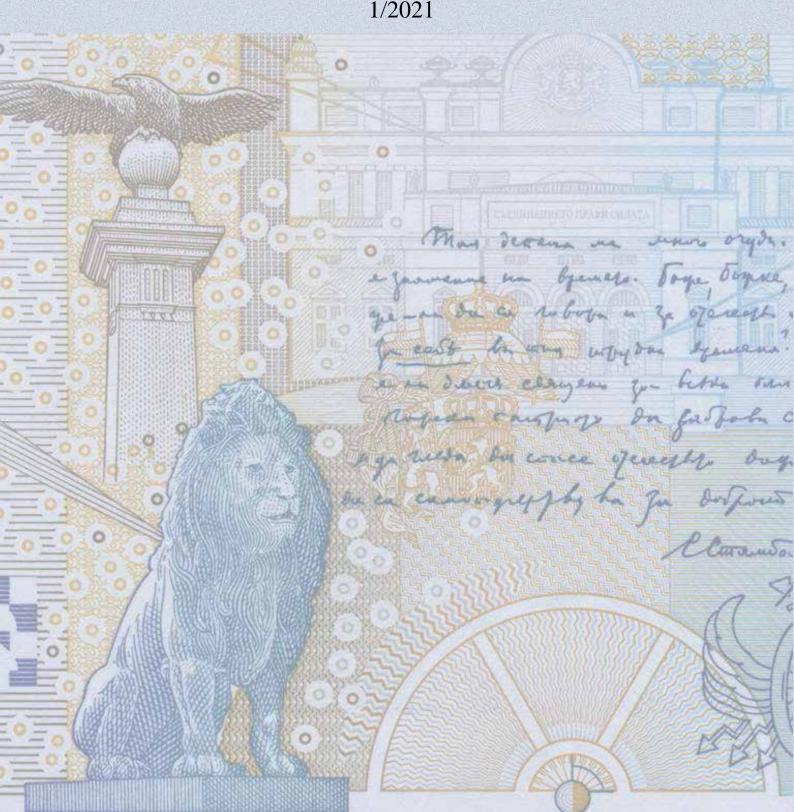
BULGARIAN NATIONAL BANK



ECONOMIC REVIEW

1/2021



ECONOMIC REVIEW 1/2021



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 the Bulgarian economy. The Review contains quantitative assessments of short-run developments in major macroeconomic indicators like inflation, economic growth, exports, imports, trade balance and the balance of payments current account, foreign direct investment, monetary and credit aggregates dynamics. Given the magnitude of the economic shock from the spread of COVID-19, the charts in this issue cover the period from the start of 2008, which allows to compare the changes in economic variables during the global financial and economic crisis of 2008–2009.

The Economic Review, issue 1/2021 was presented to the BNB Governing Council at its 14 May 2021 meeting. It employs statistical data published up to 19 April 2021. Expectations of economic trends in Bulgaria in the short term (until the third quarter of 2021), as described in this document, are based on the BNB macroeconomic forecast prepared as of 26 March 2021. These expectations are founded on the assumption that the measures imposed in the fourth quarter of 2020 to contain to spread of COVID-19 in other EU countries and Bulgaria would be extended until the end of the second quarter of 2021. 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 on 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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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

PEPP Pandemic Emergency Purchase Programme

PELTRO Pandemic Emergency Longer-Term Refinancing Operations

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

Over the first quarter of 2021 the development of global health crisis continued to be a key factor driving economic activity. The high uncertainty surrounding the pandemic persisted, stemming from the population vaccination rate and the emergence of new coronavirus variants which are potentially resistant to the existing vaccines. The global PMI continued to indicate recovery of the global economic activity at rates close to those in the last quarter of 2020, while the slowdown in manufacturing activity was offset by an increase in services sector. At the same time, dynamics varied by region, with economic activity increasing in developed countries and slowing down in developing markets. Commodity and food prices as well as production prices increased on an annual basis in the first quarter of 2021, due to both a 2020 base effect and higher demand by China, but also to difficulties in global supply chains. These factors contributed to global inflation acceleration in the first quarter. The upward inflation dynamics was assessed as temporary by US and euro area central banks, which did not initiate any steps to limit the accommodative monetary policy measures. According to both institutions, the uncertainty surrounding the prospects of economies' future development remains high, entailing the preservation of favourable financing conditions for a long period of time.

In line with the international environment and trends in Bulgaria's major trade partners, external demand for Bulgarian goods and services is expected to grow considerably on an annual basis in the second and third quarters of 2021, largely reflecting the low basis in 2020. This forecast is based on the assumption that a substantial part of the containment measures imposed in the fourth quarter of 2020 in other EU Member States and in Bulgaria would be extended until the end of the second quarter of 2021.

In 2020 the current and capital account surplus decreased significantly, reflecting the decline in net revenue from tourist and transport services. In the first half of 2021 the positive current and capital account balance on an annual basis is expected to remain close to that of end-2020 and under the assumption of gradually coping with the COVID-19 pandemic during the third quarter to begin increasing, reflecting largely the projected growth in net revenue from these groups of services.

Over the first two months of 2021 the annual growth of non-government sector's deposits in the banking system accelerated compared with end-2020. These developments reflected the deferred consumption of some goods and services by households, limited investment activity of corporations and continuous maintenance of precautionary savings by economic agents amid a persistent uncertainty stemming from the development of the COVID-19 pandemic. The downward trend in the annual growth of loans to the private sector was sustained, driven by both demand and supply factors.

In the second and third quarters of 2021 deposit growth rates are expected to remain comparatively high. Additional growth moderation in credit to non-financial corporations and households may be expected, reflecting the gradual expiry of the extended moratorium on bank loan repayments. Following the expiry of the deadline for deferring obligations of bank clients, the share of non-performing loans in bank portfolios is likely to increase, which would reflect in higher interest rates on new loans.

Domestic economic activity continued to improve in the fourth quarter of 2020, rising by 2.2 per cent on a quarterly basis despite the tightening of the anti-epidemic measures in Bulgaria. Quarterly GDP growth reflected the formation of a positive contribution of net exports and continuous growth of government consumption, driven mainly by the targeted fiscal measures introduced to support vulnerable households and firms. At the same time, private consumption and fixed capital investments declined on a quarterly basis. Overall for 2020, real GDP of Bulgaria decreased by 4.2 per cent, with almost all sub-components contributing negatively, excluding government and private consumption. During

Summary

the fourth quarter of 2020 labour market conditions improved somewhat *vis-à-vis* the third quarter: a decline in unemployment and an increase in nominal compensation of employees were reported.

In the first quarter of 2021 most of the short-term economic indicators in Bulgaria indicate that economic activity will continue to increase despite the extended period of the internal anti-epidemic measures. If the assumption that in the coming months the progress toward herd immunity against the coronavirus (a result of the growing number of the people recovered and vaccinated) would allow for a gradual easing of the containment measures in Bulgaria and its major trading partners is realised, over the second and third quarters of 2021 a stronger increase in real GDP is expected on a quarterly basis.

In March annual inflation accelerated compared with end-2020 amounting to 0.8 per cent. This reflected mainly the shrinkage of the negative contribution in energy products as a result of the strong upward dynamics of international oil prices on an annual basis. Core inflation increased compared with the end of prior year due to a slower price decrease in non-food goods and indirect effects of higher fuel prices. Since early year the annual growth rate of prices in the food group tended to slow down due mainly to lower prices of unprocessed food.

In the second and third quarters of 2021 inflation is expected to gradually accelerate, reflecting mostly the assumptions of upward developments in international food and petroleum product prices over this period compared with end-2020.

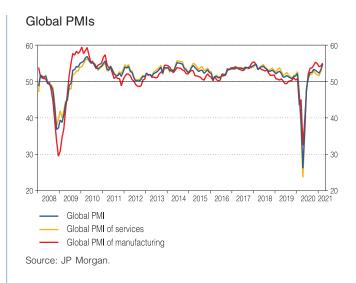
1. External environment

Over the first quarter of 2021 the development of global health crisis continued to be a key factor driving economic activity. The high uncertainty surrounding the pandemic persisted, stemming from the population vaccination rate and the emergence of new coronavirus variants which are potentially resistant to the existing vaccines. The global PMI continued to indicate recovery of the global economic activity at rates close to those in the last quarter of 2020, while the slowdown in manufacturing activity was offset by an increase in services sector. At the same time, dynamics varied by region, with economic activity increasing in developed countries and slowing down in developing markets. Commodity and food prices as well as production prices increased on an annual basis in the first quarter of 2021. This was mainly due to both a 2020 base effect and higher demand by China, but also to difficulties in global supply chains. These factors and in particular the base effect of energy product prices in the previous year contributed to global inflation acceleration in the first quarter. The upward inflation dynamics was assessed as temporary by US and euro area central banks, which did not initiate any steps to limit the accommodative monetary policy measures. According to both institutions, the uncertainty surrounding the prospects of economies' future development remains high, justifying the need of preserving favourable financing conditions for a long period of time.

In line with the international environment and trends in Bulgaria's major trade partners, external demand for Bulgarian goods and services is expected to grow considerably on an annual basis in the second and third quarters of 2021, largely reflecting the low basis in 2020. This forecast is based on the assumption that a substantial part of the containment measures imposed in the fourth quarter of 2020 in other EU Member States and in Bulgaria would be extended until the end of the second quarter of 2021.

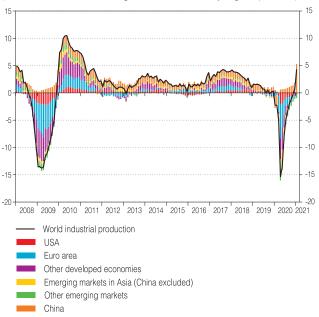
Current Business Situation

In the first quarter of 2021 the global PMI continued to indicate a recovery of the global economic activity, with its level slightly rising compared to the average values registered in the last quarter of 2020. In the beginning of the year the global PMI recorded lower levels than those at the end of 2020, before reaching its highest value since 2014 of 54.8 in March 2021. Developed markets, including the US, Japan and euro area countries mostly contributed to the continued recovery in the first quarter of 2021. Economic indicators in both the manufacturing and services sectors posted an increase in the US and the euro area. Global PMIs fell in developing market countries compared to the last quarter of 2020, however they stayed above the neutral limit of 50 points. Overall economic indicators in China and Brazil made a substantial contribution to this decline. China's PMI reflected the temporary travel restrictions between the various regions during the Chinese New Year period and market participants' expectations of changes in economic stimulus levels by the government. In Brazil the recorded decline was mainly driven by the negative trends observed in the spread of COVID-19.



Global Industrial Production

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



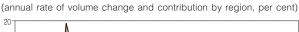
Source: CPB Netherlands Bureau for Economic Policy Analysis.

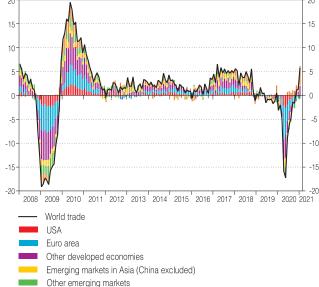
Across economic sectors the PMI indices in the first quarter of 2021 suggested a partial recovery in global economic activity in the services sector. At the end of the quarter, consumer services PMI, which was negatively impacted by the anti-epidemic measures, improved significantly. The quarterly average of the manufacturing PMI declined from the fourth quarter of 2020 continuing, however, to give positive signals about manufacturing. At the end of the first quarter of 2021, increased delivery times in manufacturing continued to be registered due to difficulties in global supply chains, resulting in raw materials and manufacturing production price increases.

At the end of the last quarter of 2020 global industrial production and global trade¹ posted a year-on-year growth, which accelerated significantly in January 2021. This reflected mostly the fading base effect in 2020 in China when the country faced the first coronavirus wave. The euro area continued to contribute negatively to the annual change in both global industrial output and global trade. The decline in the euro area in January 2021 is also likely to be driven by the trade difficulties resulting from the end of the United Kingdom's membership in the EU, in addition to the adverse effects of the second COVID-19 wave.

World Trade

China





Source: CPB Netherlands Bureau for Economic Policy Analysis.

¹ CPB Netherlands Bureau for Economic Policy Analysis data as of 23 March 2021.

In the first quarter of 2021 global inflation² accelerated mainly as a result of the base effect of energy product prices in the previous year. Preliminary estimates show that in March global inflation reached 2.0 per cent on an annual basis compared to 1.3 per cent in December 2020, with consumer prices increasing year on year in developed economies and emerging market economies.

In line with the trends in the international environment, external demand for Bulgarian goods and services is expected to grow considerably on an annual basis in the second and third quarters of 2021, largely reflecting the low basis in 2020. This forecast is based on the assumption that a substantial part of the containment measures imposed in the fourth quarter of 2020 in other EU Member States and in Bulgaria will be extended until the end of the second quarter of 2021.

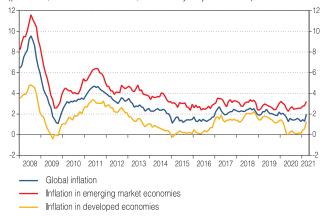
The United States

In the fourth quarter of 2020 the US real GDP growth rate moderated to 1.1 per cent quarter on quarter, mostly due to the slower growth of household consumption. The overall decline in the US real GDP for 2020 amounted to 3.5 per cent (against a growth of 2.2 per cent in 2019), which was the highest annual decline since 1946 onwards. This was attributable to the negative effects of the COVID-19 containment measures, leading to a significant decrease in household consumption.

At the end of 2020 and in the first quarter of 2021 the US initiated large-scale fiscal policy measures to stimulate the economy. The fiscal package adopted in December amounted to USD 0.9 billion³ (4.4 per cent of GDP), and that adopted in March 2021 to USD 1.9 billion (8.9 per cent of GDP). In addition to the substantial expenditure to counter the pandemic, the packages of measures include resumption of unemployment benefits, additional one-off payments to households, financial support for small businesses and increase in government expenditure for healthcare and education. Fiscal stimuli are expected to boost significantly US real GDP and to have a favourable impact on global economic activity.

Inflation Measured through CPI

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

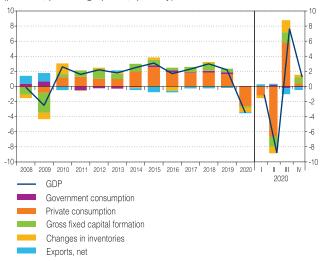


Notes: The World Bank measures the change of CPI in individual groups as a weighted average of CPI changes in the countries of the group. Real GDP based on purchasing power parity is used to calculate country weights. Groups include only World Bank Member States classified by the World Bank as emerging market economies and developed economies.

Source: the World Bank.

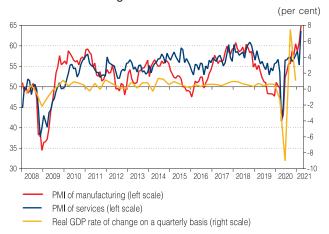
Contribution to the Change in Real GDP in the United States by Component

(per cent, percentage points; quarterly)



Source: Bureau of Economic Analysis.

ISM-PMI and Change in US Real GDP



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

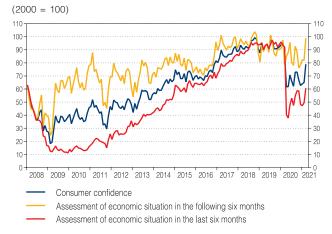
² Based on the World Bank data as of 19 April 2021.

³ Referred to as the US dollar below.

In the first guarter of 2021, the leading economic indicators of the US economy saw hesitant but mostly positive changes, reflecting vaccination progress, gradual removal of antiepidemic measures and fiscal stimuli launched. In March ISM-PMI manufacturing index increased significantly to 64.7 points, which was its highest value since December 1983. The average value of the index in the first quarter was 61.4 points against 59.0 points in the fourth quarter of 2020. ISM-PMI services index reached its historical highs of 63.7 points in March. The average value of the indicator in the first quarter was 59.2 points against 56.9 points in the previous quarter. Consumer confidence indicators showed mostly positive movements in the first quarter, remaining, however, well below their pre-pandemic level. Monthly growth rate of individual consumption and retail sales was positive in January 2021 but in February both indicators posted a monthly decline. Overall, data available in mid-April 2021 showed an increase in quarterly growth of real GDP over the first quarter of 2021.

Over the same period the annual consumption inflation rate accelerated, while the annual rate of change in the price index of personal consumer expenditure (PCE) observed by the Federal Reserve remained below the target of 2 per cent. In February the annual rate of change in this index was 1.6 per cent against an average of 1.2 per cent in the fourth quarter of 2020. In February the annual growth rate of the core PCE price index (excluding food and energy products) remained at its average of 1.4 per cent in the fourth quarter of 2020. March CPI data (the other key US inflation indicator) showed a significant acceleration in annual inflation rate to 2.6 per cent against 1.7 per cent in February and 1.3 per cent on average in the fourth quarter of 2020. In March the annual growth rate of the overall consumer price index increased considerably, largely reflecting fuel price rises due to the base effect in 2020. In March the annual growth rate of the core CPI price index, excluding food and energy products went up, though to a lesser degree, to 1.6 per cent from 1.3 per cent in February. The average value of the indicator for the first quarter was 1.4 per cent against 1.6 per cent in the fourth quarter of 2020.

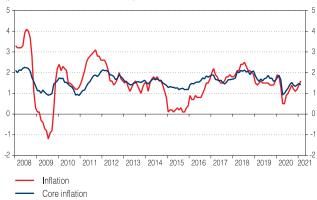
US Consumer Confidence Indices



Source: The Conference Board.

US Inflation Rate

(per cent, on an annual basis)



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

Source: Bureau of Economic Analysis.

In the first quarter of 2021, US labour market conditions improved substantially, remaining, however, significantly worse than their prepandemic status. Total employment in the US non-agricultural sector rose by 1.6 million jobs against an increase of around 638 thousand jobs over the fourth quarter of 2020. In March unemployment rate fell to 6.0 per cent from 6.7 per cent at the end of 2020, while the labour force participation rate in the USA rose to 61.5 per cent reaching its level of end-2020.

In the first guarter of 2021, the US Federal Open Market Committee (FOMC) maintained its target range for the federal funds rate at 0.00-0.25 per cent. At the March meeting FOMC members' projections of real GDP growth and inflation were revised upward and those of the expected unemployment rate were revised downward in 2021 and 2022. FOMC long term-equilibrium value assessments of all economic indicators were left unchanged, except for the unemployment rate, which was lowered by 0.1 percentage point to 4.0 percentage points. The median of FOMC members' individual forecasts about the expected level of the federal funds rate showed again complete consensus about leaving the target range for the reference rate within the range of 0.00-0.25 per cent over the projection horizon until 2023. The estimate of the long-run equilibrium level of federal funds rate remained unchanged at 2.5 per cent.

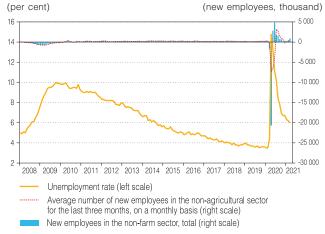
In the first quarter of 2021 total assets in the US Federal Reserve balance sheet rose by USD 326 billion to USD 7.69 trillion (36.7 per cent of GDP in 2020).

China

Over the first quarter of 2021 China's real GDP accelerated to 18.3 per cent on an annual basis compared to 6.5 per cent in the fourth quarter of 2020. This reflected the strong base effect of the first quarter of 2020 when the negative effects of the coronavirus spread in China were recorded. Quarterly real GDP growth moderated to 0.6 per cent against 3.2 per cent in the previous quarter.

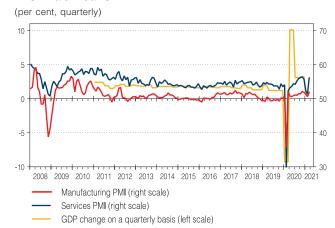
PMIs in China in the first quarter of 2021 were lower than the average values in the fourth quarter of 2020, remaining, however, above the neutral limit of 50 points, suggesting a slowdown in the recovery of both manufacturing and services

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



Source: Bureau of Labour Statistics.

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



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

sectors. In the same period retail sales and investment in all major sectors of the economy posted a significant growth on an annual basis, largely driven by the strong base effect in the first quarter of 2020.

Over the first guarter of 2021 the consumer price index in China reversed its downward trend, whereby inflation of 0.4 per cent was recorded on an annual basis in March compared to a deflation of -0.3 per cent and -0.2 per cent in January and February. Inflation increase in March was mainly reflective of price increases in energy products, while food prices recorded deflation of -0.7 per cent on an annual basis due to the continued drop in pork prices. At the same time, production price inflation rose significantly over the quarter reaching 4.4 per cent on an annual basis in March 2021 against -0.4 per cent deflation in December 2020. This is attributable to both the positive base effect of oil price's sharp decline in 2020 and the higher demand for raw materials resulting from the increased investment in tangible fixed assets.

In the first quarter of 2021 the People's Bank of China did not initiate new monetary policy measures. In March it launched measures to restrict lending, recommending that large commercial banks in the country maintain a 'stable and reasonable' credit growth. At the end of March total growth of loans to corporations and households moderated to 12.6 per cent year on year from 12.8 per cent at end-December 2020.

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.

Euro area

Over the fourth quarter of 2020 euro area real GDP fell by 0.7 per cent on a quarterly basis, reflecting the imposed anti-epidemic measures in relation to the new wave of coronavirus spread in Europe. Quarterly GDP decline was largely driven by weaker private consumption, which was partly offset by the positive contribution of changes in inventories and investment. The four largest euro area economies reported divergent changes in real GDP on a quarterly basis: decline in France and Italy, no change in Spain and weaker growth in Germany. Throughout 2020 euro area real GDP fell by 6.7 per cent against a growth of 1.3 per cent in 2019.

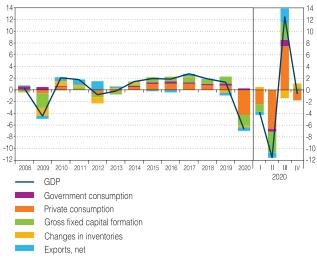
In January and February 2021 the composite PMI in the euro area declined below the 50 percentage point limit, indicating a contraction in the economic activity attributable entirely to the services sector. In March the composite PMI rose significantly, reaching 53.2 points. This reflected the positive expectations of economic agents to overcome the health crisis with the progress of the vaccination campaign in Europe and, to a larger extent, the increase in the manufacturing PMI, which reached its highest historical value. Although the euro area composite PMI rose in March, its average stayed below 50 points in the first quarter, signalling a slight decline in real GDP on a quarterly basis over that period.

In the first months of 2021 euro area governments continued to implement job-preservation policies, which played an important role in the reported dynamics of unemployed. The unemployment rate came to 8.3 per cent in January and February compared to 8.2 per cent in December 2020, while consumer expectations of the unemployment rate over the following twelve months, measured by the EC consumer confidence index, improved in the first quarter of 2021.

Consumer price inflation in the euro area increased in the first quarter of 2021, reaching 1.3 per cent on an annual basis in March compared to -0.3 per cent on average in the fourth quarter of 2020. Higher inflation reflected several factors among which the expiry of the tempo-

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

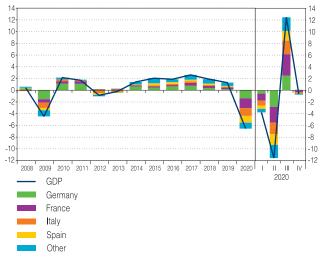
(per cent, percentage points; quarterly)



Source: Eurostat.

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

(per cent, percentage points; quarterly)



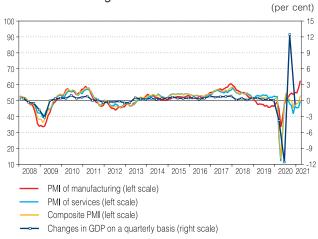
Sources: Eurostat and BNB calculations.

rary cut in VAT rates in Germany⁴, changes in end-of-season sales periods, statistical effect of changes in weights in the consumer basket in 2021 and the base effect of energy product prices in 2020. Services and energy prices contributed most to the March 2021 inflation. Core inflation, excluding food and energy product prices, came to 0.9 per cent on an annual basis in March against 0.2 per cent on average in the last quarter of 2020.

In March the ECB left its economic growth forecast for the period 2021–2023 broadly unchanged. The institution expects euro area real GDP growth to reach 4.0 per cent in 2021, 4.1 per cent in 2022 and to slow down to 2.1 per cent in 2023. According to the ECB, risks to the GDP growth projection are considered to be more balanced in the medium term, however still pointing to a lower than expected growth in the short term. The ECB expects higher inflation volatility in the euro area in 2021 and its gradual increase as economic recovery advances in the region. Euro area inflation in the medium term is expected to remain subdued driven by weaker demand.

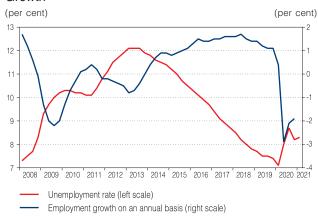
In the first quarter of 2021 the Governing Council of the ECB made no changes to its monetary policy. The reference interest rates and the forward guidance for changing these rates in the future remained unchanged. Net purchases under the asset purchase programme (APP) continued at a monthly pace of EUR 20 billion and reinvestment of the principal payments from maturing securities purchased under the APP continued in full for an extended period of time past the date when the Governing Council will start raising the key ECB interest rates. A significant amount of liquidity continues to be provided to banks mainly through targeted longer-term refinancing operations (TLTRO-III) and pandemic emergency longer-term refinancing operations (PELTRO). As regards the Pandemic Emergency Purchase Programme (PEPP) no changes were made either, but the Governing Council expected purchases under this programme to be conducted at a significantly higher pace in the coming guarter compared to the first months of this year. The ECB Governing Council stated that PEPP would be used in a flexible manner with

PMI and the Change in Euro Area Real GDP



Sources: Eurostat, Markit.

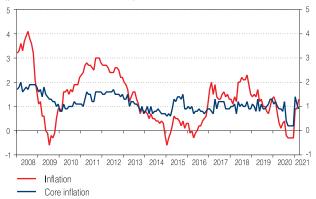
Euro Area Unemployment Rate and Employment Growth



Note: Unemployment figures are up to February 2021. Source: Eurostat.

Euro Area Inflation Rate

(per cent, on an annual basis)



Notes: The inflation is measured by HICP. Core inflation is measured by HICP, excluding energy products, food, alcohol and tobacco products. Source: Eurostat.

 $^{^{\}rm 4}$ Between 1 June and 31 December 2020 German VAT rates were temporarily reduced.

a view to preventing a tightening of financial conditions in the euro area.

As of 9 April 2021 the cumulative amount of purchases under the Eurosystem's extended Asset Purchase Programme (APP) totalled EUR 2969 billion, up EUR 60.4 billion compared with 1 January 2021. Concurrently, the cumulative amount of the temporary asset purchase programme of private and public sector securities (PEPP) totalled EUR 960.3 billion on 9 April 2021 (against EUR 753.7 billion on 1 January 2021).

As of 9 April 2021 the Eurosystem balance sheet figure rose to EUR 7514 billion (66.4 per cent of GDP in 2020) compared with EUR 6979 billion (61.6 per cent of GDP in 2020) on 1 January 2021. Asset purchases under the APP and PEPP (totalling EUR 262 billion) and long-term refinancing operations (EUR 314 billion) contributed most to the higher ECB balance sheet figure over the period. The excess liquidity in the euro area banking system continued to grow, reaching EUR 4066 billion on 9 April 2021, up EUR 723 billion compared with 1 January 2021.

The increased excess liquidity in the euro area banking system over the quarter was the main factor behind the maintained low levels of the euro short-term rate in the euro area money market (€STR), and the interest rates on unsecured deposits in the interbank market. The average €STR over the quarter under review remained unchanged compared to the fourth quarter of 2020 (-0.56 per cent). The trade volume of overnight deposits in the unsecured euro area money market rose in the first quarter of 2021, with its daily average over the period coming to EUR 43.4 billion, against EUR 42.8 billion in the fourth guarter 2020. Over the guarter EURIBOR unsecured deposit rates posted a slight increase.

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

(per cent)

Institu- Date		2021		2022		2023	
tion	of release	latest	previous	latest	previous	latest	previous
the ECB	III.2021	4.0	3.9	4.1	4.2	2.1	2.1
EC	II.2021	3.8	4.2	3.8	3.0	-	-

Sources: the ECB, the EC.

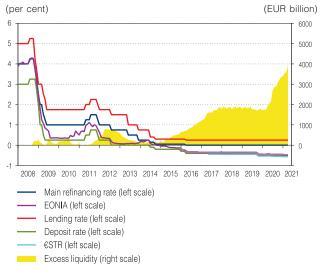
Projections of Euro Area Annual Inflation Rate

(per cent)

Institu- Date		2021		2022		2023	
tion	of release	latest	previous	latest	previous	latest	previous
the ECB	III.2021	1.5	1.0	1.2	1.1	1.4	1.4
EC	II.2021	1.4	1.1	1.3	1.3	-	-

Sources: the ECB, the EC.

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

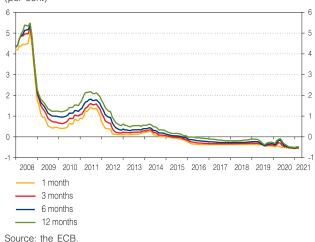


Notes: EONIA and €STR data are average for the month. Between 15 March 2017 and 30 September 2019 €STR data are on the preliminary €STR interest rate (pre-€STR).

Source: the ECB.

EURIBOR Dynamics

(per cent)



External Environment

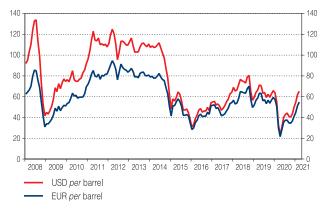
International Commodity Prices

Crude Oil

In the first guarter of 2021 the Brent crude oil price rose significantly on an annual basis in both US dollars (19.9 per cent) and euro (9.7 per cent). In March 2021 crude oil price stood at USD 65.2 per barrel (EUR 54.8 per barrel), fully recovering after the sharp downturn in fuel consumption in 2020 caused by the COV-ID-19 containment measures. The rigorous implementation of the agreement reached between the OPEC+ countries to cut the output and the extension of the term of agreement⁵ contributed most to the oil price rise in the first guarter of 2021. Furthermore, the Saudi Arabia extended its unilateral output cut⁶. At the same time, more severe winter conditions in January and February 2021 experienced in the US, Japan and the euro area also prompted the increase in crude oil price. Another factor behind its price appreciation were market participants' more optimistic expectations about global economic recovery after 2021, following the adoption of a package of fiscal policy measures by the US aimed at promoting growth.

Considering the progress of the vaccination process in a number of countries and the ensuing positive market perception of gradual recovery of global economic activity in March 2021, expectations concerning the crude oil price in the second and third quarters of 2021 increased significantly compared to those in December 2020. In March 2021 futures prices for the next six months fluctuated between USD 62.7–65.3 per barrel.

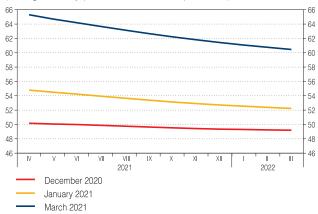
Brent Crude Oil Price



Source: the World Bank

Brent Crude Oil Futures Prices

(average monthly price of contract, USD per barrel)



Source: JP Morgan.

⁵ On 3 December 2020, OPEC, Russia and other leading oil-producing countries revised their schedule for a gradual reduction of the supply constraint, deciding on 7.2 million barrels *per* day in January 2021 and on holding additional OPEC+ meetings in the following months, at which supply changes will be discussed in the course of 2021.

⁶ On 5 January 2021, Saudi Arabia announced oil production cuts by 1 million barrels *per* day in February and March 2021 and, subsequently, extended the restriction until April 2021, including.

Basic Metals and Food Prices

Over the first quarter of 2021 metal prices in US dollars posted a significant annual growth of 48.2 per cent (35.6 per cent in euro). Price increase was particularly strong at the beginning of the year, with the price upward trend continuing in the second half of 2020. This was largely driven by the adopted sizeable fiscal stimuli package intended to overcome the effects of the pandemic in the US, and the announced plans for investment in infrastructure projects. In addition, the demand for metals from China remained high in the first quarter of 2021. By sub-components, copper and aluminium prices had the major contribution to the annual growth over the first quarter of 2021. The price of copper, which is of key importance to Bulgarian goods exports, increased in the first guarter of 2021 mainly driven by China's strong demand to use it in the manufacturing and construction sectors. The ongoing process of recovery in industrial production in the rest of the world also had a positive effect on the copper price. Aluminium price growth was most pronounced at the end of the quarter reflecting market participants' concerns about restrictions in supply from China, which is the largest producer.

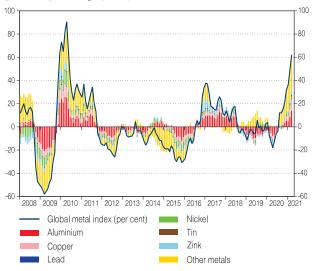
Metal prices in the second and third quarters of 2021 are expected to increase further year on year both in US dollar and euro.

In the first guarter of 2021 the food price index in US dollars posted an increase of 19.5 per cent (9.2 per cent in euro⁷) compared with the corresponding period of 2020. Soyabean and maize prices had the largest contribution to food price index growth due to the higher demand from China, where these foods are mainly used in animal husbandry. The price of wheat⁸, which is essential for the Bulgarian exports of goods, also reported a significant increase on an annual basis in the first quarter of 2021, reflecting to a large extent the enhanced demand from China9. Considerable sales of wheat through state auctions have been registered in the Chinese market since year-start, to counter the high prices of maize at the local market.

Price Indices of Major Raw Materials and Commodity Groups

Metals

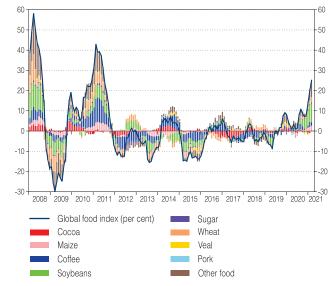
(per cent; percentage points)



Sources: the ECB and BNB calculations.

Food

(per cent; percentage points)



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

Sources: the ECB and BNB calculations.

⁷ Due to the euro appreciation against the US dollar on an annual basis the reported decline in percentage was significantly lower.

⁸ Based on World Bank data as of 16 April 2021.

 $^{^{\}rm 9}$ For further details see USDA Wheat Outlook of 13 April 2021.

Market participants' expectations for food prices in the second and third quarters of 2021 point to a strong rise on an annual basis both in US dollars and euro.

Over the first quarter of 2021 the terms of trade in goods and services for Bulgaria were favourable. As a result of the developments in international commodity prices on an annual basis and assuming that exchange rates remain unchanged, the favourable terms of trade for Bulgaria are expected to cease to exist in the second quarter of 2021. This will reflect the expected oil price increase year on year, of which Bulgaria is a net importer. Assuming that part of COVID-19 containment measures are lifted in the third quarter of 2021 and concurrently service export prices increase, a shift to favourable terms of trade for Bulgaria is projected over that period.

2. Financial flows, money and credit

In 2020 the current and capital account surplus decreased significantly, reflecting the decline in net revenue from tourist and transport services. In the first half of 2021 the positive current and capital account balance on an annual basis is expected to remain close to that of end-2020 and under the assumption of gradually coping with the COVID-19 pandemic during the third quarter to begin increasing, reflecting largely the projected growth in net revenue from these groups of services.

Over the first two months of 2021 the annual growth of non-government sector's deposits in the banking system accelerated compared with end-2020. These developments were driven by the deferred consumption of some goods and services by households, limited investment activity of corporations and continuous maintenance of precautionary savings by economic agents amid a persistent uncertainty stemming from the development of the COVID-19 pandemic. The downward trend in the annual growth of loans to the private sector was sustained, driven by both demand and supply factors

In the second and third quarters of 2021 deposit growth rates are expected to remain comparatively high. Additional growth moderation in credit to non-financial corporations and households may be expected, reflecting the gradual expiry of the extended moratorium on bank loan repayments. Following the expiry of the deadline for deferring obligations of bank clients, the share of non-performing loans in bank portfolios is likely to increase, which would reflect in higher interest rates on new loans.

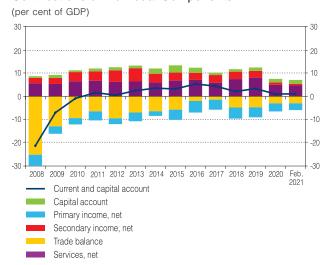
External Financial Flows

Amid a sharp decline in economic activity caused by the unprecedented measures to curb the COVID-19 spread, in 2020 Bulgaria's current account balance¹⁰ turned to a deficit for the first time since 2015, accounting for -0.7 per cent of GDP. The deficit reflected mainly the significant contraction in the surplus on trade in services compared to 2019, with the decline in the surplus on net secondary income contributing further to this effect. The lower trade balance deficit and, to a lesser extent, the reduced net primary income deficit limited the amount of the current account deficit. The current account deficit accumulated over the last 12 months as of February 2021 remained at levels close to those at the end of the previous year.

The reduced surplus in net services in 2020 compared to 2019 was a result of the stronger decline in nominal exports than that in imports of services, largely reflecting the fact that Bulgaria is a net exporter of tourist and transport services, which were most affected by the pandemic. In 2020 exports of services fell by 30.4 per

¹⁰ The analysis of balance of payments flows employs information from its analytical reporting. Preliminary data.

Current and Capital Account Flow Dynamics and Contributions of Individual Components



Notes: February 2021 data on the current and capital account flows are accumulated for the last 12 months. Nominal GDP data for 2020 are used in calculating current and capital account flows to GDP ratio for February 2021.

Sources: the BNB, the NSI, BNB calculations.

Financial Flows, Money and Credit

cent on an annual basis, with the greatest decline being concentrated in the period June to August 2020, reflecting the significantly lower number of visits of foreign nationals to Bulgaria compared to the same period of 2019. Imports of services declined by 22.2 per cent, exhibiting by month the largest year-on-year fall in April and May, when stringent containment measures were in force to cope with the first wave of the COVID-19 in Bulgaria and other EU Member States. For the last 12 months as of February 2021, the net services surplus remained close to its level at the end of 2020 and continued to be characterised by significantly reduced trade flows, largely reflecting lower number of trips globally.

In 2020 the surplus on net secondary income declined compared to 2019, largely driven by lower remittances from Bulgarian citizens working abroad. In February 2021, developments in net flows under this item remained almost unchanged on an annual basis.

The decrease in trade balance deficit in 2020 reflected a larger fall in nominal imports of goods than in nominal exports. As a result of the introduction of containment measures to cope with the first wave of the COVID-19 in Bulgaria and globally, and the reported sharp fall in oil prices, of which the country is a net importer, Bulgaria's foreign trade flows contracted significantly i.e. a year-on-year decline of 22.1 per cent in imports of goods and 15.0 per cent in exports of goods in the second quarter. In the third and fourth quarters of 2020, rates of decline in nominal terms in both imports and exports moderated significantly compared to those recorded in the second guarter. The trade balance deficit decreased over the year driven by a larger fall in the prices of imported goods than that of exported goods. In 2020, the year-on-year decline in imported goods in real terms (4.1 per cent)¹¹ was lower than in exports (5.3 per cent), thus partially limiting the reduction in trade balance deficit. For the last 12 months as of February 2021, trade balance deficit remained at its level as of end-2020.

The deficit on the net primary income item decreased on an annual basis in 2020 mainly due to the paid lower dividends and distributed

Flows on Major Balance of Payments Accounts

(EUR million)

	2019	2020	On an annual basis as of February 2021
Current account	1,121.2	-399.9	-368.6
Trade balance	-2,908.3	-1,872.0	-1,845.3
Services, net	4,894.4	2,969.7	2,814.5
Primary income, net	-2,638.4	-2,098.4	-1,770.9
Secondary income, net	1,773.5	600.8	433.1
Capital account	891.7	947.4	1,000.4
Financial account	2,906.1	-3,340.6	60.6
Change in reserves	-559.4	5,793.9	2,899.0

(per cent of GDP)

	2019	2020	On an annual basis as of February 2021
Current account	1.8	-0.7	-0.6
Trade balance	-4.7	-3.1	-3.0
Services, net	8.0	4.9	4.6
Primary income, net	-4.3	-3.5	-2.9
Secondary income, net	2.9	1.0	0.7
Capital account	1.5	1.6	1.6
Financial account	4.7	-5.5	0.1
Change in reserves	-0.9	9.6	4.8

Sources: the BNB, the NSI, BNB calculations.

¹¹ Non-seasonally adjusted national account GDP data.

profits to non-residents¹². Banks, which did not distribute dividends due to the measure launched by the BNB in March 2020 to capitalise the entire banking system profits contributed most to the lower dividends paid on primary income debit side. ¹³ Outflows related to dividends from other sectors (banks excluded) to non-residents also made an important contribution to the reduction in the deficit on this item. In February 2021, the year-on-year downward trend in net primary income deficit has been maintained.

The capital account surplus on the balance of payments rose slightly in 2020 compared to 2019 mainly as a result of higher capital transfers to general government sector under EU operational programmes and lack of outflows of that sector under capital transfers for the same period. The positive balance on the capital account for the last 12 months as of February remained largely unchanged compared to the end of 2020.

As a result of the described dynamics of flows on individual current and capital account items, the accumulated surplus on the overall balance of the two accounts declined significantly in December 2020 compared to the end of 2019, with the contraction in the surplus on net services item contributing most substantially. Total current and capital account balance for 2020 accounted for 0.9 per cent of GDP (3.3 per cent of GDP at the end of 2019). For the last 12 months as of February 2021 the overall balance of the two accounts experienced no substantial changes.

The forecast of current account flow developments is based on the assumption that most of the COVID-19 containment measures imposed globally in the fourth quarter of 2020 would be extended until the end of the first half of the current year. In line with the baseline macroeconomic scenario, the negative current account balance is expected to increase gradually on an annual basis¹⁴ in the second quarter, while in the third quarter the current account balance

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

¹³ For further details see http://www.bnb.bg/PressOffice/POPressReleases/POPRDate/PR_20200319_EN.

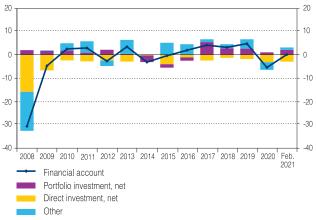
 $^{^{\}rm 14}$ lt should read the current account balance for the last four quarters.

is expected to turn to a surplus. The projected increase in the positive net services balance. and the increase in net secondary income to a lesser extent are expected to contribute most to the surplus formation. Based on the assumption of lifting certain anti-epidemic measures in the third quarter, the revenue from tourism and passenger transport services is projected to rise compared to 2020, thus boosting services net surplus. The surplus on the net secondary income item is expected to increase more significantly in the beginning of the second half of the year due both to the projected higher incoming current transfers to the government under EU programs and to the increased amount of remittances from Bulgarian emigrants. In the second and third quarters of 2021 the capital account surplus is expected to increase gradually on an annual basis.15

In 2020 an inflow of funds on Bulgaria's financial account for the amount of EUR 3.3 billion (-5.5 per cent of GDP) was reported. The negative financial account balance in 2020 was driven by Bulgarian residents' foreign liabilities increasing more than foreign assets. The rise in foreign liabilities reflected mainly the increased liabilities of the general government sector due to the issue of government securities on international capital markets in September 2020¹⁶, which was aimed at budget deficit financing over the year and maintaining liquidity buffers. The increase in foreign assets over the year was significantly limited by the measures implemented by the BNB on 12 March to further strengthen capital and liquidity position of banks by imposing limits on foreign exposures in order to reduce credit risk and concentration risk in bank balance sheets. These measures led to a decrease in bank foreign assets. Other sectors'17 assets outside Bulgaria rose, which partially limited net inflow of funds to Bulgaria. In February 2021, the financial account balance for the last 12 months turned to a surplus (0.1 per cent of GDP), mainly driven by the increase in foreign short-term assets mostly in the form of banking

Financial Account Flow Dynamics and Contributions of Individual Components

(per cent of GDP)



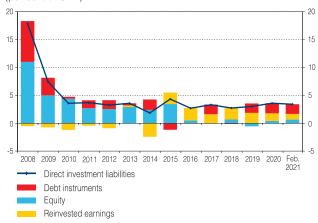
Notes: The Other item includes Other Investments, Net, and Financial Derivatives (Other than Reserves) and Employee Stock Options, Net.

February 2021 data on financial account flows are accumulated for the last 12 months. Nominal GDP data for 2020 are used in calculating financial account flows to GDP ratio for February 2021.

Sources: the BNB, the NSI, BNB calculations.

Direct Investment Liabilities by Type of Investment

(per cent of GDP)



Notes: February 2021 data on direct investment liabilities flows are accumulated for the last 12 months. Nominal GDP data for 2020 are used in calculating direct investment liabilities to GDP ratio for February 2021.

Sources: the BNB, the NSI, BNB calculations.

¹⁵ It should read the capital account balance for the last four quarters.

¹⁶ On 15 September 2020 Bulgaria issued two tranches of bonds to the amount of EUR 1.25 billion with maturities of ten and 30 years, respectively.

¹⁷ It should read sectors other than general government, banks and the central bank.

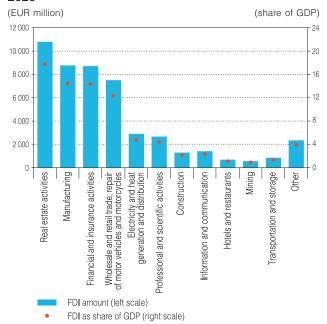
institutions' foreign currency and deposits as compared to their level for the period January-December 2020.

In 2020 foreign investment liabilities (reporting FDI inflows into Bulgaria) rose from 2019 to EUR 2195.3 million (EUR 1857.7million in 2019). The year-on-year growth reflected the increase in liabilities related to equity capital and debt instruments, with the latter reporting a significant inflow of EUR 953.3 million in July. At the end of the fourth quarter total FDI in Bulgaria accounted for 80.3 per cent of GDP. Breakdown by economic sectors show that real estate activities, manufacturing and financial and insurance activities registered the highest FDI. For the last 12 months as of February 2021 direct investment liabilities remained close to the level at the end of the previous year.

As a result of net flows on the current, capital and financial account, according to the balance of payments data for the last 12 months gross international reserves declined in February 2021¹⁹ from the end of 2020 mainly reflecting the reported increase in short-term foreign assets of the banking sector in the beginning of the year. In February 2021 the international reserve coverage of the average nominal imports of goods and non-factor services for the last 12 months remained high 10.0 months (11.1 months in December 2020). Bulgaria's international reserves²⁰ to short-term external debt ratio remained also high accounting for 340.8 per cent in January 2021 against 336.4 per cent in December 2020.

In January 2021 Bulgaria's gross external debt came to EUR 37.6 billion (62.0 per cent of GDP), marking an increase of EUR 2297.9 million from January 2020 (57.3 per cent of GDP). Higher gross external debt was mainly driven by the Eurobonds issued by the Bulgarian government in international capital markets. The increase in intercompany loans, more pronounced in July, contributed to a lesser degree to higher external debt. In January 2021 long-term debt as a share of Bulgaria's gross external

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

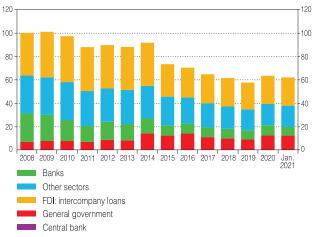


Note: Nominal GDP data for 2020 are used in calculating the investment to GDP ratio for the fourth quarter of 2020.

Sources: the BNB, the NSI, BNB calculations

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 2020 is used in calculating gross external debt to GDP ratio for January 2021.

Sources: the BNB, the NSI, BNB calculations

¹⁸ Preliminary data subject to revision.

¹⁹ Valuation adjustments and price revaluation excluded.

²⁰ 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.

debt occupied 77.8 per cent (75.5 per cent in January 2020). Concurrently, based on debt interest payments data, it may be concluded that the terms for servicing external obligations by Bulgarian residents remain favourable.

Monetary and Credit Aggregates

Over the first two months of 2021 annual growth of non-government sector's deposits²¹ in the banking system accelerated from the end of 2020 amounting to 12.0 per cent as of February (9.7 per cent in December 2020). Stronger growth of household deposits was the major factor behind this dynamics, while accelerated growth of non-financial corporation deposits had a relatively weaker impact. These developments reflected the deferred consumption of some goods and services by households, limited investment activity of corporations and continuous maintenance of precautionary savings by economic agents amid a persistent uncertainty stemming from the development of the COVID-19 pandemic. Part of household savings is most likely to remain of forced nature due to limited possibilities for making specific expenses, such as tourism and travel. The NSI consumer survey also points to an increase in household propensity to save, more pronounced in households with higher incomes²². In the context of low deposit rates, overnight deposits continued to have a major contribution to total deposit growth. Within the currency composition, deposits in national currency still comprised the bulk of non-government sector's deposits, accounting for 62.3 per cent as of February.

The effective implicit rate of minimum required reserves²³ remained at levels similar to the previous year's levels, reflecting the retained high inflow of attracted funds from residents in

²¹ 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 February 2021) comprise the major share of all non-government sector's deposits and thus the analysis focused on these two sectors.

Gross External Debt as of January 2021

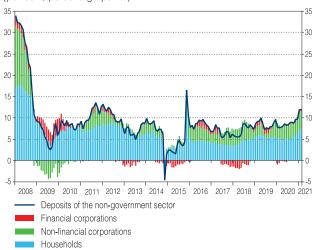
(EUR million)

		Change			
	Amount	Since December 2019	For the last 12 months		
General government	7,396.5	-23.1	1,958.9		
Central bank	0.0	0.0	0.0		
Banks	4,486.8	-839.1	-155.3		
Other sectors	11,059.6	15.6	-150.0		
FDI – intercompany loans	14,670.9	14.4	644.3		
Total	37,613.6	-832.2	2,297.9		

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

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

(per cent, percentage points)



Notes: 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



Source: the BNB

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 $^{^{22}}$ For details, see the Household Behaviour Section in Chapter 3.

²³ Under 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.

the banking system in the first two months of 2021. As of March this rate was 9.39 per cent (9.43 per cent in December 2020), with bank deposits with the BNB comprising 8.35 percentage points in the fulfilment of minimum required reserves, and remaining 1.04 percentage points forming recognised cash balances.

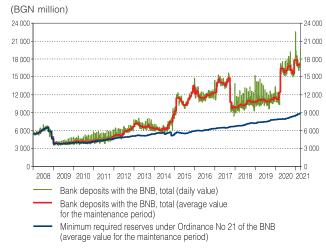
As of February 2021 reserve money exhibited a year-on-year rise of 26.0 per cent (34.9 per cent at end-2020), decelerated growth reflecting the lower contribution of banks' deposits at the BNB and especially of banks' excess reserves. As of February 2021 excess funds on banks' minimum reserve accounts over the required minimum of reserve assets under Ordinance No 21 was 61.3 per cent on an average daily basis, from 81.1 per cent in December 2020. Concurrently, over the first two months minimum required reserves' amount continued to grow due to a rise in deposit base.

Since September 2020 annual growth of currency in circulation has tended to accelerate, accounting for 16.1 per cent as of February 2021 (11.2 per cent by end-2020). High growth rates of currency in circulation could be explained by demand for liquidity for transaction purposes given the gradual recovery in economic activity and by demand for cash with the aim of accumulating in the context of continuing uncertainty surrounding the development of the pandemic and historically low interest rates on deposits.

Reserve currency (euro) trading with the BNB is the main lev liquidity management instrument of banks under currency board arrangements. In the first three months of 2021 net BNB sales of euro to banks were EUR 174 million.

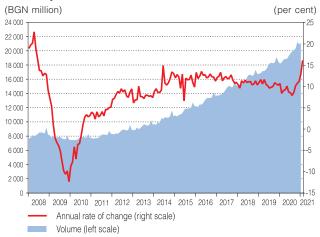
Bank assets grew by 9.0 per cent on an annual basis by end-February 2021,²⁴ reflecting mainly their foreign assets in the first two months of the year and a decrease in their excess reserves with the BNB. This dynamics could be explained by banks' demand for higher earning opportunities for investing free liquid funds, while observing BNB limits on bank foreign exposures. Compared with the end of 2020, slight decline in foreign liabilities was reported, which resulted in

Bank Deposits with the BNB



Source: the BNB.

Currency in Circulation



Source: the BNB.

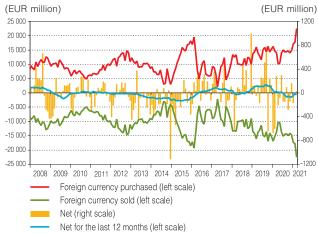
²⁴ Data from sectoral monthly reporting of other monetary financial institutions were used.

a BGN 7.5 billion increase in net foreign assets to BGN 15.3 billion as of February.

Annual growth in credit to non-financial corporations and households²⁵ continued to slow down in the fist two months of 2021, accounting for 4.1 per cent as of February (4.5 per cent by end-2020). Credit trends were further driven by factors involving both demand and supply. Results from Bank Lending Survey points to a subdued demand for investment loans and reduced consumer credit demand in the context of continuing uncertainty surrounding future developments in the macroeconomic environment and further tightening of banks' lending standards and conditions in the fourth quarter of 2020. These developments are likely to continue in the first two months of the year. In addition, the option used by companies and households to reschedule liabilities in terms of private moratorium and the disbursed loans guaranteed by the Bulgarian Development Bank (BDB) under a government's measure in support of vulnerable firms and households are factors likely to support credit growth.

Annual growth rate of credit to non-financial corporations moderated to 2.6 per cent in February 2021 (3.0 per cent by end-2020) driven mainly by the overdraft, while loans, excluding overdraft, reported stronger growth than in the previous year. Newly extended²⁶ corporate loans posted a slight decline in volumes over the first two months on end-2020.²⁷ In terms of the currency structure, an increase was recorded in the share of newly extended loans to corporations in euro at the expense of levs and US dollars. As of February loans in national currency comprised 53.8 per cent of total new corporate loans, while

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

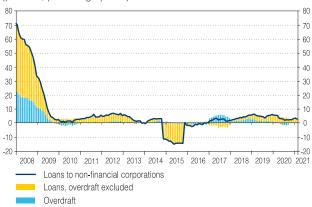


Notes: Net means currency purchased by the BNB minus currency sold by the BNB. Data refer to all bank transactions in foreign currency including liquidity management operations related to the transfer of own funds from lev accounts with the BNB to own accounts with the BNB in euro and *vice versa*.

Source: the BNB.

Annual Growth of 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.

Source: the BNB

²⁵ In February 2021 loans represented the bulk of bank claims on the non-government sector with a share of 97.1 per cent on average for the last 12 months, 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, to non-financial corporations and to financial corporations. As of February 2021 loans to households and non-financial corporations in total non-government sector loans accounted for 93.3 per cent on average in the last 12 months, and therefore developments in these two sectors are analysed.

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

²⁷ Based on 12-month moving average.

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euro-denominated loans occupied 45.5 per cent and dollar-denominated loans 0.7 per cent.²⁸

Credit to households also continued slowing down, accounting for 6.3 per cent as of February 2021 (6.6 per cent by end-2019). Lower growth rates were observed in both consumer and housing loans. Dynamics of other loans to households continued to reflect mainly government repayments 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. Newly extended household loans recorded a slight fall in volumes in January and February 2021²⁹ compared to the end of the prior year, entirely due to the lower amount of new consumer loans.

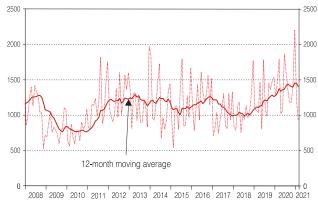
Summarised results of the bank lending survey³⁰ in the fourth quarter of 2020 suggest tightening of credit standards³¹ in approving credit applications of corporations and households, and most significantly for consumer loans. Tightened credit policies (credit standards and conditions³²) reflected the lower risk appetite of banks and increased risk assessments. Bank expectations for the first quarter of 2021 are for tightening in corporate lending standards, mainly in the segment of small- and medium-sized enterprises (SMEs) and easing in housing loans.

In the fourth quarter of 2020 banks report increased demand for short-term credit by SMEs and higher demand for loans by large corporations and decreased demand for long-term loans by SMEs. The main factors contributing to the enhanced demand for corporate loans in the quarter were firms' working capital and invento-

²⁸ The share of loans in national currency and euro for the last 12 months as of February 2021.

New Loans to Non-financial Corporations (Monthly Volumes)

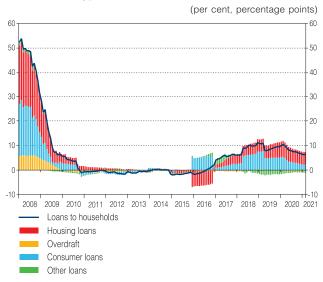
(BGN million)



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

Source: the BNB

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



Notes: 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.

²⁹ Based on 12-month moving average.

³⁰ 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.

³¹ 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.

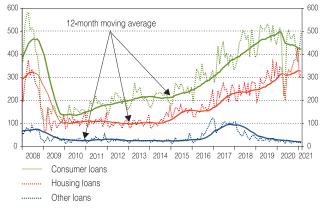
³² Credit conditions typically involve the reference interest rate surcharge, the loan amount, conditions for its utilisation and other conditions, fees and commissions, collateral or guarantees to be provided by a borrower.

ries needs and low interest rates. On the other hand, reduced demand for bank resources for investment purposes dampened the demand for corporate loans. Household demand for consumer loans decreased, which stemmed mainly from the weak economic environment. Concurrently, banks report higher demand for housing loans, needs for funding first home or additional property purchases, persistently low interest rates and housing market prospects contributing most. Banks' expectations for the first quarter of 2021 point to a slight increase in demand for loans by households and enterprises, most concentrated in the segment of short-term loans.

In the second quarter of 2021 non-government sector deposits in the banking system are expected to grow at rate close to those reported in the first two months of the year and to slightly slow down in the second half of the year in line with the projected gradual strengthening of economic activity. Additional growth moderation in credit to non-financial corporations and households may be expected in the next two quarters, reflecting the gradual expiry of the extended moratorium on bank loan repayments. Following the expiry of the deadline for deferring obligations of bank clients, the share of non-performing loans in bank portfolios is likely to increase, which would result in higher interest rates on new loans. As regards demand, the uncertainty surrounding future developments in the macroeconomic environment and relatively weak investment activity of corporations in Bulgaria will probably dampen growth in credit to the private sector.

New Loans to Households (Monthly Volumes)

(BGN million)



Source: the BNB.

Changes in Credit Standards

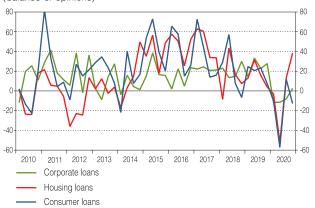
(balance of opinions)



Source: the BNB.

Changes in Credit Demand

(balance of opinions)



Source: the BNB.

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. Data presented in the charts show the change from the previous quarter.

Interest Rates

In the first quarter of 2021 no overnight unsecured deposit transactions in levs were concluded in the interbank market. These developments reflected the lack of incentive for trading in this market amid the ample banking system liquidity. Due to the lack of transactions made for the period LEONIA Plus index was not available.

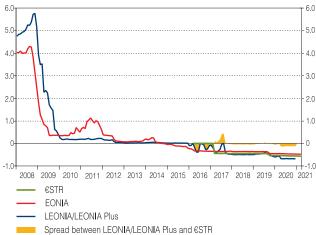
In the context of high banking system liquidity and a growing inflow of attracted funds in the banking sector, deposit rates were kept at historically low levels. As of February 2021 the average weighted interest rate on new time deposits of non-financial corporations and households was 0.06 per cent, declining by 4 basis points from the end of 2020. The slight decrease was driven by the average weighted interest rate on household deposits, while the average interest rates on non-financial corporations' deposits posted an insignificant increase on the end of 2020, accounting for -0.01 per cent as of February. By currency breakdown, slight downward dynamics was observed in deposit rates in euro and levs, while those in US dollars rose somewhat.

Slight downward dynamics was also reported in the lending rates on new loans to corporations and households. As of February 2021 the interest rate on new corporate loans was 2.9 per cent for lev-denominated, 2.3 per cent for euro-denominated, and 3.4 per cent for dollar-denominated, changing insignificantly compared to the end of 2020. 33 In the household sector, the annual percentage rate of charge (APRC) on new housing loans remained close to its December 2020 level, reaching 3.2 per cent as of February. APRC on new consumer loans decreased by 24 basis points to 9.0 per cent in February due almost entirely to a drop in the implicit rate of non-interest service charges.

Most likely, various factors have been pushing interest rates on new loans to their low levels. These factors include increasing volume and low cost of attracted resources, banks' reluctance to increase their rates in order to keep existing or attract new clients, the extended deadline for clients to reschedule liabilities payable to banks.

Overnight Interbank Money Market Rates (Average Monthly Value)

(per cent, percentage points)



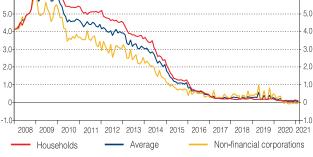
Notes: &STR replaced EONIA on 2 October 2019. EONIA (euro overnight index average) will further be computed and published until the end of 2021 by applying a fixed spread to &STR.

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.

Interest Rates on New Time Deposits

(per cent)
8.0
7.0
6.0
5.0



8.0

7.0

6.0

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

Source: the BNB.

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

Financial Flows, Money and Credit

which defers in time an eventual inability of borrowers to service regularly their obligations and prevents part of the loans from becoming nonperforming, and firms' and households' ability to extend loans under the two government anticrisis programmes in response to the COVID-19 pandemic.34

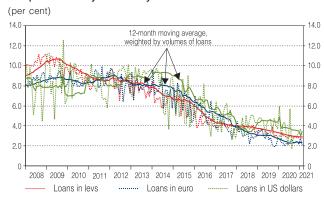
Weak new interest rate dynamics of interest rates on new loans to corporations and households in Bulgaria and the euro area played a key role for retaining the spread between them close to the levels of the end of 2020.35

Over the second and third quarters of 2021 deposit interest rates are expected to remain at historically low levels, reflecting continuous inflows of attracted funds and ample banking system liquidity. Following the expiry of the deadline for deferring obligations of bank clients, the share of non-performing loans in bank portfolios is likely to increase, which would reflect in higher interest rates on new loans.36

In the first guarter of 2021 four auctions for BGN-denominated government securities of two new issues were held: government securities issue with ten-year-and-six-month original maturity (0.10 per cent coupon interest), which is benchmark for the long-term interest rate for assessing the degree of convergence, and bond issue with a maturity of five years (0.00 per cent coupon interest). First two auctions (with nominal value of bids approved amounting to BGN 300 million for the issue with original maturity of 10 years and six months and BGN 200 million for the five-year maturity issue) were held in February. The demand for these issues was high due to early 2021 bulk of maturing government securities (BGN 484 million). At February auctions the average weighted

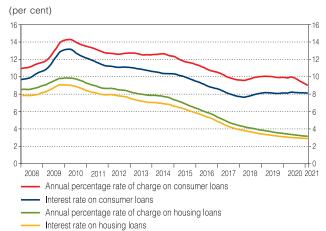
³⁴ These programmes provide for guaranteeing loans to corporations under reduced collateral requirements and lower interest rates along with interest-free loans to individuals, where certain conditions are met.

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



Source: the BNB

Interest Rates and APRC on New Household Loans



Notes: Interest rates in all maturities and currencies are weighted by the relevant volumes of new loans for a 12-month period. The implicit rate is the difference between the APRC and relevant interest rates and reflects the approximate share 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

(percentage points)



Sources: the BNB, the ECB.

³⁵ Spreads are calculated as a difference between average interest rates in Bulgaria and in the euro area across all maturities for the relevant type of credit, overall in national currency and euro, weighted by relevant volumes of new loans for a 12-month period.

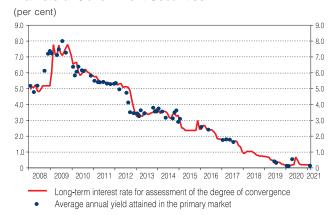
³⁶ The projection of interest rates has been prepared without taking into account the effect of interest-free loans extended to individuals under the Programme for Guaranteeing Interestfree Loans adopted by Council of Ministers' Decision 257 of 14 April 2020 as part of Bulgarian government's anti-crisis measures in support of persons deprived from the opportunity to work due to the COVID-19 pandemic.

yields were -0.17 per cent on five years and 0.14 per cent on benchmark issue government securities. The yield attained for the latter was close to January and February 2020 issues with the same maturity before the declaration of a national state of emergency. Concurrently, in February the long-term interest rate for assessing the degree of convergence fell by 5 basis points on the end of 2020 to reach 0.15 per cent in February and 0.14 per cent in March. In the March reopening of the benchmark issue, given the relatively lower demand and expected higher yield, the Ministry of Finance decided to reject the bids. In the reopening of fiveyear government bond issue in March, bids of BGN 300 million were approved at bid yield of -0.10 per cent.

In the first quarter of 2021 Bulgarian Eurobond yields issued in international capital markets followed an upward trend, most pronounced in bonds with a maturity of 15 to 20 years. Concurrently, the spread between yields of Bulgarian and German government securities narrowed as a result of a stronger increase in German government bond yields. The upward trend in the yields on government securities could be explained by external factors as market participants' optimistic expectations about global economy recovery and increased inflation expectations following the announcement of the large US fiscal stimulus package. An internal country-specific factor potentially pushing down Bulgaria's government bond yields over the first quarter was the improvement of credit rating outlook by a leading international rating agency in February.

A potential resurgence of COVID-19 along with the relatively slow pace of vaccination in the EU countries could increase the uncertainty in financial markets and investors' reorientation to lower risk assets, which could lead to a decline in Bulgarian government bond yields over the projection horizon. At the same time, uncertainty about the formation of a stable government after the parliament elections in Bulgaria and likelihood of new elections in 2021 poses a risk, which is likely to push up Bulgarian government bond yields. External factors behind the current upward trend in government bond yields may also contribute to yield increases of Bulgarian government bonds.

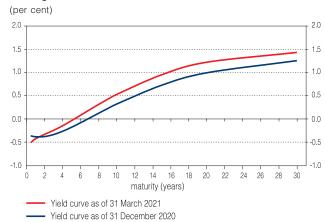
Long-term Interest Rates in the Primary and Secondary Markets of Government Securities



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.

Financial Flows between Consolidated Budget and Other Sectors of the Economy

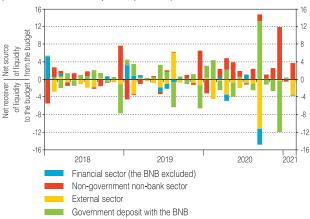
Government revenue and expenditure policies and budget financing operations affect the allocation of liquidity among economic sectors.³⁷

Over the last quarter of 2020 liquid funds were redirected from the budget to non-government non-bank sector, reflecting the continuing government discretionary measures in response to the COVID-19 pandemic and the typical of year-end higher non-interest budget expenditure and payments under the EU Common Agriculture Policy. The total amount of the excess of non-interest budget expenditure over tax and non-tax revenue accounted for 15.3 per cent of GDP over the quarter. In the same period liquidity flows between the budget and the external and financial sectors (excluding the BNB) were limited in their amount. The external sector had a neutral effect on the budget (in per cent of GDP), with grants received under EU programmes and reimbursed funds under the EU Common Agricultural Policy matching the total amount of EU budget contribution costs and interest payments on external loans. In the fourth quarter of 2020 there were neither new government securities issues, nor maturing government securities on the domestic market, with limited in amount inflow of liquid funds from the budget to the financial sector (excluding the BNB) resulting from interest payments on already issued government bonds. This liquidity rechanneled from the budget to non-government non-bank sector in the fourth quarter was the main driver behind the decrease in government deposit with the BNB by BGN 4983 million from end-September, reaching BGN 8021 million by end-December.

Data on consolidated fiscal programme (CFP) performance for early 2021 show that in the first two months non-government non-bank sector remains a net beneficiary of liquidity from the budget as a result of the excess of non-interest budget expenditure over tax and non-tax revenue. The excess reflected government discretionary measures projected in the

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 first quarter of 2021 from BNB macroeconomic forecast prepared in March 2021 are used to assess liquid flows in January and February 2021. Sources: the MF, the BNB.

³⁷ Division of economic sectors in this Section of the Economic Review is based on available information from monthly reports under the Consolidated Fiscal Programme and therefore does not match the sector classification used in the National System of Accounts.

2021 budget³⁸ and lower tax revenue during the first two months of the year.³⁹ At the same time, EU reimbursements under the Common Agricultural Policy typical of the early year were the main drivers for the external sector to be a net source of liquidity to the budget in the January to February period. In February and March 2020 government securities with a nominal value of BGN 800 million were sold on the domestic market and payments on maturing government securities worth BGN 484 million were made. As a result, it may be concluded that the budget effect on the liquidity of the financial sector (the BNB excluded) was negative over the first quarter. 40 In late March the government deposit with the BNB decreased by BGN 754 million on December 2020 to BGN 7267 million. Based on preliminary data as of February it may be suggested that deposit decrease probably reflects the reallocation of liquidity from the budget to the non-government non-bank sector.

In the second and third quarters of 2021 there is uncertainty about the effect of consolidated budget on other sectors' liquidity, stemming mainly from economic activity dynamics and the political uncertainty that emerged after the parliamentary elections in April. Funds on government loan under the European instrument for temporary support to mitigate unemployment risks in an emergency (SURE) following the COVID-19 outbreak are a potential source of liquidity to the budget over the projection horizon. Maturing government securities in the domestic market (in the amount of BGN 323 million) over the third quarter of 2021 will be another factor for rechanneling liquidity from the budget to the financial sector (excluding the BNB), where net budget effect on this sector's liquidity will be driven by the implementation of MF issuing policy.

Developments in financial flows generated in the process of external and internal economic factor interaction contributed to the decrease in Bulgaria's international foreign exchange

³⁸ For further information, see the Main Parameters of the 2021–2023 Budgetary Framework box, Economic Review,

³⁹ For details see Chapter 3, Fiscal Policy Effects on the Economy section.

⁴⁰ In January 2021 there were neither government securities issues, nor maturing government securities on the domestic market.

reserves. By the end of March 2021 the market value of international reserves (including valuation adjustments and price revaluations), an asset on the BNB Issue Department balance sheet, was EUR 28.7 billion (BGN 56.1 billion), posting a decrease by EUR 2.2 billion (BGN 4.2 billion) on end-2020. According to the currency board principles, the decline in international reserves corresponds to the drop in the balance sheet value of the Issue Department liabilities. The lower banks' reserves with the BNB and in particular their excess reserves contributed most substantially to the decreased liabilities of the BNB Issue Department in the first quarter of 2020 *vis-à-vis* December 2020.

In the second and third quarters of 2021 it is possible that excess reserves maintained by banks on accounts with the BNB would decrease further. In the context of ample liquidity in the banking system and slowing growth in credit to the private sector, banks are expected to look for alternative and higher earning opportunities for investing free liquid funds through increasing their foreign assets and Bulgarian government securities portfolios, while observing BNB limits on bank exposures. At the same time, over the projection horizon minimum required reserves are anticipated to continue growing due to the rising deposit base. With regard to currency in circulation, we envisage that their annual growth rates will slightly moderate. Over the forecast horizon, developments in the government deposit with the BNB are expected to reflect mainly the realised budget balance and the MF issuing policy. Funds on government loan under the SURE instrument are a potential external source of liquidity to the budget.

3. Economic activity

Domestic economic activity continued to improve in the fourth quarter of 2020, rising by 2.2 per cent on a quarterly basis despite the tightening of the anti-epidemic measures in Bulgaria. Quarterly GDP growth reflected the formation of a positive contribution of net exports and continuous growth of government consumption, driven mainly by the targeted fiscal measures introduced to support vulnerable households and firms. At the same time, private consumption and fixed capital investments declined on a quarterly basis. Overall for 2020, real GDP of Bulgaria decreased by 4.2 per cent, with almost all sub-components contributing negatively, excluding government and private consumption. During the fourth quarter of 2020 labour market conditions improved somewhat *vis-à-vis* the third quarter: a decline in unemployment and an increase in nominal compensation of employees were reported.

In the first quarter of 2021 most of the short-term economic indicators in Bulgaria indicate that economic activity will continue to increase despite the extended period of the internal anti-epidemic measures. If the assumption that in the coming months the progress toward herd immunity against the coronavirus (a result of the growing number of the people recovered and vaccinated) would allow for a gradual easing of the containment measures in Bulgaria and its major trading partners is realised, over the second and third quarters of 2021 a stronger increase in real GDP is expected on a quarterly basis.

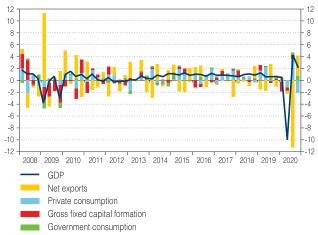
Current Economic Environment

In the fourth quarter of 2020 the quarterly growth rate of real GDP slowed down to 2.2 per cent, according to seasonally adjusted NSI national account data. Growth slowdown can be largely explained by the tightening of anti-epidemic measures in Bulgaria during the reviewed quarter and their negative effect on private consumption and fixed capital formation, both characterised by quarterly declines. At the same time, net exports and government consumption had positive contributions to the quarterly growth in real GDP. Overall for 2020, real GDP of Bulgaria decreased by -4.2 per cent from 2019, with all main components contributing negatively, excluding government and private consumption.

Private consumption had the largest negative contribution to the quarter-on-quarter rate of change in GDP over the last quarter of 2020. It declined by -3.1 per cent from the third quarter in line with the worsening consumer confidence indicator and the accelerating upward trend in net household savings. ⁴¹ The factors which underpinned household income were the

Contribution to GDP Growth by Final Use Component

(per cent, percentage points; on a quarterly basis)



Notes: 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.

 $^{^{\}rm 41}\,\mbox{For details, see the Household Behaviour Section in this Chapter.}$

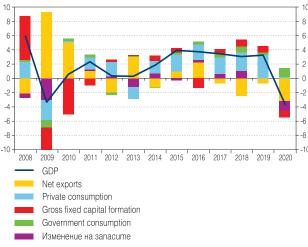
increased net transfers of the government⁴² and reported growth of wages. However, the limited ability to consume certain goods and services and lower consumption propensity of households with rising income were the preconditions for a drop in final consumption expenditure on a quarterly basis.⁴³

During the fourth quarter of 2020 government consumption rose by 4.1 per cent in real terms compared to the previous quarter. This dynamics corresponded to the growth in wage costs of the public sector⁴⁴ and higher healthcare expenditure related to the government measures to overcome the effects of the COVID-19 crisis.

Over the quarter investment in fixed capital fell by -0.1 per cent on a quarterly basis in real terms. BNB estimates⁴⁵ show that this reflected the decrease in public investment, while private investment reported growth from the previous quarter. Data on CFP implementation⁴⁶ indicate that the negative contribution of public investment to the change in gross fixed capital formation was due to the implementation of infrastructure projects financed by the national budget, while investments co-financed under EU programmes reported growth from the previous quarter. Despite the rise in private investments, their amount remained low, which could be explained by the persistently high uncertainty in the economy, available spare capacity and retained managers' attitudes in all main sectors that future production activity will remain below its long-term average in a short-term horizon. In the fourth guarter of 2020 the economic uncertainty indicator constructed by the BNB declined slightly from July-September, though remaining

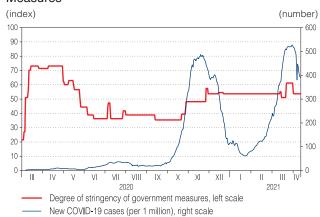
Contribution to Annual Real GDP Growth by Final Use Component

(per cent, percentage points)



Sources: the NSI, BNB calculations.

Stringency Indicator of COVID-19 Containment Measures



Note: The stringency indicator of COVID-19 containment measures changes within a range from 0 to 100, and a higher value indicates more stringent measures.

Sources: Oxford COVID-19 Government Response Tracker, BNB calculations.

⁴² The analysis employs MF data on Consolidated Fiscal Programme implementation and NSSI data on the implementation of the so-called 60/40 measure. For further information on the 60/40 measure, see The Information Bulletin of the NSSI, issue 1 of 2021 (p. 6–10).

⁴³ European Commission's regular consumer survey indicates that the strongest quarterly income growth in the fourth quarter was reported in average income households (second and third quartiles). At the same time, these households showed a comparatively more cautious behaviour, while increasing strongly their savings. It should be noted that average income households reported the largest deterioration of their financial performance in the second quarter of 2020.

⁴⁴ BNB seasonally adjusted data obtained from the short-term statistics of employment and labour costs are used.

⁴⁵ The analysis employs data derived from Consolidated Fiscal Programme implementation reports published by the NSI and the MF, respectively.

⁴⁶ BNB seasonally adjusted data.

above its average historical level in both firms and households.

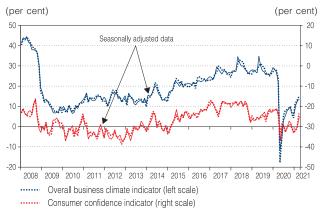
Net exports had the main positive contribution to the quarterly growth of real GDP in the fourth quarter of 2020, driven by the higher quarterly growth rate of services exports compared with that of imports. As regards goods, exports remained close to the previous quarter's level, their amount being limited by demand from third countries, as indicated in the geographical breakdown. The quarterly growth rate of goods imports slowed down in line with the low import component of the government consumption and subdued dynamics of the remaining components of domestic demand.

Economic indicators in Bulgaria for the first quarter of 2021 provide mainly signals of continuous quarterly growth in economic activity despite the extended period of the anti-epidemic measures in place. Seasonally adjusted data show⁴⁷ that in the first quarter of 2021 the overall business climate indicator rose from the previous quarter, reflecting more optimistic perceptions of the managers in all observed sectors: manufacturing, construction, retail trade and services. Regarding the indicator of the future production activity. an improvement in perceptions was reported in the sectors of manufacturing and construction, which corresponded to the increase in production assured with orders. At the same time, the indicator of the expected production activity in services and retail trade worsened from the previous quarter, likely to reflect the fact that these sectors were comparatively stronger affected by the extended containment measures. The uncertain economic environment and insufficient demand continued to be among the main factors hampering business activities, although regarding the insufficient demand, the share of firms pointing to this factor as one having dissuasive effect on their activity decreased somewhat.

According to Eurostat's seasonally adjusted data on consumer confidence, in the first quarter of 2021 consumer sentiment improved on a quarterly basis, which is a precondition for growth in final consumption expenditure of households over the next months.

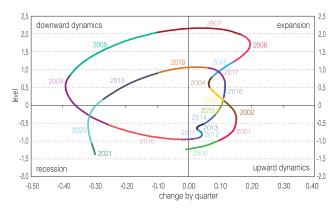
According to NSI data on retail trade volumes for January–February 2021, sales in real terms

Business Climate and Consumer Confidence



Sources: the NSI, Eurostat, BNB calculations.

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 λ = 100) in order to eliminate short-term fluctuations, after which it has been standardised.

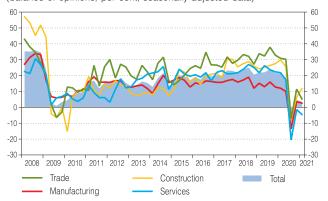
The four chart grids allow to distinguish the four phases of the business cycle.

Sources: the NSI, BNB calculations.

⁴⁷ BNB seasonally adjusted data.

Expectations about Future Economic Activity

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



Sources: the NSI, BNB calculations.

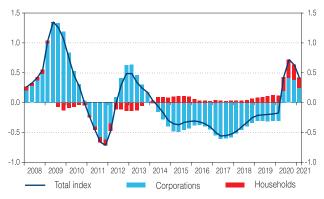
increased from the fourth quarter of 2020. Hence, as of February 2021 the level of real volumes came close to the pre-pandemic level (annual rate of decline of -0.4 per cent as of February).

In January–February 2021 the industrial production index also posted growth compared with the fourth quarter of 2020, albeit at a slower rate of growth. An increase in production was reported in all major sectors: mining and quarrying, manufacturing and production and distribution of electricity and heating and gas. The structure of nominal industrial turnover indicates that slowing growth was due to weaker global corporate sales, which implies more subdued dynamics of exports in the beginning of the year. Production activity in industry in February 2021 remained 3.4 per cent lower than in February 2020.

Construction output fell by -4.0 per cent on average for January–February 2021 compared to the fourth quarter of 2020, which reflected declines in building and civil/engineering construction. This was a prerequisite for subdued investment activity in the first quarter of 2021.

According to seasonally adjusted data of Eurostat, the services production index for January 2021 went up 3.1 per cent from the previous month. The highest quarterly growth of the index was observed in services related to information and communication (7.4 per cent). Concurrently, production indices of trade and accommodation and food service activities increased quarter on quarter by 2.6 and 4.2 per cent, respectively, with these services further recording the largest drop in their production *vis-à-vis* the pre-pandemic period. In January 2021 this decline was -14.6 and -49.3 per cent on an annual basis.

Uncertainty Indicator in the Economy (Corporations and Households)

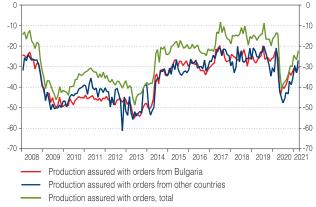


Notes: Higher values of this indicator should be interpreted as an increase in uncertainty. Positive/negative values of the global indicator show that the uncertainty in the economy is above/below its long-run level. This indicator is constructed under a methodology presented in: Ivanov, E. 'Constructing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

Sources: the EC, BNB calculations.

Production Assured with Orders from Other Countries and Finished Goods Inventories

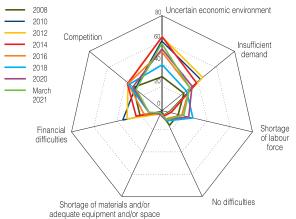
(balance of opinions, per cent; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Factors Limiting Economic Activities of Corporations

(share of corporations)



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

Sources: the NSI, BNB calculations.

Real GDP Growth by Final Use Component

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

		20	16			20	17			20	18			20	19			20	20	
	-1	Ш	Ш	IV	I	Ш	Ш	IV	1	Ш	Ш	IV	I	Ш	Ш	IV	1	II	Ш	IV
Consumption	1.3	-0.1	0.7	2.1	-0.1	1.5	1.3	1.7	1.3	0.6	1.1	0.1	1.5	2.4	0.1	0.5	0.0	-1.0	3.2	-1.2
incl.																				
Household consumption	1.4	-1.2	0.9	3.2	-1.1	1.4	1.5	2.7	1.0	0.2	0.8	-0.6	2.6	3.6	-0.3	-0.1	-0.5	-2.2	5.3	-0.9
Government final consumption expenditure	-0.8	2.5	0.2	1.9	0.8	-0.7	1.4	0.6	2.7	1.4	1.1	-0.5	1.4	0.2	0.6	1.9	-1.0	0.8	2.4	4.5
Collective consumption	-0.7	2.6	1.5	1.2	1.9	0.5	1.3	1.1	0.4	2.5	-0.1	2.1	-2.0	0.8	2.7	0.6	3.4	0.0	1.1	2.0
Gross fixed capital formation	-5.7	-2.3	0.1	-1.7	1.7	3.8	-0.6	0.8	4.7	0.1	-1.7	0.6	4.6	0.2	-1.5	1.1	-8.2	-2.5	3.5	-0.1
Exports of goods and non-factor services	3.0	4.6	0.1	1.2	1.8	2.0	1.7	-2.2	0.4	1.1	-0.4	4.3	-0.2	-2.0	5.1	-0.8	0.6	-22.2	2.0	11.2
Imports of goods and non-factor services	1.0	1.7	1.9	1.4	2.1	1.5	1.9	1.9	1.2	1.4	0.5	1.2	1.7	0.7	1.4	0.7	0.0	-21.3	20.8	4.4
GDP	1.0	1.0	0.7	1.1	0.8	8.0	0.8	0.7	0.6	0.9	1.0	0.9	1.3	0.6	0.6	0.6	0.4	-10.1	4.3	2.2

Source: the NSI.

Real GDP Growth by Final Use Component

(per cent, on an annual basis)

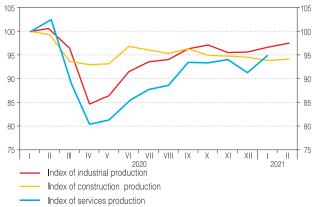
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Consumption	2.7	-3.8	0.5	2.0	1.8	-1.6	1.8	2.7	2.5	3.0	3.5	3.6	1.4
incl.													
Household consumption	2.3	-2.8	0.1	1.7	2.0	-1.7	1.8	2.2	2.1	2.2	2.6	3.2	0.1
Government final consumption expenditure	1.0	-0.8	-0.2	0.3	-0.3	0.0	0.1	0.0	0.1	0.2	0.5	0.2	0.5
Collective consumption	-0.7	-0.2	0.6	0.1	0.0	0.1	-0.1	0.3	0.2	0.4	0.4	0.1	8.0
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	0.9	-1.0
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	2.5	-7.3
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	-3.3	4.0
GDP	6.1	-3.4	0.6	2.4	0.4	0.3	1.9	4.0	3.8	3.5	3.1	3.7	-4.2

Source: the NSI.

The economic indicators dynamics signals an increase in real GDP on a quarterly basis in the first quarter of 2021, but without reaching the level of the corresponding period of the previous year. If the assumption that in the coming months the progress toward herd immunity against the coronavirus due to the growing number of the people recovered and vaccinated would allow these measures to be eased gradually in Bulgaria and its major trading partners is realised, over the second and third quarters of 2021 a stronger increase in real GDP is expected on a quarterly basis. The recovery will be driven by both improved domestic demand and an increasing positive contribution of net exports to the change in economic activity. The fiscal policy is expected to contribute further positively to the quarterly GDP growth by virtue primarily of government investments. The continuous spread of COVID-19 and the internal political uncertainty after the parliamentary elections in April create risks for lower than projected real

Dynamics of the Production Index in Industry, Construction and Services in 2020

(January 2020 = 100; seasonally adjusted data)



Sources: the NSI, Eurostat, BNB calculations.

GDP growth to be reported for the second and third quarters of 2021.

Exports and Imports of Goods and Services

In 2020 the global spread of COVID-19 and the measures of unprecedented magnitude to contain it had a strong negative effect on Bulgaria's foreign trade flows. Foreign trade data for 2020 show that Bulgarian exports and imports of goods declined considerably year on year in nominal terms: by -6.4 and -8.9 per cent, respectively. In both goods exports and imports, the nominal drop was most pronounced in the second quarter of 2020 when the most stringent containment measures were in force to cope with the first wave of the global COVID-19 spread. Non-seasonally adjusted national account GDP data suggest that lower levels of goods exports and imports in nominal terms over 2020 were due to year-on-year decreases in both real volumes (by -5.3 per cent in exports and -4.1 per cent in imports) and prices.

The group of mineral products and fuels⁴⁸ had the strongest negative contribution to the nominal change in goods exports over 2020. Concurrently, exports of base metals⁴⁹ and wood products, paper, ceramics and glass⁵⁰ posted growth in nominal terms throughout 2020.

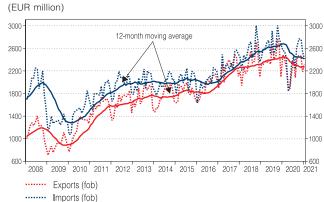
Foreign trade data in January 2021 show that the annual rate of nominal decline in Bulgarian goods exports remained close to that for 2020, with the group of mineral products and fuels having again the most significant negative contribution despite the strong increase in their prices since the beginning of 2021. Base metals solely posted an annual growth in nominal terms for the first month of the year.

The significant negative contribution of mineral products and fuels to the nominal change in goods exports in 2020 *vis-à-vis* 2019 was due to both a strong decline in crude oil prices and a substantial drop in real volumes⁵¹ for the period

$\frac{}{}^{48} \ln$ this Chapter, it should read the mineral products and

fuels group under the Combined Nomenclature.

Dynamics of Nominal Exports and Imports of Goods



Source: the BNB

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⁴⁹ In this Chapter, it should read the base metals and their products group under the Combined Nomenclature.

⁵⁰ In this Chapter, it should read the group of wood products, paper, ceramics and glass under the Combined Nomenclature.

⁵¹ Real volumes of exports of mineral products and fuels have been constructed by using NSI data on export prices of this commodity group and on its nominal values under the SITC.

Exports by Commodity Group, January-December 2020

	Value (EUR million)	Change* (EUR million)	Growth** (per cent)	Contribution** (percentage points)
Wood products, paper, ceramics and glass	1,448.9	54.0	3.9	0.2
Machines, vehicles, appliances, instruments and weapons	7,879.3	-284.7	-3.5	-1.0
Mineral products and fuels	2,313.0	-1,466.0	-38.8	-4.9
Base metals and related products	4,469.0	177.5	4.1	0.6
Animal and vegetable products, food, drinks and tobacco	4,775.3	-17.7	-0.4	-0.1
Textiles, leather, clothing, footwear and other consumer goods	3,155.9	-344.0	-9.8	-1.2
Chemical products, plastics and rubber	3,927.3	-40.3	-1.0	-0.1
Total exports	27,968.7	-1,921.2	-6.4	-

^{*} Change on the corresponding period of the previous year.

from the second to the fourth quarter of the year. Major drivers for this were the weaker external demand driven mainly by the negative economic effects of the containment measures against COVID-19 and one-off supply-side factors.⁵²

Besides mineral products and fuels, the groups of textile⁵³ and machines⁵⁴ also had an essential negative contribution to the change in nominal exports over 2020. Both commodity groups reported year-on-year declines in real volumes for 2020, most pronounced in the second quarter of the year. This was largely due to the worsened economic activity over the period when the most stringent containment measures were in force to cope with the first wave of the COVID-19 spread in Bulgaria's main trading partners. At the same time, export prices in the group of machines⁵⁵ declined in 2020, and those in textile products showed divergent dynamics by sub-component.⁵⁶

In 2020 only the groups of base metals and wood products, paper, ceramics and glass had

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

⁵² In 2020 the largest Bulgarian refinery underwent scheduled refurbishment of its production facilities thereby reducing the capacity of crude oil refining. For more details, see presented results of LUKOIL for 2019 and 2020.

⁵³ In this Chapter, it should read the textiles, leather, clothing, footwear and other consumer goods group under the Combined Nomenclature.

⁵⁴ In this Chapter, it should read the machines, vehicles, appliances, instruments and weapons group under the Combined Nomenclature.

⁵⁵ Real volumes of machine exports have been constructed by using NSI data on export prices and nominal values of exports of the commodity group under SITC.

⁵⁶ Quarterly export deflators for the groups of processed hides and skins and articles thereof, nec, textiles and textile articles (excluding clothing), clothing and clothing accessories and footwear under the SITC were used to estimate the price effect.

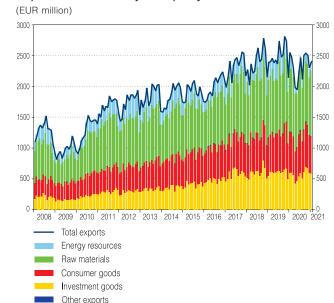
positive contributions to the nominal annual change in goods exports. BNB calculations⁵⁷ show that exports growth in the base metals group was mainly driven by an increase in real volumes.⁵⁸ Within the group of wood products, paper, ceramics and glass, the glass sub-group made the largest positive contribution to the nominal growth.

In 2020 exports of goods to EU countries decreased by 4.2 per cent, which was mainly due to the groups of mineral products and fuels, and textile and machines. Nonetheless, goods exports to Germany, the main trading partner of Bulgaria, and to Belgium increased in 2020. Exports to non-EU countries declined by 10.9 per cent in 2020. By country, exports to Turkey had the largest negative contribution, while by commodity group, mainly mineral products and fuels contributed most significantly to the drop. Reflecting this dynamics, the share of exports to the EU in total Bulgaria's goods exports increased to 67.9 per cent in 2020 (66.3 per cent in 2019).

Balance of payments data for the first two months of 2021 indicate a significant fall in the annual rate of decline of nominal goods exports compared with that for 2020. This tendency is likely to accelerate over the second quarter of 2021 as the stronger negative effects of the pandemic on foreign trade flows of Bulgaria have become increasingly visible since the second quarter of 2020 unlike the first quarter of 2020 when nominal goods exports still recorded growth on an annual basis. We expect that in the second guarter of 2021 real goods exports will post growth on an annual basis, which will accelerate in the third quarter under the influence of rising external demand for Bulgarian goods and the assumption of lifting the majority of containment measures over the second half year. Export prices are expected to pick up on an annual basis during the second and third quarters of 2021.

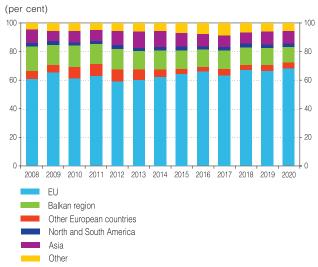
⁵⁷ Real volumes of exports by commodity group under SITC have been constructed by using NSI data on export prices of relevant commodity groups and nominal values of their exports under SITC.

Exports of Commodity Groups by Use



Source: the BNB.

Exports of Goods: Geographical Breakdown



Source: the BNB.

⁵⁸ The increased year-on-year output in one of the largest Bulgarian metal processing plants made a positive contribution during the reviewed period. For more details, see the Aurubis results for October 2019–September 2020.

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In 2020 nominal goods imports posted a drop of 8.9 per cent on an annual basis⁵⁹, driven by a simultaneous decline in both import prices and real volumes⁶⁰. The annual decrease in nominal goods imports was mainly due to energy resources followed by the group of investment goods. The decline in nominal imports of energy resources was driven by a strong annual fall in both real volumes and import prices. 61 The nominal annual decline in imports of investment goods was mainly associated with a drop in real volumes and, to a lesser extent, in import prices on an annual basis.62

Foreign trade data in January 2021 show that the annual rate of decline in nominal goods imports slowed down from that for 2020, with the annual growth in chemical products⁶³ and machines contributing to this over the first month of the year.

In 2020 the share of goods imports from the EU rose to 51.8 per cent (50.9 per cent in 2019), reflecting the lower year-on-year decline in imports from EU countries (-7.3 per cent) compared to that from non-EU countries (-10.6 per cent). Italy and Germany contributed most to the year-on-year decline in imports from the EU in nominal terms, with Russia having the largest contribution among non-EU countries.

Balance of payments data for January-February 2021 signal significant slowdown of the annual rate of decline in nominal goods imports. Our expectations show that real goods imports will grow strongly on an annual basis in the second and third quarters of 2021. This dynamics will largely follow our expectations of domestic demand and exports developments. Import prices are also projected to increase on an annual basis in the second and third quarters of 2021.

According to balance of payments data, in 2020 exports and imports of services fell significantly

Imports of Commodity Groups by Use, January-December 2020

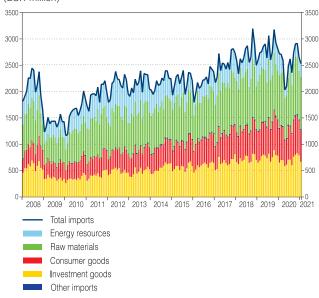
	Value (EUR million)	Change* (EUR million)	Growth** (per cent)	Contribution** (percentage points)
Consumer goods	7,556.8	-144.4	-1.9	-0.4
Raw materials	11,603.5	-131.0	-1.1	-0.4
Investment goods	8,402.0	-700.2	-7.7	-2.1
Energy resources	2,958.7	-2,054.9	-41.0	-6.1
Other imports	209.0	20.5	10.9	0.1
Total imports (cif)	30,730.0	-3,010.1	-8.9	-

^{*} Change on the corresponding period of previous year.

Source: the BNB

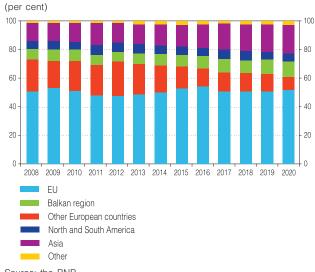
Imports of Commodity Groups by Use





Source: the BNB.

Imports of Goods: Geographical Breakdown



Source: the BNB.

⁵⁹ NSI foreign trade data.

⁶⁰ Non-seasonally adjusted national account GDP data.

⁶¹ Real volumes of energy products imports have been constructed by using NSI data on import prices of the relevant commodity group and nominal values of its imports under SITC.

⁶² Real volumes of imports of machines, equipment and vehicles have been constructed by using NSI data on import prices of the commodity group and nominal values of its imports under SITC.

⁶³ In this Chapter, it should read chemical products, plastics and rubber under the Combined Nomenclature.

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

on an annual basis. According to non-seasonally adjusted national account data, the real component had a major negative contribution to the nominal year-on-year decline in exports and imports of services, while price falls contributed to a significantly lesser extent.

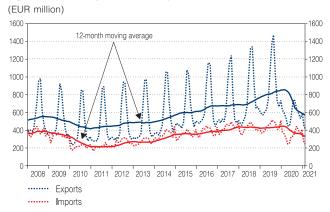
In 2020 services exports declined nominally by 30.4 per cent from 2019. This reflected travel earnings with the largest contribution (-62.8 per cent) and transport services (-29.2 per cent). Despite the partial lifting of the COVID-19 containment measures in Bulgaria and other European countries during the summer season, the operation of accommodation establishments remained limited in 2020. This fact along with the impeded travel services in the context of the COVID-19 pandemic contributed to the strong declines in exports of services. Based on NSI data, in 2020 the number of foreign nationals' visits to Bulgaria fell by 60.4 per cent on an annual basis.

BOP data for January and February 2021 show that the annual rate of decline in services exports remained strong (-31.0 per cent), further driven primarily by services related to travel and passenger transport. Based on NSI data, in the first two months of 2021 foreign nationals visited Bulgaria were 56.6 per cent lower than those in the corresponding period of the previous year. This reflected, to a certain extent, the tightening of part of the COVID-19 containment measures at the end of 2020 and in early 2021.

Imports of services fell nominally by 22.2 per cent in 2020. This resulted largely from reduced expenditure of Bulgarian nationals on travel (-44.1 per cent) and transport (-19.9 per cent) abroad. NSI data for 2020 indicate that the total number of Bulgarians' visits abroad dropped by 43.3 per cent year on year. According to balance of payments data, in January and February 2021 imports of services fell by 31.1 per cent on annual basis, with sub-component dynamics remaining close to the overall movement for 2020.

In the second and third quarters of 2021 services imports are projected to rise significantly in real terms on an annual basis. In services exports, a resumption of the annual growth in real terms may be also expected in the second guarter of 2021, though with a projected stronger annual growth rate in the third quarter

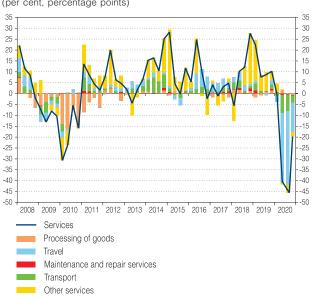
Dynamics of Exports and Imports of Services



Source: the BNB.

Annual Change of Services Exports and Contribution by Sub-component

(per cent, percentage points)



Source: the BNB.

of the year. A materialised assumption of extending the containment measures against COVID-19 in other EU countries and Bulgaria until the end of the first half of 2021 and our expectations of domestic and external demand developments in Bulgaria are of key importance for this dynamics.

Behaviour of Firms and Competitiveness

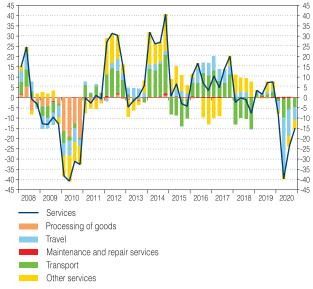
In the fourth quarter of 2020 gross value added growth in Bulgaria moderated to 1.4 per cent quarter on quarter (3.9 per cent in the third quarter) in line with the tightening of internal anti-epidemic measures in November and December. By economic sector, slowdown in total value added growth was due to the weaker rise in services' economic activity combined with a continuous decline in industry's value added. In the agricultural sector, a slight increase in value added was reported compared with the third quarter.

Value added in industry continued decreasing over the fourth quarter of 2020 on a quarterly basis (a trend observed since the second half of 2019), with the quarterly rate of decline reaching -0.8 per cent. The decrease from the third quarter of 2020 was driven by the manufacturing sub-sector, while value added in construction remained broadly unchanged. Despite the downward dynamics in gross value added of manufacturing, in the fourth quarter of 2020 the industrial output index increased in real terms (driven entirely by the processing industry) along with the real turnover in manufacturing (in both internal and external markets). According to the construction production index obtained from the NSI' short-term business statistics, the quarterly change in economic activity for October-December was positively affected by civil/engineering construction, while building construction reported a decline.64

The quarterly growth rate of services value added slowed down to 0.9 per cent in the fourth quarter of 2020 against 2.6 per cent in the third quarter. The main contributor for this was the sub-sector of trade, transport, hotels and restaurants which remained among the sectors most severely affected by the pandemic by year's

Annual Change of Services Imports and Contribution by Sub-component

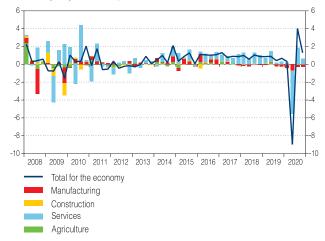
(per cent, percentage points)



Source: the BNB.

Rate of Change in Real Value Added and Contribution by Sub-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.

Economic Activity

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⁶⁴ Building construction includes construction of residential and non-residential buildings. Civil/engineering construction covers infrastructure construction of roads, bridges, pipes, power lines, gas pipelines, telecommunications and other construction works.

end.⁶⁵ The services production index providing a more detailed breakdown *per* economic sector suggests that travel operating services (a quarterly drop of -23.7 per cent) registered the largest decline in economic activity on a quarterly basis in the fourth quarter, likely to reflect the introduction of additional containment measures at the end of 2020.

Economic indicators on dynamics of production and turnover in manufacturing, construction and services in January–February 2021 give largely positive signals about the quarterly change in domestic economic activity over the first quarter of 2021 despite the extension of the anti-epidemic measures against COVID-19 in the beginning of the year.

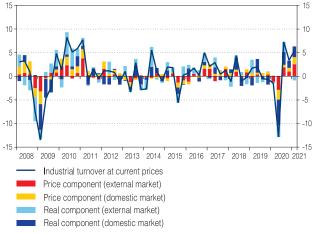
Nominal industrial turnover on average for January-February 2021 rose against the fourth quarter of 2020, with its rate accelerating compared to the quarterly growth observed in the fourth quarter. This was entirely due to the higher volume of sales in the internal market, while real volumes on international markets decreased from the fourth quarter of 2020. Seasonally adjusted industrial production index on average for January-February 2021 also increased from the fourth quarter of 2020, driven entirely by the processing industry. On average, the construction production index for January-February 2021 went down compared with the fourth quarter, with NSI Business Situation Survey data showing that the uncertain economic environment continued to be the main limiting factor for this.

The index of services production⁶⁶ grew on a quarterly basis in January 2021, with the contribution of all major sub-groups, including those directly affected by the containment measures: trade, transport, hotels and restaurants. Assuming a gradual easing of COVID-19 containment measures in Bulgaria and abroad, a stronger quarterly increase in domestic economic activity is expected in the second and third quarters of 2021.

In line with the tightening of COVID-19 containment measures and slowing growth of value added in the total economy, in the fourth quarter of 2020 employment in Bulgaria fell by 0.4 per

Industrial Turnover Dynamics

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



Note: Data for the first quarter are until February 2021. Sources: the NSI, BNB calculations.

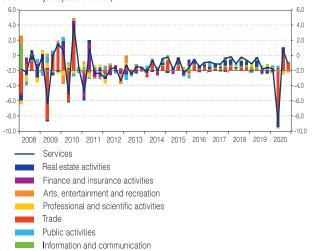
Construction Production Dynamics and New Buildings Permits Issued



Note: Data on construction production index are until February 2021. Sources: the NSI, BNB calculations.

Services Value Added Change and Contribution by Sub-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.

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⁶⁵ In the fourth quarter of 2020 value added in the sub-sector of trade, transport, hotels and restaurants remained 11 per cent lower than that in the first quarter of 2020.

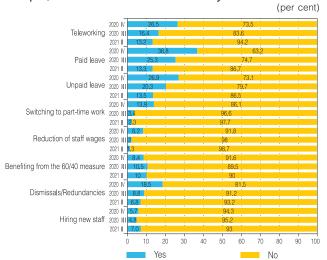
⁶⁶ Eurostat seasonally adjusted data are used.

cent on a quarterly basis, according to seasonally adjusted NSI national account data. By economic sector, the decrease in employment was due to the industry where a decline was observed in both manufacturing and construction. By occupation, the largest decline was observed with respect to technical staff, 67 likely reflecting still subdued dynamics of production activity in some industrial sub-sectors. At the same time, in the fourth quarter of 2020 employment in services grew on a quarterly basis and that in the agricultural sector remained at its preceding quarter's level. The increase in services employment was largely driven by the sub-sector of trade, transport, hotels and restaurants. NSI' short-term employment statistics indicates that within this sectors, an increase was observed only in trade in line with an improvement in sector's activity based on the retail trade turnover index and services production index.

In the fourth quarter of 2020 the number of worked man-hours fell by 1.3 per cent on a quarterly basis, reflecting declines in both employment and worked man-hours per employee. This was probably due to the tightening of COVID-19 containment measures at the end of the year and introduced part-time work and/ or unpaid leave for part of the employees.⁶⁸ According to the Employment Agency data seasonally adjusted by the BNB, in the first quarter of 2021 newly registered unemployed, net, declined from the fourth quarter of 2020, which was only partially due to engagement of unemployed persons. Concurrently, unemployment decreased on a quarterly basis largely as a result of the persons deregistered by the Employment Agency over the quarter. These developments give no grounds to expect a significant recovery in employment over the first quarter of 2021. The expected quarter-onquarter increase in the economic activity over the second and third quarters of 2021 and the gradual containment of the pandemic will be a precondition for gradual increase in the number of employed on a quarterly basis combined with a gradually decreasing unemployment rate.

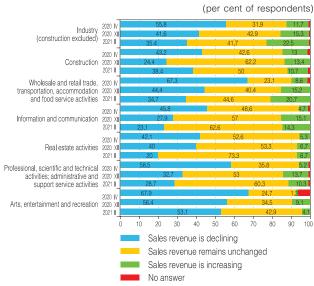
 $^{67}\,\mathrm{Based}$ on data seasonally adjusted by the BNB and obtained from the NSI Labour Force Survey.

Measures Taken by the Firms in Relation to Their Staff in April, December 2020 and February 2021



Source: the NSI

Changes in Firms' Revenue from Sales in April, December 2020 and February 2021

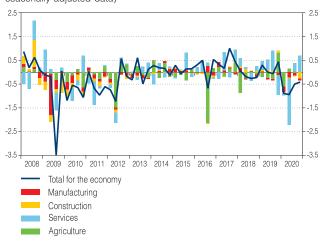


Source: the NSI.

⁶⁸ Based on NSI survey data on the effects of the state of emergency on the business. For details, see the survey results on the NSI website.

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.

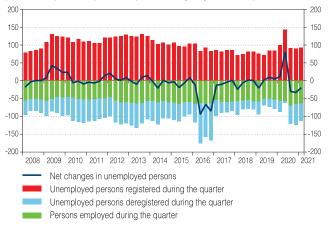
Sources: the NSI, BNB calculations.

In the fourth quarter of 2020 labour productivity⁶⁹ rose on a quarterly basis (2.3 per cent) as a result of reported value added growth in combination with a slight decline in employment. Assuming an easing in the containment measures and switching of employees from part-time to full-time work, labour productivity is expected to continue rising on a quarterly basis in the second and third quarters of 2021.

While hours worked per person declined, the quarterly growth rate of compensation per employee in nominal terms accelerated to 0.5 per cent in the fourth quarter of 2020 compared with 0.4 per cent in the third quarter. A factor supporting the increase in wages for the total economy was the reported growth in economic activity and the resulting contraction in the share of the firms cutting wages as an anti-crisis measure to optimise labour costs, according to NSI surveys. 70 The higher quarterly growth in remunerations for the total economy in the fourth guarter was driven by the sector of services where wages increased in all major sub-sectors, the largest growth observed in public sector wages. Increased wages in the public sector was underpinned by higher expenditure on wages of front-line employees in fighting the

Changes in the Number of Unemployed Persons

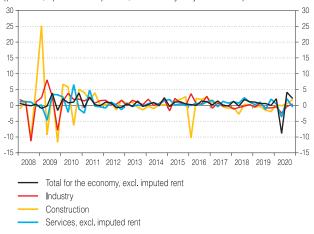
(number of persons (thousand); seasonally adjusted data)



Sources: Employment Agency, BNB calculations.

Labour Productivity Dynamics (Value Added *per* Employee)

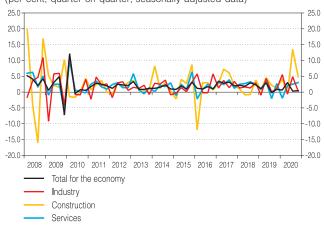
(per cent, quarter on quarter; seasonally adjusted data)



Source: the NSI.

Compensation per Employee at Current Prices

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



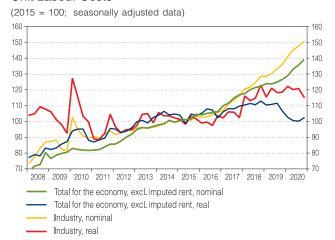
Sources: the NSI, BNB calculations.

 $^{^{\}rm 69}\,\text{Labour}$ productivity is calculated after adjusting gross value added for imputed rent.

 $^{^{70}}$ Stated in the NSI surveys on the effects of the state of emergency on the business.

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Unit Labour Costs



Sources: the NSI, BNB calculations.

COVID-19.⁷¹ In the second and third quarters of 2021 compensation *per* employee is expected to continue rising on a quarterly basis in line with higher economic activity and wage increases in the public sector set in the state budget for 2021.

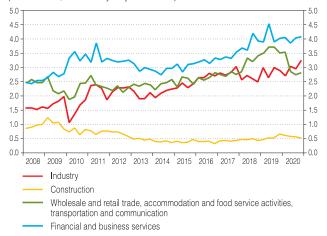
Developments in compensation of employees and labour productivity in the fourth quarter of 2020, according to seasonally adjusted data, led to an increase in unit labour costs⁷² in both nominal and real terms (by 2.5 and 2.0 per cent) on a quarterly basis. The highest increase in nominal unit labour costs was reported in the construction sector, followed by services.

In the fourth quarter of 2020 gross operating surplus at current prices rose by 5.4 per cent on a quarterly basis. In line with value added developments, the services sector, especially general government; education, and human health and social work activities, had the major positive contribution to the change in the operating surplus. An improvement in financial performance from the previous quarter was reported also in the firms of the manufacturing and agriculture sub-sectors.

Over the fourth quarter of 2020 corporations continued to use various external sources of funding which supported their operation after the negative shock in the second quarter of the year. By economic sector, the largest external financing in October–December 2020 was used

Gross Operating Surplus at Current Prices

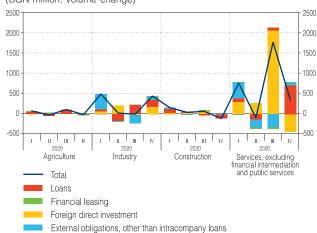
(BGN billion; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Financing Sources*

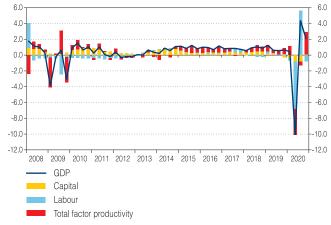
(BGN million, volume change)



* 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.

⁷¹ For details on wage dynamics in the public sector, see Section *Fiscal Policy Effects on the Economy* in this Chapter.

⁷² Unit labour costs are calculated after adjusting gross value added for imputed rent.

Gross Value Added Change

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

		20	16			20	17			20	18			20	19			20	20	
	I	П	Ш	IV	I	Ш	Ш	IV	I	П	Ш	IV	I	П	Ш	IV	I	Ш	Ш	IV
Agriculture, forestry and fishing	5.9	0.2	3.8	-1.2	6.0	0.5	1.4	0.7	-2.4	-1.5	0.9	0.1	0.7	2.5	0.6	-0.4	-1.9	-0.5	-1.9	0.4
Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities	3.8	0.5	1.7	2.3	0.0	1.1	-0.1	-0.5	-0.3	-0.8	-0.2	-0.3	-0.4	0.4	-1.1	-1.3	-1.6	-3.4	-0.9	-1.0
Construction	-11.0	1.2	1.3	1.1	1.1	1.1	0.0	-0.3	0.5	-0.3	0.8	1.3	0.9	1.3	-0.1	-0.5	-0.6	-0.9	0.0	0.1
Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities	4.0	0.4	0.0		0.0	0.0	0.4			0.4		4.0	0.7	0.0	0.0	0.4	0.7	04.0	10.0	0.4
	-1.2	2.1	0.6	1.0	0.8	0.6	0.4	1.4	1.5	0.1	1.0	1.3	0.7	0.6	0.6	0.1	•		10.6	3.4
Information and communication	7.6	1.5	1.0	1.7	-0.4	3.3	2.7	2.8	2.1	2.9	2.9	3.5	3.7	2.9	1.8	1.8	1.4	1.8	-0.8	-0.1
Financial and insurance activities	3.6	2.9	-1.7	2.2	-0.9	-0.4	2.0	-1.8	2.2	0.0	1.5	0.7	0.4	1.0	-0.2	2.6	-0.1	2.0	0.2	0.0
Real estate activities	3.2	0.8	1.9	1.1	2.1	2.5	-0.7	4.6	3.6	1.3	3.5	2.5	-1.0	4.8	-2.0	-2.4	-0.9	-4.2	1.6	0.3
Professional, scientific and technical activities administrative and support service activities		1.5	0.1	-0.3	0.4	0.1	1.0	2.2	2.6	2.0	3.2	0.1	6.0	2.3	1.2	3.6	-1.9	1.4	-3.5	-0.9
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	1.1	0.7	0.8	-0.4	-0.1	0.9	0.2	1.4	0.8	0.3	0.7
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	0.2	-0.9	1.2	2.3	0.7	2.7	0.3	1.0	-0.6	1.0	-0.4	-0.8	5.0	-3.7	-0.7	-1.3	-4.8	-0.9	-4.8
Gross value added, total for the economy	1.1	1.1	1.0	1.1	1.3	0.8	0.9	0.8	1.0	0.6	1.0	0.9	0.8	0.9	0.4	0.7	0.3	-9.0	3.9	1.4

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	2020
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	4.1	-5.3
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	-1.2	-5.2
Construction	15.1	6.8	-18.7	-4.0	-4.5	0.3	-3.4	4.3	-7.3	4.5	1.4	3.6	-1.0
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	3.1	-11.9
Information and communication	74.2	-4.3 -2.5	0.3	12.4	-3.2	2.1	0.7	2.2	16.5	6.1	10.6	13.1	0.6
Financial and insurance activities	10.5	13.2	24.7	-3.3	-3.2 -4.7	-7.5	0.7	-0.9	6.9	1.0	2.7	3.0	2.5
Real estate activities	-5.0	1.2	3.6	-3.3	-4.7 2.9	-7.5 -2.2	2.2	-0.9 2.4	5.9	7.2	11.4	4.9	-3.5
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	12.7	-6.6
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	0.3	5.9
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	1.1	-15.6
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	3.3	-4.3

Source: the NSI.

by the firms in manufacturing and services, while construction reported lower attracted funds. From the perspective of the type of sources, bank loans, followed by assumed external obligations, contributed most markedly to the attracted financing of corporations. At the same time, attracted funds in the form of foreign direct investment reported a decline during the quarter.

GDP growth decomposition by production factor suggests that the decrease in the labour factor as a result of lower worked man-hours contributed most significantly to the slowdown in economic activity over the fourth quarter of 2020. At the same time, total factor productivity and capital had positive contributions to the growth.

Household Behaviour

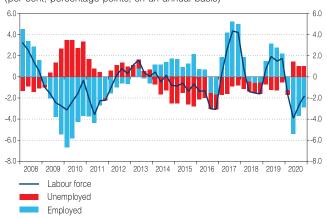
In the fourth quarter of 2020 labour supply remained subdued and household consumption decreased on a quarterly basis. These developments correspond to the continuing fall in employment and worsened consumer confidence associated with the increasing number of COVID-19 cases and the introduction of tighter containment measures at national and European level at the end of 2020.

The NSI Labour Force Survey shows that labour supply, as measured by the labour force, slightly rose on a quarterly basis in the fourth quarter of 2020⁷³, while the annual decrease slowed down due to a slower decline in employment. The quarter-on-quarter increase in labour force amid a further fall in the working-age population resulted in a rise in the labour force participation rate⁷⁴ compared with the previous quarter but the annual decline was sustained. The labour force participation rate accounted for 72.2 per cent on average for 2020 against 73.2 per cent in 2019. Concurrently, the number of discouraged people rose both on a quarterly and annual basis, with persons with primary and lower, and secondary education contributing to this growth.

The Labour Force Survey shows that in the fourth quarter of 2020 the seasonally adjusted

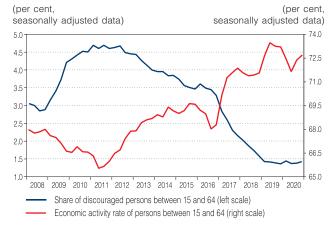
Contribution to the Change in Labour Force by Component

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



Sources: the NSI, BNB calculations.

Economic Activity and Share of Discouraged Persons



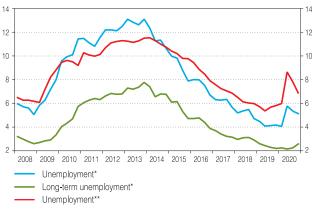
Sources: NSI Labour Force Survey, BNB calculations.

 $^{^{73}}$ Quarterly growth is calculated based on BNB seasonally adjusted data.

⁷⁴ The labour force participation rate is the proportion between economically active persons (labour force) and population of the same age.

Unemployment Rate

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



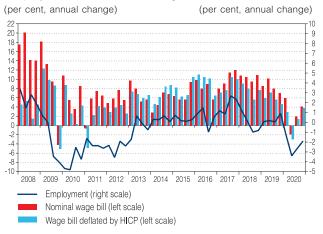
- * NSI data.
- ** Employment Agency data.

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

unemployment rate⁷⁵ fell to 5.1 per cent in the fourth quarter 2020 against 5.3 per cent in the third quarter (according to non-seasonally adjusted data the unemployment rate increased to 5.2 per cent against 4.8 per cent in the third quarter). Concurrently, the number of long-term unemployed (over one year) increased. Administrative statistics data of the Employment Agency, which are published more frequently, also reported a decline in the unemployment rate⁷⁶ over the fourth quarter of 2020, which was sustained in the first quarter of 2021. Concurrently, in the fourth quarter the number of persons deregistered by the Employment Agency increased. Taking into account the incomplete recovery of the macroeconomic environment and ongoing effects of containment measures in Bulgaria, government policies intended to protect employment⁷⁷ are likely to play the major role in the unemployment dynamics.

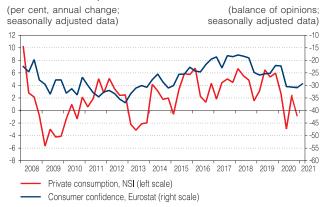
The NSI national account wage bill data suggest that annual labour income of employed

Employment and Nominal Wage Bill



Sources: the NSI - SNA, BNB calculations.

Private Consumption and Consumer Confidence

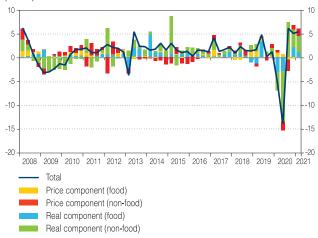


Note: Quarterly data for the consumer confidence represent the average monthly values of Eurostat consumer confidence indicator.

Sources: the NSI, Eurostat, BNB calculations.

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 first quarter of 2021 represent the quarterly change of the average value of the indicator for January and February compared to the fourth quarter of 2020.

Sources: the NSI, BNB calculations.

 $^{^{75}}$ The 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.

⁷⁶ The definition of an unemployment rate according to Employment Agency data corresponds to that referred to in note 75, but a constant rate of labour force is used, comprising the number of persons in the respective age group since the last census of the population. Employment Agency data on the unemployment rate are not directly comparable to NSI Labour Force Survey data on the unemployment rate. The series is seasonally adjusted by the BNB.

⁷⁷ Including the subsidised employment measure (the so-called 60/40), the 'Short-term support for employment in response to the COVID-19 pandemic' measure, the 'Employment for you' scheme and 'Save me' measure.

Employment and Income Dynamics

		20)17			20)18			20)19			20	20	
	-1	Ш	Ш	IV	-1	Ш	Ш	IV	I	Ш	III	IV	-1	Ш	Ш	IV
(per cent, quarter on quarter; seasonally adjusted data	.)															
Employed persons	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	-0.5	-0.4
Nominal wage per employee*	3.1	2.8	3.0	2.0	2.2	1.8	3.0	2.2	1.1	2.9	-0.5	8.0	8.0	3.5	0.7	0.4
Real wage per employee**	2.5	2.5	2.9	1.1	1.6	1.1	1.9	1.7	0.7	2.0	-1.3	0.4	8.0	4.1	0.5	0.1
Wage bill, nominal terms	3.1	2.5	3.2	2.2	2.8	2.0	2.5	2.6	1.3	3.7	0.2	0.6	0.5	-1.2	1.8	1.4
Wage bill, real terms**	2.5	2.2	3.2	1.3	2.2	1.3	1.5	2.1	1.0	2.7	-0.5	0.2	0.4	-0.7	1.7	1.1
(per cent, on corresponding quarter of previous year, r	ion-sea	sonally	adjust	ed data	a)											
Employed persons	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	-2.6	-1.9
Nominal wage per employee*	6.9	9.3	11.3	11.7	9.4	9.0	9.5	10.3	8.0	8.5	5.1	5.7	5.9	2.9	6.1	6.8
Real wage per employee**	6.1	7.8	10.4	9.8	7.7	6.5	5.6	7.1	5.4	5.6	2.8	3.3	2.9	1.8	5.5	6.5
Wage bill, nominal terms	8.0	9.1	11.5	12.0	10.9	10.6	9.5	10.9	8.6	10.2	8.0	7.1	6.0	-1.9	2.0	4.1
Wage bill, real terms**	7.2	7.6	10.6	10.1	9.1	8.0	5.7	7.7	6.0	7.3	5.6	4.7	2.9	-2.9	1.4	3.8

Employment and Income Dynamics

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
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	-2.3
, , ,		10.6				8.3	5.6	5.8	6.2			6.8	
Nominal wage <i>per</i> employee*	13.5		12.0	6.5	8.0					9.9	9.6		5.4
Real wage <i>per</i> employee**	1.6	8.1	8.7	3.0	5.4	8.0	7.4	6.9	7.6	8.6	6.7	4.2	4.2
Wage bill, nominal terms	16.3	8.3	7.1	4.9	6.0	/.1	5.4	6.8	8.1	10.2	10.5	8.4	2.5
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	5.8	1.3

^{*} 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.

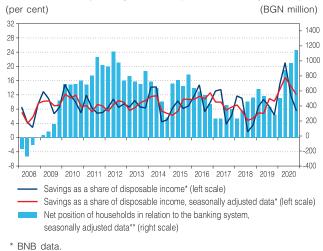
Sources: NSI - SNA, BNB calculations, Eurostat.

rose both in nominal and real terms in the fourth quarter of 2020. Concurrently, income growth in the economy slowed down quarter on quarter, reflecting mainly the fall in employees in industry. Wage growth⁷⁸ per employee also slowed down both in nominal and real terms as a result of the slower rise of remunerations in manufacturing.

Despite slight income growth, the continuous fall in employment and worsened consumer confidence led to a 3.1 quarterly decline in private consumption in the fourth quarter of 2020. Concurrently, quarter-on-quarter growth in nominal retail trade turnover moderated but continued to increase in real terms over the fourth quarter of 2020, with retail sales of food, drinks and tobacco contributing most strongly to this growth. Data for January and February 2021 reported a rise in quarter-on-quarter retail trade turnover both in nominal and real terms. Consumer confidence also rose in the first quarter of 2021 as a

Sources: NSI Household Budget Survey, the BNB.





^{**} Data deflated by HICP.

^{**} NSI data.

 $^{^{78}\,\}mbox{According}$ to the NSI national account wage bill data.

Retail Trade Turnover

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

		201	17			20	18			20	19			20	20		2021
	1	II	Ш	IV	1	Ш	Ш	IV	I	Ш	Ш	IV	-1	Ш	Ш	IV	I
Retail trade, excluding motor vehicles and motorcycles incl.	2.4	0.5	1.4	1.1	0.1	1.5	0.2	1.0	2.1	1.5	0.4	2.1	-6.6	-11.6	4.5	4.8	6.4
Food, drinks and tobacco products	0.2	0.4	1.5	3.2	1.2	2.7	1.0	-3.0	-4.0	8.8	1.0	0.0	-8.8	-8.0	-0.2	5.4	2.7
Textile, clothing, footwear and leather	12.6	-2.7	-5.3	0.5	3.9	6.4	1.8	4.9	-1.2	-4.2	3.1	4.1	-18.5	-43.0	62.6	-6.6	21.6
Household appliances, furniture and other household goods	1.0	2.9	1.5	1.2	1.3	3.2	1.5	0.9	4.1	2.4	2.7	4.2	-8.5	-6.7	14.8	5.2	3.1
Computer and communication equipment, etc.	-1.8	0.5	0.5	2.1	6.6	1.9	-1.9	-4.0	4.9	0.9	2.1	0.2	-13.6	-14.0	18.3	9.4	6.6
Pharmaceutical and medical goods, cosmetics and toiletries	0.9	2.4	1.3	1.3	-1.6	2.0	1.6	2.3	-17.3	0.7	1.5	1.9	5.5	-19.4	9.0	7.9	-1.2
Unspecialised shops with different kinds of goods	4.2	2.0	2.1	0.3	4.2	2.9	0.3	0.1	9.6	2.4	0.0	-0.4	-2.7	-4.1	-1.0	11.4	-4.3
Automobile fuels and lubricants	6.8	-2.3	1.2	-1.1	-7.6	3.5	-0.9	6.0	7.0	-1.8	-0.9	0.2	-10.5	-24.0	18.3	-0.7	3.8

^{*} Data for the first quarter of 2021 are for January and February.

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	2020
Retail trade, excluding motor vehicles and motorcycles	8.9	-7.7	-8.4	0.6	5.3	3.8	10.2	11.8	6.1	5.4	3.3	5.6	-10.6
incl.													
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	5.2	-10.9
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	4.6	-29.8
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	10.7	-0.8
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	3.2	-12.6
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	-13.3	-2.0
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	12.6	-4.0
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	10.4	-21.2

Source: the NSI: short-term business statistics.

result of improving expectations about consumers' financial position, the overall economic situation and the unemployment rate in the following 12 months. Employment Agency data show that recruited persons in the first quarter of 2021 increased and the number of newly registered unemployed decreased. As a result household consumption could be expected to rise on a quarterly basis over the first quarter of 2021.

The NSI Household Budget Survey data show that household savings as a share of income⁷⁹ continued to decline in the first quarter of 2020 but remained higher compared with the corresponding period of 2019, consistent with high uncertainty and worsened consumer confidence. Concurrently, household assets

 $^{^{79}\,\}mathrm{Income}$ is gross income reduced by taxes and social security contributions.

measured by their net position in the banking system increased from the previous quarter due to stronger growth of the deposit base and the slower increase in loans compared with the previous quarter.

The lift of containment measures and the gradual curb of the pandemic are expected to boost the economic activity and correspondingly to result in higher labour demand in the second and third quarters of 2021. Enhanced economic activity coupled with the higher minimum wage from early 2021 and the planned public sector wage rise will be the factors behind the increase in private sector wages. As a result labour supply is also expected to rise in the second and third quarters of 2021.

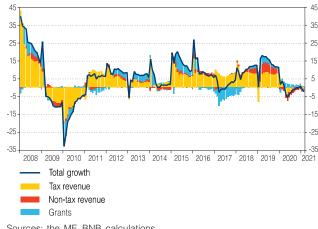
Fiscal Policy Effects on the Economy

In 2020 fiscal policy had a strong positive impact on the economic activity in terms of transfers to households, government consumption and investment. Bulgaria's favourable fiscal position, determined by the lower debt burden and high liquidity buffers, provided a fiscal space for the government to initiate discretionary measures intended to smooth the implications of the crisis caused by the spread of COVID-19. To finance the discretionary measures and preserve liquidity buffers in September 2020 the government issued eurobonds on international capital markets. This was the main factor for the increase in the general government sector debt.80 Uncertainty caused by the COVID-19 crisis was the reason behind comparatively high precautionary savings in the economy in 2020, which limited the effect of fiscal measures on domestic demand developments.

In 2020 the budget deficit on the consolidated fiscal programme⁸¹ amounted to BGN -3532 million (-3.0 per cent of GDP). The major factors behind the budget deficit were the discretionary measures initiated by the government to address the consequences of the proliferation of COVID-19 and the effects of automatic stabilisers in the budget in the context of the crisis caused by the pandemic. The balance on the

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.

⁸⁰ The general government sector debt rose from 20.2 per cent of GDP at the end of 2019 to 25.3 per cent of GDP at the end of the third quarter of 2020.

⁸¹ Based on monthly reports on the implementation of the 2020 budget, published on the Ministry of Finance website on 29 January 2021.

consolidated fiscal programme declined by BGN 2383 million compared with 2019, reflecting a rise in total budget expenditure by 5.8 per cent and a lower increase in total budget revenue by 0.6 per cent over the year. Tax revenue contributed positively to budget revenue growth followed by revenue from grants, which contributed less, while non-tax revenue reported a fall. Receipts from social and health insurance and revenue from personal income tax rose year on year, contributing to growth in tax revenue (1.6 per cent annual growth), while revenue from indirect taxes fell by 0.7 per cent.

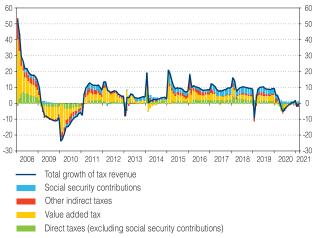
Social payments contributed most strongly to growth in 2020 total budget expenditure, followed by staff costs and subsidy payments. Payment of allowances to pensions and other social benefits, health insurance payments and unemployment benefits added to growth of social payments (by 11.1 per cent). Staff costs rose by 13.3 per cent driven by higher wages in the public sector and of people working at the front line in the fight against the spread of COVID-19. The fiscal measures launched to maintain employment in the economy, such as the so-called '60/40' measure contributed to the increase in subsidy payments by 31.9 per cent on an annual basis.82 Lower national budget capital expenditure in 2020 reflected the base effect of the payment made in August 2019 for acquiring new fighter aircraft, while capital expenditure funded by EU resources exhibited a 2.5 per cent rise on an annual basis. Concurrently, non-financial account data show that investment in the general government sector rose by 28.1 per cent on an annual basis for the first nine months of 2020, suggesting the fiscal policy's strong effect on Bulgaria's economic activity.

The additional public spending incurred as a result of the pandemic, including higher health-care and staff costs, contributed most to the accelerated increase in government consumption in 2020 compared with 2019. According to national account data, in 2020 government consumption rose by 7.5 per cent on an annual

⁸² According to NSSI data about BGN 649 million was paid on the so-called '60/40' measure at the end of 2020. Information in available on https://www.noi.bg/newsbg/6357-60-40-2020.

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

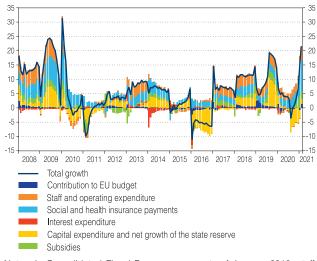
(per cent; percentage points)



Sources: the MF, BNB calculations.

Contributions of Major Groups of Expenditure to Total Budget 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 2020 and 2021'.

Sources: the MF, BNB calculations.

⁸³ According to non-financial account data of the general government sector for the first three quarters of 2020.

basis in real terms (against annual growth of 2.0 per cent in 2019). In the fourth quarter of 2020 government consumption grew 4.1 per cent on a quarterly basis in real terms.

Data on consolidated fiscal programme (CFP) performance for the first two months of 2021 and the March estimates of the Ministry of Finance indicate that the fiscal policy continued to support the economic activity. By the end of February 2021 the consolidated fiscal programme budget balance reported a surplus of BGN 24.3 million, posting a decline of BGN 1456 million compared with the corresponding period of the prior year.⁸⁴ In January and February 2021 total budget expenditure fell by -2.3 per cent on an annual basis, reflecting mainly the reported decline in revenue from grants and the fall in tax revenue to a lower extent, while non-tax revenue posted slow growth. The fall in tax revenue (by -1.1 per cent) was mainly due to lower revenue from excise duties and corporate taxes. Social and health insurance, personal income tax and VAT revenue contributed positively to the dynamics of tax revenue. In February 2021 social and health insurance revenue and that from personal income tax rose year on year by 3.3 per cent and 5.7 per cent respectively. These developments reflected the government measures in support of employment and higher wages in the economy. Rises in the minimum wage and minimum insurance threshold of self-employed persons since the beginning of the year also had a positive effect on the dynamics of these revenues.

VAT receipts from domestic and intra-Community acquisitions (net) rose by 7.9 per cent, while VAT revenue from imports posted a fall of -14.2 per cent on an annual basis. VAT revenue from domestic transactions indicated an increase despite the expected negative budget effects as a result of lower tax rates on particular goods and services⁸⁵ effective for the period from the

⁸⁴ Based on Ministry of Finance Monthly Bulletins on state budget performance and major CFP indicators for 2020 and 2021. BNB calculations.

⁸⁵ With effect from 1 July 2020, a lower VAT rate of 9 per cent has been 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 2020, 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.

beginning of July 2020 to the end of 2021 and against the background of a relatively low level of the non-refunded tax credit⁸⁶. Discretionary measures intended to protect employment, higher public sector wages and transfers to households are the factors supporting growth in VAT revenue from transactions in Bulgaria.

In the first two months of 2021 annual growth in total CFP expenditure accounted for 21.5 per cent, with social expenditure contributing most significantly. Growth in social costs (22.8 per cent) was driven by increased spending on pensions and social benefits under the Social Security Code (by 25.3 per cent on an annual basis) and higher expenditure on health insurance payments (by 19.0 per cent). Increased social payments reflected mainly the higher minimum and maximum amount of pensions, temporary monthly supplement payments of BGN 50 to pensions (effective as of August 2020), the base effect of increased pensions from July 2020, as well as higher spending on unemployment benefits.87 Pension and other cash benefits contributed to the higher household disposable income having a potential positive effect on the economic activity through stronger private consumption. Staff expenditure growth accounted for 16.5 per cent compared with February 2020. It reflected the higher expenditure on public sector wages (in public administration, education and for employees at the front line in the fight against the spread of COVID-19). The upward dynamics of costs on health insurance payments and wages in early 2021 signalled that the positive contribution of government consumption to real GDP was sustained in the first quarter of the year.

Subsidy payments rose by 68.6 per cent in February 2021, reflecting the subsidy payments financed by EU resources and expenditure on subsidised employment funded by national

⁸⁶ Based on MF Monthly Bulletin on Budget Performance and Major Indicators under the Consolidated Fiscal Programme as of February 2021 the non-refunded tax credit amounted to BGN 88.7 million.

⁸⁷ As of 1 October 2020 the increase in the minimum amount of the unemployment benefit from BGN 9 to BGN 12 *per* day and the extension of its term from four to seven months became effective.

resources⁸⁸. Capital expenditure picked up by 33.3 per cent year on year driven entirely by the positive contribution of the national budget capital expenditure amid the negative contribution of capital expenditure on EU funds.

In the second and third quarters of 2021 the fiscal policy effects on the economic activity through transfers to households, government consumption spending and public investment are expected to remain positive. This forecast does not reflect potential effects of the political cycle in Bulgaria in case of a possible change in the current fiscal policy measures. The increase in social payments and public sector wage costs projected in the 2021 state budget is a prerequisite for these factors to further support household disposable income. Concurrently, wage costs and higher health insurance payments are expected to have a positive effect on the government consumption dynamics. Implementation of infrastructure projects funded by the national budget is expected to continue, with public investments financed by EU resources are also likely to increase given the last phase of the 2014–2020 programme period.⁸⁹ The specific political situation of forming a government after the parliamentary elections in Bulgaria in early April increased uncertainty about possible changes to fiscal measures in terms of both extending the existing measures and announcing new discretionary measures.

⁸⁸ According to NSSI data, as of 16 March 2021 funds on subsidised employment paid under the so-called '60/40' measure rose to around BGN 939 million. From the beginning of 2021 to 16 March payments in support of employers to protect employment exceeded BGN 290 million. Information is available on https://www.noi.bg/newsbg/6357-60-40-2020.

⁸⁹ The BNB 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 instrument known as the Next Generation EU due to lack of sufficient detailed information by the time of preparing the forecast. The forecast includes only assumptions of a partial pre-funding, which is expected to be received under the Recovery and Resilience Facility in 2021, and of the funds expected to be received under the REACT-EU instrument (BGN 820 million in 2021).

Key Budget Indicators Performance for 2020 and 2021

Consolidated Fiscal Programme	20 January –	20 February ¹	20 January –	
O Company	BGN million	per cent ²	BGN million	per cent ²
Total revenue and grants	7,464	3.4	7,294	-2.3
Tax revenue	5,836	4.7	5,775	-1.1
incl. social security and health insurance contributions	1,765	9.4	1,822	3.3
Non-tax revenue	1,082	-7.9	1,090	0.7
Grants	545	16.7	429	-21.3
Total expenditure (incl. the contribution to EU budget)	5,984	4.9	7,270	21.5
Staff	1,656	12.5	1,930	16.5
Operating expenditure	562	0.4	572	1.7
Interest	48	-53.6	48	0.8
Social expenditure, scholarships	2,780	3.9	3,413	22.8
Subsidies	275	19.1	464	68.6
Current and capital transfers to abroad	6	9.8	4	-22.9
Capital expenditure and government reserve growth	351	22.8	445	26.8
incl. capital expenditure	348	21.7	464	33.3
Contribution to the general budget of the European Union	305	-17.9	393	28.9
	BGN million	difference ³ (BGN million)	BGN million	difference ³ (BGN million)

Budget balance, on a cash basis	1 480	-33	24	-1 456
Tax revenue under the state budget	20 January –		20 January –	
	BGN million	per cent ²	BGN million	per cent ²
Tax revenue	3,915	1.9	3,791	-3.2
Corporate tax	96	23.9	43	-54.9
Personal income tax	674	4.5	712	5.7
Value added tax	2,152	-2.0	2,171	0.9
Excise duties	920	7.7	806	-12.4
Customs duties and taxes	40	-0.6	37	-6.3
Insurance premia tax	12	12.5	12	-4.1
Other taxes	21	9.1	10	-54.5

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

Source: the MF.

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.

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

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

4. Inflation

In March annual inflation accelerated compared with end-2020 amounting to 0.8 per cent. This reflected mainly the shrinkage of the negative contribution in energy products as a result of the strong upward dynamics of international oil prices on an annual basis. Core inflation increased compared with the end of prior year due to a slower price decrease in non-food goods and indirect effects of higher fuel prices. Since early year the annual growth rate of prices in the food group tended to slow down due mainly to lower prices of unprocessed food.

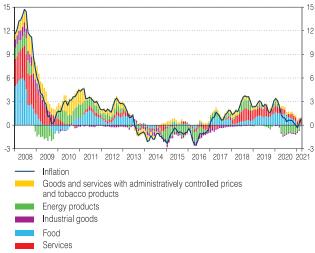
In the second and third quarters of 2021 inflation is expected to gradually accelerate, reflecting mostly the assumptions of upward developments in international food and petroleum product prices over this period compared with end-2020.

In March 2021 annual inflation increased from the end of 2020 accounting for 0.8 per cent⁹⁰ (0.0 per cent in December 2020). The increase was mainly driven by the significantly contracted negative contribution of energy products as a result of the strong upward dynamics of international oil prices in euro. Core HICP components, with their inflation increasing from December 2020, had a major positive contribution to inflation since early year. This probably reflects the indirect effects of higher fuel and food prices, as well as the slower decline in non-food goods. Since early year prices in the food group continued to rise, with their annual growth rate tending to slow down amid lower prices of imported food products. In March 2021 annual inflation slightly moderated also in goods with administratively controlled prices, with the dynamics across sub-components being divergent.

By major HIPC group, the annual rate in energy products experienced a significant change from the beginning of the year driven by the rise in international oil prices in euro by 83.8 per cent in March 2021 compared with March 2020. Higher prices of petroleum products due to enhanced global demand were rapidly transmitted through the supply chain on producer prices and consumer prices of transport fuels. This was the reason behind the contracted deflation from -17.3 per cent at the close of 2020 to -2.4 per cent in March 2021. In addition to direct effects the oil price hike prompted indirect effects on goods and services with a high share

Inflation and Contribution of Major Commodity and Services Groups to It

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



Notes: Data for 2021 cover the period to February inclusive. This structure corresponds to the Eurostat classification; tobacco products and goods and services with administratively controlled prices are presented separately. The price index of goods and services with administratively controlled prices is calculated through the elementary aggregates level in the consumer basket.

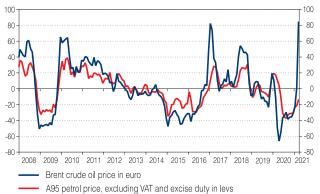
Sources: the NSI, BNB calculations.

63 Inflation

⁹⁰ The analysis in this section employs NSI data on HICP.

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

(per cent, on an annual basis)



Sources: the ECB, the NSI, BNB calculations.

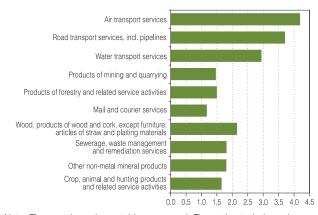
of costs on energy products in total expenditure. According to BNB estimates based on supply and use tables, prices of goods and services in transport, mining and quarrying, and agriculture are most strongly dependent on fuel price rises.

In March 2021 food inflation moderated to 0.4 per cent compared with 2.0 per cent by the end of 2020, reflecting the accelerated rate of decline in prices of unprocessed food and the lower positive contribution of processed food. Deflation of -3.7 per cent reported in the group of unprocessed food in March 2021 (compared with -0.8 per cent in December 2020) was attributable mainly to the meat and meat products sub-group in the context of an annual decline in both import prices of these products and producer prices in Bulgaria. In March the group of fruit and vegetables, which are mostly imported in this period of the year⁹¹, also had a significant negative contribution to overall inflation.

Processed food inflation came to 2.6 per cent in March, from 3.5 per cent by end-2020. The bread and cereals sub-group contributed most to the price hike, which was in line with poorer harvest in Bulgaria in 2020⁹² and higher producer prices accordingly. Another factor with a pro-inflationary effect was the rise in international wheat prices in euro due to robust global demand for this commodity. Since early 2021 the positive contribution of the animal and vegetable oils and fats sub-group to overall inflation rose

⁹¹ The analysis employs Commodity Exchange and Wholesale Markets State Commission Monthly Bulletin data.

A Price Rise in the Corresponding Sector at a 10 per cent Increase in Output Prices of the Coke and Refined Petroleum Products Sub-sector

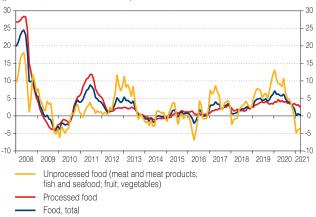


Note: The supply and use tables are used. The estimate is based on the assumption that higher expenditure in the economy due to a price hike in the coke and refined petroleum products sub-sector are entirely translated by corporations in the respective sectors into the prices of their products.

Sources: the NSI, BNB calculations.

Rate of Change of Food Price Index

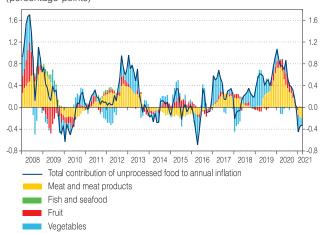
(per cent, on an annual basis)



Sources: the NSI, BNB calculations

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

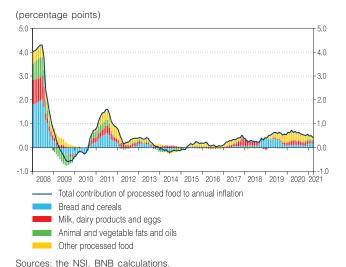
(percentage points)



Sources: the NSI, BNB calculations.

⁹² According to the NSI Economic Accounts for Agriculture cereals output in 2020 dropped by 21.2 per cent.

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

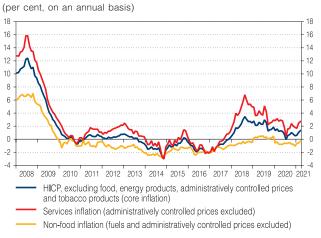


due probably to the upward dynamics of import prices of these products.

In March 2021 core inflation (including services and non-food prices) accelerated to 1.3 per cent on an annual basis (0.5 per cent in December 2020) reflecting the lower deflation in industrial goods and accelerated growth in services group prices.

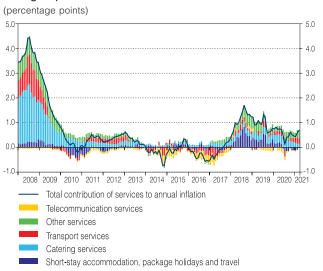
Inflation in the services group accounted for 2.7 per cent in March 2021 from 1.8 per cent at the end of 2020. This reflected the increase in transport services prices in line with the upward dynamics of international oil prices, and also the reduced supply and higher operating costs in some types of transport (e.g. air transport) as a result of the containment measures against the spread of COVID-19. Another factor behind the upward dynamics in services was the contracted negative contribution of short-stay accommodation services and package holidays. Since the early year inflation in catering slowed down, reflecting probably the lower growth rate in food prices and reduced demand for these services due to stricter anti-epidemic measures introduced at the end of 2020. The lower VAT rate of 9 per cent on restaurants and catering services, which was temporarily introduced from July 2020, was not entirely translated into end prices, and firms in the services sector used it to offset higher expenditure on implementing the

Core Inflation



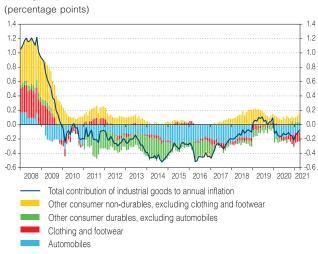
Sources: the NSI, BNB calculations.

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



Sources: the NSI, BNB calculations.

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



Sources: the NSI, BNB calculations.

65 Inflation

anti-epidemic measures⁹³. Financial services and insurance connected with travel were another group with a relatively high positive contribution to inflation in March.

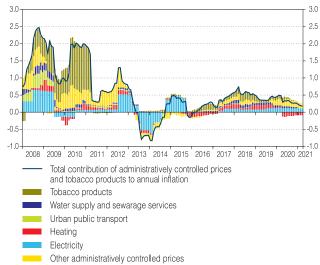
Since early 2021 deflation in non-food goods continued, though tending to subside (-0.3 per cent in March, from -1.1 per cent at the end of 2020). These developments reflected mainly the lower rate of decline in prices of durable goods driven mostly by the motor vehicles group. Concurrently, after non-durable goods prices had decreased at the end of 2020, in March 2021 prices in this sub-group slightly increased on an annual basis. Developments in nominal retail trade volumes indicate an improvement in household demand in the first three months of the year, which is a prerequisite for a gradual reversal of deflation in the non-food group in the following months.

Inflation in goods and services with administratively controlled prices and tobacco products came to 0.8 per cent in March, from 1.2 per cent at end-2020. Electricity prices, reflecting the rise in its regulated price by 2.8 per cent in July 2020 for a year ahead, had the main positive contribution to inflation in this group. Other groups of goods and services with administratively controlled prices contributing more substantially to inflation were educational services, followed by medicines and pharmaceuticals. Decreased prices of heating in the second quarter of 2020⁹⁴ was of key significance for the annual rate of decline in prices of this group in early 2021. Despite the rises in the regulated prices of natural gas in line with the dynamics of international quotations of petroleum products initiated by the Energy and Water Regulatory Commission (EWRC) between January and March 2021, the price of natural gas in March remained below its prior year's level. This was the reason for this group to have a negative contribution to overall inflation.

A factor influencing the compilation of the HICP indicator in January and March 2021 was the structure of the consumer basket changed by

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

(percentage points)



Sources: the NSI, BNB calculations.

Structure of HICP Consumer Basket in 2017–2021

(per cent)

(17					
Indicators	2017	2018	2019	2020	2021
Food	24.3	24.6	23.9	24.6	26.2
Processed food	16.4	16.3	16.0	16.0	17.5
Unprocessed food	7.9	8.2	7.9	8.6	8.7
Services	25.9	24.8	26.2	25.9	21.3
Catering services	6.0	5.5	5.4	5.5	4.4
Transport services	3.7	3.3	3.2	3.0	1.8
Telecommunication services	4.9	4.4	4.9	4.7	5.0
Other services	11.3	11.5	12.7	12.7	10.1
Energy products	6.9	8.3	8.0	7.4	6.7
Industrial goods	21.6	20.6	20.6	20.7	22.1
Administratively controlled prices*	16.5	17.1	17.0	17.0	18.8
Tobacco products	4.9	4.6	4.4	4.4	4.9

Note: Administratively controlled prices are calculated at the lowest possible level in the consumer basket (elementary aggregates). Data on administrative prices provided to Eurostat are calculated at a higher level in the consumer basket and are comparatively less accurate.

Source: the NSI, BNB calculations.

⁹³ According to Eurostat data, inflation in catering came to 2.8 per cent in March 2021, while the annual growth rate of HIPC at constant tax rates accounted for 11.0 per cent.

⁹⁴ For further information, see the EWRC's press release of 1 April 2020, the press release of 1 May 2020 and the press release of 7 July 2020 on electricity prices and decisions.

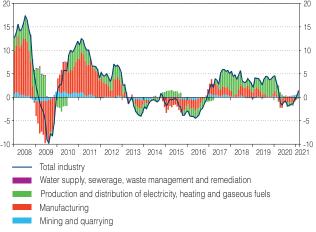
the NSI. Computing HICP for 2021 final household monetary consumption expenses (domestic concept) for 2019 were used as weights after they had been revised and updated in order to be representative for 2020 with regard to the spread of COVID-19 and the changed consumption structure. 95 The weights of food, industrial goods and administratively controlled prices (including tobacco) were increased in the revised consumer basket for 2021, while the share of services and energy products decreased. BNB estimates suggest that the change in the household consumption resulted in a 0.06 percentage point lower inflation in March 2021 than it would have been if the structure of consumer basket had remained unchanged from 2020.

The acceleration of overall inflation, which started in early 2021, was in line with the upward dynamics of producer prices. In February the total producer price index (PPI) rose by 1.1 compared with a fall of -0.5 per cent in December 2020. By economic sector, mining and quarrying, and manufacturing contributed most to PPI growth. The end-use classification shows an increase in intermediate consumption product prices and a lower negative contribution of energy products. If these developments remain unchanged in the following months, this will be prerequisite for a rise in final consumer prices.

According to the NSI business survey of March 2021, most managers in retail trade (85.5 per cent), industry (87.8 per cent) and services (92.8 per cent) expect selling prices to remain stable over the following three months. Notwithstanding, the share of retail trade fell from end-2020 as a larger number of corporations foresee price rises. This is a reason for a further decrease in non-food deflation in the following months.

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

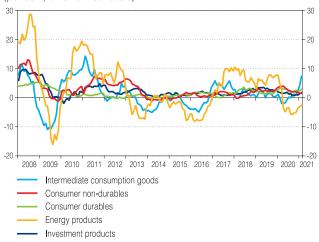
(per cent; percentage points; on an annual basis)



Source: the NSI.

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

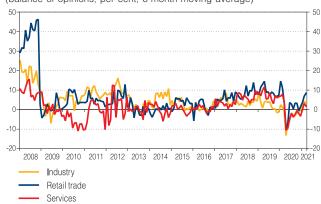
(per cent; on an annual basis)



Source: the NSI.

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

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



Source: the NSI

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⁹⁵ It is a common practice in compiling HICP for year *t* to use weights, representing shares by commodity group of individual and collective consumption of all households (including institutional and non-resident) on the economic territory in Bulgaria in year *t-2*. This implies that the structure of the consumer basket for 2021 would reflect household consumption based on 2019 national account data. With the spread of COVID-19 and the change in household consumer expenditure, Eurostat addressed methodological recommendations to statistical institutes to revise the weights in line with the changed consumption in 2020, which were implemented by the NSI. For details, see the results for January 2021 (p. 3) on the NSI website.

Key Indicators of the Housing Market in Bulgaria

(per cent; year-on-year change)

Indicators	2016	2017	2018	2019	2020	2020			
						- 1	II	III	IV
Price developments									
House price index, total	7.0	8.7	6.6	6.0	4.6	4.7	2.9	5.2	5.4
New dwellings	6.4	6.7	5.7	8.5	2.2	2.0	0.8	3.5	2.3
Existing dwellings	7.3	9.7	7.0	4.8	6.0	6.3	4.2	6.2	7.2
Inflation (HICP)	-1.3	1.2	2.6	2.5	1.2	3.0	1.1	0.6	0.3
House rentals, paid by tenants (HICP)	0.6	1.0	1.9	3.3	2.5	3.2	2.4	2.3	2.3
Lending									
New housing loans	7.4	32.7	14.9	12.4	18.1	25.7	20.0	15.5	12.3
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	3.2	3.4	3.3	3.3	3.2
Housing loans balances	-15.3	12.6	18.4	-1.4	-14.4	14.8	13.3	12.3	11.6
Construction and investment									
Permits issued for the construction of new residential buildings (square meters)	4.8	32.5	39.0	-7.9	-9.0	-21.1	-23.6	-13.2	27.5
Value added in construction (at average annual prices for 2015)	-7.3	4.5	1.4	3.6	-1.0	1.9	-7.4	0.7	1.7
Constriction production index, building construction	-16.1	10.9	2.6	8.4	-8.3	-6.1	-12.3	-6.9	-8.1
Fixed investment; residential buildings	-4.0	-3.3	-10.3	102.1	19.2	-11.5	-13.1	-2.8	-0.6
Construction cost index for new buildings	0.8	2.5	2.9	5.1	2.1	3.3	1.8	1.0	2.4

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.

Despite the deterioration of the economic situation in Bulgaria caused by COVID-19, in the fourth quarter of 2020 the House Price Index (HPI) increased by 5.4 per cent on an annual basis, exhibiting average annual growth of 4.6 per cent (against 6.0 per cent in 2019). Growth in house prices was reported in all big cities over the fourth quarter of 2020. By HPI sub-component prices of existing houses increased more than new ones. A factor supporting housing demand and thereby contributing to higher house prices was the enhanced lending activity in the context of a continuously falling annual percentage rate of charge (APRC) on new housing loans. Accumulated savings in the economy and the lack of alternatives for their investment amid low interest rates is another possible factor with a pro-inflationary effect on house prices. In the fourth quarter of 2020 house prices in Bulgaria were 8.2 per cent lower than the maximum values in the third quarter of 2008. Estimates based on the a BNB macroeco-

Rate of Change of House Price Index

(per cent; on an annual basis)



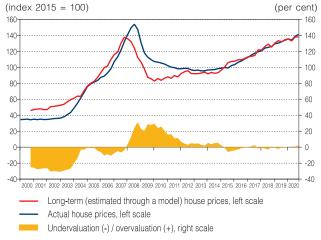
Source: the NSI.

nomic model⁹⁶ suggest that in the fourth quarter of 2020 the positive output gap of current residential property prices in Bulgaria from their long-term equilibrium value dependent on fundamental factors, such as income, interest rates on housing loans and FDI inflows, remained slightly positive at about 2.3 per cent. Over the fourth quarter of 2020 the price-to-rent ratio remained at a level higher than its long-term (historical) value. In the second and third guarters of 2021 the house price index is expected to increase further on an annual basis. The NSI Consumer Survey of January 2021 shows that this will be driven by enhanced housing demand in line with the increased propensity of households to buy homes.

The overall inflation is projected to accelerate in the second and third quarters of 2021 compared with the end of 2020, reflecting largely the anticipated increase in international oil and food prices in euro. As regards core HICP components, a slight rise is expected in services inflation and a lower negative contribution of non-food goods due to indirect effects of higher international prices and gradually subsiding negative effects of the COVID-19 pandemic on domestic demand. Projected growth of unit labour costs will be another factor of pro-inflationary effect in the services group. The increase in some administratively controlled prices in the second half of 2020 is expected to retain the positive contribution of this group to overall inflation in the second and third guarters of 2021.

Risks to the inflation forecast are assessed as largely oriented towards a stronger increase in prices. Higher than projected inflation could be seen in energy products and administratively controlled prices in case of a stronger than expected rise in international oil prices. The extension of anti-epidemic measures in Bulgaria and globally poses risks of lower than anticipated core inflation.

Actual and Equilibrium House Prices



Sources: the NSI, BNB calculations.

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



Sources: the NSI, BNB calculations.

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⁹⁶ 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.

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

	Inflation accumulated as of March 2020 (December 2019 = 100)		Inflation accumulated as of March 2021 (December 2020 = 100)		Annual rate of inflation as of March 2021 (December 2020 = 100)	
Inflation (per cent)	0.0		0.9		0.8	
	inflation rate by group (per cent)	contribution (percentage points)	inflation rate by group (per cent)	contribution (percentage points)	inflation rate by group (per cent)	contribution (percentage points)
Food	2.9	0.7	3.3	0.8	0.4	0.1
Processed food	1.8	0.3	4.5	0.7	2.6	0.4
Unprocessed food	4.9	0.4	1.0	0.1	-3.7	-0.3
Services	-0.7	-0.2	2.0	0.5	2.7	0.7
Catering	1.7	0.1	4.5	0.2	2.8	0.1
Transport services	-5.9	-0.2	-1.1	0.0	5.0	0.2
Telecommunication services	-1.2	-0.1	-1.3	-0.1	-0.1	0.0
Other services	-0.3	0.0	2.5	0.3	2.8	0.3
Energy products	-3.6	-0.3	-5.0	-0.4	-1.5	-0.1
Transport fuels	-4.4	-0.2	13.1	0.6	-2.4	-0.1
Industrial goods	-1.5	-0.3	-1.8	-0.4	-0.3	-0.1
Goods and services with administratively controlled prices*	0.4	0.1	1.5	0.3	1.0	0.2
Tobacco products	0.2	0.0	0.2	0.0	0.1	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.

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