation outlook until the end of the year are assessed as being on the downside, stemming notably from the uncertain macroeconomic environment. Materialisation of lower than expected international oil prices in euro would be a precondition for both lower inflation in energy products and decreased inflation in some services groups and goods and services with administratively controlled prices. Risks to the core inflation forecast are assessed as being on the downside, arising primarily from the possibility of lower than expected private consumption. Risks to the food inflation can be defined as balanced and reflecting largely the uncertainty around the effects of COVID-19 containment measures and international price dynamics.

⁹³ The EWRC's press release of 1 June 2020.

Rates of Change in Commodities and Services Prices and Their Contribution to Inflation

	Inflation accumulated as of May 2019 (December 2018 = 100)		Inflation accumulated as of May 2020 (December 2019 = 100)		Annual rate of inflation as of May 2020 (December 2019 = 100)	
Inflation (per cent)	1.5		-0.6		1.0	
	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	4.1	1.0	3.7	0.9	5.7	1.4
Processed food	1.4	0.2	2.4	0.4	4.4	0.7
Unprocessed food	9.6	0.8	6.1	0.5	8.3	0.7
Services	-0.5	-0.1	-0.7	-0.2	2.8	0.7
Catering	2.0	0.1	2.1	0.1	5.9	0.3
Transport services	-3.5	-0.1	-0.2	0.0	5.5	0.2
Telecommunication services	-2.0	-0.1	-1.7	-0.1	-3.1	-0.1
Other services	-0.3	0.0	-1.6	-0.2	3.1	0.4
Energy products	5.5	0.4	-16.4	-1.2	-17.5	-1.3
Transport fuels	7.5	0.5	-21.0	-1.2	-22.3	-7.6
Industrial goods	0.8	0.2	-0.5	-0.1	-0.8	-0.2
Goods and services with administratively controlled prices*	0.3	0.0	-0.3	0.0	1.5	0.2
Tobacco products	0.3	0.0	0.2	0.0	2.1	0.1

* 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 2020–2022

The global spread of COVID-19 since the beginning of 2020 and the containment measures undertaken in a number of countries have strong negative effects on Bulgaria's economic activity in terms of both aggregate demand and supply. Given the unprecedented nature and scale of the economic shock globally and in Bulgaria, the forecast for the development of the Bulgarian economy is surrounded by a high degree of uncertainty, including in the short run.

The BNB forecast of key macroeconomic indicators is based on information published by 17 June 2020, involving assumptions on global economic developments and commodity price dynamics in international markets by 9 June 2020. Based on the assumptions on the international situation external demand for Bulgarian goods and services is expected to fall strongly in 2020: by 13.3 per cent on average driven mainly by a substantial quarterly fall in the second quarter of the year. The assumptions reflect expectations of a gradual curb in the global spread of COVID-19. As a result, the external demand recovery on a quarterly basis will start in the second half of 2020 and it will continue in 2021–2022. In 2020 prices of energy and non-energy products are expected to decrease in both US dollars and euro compared with 2019 and to start rising in the following two years consistent with the improvement in the global economic activity.

The data available as of 17 June, on the basis of which the forecast has been prepared, suggest that one of the strongest historical falls in Bulgaria's GDP is to be expected, but there is great uncertainty regarding the scale of the economic shock over the period. Given the uncertainty about future developments in the epidemic situation, the uncertainty surrounding the GDP dynamics in the second half of the year is also significant. Consequently, according to the constructed probability distribution around the baseline forecast for the change in GDP in 2020 (-8.5 per cent), the estimate as of 17 June suggests that the decline in real GDP over the year will vary from -4.1 per cent to -13.1 per cent and the probability for the magnitude of the change in GDP to fall in this range is estimated at 60 per cent.

According to the baseline forecast Bulgaria's real GDP will decrease by 8.5 per cent in 2020, which will be mainly driven by a fall in private consumption (contributing by -3.4 percentage points) and fixed capital investment (contributing by -3.2 percentage points) and to a lower degree by the negative contribution of net exports (contributing by -2.6 percentage points). Fiscal policy is expected to have a positive contribution to the economic activity through higher national and EU co-financed expenditure on government consumption and investment. In accordance with the assumptions about external environment developments and curb of the pandemic in the 2021–2022 period, a gradual recovery in the economic activity is projected, and at the end of the forecast horizon real GDP is expected to match its 2019 level. Private consumption and exports of goods, as well as the assumption of a strong rise in public investment, will contribute most to GDP growth over the period.

Annual inflation is expected to slow down substantially to 0.8 per cent at the close of 2020, reflecting the sharp fall in international oil prices in euro and the fallout from weaker private consumption, which are expected to result in a slowdown of inflation in services and a lower non-energy industrial goods price index. Overall Inflation is expected to accelerate to 1.4 per cent at the end of 2021, reflecting mainly the assumption of higher oil prices, and to remain at similar levels in 2022.

The balance of risks to the macroeconomic outlook are assessed as being on the downside, suggesting a possibly larger decline in real GDP over 2020 and a slower subsequent recovery of economic growth. Such risks would materialise in the event of a continued spread of COVID-19 in Bulgaria and worldwide due to the failure to contain it effectively, which would be a reason for extending the existing anti-epidemic measures or for a launch of new more restrictive measures. Risks to the inflation outlook are assessed as being on the downside, arising mostly from possibly lower inflation in energy products and core HICP components.

Forecast

The global spread of COVID-19 since the beginning of 2020 was the reason for a number of countries to launch containment measures aimed at maintaining social distancing. This generated strong negative effects on the economic activity in Bulgaria and in the countries which are Bulgaria's major trading partners in terms of both aggregate demand and supply. Given the unprecedented nature and scale of the economic shock caused by the containment measures intended to curb the spread of COVID-19 globally and in Bulgaria, and the uncertainty about future developments in the epidemic situation, the forecast for the development of the Bulgarian economy is surrounded by a high degree of uncertainty, including in the short run.

The BNB forecast of key macroeconomic indicators is based on data published as of 17 June 2020. ECB, EC and IMF assumptions on global economic developments and the dynamics of international prices of major commodity groups as of 9 June 2020 are used. Based on these assumptions global economic activity in 2020 is expected to fall significantly as a result of the global spread of COVID-19 and the measures launched to curb the pandemic. Projections point to a fall in real GDP across global regions. However, the decline in the economic activity across countries will diverge depending on factors such as the epidemic situation, cyclical position of the economy prior to COVID-19, fiscal and monetary policy measures launched to tackle the crisis, as well as on structural factors such as the degree of integration in global value chains, the size of heavily affected sectors by COVID-19 (e.g. transport and tourism) and available fiscal buffers. IMF projections show that advanced economies will be more strongly affected than emerging market economies in 2020. In the 2021–2022 period projections are for a recovery of real GDP growth in affected countries, which will be more strongly pronounced in emerging market economies, with China playing a key role to this.

External demand for Bulgarian goods and services is expected to slow down substantially on both quarterly and annual basis over the second quarter of 2020, reflecting the global expansion of the COVID-19 pandemic and the measures initiated by a number of countries to mitigate the spread of the infection. Assuming a gradual global easing of the magnitude and stringency of the measures in the second half of the year, external demand for Bulgarian goods and services is expected to gradually recover on a quarterly basis. However, it will remain below its levels in the corresponding period of 2019. As a result of these developments external demand is projected to fall by 13.3 per cent in 2020 and to rise by 8.1 per cent 5.4 per cent in 2021 and 2022. The baseline scenario for the external demand dynamics does not foresee a further launch of containment measures against the spread of COVID-19 in the countries which are Bulgaria's major partners over the second half of 2020.

With the expansion of the pandemic commodity prices in both US dollars and euro (excluding food prices) fell significantly on an annual basis for the first five months of the year. Petroleum products posted the strongest drop amid severely limited global travels and transportation services, which comprise two thirds of global demand for petroleum products⁹⁴. Metal prices in US dollars and euro were also severely affected by the contracted industrial output and disrupted supply chains. Food prices alone exhibited a year-on-year rise in the first five months of 2020 in both US dollars and euro. The price hike reflected concerns about any difficulties that might occur in harvesting agricultural produce due to the pandemic-related containment measures, an excessive stockpiling of staple goods by consumers and export bans on particular foods in some countries.

In line with the assumptions about developments in global economic activity, petroleum product prices are expected to fall substantially in 2020 in both US dollars and euro and to start gradually recover in the remaining projection horizon. Non-energy product prices in US dollars and in euro are also anticipated to post a decline in 2020 followed by a rise in 2021–2022 driven mostly by the rise in metal prices amid gradually increasing global demand. The rise in food prices will probably slow down compared with 2020.

⁹⁴ See p. 1 in the Commodity Markets Outlook of the World Bank for April 2020.

Based on these assumptions and the economic data for Bulgaria available as of 17 June the projections are for a severe annual decline in GDP in the second quarter of 2020 followed by a gradual recovery. The data as of 17 June suggest that one of the strongest historical falls in Bulgaria's GDP is to be expected in the second quarter of 2020 but there is great uncertainty regarding the scale of the economic shock over the period. Given the uncertainty about future developments in the epidemic situation, the uncertainty surrounding the GDP dynamics in the second half of the year is also significant. Consequently, according to the constructed probability distribution around the central forecast for the change in GDP in 2020, the estimate as of 17 June shows that there is a 60 per cent probability for the decline in real GDP to move within -4.1 per cent and -13.1 per cent in the current year (see the fan chart of the expected annual rate of change of real GDP, p. 94) According to the central forecast Bulgaria's real GDP will decrease by 8.5 per cent in 2020, which will be mainly driven by a fall in private consumption (contributing by -3.4 percentage points) and fixed capital investment (contributing by -3.2 percentage points) and to a lower degree by the negative contribution of net exports (contributing by -2.6 percentage points). Private consumption is anticipated to decline by 5.3 per cent in 2020 in line with the projected worsening of labour market conditions and lower real disposable income of households. The government programme supporting employment and income will partially mitigate negative effects. The increased uncertainty in the economy and worsened consumer sentiment are the reasons for households to postpone their purchases of durable goods and increase the amount of precautionary savings. In 2020 the volume of fixed capital investment is expected to decrease by 17 per cent in real terms, entirely due to the anticipated drop in private investment. This decline will be driven by deteriorated prospects of demand for Bulgarian goods and services, decreased household consumption, the enhanced uncertainty and worsening financial performance of firms, as well as by tightened credit standards of banks. The measures introduced to support business, as the temporary moratorium on loan servicing, provision of grants under different EU programmes and loan guarantees for small- and medium-sized enterprises, are expected to mitigate only partially the negative effects of the pandemic on financial conditions and sentiment of corporations and, hence, managers' readiness to launch investment projects. In 2020 the fiscal policy is projected to contribute positively to growth in real GDP through higher national and co-financed expenditure on government consumption and investment.⁹⁵ The contribution of net exports to real GDP growth is expected to be negative in 2020. The projected decline of economic activity in major trading partners of Bulgaria and disruptions in supply chains are anticipated to contribute to a 15.1 per cent fall in overall goods and services exports. As regards exports of services (especially transport and tourism), the decline is expected to be higher than that in goods. The projection of goods and services imports also shows a decrease in 2020 in line with described downward dynamics in private consumption and investment (characterised by a high import component) and weaker exports of goods and services.

A partial recovery in economic activity and real GDP growth of 5.1 per cent are projected for 2021. This will be driven by the recovery in private consumption in the context of a gradual decrease in the uncertainty, a moderate rise in employment and accelerated growth in wages *vis-à-vis* 2020 in line with enhancing labour productivity. Public investment is projected to have a further positive contribution to GDP growth underpinned by the better absorption of EU funds in the last phase of the 2014–2020 programme period and continuous implementation of large infrastructure projects financed by the national budget. The recovery process in private investment is expected to be comparatively slow, and its contribution to the economic growth to be low. The projected increase in external demand over 2021 will be a factor for a rise in goods and services exports whereby net exports will contribute positively to real GDP growth. In 2022 we foresee a further increase in economic activity, though at a slower rate (4.6 per cent) and real GDP to reach its 2019 level by the year's end.

In 2020 a rise is expected in Bulgaria's BOP current account surplus as a share of GDP compared to 2019. This will be mainly driven by the significant year-on-year fall in the deficit on net primary income, reflecting projections of lower dividend payments and distributed profits to non-residents as a result of

⁹⁵ For further information on the factors for increasing discretionary expenditure of the government due to the COVID-19 crisis, see the research topic on the Impact of the COVID-19 Crisis on Public Finances, published in the Economic Review, issue 1 of 2020.

worsening economic activity in Bulgaria and financial performance of corporations. In 2020 the negative trade balance is expected to slightly increase as a share of GDP from 2019, driven by a higher drop in real exports of goods compared to that in imports. A factor likely to limit the increase in the trade deficit will be the emergence of highly positive terms of trade (measured by the change in export prices of goods compared to import prices of goods). Downward dynamics in oil prices will have a strong contribution to this, as Bulgaria is a net importer of oil. As regards the services trade balance, in 2020 we project a fall in the surplus as a share of GDP compared to 2019, reflecting the fact that Bulgaria is a net exporter of tourist services and services related to passenger transport which are among the sectors most affected by the measures against the COVID-19 pandemic. In 2020 net transfers on the BOP net secondary income account are projected to remain relatively stable as a share of GDP compared to 2019.

With the partial recovery in external demand and formation of a positive contribution of net exports of goods and services to real GDP growth, the current account surplus is also expected to continue rising as a share of GDP in 2021. Over the remaining forecast horizon, the surplus is projected to begin contracting mainly under the influence of higher investment income to non-residents as a result of the improving economic activity in Bulgaria.

In 2020 the total number of people employed in the economy may decline by 3.3 per cent, reflecting the worsened macroeconomic environment, with this process only partially compensated by the government measures to maintain employment. In 2021–2022 the number of employed is expected to gradually recover, unlikely to reach its 2019 levels. Reflecting largely employment developments, the unemployment rate will increase to 6.6 per cent in 2020, but it will start to decline smoothly thereafter. As a result of the expected weaker drop in employment compared to real GDP, labour productivity will decline in 2020. In the remaining forecast horizon, productivity will broadly follow real GDP dynamics due to a projected slight rise in the number of employed. Over 2020 the compensation *per* employee growth rate is anticipated to significantly slowdown, driven by decreased hours worked *per* person due to the containment measures on the COVID-19 during the state of emergency in Bulgaria and intentions announced by some of the firms to cut employee wages.⁹⁶ Factors expected to contribute positively to growth in compensation *per* employee over 2020 are the increased minimum wage since 1 January 2020 and higher budget and education wages projected in the budgetary framework. The continuous wage increase in the sector of education over 2021 coupled with recovered growth in employment will result in more robust growth in wages on average for 2021–2022 compared to 2020. Reflecting the above sub-component dynamics, growth in nominal unit labour costs will accelerate strongly during 2020, albeit remaining comparatively low in the following two years.

Inflation is projected to slow down on an annual basis to 0.8 per cent by end-2020, reflecting the substantial fall in energy prices in line with the oil price decrease on an annual basis. Core inflation is expected to slowdown mainly under the influence of anticipated private consumption declines, which may lead to lower inflation in services and a decrease of the non-energy industrial goods price index. The projection includes a slowdown in food inflation, more clearly pronounced in the group of meat and meat products.⁹⁷ Decreased prices of natural gas and heating approved by the EWRC in the second quarter of 2020 are of key significance for the expected strong slowdown of inflation in goods and services with administratively controlled prices compared to the end of 2019. Inflation is expected to increase to 1.4 per cent by end-2021 due primarily to the assumption of increased oil prices. Slight acceleration is projected in core inflation, reflecting largely the upward dynamics in services prices amid growing private consumption. In line with international food price assumptions, inflation in this group is expected to slow down further. Our forecast shows retention of the overall inflation at a similar level by end-2022, with food and energy inflation likely to moderate in line with developments in international food and oil prices. Concurrently, core inflation is expected to further increase gradually due to the services group.

⁹⁶ For details, see: <https://www.nsi.bg/en/content/18166/basic-page/survey-results-related-impact-state-emergency-business>.

⁹⁷ The expected slowdown is due to a base effect associated with an increase of the prices in this group over the last year.

Over the projection horizon, non-government sector's deposits are anticipated to continue growing at comparatively high rates. In 2020 this dynamics will be driven by formation of precautionary savings by economic agents in the context of an increased uncertainty around the future development of the macroeconomic environment and the absence of a safe and low-risk alternative to bank deposits. Assuming that the pandemic will be gradually overcome, in 2021 and 2022 the effect of precautionary savings is likely to be less pronounced. Persistently high inflows of attracted funds in the banking system will contribute to the maintenance of deposit rates at the reached low levels. In 2020 growth in non-government sector's credit is projected to slow down significantly on an annual basis due to the worsening macroeconomic environment and contracting domestic demand as a result of the COVID-19 pandemic. On the supply side, potential further tightening of credit standards may result from the expected decline in the risk appetite of banks, the overall deterioration of the business climate and reduced borrower solvency. Despite the low costs of funds attracted by banks, the higher uncertainty in the economy due to the pandemic is expected to push up the risk premium on loans which is projected to lead to some increase in interest rates on newly extended loans.⁹⁸ Under the assumption of coping with the pandemic and gradually recovering economic activity, the growth rate of loans to the non-government sector in 2021–2022 is expected to accelerate gradually, though remaining significantly lower than that in 2019.

Forecast Revisions

Compared with the forecast published in Economic Review, issue 4 of 2019, projecting an increase in the economic activity over the entire projection horizon, real GDP is currently expected to decline substantially in 2020 and to grow at a higher rate in 2021–2022. However, at the end of the projection horizon real GDP will remain lower *vis-à-vis* the previous forecast.

The revision of the real GDP growth forecast largely reflects the effects of the spread of COVID-19 globally and the containment measures to cope with the pandemic in a number of countries, including Bulgaria. These measures constitute significant adverse shocks to the Bulgarian economy in terms of demand and supply at the same time. Consequently, the downward revision of GDP in 2020⁹⁹ is due to both components of internal demand and net exports.

Expectations of real GDP growth in 2021 and 2022 are revised upwards compared to the previous forecast, mainly on account of the lower base in 2020. Current assumptions about the external environment show signs of a recovery in external demand growth for Bulgarian goods and services in 2021–2022 following the expected decline in 2020, which is reflected in higher export growth rates over that period. Expected growth in gross fixed capital formation in 2021–2022 is revised upwards, however not offsetting the significant drop in 2020, which implies substantially lower investments in the economy at the end of the projection horizon. In the following two years private consumption is expected to grow at lower than projected rates, driven by the forecast of a lower number of employed in the overall economy and weaker labour income growth, coupled with increased uncertainty entailing higher precautionary savings compared to the previous forecast. Projected higher growth in exports and gross fixed capital investment over 2021–2022 is the driver behind an upward revision also in goods and services import growth rates.

The overall inflation forecast has been revised downwards for the entire projection horizon, largely reflecting the new assumptions about international food and oil prices in euro and the negative economic effects of the COVID-19 spread and containment measures. A lower growth rate of service prices driven by the downward revision of private consumption expectations is the key factor for the

⁹⁸ The projection of credit and interest rate growth has been prepared without taking account of the effect of loans to individuals and firms guaranteed by the Bulgarian Development Bank and deferred loans under the BNB Procedure for Deferral and Settlement of Liabilities Payable to Banks and their Subsidiaries – Financial Institutions in relation to the state of emergency enforced by the National Assembly on 13 March 2020.

⁹⁹ For more information, see the research topic on Main Transmission Channels of the COVID-19 Pandemic to Economic Activity in Bulgaria, published in the Economic Review, issue 1 of 2020.

downward revision of core inflation over the entire period. The energy inflation forecast has been revised downwards for 2020 and upwards for 2021 and 2022 in line with the anticipated lower international oil prices on an annual basis until the end of 2020 and a gradual oil price increase as set out in the assumptions over the remaining forecast horizon. The prevailing downward revision of food inflation corresponds to the assumptions about international food prices. Lower natural gas and heating prices announced by the EWRC in the second quarter of 2020 are the main factor behind the downward revision of inflation in goods and services with administratively controlled prices for that year.

GDP and Inflation Forecast Revisions (22 June 2020 *vis-à-vis* 20 December 2019)

Annual rate of change, per cent	Forecast as of 22 June 2020				Forecast as of 20 December 2019				Revision (percentage points)			
	2019	2020	2021	2022	2019*	2020	2021	2022	2019	2020	2021	2022
GDP at constant prices	3.4	-8.5	5.1	4.6	3.4	3.5	3.6	3.6	0.0	-12.0	1.5	1.0
Private consumption	5.8	-5.3	3.8	3.3	5.8	4.3	4.3	3.7	0.0	-9.6	-0.5	-0.4
Government consumption	5.5	3.8	0.2	2.2	5.5	4.0	3.8	3.1	0.0	-0.2	-3.6	-0.9
Gross fixed capital formation	2.2	-17.0	7.2	9.8	2.2	6.0	7.1	7.3	0.0	-23.0	0.1	2.5
Exports of goods and services	1.9	-15.1	8.9	5.4	1.9	2.9	3.0	3.2	0.0	-18.0	5.9	2.2
Imports of goods and services	2.4	-11.2	6.3	4.7	2.4	4.5	4.5	4.1	0.0	-15.7	1.8	0.6
HICP at end of period	3.1	0.8	1.4	1.3	3.1	2.0	1.7	1.8	0.0	-1.2	-0.3	-0.5
Core inflation	1.8	0.8	0.9	1.2	1.8	2.2	2.5	2.4	0.0	-1.4	-1.6	-1.2
Energy products	4.1	-11.9	2.6	2.1	4.1	-4.9	-1.3	-0.3	0.0	-7.0	3.9	2.4
Food	6.2	5.0	3.4	2.4	6.2	5.5	2.8	2.7	0.0	-0.5	0.6	-0.3
Goods and services with administratively controlled prices and tobacco products	2.0	-0.2	0.1	0.0	2.0	0.1	0.1	0.0	0.0	-0.3	0.0	0.0

* Reporting data for 2019.

Source: the BNB.

Risks to the Forecast

The uncertainty surrounding the forecast is substantial, including in the very short term. The balance of risks to the baseline scenario of the macroeconomic projection is assessed as being on the downside, suggesting a possibly larger decline in real GDP in 2020 and a slower recovery of economic growth over the rest of the forecast horizon. Such risks could arise in case of a further spread of COVID-19 in Bulgaria and globally due to the failure to contain it effectively, which could be a reason for extending the existing anti-epidemic measures or introducing new more stringent ones. Such a scenario would lead to weaker domestic demand, persistent high levels of uncertainty in the economic environment and pessimistic expectations of economic agents. This, in turn, would prompt households and firms to maintain higher precautionary savings and refrain from unnecessary consumer and investment expenditure. Concurrently, as regards the external environment, we believe that the risks are associated with a slower than set out in the assumptions recovery in exports, and in particular in tourist services. An additional risk to the forecast stems from the uncertainty about the impact of government's discretionary expenditure on domestic demand. Such uncertainty exists both in terms of magnitude and duration of the implemented measures and their success in mitigating the negative effects on private consumption and investment. A downward risk to the forecast represents the statutory restriction to undertake new commitments to incur expenditure and the potential delay in the implementation of investment projects co-financed by EU or national funds.

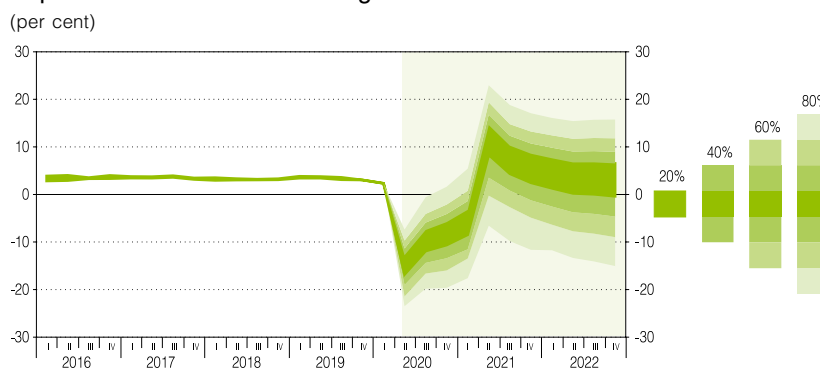
Domestic demand higher than projected in the baseline macroeconomic forecast would materialise in case of a possible introduction of additional or extension of the existing fiscal stimuli in support of households and corporations along with faster than projected improvement of economic agents' expectations. If such a scenario materialises, higher growth rates in private consumption and investment could be expected.

The uncertainty over the outlook for a particular indicator may be graphically illustrated by means of a fan chart. Chart bands coloured with a specific colour set an interval within which with a certain probability the projected value is expected to fall (for further details see the note to the chart on GDP growth). Usually, each interval widens with the increase in the forecast horizon, reflecting the increasing uncertainty further into the future. Given the unprecedented nature of the economic shock resulting from the containment measures to curb the spread of COVID-19 and the uncertainty surrounding the future development of the epidemic situation, the uncertainty interval under the current forecast is unusually wide even in the short term, which is evidenced by the profile of the fan chart since the second quarter of 2020. The middle band of the fan 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 within this band in each of the quarters. According to the chart the probability distribution for 2020 shows a 60 per cent probability for the GDP annual rate of change to fall within the interval from -4.1 per cent to -13.1 per cent.

Risks to the inflation outlook are assessed as being on the downside. Lower than projected inflation could be expected for the energy products and core components, while risks to the inflation outlook in food may be defined as balanced. Realisation of international oil prices in euro, which are lower than those set out in the assumptions, would be a precondition for both lower inflation in energy products and a decline in administratively controlled prices of some services, including electricity and heating prices. Risks to the core inflation outlook are assessed as being on the downside. In case of weaker private consumption it is possible that core inflation slows down more than expected. The balance of risks regarding inflation is graphically shown in the fan chart below.

With regard to non-government sector's bank deposits risks of higher than projected growth prevail. Despite low deposit rates, the increased uncertainty surrounding the duration of the COVID-19 pandemic and the effects on income and gross operating surplus in the economy could lead to higher than projected precautionary savings by households and corporations. At the same time, risks to lower than projected growth rate of credit to the non-government sector prevail, mainly due to downward risks to the real economic activity dynamics.

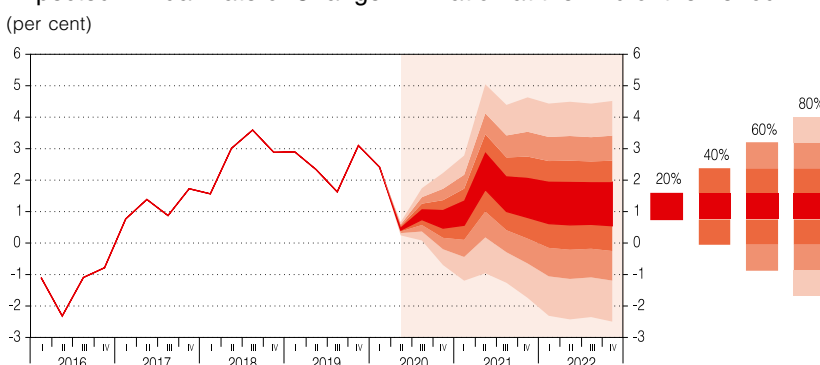
Expected Annual Rate of Change in Real GDP



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.

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



Notes: 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 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.

Forecast of Key Macroeconomic Indicators for 2020–2022

(per cent)

	2018	2019	2020	2021	2022
<i>Annual rate of change</i>					
GDP at constant prices	3.1	3.4	-8.5	5.1	4.6
Private consumption	4.4	5.8	-5.3	3.8	3.3
Government consumption	5.3	5.5	3.8	0.2	2.2
Gross fixed capital formation	5.4	2.2	-17.0	7.2	9.8
Exports of goods and services	1.7	1.9	-15.1	8.9	5.4
Imports of goods and services	5.7	2.4	-11.2	6.3	4.7
HICP at end of period	2.3	3.1	0.8	1.4	1.3
Core inflation	2.5	1.8	0.8	0.9	1.2
Energy products	1.0	4.1	-11.9	2.6	2.1
Food	2.4	6.2	5.0	3.4	2.4
Goods and services with administratively controlled prices and tobacco products	2.3	2.0	-0.2	0.1	0.0
Employment	-0.1	0.3	-3.3	0.7	0.6
Unit labour costs	6.3	2.9	8.6	1.3	2.1
Labour productivity	3.2	3.0	-6.0	5.0	3.9
Unemployment rate (share of labour force, per cent)	5.3	4.3	6.6	6.1	5.6
Claims on non-government sector	8.9	9.7	0.6	3.5	4.2
Claims on corporations*	6.4	6.6	-0.9	2.1	3.0
Claims on households	11.2	9.5	2.9	4.7	5.4
Deposits of the non-government sector	7.3	9.7	7.5	7.3	7.3
<i>Share of GDP</i>					
Balance of payments current account	1.4	4.0	4.6	5.0	4.7
Trade balance	-3.3	-2.8	-2.9	-2.2	-1.9
Services, net	5.9	6.2	4.7	5.3	5.3
Primary income, net	-4.4	-2.8	-0.6	-1.0	-1.6
Secondary income, net	3.2	3.4	3.4	2.9	2.9
<i>Annual rate of change</i>					
External assumptions					
External demand	3.1	1.7	-13.3	8.1	5.4
Average annual Brent oil price (in USD)	30.7	-9.9	-38.7	7.3	6.8
Average annual price of non-energy products (in USD)	4.1	-3.6	-2.0	3.8	2.9
Brent oil price at the end of period (in USD)	9.6	-7.0	-36.7	9.2	6.1
Price of non-energy products at the end of period (in USD)	-1.1	0.8	-1.4	3.8	2.5

* Data refer to non-financial corporations.

Source: the BNB.

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