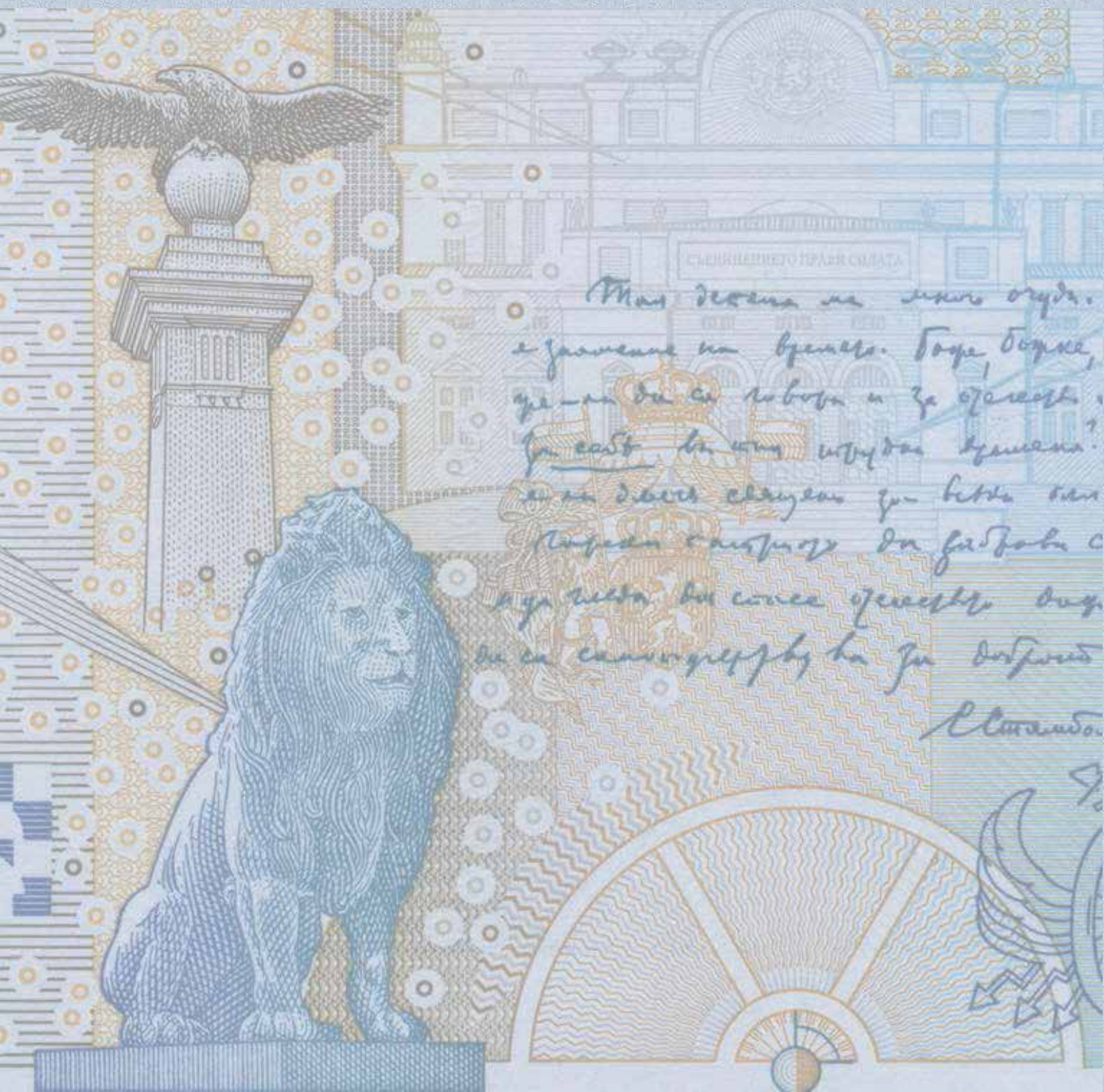


BULGARIAN NATIONAL BANK



ECONOMIC REVIEW

3/2020



ECONOMIC REVIEW

3/2020



BULGARIAN NATIONAL BANK

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 3/2020 was presented to the BNB Governing Council at its 29 October 2020 meeting. It employs statistical data published up to 9 October 2020. Expectations of economic trends in Bulgaria in the short-term (until the first quarter of 2021), as described in this document, are based on the BNB macroeconomic forecast prepared as of 25 September 2020. Expectations are founded on the assumption of no increase in the number of people infected with COVID-19 and no subsequent tightening of containment measures that would affect the economic behaviour of households and firms. After the cut-off date for information used for the analysis in the Economic Review, issue 3/2020 (9 October 2020), a significant increase in the number of people infected with COVID-19 globally and in Bulgaria has been observed.

The estimates and projections published in this issue should not be regarded as advice or recommendation. Exclusively the information user is liable for any consequences thereof.

The Economic Review is available at the BNB website, Research and Publications menu, Periodical Publications sub-menu. Please address notes, comments and suggestions to the BNB Economic Research and Projections Directorate at 1000 Sofia, 1, Knyaz Alexander I Square.

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This issue includes materials and data received up to
12 November 2020.

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ISSN 2367 – 4962 (online)

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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

In the third quarter of 2020 the recovery of global economic activity accelerated. Economic indicators showed improvement in the business climate in both manufacturing and services sectors. However, signs of some slowdown in the rate of recovery have been observed in September. Weaker global demand for goods and services due to heightened economic uncertainty stemming from the development of COVID-19 pandemic, continued to dampen global inflation rates, particularly in the developed economies. In the third quarter the ECB and the US Federal Reserve System did not launch new monetary policy measures.

In line with the indications from the international environment of recovery of global economic activity, the annual rate of decline in the external demand for Bulgarian goods and services is expected to moderate by the end of 2020 and the beginning of 2021.

Between January and July 2020 the overall current and capital account surplus increased slightly from the corresponding period of 2019, reflecting largely a trade deficit drop amid declines in foreign trade flows for Bulgarian economy. Over the fourth quarter of 2020 and the first quarter of 2021 the positive current and capital account balance is expected to increase from the end of 2019 due mainly to the higher capital account surplus, assuming the redirection of funds under EU operational programmes to address the consequences of COVID-19 spread in the form of capital transfers to Bulgaria.

Non-government sector deposits in the banking sector continued growing at comparatively high rates in the June–August 2020 period driven by both the ongoing postponement of consumption on the part of households and limited investment activity of corporations, and by the persistent formation of precautionary savings. The downward trend in growth of credit to non-financial corporations and households, which started in March 2020, was sustained between June and August. Deteriorated macroeconomic environment, weaker external and internal demand for goods and services and uncertainty about future income of households and corporate profits related to the COVID-19 pandemic had a dampening effect on credit demand. Concurrently, banks reported a tightening of credit standards and other credit conditions. Over the last quarter of 2020 and the first quarter of 2021 we expect the generation of precautionary savings by economic agents to continue to boost relatively high growth rate of banking system deposits, while the annual growth of loans to the non-government sector is expected to moderate further.

In the second quarter of 2020 Bulgaria's real GDP fell by 10.0 per cent on a quarterly basis, reflecting the simultaneous decline in domestic demand and net exports. The containment measures introduced to curb the spread of COVID-19 in Bulgaria and worldwide were the main factor behind the very strong fall in the economic activity. In the context of a pandemic the fiscal policy was counter-cyclical and contributed positively to the economic activity both through higher national and co-financed expenditure on government consumption and investment, and increased net transfers to households. In the second quarter of 2020 the seasonally adjusted number of employed in the economy decreased by 1.0 per cent quarter on quarter total for the economy due to services and industry sectors, while employment in agriculture increased.

Short-term economic indicators signalled a partial recovery in the economic activity in Bulgaria over the third quarter of 2020. Easing of restrictions imposed against COVID-19 in Bulgaria and abroad resulted in a steady improvement in the business climate and consumer confidence in the third quarter of 2020. These developments were accompanied by increases on a quarterly basis in retail sales, turnover in industry, and construction output and services indices, and also by a decrease in the unemployment rate to 7.9 per cent in August from 8.8 per cent in May 2020 according to the Employment Agency data seasonally adjusted by the BNB.

If the assumptions of no rise in the number of people infected with COVID-19 and no subsequent tightening of anti-epidemic measures realise, which otherwise will encourage households and companies to increase savings, in the fourth quarter of 2020 and the first quarter of 2021 the trend toward a recovery in the quarter-on-quarter economic activity is expected to be sustained, though real GDP is expected to remain below its pre-pandemic level.

In August annual inflation slowed down significantly to 0.6 per cent, compared to the end of 2019, mainly driven by the effects of COVID-19 spread and the relevant containment measures. In August annual inflation in the main HICP groups either decelerated or turned negative. The negative contribution of the group of energy products played a key role for the slower overall inflation, in line with the significant year-on-year fall in international oil prices. Food and services price rises moderated, which also contributed to the slowdown of the overall inflation in August.

In the fourth quarter of the year the overall inflation is expected to decelerate further compared with August, before accelerating in the first quarter of 2021, largely reflecting the anticipated international food and oil price dynamics over that period. In the context of decreasing oil prices on an annual basis, energy products are expected to have the largest negative contribution to the overall inflation. Food inflation is projected to moderate in the fourth quarter of 2020 compared to August, however accelerating quarter on quarter in line with the assumed change in food international prices. Core inflation is expected to increase gradually in the beginning of 2021, reflecting the continued recovery of private consumption.

1. EXTERNAL ENVIRONMENT

In the third quarter of 2020 the recovery of global economic activity accelerated. Economic indicators showed improvement in the business climate in both manufacturing and services sectors. However, signs of some slowdown in the rate of recovery were observed in September, particularly in developed economies, while the upward trend was maintained in the emerging market economies. Labour market conditions in the euro area continued to deteriorate, whereas their improvement in the US was not enough to compensate the high increase in unemployment in April. Weaker global demand for goods and services due to heightened economic uncertainty stemming from the development of COVID-19 pandemic, continued to dampen global inflation rates, particularly in the developed economies.

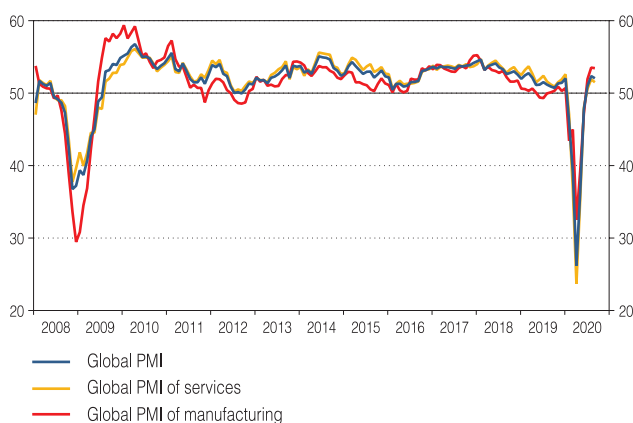
In the third quarter, the ECB and the US Federal Reserve System did not launch new monetary policy measures. ECB Governing Council left unchanged the reference interest rates and the forward guidance for changing these rates in the future, as well as the terms and conditions on long-term refinancing operations. The US Federal Reserve System also kept its target range for the federal funds, announcing, however, the results of the review of long-run targets of its monetary policy, which imply greater flexibility with regard to the objectives of maximum employment and price stability.

In line with the indications from the international environment of recovery of global economic activity, the annual rate of decline in the external demand for Bulgarian goods and services is expected to moderate by the end of 2020 and in the beginning of 2021. The external demand forecast is based on the assumption of addressing a potential increase in new cases of COVID-19 infection globally and in Bulgaria in the fourth quarter of 2020 and the first quarter of 2021 through containment measures that would not have such a negative effect on the economic activity as the measures launched in the first half of the year.

Current Business Situation

In the third quarter of 2020 global PMI recorded values above the neutral limit of 50 in both developed economies and emerging market economies. This indicated a continued recovery of global economic activity following the easing of measures to contain the COVID-19 pandemic in a number of countries. However, after global PMI rose in July and August, the composite index declined in September showing some slowdown in the recovery of global economy. The decline in PMI in September *vis-à-vis* August reflected the increase in the number of COVID-19 cases in some countries and the implementation of additional COVID-19 containment measures. By sector, in September the PMI for the services sector registered a greater decline compared to that for the manufacturing sector, particularly in consumer and financial services. Across regions, sentiment worsened only in developed economies, while the composite index increased in emerging market economies.

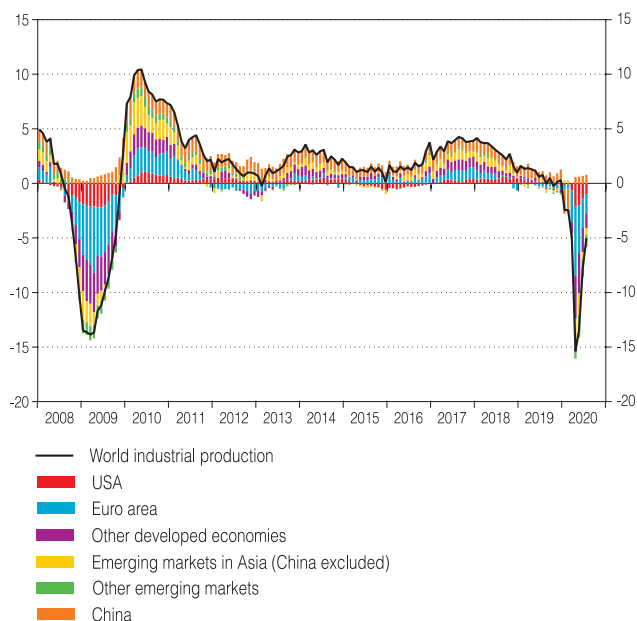
Global PMIs



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.

After the largest historical fall in the industrial output volume in April¹, the annual rate of decline decelerated between May and July 2020. This trend was most pronounced in the euro area and Latin America. Industrial output growth was recorded only in China where the economy recovered earlier from the crisis caused by the COVID-19 containment measures.

The annual rate of decline in world trade volume² began to slow in June 2020, continuing in July mainly driven by lower negative contribution of the euro area and emerging market economies in Asia (excluding China).

In August 2020 annual inflation³ decreased significantly compared to pre-COVID-19 pandemic levels amounting to 1.4 per cent. Inflation slowdown was more pronounced in developed economies than in emerging market economies.

In line with the indications from the international environment of recovery of global economic activity, world trade and industrial output, the annual rate of decline in the external demand for Bulgarian goods and services is expected to moderate by the end of 2020 and the beginning of 2021. The external demand forecast is

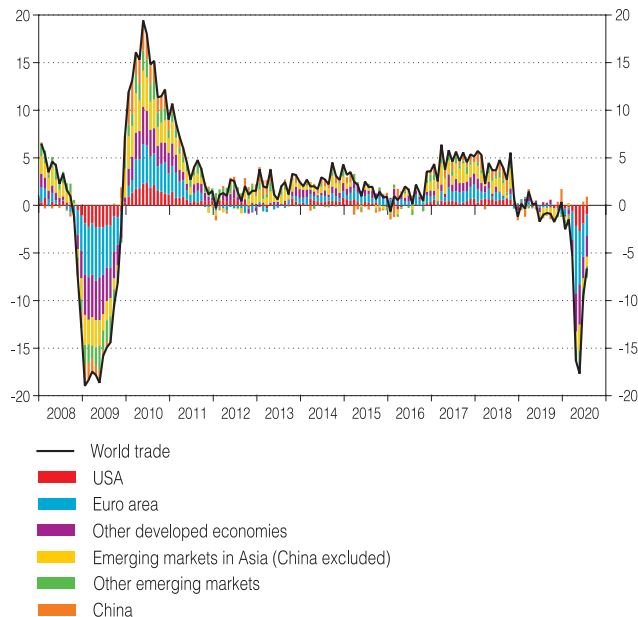
¹ CPB Netherlands Bureau for Economic Policy Analysis data as of 25 September 2020.

² CPB Netherlands Bureau for Economic Policy Analysis data as of 25 September 2020.

³ Based on the World Bank data as of 9 October 2020.

World Trade

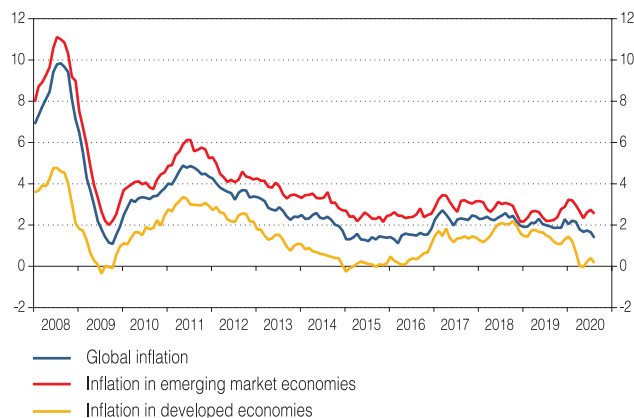
(annual rate of volume change and contribution by region, per cent)



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.

based on an assumption of addressing potential increase in new cases of COVID-19 infection globally and in Bulgaria in the first quarter of 2020 and first quarter of 2021 through containment measures that would not have such a negative effect on the economic activity as the measures launched in the first half of the year.

Euro Area

In the second quarter of 2020 the decline in real GDP in the euro area deepened significantly as a result of COVID-19 containment measures. The quarter-on-quarter decline was 11.8 per cent against 3.7 per cent in the first quarter. Private consumption and investments were the GDP components with the largest negative contributions on a quarterly basis.

The four largest euro area economies reported a significant fall in real GDP quarter-on-quarter with Spain posting the greatest decline (-17.8 per cent).

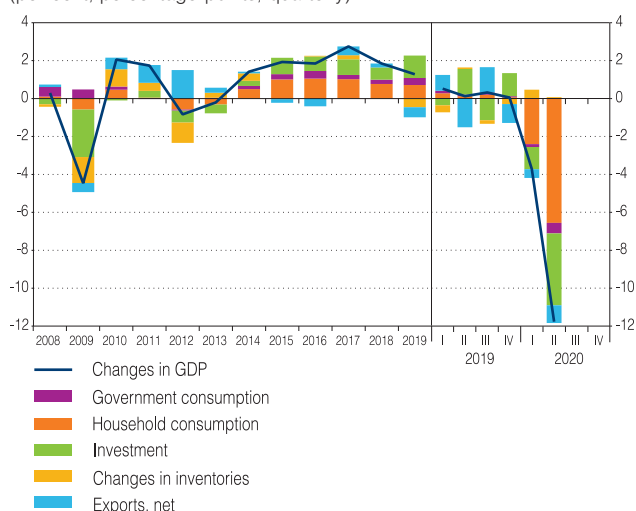
Following the fast growth in the period May–July, the composite PMI in the euro area fell in August and September, remaining, however, above the 50 percentage point limit and giving indications of economic activity recovery. The downward dynamics of the overall index in August and September was driven by the decline in the activity in the services sector, where the index dropped to 48 points. At the same time, manufacturing subindex rose to 53.7 points (highest value since August 2018).

Labour market conditions in the euro area which are deteriorated further. The ongoing programmes for stimulating employment which are in place in the euro area countries, continued to partially mitigate the negative effects of the COVID-19 crisis. The unemployment rate in the euro area rose further, reaching 8.1 per cent in August against 7.8 per cent in June. Consumer expectations of unemployment rate over the next twelve months measured by the EC consumer confidence index remained relatively high in the third quarter of 2020. Employment decreased significantly in the second quarter of 2020 for the first time in nearly seven years.

In the third quarter of 2020 HICP in the euro area fell, with preliminary data for September showing a deflation of -0.3 per cent on an annual basis compared to inflation of 0.2 per cent

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

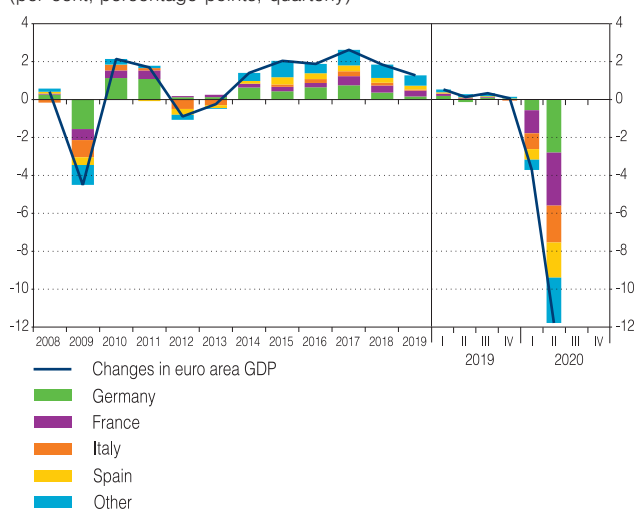
(per cent; percentage points, quarterly)



Source: Eurostat.

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

(per cent; percentage points, quarterly)



Sources: Eurostat and BNB calculations.

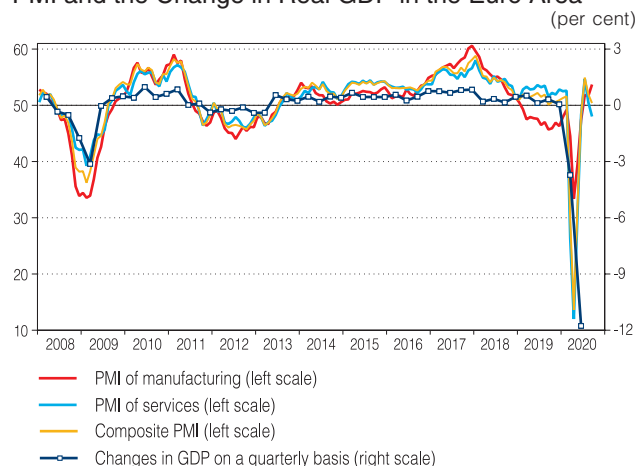
on average in the second quarter. Core inflation, excluding food and energy product prices, also followed a declining trend in the third quarter, coming to 0.2 per cent on an annual basis in September against 0.9 per cent on average in the previous quarter. Energy product prices falling by 8.2 per cent year on year in September, compared to 10.3 per cent on average in the second quarter, continued to have the major negative contribution to HICP change in the euro area. The annual decline in the euro area HICP was also driven by the temporary decrease in VAT rates in Germany, which will be effective from July to December 2020.

In September the ECB revised upwards its euro area real GDP growth projections for 2020 by 0.7 percentage points to -8.0 per cent, and downwards its projection for the next two years by -0.2 percentage points to 5.0 per cent and by -0.1 percentage points to 3.2 per cent. According to the ECB, risks to the projection still point to a lower than expected growth. Given the unprecedented uncertainty surrounding the development of the pandemic and its economic effects, the ECB forecast includes again two additional scenarios. Assuming that the current economic shock due to COVID-19 is temporary, real GDP is expected to decline by 7.2 per cent in the current year, whereas according to the scenario for a renewed spread of the coronavirus and new containment measures, GDP will fall by 10.0 per cent in 2020.

The ECB euro area inflation forecasts measured by HICP for 2020 and 2022 remained unchanged at 0.3 and 1.3 per cent, and that for 2021 was revised upwards by 0.2 percentage points to 1.0 per cent. Due to the significant oil price decline, the appreciation of the euro and the temporary VAT rates decrease in Germany, the annual change in HICP is expected to be negative or close to zero in the remainder of the year.

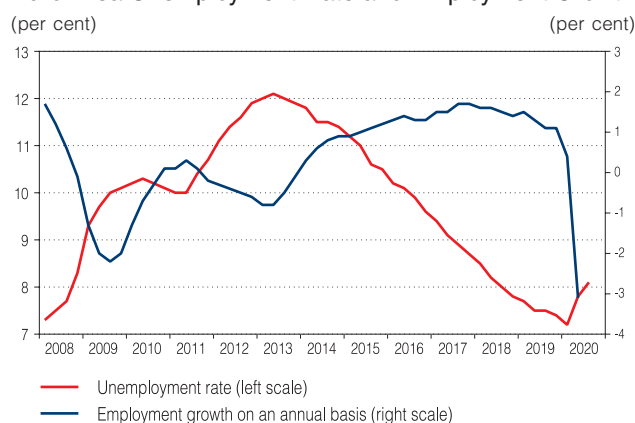
In the third quarter of 2020 the ECB Governing Council made no changes to its monetary policy. The reference interest rates and the forward guidance for changing these rates in the future, and the terms and conditions on long-term refinancing operations remained unchanged. Over the period the ECB Governing Council decided to keep net purchases at a monthly pace of EUR 20 billion under the Asset Purchase Pro-

PMI and the Change in Real GDP in the Euro Area



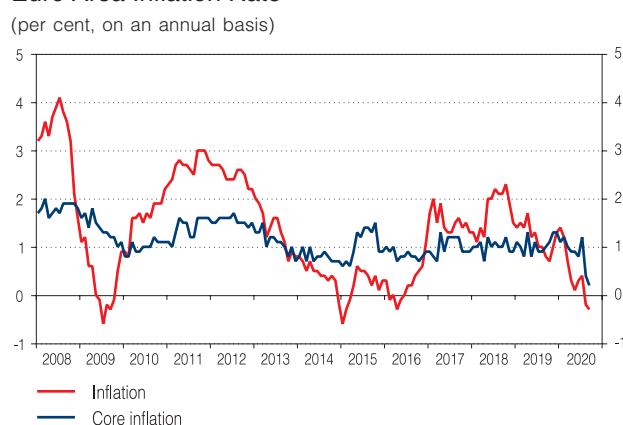
Sources: Eurostat, Markit.

Euro Area Unemployment Rate and Employment Growth



Source: Eurostat.

Euro Area Inflation Rate



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

gramme (APP) ('for as long as needed') along with the additional temporary purchases under the programme⁴ at EUR 120 billion until the end of the year. With regard to reinvestments of the principal payments from maturing securities purchased under the APP, it was decided that they will continue, in full, for an extended period of time past the date when the ECB Governing Council will start raising the key interest rates and in any case, for as long as needed. The ECB Governing Council continued to make purchases in a flexible way under the Pandemic Emergency Purchase Programme (PEPP). The horizon of net asset purchases was confirmed 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. Reinvestments of the principal payments from maturing securities purchased under the PEPP will continue at least until the end of 2022. On 22 September 2020, the Governing Council announced that as of 1 January 2021 bonds with coupons linked to sustainability performance targets will be accepted as eligible collateral for refinancing operations and will be eligible under asset purchase programmes (APP and PEPP), if they comply with the other eligibility criteria.

On 24 September 2020 the ECB conducted another operation of the third targeted longer-term refinancing operations (TLTRO III). Credit institutions' interest to the operations was lower compared with the previous operation, with EUR 174.5 billion allocated between 388 banks. The net effect of this operation on euro area banking liquidity was EUR 158 billion, as at that date banks repaid obligations under other longer-term refinancing operations.

As of 30 September 2020 the cumulative amount of purchases under the Eurosystem's extended asset purchase programme totalled EUR 2842 billion, up EUR 67.3 billion on 30 June 2020. Concurrently, the cumulative amount of purchases under the Pandemic Emergency Purchase Programme (PEPP) totalled EUR 565.6 billion as of the end of September 2020.

As a result of the asset purchases and allocation of funds under TLTRO III, conducted in the

⁴ 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.

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	IX.2020	-8.0	-8.7	5.0	5.2	3.2	3.3
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)

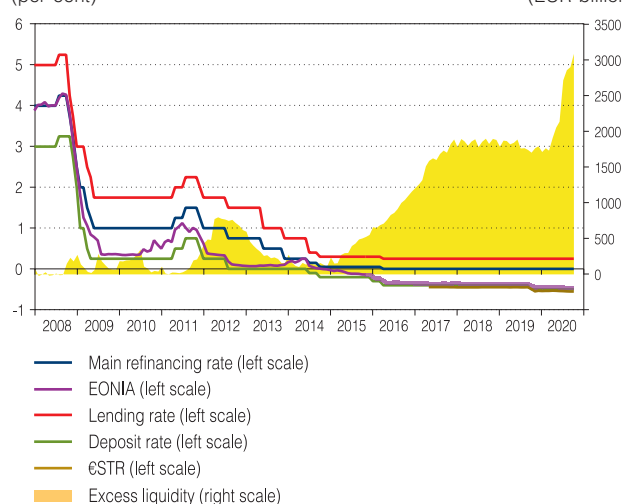
Institution	Date of release	2020		2021		2022	
		latest	previous	latest	previous	latest	previous
the ECB	IX.2020	0.3	0.3	1.0	0.8	1.3	1.3
the EC	VII.2020	0.3	0.2	1.1	1.1	-	-

Sources: the ECB, the EC.

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

(per cent)

(EUR billion)



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.

third quarter, the excess liquidity in the euro area banking system increased significantly by EUR 370 billion to EUR 3085 billion. As of 30 September 2020 the Eurosystem's balance sheet figure rose to EUR 6535 billion (54.8 per cent of GDP in 2019) from EUR 6236 billion (52.3 per cent of GDP in 2019) on 30 June 2020.

The increased excess liquidity in the euro area banking system over the quarter was the main factor holding down €STR and unsecured deposit interest rates. Over the review period the average value of the €STR, the short-term euro area's money market rate, dropped by 1 basis point to -0.55 per cent compared to the second quarter of 2020. Over the same period, the average value of EONIA computed by applying a fixed spread to €STR⁵, also fell from the second quarter by 1 basis point to -0.47 per cent. The trade volume of overnight deposits in the unsecured money market in the third quarter declined, with its daily average over the period coming to EUR 41.9 billion (against EUR 44.5 billion in the second quarter). Over the quarter EURIBOR unsecured deposit rates decreased, mostly in long term maturity sectors.

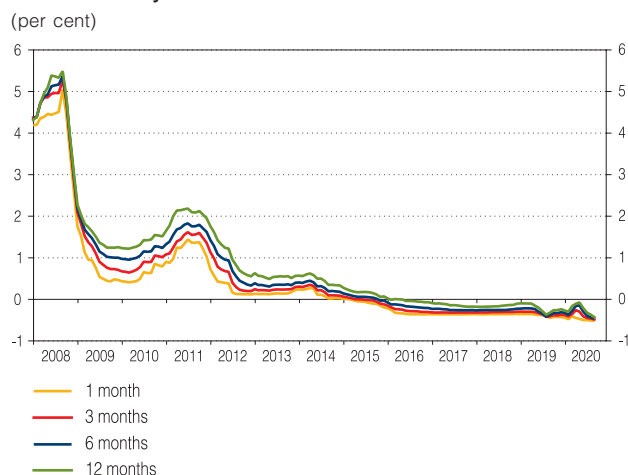
The USA

In the second quarter of 2020, the US real GDP posted a fall of 9.0 per cent quarter on quarter from 1.3 per cent in the first quarter. Real GDP in the second quarter recorded the largest quarterly decline in the post World War II period, mainly due to the weaker household consumption, and, to a lesser extent, to lower investment and inventories. The downward dynamics of GDP components reflected the forced suspension of operations of a major part of US economy as a result of COVID-19 containment measures launched in March 2020. Net exports contributed positively to GDP growth driven by the larger decline in imports compared to that in exports.

In the third quarter of 2020 US major economic indicators improved significantly mainly reflecting the gradual easing of COVID-19 measures. ISM-PMI manufacturing index increased significantly to 56.0 point between May and

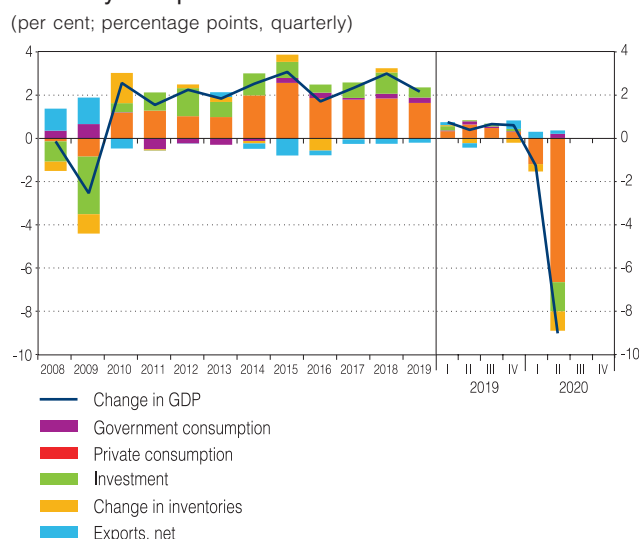
⁵ Since 2 October EONIA has been calculated by applying a fixed spread of 8.5 basis points to the €STR. For further detail, see the box entitled Key Characteristics of the €STR, the New Euro Unsecured Overnight Rate, Economic Review, 3/2019.

EURIBOR Dynamics



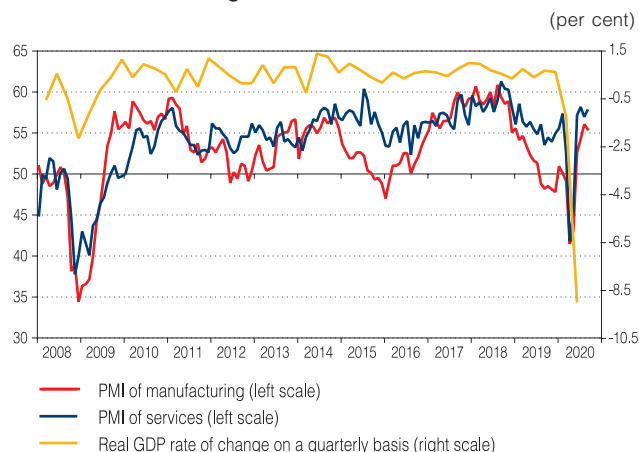
Source: the ECB.

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.

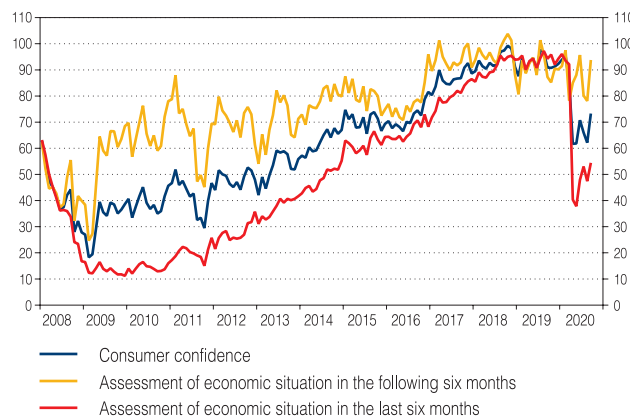
August, before declining slightly to 55.4 points in September. Concurrently, ISM-PMI of services increased until July, while in the following two months it showed a volatile trend, reaching 57.8 points in September. Consumer confidence indicators also improved in the third quarter, remaining, however, well below their pre-pandemic level, probably driven by the significant increase in the cases of COVID-19 throughout the country over the quarter. Monthly growth rate of individual consumption and retail sales moderated in the third quarter most likely due to the expiry of fiscal stimuli in support of households. Data on the construction sector showed an accelerated recovery of the economic activity in that sector. Overall, early October data indicated a significant GDP growth over the third quarter.

The annual inflation measured by the personal consumption expenditure index (PCE) accelerated in the third quarter, reaching 1.4 per cent in August against 0.6 per cent on average in the second quarter. The annual growth rate of the core CPI (excluding food and fuel) accelerated to 1.6 per cent in August from 1.0 per cent in the second quarter. August CPI data (the other key US inflation indicator) showed an accelerated annual rate of inflation to 1.3 per cent compared to 0.3 per cent on average in the second quarter. The annual growth rate of the core CPI price index, excluding food and energy products, increased to 1.7 per cent against 1.3 per cent on average in the second quarter of 2020. Price rises in fuels and cars (second hand) contributed most to inflation acceleration. Automobile price hike was likely due to higher demand, reflecting the efforts to avoid the use of public transport and thus to prevent COVID-19 infection.

US labour market conditions improved partially in the third quarter of 2020. Total employment in the US non-agricultural sector rose by 3.9 million jobs over the period, against an increase of 7.5 million jobs in May and June, and a fall of 20.8 million jobs in April. In September the unemployment rate went down to 7.9 percent from 11.1 per cent at the end of the second quarter. In September the US labor force participation rate fell to 61.4 per cent against 61.5 per cent at the end of the second quarter.

US Consumer Confidence Indices

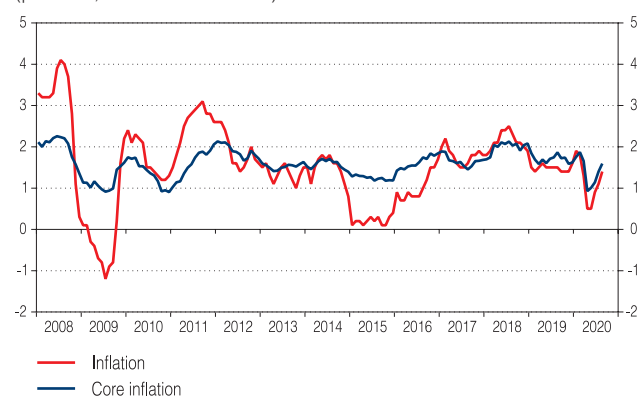
(2000 = 100)



Source: the Conference Board.

US Inflation Rate

(per cent; on an annual basis)



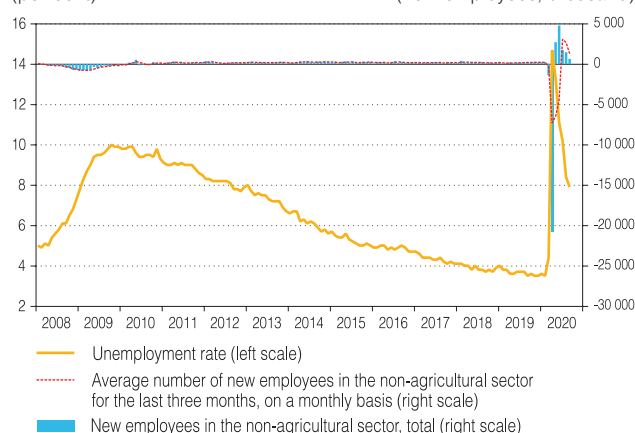
Notes: Inflation is measured by the personal consumption expenditure indicator. Core inflation is measured by the personal consumption expenditure, excluding food and energy expenditure.

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.

In the third quarter, the US Federal Open Market Committee maintained its target range for the federal funds rate at 0.00–0.25 per cent. On 27 August FOMC announced the results of the review of long-run targets of its monetary policy, which had started in the beginning of 2019. Main changes involved greater flexibility with regard to the objectives of maximum employment and price stability and shorter regular period of reviewing monetary policy targets.

At the 15 and 16 September meeting FOMC members revised their forecasts for key macroeconomic indicators and published for the first time their forecasts for 2023. 2020 forecast underwent significant revision, with FOMC's members mitigating their previous pessimistic projections of economic downturn and unemployment rise, revising upwards their inflation forecast. The median of FOMC members' individual forecasts about the expected level of the federal funds rate showed complete consensus about leaving the target range for the federal funds rate within the range of 0.00–0.25 per cent this year and in the following three years. For 2023 the median of FOMC members' individual forecasts showed expectations of reaching a target inflation rate of 2 per cent and unemployment rate close to the long-run equilibrium level. The estimate of the long-run equilibrium level of federal funds rate remained unchanged at 2.5 per cent.

In the third quarter of 2020 the total assets in the Federal Reserve balance sheet remained at levels close to those at the end of the second quarter, reaching USD 7.06 trillion (32.9 per cent of GDP in 2019) at end-period.

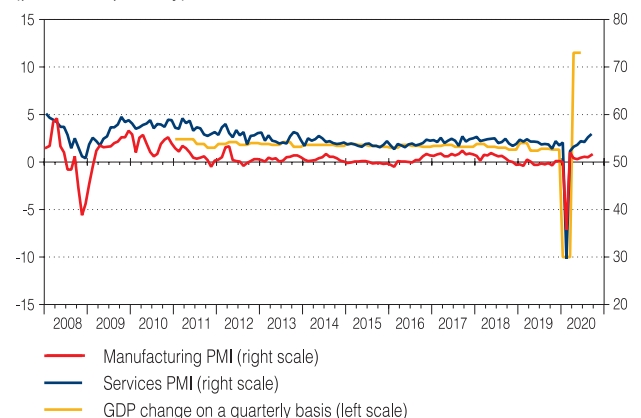
China

Over the second quarter of 2020 China's real GDP grew by 11.5 per cent quarter on quarter against a decline of 10.0 per cent in the previous quarter. Economic growth was mainly driven by the significant increase in gross capital formation, largely exceeding the fall in private consumption.

Economic indicators' dynamics shows that the economic activity in the country continues to recover in the third quarter as well. The values of services and manufacturing PMI over the review period exceeded the pre-pandemic levels. PMI reported continuing higher economic activity

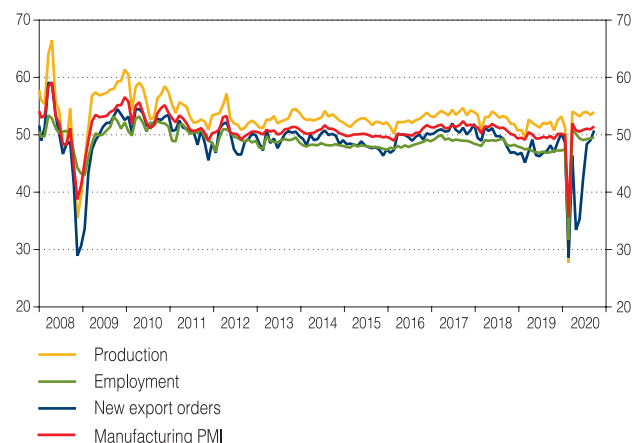
Manufacturing and Services PMIs and Change in China's Real GDP

(per cent, quarterly)



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

Manufacturing PMI in China and Major Components



Source: China Federation of Logistics and Purchasing.

in the services sector than in manufacturing. The growth of manufacturing PMI was driven by current output and new orders sub-components, while that in services reflected the gradual easing of COVID-19 containment measures, severely hampering sector's activities at the beginning of the year.

Business climate recovery favoured private consumption growth in China in the third quarter. In August retail sales increased by 0.5 on an annual basis in nominal terms against a fall of -1.8 per cent in June, while the decline in retail sales in real terms moderated in August to -1.1 per cent from -2.9 per cent in June.

Annual rate of decline in total fixed capital investment slowed down from 3.1 per cent in June to 0.3 per cent in August, mainly driven by public sector firms' investment.

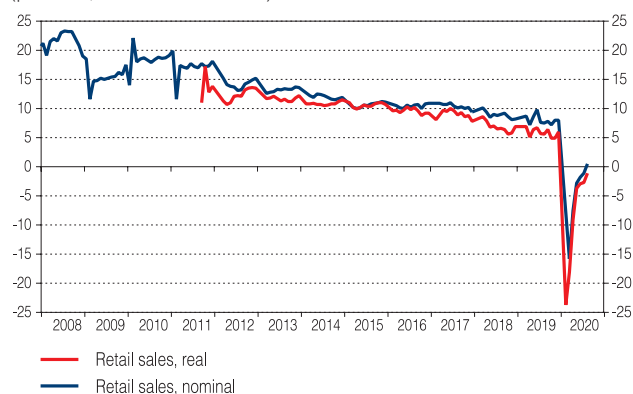
Industrial output maintained its gradual acceleration growth rates, which started in April. In August the annual growth of industrial output was 5.6 per cent against 4.8 per cent in June. The fastest recovery was observed in manufacturing and production of energy, gas and water.

In the third quarter of 2020 inflation in China continued to moderate, reaching 2.4 per cent on average in August from 2.7 per cent in the second quarter. Slower pace of food price rises and lower core inflation, excluding food and energy products, contributed to the downward dynamics. Food inflation declined from 12.2 per cent on average in the second quarter to 11.2 per cent in August, reflecting developments in meat prices. In the same periods, core inflation went down from 1.1 per cent to 0.5 per cent.

In the third quarter, the People's Bank of China did not initiate new measures on its monetary policy to stimulate the economy. Central Bank neutral position reflected government's fiscal activity. In May China's government announced that the budget deficit will increase from 2.8 per cent in 2019 to 3.6 per cent in 2020. Significant extra budgetary financing is projected through issues of special securities by the central government. According to IMF estimates, which include also the extra budgetary financing, country's budget deficit will reach 11.9 per cent of GDP in 2020 from 6.3 per cent of GDP in 2019, respectively.

Retail Sales in China

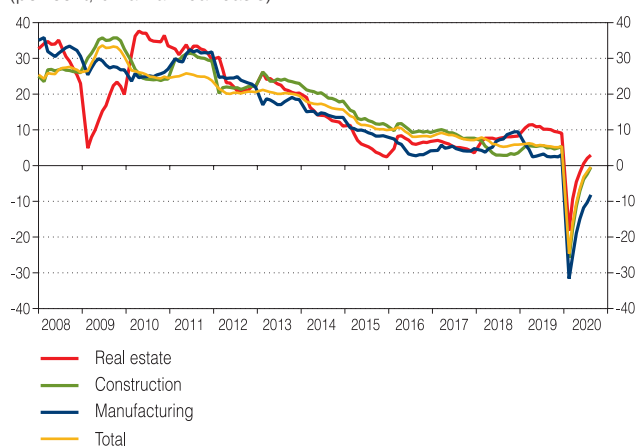
(per cent; on an annual basis)



Source: National Bureau of Statistics of China.

Fixed Capital Investment in China by Sector

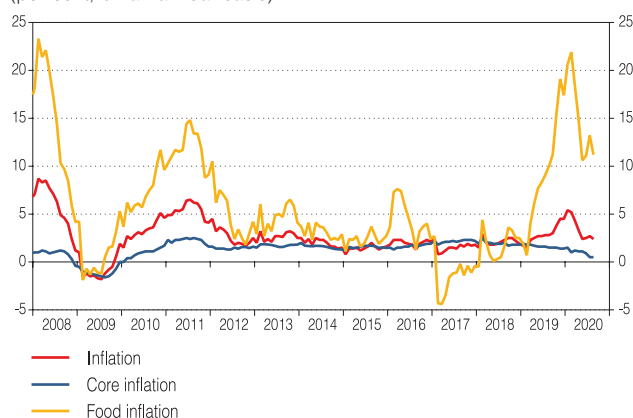
(per cent; on an annual basis)



Source: National Bureau of Statistics of China.

China's Inflation Rate

(per cent, on an annual basis)



Notes: Inflation is measured by consumer price index. Core inflation is measured by consumer price index, excluding food and energy expenditure.

Source: National Bureau of Statistics of China.

International Commodity Prices

Crude Oil

In the third quarter of 2020 Brent crude oil price rose compared to the second quarter and was traded at 42.7 USD *per barrel* on average. The increasing economic activity as a result of the easing of containment measures globally and the ensuing higher demand for crude oil was the main factor behind its price rise. Concurrently, the supply remained to a large extent subdued by the agreement reached between the OPEC+ countries on the allocation of quotas in oil production cuts until April 2022⁶. The crude oil price increased on a quarterly basis in the third quarter, remaining, however, largely below its level of the corresponding period of last year, still subdued by the negative effects of containment measures to curb the spread of COVID-19.

In September the upward trend in crude oil prices was reversed, declining both in US dollars and euro on an annual basis. This dynamics reflected the news of resumption of oil supplies from Libya, which were suspended due to the blockade on Libyan oil exports and the temporary decline in production of petroleum products in some refineries in the USA, resulting from the damages of hurricane Laura.

In September oil price expectations for the end of 2020 and the beginning of 2021 increased from those in June, varying in the range from USD 42.5 to 44.4 *per barrel*. Higher crude oil futures prices were in line with the forecast for higher demand compared to oil supply in the fourth quarter of 2020 and the first quarter of 2021.⁷

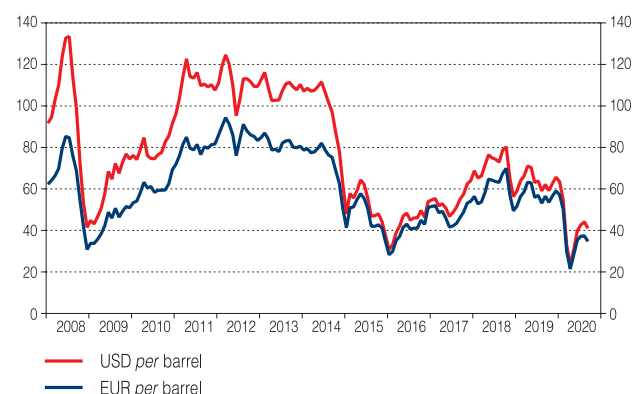
Basic Metals and Food Prices

In the third quarter of 2020 metal prices in US dollars rose 19.5 per cent on a quarterly basis (12.5 per cent in euro). This was driven by the disruptions in the mining of metals globally as a result of the COVID-19 pandemic, and the quarter-on-quarter growth of the industrial output in China. By sub-components, the largest growth was recorded in copper prices, which is

⁶ On 12 April 2020, OPEC, Russia and other oil producing countries agreed on output cuts in daily oil-production to 9.7 million barrels *per day*, with effect from 1 May 2020, initially for a two month-period (subsequently extended until July 2020), followed by a further oil-production cut by 7.7 million barrels *per day* until December 2020 and another cut by 5.8 million barrels *per day* until April 2022.

⁷ See [Short-Term Energy Outlook](#), U.S. Energy Information Administration, 6 October 2020

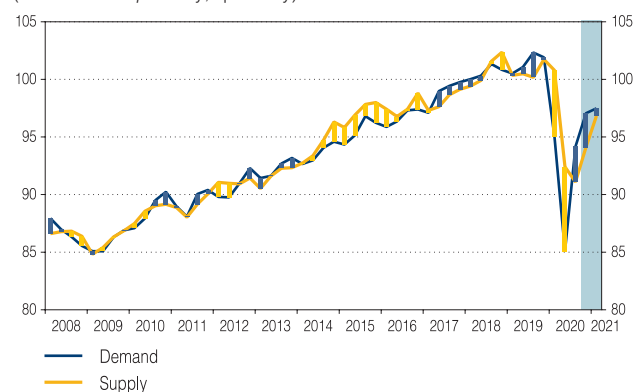
Brent Crude Oil Prices



Source: the World Bank.

World Crude Oil Supply and Demand

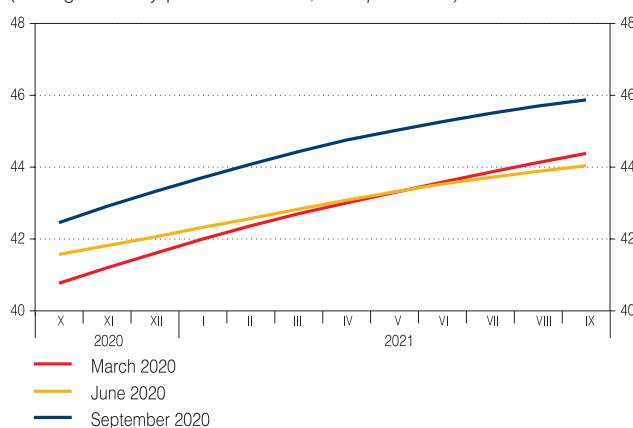
(million barrel *per day*; quarterly)



Source: U.S. Energy Information Administration

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.

of key importance for Bulgaria's goods exports. Higher copper price reflected also the temporary production disruptions in some of the world's largest copper mines, the decrease in copper inventories globally and the improved prospects of China's economic recovery.

In the third quarter of 2020 metal prices in US dollars increased on an annual basis by 6.5 per cent, which, due to the appreciation of the euro against the US dollar, resulted in a significantly lower price rise in euro (1.2 per cent). Metal prices in the fourth quarter of 2020 and the first quarter of 2021 are expected to increase further year on year both in US dollar and euro.

The food price index in US dollars posted an increase of 3.1 per cent against the second quarter of 2020, with divergent dynamics observed across index sub-components. The highest quarter-on-quarter price rises were reported in soybeans (in line with the enhanced demand in China) and coffee. Pigmeat prices increased slightly on a quarterly basis, which could be partly explained by the spread of the African swine fever in Germany and the ban on pigmeat imports by China, North Korea and Japan. The price of wheat, which is essential for Bulgaria's exports, declined in line with the expectations of higher yields in Australia, Canada and the EU⁸. As a result of the euro appreciation against the US dollar in the third quarter 2020, the food price index in euro decreased on a quarterly basis by 3.0 per cent.

Between July and September food prices rose on annual basis in both US dollars and euro. Market participants' expectations of food prices over the projection horizon point to a rise in US dollars on an annual basis, which under the assumption of appreciation of the euro against the US dollar will result in a fall in the food prices in euro.

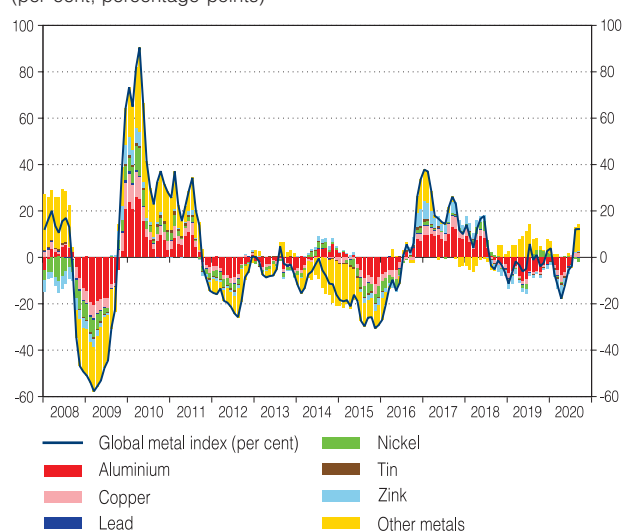
The developments of the international commodity prices on an annual basis imply sustained favourable terms of trade for Bulgaria in the period July-September 2020. Positive terms of trade will reflect mainly the decline in oil prices, as Bulgaria is a net importer of oil. If exchange rates are assumed to remain unchanged and market expectations of international commodity price dynamics materialise, the terms of trade for Bulgaria are expected to remain positive at the end of 2020 and in the beginning of 2021.

⁸ For further details see USDA Wheat Outlook of 15 September 2020.

Price Indices of Major Raw Materials and Commodity Groups

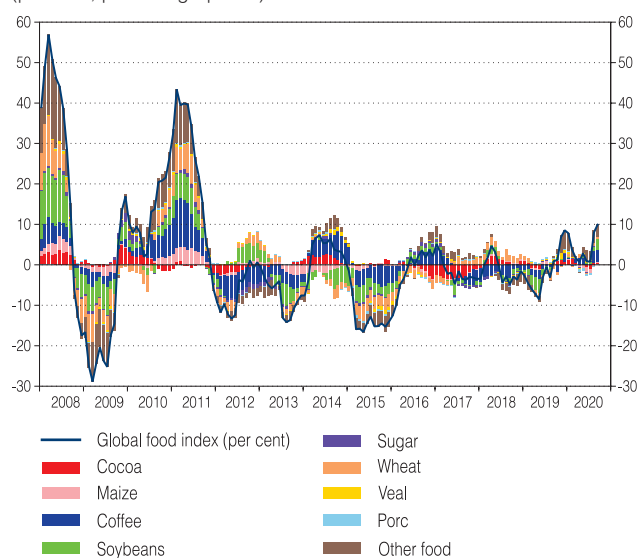
Metals

(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.

2. FINANCIAL FLOWS, MONEY AND CREDIT

Between January and July 2020 the overall current and capital account surplus increased slightly from the corresponding period of 2019, reflecting largely a trade deficit drop amid declines in foreign trade flows for the Bulgarian economy. Over the fourth quarter of 2020 and the first quarter of 2021 the positive current and capital account balance is expected to increase from the end of 2019 mainly due to the higher capital account surplus, assuming the redirection of funds under EU operational programmes to address the consequences of the COVID-19 spread in the form of capital transfers to Bulgaria.

Non-government sector deposits in the banking sector continued growing at comparatively high rates in the June–August 2020 period driven by both the ongoing postponement of consumption on the part of households and limited investment activity of corporations, and by the persistent formation of precautionary savings. The downward trend in growth of credit to non-financial corporations and households, which started in March 2020, was sustained between June and August. Deteriorated macroeconomic environment, weaker external and internal demand for goods and services and uncertainty about future income of households and corporate profits related to the COVID-19 pandemic had a dampening effect on credit demand.

Concurrently, banks reported a tightening of credit standards and other credit conditions. Over the last quarter of 2020 and the first quarter of 2021 we expect the generation of precautionary savings by economic agents to continue to boost relatively high growth rate of banking system deposits, while the annual growth of loans to the non-government sector is expected to moderate further.

External Financial Flows

The balance of payments data for January–July 2020 reflect the COVID-19 crisis effects on Bulgaria's foreign trade flows. Over the review period the current account surplus⁹ increased slightly from the corresponding period of 2019, reflecting largely the contracting trade balance deficit and, to a lesser extent, the lower deficit on net primary income deficit. Over the period under review the lower positive net services balance and the smaller net secondary income surplus limited the current account surplus rise on the same period last year.

The decrease in the trade balance deficit reflected a stronger fall in nominal imports of goods than in nominal exports. By month, declines in foreign trade flows were most pronounced in April and May 2020, while moderating in June and July. During the period of the most comprehensive containment measures in Bulgaria and Bulgaria's major trading partners the strongest fall of 32.0 per cent was observed in imports of goods in April 2020 compared to April 2019 (29.3 per cent on an annual basis in May 2020), while in exports the largest annual

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

decrease of 22.1 per cent was reported in May 2020 (18.9 per cent on an annual basis in April 2020). Due to the fact that Bulgaria is a net importer of petroleum products, the considerable fall in oil prices also contributed to the stronger fall in nominal imports of goods than in nominal exports. In real terms on an annual basis¹⁰ the second quarter of 2020 saw a higher decline in imports of goods (12.6 per cent) than in exports (10.7 per cent), with imports of goods falling more than exports over the first half of 2020.

The drop in the net primary income deficit between January and July 2020 compared to the corresponding period of 2019 was mainly driven by the lower amount of dividends paid and distributed profits to non-residents, which was most pronounced in April and June 2020.¹¹ The lower dividends paid on the primary income debit side was impacted mainly by the banks with no dividend distribution as a result of the BNB measures launched on 12 March aiming at further strengthening banks capital and liquidity to limit the negative effects of the pandemic on banking system and economic activity.

The lower surplus in net services in January–July 2020 compared to the corresponding period of 2019 reflected the stronger decline in nominal exports than imports of services. Over the review period exports of services, mostly related to travel and passenger transport, reported an annual decline of 32.8 per cent, accounting for 55.3 per cent only in July. Imports of services by month exhibited the largest year-on-year fall of 48.0 per cent in May 2020, dropping by 29.4 per cent on an annual basis in the first seven months. In the January–July 2020 period travel followed by transport services, which are among the sectors most affected by the containment measures against the spread of COVID-19, posted the strongest fall both in services exports and imports. The decrease in net secondary income item between January and July 2020 compared to the corresponding period of 2019 was driven mainly by the lower remittances from Bulgarian citizens working abroad.

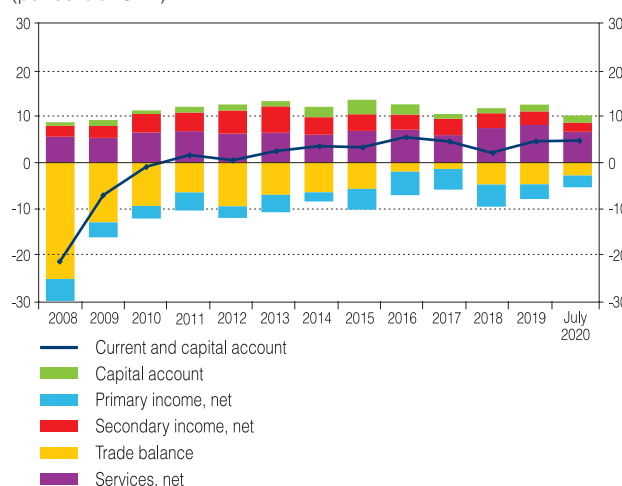
The positive balance of the capital account rose in the January–July 2020 period compared to the corresponding period of 2019 mainly as a

¹⁰ Non-seasonally adjusted national account GDP data.

¹¹ Preliminary data subject to revision; revisions usually show an increase in outflows to non-residents.

Current and Capital Account Flow Dynamics and Contributions of Individual Components

(per cent of GDP)



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

Sources: the BNB, the NSI, BNB calculations.

Flows on Major Balance of Payments Accounts

(EUR million)

	2019	January–July 2020	Change compared to January–July 2019
Current account	1 847.5	968.3	40.3
Trade balance	-2 891.2	-548.1	1 168.7
Services, net	4 875.2	1 622.5	-943.3
Primary income, net	-1 910.1	-743.2	399.1
Secondary income, net	1 773.5	637.1	-584.2
Capital account	891.6	592.3	26.9
Financial account	3 222.5	-1 483.0	-2 571.8
Change in reserves	-559.4	2 678.4	

Source: the BNB.

result of higher capital transfers received under EU operational programmes and a lack of outflows under capital transfers for the same period. This effect was largely offset by greenhouse gas emission allowance purchases over the period.¹²

As a result of the described dynamics of flows on the individual current and capital account items, in July 2020 the total current and capital account surplus accumulated for the last 12 months rose from December 2019, with a significantly shrinking deficit in the trade balance and, to a lesser extent, the lower deficit on net primary income contributing most substantially.

Our expectations for the current account flow dynamics until the end of 2020 and the first quarter of 2021 are based on the assumption of addressing a potential increase in new cases of the COVID-19 infection in Bulgaria and Bulgaria's major trade partners through containment measures that would not have such a negative effect on the economic activity as the measures launched in the first and second quarters of the year. Based on these assumptions and data for the January–July 2020 period, in the fourth quarter of 2020 a slight rise is expected in Bulgaria's BOP current account surplus on an annual basis¹³ compared to the end of 2019. The contracting deficit in the trade balance and, to a lesser degree, the lower deficit on net primary income will remain the driving factors for this trend. Trade balance flow developments are expected to be affected by the slower fall in real exports of goods compared with imports, reflecting the assumption of improving external demand given the forecast of gradual recovery in the economic activity in Bulgaria. The sustained favourable terms of trade (measured by the change in export prices of goods compared to import prices of goods) until the end of 2020 and the beginning of 2021 will be another important factor for the projected decline in the trade balance deficit. A lower deficit on the net primary income account on an annual basis compared to end-2019 is expected to be further driven by the projected decrease in dividend payments and distributed profits to non-residents amid heightened uncertainty and worsened

¹² Payments for emission allowance purchases were recorded in gross acquisition/disposal of non-produced non-financial assets, debit of the capital account item.

¹³ It should read the current account balance for the last four quarters.

economic activity in Bulgaria, as well as by the measures initiated by the BNB for the capitalisation of all banking system profits. The rise in the current account surplus will be limited mainly by lower net revenue from the services trade since Bulgaria is a net exporter of tourist services and services related to passenger transport, which are among the sectors most severely affected by the COVID-19 spread and the uncertainty about the pandemic's future development. The effect of the above factors is expected to be sustained over the first quarter of 2021. In the fourth quarter of 2020 and the first quarter of 2021 the capital account surplus is expected to increase on an annual basis¹⁴ compared to the end of 2019. The capital account flow dynamics 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 assumed to be in the form of capital transfers to Bulgaria. Over the projection horizon the annual overall balance on the current and capital account as a share of GDP is expected to increase from the end of 2019, reflecting both the external flow dynamics described above and the projected strong fall in nominal GDP.

Between January and July 2020 a net inflow of funds in Bulgaria's financial account of EUR 1.5 billion was reported. The negative balance on the financial account reflected mainly the decrease in foreign assets of banks as a result of BNB's measures announced to enhance the Bulgarian banking system liquidity. An increase in liabilities of other sectors¹⁵ and to a lesser extent general government was reported, contributing less to the formation of a negative balance on the financial account. In the January–July 2020 period other sectors' assets rose, partially limiting net inflow of funds to Bulgaria. In July 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.

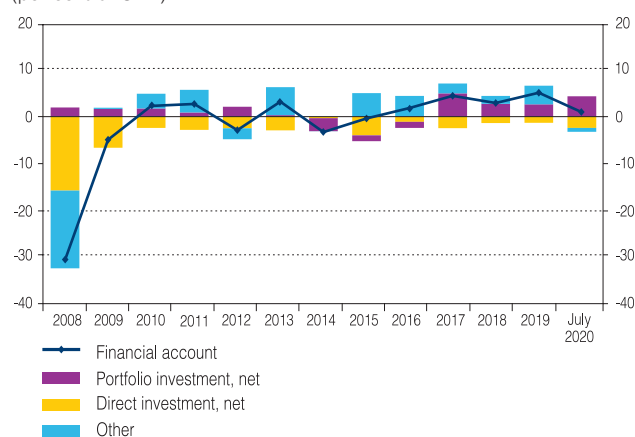
Between January and July 2020 direct investment liabilities (reporting FDI inflows into

¹⁴ It should read the capital account balance for the last four quarters.

¹⁵ It should read sectors other than general government, banks and the central bank.

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. July 2020 data on financial account flows are accumulated for the last 12 months. GDP data for the last four quarters, through the second quarter of this year inclusive, are used in calculating financial account to GDP ratio for July 2020.

Sources: the BNB, the NSI, BNB calculations.

Bulgaria) increased significantly from the corresponding period of 2019 to EUR 1466.0 million (against EUR 906.3 million for the same period of 2019).¹⁶ The annual growth was most pronounced in July 2020, with direct investment inflows of EUR 903.8 million in the form of debt instruments contributing the most. At the end of the second quarter of the year total FDI in Bulgaria accounted for 77.9 per cent of GDP. A breakdown by economic sectors shows that real estate activities, financial and insurance activities and manufacturing remained the sectors with the highest level of FDI.

As a result of the net flows on the current, capital and financial account, according to the balance of payments data for the last 12 months gross international reserves rose significantly in July 2020¹⁷ from the end of 2019 mainly reflecting the BNB measures to boost banking system liquidity. The coverage of average nominal imports of goods and non-factor services for the last 12 months in July increased to 9.8 months (8.0 months in December 2019). Bulgaria's international reserves¹⁸ to short-term external debt ratio was also high accounting for 354.5 per cent in July (287.1 per cent in December 2019).

In July 2020 Bulgaria's gross external debt was EUR 35.6 billion (59.4 per cent of GDP), marking an increase of EUR 433 million from the end of 2019. By sector, the highest rise was reported in intercompany lending and to a lesser extent in general government debt. The external debt growth was largely driven by the reported rise of EUR 957.4 million in intercompany lending in July 2020 compared to June 2020, which is probably of a one-off nature. According to the data up to July, government external debt increased mainly as a result of new tranches disbursed in April 2020 under loan agreements signed with the European Investment Bank and the Council of Europe Development Bank worth EUR 400 million. The increase in Bulgaria's gross external debt in July 2020 compared to the previous year end was partly limited by the

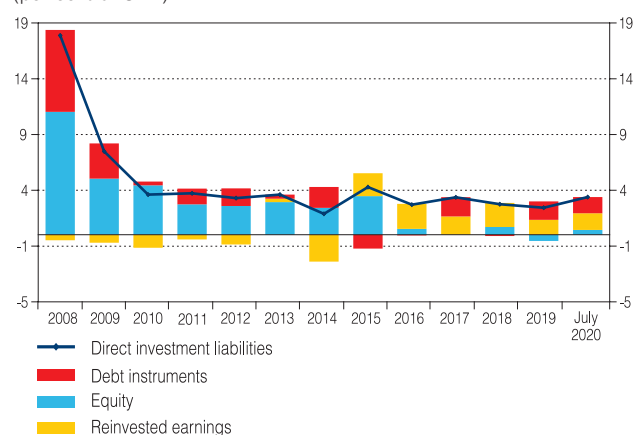
¹⁶ Preliminary data subject to revisions which usually show an increase in foreign direct investment liabilities.

¹⁷ Valuation adjustments and price revaluation excluded.

¹⁸ 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.

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

(per cent of GDP)



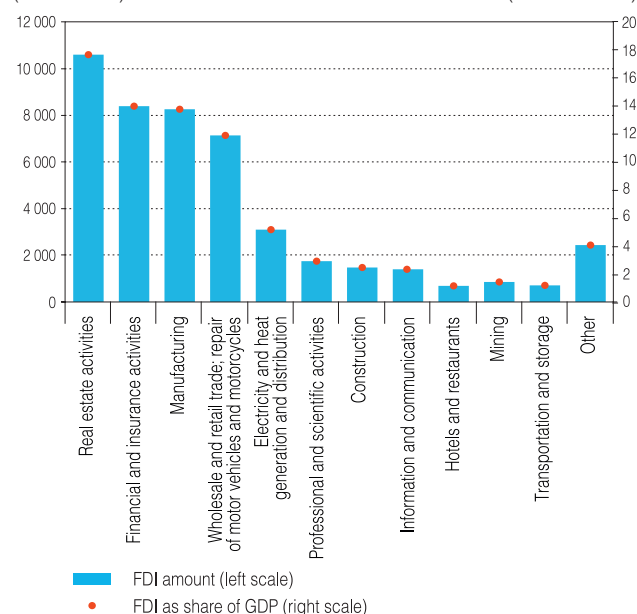
Notes: July 2020 data on flows on direct investment liabilities are accumulated for the last 12 months. GDP data for the last four quarters, through the second quarter of this year inclusive, are used in calculating direct investment liabilities to GDP ratio for July 2020.

Sources: the BNB, the NSI, BNB calculations.

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

(EUR million)

(share of GDP)



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

Sources: the BNB, the NSI, BNB calculations.

Gross External Debt as of July 2020

(EUR million)

	Amount	Change	
		Since December 2019	For the last 12 months
General government	5 681.2	253.7	249.4
Central bank	0.0	0.0	0.0
Banks	4 415.6	-485.8	-212.5
Other sectors	10 732.9	-268.1	-332.0
FDI – intercompany loans	14 781.9	933.6	876.5
Total	35 611.5	433.3	581.4

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

Source: the BNB.

decrease in banks' and other sectors' foreign debt.

In terms of maturity structure, the relatively high share of long-term debt in Bulgaria's total gross external debt accounting for 77.9 per cent in July 2020, reduces the economy's vulnerability to potential volatility of international capital flows, which could arise from potential negative shocks. The downward trend in external debt interest payments on an annual basis persisted in July 2020. This indicates that the current terms for servicing external obligations by Bulgarian residents remain favourable.

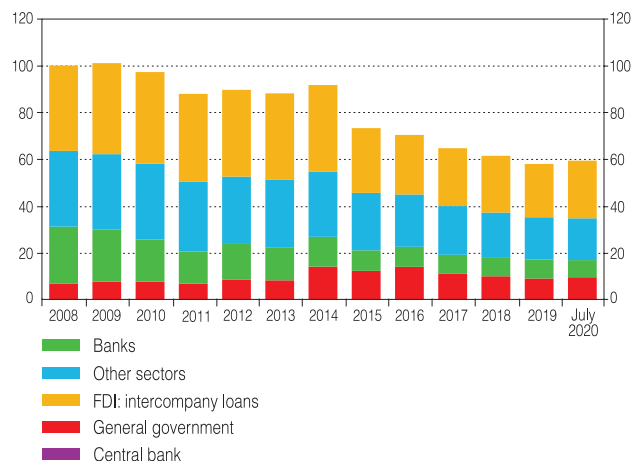
Monetary and Credit Aggregates

In the first eight months of 2020 non-government sector's deposits¹⁹ in the banking system continued to increase at comparatively high rates, the annual growth rate accounting for 8.9 per cent in August against 9.7 per cent at the end of 2019. Unfavourable labour market conditions manifested in the slowing labour income growth and growing unemployment, as well as lower revenue from corporate profits in the second quarter of the year had no significant impact on the annual growth of deposits, reflecting the increased savings due to the impossibility for certain consumer and investment expenditure to be made under the state of emergency in Bulgaria. The major factor behind the retained high deposit rates in the emergency epidemic

¹⁹ Non-government sector's deposits include deposits of households, non-financial corporations and financial corporations. Deposits of households and non-financial corporations (96.3 per cent on average for the last 12 months as of August 2020) comprise the major share of all non-government sector's deposits, and the analysis therefore 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 second quarter of this year inclusive, is used in calculating gross external debt to GDP ratio for July 2020.

Sources: the BNB, the NSI, BNB calculations.

situation relate to both the postponement of consumption of certain goods and services by households and limited investment activity by corporations, and the increase in precautionary savings. In the first eight months of the year household deposits continued to comprise the bulk of non-government sector deposits their share amounting to 65.0 per cent in August. The maintenance of very low deposit rates and the uncertainty about macroeconomic environment were a precondition for firms and households to continue to save mainly in the form of overnight deposits characterised by high liquidity. In terms of currency, over the first eight months the share of foreign currency deposits of firms and households increased, especially in euro, while that in levs declined. However, deposits in national currency still comprised the bulk of non-government sector deposits accounting for 60.8 per cent as of August 2020.

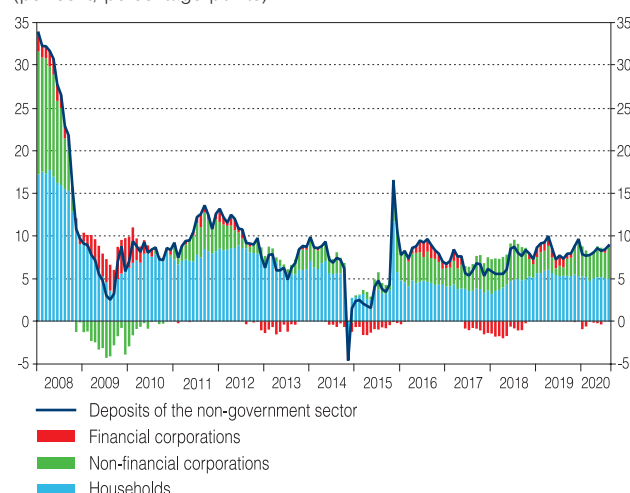
The effective implicit rate of minimum required reserves²⁰ remained at levels similar to the previous year's end levels, reflecting the retained high inflow of attracted funds from residents in the banking system in the first nine months of 2020. In September this rate was 9.41 per cent (9.43 per cent in December 2019) with bank deposits with the BNB comprising 8.28 percentage points in the fulfilment of minimum required reserves, and the remaining 1.13 percentage points forming recognised cash balances.

Annual growth of reserve money tended to accelerate significantly since March, reaching 26.1 per cent in August (-0.3 per cent at the end of 2019). This dynamics reflected the year-on-year substantial rise in banks' reserves mainly due to banks' excess reserves increase. The increase in banks' excess reserves was driven by BNB measures introduced in March aiming at further strengthening banks capital and liquidity. In September 2020 excess funds on banks' minimum reserve accounts over the required minimum of reserve assets under Ordinance No 21 were 76.5 per cent on an average daily basis, from 29.8 per cent in December 2019. Higher funds on banks' accounts in the

²⁰ 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, from non-residents 5 per cent and from the state and local government budgets 0 per cent.

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

(per cent, percentage points)



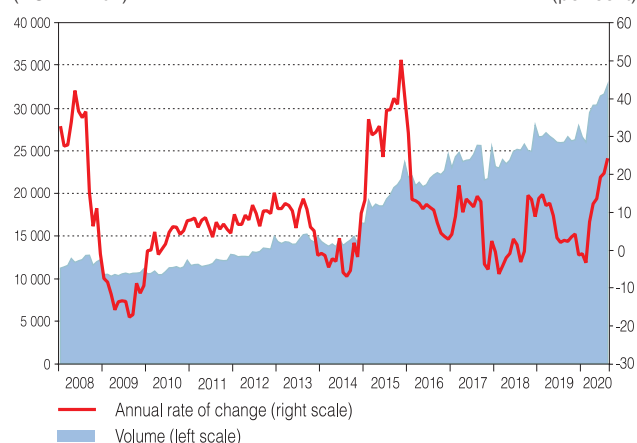
Notes: Data for 2020 cover the period to August inclusive. The annual growth rate of non-government sector deposits in November 2015 reflects the exhausted base effect of KTB removal as a reporting unit from the monetary statistics in November 2014.

Source: the BNB.

Reserve Money

(BGN million)

(per cent)



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

Source: the BNB.

TARGET2 contributed, to a lesser degree, to the growth of bank deposits with the BNB. In the period under review minimum required reserves' amount continued to grow due to a rise in the deposit base.

Annual growth of currency in circulation slowed down to 7.9 per cent in August 2020, from 10.3 per cent at the end of 2019, with weaker private consumption contributing to the lower demand for currency in circulation. Concurrently, in an uncertain economic environment some economic agents probably continue to maintain reserve funds in the form of cash.

Reserve currency (euro) transactions with the BNB is banks' main lev liquidity management instrument under currency board arrangements. In the first nine months of 2020 net BNB sales of euro to banks amounted to EUR 1.2 billion.

Bank assets grew 6.5 per cent on an annual basis in August 2020.²¹ In asset management, in the first eight months of the year banks reported a substantial growth of their deposits with the BNB, while their foreign assets declined. These developments were entirely driven by BNB measures introduced in March. A weaker growth was observed in claims on households and on general government sector, while claims on non-financial corporations posted a decrease from end-2019. Reflecting a more substantial decrease in banks' foreign assets than foreign liabilities, net foreign assets declined by BGN 447 million in the first eight months of 2020 to BGN 10.4 billion at the end of August.

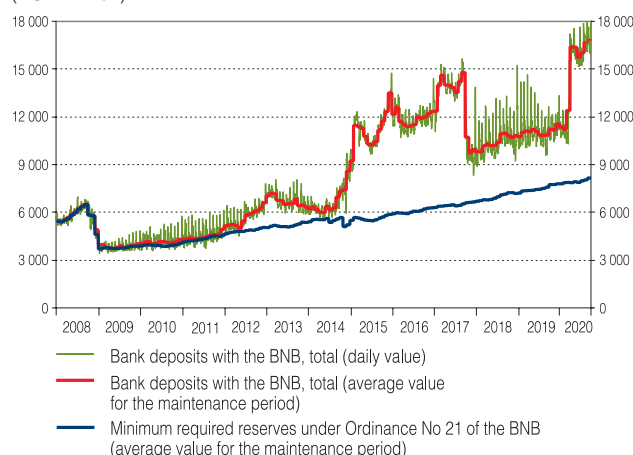
The downward trend in growth of credit to non-financial corporations and households²², which started in March 2020, was sustained in the following months to reach 4.3 per cent on an annual basis in August (7.4 per cent by end-2019). Deteriorated macroeconomic environ-

²¹ Data from the sectoral monthly reporting of other monetary financial institutions were used.

²² 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 in August 2020, and the analysis is therefore focused on them. In addition to loans, claims include also repurchase agreements, securities other than shares, and shares and other equity instruments. Non-government sector's deposits, in turn, include loans to households, loans to non-financial corporations and loans to financial corporations. The share of loans to households and non-financial corporations in total loans to the non-government sector accounted for 93.5 per cent on average in the last 12 months as of August 2020 and therefore developments in these two sectors are addressed.

Bank Deposits with the BNB

(BGN million)



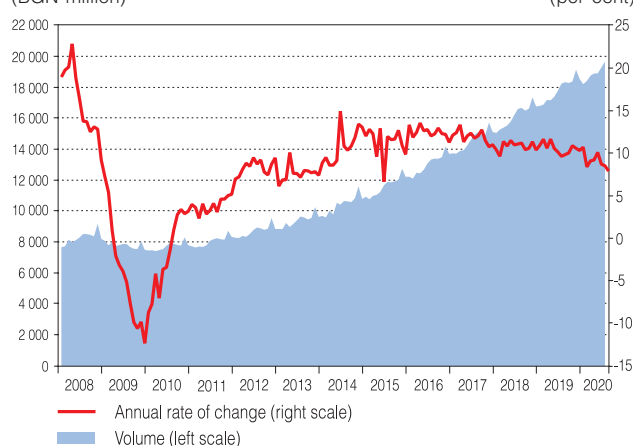
Note: Data for 2020 cover the period to August inclusive.

Source: the BNB.

Currency in Circulation

(BGN million)

(per cent)



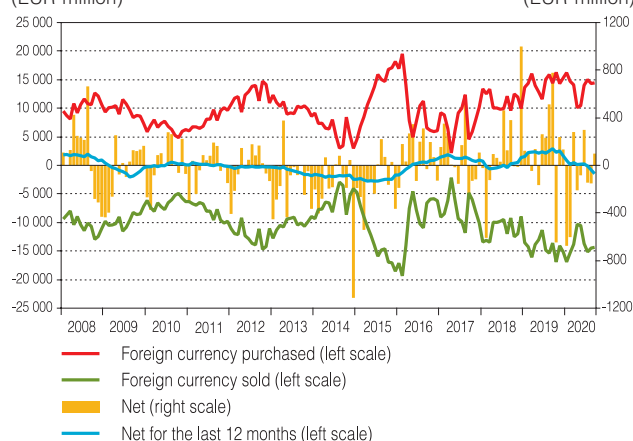
Note: Data for 2020 cover the period to August inclusive.

Source: the BNB.

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

(EUR million)

(EUR million)



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

Data for 2020 cover the period to August inclusive.

Source: the BNB.

ment, weaker external and internal demand for goods and services and uncertainty about future income of households and corporate profits related to the COVID-19 pandemic had a dampening effect on private sector demand for credit. Credit growth was additionally limited by supply side factors. The results of the BNB quarterly bank lending survey suggest tightening of credit standards and conditions due to the deteriorating macroeconomic environment and banks' lower risk appetite. At the same time, the option of rescheduling liabilities payable under the Procedure for Deferral and Settlement of Liabilities Payable to Banks and their Subsidiaries – Financial Institutions (the so called private moratorium) used by companies and households is likely to support credit growth.

In August 2020 credit growth to non-financial corporations slowed down to 2.2 per cent on an annual basis (5.9 per cent in December 2019). Overdrafts and to a lesser extent loans, excluding overdraft, contributed most to this dynamics. In the June to August 2020 period the volumes of newly extended²³ corporate loans increased²⁴ with an increase in new loans in all currencies. At the same time, the share of lev-denominated loans of total new loans to non-financial corporations continued to increase since the beginning of 2020 at the expense of the share of euro-denominated loans. In August loans in national currency reached 52.4 per cent of total new corporate loans, while the share of euro-denominated loans amounted to 46.1 per cent.

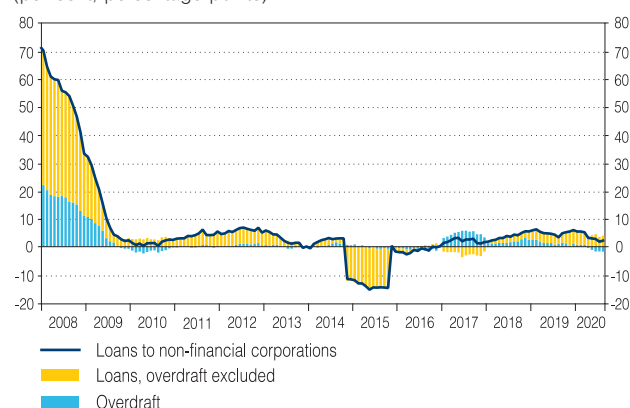
Annual growth in household loans tended to decelerate since March and reached 7.4 per cent in August (9.5 per cent at the end of 2019), remaining higher than credit growth to non-financial corporations. Growth rates of both consumer and housing loans slowed down, with consumer loans decelerating more 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. Between June and August 2020 the volumes

²³ The terms 'new' and 'newly extended' are hereinafter referred to as the statistical category 'new business'.

²⁴ Based on monthly data.

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

(per cent, percentage points)

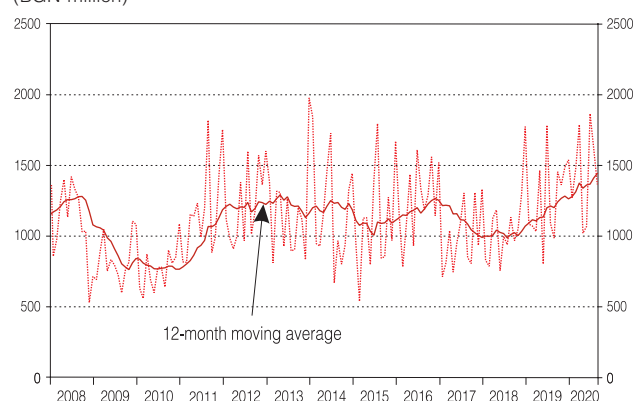


Notes: The annual growth rate of loans to non-financial corporations in November 2015 reflects the exhausted base effect of KTB removal as a reporting unit from the monetary statistics in November 2014. Data for 2020 cover the period to August inclusive.

Source: the BNB.

New Loans to Non-financial Corporations (Monthly Volumes)

(BGN million)



Notes: Data for 2020 cover the period to August 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.

of new consumer and housing loans increased, with new consumer loans exhibiting a more substantial increase.²⁵ The higher volumes of new consumer loans are likely to reflect the loans extended to individuals under the Programme for guaranteeing interest-free loans supporting people deprived of the possibility to work due to the COVID-19 pandemic, which amount to BGN 80 million between April and September according to Bulgarian Development Bank data.

Summarised results of the bank lending survey²⁶ in the second quarter of 2020 suggest significant tightening of credit standards²⁷ in approving credit applications of corporations and households most significantly for consumer loans. All credit conditions²⁸ for loans to corporations and households were tightened, excluding fees and commissions. Stricter credit policy (credit standards and conditions) was mainly driven by the deterioration of the macroeconomic environment and banks' lower risk tolerance. Other factors behind credit policy tightening include the unfavourable housing market prospects, the reduced solvency of borrowers, the deteriorated business climate in the sectors with a large share in the credit portfolio and the higher collateral risk. Bank's expectations for the third quarter of 2020 show that credit standards for corporate loans will tighten further compared to the April–June 2020 period. Concurrently, a slight easing of the standards for households and in particular for housing loans is expected.

In the second quarter of 2020 banks report lower demand for loans by small- and medium-sized enterprises (mainly in respect to long-term loans) and higher demand by large corporations mainly in the segment of short-term loans. The

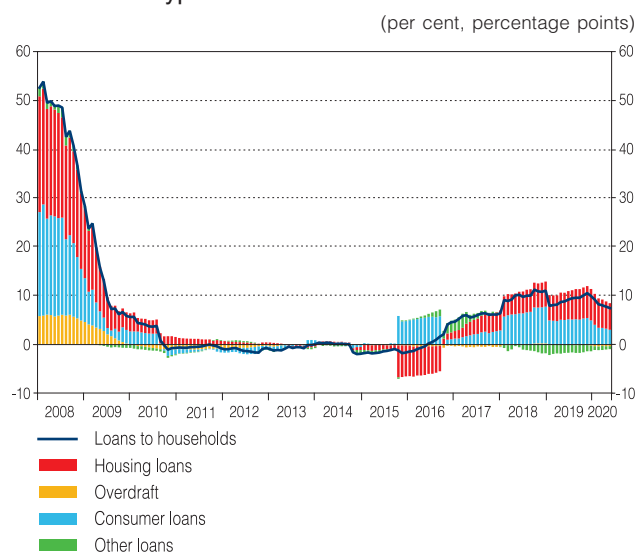
²⁵ Based on monthly data.

²⁶ 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.

²⁷ Credit standards are understood as internal bank guidelines or criteria for loan approvals established prior to negotiating the terms of extended loans. Credit standards determine the type of the loan and collateral considered admissible by banks, taking into account specific priorities by sector, *etc.* Credit standards specify also all relevant conditions to be met by a borrower.

²⁸ 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

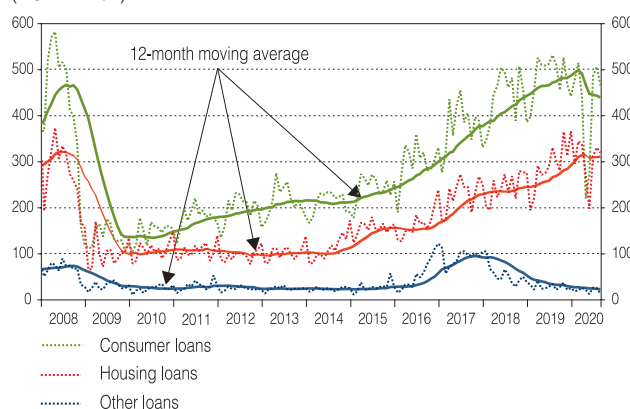


Notes: Data for 2020 cover the period to August inclusive. Based on additional information received from reporting units, a revision of household loans was carried out according to their purpose of use in the period December 2015 – August 2019.

Source: the BNB.

New Loans to Households (Monthly Volumes)

(BGN million)



Data for 2020 cover the period to August inclusive.

Source: the BNB.

weighted balance of opinions indicated a stronger decline in the credit demand by households than by corporations. The main factor considered by banks as a driver for the lower demand for corporate loans over the quarter was reduced demand for bank resources for investment purposes. The level of interest rates and lower need of funds for mergers, acquisitions and restructuring contributed to a lesser extent. Weaker credit demand by households reflected mainly the deteriorating macroeconomic environment. In the third quarter of 2020 banks expect further but weaker decline in corporate loans compared to the April to June period and rising household credit demand.

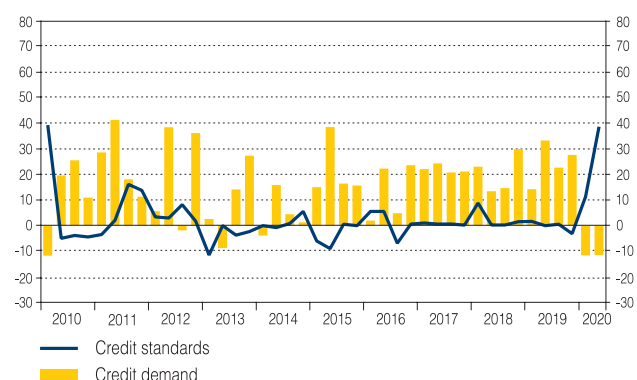
Over the last quarter of 2020 and the first quarter of 2021 we expect the formation of precautionary savings by economic agents to continue to contribute to a relatively high growth rate of banking system deposits. The annual growth of loans to the non-government sector is expected to moderate further, reflecting both demand and supply factors. Deteriorated macroeconomic environment and uncertainty surrounding the duration of the COVID-19 pandemic will dampen demand for loans by companies and households. Factors which may limit credit supply include both uncertain economic environment and banks' lower risk appetite, their deteriorated assessment of borrowers' solvency and higher collateral risk. Upon the expiry of the deadline for deferring obligations declared by firms and households under the private moratorium, some increase in the share of non-performing loans in bank portfolios may be expected, which is also a potential factor for limiting credit supply and further tightening of lending policies.²⁹

²⁹ 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.

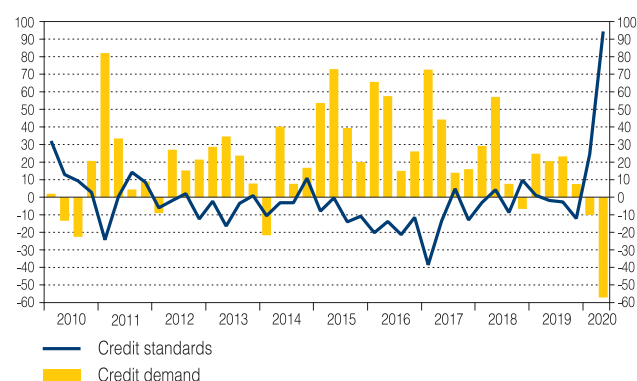
Changes in Demand and Credit Standards

(balance of opinions; percentage points)

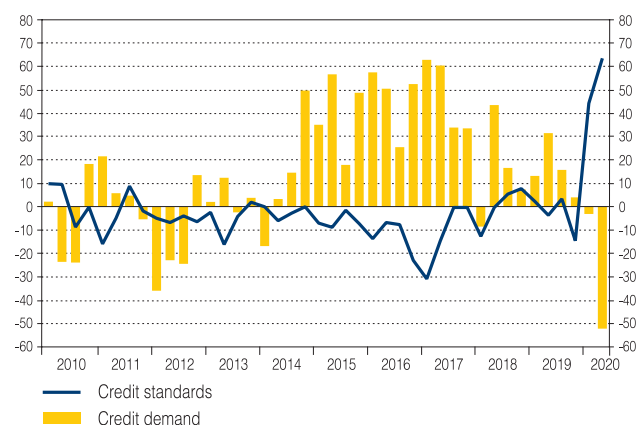
a) corporate loans



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.

Interest Rates

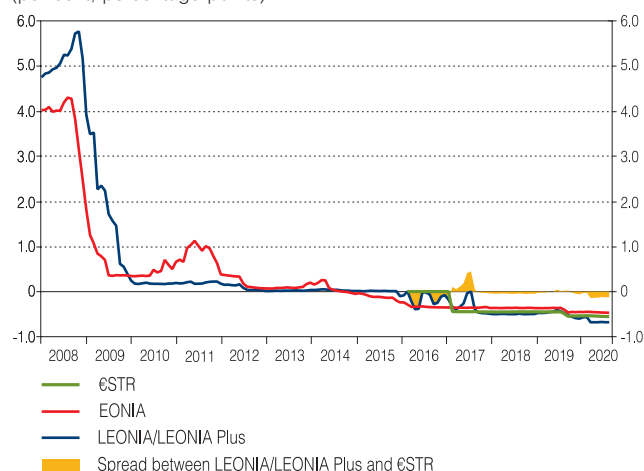
The trends in the interbank money market continued to reflect mainly the measures implemented by the BNB to enhance banking system liquidity, which strongly limited the banks' incentive to trade in this market. In the third quarter of 2020 LEONIA Plus index remained close to the level of the interest rate on banks' excess reserves at -0.67 per cent in September. Traded volumes in the interbank money market fell further from the April to June period by 37.0 per cent in September compared to the end of the second quarter. Reflecting the lack of significant dynamics of LEONIA Plus and €STR, the negative spread between the two indices remained at its June 2020 level (-13 basis points as of September 2020).

In the context of high banking system liquidity and a continuous inflow of attracted funds in the banking sector, deposit rates remained at the reached historically low levels. Following the slight decline in the first five months of the year, the average weighted interest rate on new time deposits of non-financial corporations and households remained broadly unchanged between June and August and accounted for 0.07 per cent in August. By sector, interest rates on new time deposits of non-financial corporations underwent more significant changes. After a negative interest rate on deposits of non-financial corporations in levs³⁰ had been registered for the first time in May 2020, it remained negative between June and August, affecting the total average weighted interest rate on deposits of non-financial corporations to turn negative (-0.06 per cent in August 2020). By currency, interest rates on new time deposits in levs and euro to corporations and households remained relatively stable, while interest rates on US dollar-denominated deposits traditionally were more volatile.

Between June and August 2020 interest rates on new loans to non-financial corporations and households remained at the achieved low levels. This dynamics was probably driven by the rising volume and low cost of attracted funds, high liquidity in the banking sector and weaker demand for loans by economic agents. Results from the Bank Lending Survey for the second

Overnight Interbank Money Market Rates (Average Monthly Value)

(per cent, percentage points)



Notes: 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.

³⁰ For the whole banking system.

quarter of 2020 indicate a more substantial tightening of credit policy in terms of other credit conditions, apart from interest rates, such as collateral requirements, premia for riskier loans, maximum amount and term of the loan, and additional requirements to borrowers. The economic effects of the COVID-19 pandemic on lending interest rates are likely to appear with some delay after the expiry of the private moratorium period for deferring customers' obligations on loan repayments (31 March 2021). In August 2020 according to the BNB data under the Procedure for Deferral and Settlement of Liabilities Payable to Banks and their Subsidiaries – Financial Institutions, loans worth BGN 9.1 billion were approved, comprising 14.7 per cent of total loans and advances to non-financial corporations and households.³¹ Inability for some economic agents to service their debt after the expiry of the private moratorium could lead to an increase in the share of non-performing loans in bank portfolios, which is a potential factor for limiting credit supply and further tightening of lending policies, including by a rise in lending interest rates.

In August 2020 the interest rate on new corporate loans came to 3.0 per cent for lev-denominated, to 2.3 per cent for euro-denominated, and to 3.6 per cent for US dollar-denominated, declining slightly from their May levels in all currencies.³² Slight downward dynamics was observed in the annual percentage rate of charge (APRC) on new consumer and housing loans, reaching 9.7 per cent in consumer loans and 3.3 per cent in housing loans in August.

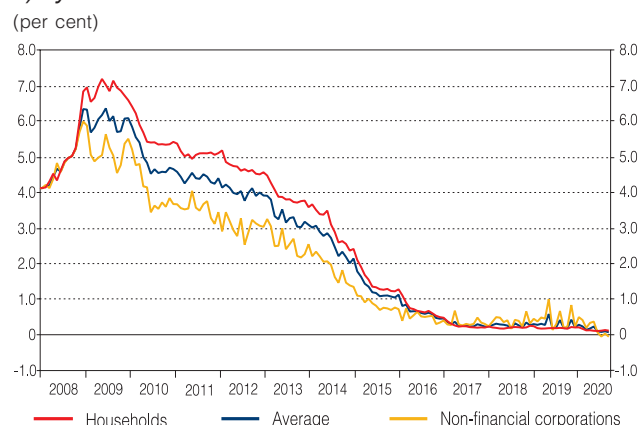
The spread between lending rates on new loans to corporations in Bulgaria and the euro area continued to decline gradually between June and August 2020. The interest rate spread widened in new loans to households in the corresponding period, while the spread between lending rates on loans for house pur-

³¹ In August 2020 according to the BNB Banking Supervision Division data under the Procedure for Deferral and Settlement of Liabilities Payable to Banks and their Subsidiaries – Financial Institutions, household loans of BGN 2.1 billion were approved comprising 8.4 per cent of total loans and advances to households, while that to non-financial corporations accounted for BGN 7.0 billion or 19.1 per cent of total loans and advances to non-financial corporations.

³² The above values of lending rates for non-financial corporations are weighted averages on a 12-month basis.

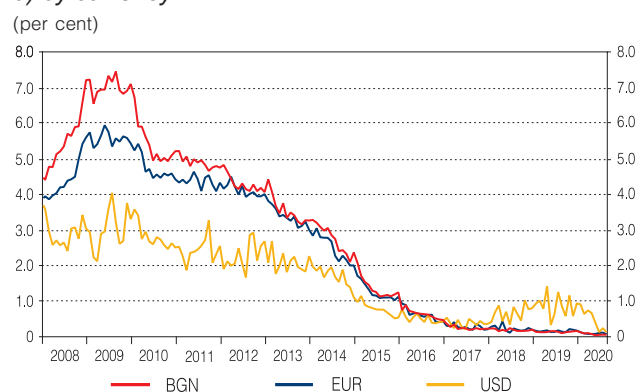
Interest Rates on New Time Deposits

a) by sector



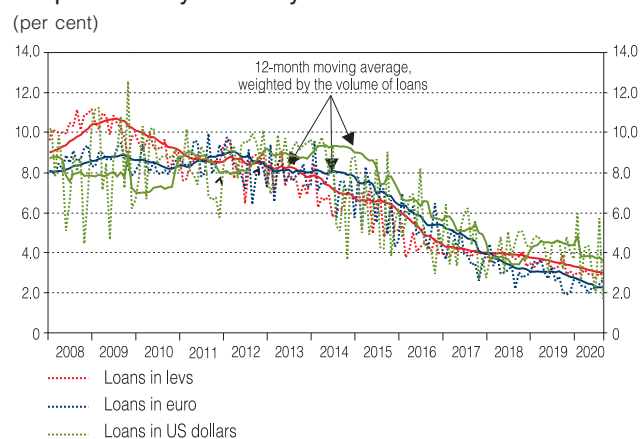
Notes: The average interest rate is calculated for all sectors, maturities and currencies weighted by the relevant volumes of new deposits. Average deposit rates for non-financial corporations and households are based on interest rates for all maturities and currencies weighted by relevant volumes of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

b) by currency



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

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



Source: the BNB.

chase in Bulgaria and the euro area remained unchanged.³³

Over the last quarter of 2020 and the first quarter of 2021 interest rates on deposits are expected to remain at the attained very low levels, reflecting the continuous inflow of attracted funds and the high liquidity in the banking system. After the expiry of the deadline for deferring obligations declared by firms and households under the private moratorium, some increase in lending interest rates may be expected due to the increased share of non-performing loans in bank portfolios and lower risk appetite of banks.³⁴

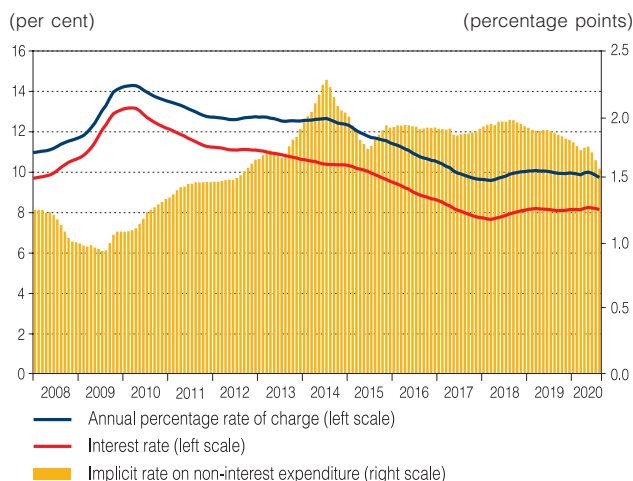
Between July and September 2020 no government securities auctions were held in the domestic primary market. On 15 September the Republic of Bulgaria issued a double tranche of Eurobonds in international capital markets, each tranche amounting to EUR 1.25 billion with a maturity of ten and 30 years respectively. The yield of 0.389 per cent attained for ten-year bonds and 1.476 per cent for thirty-year bonds was close to the respective values according to the reference yield curve in Bulgaria, reflecting the downward trend in Bulgarian government securities yields started in June. The long-term interest rate used to assess the degree of convergence posted a significant decline of 48 basis points on June, reaching 0.20 per cent in September. The drop in Bulgarian government bond yields was largely due to external factors. A similar downward trend in government bond yields was reported in most of EU countries, which can be explained by the sustained ECB's accommodative monetary policy and the announced fiscal stimuli of an unprecedented size at national and European levels. The inclusion of the Bulgarian lev in the ERM II on 10 July 2020 and the establishment of close cooperation with the ECB represent internal factors, which are likely to contribute to the decline in

³³ 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.

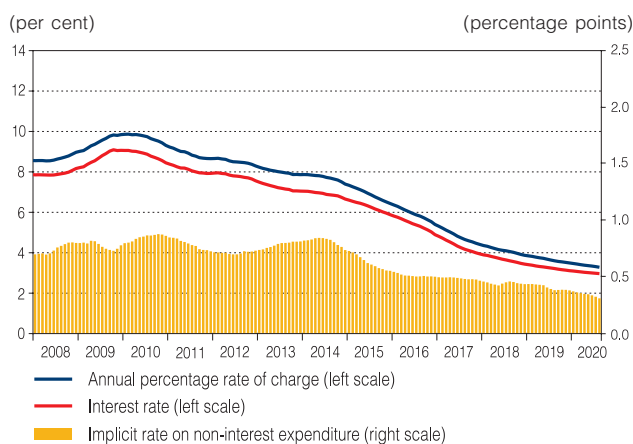
³⁴ The projection of interest rates has been prepared without taking into account the effect of interest-free loans extended to individuals under the Programme for guaranteeing interest-free loans adopted by Decision of the Council of Ministers 257 of 14.04.2020 as part of Bulgarian government's anti-crisis measures supporting people deprived of the possibility to work due to the COVID-19 pandemic.

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

a) consumer loans



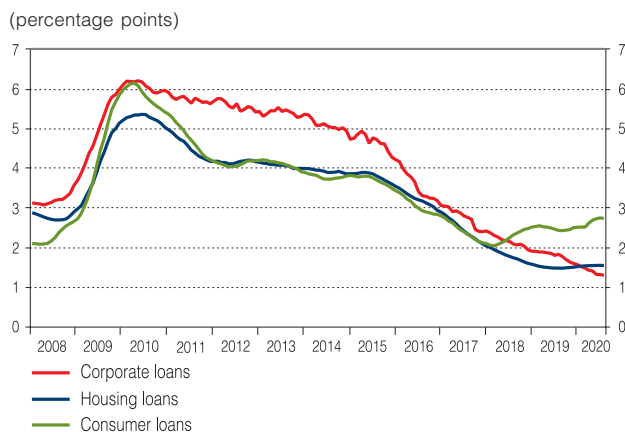
b) housing loans



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



Data for 2020 cover the period to August inclusive.

Sources: the BNB, the ECB.

Bulgarian government securities yield, while political uncertainty in Bulgaria between July and September is a factor with a potential effect in the opposite direction.

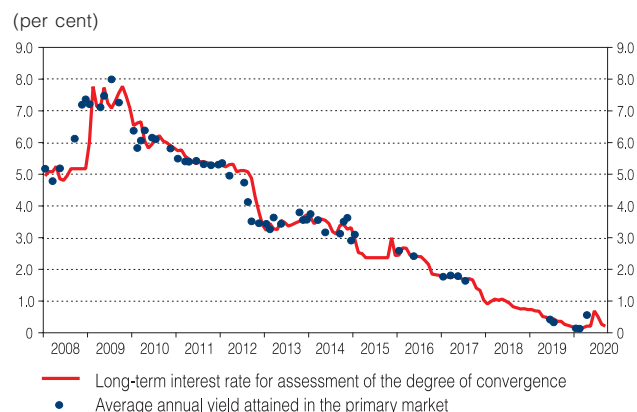
In the fourth quarter of 2020 and the first quarter of 2021 there is uncertainty surrounding the developments in Bulgarian government bond yields, reflecting the potential impact of external and internal factors. Risks associated with a new launch of the containment measures at the EU and national level due to a second wave of COVID-19 spread remained substantial. The materialisation of this type of risks may increase the uncertainty in international capital markets and more pessimistic projections for economic growth may result in a depreciation of government securities, including Bulgarian government securities. Concurrently, a possible announcement of new monetary and fiscal policy stimuli is likely to result in price appreciation of government bonds of most EU Member States. Political uncertainty in Bulgaria is an internal factor with a potential adverse effect on the price of Bulgarian government securities.

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

Government revenue and expenditure policies and budget financing operations affect the allocation of liquidity among economic sectors.

The non-government non-bank sector remained a net beneficiary of liquidity from the budget in each month following the introduction of the state of emergency in Bulgaria on 13 March, with the exception of July. The positive effect on liquidity of this sector in the second quarter came to 8.6 per cent of GDP for the quarter, while in the July–August period net financial flows accounting for 2.4 per cent of the projected GDP for the third quarter were redirected. Budget automatic stabilisers and government's discretionary measures to support businesses and households in the context of the COVID-19 crisis affected the reallocation of liquidity from the budget to the non-government non-bank sector. This impact was relatively uneven throughout the different months, the expiry of extended deadlines for payment of particular direct taxes at the end of June and the gradual recovery of indirect taxes dynamics led to a fall in liquidity

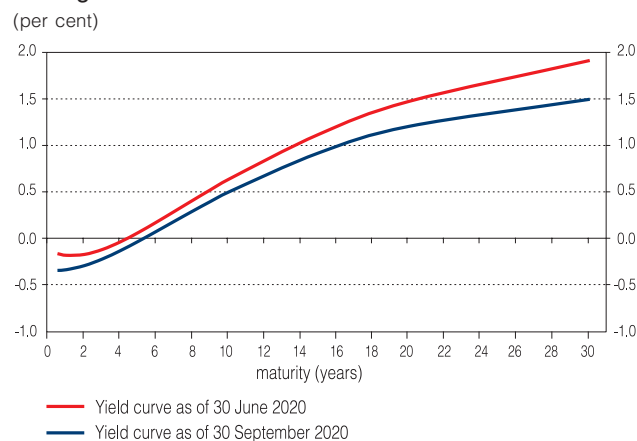
Long-term Interest Rates in the Primary and Secondary Markets of Government Securities



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.

Reference Government Securities Yield Curve in Bulgaria



Notes: The reference yield curve of Bulgarian government securities is based on BNB own calculations under the extended version of the 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.

redirected from the budget to this sector in June and July. Concurrently, additional government anti-crisis measures adopted at the end of July related to higher pension and staff payments had a clearly positive effect on liquidity of this sector already in August, with redirected financial flows over this month matching their monthly average in the second quarter.

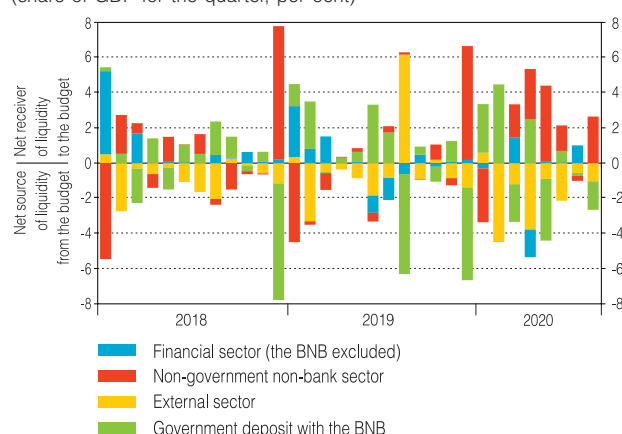
The external sector remained a net source of liquidity for the budget in the second quarter and in the first two months of the third quarter, accounting for 6.8 per cent and 1.6 per cent of GDP respectively for the quarter. Funds reimbursed by the EU in June under the EU Common Agriculture Policy (BGN 452 million) and grants received under EU programmes (BGN 717 million in the second quarter and BGN 424 million in the first two months of the third quarter) contributed to this. At the same time, the effect of budget on the liquidity of the financial sector (the BNB excluded) during the period from the introduction of the state of emergency was close to neutral, the liquidity withdrawn from the sector for the issuance of government securities in April (with a nominal value of BGN 400 million) being largely compensated by the inflow of liquidity to the sector in July resulting from the maturing government securities in the domestic market (in the amount of BGN 290 million).

In the second quarter of 2020 total net financial flows redirected from the external and financial sector (the BNB excluded) were almost entirely sufficient to offset the inflow of liquidity to the non-government non-bank sector, the change in the government deposit with the BNB from the end of the first quarter being minimal (a decline of BGN 93 million or -0.4 per cent of GDP over the review quarter). A stronger fall in government deposit with the BNB was reported in the July to August period (by BGN 512 million or -1.8 per cent of GDP) due to the excess of net financial flows to the non-government non-bank sector and the financial sector (the BNB excluded) over the liquidity received from the external sector.

Based on data available as of early October, including data on Bulgarian government securities issued on 15 September at international capital markets amounting to EUR 2.5 billion and the purchase of a small part of the issue by the resident financial sector (the BNB excluded),

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 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 third quarter of 2020 from BNB macroeconomic forecast prepared in September 2020 are used to assess liquid flows in July and August 2020.

Sources: the NSI, the BNB, BNB calculations.

it may be concluded that, as a whole, for the third quarter the new issue will have the most significant impact on the allocation of liquidity across individual sectors in the economy. In line with this the external and, to a lesser extent, the financial sectors (the BNB excluded) are expected to be the main source of liquidity for the budget, the increase in the government deposit with the BNB as of end-September by BGN 3.7 billion on June to BGN 13.0 billion was driven by the excess of liquid funds received in the budget due to the issue over the positive net financial flows to the non-government non-bank sector.

At the end of 2020 financial flows from the budget to the non-government non-bank sector are expected to increase as a result of the continuing government anti-crisis measures and typical of year-end higher budget expenditure and payments under the Common Agriculture Policy. Assuming that the term of part of the measures would not be extended any further, in early 2021 the fiscal policy is expected to have a weaker effect on liquidity of the non-government non-bank sector, while pending payments on maturing government securities (worth BGN 0.5 billion in the first quarter of 2021) would contribute to the redirection of liquid funds from the budget to the financial sector (the BNB excluded).

In the third quarter of 2020 the upward trend in Bulgaria's international reserves continued, their market value (including valuation adjustments and price revaluations) rising by EUR 6.2 billion on end-2019 to EUR 31.1 billion (BGN 60.8 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. The higher banks' reserves with the BNB, and in particular their excess reserves as a result of the BNB measures implemented in March, contributed most substantially to the increased liabilities of the BNB Issue Department at the end of the first nine months of 2020 *vis-à-vis* December 2019. The increase in international reserves was mainly driven by the increased government deposit with the BNB mainly due to the Eurobonds issue on international capital markets in September.

Until the end of the year and in the first quarter of 2021 banks' excess reserves with the BNB are expected to remain at high levels. In the context of high banking system liquidity and lower risk appetite of banks as a result of uncertainty surrounding the macroeconomic environment stemming from the COVID-19 pandemic, banks are likely to use a part of funds maintained as excess reserves with the BNB to purchase on secondary markets Eurobonds of the last government issue sold at international markets. At the same time, over the projection horizon minimum required reserves are expected to continue growing due to a rise in the deposit base. Annual growth rates of currency in circulation are projected to remain close to the current levels. The government deposit with the BNB is expected to decrease by the close of the year as a result of the continuing anti-crisis measures and concentration on higher capital expenditure and payments under the Common Agriculture Policy. This decrease may be partially compensated in the beginning of 2021, assuming growing EC revenue (from grants under the operational programmes and reimbursements under the EU Common Agriculture Policy), active issuing policy in the domestic market and maintaining current government anti-crisis measures.

3. ECONOMIC ACTIVITY

In the second quarter of 2020 Bulgaria's real GDP fell by 10 per cent on a quarterly basis, reflecting the simultaneous decline in domestic demand and net exports. The containment measures introduced to curb the spread of COVID-19 in Bulgaria and worldwide played a key role in the very strong fall of the economic activity. In the context of a pandemic the fiscal policy was counter-cyclical and contributed positively to the economic activity both through higher national and co-financed expenditure on government consumption and investment, and increased net transfers to households. In the second quarter of 2020 the seasonally adjusted number of employed in the economy decreased by 1.0 per cent quarter on quarter total for the economy due to services and industry sectors, while employment in agriculture increased.

Short-term economic indicators signalled a partial recovery in the economic activity in Bulgaria over the third quarter of 2020. Easing of restrictions imposed against COVID-19 in Bulgaria and abroad resulted in a steady improvement in the business climate and consumer confidence in the third quarter of 2020. These developments were accompanied by strong quarter-on-quarter increases in retail sales, turnover in industry, and construction output and services indices, and also by a decrease in the unemployment rate to 7.9 per cent in August from 8.8 per cent in May 2020 according to the Employment Agency data seasonally adjusted by the BNB.

If the assumptions of no rise in the number of people infected with COVID-19 and no subsequent tightening of anti-epidemic measures realise, which otherwise will encourage households and companies to save more, in the fourth quarter of 2020 and the first quarter of 2021 the trend toward a recovery in the quarter-on-quarter economic activity is expected to be sustained, though real GDP is expected to remain below its pre-pandemic level.

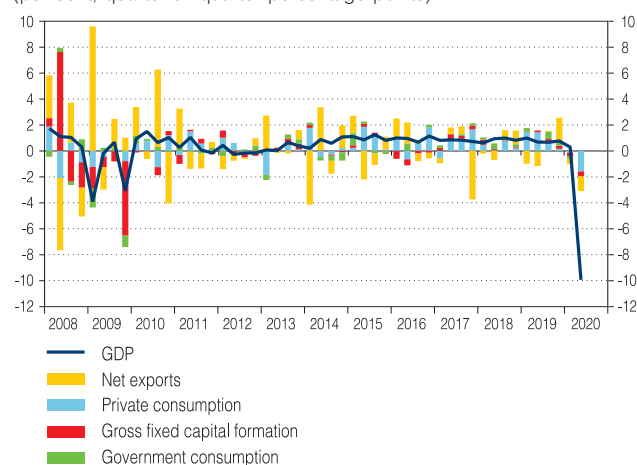
Current Economic Environment

The second quarter of 2020 saw an extremely large quarterly fall of Bulgaria's real GDP (-10 per cent according to seasonally adjusted NSI national account data), which is comparable only to the economic downturn reported in the first quarter of 1997 (-10.1 per cent). The economic activity slowdown was driven by a decline in domestic demand and net exports, impacted by the containment measures introduced against the spread of COVID-19 in Bulgaria and worldwide³⁵. In the context of a pandemic the fiscal policy was counter-cyclical and contributed positively to the economic activity both through higher national and EU co-financed expenditure on government investment and increased net transfers to households.

Private consumption fell 2.5 per cent quarter on quarter in the second quarter of 2020 consistent with the stringent anti-epidemic measures, which severely hampered and limited consumption of

³⁵ For more information on the effects of COVID-19 on Bulgaria's economy, see the research topic on Main Transmission Channels of the COVID-19 Pandemic to Economic Activity in Bulgaria, published in the Economic Review, issue 1/2020.

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



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

Sources: the NSI, BNB calculations.

non-essential goods and services. Other factors responsible for lower final consumption expenditure involved worsened labour market conditions, heightened uncertainty of the economic environment, negative consumer sentiment and lower real disposable income of households³⁶. Limited consumption opportunities and economic agents' precautionary behaviour was the reason behind the increase in the household savings rate to 21.2 per cent of disposable income in the second quarter of the year from 15.3 per cent in the previous quarter, according to the regular NSI Household Budget Survey.

Despite the additional public spending incurred as a result of the pandemic, government consumption reported a slight quarter-on-quarter decline of -0.1 per cent in the second quarter. Given the prioritisation of budget payments in June operating expenditure declined and health cost remained at its previous year level, while staff costs continued to grow, but at a relatively slower pace than in the first quarter.³⁷

Over the quarter investment in fixed capital decreased by 2.0 per cent on a quarterly basis. According to the BNB estimates³⁸ this reflects mainly the fall in private investment, while public investment recorded a substantial increase. Lower private investment reflected deteriorated prospects of demand for Bulgarian goods and services, lower production capacity utilisation, subdued household consumption, worsened financial performance of firms and managers' negative sentiment about future production activity in all main sectors due to uncertainty caused by the COVID-19 pandemic. Public investment contributed positively to the change in gross fixed capital formation underpinned by the absorption of EU funds in the 2014–2020 programme period and the implementation of large infrastructure projects financed by the national budget.

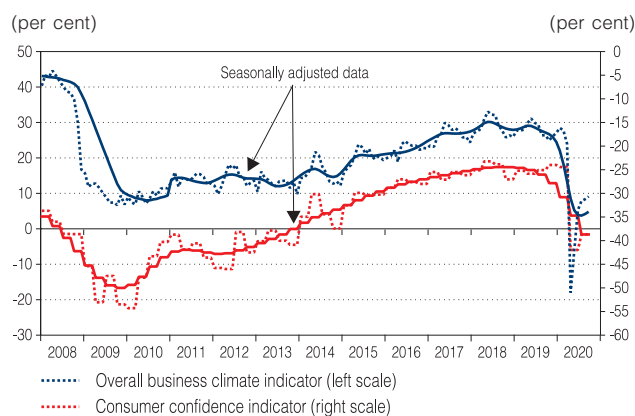
The negative contribution of net exports to the change in the GDP in the second quarter of 2020 was driven by the stronger decline

³⁶ The BNB estimate on the level of real disposable income is used.

³⁷ For details, see Fiscal Policy Effects on the Economy Section in Chapter 3.

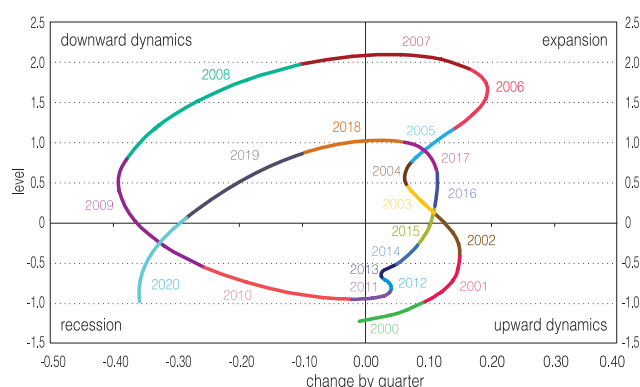
³⁸ The analysis employs data derived from quarterly non-financial accounts of the general government sector and Consolidated Fiscal Programme implementation reports published by the NSI and MF, respectively.

Business Climate and Consumer Confidence



Source: the NSI.

Business Climate Dynamics Indicator



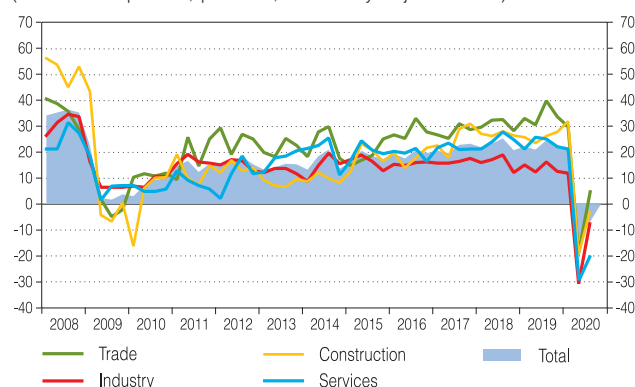
Notes: The chart compares the business climate level (the vertical axis) and its quarterly change (the horizontal axis). The business climate series has been transformed using the HP filter (with a parameter $\lambda = 100$) in order to eliminate short-term fluctuations, after which it has been standardised.

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.

in exports in goods and services than that in imports. Exports of goods and services fell by 22.1 per cent on a quarterly basis driven by lower external demand and impeded cross-border movement of people and goods due to tight containment measures introduced globally. By sub-component of exports the group of services reported a significantly higher annual decline compared with goods as services were relatively more severely affected by the anti-epidemic measures. Imports of goods and services also fell on a quarterly basis in real terms over the quarter (-20.4 per cent), reflecting the weaker domestic demand and lower exports of goods and services.

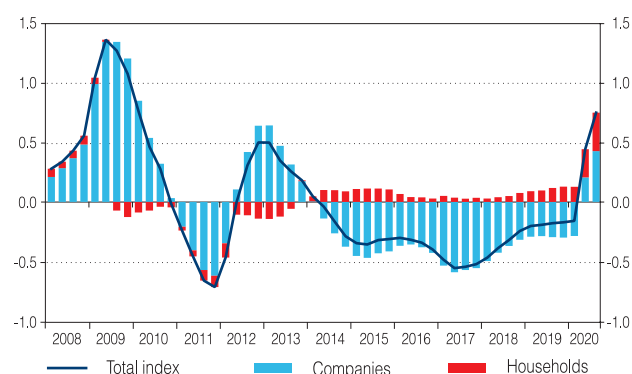
Easing of containment measures against the spread of COVID-19 contributed to the improvement in economic indicators over the third quarter of 2020. The overall business climate indicator increased by 14.6 points compared with the previous quarter, although it remained significantly under its long-term average value. This reflected more favourable assessments of managers in all economic sectors³⁹ about the current and expected business situation in Bulgaria. The uncertain economic environment and weak demand remain the main challenges to business. In the third quarter of 2020 the economic uncertainty indicator constructed by the BNB continued to increase, corporations contributing most to this rise and households to a lesser degree. The NSI Consumer Survey of July 2020 showed an increase in the consumer confidence indicator by 3.3 points from April⁴⁰. This reflected more optimistic household assessments about overall economic situation in Bulgaria and labour market developments in recent months. Concurrently, the NSI survey signals a deterioration of household budgets, which is a precondition for a slower and longer recovery of final consumption expenditure in the following months.

Between July and August 2020 NSI data on retail trade turnover reported an increase of real sales by 4.4 per cent compared with the second quarter of the year, remaining however significantly under the level of the correspond-

³⁹ The economic sectors include manufacturing, retail trade, construction and services.

⁴⁰ Similar trend is also observed in the monthly consumer confidence indicator compiled by the European Commission, for which data are available as of September 2020.

Uncertainty Indicator in the Economy (Corporations and Households)

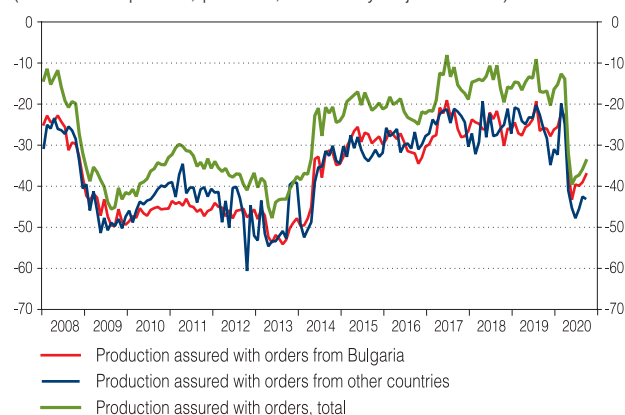


Notes: Higher values of this indicator should be interpreted as an increase in uncertainty. Positive/negative values of the global indicator show that the uncertainty in the economy is above/below its long-run level. This indicator is constructed under a methodology presented in: Ivanov, E. 'Constructing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

Sources: EC, BNB calculations.

Production Assured with Orders from Other Countries and Finished Goods Inventories

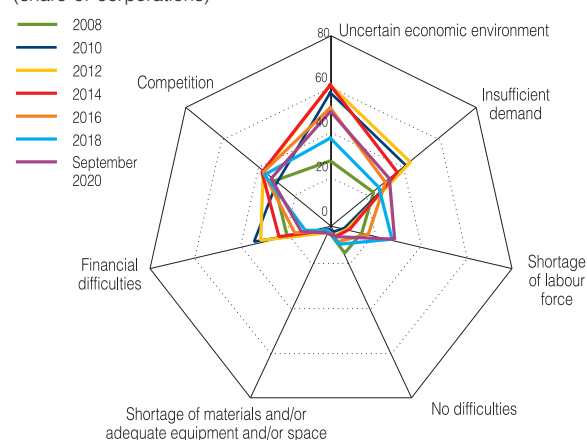
(balance of opinions, per cent; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Factors Limiting Economic Activities of Corporations

(share of corporations)



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

Sources: the NSI, BNB calculations.

ing period in 2019 (-12.2 per cent). In July and August the industrial production index also posted growth compared with the second quarter of 2020 (7.0 per cent) but a fall on an annual basis. Production activity growth in industry was mainly driven by manufacturing⁴¹, consistent with the recovering levels of production assured with orders from both Bulgaria and other countries⁴². Based on nominal industrial turnover data sales of corporations in July and August rose quarter on quarter due to an increase in both volumes and prices driven simultaneously by domestic and international markets. Construction also recorded positive developments: in July and August the construction production index rose 4.0 per cent on a quarterly basis compared with the second quarter, which was attributable to both the building and civil/engineering construction.

According to Eurostat data the index of services production rose by 4.8 per cent in July compared with its average value in the second quarter of 2020, with trade⁴³, transport⁴⁴, information and communication⁴⁵, real estate and professional activities⁴⁶ sub-sectors having a positive contribution. In July accommodation and food service activities continued to fall quarter on quarter in the context of a pandemic.

Based on the economic indicators dynamics quarter-on-quarter growth in GDP may be expected in the third quarter of 2020. If the assumptions of neither rise in the number of people infected with COVID-19, nor subsequent tightening of anti-epidemic measures materialise, which will affect the economic behaviour of households and companies, in the fourth quarter of 2020 and the first quarter of 2021 the trend

⁴¹ The industrial production index in production and distribution of electricity and heating and gas posted a slight rise on a quarterly basis, while that in mining and quarrying recorded a decline compared with the second quarter of 2020.

⁴² The degree of assuring firms in manufacturing with orders from Bulgaria and other countries is based on NSI business situation survey data.

⁴³ This refers to the wholesale and retail trade, repair of motor vehicles and motorcycles sector according to the Aggregated Nomenclature A21 under the Classification of Economic Activities (NACE-28).

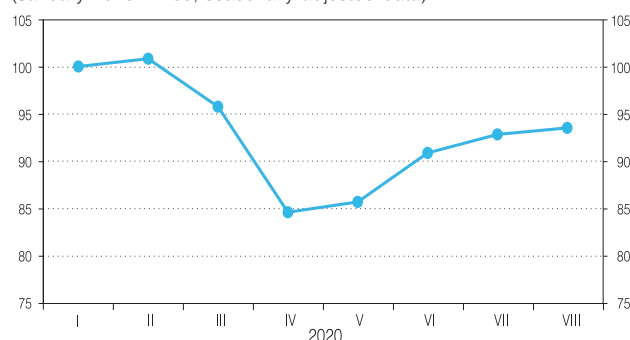
⁴⁴ This refers to the transport, storage and mail services sector according to the Aggregated Nomenclature A21 under the Classification of Economic Activities (NACE-28).

⁴⁵ This refers to the information and communication sector according to the Aggregated Nomenclature A21 under the Classification of Economic Activities (NACE-28).

⁴⁶ This refers to the professional, scientific and research activities sector according to the Aggregated Nomenclature A21 under the Classification of Economic Activities (NACE-28).

Dynamics of the Index of Industrial Production in 2020

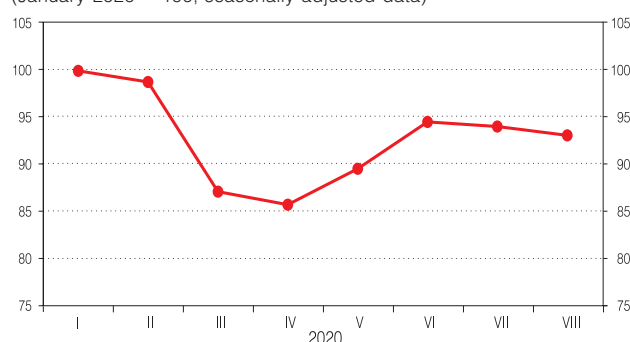
(January 2020 = 100; seasonally adjusted data)



Source: the NSI.

Dynamics of the Index of Construction Production in 2020

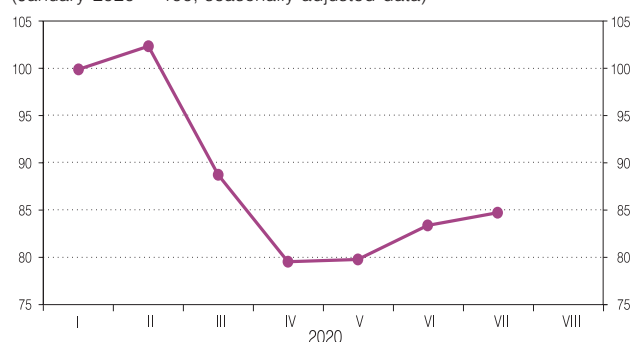
(January 2020 = 100; seasonally adjusted data)



Source: the NSI.

Dynamics of the Index of Services Production in 2020

(January 2020 = 100; seasonally adjusted data)



Source: the NSI.

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	II
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	-2.1
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	-2.5
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	1.3
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	-0.2
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	-2.0
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	-22.1
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	-20.4
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	-10.0

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

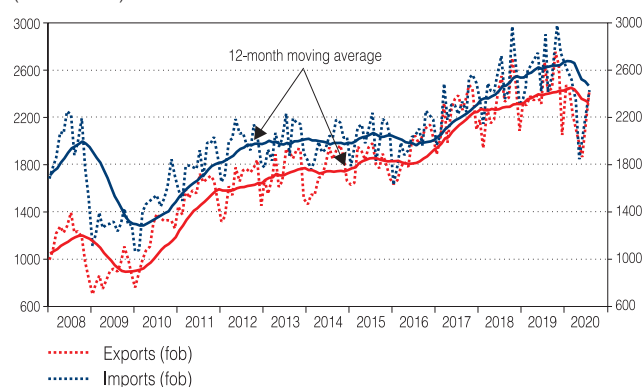
Source: the NSI.

toward a gradual recovery of the economic activity is expected to be sustained but real GDP to remain below its pre-pandemic level. The fiscal policy is expected to contribute positively to the economic activity mainly through higher national and EU co-financed expenditure on investment and increased transfers to households. Exports of goods and services will also have a positive contribution to growth in the fourth quarter of the year and the first quarter of 2021 in line with the projected increase in external demand.

Exports and Imports of Goods and Services

The unprecedented deterioration of the global macroeconomic environment, as a result of the comprehensive measures imposed to curb COVID-19 globally in the second quarter of 2020, had a strong negative impact on Bulgaria's foreign trade flows in the January–June 2020 period. Data on Bulgaria's exports of goods in the first half of 2020 show a strong year-on-year

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



Source: the BNB.

Exports by Commodity Group, January–June 2020

	Value (EUR million)	Change* (EUR million)	Growth** (per cent)	Contribution**, percentage points
Wood products, paper, ceramics and glass	642.6	-60.9	-8.7	-0.4
Machines, vehicles, appliances, instruments and weapons	3 642.8	-437.0	-10.7	-3.0
Mineral products and fuels	1 228.3	-586.4	-32.3	-4.1
Base metals and related products	2 151.1	17.8	0.8	0.1
Animal and vegetable products, food, drinks and tobacco	2 335.3	275.6	13.4	1.9
Textiles, leather, clothing, footwear and other consumer goods	1 543.1	-183.0	-10.6	-1.3
Chemical products, plastics and rubber	1 917.0	-22.5	-1.2	-0.2
Total exports	13 460.4	-996.2	-6.9	-

* 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.

fall of 6.9 per cent in nominal terms, with the fall pronounced most strongly in April and May. The non-seasonally adjusted national account GDP data suggested that the nominal decline in exports of goods in the first half of 2020 was due to a sharp year-on-year decrease in both real volumes and prices. Between January and June 2020 mineral products and fuels⁴⁷ and machines⁴⁸ contributed most to the nominal decline in exported goods, while animal and vegetable products⁴⁹ and base metals⁵⁰ were the only commodity groups reporting growth on an annual basis. The negative contribution of mineral products and fuels in the first quarter of 2020 was entirely ascribable to the strong fall in crude oil prices, while real volumes of exports posted a rise⁵¹. As a result of weaker domestic demand and one-off supply side factors real volumes of exported mineral products and fuels also exhibited a decline⁵² on an annual basis over the second quarter, which coupled with the further strong annual fall in oil prices led to

⁴⁷ In this chapter it should read the mineral products and fuels group under the Combined Nomenclature.

⁴⁸ In this chapter, it should read the machines, vehicles, appliances, instruments and weapons group under the Combined Nomenclature.

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

⁵⁰ In this chapter, it should read the base metals and their products group under the Combined Nomenclature.

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

⁵² Scheduled maintenance of the production facilities in Bulgaria's largest refinery in the second quarter of 2020 reduced the capacity of crude oil refining. For more details: PJSC "LUKOIL", 1Q 2020 Results Conference Call and Webcast Transcript, June 4, 2020.

a sharp drop in nominal exports of the group. Over the first half-year the group of machines posted a decline in both real volumes and the price component, with the strongest fall being concentrated mostly in the second quarter of 2020⁵³, probably reflecting the worsened global economic activity. Animal and vegetable products and, to a much lesser extent, base metals had a positive contribution to the nominal change in exports of goods. Based on BNB's calculations⁵⁴ growth in exported animal and vegetable products in the first half of 2020 was due to a combined rise in real volumes and prices, while the group of base metals posted an increase only in real volumes⁵⁵, and prices fell on an annual basis.

In the first half of 2020 exports of goods to EU countries⁵⁶ decreased by 6.6 per cent year on year, which was mainly due to the groups of machines, mineral products and fuels, and textile and leather⁵⁷. The share of exports to the EU in total Bulgarian exports of goods (67.6 per cent) remained similar to that in the corresponding period of the previous year. By country, exports to Germany, Bulgaria's major trading partner, and to Belgium posted an increase, while exports to Bulgaria's other EU key trading partners recorded declines. Between January and June 2020 a strong annual fall in exports was reported in all non-EU regions, with the exception of North and South America and Asia.

The balance of payments data on the beginning of the third quarter of 2020 signalled a lower fall in nominal exports of goods in July compared with that in the second quarter of 2020. This was attributable mainly to easing of the most restrictive measures against the spread of the pandemic in Bulgaria's major trading partners after the second quarter of the year.

⁵³ See footnote 51.

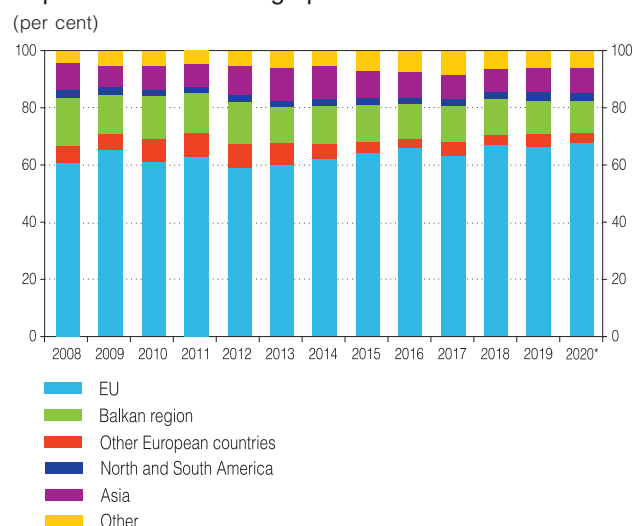
⁵⁴ See footnote 51.

⁵⁵ The rise in processed copper by 63 per cent on an annual basis over the review period in one of the largest Bulgaria's plants made a positive contribution. For details, see: [Aurubis, Quarterly Report First 9 Months 2019/20](#).

⁵⁶ EU data for 2020 include the United Kingdom due to the comparisons made with previous years and the fact that there are no major changes in the trade relations between the EU and the United Kingdom over the transition period.

⁵⁷ In this chapter it should read the textiles, leather, clothing, footwear and other consumer goods group under the Combined Nomenclature.

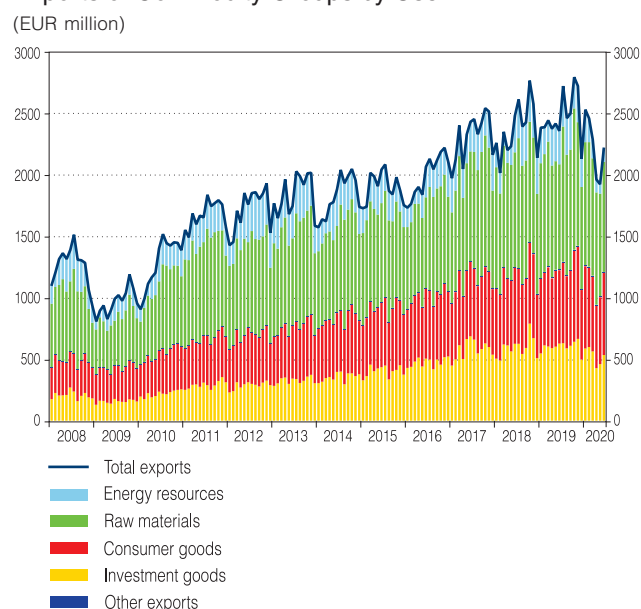
Exports of Goods: Geographical Breakdown



* Data for 2020 refer to January–June.

Source: the BNB.

Exports of Commodity Groups by Use



Source: the BNB.

Assuming that there will be neither a sharp increase in the number of people infected with COVID-19, nor a reintroduction of social distancing measures in Bulgaria's main trading partners, which would limit Bulgaria's foreign trade flows, the expectations for the fourth quarter of 2020 and the first quarter of 2021 are for real exports of goods to continue their partial recovery on a quarterly basis in line with recovering external demand. However, real exports of goods in the fourth quarter of 2020 and the first quarter of 2021 will remain lower compared with the corresponding period of the prior year. Over the projection horizon the year-on-year fall in export prices is anticipated to slow down compared to the second quarter of 2020 mainly due to the dynamics of international commodity prices.

In the first half of 2020 nominal imports of goods recorded a strong fall of 12.2 per cent on an annual basis driven by both a decline in import prices and real volumes⁵⁸. Energy resources contributed most to the annual fall in nominal imports of goods in January–June 2020 followed by the group of investment goods. The decline in energy resources in the half-year was entirely attributable to the strong year-on-year drop in international crude oil prices in the first quarter of the year, with real volumes⁵⁹ also reporting a strong decline on an annual basis in the second quarter. Decreased real volumes in imports of investment goods⁶⁰ and lower import prices of raw materials⁶¹ on an annual basis contributed to a lesser extent to the nominal fall in imported goods on an annual basis over the half-year.

The 2018 trend toward a gradual increase in the share of EU goods imported in Bulgaria was sustained in the first half of 2020. Between January and June imports from the EU accounted for 52.5 per cent of total imports (51.5 per cent in the corresponding period in 2019), although imports of goods from EU Member States exhibited a strong decline of 10.6 per cent compared with the January–June 2019 period.

⁵⁸ Non-seasonally adjusted national account GDP data.

⁵⁹ 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 SITC.

⁶⁰ See footnote 59.

⁶¹ 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 and second quarters of 2020.

Imports of Commodity Groups by Use, January–June 2020

	Value (EUR million)	Change* (EUR million)	Growth** (per cent)	Contribution** (percentage points)
Consumer goods	3 520.1	-98.2	-2.7	-0.6
Raw materials	5 472.1	-374.7	-6.4	-2.3
Investment goods	3 855.9	-559.6	-12.7	-3.4
Energy resources	1 491.6	-988.6	-39.9	-6.0
Other imports	95.5	6.8	7.6	0.0
Total imports (cif)	14 435.2	-2 014.2	-12.2	-

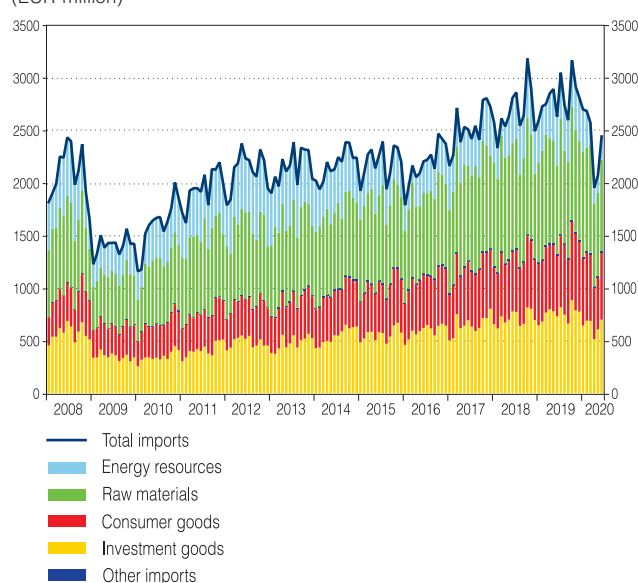
* Change on the corresponding period of previous year.

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

Source: the BNB.

Imports of Commodity Groups by Use

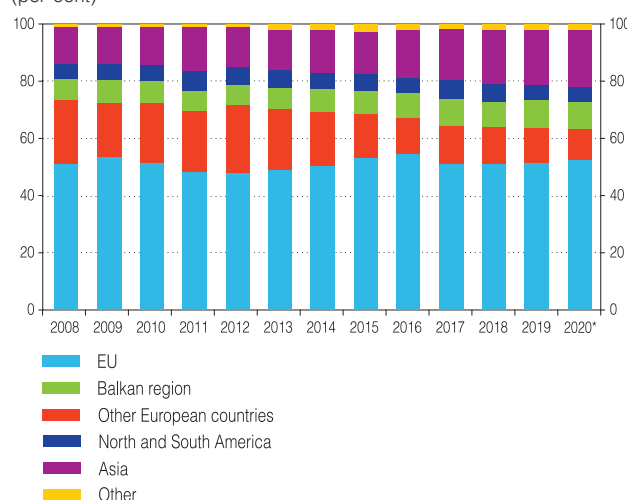
(EUR million)



Source: the BNB.

Imports of Goods: Geographical Breakdown

(per cent)



* Data for 2020 refer to January–June.

Source: the BNB.

Germany and Italy contributed most significantly to the nominal fall in imports from the EU on an annual basis. Concurrently, imports from non-EU countries declined by 6.8 per cent on an annual basis in January–June 2020. This was ascribable mainly to lower imports of petroleum products from Russia and decreased imports from Turkey.

The balance of payments data for July 2020 suggest that nominal imports of goods continued to fall significantly on an annual basis, although the rate of decline was lower than that in the second quarter of the year.

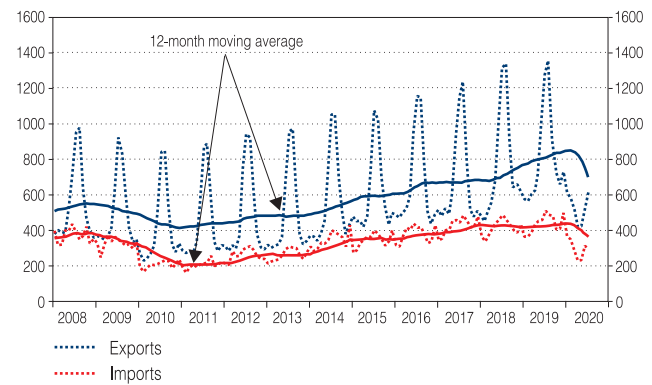
Real imports of goods are expected to further decline on an annual basis at the end of 2020 and in early 2021, the decline being much lower than that in the second quarter of 2020. The expected dynamics of imports will follow to a large degree the expectations of domestic demand and exports developments, but the quarter-on-quarter recovery, followed by the strong shock in the second quarter of 2020, will be insufficient to reach the levels of the corresponding quarter of the previous year. In the fourth quarter of 2020 and the first quarter of 2021 the annual fall in the price component is anticipated to follow the dynamics projected for the prices of Bulgaria's exports of goods but to be stronger.

According to balance of payments data for the January–July 2020 period exports and imports of services declined significantly on an annual basis. According to non-seasonally adjusted national account data, in the first half of 2020 the real component had a negative contribution to the nominal change in exports and imports of services on an annual basis, while the price component had a positive effect on the year-on-year nominal change of foreign trade flows in services.

The exports of services fell by 32.8 per cent in nominal terms in January–July 2020 compared with the corresponding period of the previous year, with declines in travel earnings (-62.9 per cent) and transport services (-32.9 per cent) contributing most strongly. The major reason behind these declines were the strong restrictions on the operation of accommodation establishments and impeded travel services in the context of the COVID-19 pandemic. Data on the number of flights to and from Bulgarian airports in the summer season, including the period from

Dynamics of Exports and Imports of Services

(EUR million)

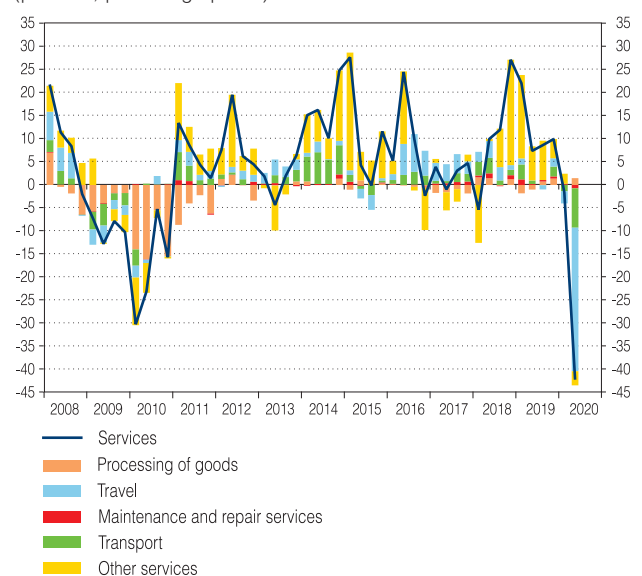


Note: Data for 2020 refer to January–July.

Source: the BNB.

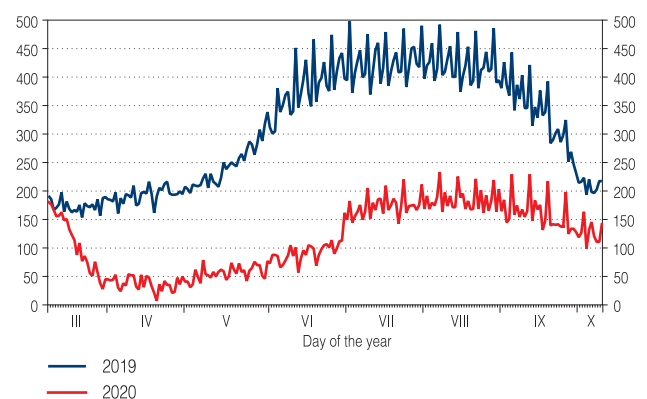
Annual Change of Services Exports and Contribution by Sub-component

(per cent, percentage points)



Source: the BNB.

Number of Flights from/on Bulgaria's Airports



Source: European Organization for the Safety of Air Navigation.

early June to the end of August 2020, indicate a year-on-year decline of 63.5 per cent. However, from the beginning of September 2020 the annual decline slowed down to 50.4 per cent. Based on NSI data in the January–August 2020 period the decline in the number of visits of foreign nationals to Bulgaria accounted for 62.5 per cent on an annual basis. The NSI surveys for July, August and September conducted among managers of accommodation establishments indicate improving sentiment in tourism. In August about 34.8 per cent of the managers reported an increase in the operating income compared to the previous month (34.0 per cent in July and 28.8 per cent in June 2020).

Between January and July 2020 imports of services fell by 29.4 per cent on an annual basis in nominal terms. This reflected mostly the reduced expenditure of Bulgarians on travel (by 53.4 per cent) and transport (by 23.9 per cent) abroad. NSI's data for the January–August 2020 indicate that total number of Bulgarians' visits abroad fell by 52.6 per cent year on year.

In the fourth quarter of 2020 and in the first quarter of 2021 trade flows in services (in real terms) are expected to remain significantly lower compared to the corresponding period of the previous year. The annual fall will gradually slow down, if the assumption of a gradual recovery in external demand on a quarterly basis materialises.

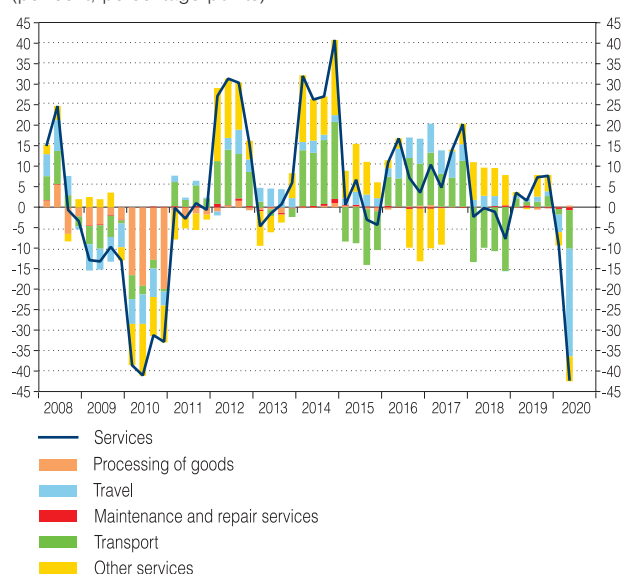
Behaviour of Firms and Competitiveness

In the second quarter of 2020 real value added in the total economy decreased by 8.9 per cent compared to the previous quarter. An economic activity slowdown was reported in all major sectors, with services having the largest negative contribution as a result of the containment measures imposed in Bulgaria against the spread of COVID-19.

Over the second quarter value added in industry fell by 3.3 per cent on a quarterly basis, driven by both manufacturing and construction sub-sectors. Dynamics in the value added in industry corresponded to the decline in the index of industrial production and the turnover of industrial enterprises from the NSI short-term business statistics. In the second quarter the index of industrial production decreased by 11.9 per cent quarter on quarter due mainly to manufacturing

Annual Change of Services Imports and Contribution by Sub-component

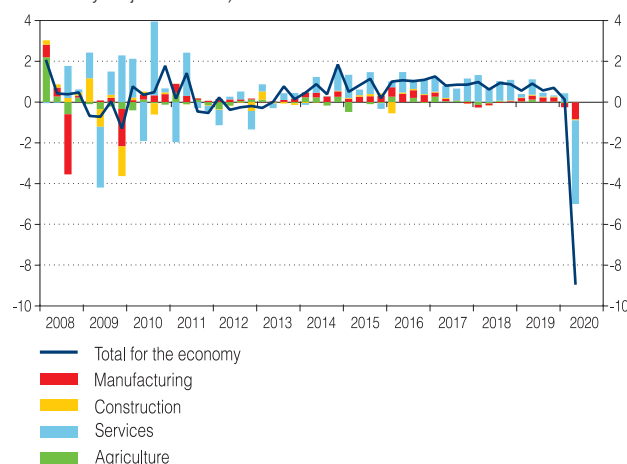
(per cent, percentage points)



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.

and, to a lesser extent, to other sub-sectors: mining and quarrying, and production and distribution of electricity, heating and gas. The fall in domestic demand and the economic activity slowdown in Bulgaria's major trading partners was a precondition for a decline of the economic activity in manufacturing, which contributed to the lower production of electricity and heating.

Gross value added in the services sector fell by 6.0 per cent on a quarterly basis in the second quarter of 2020. The trade, transport, accommodation and food service activities sub-sector had the largest negative contribution to the value added dynamics over the review period, followed by the real estate activities and arts, entertainment and recreation sub-sectors. Data on the index of services production, including a more detailed breakdown by economic sector, suggest that accommodation and food service activities recorded the largest quarter-on-quarter decline (-63 per cent) in the second quarter.

Economic indicators on the dynamics of production and turnover in industry, construction and services for July–August 2020 signal a partial recovery of gross value added in the respective sectors in the third quarter of the year. In July and August nominal industrial turnover rose by 4.6 per cent on the second quarter, reflecting an increase in both volumes and prices. Domestic market contributed most to the increased volumes, while the contribution of the external market was significantly lower. In July and August 2020 the construction production index rose by 4.0 per cent quarter on quarter, reflecting the increase in both building⁶² and civil/engineering⁶³ construction. The index of services production⁶⁴ posted growth in all main sub-sectors in July compared with the average level for the second quarter of 2020, with the exception of accommodation and food service activities, and administrative and support service activities, which remained directly affected by the COVID-19 crisis.

Given the containment measures introduced against the spread of COVID-19 and consistent with the decline in the value added, in the

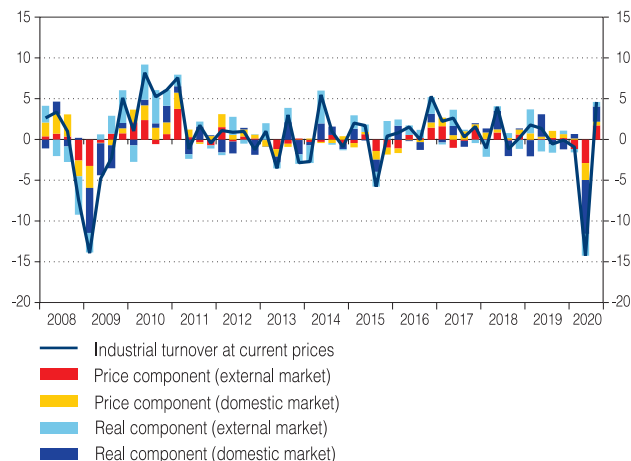
⁶² Building construction includes construction of residential and non-residential buildings.

⁶³ Civil and engineering construction covers infrastructure construction of roads, bridges, pipes, power lines, telecommunications and other construction works.

⁶⁴ Eurostat seasonally adjusted data are used.

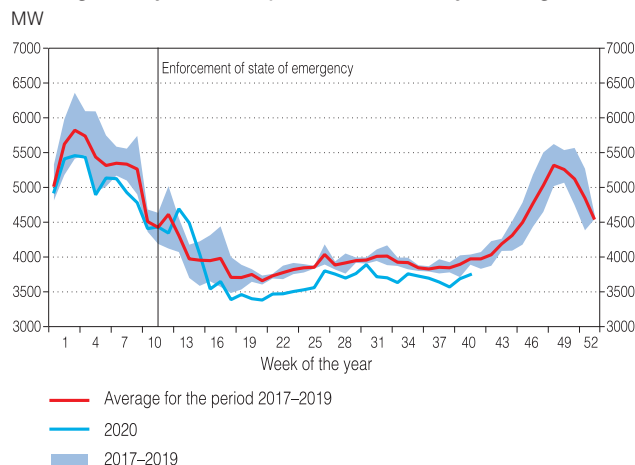
Industrial Turnover Dynamics

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



Sources: the NSI, BNB calculations.

Average Daily Consumption of Electricity in Bulgaria

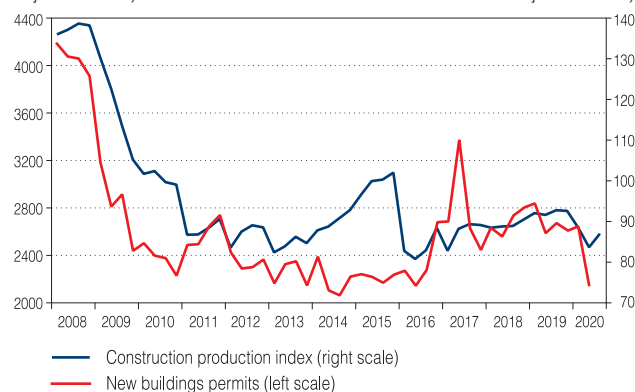


Sources: The European Network of Transmission System Operators for Electricity (ENTSO-E).

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)

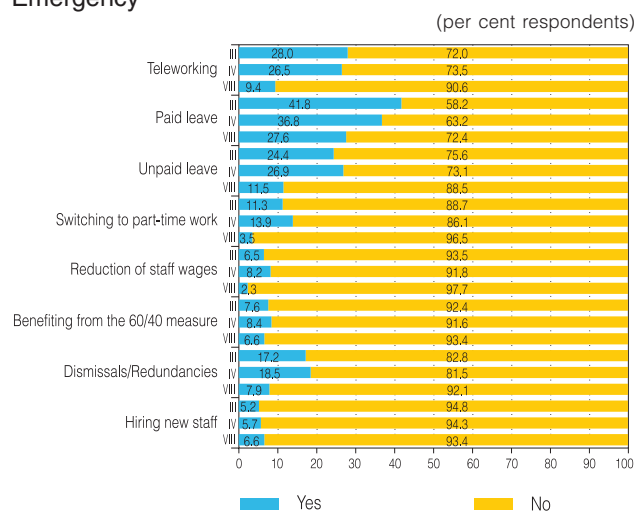
Economic sector	2019				2020	
	I	II	III	IV	I	II
Wholesale and retail trade, repair of motor vehicles and motorcycles	-2.5	-0.8	0.6	-0.8	-4.8	-13.8
Transport, storage and mail services	-1.5	-0.6	-0.6	0.6	0.8	-18.4
Accommodation and food service activities	-9.0	-4.6	-4.4	3.7	-4.8	-63.0
Information and communication	-0.9	4.0	3.0	3.1	2.3	-4.8
Real estate activities	-9.6	-2.5	0.3	-9.6	3.1	-14.9
Professional, scientific and technical activities	-5.0	5.3	-2.6	-2.4	8.6	-14.5
Administrative and support service activities	-3.8	4.4	0.8	-3.1	1.4	-7.4

Source: Eurostat.

second quarter of 2020 employment in the total economy fell by 1.0 per cent from the previous quarter, according to seasonally adjusted NSI national account data. The services sector had the largest negative contribution to the change in employment followed by industry, while the agricultural sector contributed positively over the quarter. Across services sub-sectors the employment fall was concentrated in trade, transport, accommodation and food service activities, and arts, entertainment and recreation, while in industry the strongest employment decline was reported in manufacturing and, to a lower extent, in construction. The decline in hours worked *per* employed person over the quarter was significantly higher than that in employment, reflecting probably the firms' efforts to use other methods for reducing labour costs such as reduced working time instead of dismissals due to uncertainty about the duration of containment measures. Employment Agency data⁶⁵ suggest a strong rise in newly registered unemployed over the second quarter, with their sectoral distribution corresponding to a large extent to changes in employment. In the third quarter of 2020 labour market recorded only a slight recovery, with the number of newly registered unemployed exceeding the number of newly employed. The expected quarter-on-quarter gradual recovery of the economic activity and the extended validity of the government's measure to preserve employment until the end of the year will be a precondition for growth in the number of employed on a quarterly

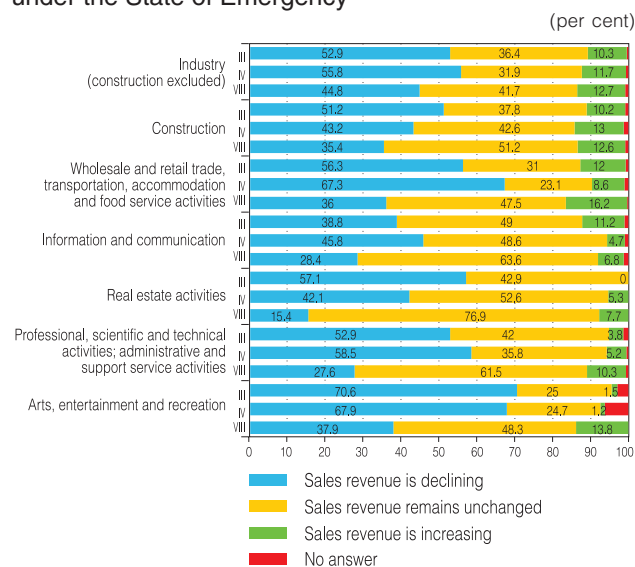
⁶⁵ The government programme to preserve jobs in Bulgaria through subsidised employment (the so-called 60/40 measure) was extended until the end of 2020. The new design of the programme provides for a larger share of the compensation for the transport and accommodation and food service activities sectors to be undertaken by the government. Data provided by the NSSI on payments made under the measure show that jobs of about 219,000 employees were preserved between April and August 2020 (based on BNB estimates).

Measures Taken by the Firms in Relation to Their Staff in March, April and August 2020 under the State of Emergency



Source: the NSI.

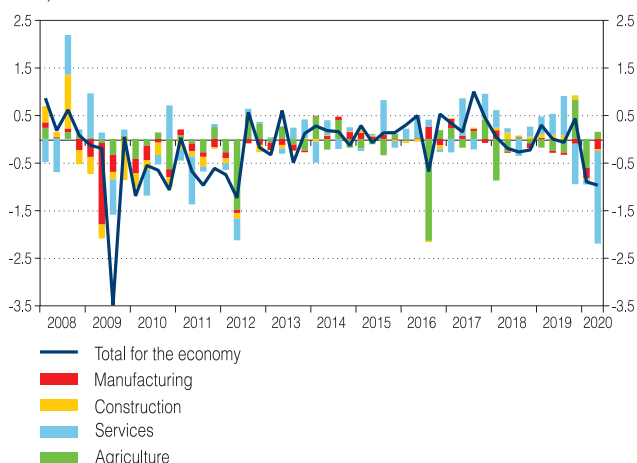
Changes in Firms' Revenue from Sales (Compared to the Previous Month) in March, April and August 2020 under the State of Emergency



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.

basis combined with the gradually decreasing unemployment rate in the fourth quarter of 2020 and the first quarter of 2021.

In the second quarter of 2020 labour productivity declined significantly on a quarterly basis due to the strong fall in the value added along with a comparatively lower decrease in employment. Factors such as reduced working time, difficulties in reaching the workplace and reorganisation of the working process related to the spread of COVID-19 in Bulgaria contributed to the fall in labour productivity over the quarter. The removal of these factors and the expected gradual improvement of the economic activity at the end of the year and the beginning of 2021 are expected to contribute to growth of labour productivity on a quarterly basis.

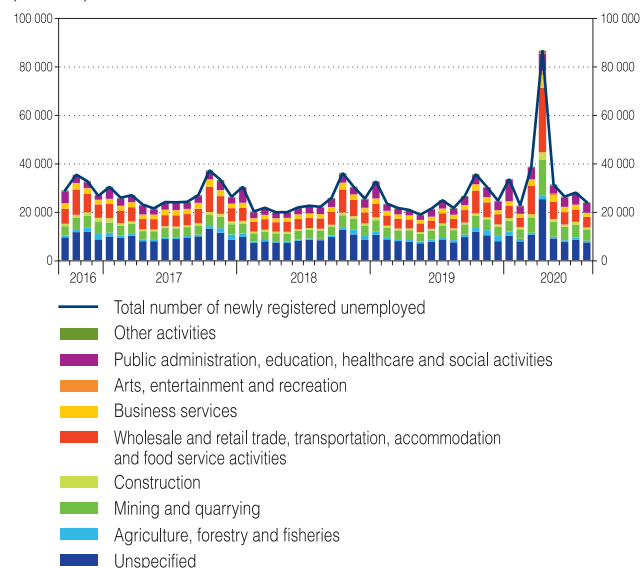
Despite the decrease in hours worked *per* employed person and the intention of some companies to reduce wages⁶⁶ stated in NSI surveys, the compensation *per* employee in nominal terms showed an acceleration of the quarterly growth rate in the second quarter of 2020. This may be explained by the stronger decline in employment in the economic sectors⁶⁷, in which the average

⁶⁶ According to the NSI surveys on the effects of the state of emergency on business.

⁶⁷ This refers to the sectors under NACE-2008: wholesale and retail trade, repair of motor vehicles and motorcycles; transport, storage and mail services; accommodation and food service activities; arts, entertainment and recreation; other activities; industry and agriculture, forestry and fishing sub-sectors.

Newly Registered Unemployed in Labour Offices

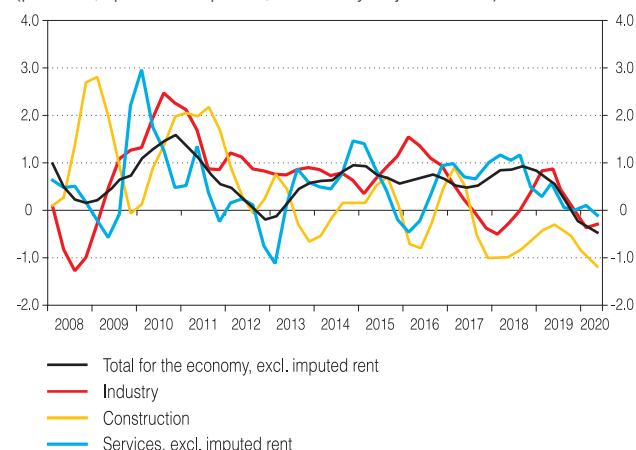
(number)



Source: the Employment Agency.

Labour Productivity Dynamics (Value Added *per* Employee)

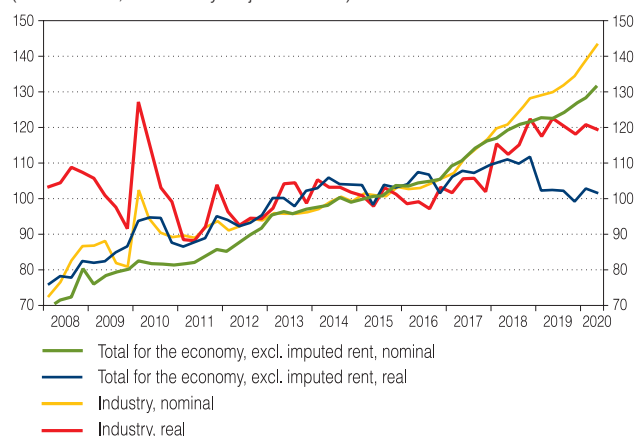
(per cent, quarter on quarter; seasonally adjusted data)



Source: the NSI.

Unit Labour Costs

(2015 = 100; seasonally adjusted data)



Sources: the NSI, BNB calculations.

wage is lower than in the overall economy, as well as by increased wage costs for the public sector and employees working at the front line in the fight against the spread of COVID-19.

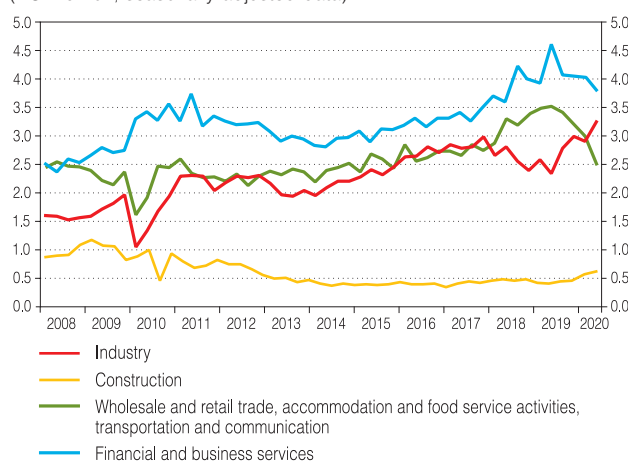
In the fourth quarter of 2020 and first quarter of 2021 compensation *per* employee is expected to continue rising on a quarterly basis as a result of approved wage increases in the education sector, as well as the government intends to raise the minimum wage to BGN 650 from 1 January 2021 (compared to BGN 610 from early 2020). In the context of heightened uncertainty companies are likely to remain more cautious in respect of their expenditure policies and wages in the private sector will probably grow at slower rates than in the public sector.

The increase in the compensation *per* employee combined with a decline in labour productivity in the second quarter of 2020 resulted in higher unit labour costs in both nominal and real terms according to seasonally adjusted data. The largest increase in unit labour costs was reported in sectors with a stronger than average labour productivity fall such as real estate activities, arts, entertainment and recreation and wholesale and retail trade, repair of motor vehicles and motorcycles; transport, storage and mail services, accommodation and food service activities and industry.

Seasonally adjusted data show that the gross operating surplus at current prices continued to decrease in the second quarter of 2020. In line with value added developments the services sector had the largest negative contribution to the change in the operating surplus, in particular the wholesale and retail trade, repair of motor vehicles and motorcycles; transport, storage and mail services; accommodation and food service activities sub-sectors. Concurrently, firms' profits in manufacturing rose compared with the previous quarter, reflecting the positive change in subsidies in the sector. Between April and June 2020 external funds attracted by firms for financing business (sources of financing other than gross operating surplus) posted a decline quarter on quarter. Firms of all economic sectors, excluding construction, contributed to these developments. As regards the type of funding sources, the fall was concentrated in bank loans and probably attributable to the uncertain economic environment in Bulgaria.

Gross Operating Surplus at Current Prices

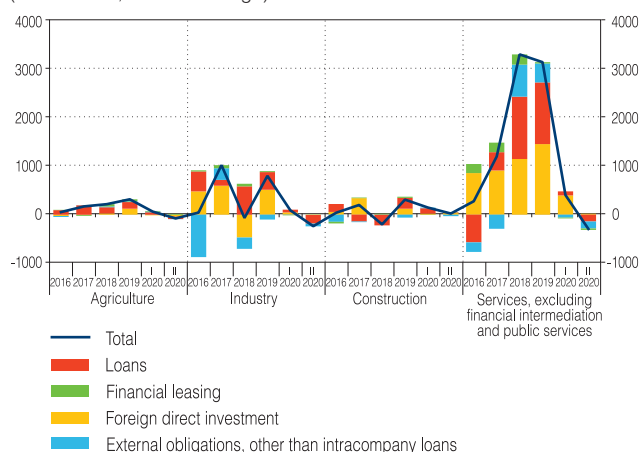
(BGN billion; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Financing Sources*

(BGN million, volume change)

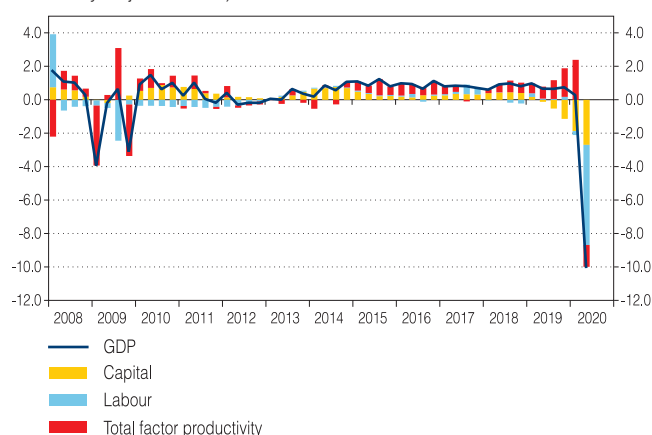


* Sources of financing other than gross operating surplus.

Source: the BNB.

Contribution of the Change in Production Factors to GDP Growth

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



Sources: the NSI, BNB calculations.

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	II
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	-0.4
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	-3.7
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	-1.1
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	-17.8
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	1.4
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	0.5
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	-3.6
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	0.5
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	0.1
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	-4.5
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	-8.9

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.

GDP growth decomposition by production factor suggests that all major components contributed negatively to the change of GDP in the second quarter of 2020. Labour had the largest negative contribution due to the reported strong fall in hours worked *per* employed person over the quarter, while capital was adversely affected by significantly decreased capacity utilisation, as a result of contracted supply due to containment measures.

Household Behaviour

In the second quarter of 2020 household consumption and labour supply declined, while the household savings rate recorded an increase. This was attributable mainly to the heightened uncertainty and impossible consumption of certain goods and services due to the spread of COVID-19 and the measures to curb it.

The NSI Labour Force Survey (LFS) shows that in the second quarter of 2020 labour supply, as measured by the labour force, declined by 3.9 per cent on an annual basis, as a result of a decreased number of employed, which was not offset by an equivalent increase in the number of unemployed. This was probably due to the spread of COVID-19 and the measures to curb it and, to a lesser extent, to the long-term trend toward a decrease in working age population. Concurrently, the labour force participation rate⁶⁸ declined both on an annual and quarterly basis, with the stronger decline on the corresponding period of the prior year reported in persons with primary or lower education, who are among the most vulnerable groups in the labour market.

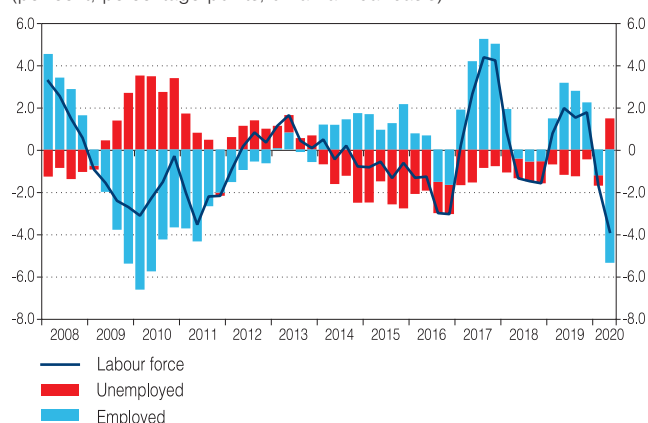
The Labour Force Survey shows that in the second quarter of 2020 the seasonally adjusted unemployment rate⁶⁹ rose to 5.9 per cent against 4.6 per cent in the first quarter (according to non-seasonally adjusted data the unemployment rate in the second quarter also accounted for 5.9 per cent against 4.2 per cent in the first quarter). Concurrently, according to Employment Agency data, which are published with a higher frequency and less lags, the seasonally adjust-

⁶⁸ The labour force participation rate is the proportion between economically active persons (labour force) and 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. The series is seasonally adjusted by the BNB.

Contribution to the Change in Labour Force by Component

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

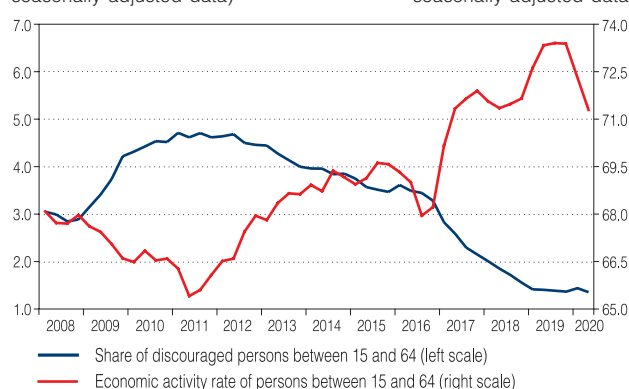


Sources: the NSI, BNB calculations.

Economic Activity and Share of Discouraged Persons

(per cent, seasonally adjusted data)

(per cent, seasonally adjusted data)



Sources: NSI Labour Force Survey, BNB calculations.

ed⁷⁰ unemployment⁷¹ in August 2020 declined to 7.9 per cent from 8.2 per cent in July and 5.9 per cent in February, the last month prior to the the pandemic in Bulgaria. The lower unemployment in July and August compared with the first months of the state of emergency reflected the easing of most containment measures at the end of the second quarter and the government measure for subsidising employment, which was extended until the end of the year⁷².

In the second quarter of 2020 labour income of employed declined both on an annual and quarterly basis according to the NSI national account wage bill data. This fall was due to both the employment decrease and fewer hours worked. Concurrently, the wage *per* employee rose both on an annual and quarterly basis, which reflected the respective stronger declines in the number of employees in sectors with lower than average wage compared with that in the overall economy and wage increases in the budget sector⁷³.

The loss of labour income by households coupled with heightened uncertainty and the impossibility to consume certain goods and services during the state of emergency in Bulgaria resulted in a 2.5 per cent quarter-on-quarter drop in private consumption over the second quarter of 2020. At the same time, the retail trade turnover recorded a significantly stronger quarterly decline (-14.9 per cent) in the second quarter. Sales declines were reported in all groups, with durable goods and semi-durable goods⁷⁴ having the main negative contribution to this decline. Data for July and August 2020 suggest a partial recovery of total turnover on a quarterly basis but the index remained significantly lower compared with that in February (prior to the spread of COVID-19 in Bulgaria). Quarter-on-quarter growth in retail trade

⁷⁰ BNB seasonal adjustment.

⁷¹ The definition of unemployment rate according to Employment Agency data corresponds to that referred to in footnote 69, but 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. Employment Agency data on the unemployment rate are not directly comparable to NSI Labour Force Survey data on the unemployment rate.

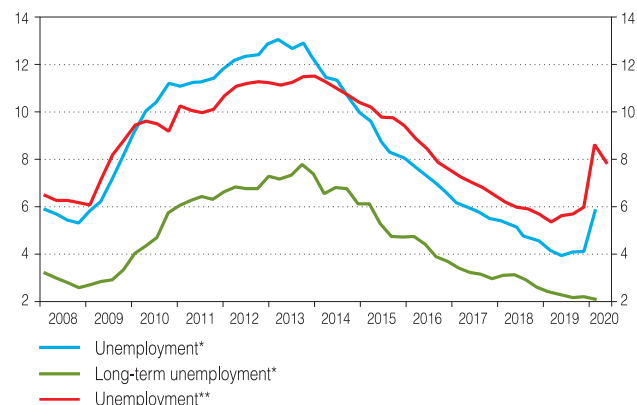
⁷² For details, see the Behaviour of Firms and Competitiveness Section.

⁷³ For details, see the Behaviour of Firms and Competitiveness Section.

⁷⁴ The goods are divided into durable and semi-durable according to the NSI Classification of Final Consumption Expenditure.

Unemployment Rate

(per cent, share of labour force; seasonally adjusted data)



* NSI data.

** Employment Agency data.

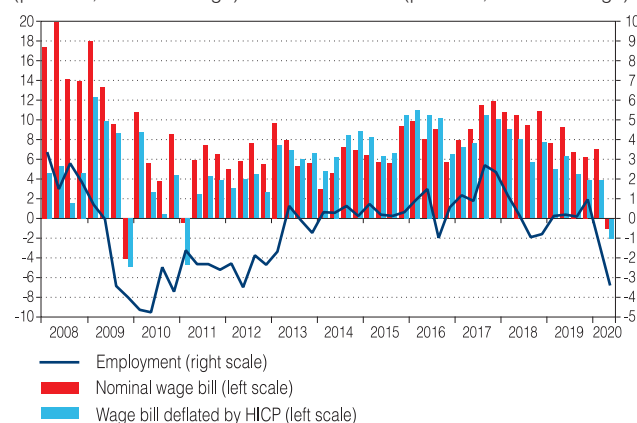
Note: Quarterly data, with values for August presented for the third quarter of 2020.

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

Employment and Nominal Wage Bill

(per cent, annual change)

(per cent, annual change)

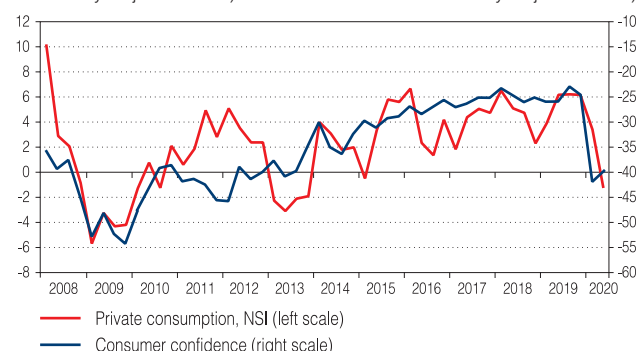


Sources: the NSI – SNA, BNB calculations.

Private Consumption and Consumer Confidence

(per cent, annual change;
seasonally adjusted data)

(balance of opinions
seasonally adjusted data)



Sources: the NSI, BNB calculations.

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	II
(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	-1.0
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	3.8
Real wage <i>per employee</i> **	2.0	1.3	1.3	0.9	2.5	2.5	2.9	1.1	1.7	1.0	1.9	1.6	0.1	1.8	-0.8	0.4	0.6	3.3
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	-1.0
Wage bill, real terms**	2.0	2.1	1.6	1.5	2.5	2.3	3.2	1.3	2.3	1.2	1.4	2.0	0.3	2.6	-0.1	0.2	0.2	-1.4
(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	-3.3
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	3.8
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	2.7
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	-1.0
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	-2.1

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.

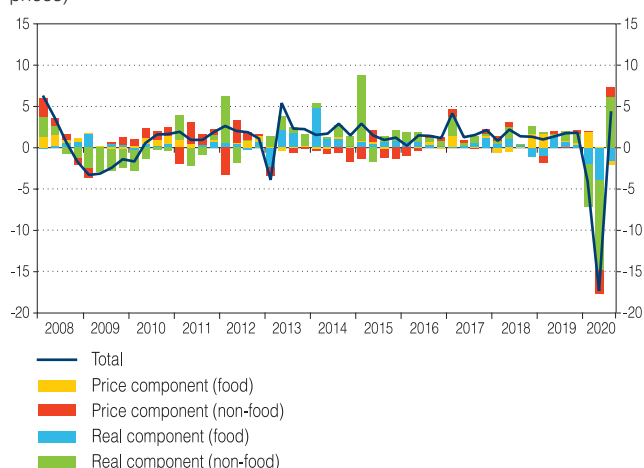
turnover in July and August 2020 was driven mainly by sales of textile, clothing, footwear and leather, automobile fuels and lubricants and computer and communication equipment and other consumer goods; household appliances, furniture and other household goods.

According to the NSI Consumer Survey of July 2020, the consumer confidence indicator slightly improved compared with April. The improvement reflects household perceptions of labour market developments, while household expectations of the overall economic situation in Bulgaria and their financial position continued to worsen compared with April. In addition, consumers remained more cautious about their intentions to purchase durable goods compared with the results of the April survey.

The NSI Household Budget Survey shows that the share of savings in household disposable income rose significantly in the second quarter of 2020 in line with the increased uncertainty and the impossibility to consume certain goods

Retail Trade Turnover

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



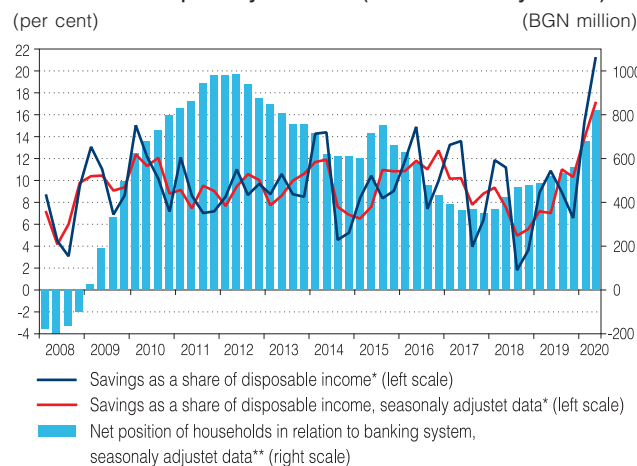
Notes: Non-additive data on contributions due to direct seasonal adjustment of the total amount and its components. Data for the third quarter of 2020 represent the quarterly change of the average value of the indicator for July and August compared to the second quarter of the year.

Sources: the NSI, BNB calculations.

and services. Concurrently, household assets, measured by their net position in the banking system, increased from the previous quarter due to accelerated quarterly growth of the deposit base over the quarter and the slower quarterly increase in loans.

At the end of 2020 and in early 2021 labour supply, as measured by the labour force, is expected to increase compared with the second quarter of 2020 due to the lift of containment measures against the spread of COVID-19. In line with the expected improvement in the economic activity labour demand will grow on a quarterly basis over the period, which will result in a slower annual decline in employment. Notwithstanding, according to the NSI business survey of September labour demand measured by managers' expectations about hiring new staff in the following three months remains subdued compared with the period prior to the launch of containment measures, which is a precondition

Household Propensity to Save (on a Quarterly Basis)



* BNB data.

** NSI data.

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

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	III
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	-14.9	4.4
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	-10.5	-4.4
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	-45.8	65.0
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	-7.9	13.4
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	-15.5	15.3
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	-19.8	5.1
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	-9.4	-4.6
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	-23.0	17.1

* Data refer to July and August.

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.

for a relatively slight improvement in labour market conditions compared with the current situation. The expected improvement in labour market conditions compared with the second quarter of 2020, in combination with higher social transfers by the government and the expected increase in the average compensation *per* employee for the projection horizon, will mitigate the negative effects of the pandemic on household disposable income. If these expectations materialise, private consumption is projected to start increasing on a quarterly basis in the fourth quarter of 2020 and the first quarter of 2021, but uncertainty surrounding pandemic developments will encourage households to maintain a comparatively high savings rate.

Fiscal Policy Impact on the Economy

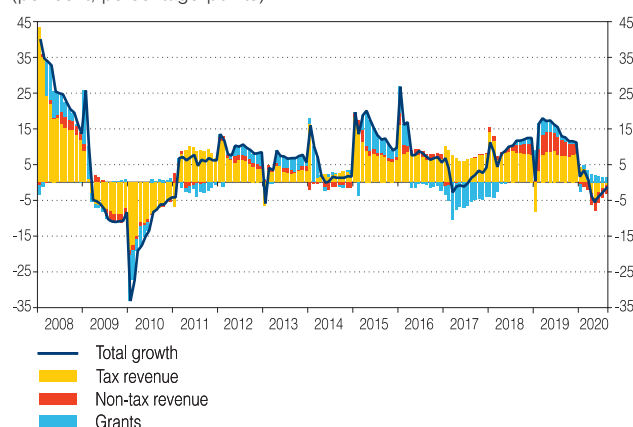
In the first eight months of 2020 the budget balance on the Consolidated Fiscal Programme (CFP) remained positive at BGN 1616 million despite the negative impact of the COVID-19 crisis on Bulgaria's budgetary position related to automatic stabilisers and the effects of government discretionary measures. Compared with the first eight months of the prior year the balance on the Consolidated Fiscal Programme improved by BGN 503 million. The decline in expenditure for the respective period exceeded that of revenue due to a base effect of the one-off payment made a year earlier for acquiring new fighter aircraft. Preliminary MF data show that the consolidated budget recorded a surplus of BGN 891 million for the January–September period.

The decline in total budget revenue gradually slowed down to -1.7 per cent in August from -5.8 per cent in May, reflecting mainly the lower fall in tax revenue. Non-tax revenue also exhibited a partial recovery: -15.5 per cent in August against -22.7 per cent in May⁷⁵. Revenue from grants continued to grow, albeit at a more moderate pace, and the gradually accelerating payment of transfers to companies and households, financed by funds redirected from the EU

⁷⁵ The slower decline in non-tax revenue was mainly ascribable to higher monthly receipts on municipality budgets in June when the two-month extension of the term for a 5 per cent discount on payment of refuse levies had expired. The extension of the deadlines for payment of municipal taxes and fees and lower rents on state-owned and municipal property were among the government measures in support of business and households during the state of emergency in Bulgaria.

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.

budget to address the aftermath of the spread of COVID-19, should push up growth of grants at the end of the year.

Tax revenue reported a minimum fall in the first eight months of the year (-1.0 per cent). The strong year-on-year declines reported in April and May were almost entirely offset by growth of 6.3 per cent on average between June and August. The recovery of tax revenue in recent three months was mainly attributable to the expiry of extended deadlines for payment of particular direct taxes⁷⁶. As a result, the decline in corporate tax revenue contracted to -10.8 per cent in August from -43.2 per cent in May. Between June and August indirect taxes exhibited more favourable developments. The annual decline in excise receipts slowed down to -1.3 per cent in August from -4.9 per cent in May and -10.6 per cent in June due to growth in tobacco excise revenue and the lower decline in fuel excise revenue. Despite the -2.4 per cent annual fall in private consumption reported in the first half of the year, VAT receipts from domestic and intra-Community acquisitions (net)⁷⁷ accelerated their growth to 5.8 per cent in August from 2.0 per cent in May. The more favourable dynamics of this revenue compared to the respective macroeconomic base was realised on the background of a relatively low level of the non-refunded tax credit (BGN 155 million⁷⁸) and expected negative effects of lowered tax rates on particular goods and services, effective as of early July⁷⁹. Concurrently, the year-on-year decline in VAT revenue from imports intensified (-20.8 per cent in August against -15.7 per cent in May) as a result of lower foreign trade flows, a strong fall in crude oil price and negative budgetary effects of changes made to the

⁷⁶ These are tax obligations under the Corporate Income Tax Law, the Personal Income Tax Law and the Law on Local Taxes and Charges.

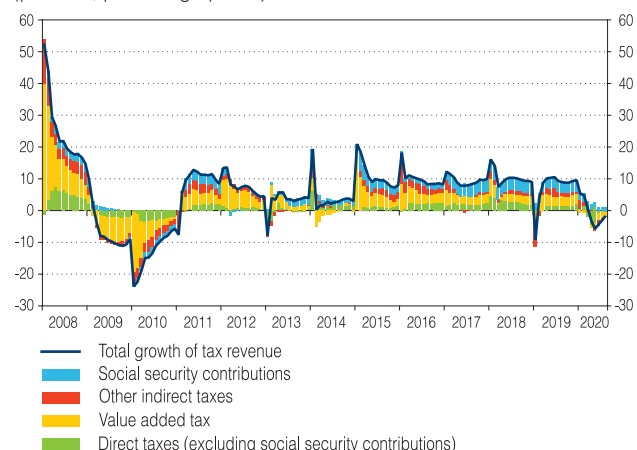
⁷⁷ Based on Ministry of Finance Monthly Bulletins data on state budget performance and major CFP indicators for 2019 and 2020. BNB calculations.

⁷⁸ Based on Ministry of Finance Monthly Bulletins data on state budget performance and major CFP Indicators for August 2020.

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 scope of goods with reduced tax rate was additionally expanded from 1 August, with this rate being applied on sales of tourist companies, fitness centres and beer and wine consumed in restaurants. The 9 per cent rate is temporary and will be valid until 31 December 2021.

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

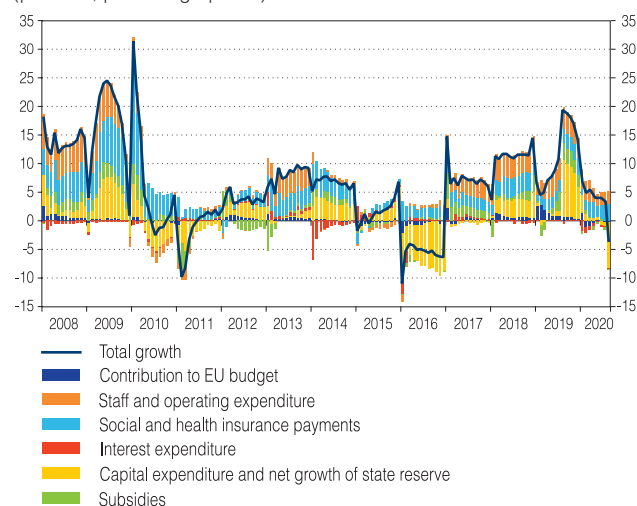
(per cent; percentage points)



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, staff 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.

method of charging VAT on imports of particular raw materials from third countries⁸⁰.

Revenue from personal income tax and social security contributions remained the only tax revenue reporting growth for the first eight months of the year (3.2 per cent and 3.5 per cent respectively). Worsening labour market conditions, partially mitigated by government measures to support employment, led to a significant slowdown in cumulative growth of this revenue in the period after the state of emergency had been enforced.

Between January and August 2020 total expenditure on the Consolidated Fiscal Programme reported a 3.5 per cent decline due to a base effect of the one-off payment in August 2019 for modernisation of the Bulgarian army. If this one-off effect is excluded, year-on-year growth of total expenditure on the Consolidated Fiscal Programme would be 4.3 per cent (against growth of 4.0 per cent in May). A relatively low annual growth rate of total Consolidated Fiscal Programme expenditure reflected both the weaker investment activity of the government and compensation of the additional costs for overcoming the consequences of the spread of COVID-19 by savings from lower priority expenditure. The most significant was the effect of cost savings made in terms of operating expenditure, which reported a decrease of 5.8 per cent for the January–August period. Subsidy payments fell by 2.5 per cent as the strong increase in payments under the subsidised employment programme (the so-called 60/40 measure⁸¹) was entirely compensated by lower subsidy payment to the Security of the Electricity System Fund⁸². Minimum growth of 0.9 per cent on an annual basis⁸³) was reported in health insurance pay-

⁸⁰ Based on Ministry of Finance Monthly Bulletins data on state budget performance and major CFP indicators for August 2020, the effect of applying this rate in January–August 2020 resulted in non-charged VAT on imports, worth BGN 708 million.

⁸¹ Based on the National Insurance Institute monthly reporting information on expenses incurred on the containment measures on COVID-19 and its treatment, business-support measures and social measures and compensations paid under the 60/40 measure totalled BGN 214.7 million at the end of August (BGN 52.5 million paid by the end of May).

⁸² The lower public service fee, effective as of July 2019, impacted revenue and expenditure of the Security of the Electricity System Fund.

⁸³ Based on Ministry of Finance Monthly Bulletins data on state budget performance and major CFP indicators.

ments despite the additional costs on health services, tests and drugs due to the spread of COVID-19. Concurrently, staff costs accelerated to 11.8 per cent in August (10.1 per cent in May) and the additional up to 30 per cent wage increase⁸⁴ of those working at the front line in the fight against the spread of COVID-19, announced at the end of July, is expected to make a more tangible contribution to the upward dynamics of these costs by the close of the year.

Despite the additional public spending incurred as a result of the pandemic, government consumption reported a slight quarter-on-quarter decline of 0.1 per cent in the second quarter, reflecting both the subdued dynamics of operating and health costs and a relatively slower growth rate of public wages compared with the first quarter. Given accelerated growth in staff costs in July and August and the additional staff and health spending approved by the government at the end of July, it may be expected that government consumption will grow on a quarterly basis in the third quarter of the year.

In the first eight months of the year expenditure on pensions, household benefits and allowances under the Social Security Code accelerated to 10.7 per cent (8.4 per cent in May). The main factors behind the upward dynamics of these social payments were the indexation of pensions by 6.7 per cent as of 1 July, the anti-crisis supplement payments to pensions (amounting to BGN 50 for each pensioner) approved by the government at the end of July and increased costs on unemployment benefits due to worsened labour market. Higher social payments and government subsidised employment programmes support significantly disposable income of households but their effectiveness in boosting domestic demand remains still limited by relatively high precautionary savings in the economy.

Between January and August 2020 capital expenditure funded under EU programmes decreased by 6.5 per cent, whereas developments of national expenditure reflected entirely the base effect of the payment made last year for acquiring new fighter aircraft (a fall by 71 per cent). Excluding this effect, the annual

⁸⁴ New social and economic measures announced by the government on 27 July 2020 in response of COVID-19 pandemic.

rate of change in national capital expenditure would be again negative estimated at -8.0 per cent. The dynamics of capital expenditure is indicative of the limited role of general government sector investment in softening the drop in total investment in the economy over the third quarter of the year.

In the fourth quarter of 2020 a strong positive impact of fiscal policy on domestic demand may be expected as a result of the increasing effect of discretionary anti-crisis measures in the revenue and expenditure side of the budget and traditional end-of-year growth in capital expenditure. The extension of the term of supplement payments to pensions until the end of the year and the 60/40 subsidised employment measure, as well as the changes in determining the amount and time for receiving unemployment benefits, effective as of 1 September, will continue to provide significant support to disposable income of households. The positive effect of the measures in support of business should also increase, with rising payments under EU co-financed grant schemes and new measures in support of the economic activity announced at the end of July also contributing to this effect. Government consumption is also expected to contribute positively to GDP growth mainly as a result of the expected increase in staff and health costs at the end of the year. The progress in implementing investment projects, financed by the national budget and EU programmes, is expected to contribute to growth in public investment in the last quarter of the year, while the effects of newly approved investment projects, as part of government anti-crisis measures, may be expected with a certain delay.

Expectations of the impact of fiscal policy on the economic activity in the first quarter of 2021 are surrounded by significant uncertainty due to currently uncertain parameters of the budgetary framework for the following year. Assuming that the term of anti-crisis measures is not further extended and no new measures are required, social payments and government consumption would have a weaker positive effect on the economic activity. The usually high uncertainty surrounding the dynamics of public investment is sustained. The accelerated pace of absorption of EU funds in the last phase of the 2014–2020 programme period and ongoing implementation

Key Budget Indicators Performance for 2019 and 2020

Consolidated Fiscal Programme	2019 January – August ¹		2020 January – August ¹	
	BGN million	per cent ²	BGN million	per cent ²
Total revenue and grants	29 306	12.8	28 820	-1.7
Tax revenue	23 256	9.0	23 012	-1.0
incl. social security and health insurance contributions	6 891	11.4	7 130	3.5
Non-tax revenue	4 463	33.5	3 772	-15.5
Grants	1 586	23.1	2 036	28.3
Total expenditure (incl. the contribution to EU budget)	28 193	19.5	27 204	-3.5
Staff	6 374	13.4	7 127	11.8
Operating expenditure	2 647	6.4	2 495	-5.8
Interest	470	-20.1	443	-5.7
Social expenditure, scholarships	11 220	5.4	12 068	7.6
Subsidies	2 284	45.0	2 227	-2.5
Current and capital transfers to abroad	24	-36.8	22	-6.3
Capital expenditure and government reserve growth	4 271	125.3	2 013	-52.9
incl. capital expenditure	4 266	124.7	2 011	-52.9
Contribution to the general budget of the European Union	904	22.4	808	-10.5
	BGN million	difference ³ (BGN million)	BGN million	difference ³ (BGN million)
Budget balance, on a cash basis	1 113	-1 276	1 616	503
Tax revenue under the state budget	2019 January – August ⁴		2020 January – August ⁴	
	BGN million	per cent ²	BGN million	per cent ²
Tax revenue	15 616	8.1	15 131	-3.1
Corporate tax	1 587	4.6	1 415	-10.8
Personal income tax	2 693	9.9	2 778	3.2
Value added tax	7 402	9.2	7 067	-4.5
Excise duties	3 616	6.8	3 568	-1.3
Customs duties and taxes	153	-2.6	139	-9.4
Insurance premia tax	33	19.2	35	5.6
Other taxes	133	5.8	130	-2.3

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.

of large infrastructure projects funded by the national budget⁸⁵ are expected to contribute to growth of public investment, but there may be delays in the implementation, which will postpone this investment.

⁸⁵ The macroeconomic forecast does not include assessments of the potential effect on public investment and government consumption of funds, which will be provided to Bulgaria under the multiannual financial framework for 2021–2027 and the recovery effort known as the Next Generation EU due to lack of sufficient detailed information by the time of preparing the forecast.

4. INFLATION

In August annual inflation slowed down significantly to 0.6 per cent, as compared to the end of 2019, mainly driven by the effects of COVID-19 spread and the relevant containment measures. In August annual inflation in the main HICP groups either decelerated or turned negative. The negative contribution of the group of energy products played a key role for the slower overall inflation, in line with the significant year-on-year fall in international oil prices. Food and services price rises moderated, which also contributed to the slowdown of the overall inflation in August.

In the fourth quarter of the year the overall inflation is expected to decelerate further compared with August, before accelerating in the first quarter of 2021, largely reflecting the anticipated international food and oil price dynamics over that period. In the context of decreasing oil prices on an annual basis, energy products are expected to have the largest negative contribution to the overall inflation. Food inflation is anticipated to moderate in the fourth quarter of 2020 compared to August, however accelerating quarter on quarter in line with the assumed change in food international prices. Core inflation is expected to increase gradually in the beginning of 2021, reflecting the continued recovery of private consumption.

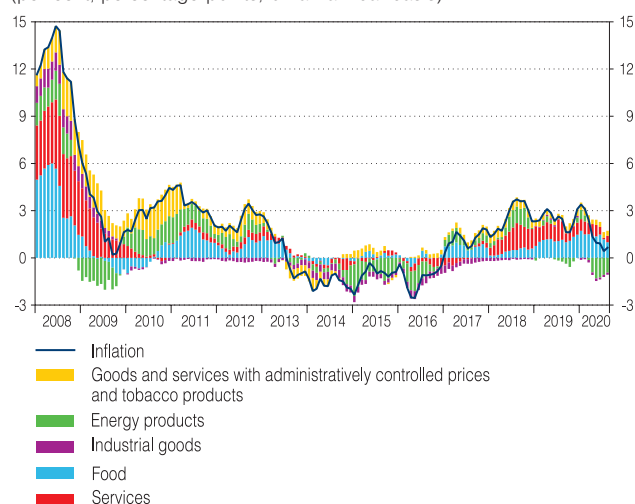
In August 2020 annual inflation slowed down significantly from the end of 2019 to reach 0.6 per cent⁸⁶ (3.1 per cent in December 2019). In August annual inflation in the main HICP groups either decelerated or turned negative, largely driven by the spread of COVID-19 and the containment measures.

Energy products (excluding administratively controlled prices) had the major negative contribution to the August inflation reflecting the significant year-on-year fall in international oil prices. Transport fuels recorded deflation of 17.0 per cent in line with the fall in oil prices by 29.7 per cent on an annual basis amid a weaker global demand for oil. 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. The group of food and core HICP components continued to have the largest positive contribution to August inflation although the inflation in this group also decelerated from the end of 2019.

Food inflation moderated in August to 4.1 per cent (6.2 per cent at end-2019) driven mainly by a decreased positive contribution of unprocessed food. At the same time, processed food inflation accelerated to 3.7 per cent in August (from

Inflation and Contribution of Major Commodity and Services Groups to It

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



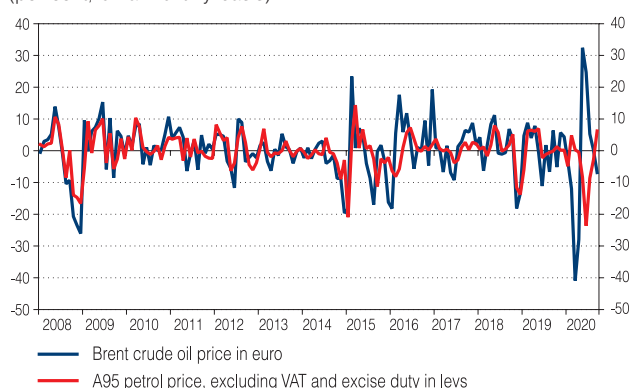
Notes: This structure corresponds to the Eurostat classification; tobacco products and goods and services with administratively controlled prices are presented separately. The index of goods and services with administratively controlled prices is calculated through the elementary aggregates level in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

Sources: the NSI, BNB calculations.

⁸⁶ The analysis in this Section employs NSI data on the Harmonised Index of Consumer Prices (HICP).

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.

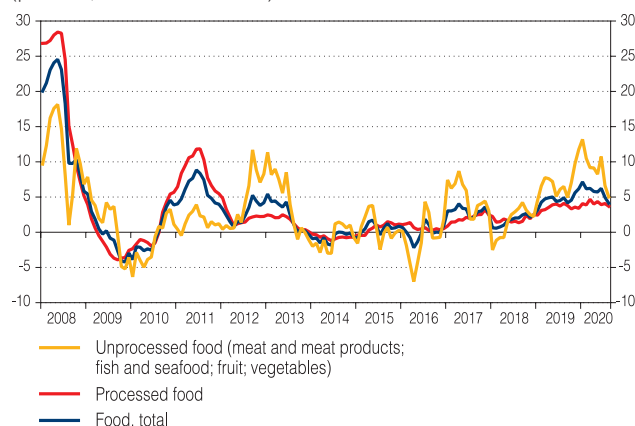
3.4 per cent by end-2019) due primarily to the group of milk and dairy products. The group of food products not elsewhere classified retained its highest positive contribution to the processed food inflation. August inflation in this group was largely driven by ready-to-eat foods available in food shops and supermarkets. This trend has been observed since 2019, probably reflecting the sharp meat price increase as a result of the spread of African swine fever in Bulgaria.

As of August 2020 annual inflation in unprocessed food decelerated from the end of 2019, coming to 5.0 per cent (11.8 per cent in December 2019). The observed dynamics was mainly driven by inflation slowdown in the group of meat and meat products, and to a lesser extent by price declines in the vegetables group. Although meat and meat products inflation has decelerated to 7 per cent (16.3 per cent by end-2019), in August it continued to have the main positive contribution to the inflation in unprocessed food. Annual price increase in pigmeat as of August resulted from reduced supply, higher producer prices⁸⁷ and higher import prices reflecting African swine fever spread worldwide and in Bulgaria. In August inflation accelerated in the group of fruit, most likely due to both the lower share of Bulgarian fruit in the internal market and higher prices of

⁸⁷ NSI data on producer prices and indices of agricultural produce for the second quarter of 2020.

Rate of Change of Food Price Index

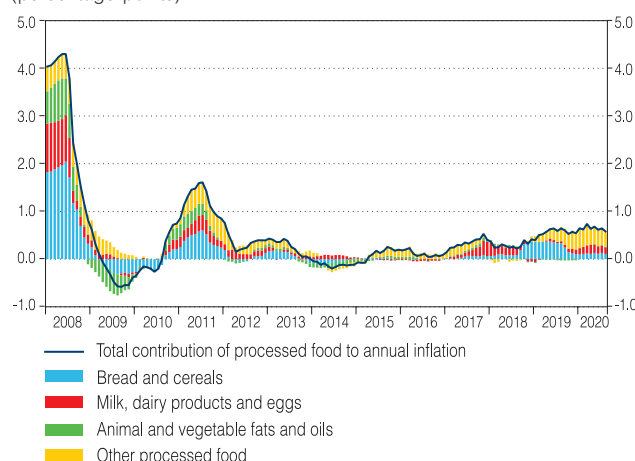
(per cent; on an annual basis)



Sources: the NSI, BNB calculations.

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

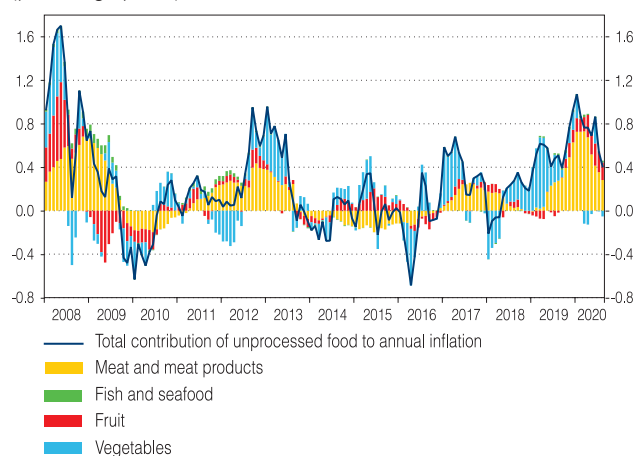
(percentage points)



Sources: the NSI, BNB calculations.

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

(percentage points)



Sources: the NSI, BNB calculations.

imported fruit on an annual basis⁸⁸ and higher producer prices⁸⁹.

Core inflation (including services and non-food prices) slowed down to 0.6 per cent on an annual basis in August (1.8 per cent in December 2019) reflecting deflation in industrial goods, while services group's positive contribution declined.

Inflation in the group of services decreased significantly from end-2019 to reach 1.6 per cent in August (from 2.9 per cent in December 2019). The slowdown was mainly due to the negative contribution of the groups of accommodation and cultural recreation services and to the sharp decline in the positive contribution of package holidays. Catering remains the group with the highest contribution to the services inflation, although price growth rate slowed down to 5.4 per cent in August (from 5.8 per cent at end-2019). The continuous decline in telecommunication prices also limited the price increase in the services group.

NSI reports ongoing difficulties in collecting price surveys in the emergency epidemic situation. In the overall HICP missing observations in June, July and August⁹⁰ amount to 2 per cent, with the group of education holding the largest share of missing price observations (8 per cent).

Following the 2019 reversal in non-energy industrial goods deflation observed since 2010, in Bulgaria this group's prices have started to decline again on an annual basis since the beginning of 2020. Weaker demand for goods in this group stemming from the uncertain economic environment and limited business activities of most trading establishments in the period of the state of emergency contributed to the price fall in the group, with deflation reaching in August

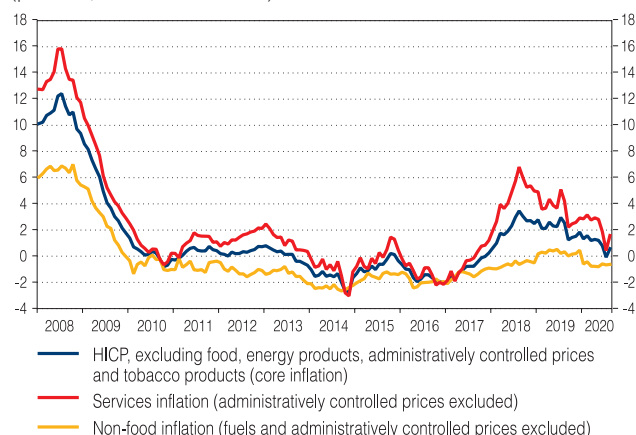
⁸⁸ The analysis employs data on wholesale prices of foodstuffs on commodity markets in Bulgaria for August 2020, obtained from the Monthly Bulletin of the Commodity Exchange and Wholesale Markets State Commission.

⁸⁹ NSI data on producer prices and indices of agricultural produce for the second quarter of 2020.

⁹⁰ For part of the period of the state of emergency (13 March – 13 May), the NSI functioned in a changed mode for collection of consumer prices. Given the measures taken against the spread of COVID-19, provision of some services was strongly limited (catering, transport services) and entirely absent in other (cultural recreation and accommodation services). In April missing observations reached 32 per cent. For details, see: <https://www.nsi.bg/bg/content/18101/националният-статистически-институт-променя-организацията-си-на-работата> and https://www.nsi.bg/sites/default/files/files/pressreleases/Inflation2020-04_117QGNK.pdf

Core Inflation

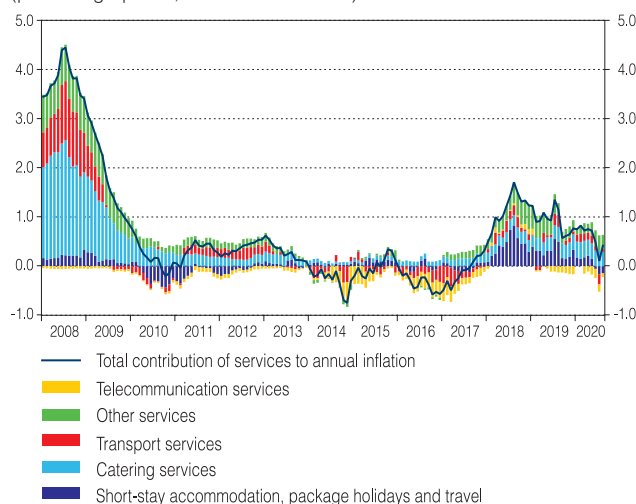
(per cent; on an annual basis)



Sources: the NSI, BNB calculations.

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

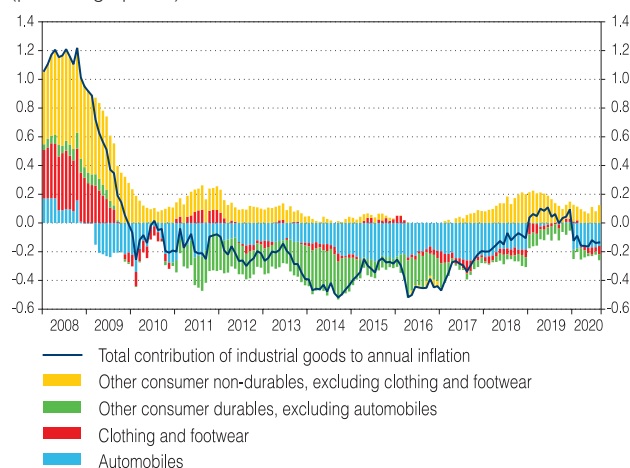
(percentage points; on an annual basis)



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.

-0.6 per cent (compared to 0.5 per cent inflation in December 2019). The increased negative contribution of the group to the core inflation was mainly driven by the motor vehicles group. In August deflation was also reported in the sub-group of clothing and footwear and furniture and furnishings with price declines expected to continue in the following months as a result of weaker consumer demand effects.

The annual growth rate of goods and services with administratively controlled prices and tobacco products went down in August to 1.5 per cent, from 2.0 per cent by the end of 2019. Slowdown in inflation was observed in both goods and services with administratively controlled prices and tobacco products. The inflation slowdown in this group *vis-à-vis* December 2019 was largely driven by a further natural gas price decline of 2.25 per cent for August⁹¹ compared to the prices in force over the previous month,⁹² and a heating price decrease of 12.7 per cent on average as of July for a period of one year,⁹³ confirmed by the Energy and Water Regulatory Commission (EWRC). Concurrently, the increase in the electricity price⁹⁴ by 2.8 per cent on average since July for a period of one year contributed positively to the inflation within the group. The inflation within this group continued to be supported by the medicines and pharmaceuticals, retaining their upward inflation dynamics since mid-2019⁹⁵.

In August the slowdown observed in headline inflation compared to December 2019 was in line with producer price dynamics. In August the total producer price index (PPI) decreased

⁹¹ For details, see: <https://www.dker.bg/news/524/65/kevr-utvrdisenata-na-prirodniya-gaz-za-mesets-avgust-2020-g.html>

⁹² EWRC cut the natural gas price by 42.8 per cent, 11.3 per cent, 9.0 per cent and 6.1 per cent for April, May, June and July compared to the prices in the previous month. For details, see: <https://www.dker.bg/news/465/65/kevr-utvrdisenata-na-prirodniya-gaz-za-mesets-april-2020-g.html>, <https://www.dker.bg/news/477/65/kevr-utvrdisenata-na-prirodniya-gaz-za-mesets-maj-2020-g.html>, <https://www.dker.bg/news/493/65/kevr-utvrdisenata-na-prirodniya-gaz-za-mesets-yuni-2020-g.html> u <https://www.dker.bg/news/510/65/kevr-utvrdisenata-na-prirodniya-gaz-za-mesets-yuli-2020-g.html>

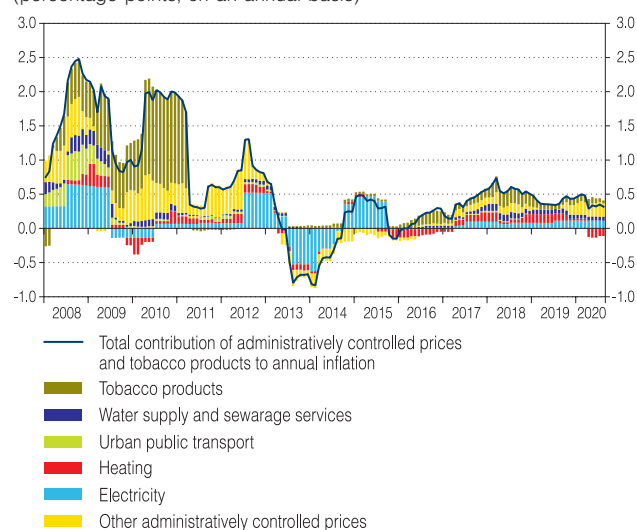
⁹³ For details, see: <https://www.dker.bg/news/511/65/kevr-utvrdisenata-na-prirodniya-gaz-za-mesets-april-2020-g.html>, <https://www.dker.bg/news/477/65/kevr-utvrdisenata-na-prirodniya-gaz-za-mesets-maj-2020-g.html>, <https://www.dker.bg/news/493/65/kevr-utvrdisenata-na-prirodniya-gaz-za-mesets-yuni-2020-g.html> u <https://www.dker.bg/news/510/65/kevr-utvrdisenata-na-prirodniya-gaz-za-mesets-yuli-2020-g.html>

⁹⁴ See footnote 93.

⁹⁵ From 6 August 2019, amendments to the Ordinance on the Terms, Rules and Procedures for Regulation and Registration of Prices of Medicinal Products entered into force. For details, see: https://www.ncpr.bg/images/Naredbi/2019/HYPPPPCP_6_08_2019.pdf

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

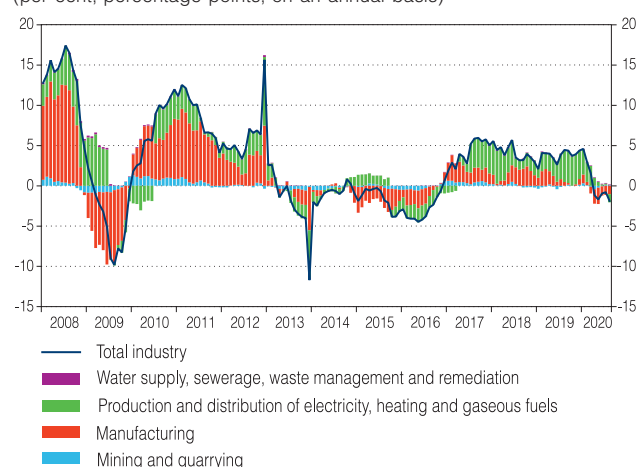
(percentage points; on an annual basis)



Sources: the NSI, BNB calculations.

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.

significantly year on year by 1.9 per cent, compared to an increase of 4.5 per cent in December 2019. The negative contribution of manufacturing was the main driver for the price decline. It was due to a large extent to the downward trend in prices in the sub-sector of production of coke and refined petroleum products, which was also reflected in lower consumer prices of transport fuels on an annual basis. In line with this dynamics, the end-use classification shows a negative contribution of energy products to the annual change in producer prices.

Price developments in Bulgaria corresponded also to the results of NSI business surveys in August, reflecting the negative effects of the COVID-19 spread. Compared to end-2019, the share of managers who expect selling prices to fall in services, manufacturing and retail trade increased significantly, which is a factor for a lower inflation in consumer prices in the following months. Despite the observed decline in the balance of opinions in August *vis-à-vis* December 2019 the NSI business survey results suggest that the share of managers in the three sectors 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, while the balance of opinions increased from the low levels reached in April and May.

In the second quarter of 2020 which covered a large part of the state of emergency declared on 13 March⁹⁶, the growth of house price index slowed down significantly from the end of 2019, reaching 2.9 per cent, from 6.2 per cent at the end of 2019. House price growth of both new and existing housing also slowed down. In early 2020 country-wide house prices remained 11.9 per cent lower than the maximum values recorded in the third quarter of 2008.

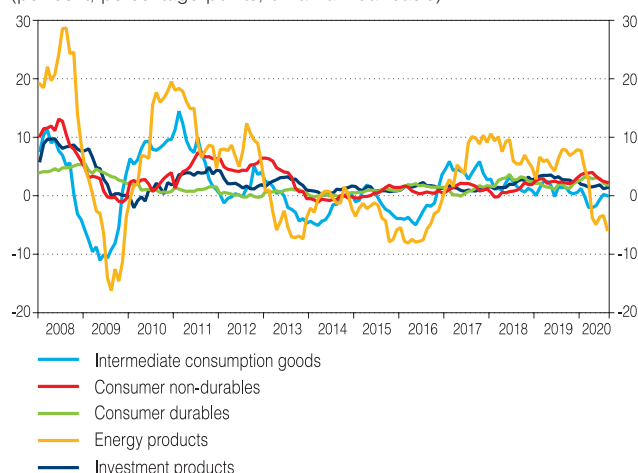
In the second quarter of 2020 the downward trend in the annual percentage rate of charge (APRC) on new housing loans was retained reaching 3.3 per cent (against 3.5 per cent by end-2019)⁹⁷. However, according to the results of the BNB quarterly lending survey, in the second

⁹⁶ The state of emergency declared on 13 March to prevent the spread of COVID-19 continued until 13 May and was replaced by an emergency epidemic situation.

⁹⁷ Values indicating APRC on housing loans to households are averages weighted by the relevant volumes of new loans for a 12-month period.

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

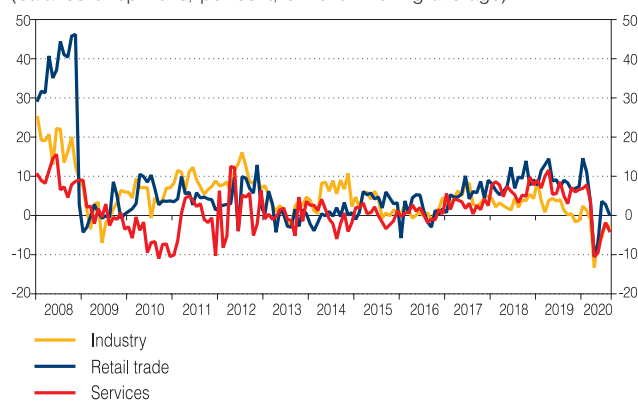
(per cent; percentage points; on an annual basis)



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.

quarter of 2020 credit standards applied to housing loans to households continued to tighten significantly⁹⁸. These developments indicate worsening housing affordability of households, which is likely to be reflected in lower demand.

Over the second quarter of 2020 the construction production index declined by 12.6 per cent on an annual basis (against growth of 5.7 per cent by end-2019), while value added growth in this sector fell by 9.0 per cent annually (5.3 per cent by end-2019). Concurrently, residential building permits (measured by building floor area) declined by 23.6 per cent on an annual basis. These developments signal that lower supply of new housing may be expected in the following months, which is in line with household lower demand.

At the same time, estimates obtained on the basis of a BNB macroeconomic model⁹⁹ suggest that in the second quarter of 2020 positive output gap of actual residential property prices in Bulgaria from their long-term equilibrium value based on fundamental factors, such as the income level, interest rates on housing loans and FDI inflows, rose to 5.9 per cent from 1.8 per cent in the previous quarter. Over the second quarter of 2020 the price-to-rent ratio fell, however remaining at a level higher than its long-term (historical) value.

The effects of the measures against the spread of COVID-19 are expected to have a negative impact on the growth rate of house prices. In the context of falling income of some households, a possible rise in interest rates on housing loans and tightening credit standards, housing affordability is expected to worsen which could exert a downward pressure on the house price increase on an annual basis at the end of 2020 and the beginning of 2020.

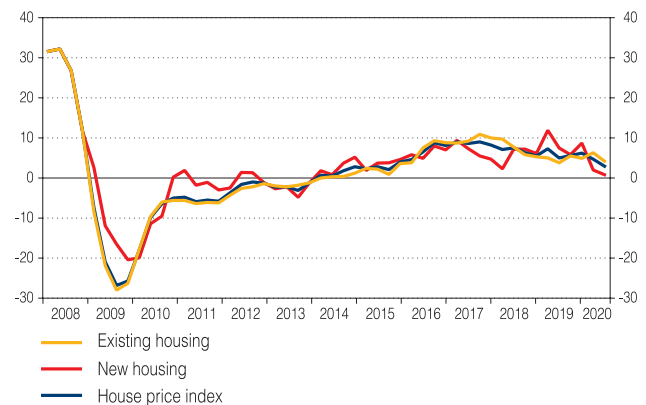
In the fourth quarter of the year the overall inflation is projected to slow down compared with August, followed by an acceleration in the first quarter of 2021, largely reflecting the anticipated international food and oil price dynamics over that period. Energy products are expected to have the main negative contribution in those two

⁹⁸ For further details, see the Monetary and Credit Aggregates section in Chapter 2.

⁹⁹ For more information on this model, see the research topic on *Dynamics of house prices in Bulgaria between 2000 and 2016*, Economic Review, 1/2017.

Rate of Change of House Prices

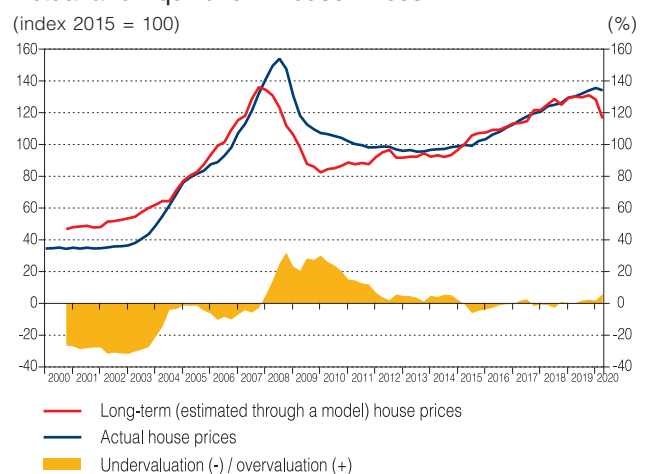
(per cent; on an annual basis)



Source: the NSI.

Actual and Equilibrium House Prices

(index 2015 = 100)



Sources: the NSI, BNB calculations.

Key Indicators of the Housing Market in Bulgaria

(per cent; year-on-year change)

Indicators	2016	2017	2018.	2019	2019		2020	
					III	IV	I	II
Price developments								
House price index, total	7.0	8.7	6.6	6.0	5.6	6.2	4.7	2.9
New dwellings	6.4	6.7	5.7	8.5	5.8	8.7	2.0	0.8
Existing dwellings	7.3	9.7	7.0	4.8	5.5	4.9	6.3	4.2
Inflation (HICP)	-1.3	1.2	2.6	2.5	2.2	2.3	3.0	1.1
House rentals, paid by tenants (HICP)	0.6	1.0	1.9	3.3	3.3	3.0	3.2	2.4
Lending								
New housing loans	7.4	32.7	14.9	0.0	14.8	18.7	25.7	20.0
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	3.6	3.5	3.4	3.3
Housing loans balances	-15.3	12.6	18.4	-1.4	13.6	14.5	14.8	13.3
Construction and investment								
Permits issued for the construction of new residential buildings (square meters)	4.8	32.5	39.0	-7.9	-5.4	-38.5	-21.1	-23.6
Value added in construction (at average annual prices for 2015)	-7.3	4.5	1.4	3.4	3.2	5.3	1.1	-9.0
Constriction production index, building construction	-16.1	10.9	2.6	8.4	9.7	5.7	-6.1	-12.6
Fixed investment; residential buildings	-10.3	102.1	19.2	-2.2	0.2	4.8	-7.8	-9.5
Construction cost index for new buildings	0.8	2.5	2.9	5.1	4.5	5.8	3.3	1.8

Note: 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.

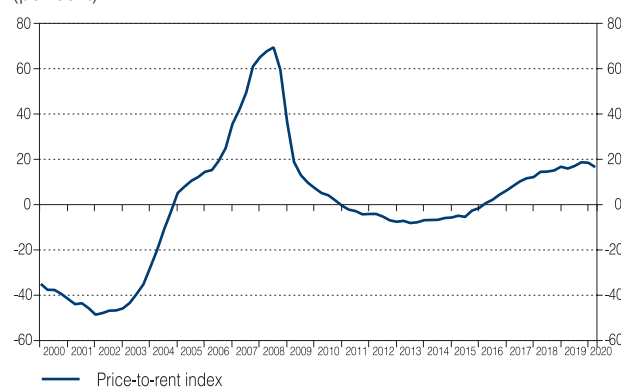
Sources: the NSI, the BNB, Eurostat.

quarters, reflecting the decreasing international oil price on an annual basis. In line with our assumptions, the negative contribution of the change in the prices of these products will be higher in the fourth quarter of 2020, before shrinking in the beginning of 2021. Inflation in foodstuffs is expected to decelerate significantly at the end of 2020 compared to August, and this dynamics will be the most pronounced in the meat and meat products group¹⁰⁰. Inflation in this group is projected to accelerate in the first quarter of 2021 compared to the end of 2020, in line with the assumptions of the international food prices in euro. Core inflation in the fourth quarter is expected to remain at its August 2020 levels reflecting the projected maintenance of the inflation rate in the services group. Our forecast for acceleration of core inflation over the first quarter of 2021 reflects primarily our expectations of a gradual recovery of the private consumption over that period. Inflation slowdown in the group of goods with an administratively

¹⁰⁰ The expected slowdown is primarily due to a base effect associated with an increase of the prices in this group over the last year.

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

(per cent)



Sources: the NSI, BNB calculations.

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

	Inflation accumulated as of August 2019 (December 2018 = 100)		Inflation accumulated as of August 2020 (December 2019 = 100)		Annual rate of inflation as of August 2020 (December 2019 = 100)	
Inflation (per cent)	3.0		0.6		0.6	
	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	3.5	0.8	1.5	0.4	4.1	1.0
Processed food	2.3	0.4	2.5	0.4	3.7	0.6
Unprocessed food	6.1	0.5	-0.3	0.0	5.0	0.4
Services	6.9	1.8	5.5	1.4	1.6	0.4
Catering	3.5	0.2	3.2	0.2	5.4	0.3
Transport services	14.2	0.5	14.1	0.4	1.9	0.0
Telecommunication services	-3.1	-0.2	-0.6	0.0	-0.9	0.0
Other services	10.4	1.3	6.7	0.9	0.9	0.1
Energy products	2.9	0.2	-14.1	-1.0	-13.0	-0.9
Transport fuels	4.1	0.3	-18.3	-1.0	-17.0	-0.9
Industrial goods	-0.7	-0.1	-1.7	-0.4	-0.6	-0.1
Goods and services with administratively controlled prices*	1.2	0.2	0.9	0.1	1.6	0.3
Tobacco products	1.4	0.1	0.2	0.0	1.0	0.0

* 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.

controlled prices over the projection horizon was driven by a base effect associated with higher prices of heating and natural gas at the end of 2019. The reduced value added tax (VAT) rates on some groups of goods and services is a factor that could potentially impact consumer price dynamics in Bulgaria. Currently, the effect of the reduced VAT rates remains limited and affects only some subgroups of the services and industrial goods¹⁰¹.

Risks to the inflation outlook in the fourth quarter of 2020 and the first quarter of 2021 are assessed as broadly downward, in particular in energy products sub-group. Materialisation of lower than expected international oil prices in euro would be a precondition for both lower inflation in energy products and moderated inflation in some services groups and administratively controlled prices.

¹⁰¹ For further information, see footnote 79.

ISSN 2367-4962

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