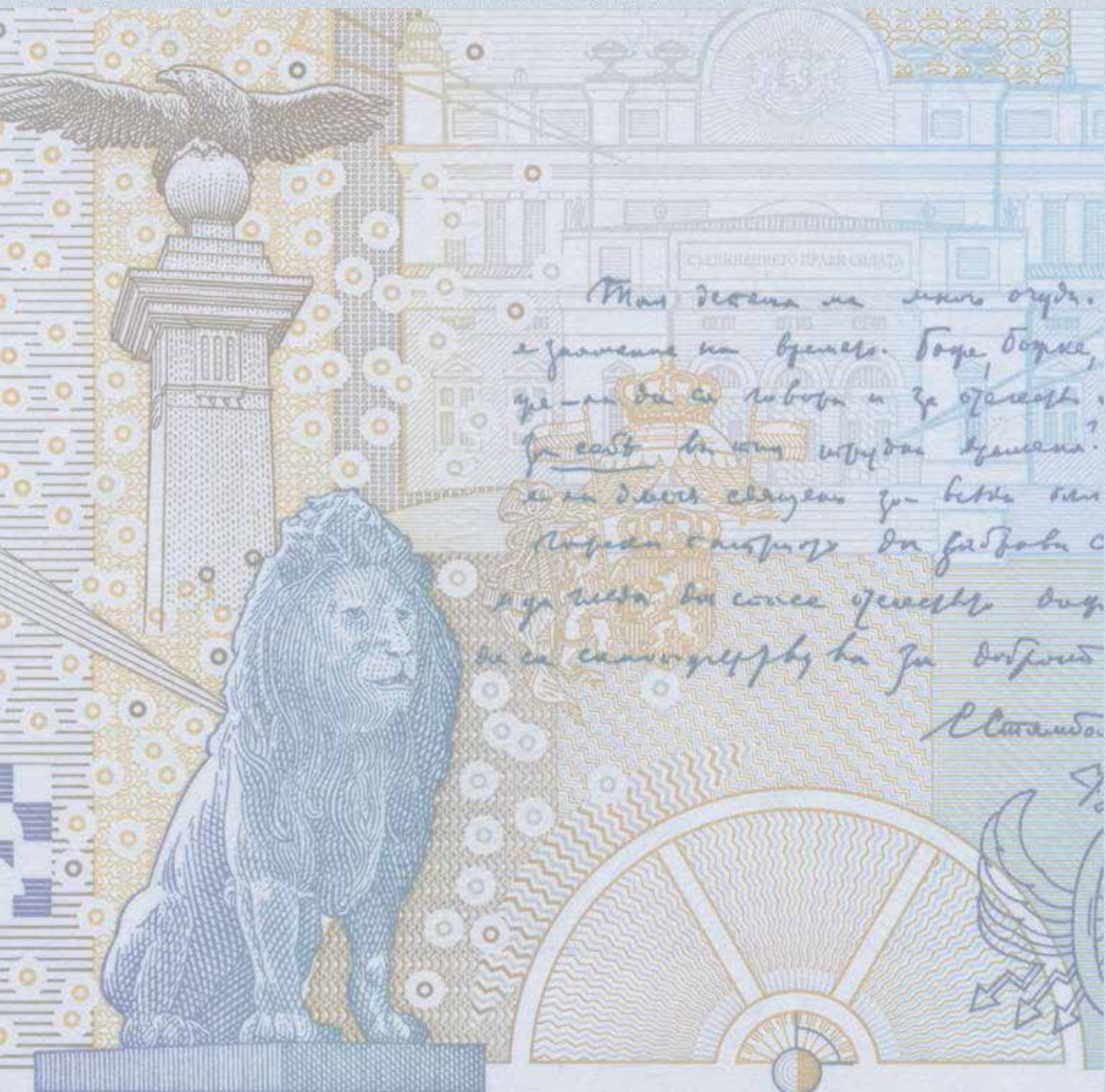


BULGARIAN NATIONAL BANK



ECONOMIC REVIEW

3/2021



ECONOMIC REVIEW

3/2021



BULGARIAN NATIONAL BANK

The BNB quarterly Economic Review presents information and analysis of balance of payments dynamics, monetary and credit aggregates, their link with the development of the real economy, and their bearing on price stability. External environment developments are also analysed since they directly affect 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 3/2021 was presented to the BNB Governing Council at its 3 November 2021 meeting. It employs statistical data published up to 18 October 2021. Expectations of economic trends in Bulgaria in the short term (until the first quarter of 2022), as described in this document, are based on the BNB macroeconomic forecast prepared as of 28 September 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.

© Bulgarian National Bank, 2021

1, Knyaz Alexander I Square
1000 Sofia, Bulgaria

Tel.: (+359 2) 9145-1351, 1209, 1806, 1227

Website: www.bnb.bg

This issue includes materials and data received up to
15 November 2021.

The contents of the BNB Economic Review may be quoted
or reproduced without further permission.
Due acknowledgement is requested.

ISSN 2367 – 4962 (online)

CONTENT

SUMMARY	7
1. EXTERNAL ENVIRONMENT	9
Current Business Situation	9
International Commodity Prices	17
2. FINANCIAL FLOWS, MONEY AND CREDIT	20
External Financial Flows	20
Monetary and Credit Aggregates	24
Interest Rates	30
Financial Flows between the Consolidated Budget and Other Sectors of the Economy	33
3. ECONOMIC ACTIVITY	37
Current Economic Environment	37
Exports and Imports of Goods and Services	46
Behaviour of Firms and Competitiveness	50
Household Behaviour	57
Fiscal Policy Effects on the Economy	60
4. INFLATION	66

HIGHLIGHTS

• Revision of GDP Data	42
------------------------------	----

Charts

Global PMIs	9	Annual Growth of Credit to Non-financial Corporations and Contributions of Individual Types of Loans	27
Global Industrial Production.....	10	New Loans to Non-financial Corporations (Monthly Volumes).....	27
World Trade.....	10	Annual Growth of Household Credit and Contributions of Individual Types of Loans	28
Inflation Measured through CPI.....	10	New Loans to Households (Monthly Volumes)	28
Contribution to the Change in Real GDP in the United States by Component	11	Changes in Credit Standards	29
US ISM-PMIs.....	11	Changes in Credit Demand	29
US Consumer Confidence Indices.....	12	Overnight Interbank Money Market Rates (Average Monthly Value).....	30
US Unemployment Rate and Number of New Employees in the US Non-Farm Sector	12	Interest Rates on New Time Deposits	30
US Inflation Rate	12	Interest Rates on New Loans to Non-financial Corporations by Currency.....	31
Manufacturing and Services PMIs and Change in China's Real GDP.....	13	Interest Rates and APRC on New Household Loans.....	31
China's Inflation Rate	14	Interest Rates on New Corporate and New Household Loans: the Spread between Bulgaria and the Euro Area	31
Contribution to the Change in Real GDP in the Euro Area by Component	14	Long-term Interest Rates in the Primary and Secondary Markets of Government Securities	32
Contribution to the Change in Real GDP in the Euro Area by Country	15	Reference Government Securities Yield Curve in Bulgaria.....	32
PMIs in the Euro Area	15	Consolidated Budget Effect on Other Sectors' Liquidity (Monthly).....	33
Euro Area Unemployment Rate and Employment Growth.....	15	Contribution to GDP Growth by Final Use Component.....	37
Euro Area Inflation Rate	15	Expectations about Future Economic Activity	38
ECB Interest Rates, EONIA, €STR and Excess Liquidity in the Euro Area Banking System	16	Production Assured with Orders from Other Countries and Finished Goods Inventories	39
EURIBOR Dynamics	17	Factors Hampering Business Activities of Corporations	39
Brent Crude Oil Price.....	17	Uncertainty Indicator in the Economy (Corporations and Households).....	40
Brent Crude Oil Futures Prices	18	Dynamics of the Index of Industrial, Construction and Services Production	40
Natural Gas Prices.....	18	Chart 1. Revisions to the GDP at Current Prices for the Period 1995–2020.....	43
Price Indices of Major Raw Materials and Commodity Groups.....	19	Chart 2. Revisions to the Rates of Change in Nominal GDP for the Period 1996–2020.....	43
Current and Capital Account Flow Dynamics and Contributions of Individual Components.....	20	Chart 3. Revisions to the Annual Rate of Change in Real GDP	44
Financial Account Flow Dynamics and Contributions of Individual Components	22	Chart 4. Revisions to the Real GDP Change by Final Expenditure.....	44
Direct Investment Liabilities by Type of Investment.....	22	Chart 5. GDP Index at Constant Prices.....	44
FDI by Sector as of the End of the Second Quarter of 2021	23	Dynamics of Nominal Exports and Imports of Goods	46
Gross External Debt	23	Exports of Commodity Groups by Use.....	47
Annual Growth of Non-government Sector Deposits and Contribution by Sector	24	Exports of Goods: Geographical Breakdown.....	48
Reserve Money	25	Imports of Commodity Groups by Use.....	49
Bank Deposits with the BNB	25	Imports of Goods: Geographical Breakdown.....	49
Currency in Circulation	26	Dynamics of Exports and Imports of Services	49
Foreign Currency Purchases and Sales between the BNB and Banks (on a Monthly Basis)	26	Annual Change of Services Exports and Contribution by Sub-component	50

Annual Change of Services Imports and Contribution by Sub-component	50
Rate of Change in Real Value Added and Contribution by Sub-sector	51
Manufacturing Turnover Dynamics.....	51
Construction Production Dynamics and New Buildings Permits Issued	51
Services Value Added Change and Contribution by Sub-sector	52
Contribution to Changes in the Number of Employed by Economic Sector.....	52
Change in the Number of Employed.....	53
Measures Taken by the Firms in Relation to Their Personnel in March, June and August 2021 amid an Epidemiological Situation.....	53
Labour Productivity Dynamics (Value Added <i>per</i> Employee).....	54
Compensation <i>per</i> Employee at Current Prices.....	54
Unit Labour Costs	54
Gross Operating Surplus at Current Prices.....	55
Financing Sources	55
Contribution of Changes in Production Factors to GDP Growth.....	55
Contribution to the Change in Labour Force by Component	57
Economic Activity and Share of Discouraged Persons	57
Unemployment Rate	58
Employment and Nominal Wage Bill	58
Private Consumption and Consumer Confidence	58
Retail Trade Turnover	58
Household Propensity to Save (on a Quarterly Basis).....	60
Contributions of Major Groups of Revenue to Growth in Total Revenue and Grants, Cumulatively (on an Annual Basis).....	61
Contributions of Major Tax Groups to Tax Revenue Growth, Cumulatively (on an Annual Basis).....	61
Contribution of Major Groups of Expenditure to Total Expenditure Growth, Cumulatively (on an Annual Basis)	63
Inflation and Contribution of Major Commodity and Services Groups to It	66
Annual Rate of Change in Brent Crude Oil and A95 Petrol Prices.....	67
Rate of Change of the Food Price Index	67
Contribution of Major Sub-groups of Unprocessed Food to Overall Inflation.....	67
Contribution of Major Sub-groups of Processed Food to Overall Inflation.....	67
Core Inflation.....	68

Contribution of Inflation in Services and Major Services Sub-groups to Overall Inflation	68
Contribution of Inflation in Non-food Goods (Excluding Energy Products) and Major Services Sub-groups to Overall Inflation	68
Contribution of Tobacco Products and Major Sub-groups of Goods with Administratively Controlled Prices to Overall Inflation.....	69
Rate of Change in PPI on the Domestic Market and Contributions by Major Sub-sectors	69
Rate of Change in Producer Prices on the Domestic Market by Major Industrial Groupings.....	69
Diffusion Index	70
Expectations of Selling Prices in Industry, Retail Trade and Services in the Following Three Months	70
Rate of Change of House Price Index.....	71
Actual and Equilibrium House Prices.....	72
Price-to-Rent Ratio (Percentage Deviation from Long-term Average Value)	72
The Price at Which the Public Supplier Bulgargas EAD Sells Natural Gas to Final Suppliers (by Month).....	72
The Average Market Price of Electricity in the Day Ahead Market Segment of the Independent Bulgarian Energy Exchange EAD (by Week).....	73

Tables

Projections of the Annual Rate of Change of Euro Area Real GDP	16
Projections of Euro Area Annual Inflation Rate.....	16
Flows on Major Balance of Payments Accounts	21
Gross External Debt as of July 2021	24
Real GDP Growth by Final Use Component.....	42
Table 1. Annual Rate of Change and Contributions to Real GDP Growth (at 2015 prices).....	45
Table 2. Quarter-on-quarter Rate of Change in Real GDP (at 2015 prices).....	46
Exports by Commodity Group, January – June 2021	47
Imports of Commodity Groups by Use, January – June 2021.....	48
Gross Value Added Change	56
Employment and Income Dynamics.....	59
Retail Trade Turnover	59
Key Budget Indicators Performance for 2020 and 2021	65
Key Indicators of the Housing Market in Bulgaria	71
Rates of Change in Commodities and Services Prices and Their Contribution to Inflation	73

ABBREVIATIONS

APP	Asset Purchase Programme
APRC	Annual percentage rate of charge
BIR	Base interest rate
BOP	Balance of Payments
b.p.	basis points
CFP	Consolidated Fiscal Programme
CIF	Cost, insurance, freight
CNY	Chinese Yuan
CPI	Consumer Price Index
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
FOMC	Federal Open Market Committee
FRS	Federal Reserve System
GDP	Gross Domestic Product
HICP	Harmonized Index of Consumer Prices
HUF	Hungarian forint
IEA	International Energy Agency
IMF	International Monetary Fund
ISM	Institute for Supply Management
LEONIA	LEv OverNight Index Average
LFS	Labour Force Survey
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
PCE	Personal Consumption Expenditures
PEPP	Pandemic Emergency Purchase Programme
PELTRO	Pandemic Emergency Longer-Term Refinancing Operations
PMI	Purchasing Managers' Index
p.p.	percentage points
PPI	Producer Price Index
PPP	Purchasing Power Parity
PSPP	Public Sector Purchase Programme
RON	Romanian new leu
SITC	Standard International Trade Classification
SNA	System of National Accounts
VAT	Value Added Tax
€STR	Euro Short-Term Rate

SUMMARY

In the third quarter of 2021 global PMIs indicated a slowing pace of recovery of the global economic activity. The slowdown was more pronounced in the services sector attributable to the spread of the more contagious coronavirus variant across the world, while the more moderate deceleration in industry was due to the continuing bottlenecks in global supply chains for goods, commodities and equipment. Global inflation continued to grow at high rates over the third quarter of 2021, reflecting price rises in energy products and also in a number of goods due to bottlenecks in supply chains, higher non-energy commodity prices, as well as growing consumer demand in the context of highly accommodative monetary and fiscal policy. Over the period, the central banks of the US and the euro area left unchanged their accommodative monetary policies, with the US Federal Reserve indicating a gradual tapering in view of the pace of economic recovery. The two central banks maintained their views that the upward inflation dynamics was driven by temporary factors related to the transition to normalisation of economic activity after the health crisis caused by the COVID-19 spread.

In the fourth quarter of 2021 and the first quarter of 2022 external demand for Bulgarian goods and services is expected to grow considerably on an annual basis in line with the international environment and the low base effect over the corresponding periods of the previous and current year. The main assumption used in preparing the forecast and related to the development of COVID-19 pandemic is that the negative macroeconomic effects of the containment measures in the euro area countries would be limited owing to the gradual adaptation of economic agents' behaviour to them.

In the first seven months of 2021 the total current and capital account surplus of Bulgaria decreased from the same period of 2020, reflecting mainly a higher deficit on the trade balance and on net primary income. In the fourth quarter of 2021 and the first quarter of 2022 the surplus of the overall current and capital account balance as a share of GDP is expected to increase *vis-à-vis* the end of 2020. This will be largely driven by the higher surplus of the trade in 'other services' item, which is projected to follow the trend observed since early 2021, and by the expected higher net revenue from travel services.

In the first eight months of the year non-government sector's deposits in the banking system increased further at comparatively high rates, with accelerated increase in labour income, continued maintenance of precautionary savings by households and still limited investment activity of corporations contributing to it. Since March annual growth of credit to the private sector followed the trend toward a gradual acceleration driven mainly by the strong upward dynamics of credit to households. Over the projection horizon growth of deposits of the non-government sector is expected to slow down marginally in line with the projected rise in private consumption. The expected gradual recovery of investment activity, positive housing market prospects and the sustained low interest rate levels will favour the growth of credit to the private sector.

In the second quarter of 2021 Bulgaria's real GDP fell by -0.3 per cent on a quarterly basis, although the contributions of individual sub-components suggested an increase in economic activity on a quarterly basis. According to seasonally adjusted NSI data, private consumption and net exports of goods and services contributed positively to economic activity growth over the review quarter, which was only partially offset by the fall in government consumption and investment in fixed capital. Similar developments were also observed in gross value added, which posted a quarterly decline for the total economy over the second quarter of 2021, while reporting an increase in all major economic sectors (agriculture, industry and services). During the second quarter labour market conditions improved: a quarterly increase in employment and a decline in unemployment rate, as well as a rise in nominal compensation of employees were reported.

Economic indicators for the third quarter of 2021 suggest retention of economic activity close to the second quarter level. If the assumption that the deterioration of the epidemiological situation in Bulgaria, which started in August 2021, will be addressed by implementing measures having a limited impact on economic activity materialises, real GDP is expected to grow in the fourth quarter of 2021 and the first quarter of 2022 and reach its pre-pandemic level.

Annual inflation measured by the HICP continued to accelerate, reaching 4.0 per cent in September 2021 (0.0 per cent in December 2020). Price rise was broad-based across HICP components, reflecting the simultaneous effect of pro-inflationary factors in terms of both external and internal macroeconomic environment. Energy products (excluding administratively controlled prices) and food had the largest positive contributions to the overall inflation in September in the context of significant annual increases in international commodity prices. Core inflation also accelerated amid growth of final consumption expenditure of households and higher production costs of corporations. Administratively controlled prices continued to contribute positively to overall inflation driven mainly by higher prices of electricity, heating and gaseous fuels approved by the Energy and Water Regulatory Commission.

Inflation is projected to accelerate further in the fourth quarter of 2021, and thereafter HICP growth would slow down in early 2022 in line with the technical assumptions for a weaker annual increase in international food and petroleum product prices compared to the corresponding period of 2021. Risks to the inflation forecast are assessed as oriented towards a stronger increase in prices compared to the baseline scenario and stem largely from the possibility that the upward trend in electricity, natural gas and other commodity prices would be maintained over the projection horizon. An additional risk of higher than projected inflation arises from the likelihood that firms would undertake indexation schemes of employee wages to accelerated growth of consumer prices and carry over this increase on end prices, thereby extending in time the effects of an ongoing increase in inflation.

-

1. EXTERNAL ENVIRONMENT

In the third quarter of 2021 global PMIs indicated a slowing pace of recovery of the global economic activity. The slowdown was more pronounced in the services sector attributable to the spread of the more contagious coronavirus variant across the world, while the more moderate deceleration in industry was due to the continuing bottlenecks in global supply chains for goods, commodities and equipment. Developments continued to diverge across regions with the USA reporting a slowdown, China – a slight growth, while euro area economic recovery rate accelerated significantly. Global inflation continued to grow at high rates over the third quarter of 2021, reflecting price rises in energy products and also in a number of goods due to bottlenecks in supply chains, higher non-energy commodity prices, as well as growing consumer demand in the context of highly accommodative monetary and fiscal policy. Over the period, the central banks of the US and the euro area left unchanged their accommodative monetary policies, with the US Federal Reserve suggesting a gradual tapering in view of the pace of economic recovery. The two central banks, however, maintained their views that the upward inflation dynamics was driven by temporary factors related to the transition to normalisation of economic activity after the health crisis caused by the COVID-19 spread.

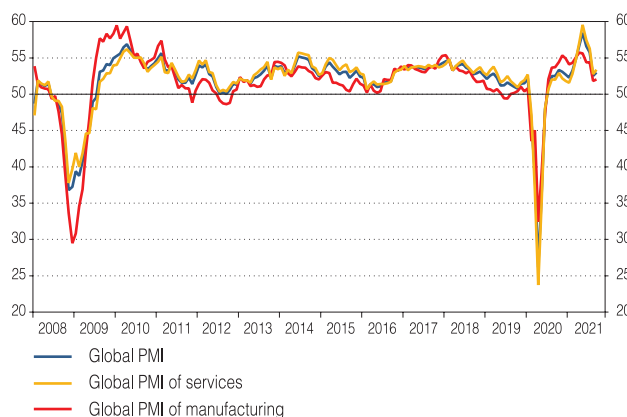
In the fourth quarter of 2021 and the first quarter of 2022 external demand for Bulgarian goods and services is expected to grow considerably on an annual basis in line with the international environment and the low base effect over the corresponding periods of the previous and current year. The main assumption used in preparing the forecast and related to the development of COVID-19 pandemic is that the negative macroeconomic effects of the containment measures in the euro area countries would be limited owing to the gradual adaptation of economic agents' behaviour to them.

Current Business Situation

In the third quarter of 2021 global PMI dynamics indicated a slowing pace of recovery of the global economic activity. Over the review quarter the global PMI remained above the neutral 50 point limit, however it did fall from the average values in the second quarter of 2021 when it reached its highest monthly value since 2006. There was a divergent dynamics across regions. In the euro area, the economic recovery rate accelerated significantly in the third quarter of 2021 on the previous quarter, while in the USA PMIs signalled a moderation in economic activity growth. In the third quarter of 2021 the average value of China's composite PMI declined, still staying slightly above the neutral 50 point limit. Concurrently, it posted a significant increase in India and Brazil compared with the second quarter of 2021, when the economic activity in both countries was adversely affected by the spread of the coronavirus.

Across economic sectors PMIs in the third quarter of 2021 suggested a more pronounced slowdown in the pace of recovery of global economic activity in the services sector, reflecting the uncertainty and anti-epidemic measures initi-

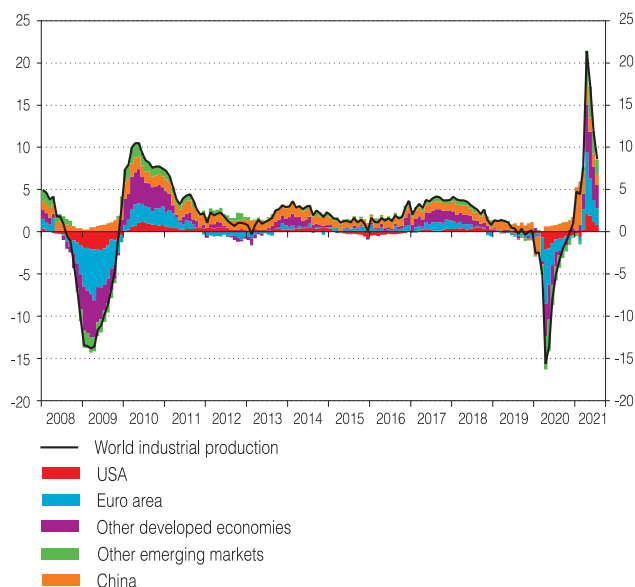
Global PMIs



Source: JP Morgan.

Global Industrial Production

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



Source: CPB Netherlands Bureau for Economic Policy Analysis and BNB calculations.

ated against the spread of the more contagious coronavirus Delta variant globally. In manufacturing, the slowdown in economic activity was more moderate, reflecting the continuing bottlenecks in global supply chains.

Between May and July 2021, a broad-based slowdown in the annual growth rate of world industrial production and trade was observed across regions¹.

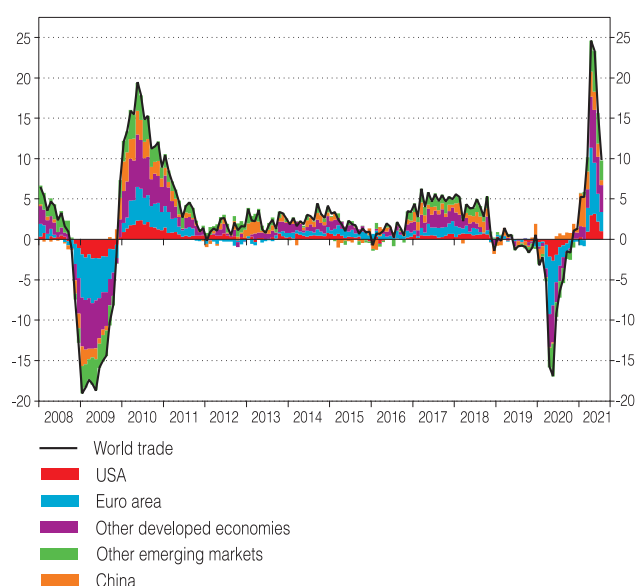
Over the third quarter of 2021 global inflation² accelerated significantly in both developed and emerging market economies. Preliminary World Bank estimates show that global inflation as of September reached 4.4 per cent on an annual basis, from 2.9 per cent in June 2021. Price rises in energy products, such as oil, natural gas and electricity, contributed most to inflation acceleration, reflecting the higher demand amid a global economic recovery, limited oil and gas supply, and low base effects in 2020. Continuing bottlenecks in global supply chains of goods, commodities and equipment, as well as growing consumer demand in the context of highly accommodative monetary and fiscal policy were also driving factors for the rise in global inflation.

¹ Based on CPB Netherlands Bureau for Economic Policy Analysis data as of 21 September 2021.

² Based on the World Bank data as of 18 October 2021.

World Trade

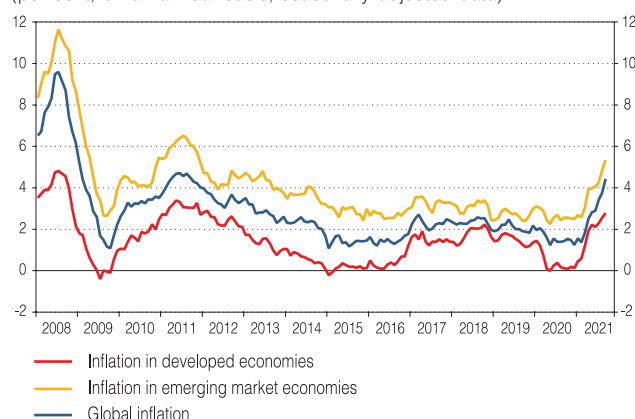
(annual rate of volume change and contribution by region, per cent)



Source: CPB Netherlands Bureau for Economic Policy Analysis and BNB calculations.

Inflation Measured through CPI

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



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

Source: the World Bank.

In the fourth quarter of 2021 and the first quarter of 2022 external demand for Bulgarian goods and services is expected to grow considerably on an annual basis in line with the international environment and reflecting the low base effect over the corresponding periods of the previous and current year. The main assumption used in preparing the forecast related to the development of COVID-19 pandemic is that the negative macroeconomic effects of the containment measures in the euro area countries would be limited owing to the gradual adaptation of economic agents' behaviour to them.

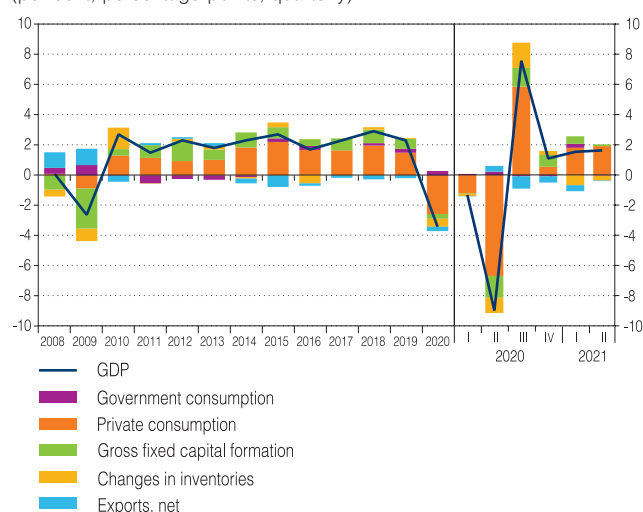
The United States

In the second quarter of 2021, the US real GDP posted a growth of 1.6 per cent quarter on quarter from 1.5 per cent in the previous quarter. Slight acceleration of growth over the second quarter was driven by the accelerated increase in household consumption and resumed growth in exports, resulting in a smaller negative contribution of net exports. In the second quarter of 2021 business investment growth slowed down, while housing investment posted a significant decline. Over the review quarter government consumption had a neutral contribution to the quarter-on-quarter growth, while inventories contributed negatively.

In the third quarter of 2021 leading economic indicators remained at relatively high historical levels. The fall in the indicators in the beginning of the review period was due to bottlenecks in supply chains, including labour shortage, logistical delays and lack of raw materials for production. In September the ISM Manufacturing PMI increased to 61.1 points compared to 59.9 points in August and 60.8 points on average in the second quarter. Services PMI reached its historical high of 64.1 points in July, from 62.3 points on average in the second quarter of 2021. In the following two months the index fell reaching 61.9 points in September. Consumer confidence indicator saw negative changes over the third quarter, its drop being most pronounced in August. Concerns about the spread of coronavirus Delta variant and, to a lesser extent, those about the rises in fuel and food prices were the main drivers for the decline. US labour market conditions continued to improve gradually in the third quarter of 2021. Over the review quarter total employment in

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

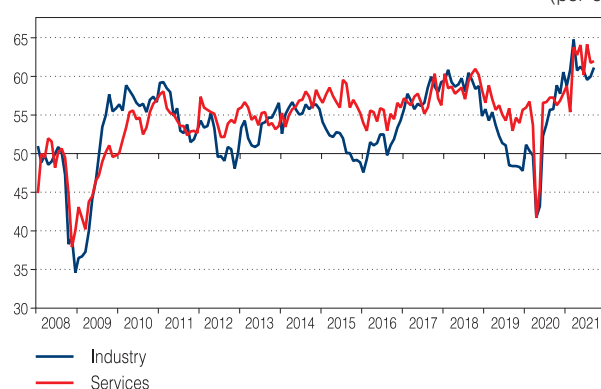
(per cent, percentage points; quarterly)



Source: Bureau of Economic Analysis.

US ISM-PMIs

(per cent)



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

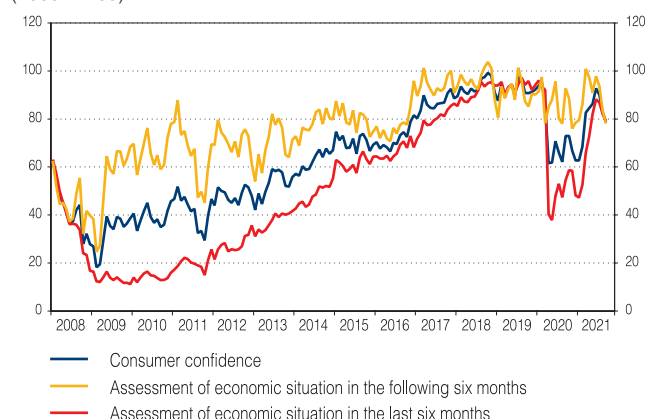
the US non-agricultural sector rose in total by around 1.7 million jobs against a total increase of 1.8 million jobs over the second quarter 2021. In September the unemployment rate went down to 4.8 per cent from 5.2 per cent in August and 5.9 per cent on average in the second quarter. In September the US economically active population rate fell marginally to 61.6 per cent against 61.7 per cent in the previous two months. Overall, late September data indicated a slowdown in real GDP quarterly growth over the third quarter.

In the third quarter of 2021 consumer price inflation remained significantly above the 2 per cent target level set by the US Federal Reserve System. In August the annual rate of change of the price index of personal consumption expenditure (PCE) was 4.3 per cent against 4.2 per cent in July and 3.9 per cent on average in the second quarter. The increase in the annual rate was largely attributable to the difficulties in product and labour market supply and further increasing consumer demand in the context of economic recovery from the crisis caused by the COVID-19 spread and highly accommodative fiscal stimulus measures. In August the annual growth rate of the core PCE price index (excluding food and energy products) remained at 3.6 per cent for a third consecutive month against 3.4 per cent on average in the second quarter. September 2021 CPI data (the other key US inflation indicator) showed a slightly accelerated annual rate of inflation to 5.4 per cent compared to 5.3 per cent in August and 4.9 per cent on average in the second quarter. Food, automobiles and housing expenditure contributed to inflation acceleration on an annual basis in the third quarter, which was partially offset by the lower inflation rate in transport services and fuels. The annual growth rate of the core PCE price index, excluding food and energy products, remained at 4.0 per cent in September for a second consecutive month from 3.7 per cent on average in the second quarter of 2021.

In the third quarter 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 and the volume of monthly purchases of US treasury securities and of agency mortgage-backed securities, though announcing at its September 2021 meeting guidance on the expected start and duration of its

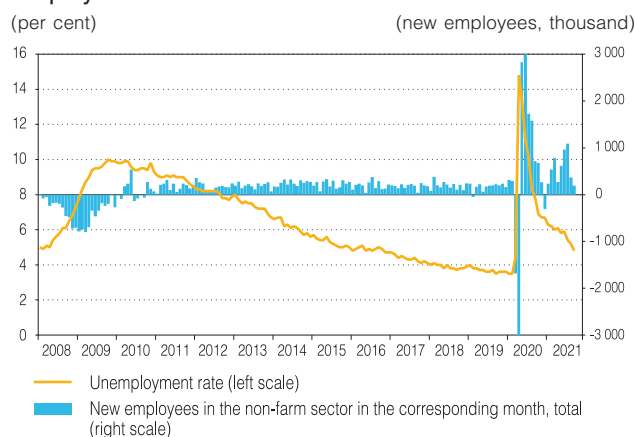
US Consumer Confidence Indices

(2000 = 100)



Source: The Conference Board.

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

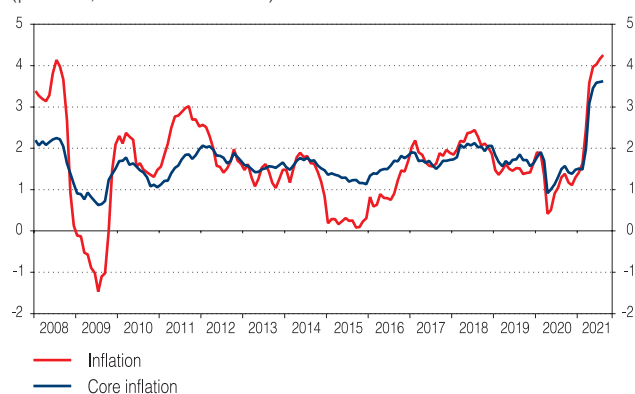


Notes: The number of new employees in the non-farm sector for April and June 2020 is not evident in the chart, coming to -20,679 and 4846 thousand employees.

Source: Bureau of Labour Statistics.

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.

asset purchase tapering. At the same meeting the FOMC decided to double the counterparty limit in overnight reverse repurchase agreements to USD 160 billion³, from the current level of USD 80 billion, in the aim to absorb a part of excess liquidity in the banking system. The Committee continued to view accelerating inflation as a result of temporary factors, requiring no tightening of the monetary policy stance. It was announced that if the overall progress toward the Federal Reserve's maximum employment and price stability goals persists, the US central bank could soon proceed with the gradual bond-buying taper.

In September FOMC members' individual forecasts about real GDP were revised downwards for 2021 and upwards for 2022–2023 compared with the June forecasts. The median of the projections concerning the level of overall and core inflation rose substantially for 2021 and to a lesser degree for the next two years. FOMC long term-equilibrium value assessments of all economic indicators were left unchanged from the previous forecasts. The median of FOMC members' individual forecasts about the federal funds rate showed expectations of first increasing in 2022 and increasing by 75 basis points in 2023 and 2024.

In the third quarter of 2021 total assets in the US Federal Reserve balance sheet rose by USD 369 billion to USD 8.45 trillion (40.4 per cent of GDP in 2020).

China

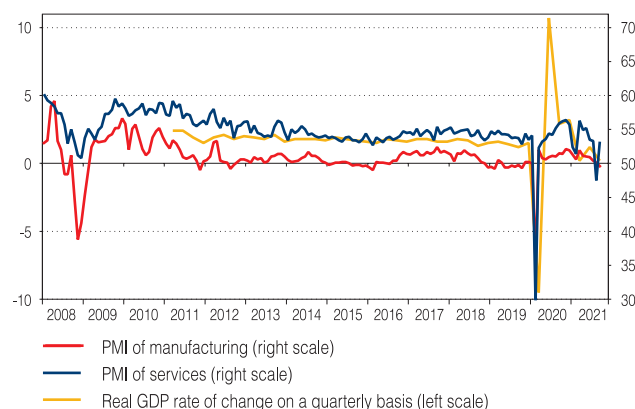
In the third quarter of 2021 real GDP growth rate in China moderated to 0.2 per cent on a quarterly basis from 1.2 per cent in the second quarter. Growth deceleration was due to power shortages in some large industrial regions, bottlenecks in supply chains, anti-epidemic measures introduced to curb the COVID-19 spread and regulatory restrictions in the real estate sector. Over the review quarter China's industrial production growth slowed down significantly to 4.9 per cent on an annual basis, from 9.0 per cent in the second quarter.

In the third quarter of 2021 average PMIs went down on the second quarter of the year, exhibiting heterogeneous developments across eco-

³ Referred to as the US dollar below.

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

(per cent, quarterly)



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

conomic sectors. The activity in the services sector fell sharply in August, with services PMI reaching 47.5 points and increasing again in September to its June and July level. Short-term and steep decline in August was mainly driven by the stringent anti-epidemic measures launched in certain regions of China in response to local epidemic waves. Manufacturing PMI declined to 49.6 in September, reflecting mainly the disruptions in some energy-intensive companies producing steel, cement and aluminium, which are located in the regions with power shortages. In addition, PMI for new orders (total for exports) also posted a decline over the review period, signalling a lower demand for industrial goods.

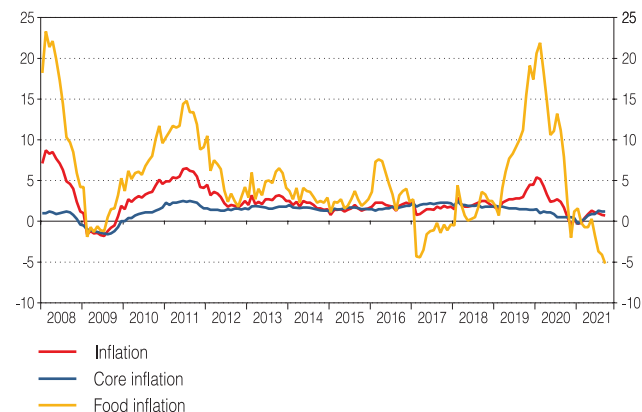
In the third quarter of 2021 inflation in China slowed down to 0.7 per cent on an annual basis in September from 0.8 per cent in August and 1.1 per cent on average in the second quarter of 2021. The moderation was mainly driven by the lower food prices, while non-food goods posted an acceleration in year-on-year price increase. Concurrently, production price inflation in the third quarter accelerated further, reaching 10.7 per cent on an annual basis in September against 9.5 per cent in August and 8.2 per cent on average in the second quarter. The accelerated growth rate of producer prices reflected surging commodity prices globally.

Euro Area

Euro area real GDP increased by 2.1 per cent, quarter on quarter, in the second quarter of 2021, largely reflecting the lifting of certain anti-epidemic measures in the review period due to the decrease in COVID-19 cases. The high quarterly growth was mainly driven by the strong growth in private consumption (1.7 percentage points) and, to a lesser extent, in government consumption, investment and net exports. The four largest euro area economies reported a growth in real GDP on a quarterly basis, with Germany and Italy contributing most and France and Spain less. In terms of production, over the review period the services sectors had the main contribution to the growth, while the contribution of industry was weak due to the bottlenecks in raw materials supply chains. As of the second quarter of 2021 the level of euro area real GDP was still lower than the pre-crisis levels (by 2.7 per cent below its level of the fourth quarter of 2019).

China's Inflation Rate

(per cent, on an annual basis)

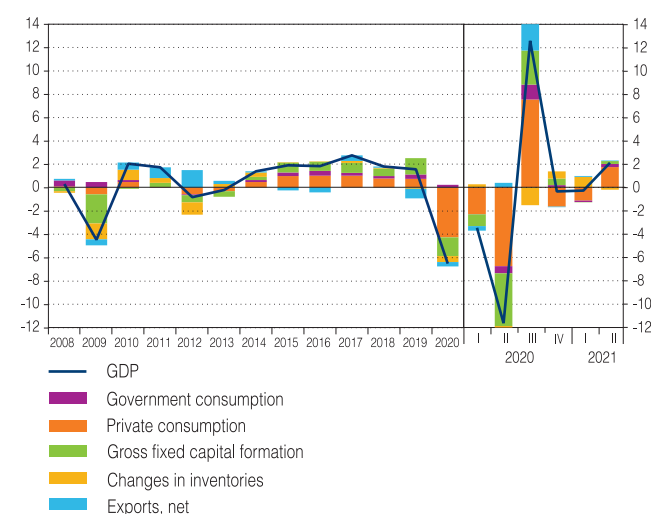


Notes: Inflation is measured by consumer price index. Core inflation is measured by consumer price index, excluding food and energy expenditure.

Source: National Bureau of Statistics of China.

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

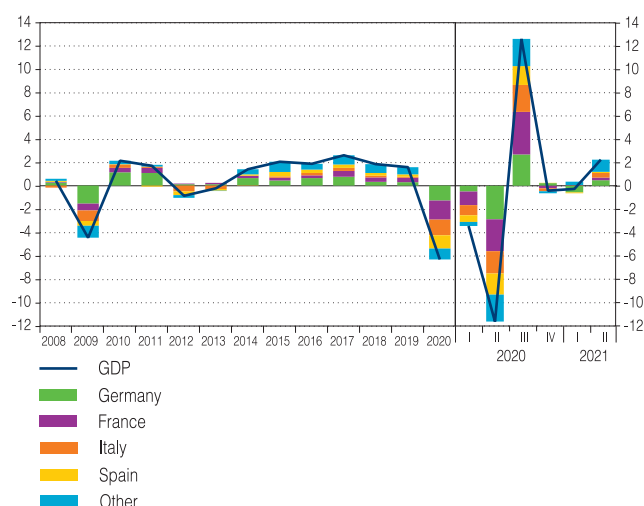
(per cent, percentage points; on a quarterly basis)



Source: Eurostat.

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

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



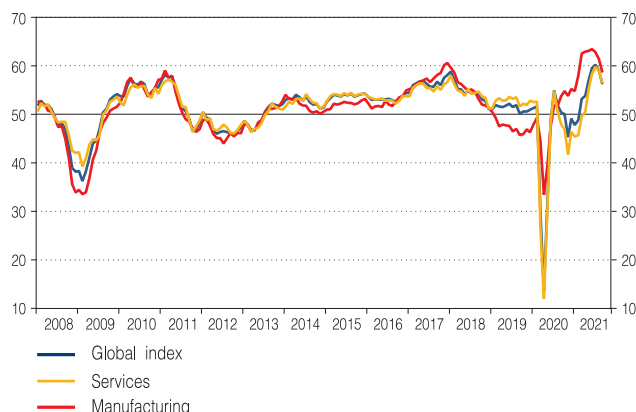
Sources: Eurostat and BNB calculations.

In the third quarter of 2021 euro area economic indicators provided signals of continuous growth in economic activity. In the third quarter the composite PMI in the euro area reached in July its highest value since 2006 (60.2 points) before declining in August and September, posting a certain slowdown in economic activity growth due to worsening problems with supply chains and price hikes in raw materials and equipment. A decrease was reported in both industry and services sectors. The deterioration of the epidemic situation in some large euro area countries in August and September adversely affected the services sector. In the third quarter of 2021 the household confidence indicator reversed its upward trend observed since February 2021, stabilising at relatively high levels. Labour market conditions in the euro area improved further in the third quarter, the unemployment rate falling to 7.5 per cent in August against 7.8 per cent in June. Concurrently, consumer expectations of unemployment rate over the next twelve months measured by the EC consumer confidence index stabilised in the third quarter of 2021 at levels close to the pre-pandemic ones. Overall, data available in mid-October 2021 indicated a slight acceleration in quarterly growth of euro area real GDP over the third quarter of 2021.

Euro area inflation measured by the HICP continued to accelerate at a fast pace in the third quarter of 2021, reaching 3.4 per cent on an annual basis in September compared to 3.0 per cent in August and 1.8 per cent on average in

PMIs in the Euro Area

(per cent)

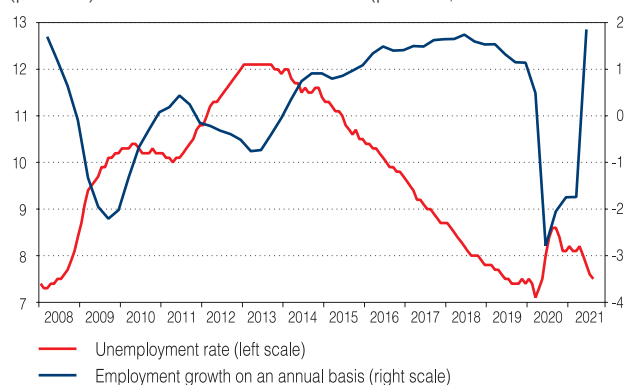


Sources: Eurostat, Markit.

Euro Area Unemployment Rate and Employment Growth

(per cent)

(per cent, on an annual basis)

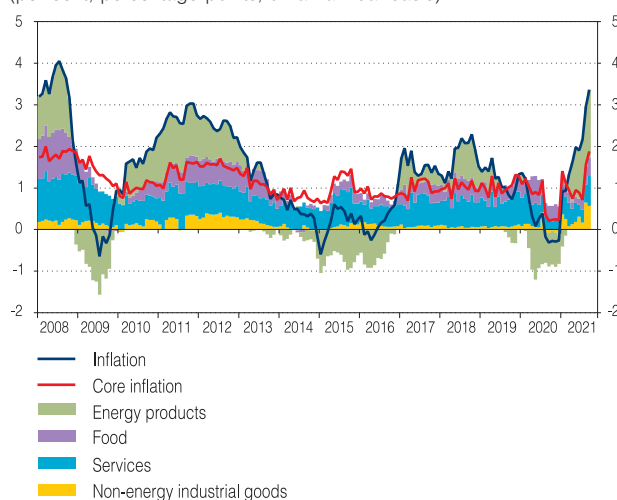


Note: Unemployment data cover the period up to May 2021.

Source: Eurostat.

Euro Area Inflation Rate

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



Notes: Inflation is measured by the HICP. Core inflation is measured by the HICP, excluding energy products, food, alcohol and tobacco products.

Source: Eurostat.

the second quarter of 2021. The marked increase in the HICP reflected all major price sub-indices, with energy products contributing most. Among energy products, not only the price of liquid fuels, but also of natural gas and electricity rose significantly. High household demand, accompanied by the bottlenecks in the supply and delivery of raw materials and equipment, also exerted an upward pressure on consumer prices. Core inflation, excluding food and energy product prices, came to 1.9 per cent on an annual basis in September against 1.6 per cent in August and 0.9 per cent on average in the second quarter. The base effect of the temporary reduced VAT rates in Germany in the second quarter of 2020 continued to affect euro area consumer prices.

In September the ECB revised its economic growth forecast for 2021 significantly upwards and for 2022 downwards, while leaving its forecast for 2023 unchanged. Risks to euro area economic growth are assessed as balanced. The ECB euro area inflation forecast was revised upwards for the whole forecast horizon until 2023, justified by more sustainable pro-inflationary factors, involving disruptions in supply chains, higher commodity prices, improved prospects of demand, and the depreciation of the euro.

The ECB Governing Council left unchanged the reference interest rates in the third quarter of 2021. No changes were made to the parameters and guidance of the Asset Purchase Programme (APP), but as regards the Pandemic Emergency Purchase Programme (PEPP), the ECB Governing Council announced that favourable financing conditions could be maintained with a moderately lower pace of net asset purchases than in the previous two quarters. The Governing Council of the ECB expected net purchases under the PEPP to continue until at least the end of March 2022, or until the ECB Governing Council judges that the COVID-19 crisis is over.

At the end of September 2021 the cumulative amount of purchases under the Eurosystem's extended Asset Purchase Programme (APP) totalled EUR 3068 billion, up EUR 51 billion compared with the end of the second quarter of 2021. Concurrently, the cumulative amount of the temporary asset purchase programme of private and public sector securities (PEPP) totalled EUR 1412 billion as of the end of September (against EUR 1185 billion as of the end of June).

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

(per cent)

Institution	Date of release	2021		2022		2023	
		latest	previous	latest	previous	latest	previous
the ECB	IX.2021	5.0	4.6	4.6	4.7	2.1	2.1
EC	VII.2021	4.8	4.3	4.5	4.4	-	-

Sources: the ECB, the EC.

Projections of Euro Area Annual Inflation Rate

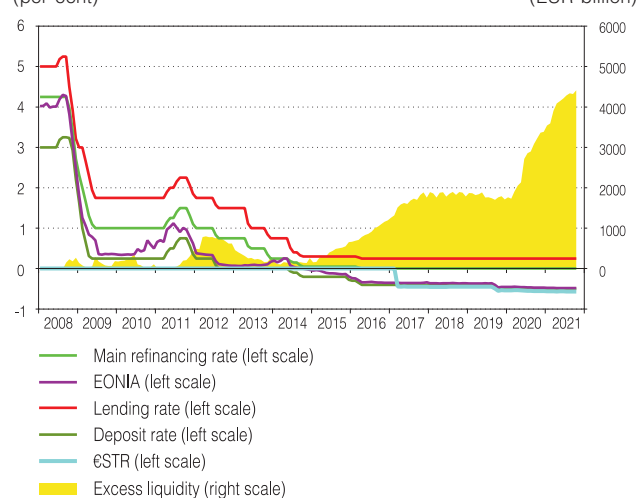
(per cent)

Institution	Date of release	2021		2022		2023	
		latest	previous	latest	previous	latest	previous
the ECB	IX.2021	2.2	1.9	1.7	1.5	1.5	1.4
EC	VII.2021	1.9	1.7	1.4	1.3	-	-

Sources: the ECB, the EC.

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

(per cent) (EUR billion)



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

Source: the ECB.

As of 1 October 2021 the Eurosystem balance sheet figure rose to EUR 8289 billion (72.7 per cent of GDP in 2020) compared with EUR 7908 billion (69.4 per cent of GDP in 2020) on 2 July 2021. Asset purchases under the APP and PEPP (EUR 256 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 4321 billion as of the end of September, up EUR 112 billion compared with the end of June.

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 matched the second quarter's level (-0.57 per cent). The trade volume of overnight deposits in the unsecured euro area money market rose in the third quarter of 2021, with its daily average over the period coming to EUR 47.4 billion, against EUR 44.1 billion in the second quarter 2021. Over the quarter EURIBOR unsecured deposit rates did not change significantly.

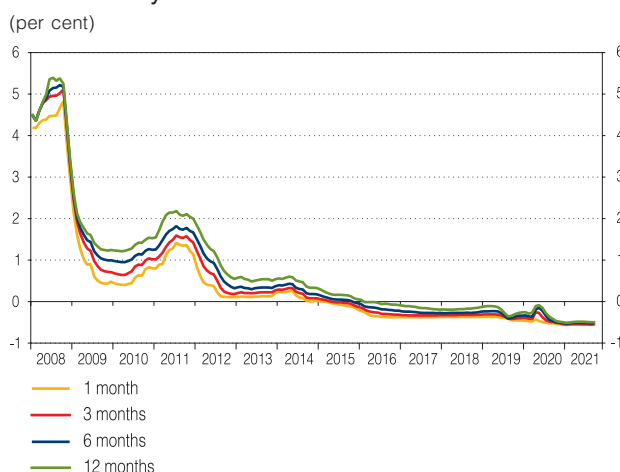
International Commodity Prices

Crude oil

In the third quarter of 2021 the Brent crude oil price rose significantly on an annual basis in both US dollars (70.9 per cent) and euro (69.5 per cent). In September 2021 crude oil price stood at USD 74.6 *per barrel* (EUR 63.4 *per barrel*). Robust demand for oil in the third quarter of 2021 resulting from the continued recovery of global economic activity was the main driver of its price rises. The strict fulfillment of output cuts agreed between the OPEC+ countries was another important precondition for the strong rise in oil prices.⁴ In the third quarter of 2021 the shortage in natural gas supply, which pushed up the demand for other energy commodities had an additional effect on the oil price. At the same time, the uncertainty

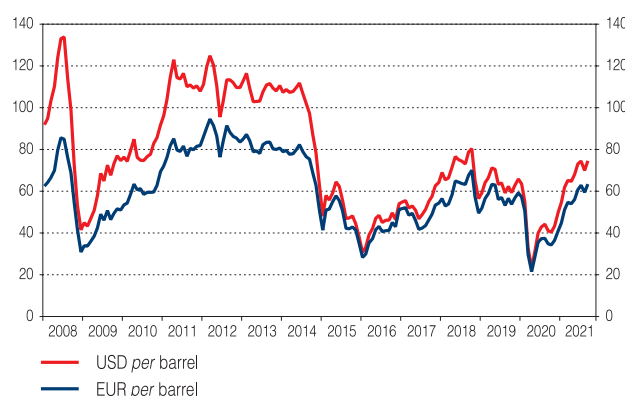
⁴ On 18 July 2021, OPEC+, which includes most members of OPEC and several non-OPEC members (including Russia), agreed to increase monthly crude oil production starting in August 2021. The agreement calls for the 400,000 barrels per day monthly increases to continue until the total production is fully recovered that should be reached at current rates over the third quarter of 2022.

EURIBOR Dynamics



Source: the ECB.

Brent Crude Oil Price



Source: the World Bank, the ECB and BNB calculations.

surrounding the transmission of new coronavirus variants exerted, to a certain extent, a dampening effect on prices.

Market participants' expectations of oil prices in the fourth quarter of 2021 and the first quarter of 2022 increased significantly *vis-à-vis* the expectations in June 2021, but the price curve remained downward sloping pointing towards a fall in oil prices in the following months. In the first two weeks of October 2021 futures prices for the next six months fluctuated between USD 78.4 and 81.9 *per barrel*. The increase reflected the shortage in the supply of other energy commodities, such as natural gas and coal.

In the third quarter of 2021 natural gas prices rose substantially worldwide, which led to a price hike of other energy products, including electricity. In September the gas price in US dollars on European gas markets⁵ surged by 489.4 per cent on an annual basis (486.9 per cent in euro), reaching the highest historical average monthly level of 22.8 USD/MMBtu⁶. Higher price levels were driven by both demand and supply side factors. Unfavourable weather conditions in Asia and South America at the beginning of the third quarter, which hampered the production of energy from alternative sources, pushed up demand for natural gas in these regions. This was combined with low levels of inventories in some European countries and its enhanced demand due to the rebound of global industrial production. Concurrently, planned and extraordinary repair works limited gas supply from Russia, with other gas producers as Norway and Australia also reporting limited deliveries due to extraordinary repair works. In the first two weeks of October 2021 the natural gas price in Europe rose further, with higher demand by the Asian market contributing negatively to gas prices and supplies to the European market.

Basic Metals and Food Prices

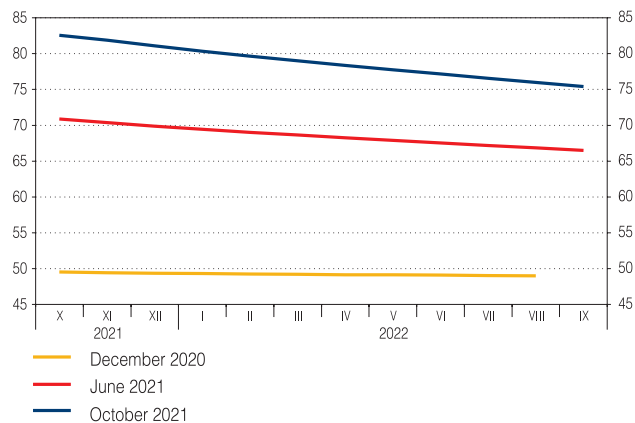
In the third quarter of 2021 metal prices in US dollars posted an annual growth of 44.8 per cent (43.7 per cent in euro), the annual growth rate of metal price index slowing significantly from the previous quarter of the year. The moderating growth rate was in line with the decline reported in economic indicators for global

⁴ For details, see: [ICE Dutch TTF Gas Futures](#).

⁵ Based on the World Bank data as of 18 September 2021.

Brent Crude Oil Futures Prices

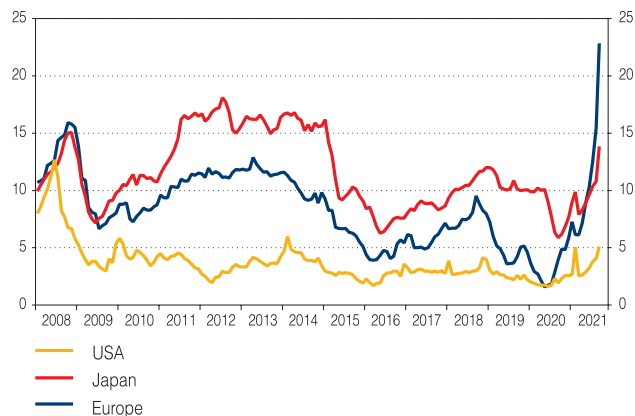
(average monthly price of contract, USD *per barrel*)



Source: JP Morgan.

Natural Gas Prices

(USD *per MMBtu*)



Source: the World Bank.

industrial production and continuing bottlenecks in global supply chains over the third quarter of 2021. By metal price index sub-components, the annual growth of copper and zinc prices slowed down substantially over the review period. The price of copper, which is of key importance for Bulgaria's goods exports, posted a slower growth compared with the second quarter reflecting the global rise in production volumes and market participants' expectations about lower copper demand growth. The sales of state metal reserves made by the Chinese authorities also contributed to slower annual growth of copper and zinc prices. Metal prices in the fourth quarter of 2021 and the first quarter of 2022 are expected to increase year on year both in US dollars and euro.

In the third quarter of 2021 the food price index in US dollars posted an annual growth of 27.3 per cent (26.3 per cent in euro). All index sub-components increased except for rice. The sub-groups of soybeans, coffee and maize had the largest positive contribution to the annual growth of food price index. The price of wheat, which is essential for the Bulgarian exports of goods, also reported a significant increase on an annual basis in the third quarter of 2021, as in the previous two quarters of the year. Expectations for poorer harvests in the USA and Russia due to unfavourable weather conditions and higher global demand for wheat used in animal husbandry contributed to the price increase. At the end of the quarter the gap between the prices of wheat and maize narrowed, but wheat remained more advantageous for livestock purposes.⁷

Market participants' expectations for food prices in the fourth quarter of 2021 and the first quarter of 2022 point to an increase on an annual basis both in US dollars and euro, which will gradually moderate.

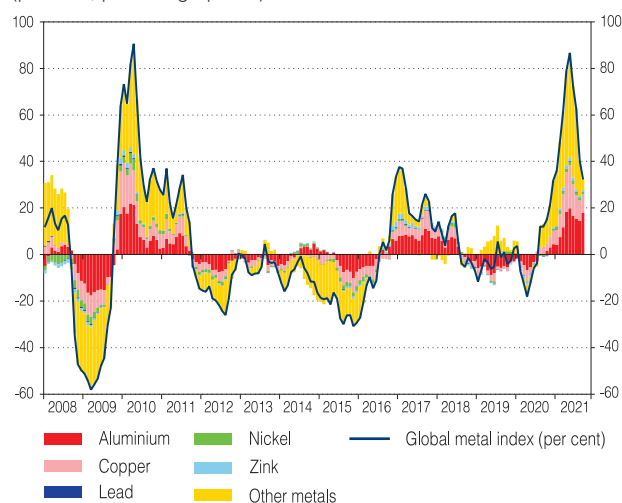
As a result of this dynamics of international commodity prices on an annual basis and assuming that exchange rates will remain unchanged, we expect the positive terms of trade for Bulgaria to reverse in the third quarter of 2021 and the first quarter of 2022. This will be partially attributable to the expected rise in oil prices on an annual basis as Bulgaria is a net importer of oil.

⁶ For details, see the regular publication of the United States Department of Agriculture [Wheat Outlook](#): September 2021.

Price Indices of Major Raw Materials and Commodity Groups

Metals

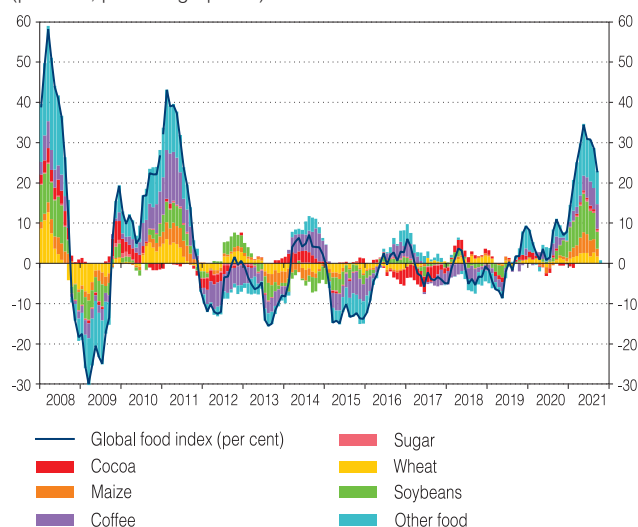
(per cent; percentage points)



Sources: the ECB and BNB calculations.

Food

(per cent; percentage points)



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

Sources: the ECB and BNB calculations.

2. FINANCIAL FLOWS, MONEY AND CREDIT

In the first seven months of 2021 the total current and capital account surplus of Bulgaria decreased from the same period of 2020, reflecting mainly a higher deficit on the trade balance and on net primary income. In the fourth quarter of 2021 and the first quarter of 2022 the surplus of the overall current and capital account balance as a share of GDP is expected to increase *vis-à-vis* the end of 2020. This will be largely driven by the higher surplus of the trade in 'other services' item, which is projected to follow the trend observed since early 2021, and by the expected higher net revenue from travel services.

In the first eight months of the year non-government sector's deposits in the banking system continued to grow at comparatively high rates, with accelerated increase in labour income, continued maintenance of precautionary savings by households and still limited investment activity of corporations contributing to this dynamics. Since March the annual growth of credit to the private sector followed a trend of gradual acceleration driven mainly by the strong upward dynamics of credit to households. Over the projection horizon the growth of non-government sector's deposits is expected to slow slightly in line with the projected increase in private consumption. The projected gradual recovery of investment activity, positive housing market prospects and the sustained low interest rate levels will favour the growth of credit to the private sector.

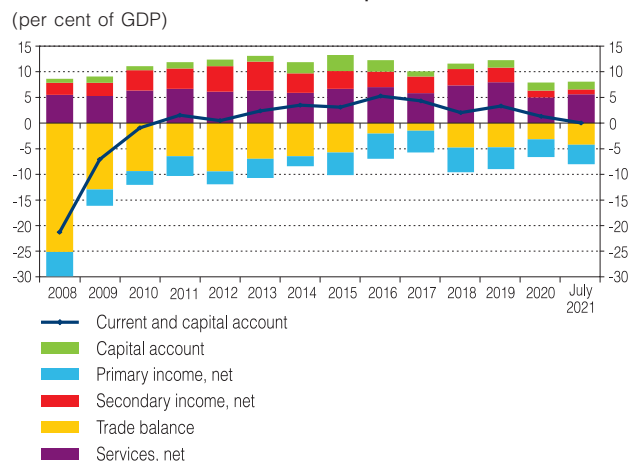
External Financial Flows

In the first seven months of 2021 a small deficit was reported on the BOP current account⁸ of Bulgaria (compared to a surplus in the corresponding period of 2020). The deficit reflected mainly an increased negative trade balance and a higher deficit on net primary income. As of July, the BOP current account balance for the last 12 months was negative at -1.5 per cent of GDP (-0.3 per cent of GDP at the end of 2020).

The higher trade balance deficit in January–July 2021 compared to the same period of 2020 reflected a larger increase in nominal goods imports (26.3 per cent) than nominal exports (22.7 per cent). This was mainly driven by a more significant growth of real volumes of goods imports compared to that of real exports of goods⁹ in the context of the strong increase in private consumption in Bulgaria marked by a relatively high import component. Despite significant price rises in oil, of which the country is a net importer, the terms of trade for Bulgaria were favourable in the first half year, which partially limited the increased trade balance deficit.

The deficit under the net primary income item increased on the same period of 2020, mainly

Current and Capital Account Flow Dynamics and Contributions of Individual Components
(per cent of GDP)



Note: July 2021 data on the current and capital account flows are accumulated for the last 12 months. Nominal GDP data for the last four quarters, including the second quarter of 2021, are used in calculating the GDP ratio for July 2021.

Sources: the BNB, the NSI, BNB calculations.

⁸ The analysis of balance of payments flows employs information from its analytical reporting. Preliminary data.

⁹ Non-seasonally adjusted national account GDP data.

as a result of higher outflows from Bulgaria on the investment income sub-item.¹⁰ Reinvested profits outside Bulgaria under this sub-item and to a lesser extent distributed dividends registered an increase. Higher accrued dividends were entirely driven by other sectors¹¹. At the same time, banks did not distribute dividends, as in 2020, in line with the BNB decision of January 2021 on the macroprudential measure for capitalising all banking system profits for 2020.¹²

The surplus on net secondary income declined largely driven by lower remittances from Bulgarian citizens working abroad.

The net services surplus increased compared to January–July 2020, which helped limit the current account deficit. The surplus on this item rose as annual services exports grew more (by 19.0 per cent) than imports (by 11.1 per cent). Other services sub-item posting an annual growth of 22.2 per cent¹³ contributed most to the reported growth in services exports. Exports of travel services of which Bulgaria is a net exporter and which were severely hit by the first wave of the COVID-19 pandemic also reported a growth. Higher services imports were driven primarily by imports of transport and travel services.

Between January and July 2021 the capital account surplus on the balance of payments rose slightly on an annual basis, reflecting mainly the higher receipts from auctioning of greenhouse gas emission allowances.

As a result of flow dynamics on individual current and capital account items, as of July 2021 the surplus on the overall balance of the two accounts accumulated for the last 12 months declined from the end of 2020, with a rising trade balance deficit and a higher negative balance on net primary income contributing most substantially. The total current and capital account balance as of July 2021 was 0.0 per cent of GDP (1.3 per cent of GDP at the end of 2020).

¹⁰ Preliminary data subject to revision; revisions usually show an increase in outflows to non-residents.

¹¹ It should read sectors other than banks.

¹² For further details, see the BNB [press release](#) of 28 January 2021.

¹³ For details, see the Exports and Imports of Goods and Services Section in Chapter 3 *Economic Activity*.

Flows on Major Balance of Payments Accounts

(EUR million)

	2020	January–July 2021	Change compared to January–July 2020
Current account	-161.2	-43.5	-777.6
Trade balance	-1,945.4	-1,415.2	-745.5
Services, net	3,059.1	2,311.3	514.8
Primary income, net	-2,109.7	-1,556.6	-317.9
Secondary income, net	834.8	617.0	-229.0
Capital account	946.5	595.8	3.6
Financial account	-3,172.9	4,206.4	5,195.4
Change in reserves	5,793.9	-1,921.0	-

Sources: the BNB, the NSI, BNB calculations.

In the fourth quarter of 2021 and the first quarter of 2022 the BOP current account balance is expected to turn to a surplus as a share of GDP on an annual basis¹⁴. The current account surplus over the projected horizon following the deficit reported in late 2020 will primarily reflect the increased surplus on the net services item, with 'other services'¹⁵ and travel sub-items contributing most and thereby following the trend observed at the beginning of the year. The assumption that in the second half of 2021 and the beginning of 2022 the negative macroeconomic effects on the demand for services as a result of the containment measures in Bulgaria's major trading partners would be limited, is of key importance for travel services. The current account surplus will be also driven by the projected increase in positive balance on the net secondary income item, with gradually recovering remittances to the country by Bulgarian emigrants and higher incoming current transfers to the government. In the fourth quarter the capital account surplus is expected to grow as a share of GDP on an annual basis¹⁶ mainly as a result of higher capital transfers under EU programmes compared to 2020, while in the first quarter of 2022 it is projected to remain close to its level of late 2021.

In January–July 2021, a net outflow from Bulgaria's financial account to the amount of EUR 4.2 billion was reported. The positive financial account balance was formed as a result of a significantly larger increase in Bulgarian residents' foreign assets compared to their foreign liabilities. The increase in foreign assets was mainly due to increased short-term assets in the form of banks' foreign currency and deposits. Measures announced by the BNB in March 2020 to further strengthen capital and liquidity position of banks, including by imposing limits on their foreign exposures in order to reduce credit and concentration risks in bank balance sheets, remained in force during 2021 as well.¹⁷ An increase in assets outside Bulgaria of other

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

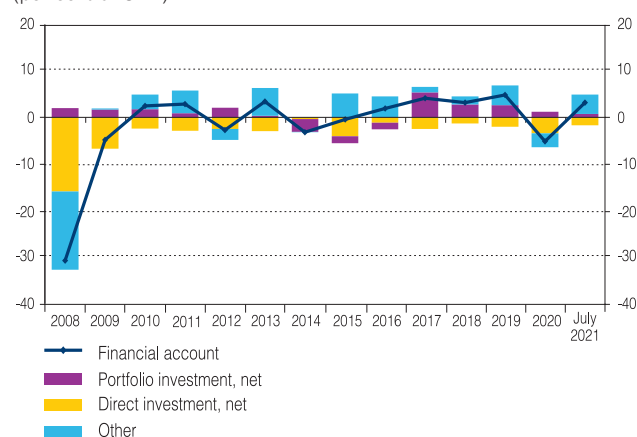
¹⁵ It should read other services in balance of payments statistics published by the BNB.

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

¹⁷ For further details, see the BNB [press release](#) of 28 January 2021.

Financial Account Flow Dynamics and Contributions of Individual Components

(per cent of GDP)

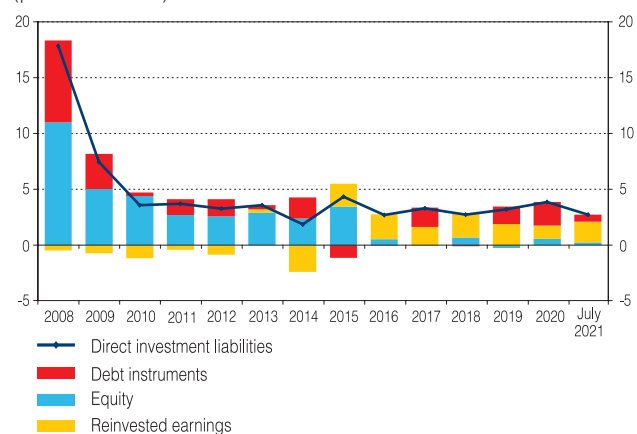


Note: The Other item includes Other Investments, Net, and Financial Derivatives (Other than Reserves) and Employee Stock Options, Net. July 2021 data on financial account flows are accumulated for the last 12 months. Nominal GDP data for the last four quarters, including the second quarter of 2021, are used in calculating the GDP ratio for July 2021.

Sources: the BNB, the NSI, BNB calculations.

Direct Investment Liabilities by Type of Investment

(per cent of GDP)



Note: July 2021 data on direct investment liabilities flows are accumulated for the last 12 months. Nominal GDP data for the last four quarters, including the second quarter of 2021, are used in calculating the GDP ratio for July 2021.

Sources: the BNB, the NSI, BNB calculations.

sectors¹⁸ was reported, which also contributed, though to a lesser extent, to net outflows from Bulgaria. As of July 2021, the financial account balance for the last 12 months turned to a surplus at 3.2 per cent of GDP (a -5.2 per cent deficit as of end-2020), mainly driven by the increase in foreign short-term assets of bank institutions as compared to their level at end-2020.

In the first seven months of 2021 direct investment liabilities (reporting FDI inflows into Bulgaria) decreased to EUR 1260.6 million (reporting FDI inflows into Bulgaria) decreased to EUR 1260.6 million (EUR 1895.9 million in January–July 2020).¹⁹ The reported decline reflected mainly lower incoming funds related to debt instruments largely driven by the base effect in July 2020 when direct investment in the form of debt instruments rose substantially. The decrease in direct investment was partially limited by the rise in reinvested profit, which was reported in other sectors and to a lesser extent in banks. At the end of the second quarter of 2021, total FDI amounted to 76.4 per cent of GDP.

As a result of net flows on the balance of payments current, capital and financial account, according to the balance of payments data for the last 12 months gross international reserves declined in July 2021²⁰ from the end of 2020 mainly reflecting the reported increase in foreign assets of the banking sector in the first seven months of the year. In July 2021 the international reserve coverage of the average nominal imports of goods and non-factor services for the last 12 months remained high 9.2 months (11.1 months in December 2020). The ratio of Bulgaria's international reserves²¹ to short-term external debt remained also high, reaching 453.7 per cent in July, against 507.8 per cent in December 2020.

In July 2021 Bulgaria's gross external debt came to EUR 40.5 billion (63.6 per cent of GDP), marking an increase of EUR 900.6 million from December 2020. The strong rise in debt securities of non-financial corporations in July was the

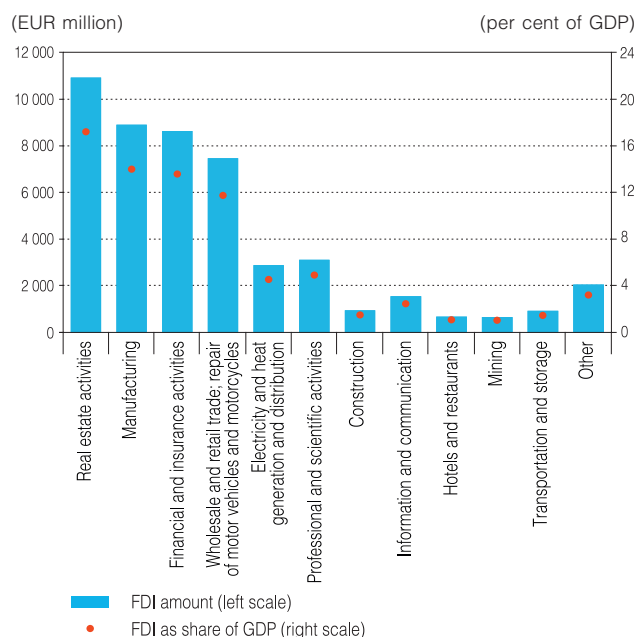
¹⁸ It should read sectors other than general government, banks and central bank.

¹⁹ Preliminary data subject to revision.

²⁰ Valuation adjustments and price revaluation excluded.

²¹ 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.

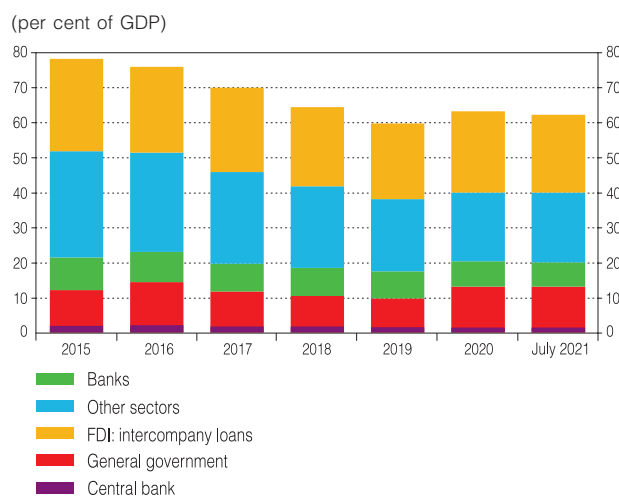
FDI by Sector as of the End of the Second Quarter of 2021



Note: Nominal GDP data for the last 12 months, including the second quarter of 2021, are used in the FDI to GDP ratio denominator.

Sources: the BNB, the NSI, BNB calculations.

Gross External Debt



Note: Since July 2021 the BNB has started to publish its monthly statistical data on gross external debt in line with External Debt Statistics: Guide for Compilers and Users, IMF 2014. Further details on individual institutional sectors are available on the BNB website, Statistics, External sector/Gross External Debt Nominal GDP for the last four quarters, including the second quarter of this year, is used in calculating gross external debt to GDP ratio for July 2021.

Sources: the BNB, the NSI, BNB calculations.

main contributor to the higher gross foreign debt. A possible reason behind the increased debt of non-financial corporations could be the eurobond issue of the Bulgarian Energy Holding sold in July on international capital markets, worth EUR 600 million, intended to refinance a bond lending with pending maturity²². The increased external debt of the general government sector compared with end-2020 also added to the upward dynamics of Bulgaria's gross external debt. In July 2021 the share of long-term debt in Bulgaria's total gross external debt was 84.3 per cent (84.7 per cent in December 2020).

Monetary and Credit Aggregates

In the first eight months of 2021 the growth of non-government sector's deposits²³ in the banking system remained high, accounting for 12.0 per cent on an annual basis in August against 9.7 per cent in December 2021. High growth rates continued to be observed in both the household and non-financial corporations sectors, although since the second quarter household deposits recorded a slight slowdown in annual growth. Factors supporting the increase in the deposit base involve accelerated growth of labour income and continued maintenance of precautionary savings by households amid an uncertainty about the future development of the pandemic and the economic environment, as well as still limited investment activity of companies. At the same time, the slowdown in household deposit growth in the last few months might be impacted by the attempts to find alternative opportunities for investing savings in the context of increasing inflation at close to zero interest rates, and the practice of some large commercial banks to charge a 'storage' fee for cash above a certain amount. Both corporations and households continued to keep their savings mainly in overnight deposits, and in terms of currency, their savings remained preferably in national currency. Continued growth of household overnight deposits was

²² For further details, see the [press release](#) on the Bulgarian Energy Holding website of 15 July 2021.

²³ Non-government sector's deposits include deposits of households, non-financial corporations and financial corporations. Deposits of households and non-financial corporations (96.4 per cent on average for the last 12 months as of August 2021) comprise the major share of all non-government sector's deposits, and the analysis therefore is focused on these two sectors.

Gross External Debt as of July 2021

(EUR million)

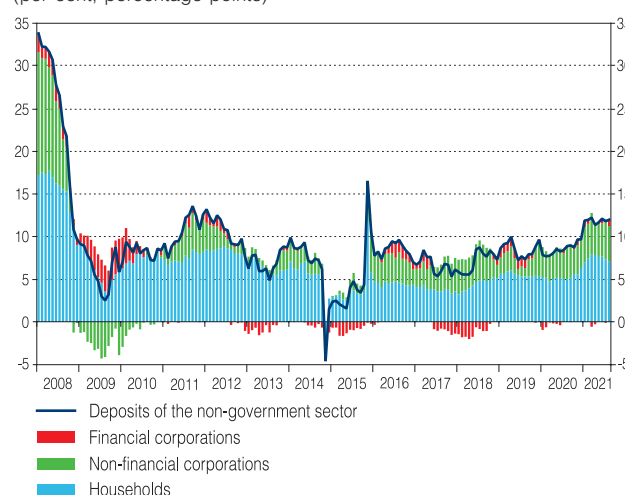
	Amount	Change	
		Since December 2020	For the last 12 months
General government	8,353.9	331.6	2,163.7
Central bank	837.7	12.6	10.5
Other monetary financial institutions	4,390.2	-70.0	195.3
Other sectors	12,769.2	711.3	661.8
Financial corporations, other than MFIs	2,167.3	140.5	12.6
Non-financial corporations	10,502.1	585.4	650.7
Households and NPISHs	99.9	-14.6	-1.6
FDI: Intercompany loans	14,176.6	-84.9	-89.0
Total	40,527.7	900.6	2,942.3

Note: Since July 2021 the BNB has started to publish its monthly statistical data on gross external debt in line with External Debt Statistics: Guide for Compilers and Users, IMF 2014. 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)



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

Source: the BNB.

influenced by the policy adopted since early 2021 by some banks to convert time deposits into demand deposits and to cease offering new time deposits.

The effective implicit rate of minimum required reserves²⁴ remained at levels close to the previous year's levels, reflecting high inflows of attracted funds from residents in the banking system during the first eight months of 2021. In August this rate was 9.40 per cent (9.43 per cent in December 2020), with banks' deposits at the BNB comprising 8.22 percentage points, and the remaining 1.18 percentage points being formed by recognised cash balances.

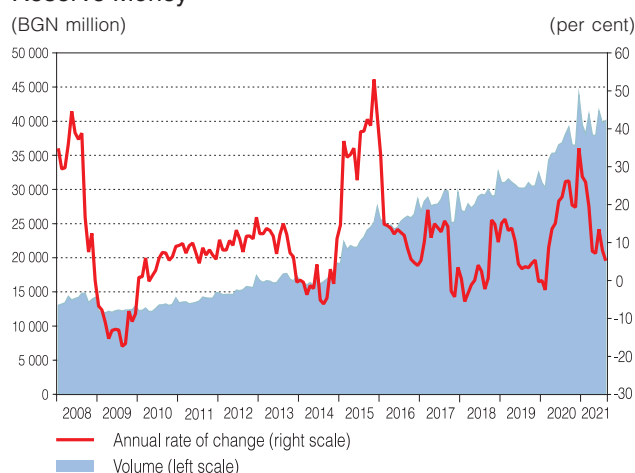
Since early 2021 the annual growth rate of reserve money tended to slow down, accounting for 5.2 per cent at the end of August (34.9 per cent in late 2020). This dynamics was driven by the decreased amount of bank reserves and, in particular, by the fall in banks' excess reserves. In August 2021 excess funds on banks' minimum reserve accounts over the required minimum of reserve assets under Ordinance No 21 was 46.8 per cent on an average daily basis against 81.1 per cent in December 2020.²⁵ The amendments to Ordinance No 21, in force since 4 June 2021, changed the definition of excess reserves. According to the new definition, excess reserves shall be the excess of the holdings in reserve assets over the required amount of minimum required reserves.²⁶ Amendments to Ordinance No 21 resulted in a one-off increase in the amount of excess reserves due to the expansion of their scope. Concurrently, these amendments create an additional incentive for banks to look for alternative opportunities for investing their free funds. In the first eight months of 2021 minimum required reserves continued growing under the influence of the rising deposit base and bank funds in TARGET2 remained close to their level at the end of 2020.

²⁴ 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 deposit base, from non-residents 5 per cent, and from the state and local government budgets 0 per cent.

²⁵ In 2021 the excess reserve interest rate remains unchanged from 2020 at -0.70 per cent.

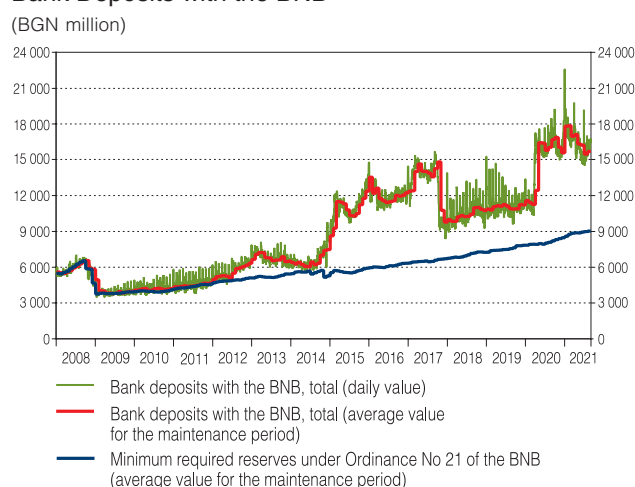
²⁶ Ordinance No 21 Article 5, paragraph 1, in force since 4 January 2016, defines excess reserves as the excess of the holdings in reserve assets by more than 5 per cent over the required amount of minimum required reserves.

Reserve Money



Source: the BNB.

Bank Deposits with the BNB



Source: the BNB.

The annual growth rate of currency in circulation retained its upward trend which started in September 2020 to reach 19.4 per cent in August (11.2 per cent by end-2020). The recovery of economic activity and private consumption encourages the demand for cash for transactional purposes. Another potentially important factor behind the highly upward dynamics of currency in circulation are the historically low interest rates on deposits and the rising costs and rising costs of maintaining these deposits in the form of various fees (for maintenance, depositing cash at cash-desk, storage, *etc.*), which create an incentive for economic agents to keep some of their savings in cash.

Reserve currency (euro) trading with the BNB is the main lev liquidity management instrument of banks under currency board arrangements. In the first eight months of 2021 net BNB purchases of euro from banks amounted to EUR 347 million.

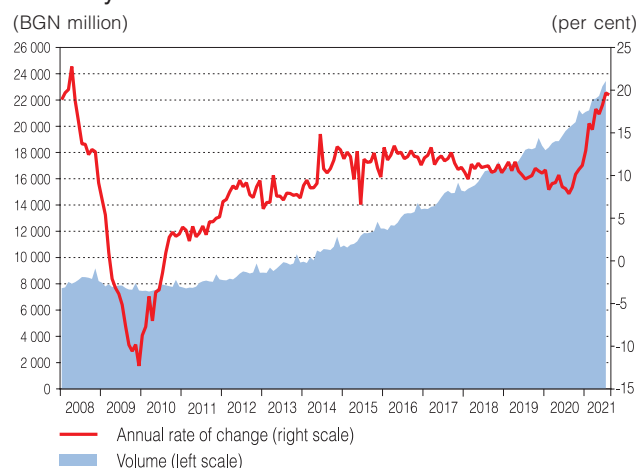
As of August 2021 bank assets grew by 10.4 per cent year on year.²⁷ Bank asset growth in the first eight months of the year was driven mainly by foreign assets of banks, which rose by BGN 10.1 billion. Growth in claims on the non-government sector and Bulgarian government bond portfolios also contributed to bank asset growth, albeit to a lesser extent. Concurrently, banks' reserves with the BNB posted a strong decline over the review period, which was due to the lower amount of excess reserves. Most likely, these developments reflect banks' demand for higher earning opportunities for investing free liquid funds, while observing the BNB limits on bank foreign exposures. Banks' foreign liabilities posted a slight decline from the end of 2020. As a result net foreign assets rose by BGN 7.5 billion to BGN 8 billion in August.

From March 2021 annual growth in credit to non-financial corporations and households²⁸ was

²⁷ Data from sectoral monthly reporting of other monetary financial institutions were used.

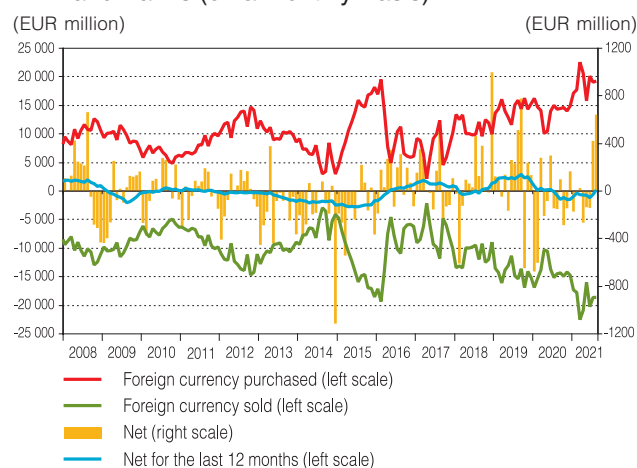
²⁸ Loans represent the bulk of bank claims on the non-government sector with a share of 97.1 per cent on average for the last 12 months in August 2021, and the analysis is therefore focused on them. In addition to loans, claims include also repurchase agreements, securities other than shares, and shares 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 August 2021 the share of loans to households and non-financial corporations in total loans to the non-government sector accounted for 93.3 per cent on average in the last 12 months, and therefore developments in these two sectors are addressed.

Currency in Circulation



Source: the BNB.

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



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

Source: the BNB.

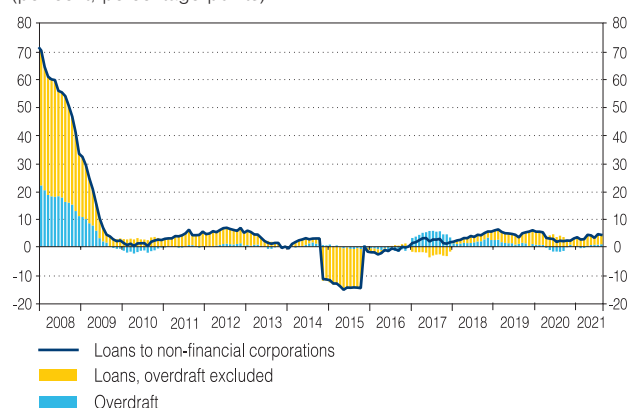
gradually accelerating to reach 7.3 per cent in August (4.5 per cent by end-2020). The strongly accelerating growth rate in credit to households contributed most to this dynamics. Developments in private sector lending were influenced by factors on both the demand and supply side. The gradual recovery of the economic activity in Bulgaria and private consumption growth amid rising labour income, low interest rates and favourable housing market prospects stimulated the demand for loans. On the supply side, following a strong tightening in 2020 banks report an easing of lending standards, with those for housing loans easing most significantly.

In August the annual growth rate of non-financial corporations' credit accelerated to 4.2 per cent (3.0 per cent by end-2020), with loans excluding overdrafts contributing most substantially and overdrafts, to a lesser extent. Newly extended corporate loans²⁹ posted a slight decline over the first eight months compared with end-2020.³⁰ In terms of the currency structure, the share of newly extended loans to corporations in euro increased at the expense of those in levs and in US dollars. In August loans in national currency comprised 51.6 per cent of total new corporate loans, while euro-denominated ones occupied 47.2 per cent and dollar-denominated 1.2 per cent.³¹

Credit to the household sector accelerated strongly to 11.5 per cent on an annual basis in August 2021 (6.6 per cent at the end of 2020). Annual growth rates accelerated in both consumer loans (to 9.8 per cent in August, from 5.0 per cent in December 2020) and loans for house purchase (to 15.8 per cent in August, from 11.6 per cent at the end of 2020). The volume of new consumer and housing loans posted an increase³² in the first eight months of the year, which was more strongly pronounced in housing loans.

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

(per cent, percentage points)

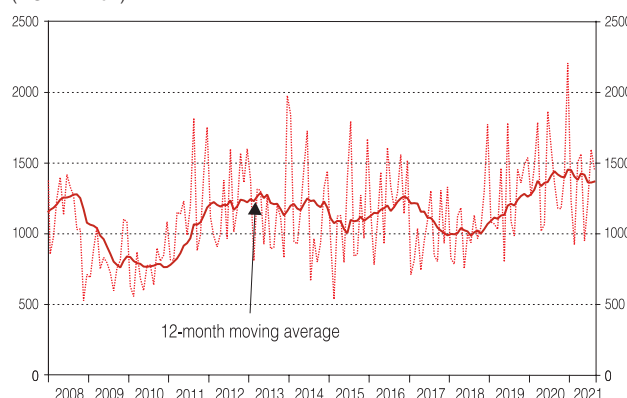


Note: The annual growth rate of loans to non-financial corporations in November 2015 reflects the exhausted base effect of KTB removal as a reporting unit from the monetary statistics in November 2014.

Source: the BNB.

New Loans to Non-financial Corporations (Monthly Volumes)

(BGN million)



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

Source: the BNB.

²⁹ The terms 'new' and 'newly extended' hereinafter refer to as the statistical category 'new business'.

³⁰ Based on 12-month moving average.

³¹ The share of loans in national currency, euro and US dollars for the last 12 months as of August 2021.

³² Based on 12-month moving average.

Summarised weighted results of the bank lending survey³³ for the second quarter of 2021 show a slight tightening of bank standards³⁴ in extending loans to corporations and easing of the lending policy to households. Easing of credit conditions for corporations and households refers to the credit maximum amount and term, and interest rates. Concurrently, banks reported a tightening of conditions for corporations, especially in terms of collateral requirements and premia for riskier loans, and for households in terms of required fees and commissions, accordingly. The tightened credit policy (credit standards and conditions³⁵) for corporations over the quarter reflected the lower risk appetite of banks and increased risk assessments. At the same time, the eased household lending policy was impacted by the significant volume and low cost of attracted funds, competition and high liquidity in the banking sector. In addition, the easing of bank policies with regard to housing loans reflected the lowered risk assessment as a result of overall improvement of the macroeconomic environment, favourable prospects in the housing market and increased assessments of borrower solvency. Bank expectations in the third quarter of 2021 are for a more significant easing of lending standards for consumer and housing loans and a slighter easing of the standards for corporate loans.

Over the second quarter of 2021 banks reported an increase in demand for loans from corporations and households, with demand for loans for house purchase rising most strongly. Financial resources required for working capital and inventories are considered by banks to be the main factor behind higher demand for corporate loans over the quarter. Demand for bank resources for investment purposes, low interest rates and the

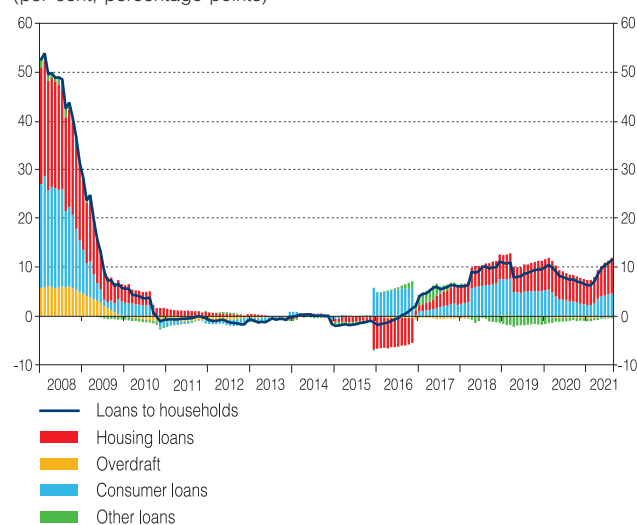
³³ Bank Lending Survey in Bulgaria is carried out by the BNB on a quarterly basis. Summarised results of the survey are presented through weighting bank responses by their market share in the relevant credit segment.

³⁴ 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.

³⁵ Credit conditions typically involve the reference interest rate surcharge, the loan amount, conditions for its utilisation and other conditions, fees and commissions, collateral or guarantees to be provided by a borrower.

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

(per cent, percentage points)

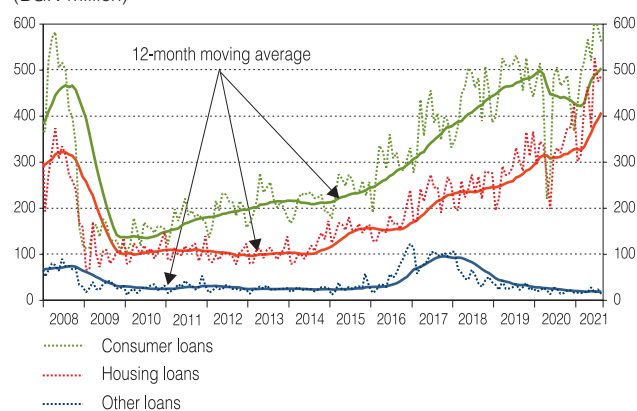


Note: Based on additional information received from reporting units, a revision of household loans was carried out according to their purpose of use in December 2015 – August 2019.

Source: the BNB.

New Loans to Households (Monthly Volumes)

(BGN million)



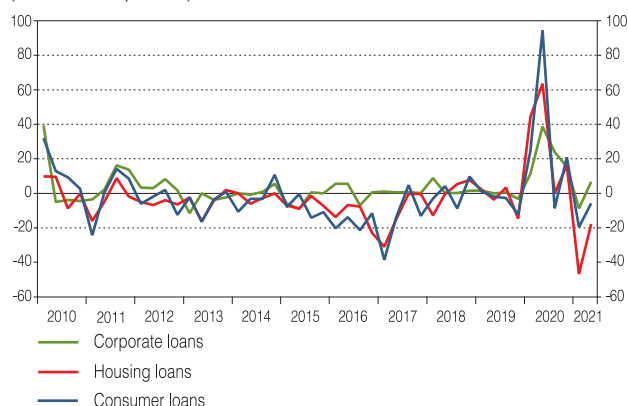
Source: the BNB.

need of funds for refinancing and renegotiating debt contributed to a lesser extent. Overall improvement of the macroeconomic environment, low interest rates, funds needed for purchasing current consumption goods and the desire of some households to finance their consumer expenditure by loans secured by real estate were the main drivers of increased demand for consumer loans. In addition to the overall macroeconomic environment and low interest rates, households' needs of funds for purchasing first and especially additional residence, and favourable housing market prospects contributed substantially to the surge in demand for housing loans over the quarter. In the third quarter of 2021 banks expect a further increase in demand for loans from both households and corporations, with corporate loans expected to grow most strongly.

Amid continuous wage growth, deposits in the banking system are expected to further grow at comparatively high rates while tending to gradually slow down in the last quarter of 2021 and in the first quarter of 2022. Part of households' additional income is expected to be used for boosting private consumption or maintained in cash. The projected gradual recovery of investment activity in Bulgaria will also contribute to slower deposit growth. A potential factor limiting deposit growth is the 'storage' fee introduced earlier this year by some banks for cash above a certain amount and a possible rise in the number of banks charging such a fee, as well as the cut of the threshold to which it applies. Credit to the non-government sector is expected to retain its relatively high growth rates over the following two quarters, with household loans contributing much stronger to growth. Increasing demand for consumer and especially housing loans amid a continuing economic activity recovery, positive housing market prospects and low interest rates will support these developments. Concurrently, a possible moderate rise in the share of non-performing loans in banks' portfolios associated with the expiry of the extended terms on the private moratorium on bank loan repayments is a factor with a potentially limiting effect on the dynamics of credit to the private sector.

Changes in Credit Standards

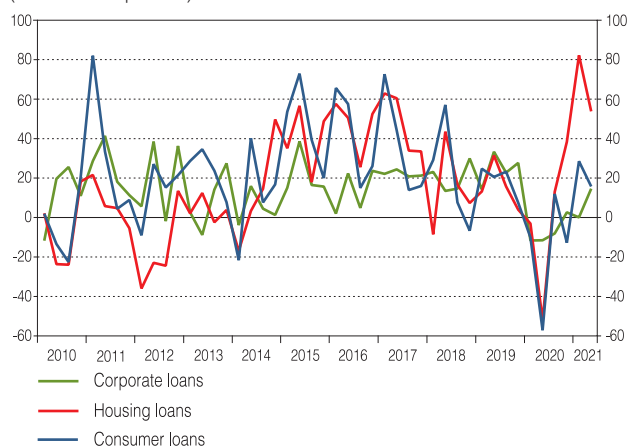
(balance of opinions)



Source: the BNB.

Changes in Credit Demand

(balance of opinions)



Source: the BNB.

Note: 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 chart show the change from the previous quarter.

Source: the BNB.

The decision announced by the BNB in September 2021 to increase the countercyclical capital buffer rate from 0.5 per cent to 1.0 per cent, in force as of 1 October 2022, will have a limiting effect on lending in the following year. This increase marked a change in the Bank's macroprudential policy pursued after the planned countercyclical capital buffer rises for 2020 and 2021 were cancelled by BNB Governing Council in March 2020 due to the emergency situation caused by the COVID pandemic. In the context of accelerating growth of lending activity, especially in the housing loan segment, the BNB decision of September 2021 could create expectations for a further increase in the rate of the countercyclical capital buffer in the short term.

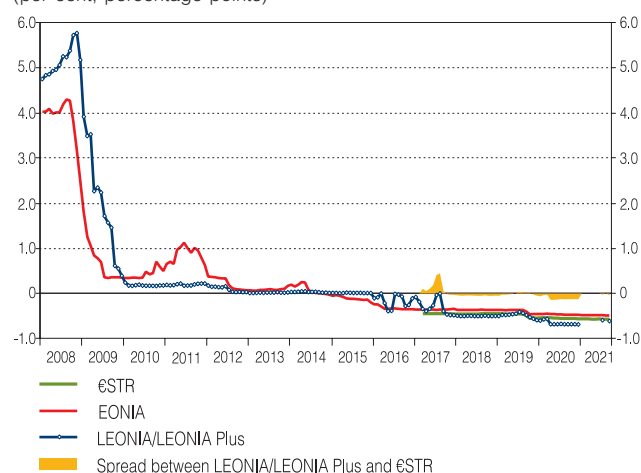
Interest Rates

In the first nine months of 2021 the interbank money market activity was very weak and unsecured overnight deposit transactions in levs were concluded only in July and September. These developments continued to reflect the lack of incentives for trading in this market amid ample banking system liquidity. In the months when no transactions were concluded, LEONIA Plus index was not available. In September it was -0.61 per cent, and its spread with €STR was -0.04 basis points (-13 basis points in December 2020).

In the first eight months of the year deposit interest rates recorded a further decline from historical levels as a result of the continuing high liquidity and increasing inflow of attracted funds in the banking system. As of August 2021 the average weighted interest rate on new time deposits of non-financial corporations and households was 0.02 per cent (down 8 basis points from the end of 2020). The average interest rate on household deposits remained slightly positive at 0.08 per cent as of August (down 7 basis points from the end of 2020), while in the non-financial corporations' sector there was a further increase of its negative value to -0.13 per cent in August (-0.02 per cent in December 2020). Downward dynamics of new corporate deposit interest rates was driven by the increase in the negative lev deposit interest rate (from -0.10 per cent in December to -0.24 per cent in August), while interest rates on corporate deposits in euro and U.S. dollars remained positive, though close to zero. The negative interest rate on corporate

Overnight Interbank Money Market Rates (Average Monthly Value)

(per cent, percentage points)



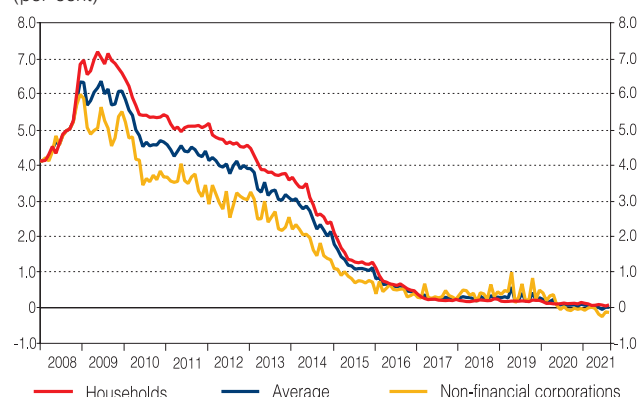
Notes: €STR replaced EONIA on 2 October 2019. EONIA (euro overnight index average) will be further computed and published by the end of 2021 by applying a fixed spread to the €STR.

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)



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

Source: the BNB.

deposits denominated in levs resulted in a negative value of the total average weighted interest rate on household and corporate deposits in levs, which stood at -0.03 per cent as of August (0.08 per cent in December 2020).

Declining cost and growing amount of attracted resources coupled with lacking high-yield alternatives for using free resources by banks continued to be behind the slight decline in lending rates on new loans to corporations and households.

As regards new loans to non-financial corporations, interest rates on US dollar-denominated loans posted the largest decline by 86 basis points to 2.7 per cent in August from the end of 2020, while interest rates on loans in national currency fell by 21 basis points to 2.7 per cent. Concurrently, interest rates on newly extended loans in euro slightly increased by 12 basis points to 2.5 per cent in August.³⁶ In the sector of households, the gradual decrease in the annual percentage rate of charge (APRC) on new housing loans was retained (by 12 basis point from the end of 2020 to 3.1 per cent in August), reflecting entirely lower interest rates. The APRC on newly extended consumer loans tended to decline in the first half of the year, while in the last two months it remained at the achieved levels. This dynamics was largely driven by the implicit rate of non-interest service charges.

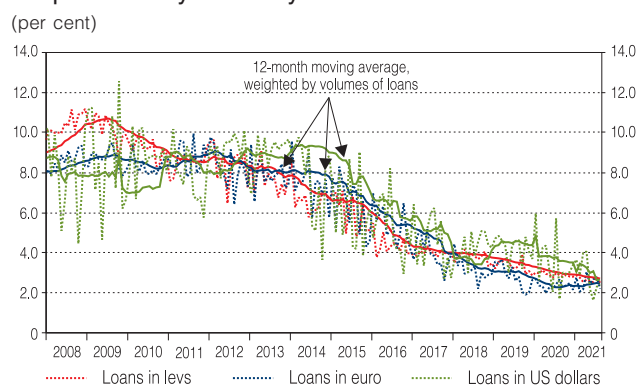
In the first eight months of 2021 interest rates on new loans to corporations in the euro area remained at the levels of end-2020, while in the sector of households the trend to a slight decline persisted. This dynamics coupled with the dynamics of interest rates on newly extended loans to corporations and households in Bulgaria, resulted in a slight decline in their spreads from the end-2020 levels³⁷.

Amid continuous inflows of attracted funds and high liquidity in the banking system in the last quarter of 2021 and the first quarter of 2022,

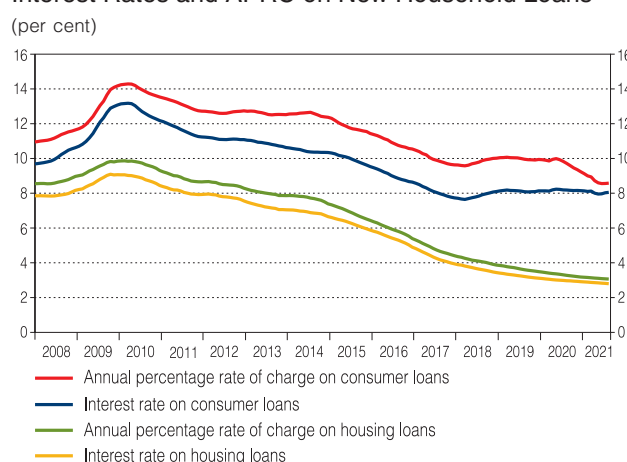
³⁶ Indicated values of interest rates on loans to non-financial corporations and households are weighted averages on a 12-month basis.

³⁷ Spreads are calculated as a difference between average interest rates in Bulgaria and 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.

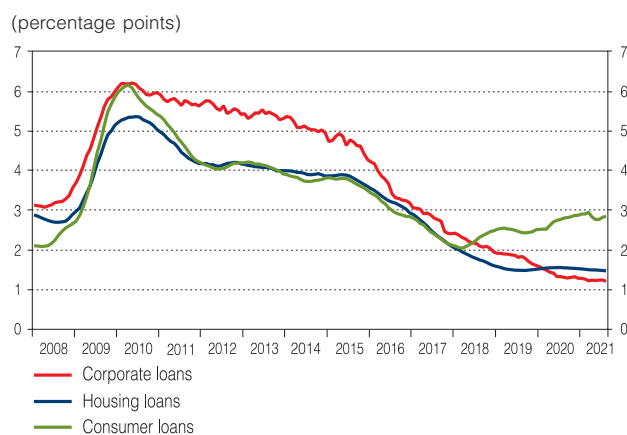
Interest Rates on New Loans to Non-financial Corporations by Currency



Interest Rates and APRC on New Household Loans



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

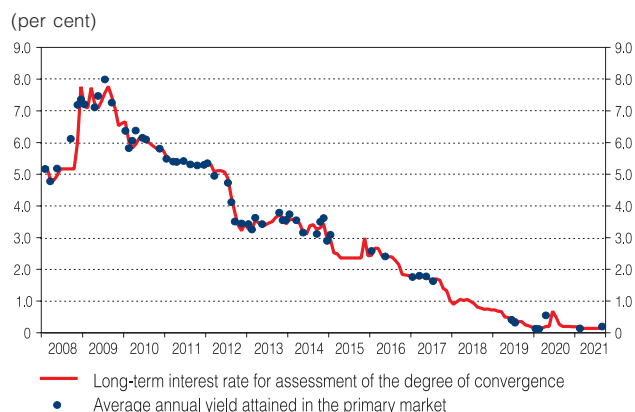


the interest rate on new deposits overall of non-financial corporations and households is expected to remain close to 0 per cent and is likely to become slightly negative. With the gradual expiry of the extended terms on the private moratorium on bank loan repayments, the share of non-performing loans in bank portfolios is likely to increase moderately, which may be a prerequisite for interest rates on loans to rise somewhat.

In the third quarter of 2021 two auctions for BGN-denominated government securities were held in the domestic primary market. In September 2021 an issue with five-year original maturity (0.00 per cent coupon interest) and an issue with ten-year-and-six-month original maturity (0.10 per cent coupon interest) were reopened, the latter being benchmark for the long-term interest rate for assessing the degree of convergence, with nominal value of bids approved amounting to BGN 200 million and BGN 300 million, respectively. The average annual weighted yields attained at the auctions were -0.15 per cent on five-year government securities and 0.20 per cent on ten-year-and-six-month government securities. Five-year government securities' yields were lower by 5 basis points compared to the yields from the previous auction of five-year government securities held in March 2021, while the bid-to-cover ratio was higher in September than in March. Benchmark issue reached 6 basis points higher yields than those at the auction with government securities of the same maturity in February, with a lower bid-to-cover ratio in September. Concurrently, the long-term interest rate for assessing the degree of convergence went up marginally to 0.15 per cent in February from 0.14 per cent in June.

In the long end of the reference yield curve of Bulgarian government securities issued in international capital markets a decline was registered as of the end of September compared to the end of June. At the same time, a yield increase was observed in the short end. The decrease in German sovereign bond yields in the short end of the maturity curve recorded at the end of the third quarter of 2021 helped widening the spread between Bulgarian and German government securities in that section of the curve. In the long end of the curve, spread contracted

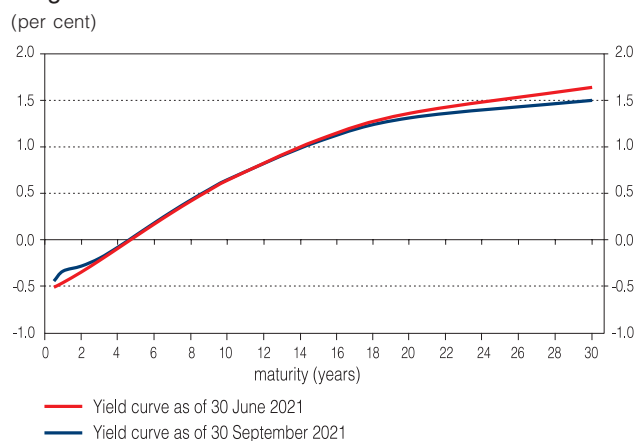
Long-term Interest Rates in the Primary and Secondary Markets of Government Securities



Notes: The chart shows the yields reported on the primary and secondary markets on 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 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.

vis-à-vis German government securities mainly due to a fall in Bulgarian government securities yields, while German government securities yields remained largely unchanged in the long-term sectors.

The political cycle in the country is an internal factor likely to push up Bulgarian government bond yields over the projection horizon. Concurrently, a potential significant deterioration of the epidemic situation in the euro area countries could lead to increased uncertainty in financial markets, investors' reorientation to lower risk assets and a decline in government bond yields, including in Bulgaria.

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.³⁸

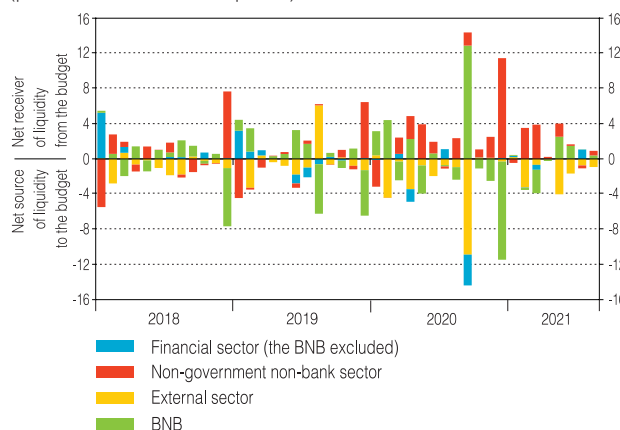
In the second quarter of 2021 the external sector was a net source of liquidity to the budget mainly as a result of the funds received in May in the amount of EUR 511 million under the Loan Agreement between the EU and Bulgaria under the European instrument for temporary support to mitigate unemployment risks in an emergency (SURE) following the COVID-19 outbreak. The budget effect on the liquidity of the financial sector (the BNB excluded) was neutral over the quarter since there were no new government bond issues and no maturing government securities in the domestic market over the quarter. BNB estimates show that as a result of the excess of non-interest budget expenditure over tax and non-tax revenue, the non-government non-bank sector was a net beneficiary of liquidity from the budget in the period from April to June 2021. Positive net financial flows to this sector reflected government's discretionary measures under the State Budget Law for 2021³⁹, including the extension of payments in

³⁸ 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 does not therefore coincide with the sector classification used in the National System of Accounts.

³⁹ For further information, see the Main Parameters of the 2021–2023 Budgetary Framework box, BNB Economic Review, issue 4/2020.

Consolidated Budget Effect on Other Sectors' Liquidity (Monthly)

(per cent of GDP for the quarter)



Notes: This chart is based on monthly data of CFP implementation by including also information obtained from MF monthly bulletins on state budget performance and major CFP indicators and MF Central Government Debt and Guarantees monthly bulletins. GDP data for the third quarter of 2021 from the BNB macroeconomic forecast of September 2021 are employed to assess liquid flows in July and August 2021.

Sources: the MF, the BNB.

the second quarter under the so-called subsidised employment '60/40' program and payments for allowances to pensions. Government deposit with the BNB increased from end-March by BGN 1188 million to reach BGN 8456 million as of the end-June, as a result of higher net funds received from the external sector to the budget compared to the liquid funds provided by the budget to the non-government non-bank sector.

Data on consolidated fiscal programme (CFP) performance for July and August 2021 published by the Ministry of Finance indicate that the external sector continued to be a source of liquidity to the budget. This is attributable to the revenue from grants and reimbursements from the European Union that exceeded payments made for Bulgaria's contribution to the EU budget and interest payments on external loans. Payments on maturing government securities amounting to BGN 316 million over that period were a key factor behind the redirecting of net liquidity from the budget to the financial sector (excluding the BNB). As a result of the slight excess of non-interest budget expenditure over tax and non-tax revenue in July and August, the effect of non-government non-bank sector on the budget was close to neutral. Government deposit with the BNB increased from the second quarter of 2021 by BGN 138 million to reach BGN 8594 million as of end-August, due to higher net funds received from the external sector compared to the liquid funds provided by the budget to the financial sector (excluding the BNB) and non-government non-bank sector.

The budget deficit projected by the Law amending the State Budget Law for 2021 along with the positive budget balance expected by the end of the third quarter of the year are a prerequisite for redirecting liquidity from the budget to the non-government non-bank sector in the fourth quarter of the year. Concurrently, domestic government securities issued in October totalling BGN 500 million and no pending payments on maturing domestic government securities in the last quarter of 2021 suggest that financial sector (excluding the BNB) will be a net source of liquidity to the budget.

Funds which Bulgaria expects to receive following the assessment of the National Recovery

and Resilience Plan by the European Commission and its possible approval by the EU Council represent a source of liquidity from the external sector to the budget in the fourth quarter of 2021 and the first quarter of 2022. Upcoming parliamentary elections in Bulgaria in November bring uncertainty about the adoption of the State Budget Law for 2022, the scope and amount of discretionary fiscal measures in the beginning of next year and budget's effect on non-government non-bank sector's liquidity over that period.

Pending payments at the end of the first quarter of 2022 on maturing government securities issued on international capital markets totalling EUR 1.25 billion, of which EUR 864.56 million were held by residents by end-July, will be a factor for redirecting liquidity from the budget to both external sector and financial sector (the BNB excluded). At the same time, EU reimbursements under the Common Agricultural Policy, that are typical for the beginning of the year, could help redirecting liquidity from the external sector to the budget in the first quarter of 2022.

By the end of September 2021 the market value of Bulgaria's international reserves (including valuation adjustments and price revaluations) was EUR 32.4 billion (BGN 63.5 billion), increasing by EUR 1.6 billion (BGN 3.2 billion) from the end of 2020. The amount of gross international reserves reflects the dynamics of financial flows generated in the process of external and internal economic factors interaction and corresponds to the BNB Issue Department balance sheet liabilities, according to the currency board principles. The increase in banknotes and coins in circulation contributed most to the rise in liabilities of the BNB Issue Department at the end of September 2021 *vis-à-vis* December 2020. Higher amount of Banking department deposit due to the additional SDR 859 million allocated to Bulgaria on 24 August and the increased government deposit with the BNB had a weaker impact. Concurrently, excess reserves maintained by banks on their accounts with the BNB declined over the period.

Banks' excess reserves with the BNB are expected to decrease further in the last quarter of 2021 and the first quarter of 2022 and this dynamics will continue to be driven by banks' demand for higher earning opportunities for

investing free liquid funds. At the same time, over the projection horizon minimum required reserves are anticipated to continue growing due to the rising deposit base. Currency in circulation is expected to maintain high growth rates with a tendency toward a gradual slowdown. The expected negative budget balance is projected to have the strongest impact on the dynamics of government deposit with the BNB in the fourth quarter of 2021. A potential external source of liquidity to the budget would be the disbursement of advance payments by the EC under the National Recovery and Resilience Plan. Over the first quarter of 2022, developments in the government deposit with the BNB will be mainly driven by the realised budget balance and the MF issuing policy.

3. ECONOMIC ACTIVITY

In the second quarter of 2021 Bulgaria's real GDP fell by -0.3 per cent on a quarterly basis, although the contributions of individual sub-components suggested an increase in economic activity on a quarterly basis. According to seasonally adjusted NSI data, private consumption and net exports of goods and services contributed positively to economic activity growth over the review quarter, which was only partially offset by the fall in government consumption and investment in fixed capital. Similar developments were also observed in gross value added, which posted a quarterly decline for the total economy over the second quarter of 2021, while reporting an increase in all major economic sectors (agriculture, industry and services). During the second quarter labour market conditions improved: a quarterly increase in employment and a decline in unemployment rate, as well as a rise in nominal compensation of employees were reported.

Economic indicators for the third quarter of 2021 suggest retention of economic activity close to the second quarter level. If the assumption that the deterioration of the epidemiological situation in Bulgaria, which started in August 2021, will be addressed by implementing measures having a limited impact on economic activity materialises, real GDP is expected to grow in the fourth quarter of 2021 and the first quarter of 2022 and reach its pre-pandemic level.

Current Economic Environment

Revised seasonally adjusted NSI national account data, published on 18 October 2021, show that in the second quarter of 2021 Bulgaria's real GDP registered a quarter-on-quarter decline for a third consecutive quarter.⁴⁰ Although the dynamics of GDP sub-components by final demand elements suggested an increase in economic activity, the decline amounted to -0.3 per cent in the second quarter. This discrepancy could be explained by the methodology for seasonal adjustment of the data employed by the NSI.⁴¹ By sub-components, private consumption and net exports made a positive contribution to GDP dynamics, which was only partially offset by the fall in government consumption and investment in fixed capital.

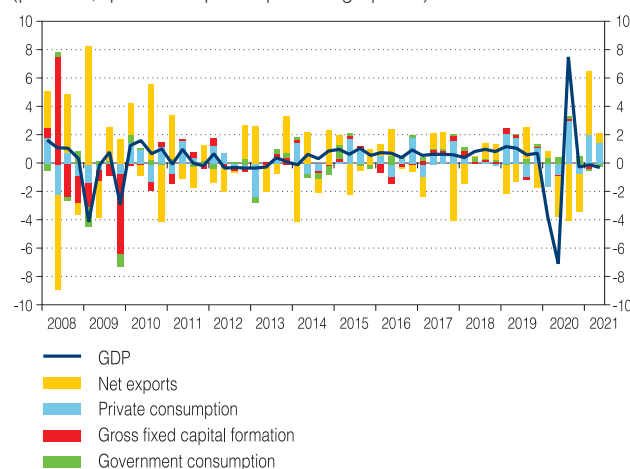
Over the second quarter of 2021 private consumption increased by 2.2 per cent quarter on quarter in real terms, contributing most substantially to the economic activity over the period. Factors, which underpinned the growth of household final consumption expenditure, include the

⁴⁰ For further information, see the Highlights entitled Revision of GDP Data.

⁴¹ The NSI applies a method of seasonal adjustment in which the aggregates and their components undergo self-smoothing. As a result, there is a non-additivity of the seasonally adjusted components to the seasonally adjusted index, total for the economy.

Contribution to GDP Growth by Final Use Component

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



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.

rise in nominal compensation of employees (by 0.8 per cent on a quarterly basis), increased fiscal transfers to households and corporations, an improved consumer confidence indicator, a lower rate of household savings⁴² (from 11.5 per cent in the first quarter of the year to 10.0 per cent in the second quarter) and consumer loan growth. In terms of final consumer expenditure structure, a stronger rise was reported in expenditure on durables and to a lesser extent in the group of services, non-durables and semi-durables.

In the second quarter of 2021 government consumption contributed slightly negatively to the quarter-on-quarter change in the real GDP since the growth rate of the government consumption deflator outpaced the growth rate of nominal government consumption. Despite quarter-on-quarter declines in the first half of the year, government consumption rose by 3.7 per cent on an annual basis, reflecting growing operating, staff and healthcare costs since early this year.

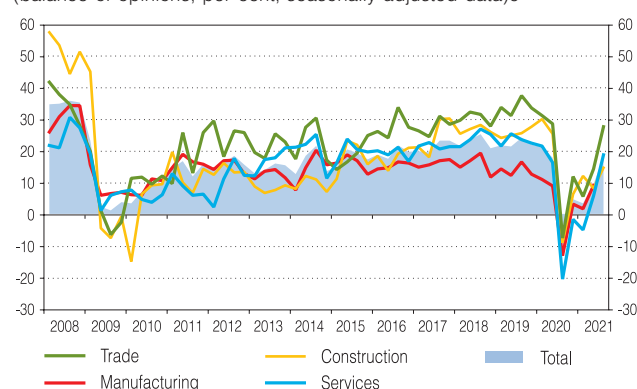
Between April and June 2021 investment in fixed capital fell by 0.2 per cent on a quarterly basis in real terms. BNB estimates based on data available as of 18 October⁴³ show that the decline in total investment was entirely due to public investment, while private investment increased quarter on quarter, likely driven by managers' more optimistic sentiment about future production activity, a higher rate of production capacity utilisation and increased external demand for Bulgarian goods and services on a quarterly basis. NSI Business Situation Survey data indicate that the continuing comparatively high economic uncertainty was a factor that further limited the investment activity of corporations. The fall in general government sector's investment in the second quarter of the year is probably associated with delays in the imple-

⁴² NSI Household Budget Survey data, seasonally adjusted by the BNB are used. For details, see the Household Behaviour Section in Chapter 3.

⁴³ The NSI does not provide official data on the breakdown of total investments into private and public. The series on private investment is constructed by the BNB as a difference between total investment and the estimated amount of public investment on an accrual basis in real terms. The estimate of public investment is based on data from quarterly non-financial accounts of the general government sector and reports on the implementation of the consolidated fiscal programme published by the NSI and the MF accordingly.

Expectations about Future Economic Activity

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



Sources: the NSI, BNB calculations.

mentation of infrastructure projects funded by the national budget⁴⁴.

Net exports had a positive contribution to quarterly growth of real GDP in the second quarter of 2021, driven by both trade in goods and in services. Net exports also exhibited discrepancies between the quarterly dynamics of aggregate items of exports and imports, and the dynamics of their individual sub-components, which is likely due to the seasonal adjustment method applied by the NSI. Current data show a quarter-on-quarter decline in total exports of goods and services in the second quarter of 2021, while exports of goods and exports of services separately increased on a quarterly basis, thus making difficult the economic interpretation of current data.

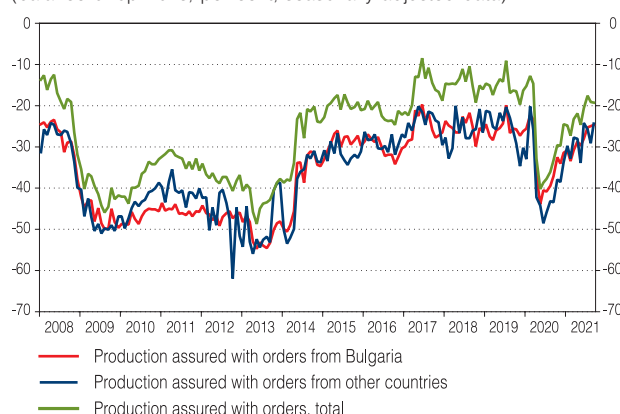
Short-term business statistics indicators in Bulgaria for the third quarter of 2021 suggest retention of economic activity close to the second quarter level given the continuing COVID-19 spread and the tightening of anti-epidemic measures in the country. In the third quarter of 2021 the overall business climate indicator deteriorated somewhat on the previous quarter, according to seasonally adjusted data⁴⁵. This reflected managers' more pessimistic sentiment in manufacturing, construction and retail trade, while business climate improved in the services sector. However, as regards the indicator of future production activity, an improvement in expectations was reported in all sectors. The uncertain economic environment, insufficient demand and staff shortage continued to be among the main factors hampering business activities, with the latter factor increasing somewhat its negative impact. Concurrently, the economic uncertainty indicator calculated by the BNB continued to report a significant decline for both corporations and households. According to the construction of the indicator, this is a sign that economic agents' expectations about economic environment developments are similar, irrespective of whether they are more positive or more negative.

⁴⁴ BNB calculations on the quarterly rate of change in government investment, for which quarterly non-financial accounts of the general government sector published by the NSI, as well as Ministry of Finance cash data on budget performance are used.

⁴⁵ BNB seasonally adjusted data.

Production Assured with Orders from Other Countries and Finished Goods Inventories

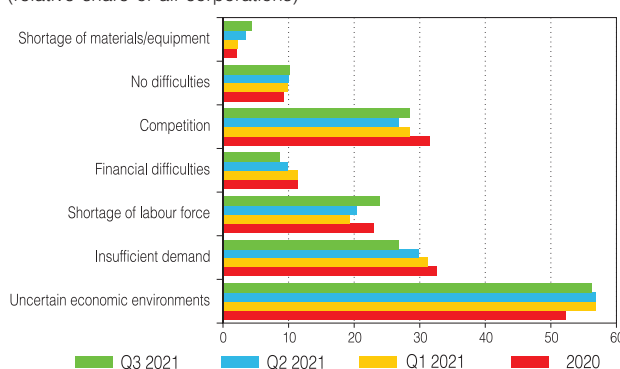
(balance of opinions, per cent; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Factors Hampering Business Activities of Corporations

(relative share of all corporations)



Note: Average for the period calculated as a weighted average based on economic sectors' shares in total economy (industry, construction, trade and services).

Sources: the NSI, BNB calculations.

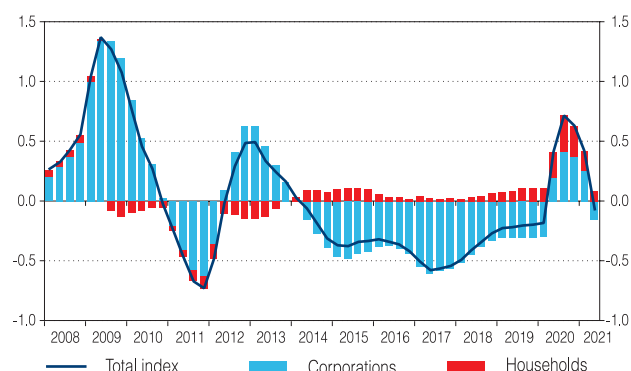
Eurostat's seasonally adjusted data on consumer confidence show that in the third quarter of 2021 consumer sentiment continued to improve, with the indicator remaining above its long-term average, *i.e.* at a level similar to the pre-COVID-19 pandemic level. This largely reflected more positive assessments of households about the economic situation in Bulgaria in the last 12 months and their more optimistic expectations about the labour market in the next one year. Improved household sentiment is a precondition for further private consumption growth in the third quarter of 2021. However, the rise in final consumer prices has a dampening effect on household real disposable income and on consumption. In July and August 2021 retail trade turnover increased quarter on quarter in nominal terms, while in real terms it remained close to that of the second quarter⁴⁶.

After the industrial production index recovered to its pre-COVID-19 pandemic level in the second quarter, its quarterly growth rate slowed in July and August 2021. Mining and quarrying and manufacturing sectors contributed most to this dynamics. Concurrently, a significant increase in the produced output on a quarterly basis was reported in production and distribution of electricity, heating and gas, which was probably driven by higher energy prices in Bulgaria and other EU Member States in the third quarter. The dynamics in the structure of nominal industrial turnover indicates that slower growth of the global industrial production index reflects a decline in corporate sales in external markets, while domestic market turnover continued to grow on a quarterly basis. This could result in a more subdued dynamics of exports of goods in the third quarter of 2021 compared with the beginning of the year.

Construction production in July and August 2021 matched the previous quarter's level. Divergent developments were observed across sub-components of the construction production index, with building construction reporting quarterly growth, while civil/engineering posted a decline. This gives reason to expect that the investment activity will remain subdued over the following quarters, largely driven by the private sector.

⁴⁶ NSI seasonally adjusted data.

Uncertainty Indicator in the Economy (Corporations and Households)

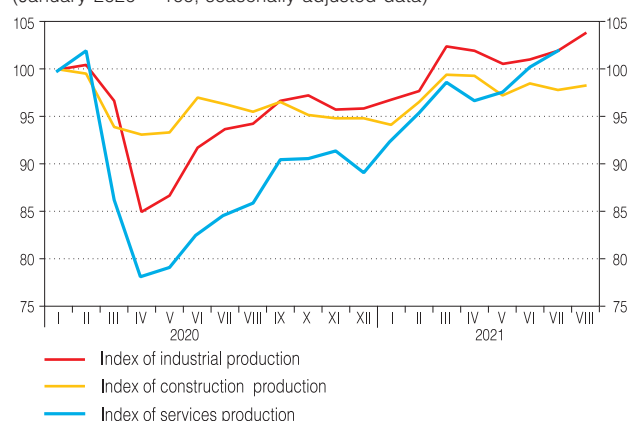


Notes: Higher values of this indicator should be interpreted as an increase in uncertainty. Positive/negative values of the global indicator show that the uncertainty in economy is above/below its long-run level. This indicator is constructed under a methodology presented in: Ivanov, E. "Constructing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

Sources: EC, BNB calculations.

Dynamics of the Index of Industrial, Construction and Services Production

(January 2020 = 100; seasonally adjusted data)



Sources: the NSI, Eurostat, BNB calculations.

Data on the services production index⁴⁷ show that economic activity grew by 20.3 per cent on a monthly basis in July, underpinned by all major sub-sectors. This dynamics was in line with the lower number of COVID-19 cases, significant easing of containment measures over the summer in Bulgaria and increased number of visits of foreign nationals to the country. The highest increase in production in July was recorded in services related to hotels and restaurants.

We expect that real GDP will increase on a quarterly basis in the fourth quarter of 2021 and the first quarter of 2022 based on the assumption that the deterioration of the epidemiological situation in Bulgaria (observed since August 2021) will be addressed by measures with a limited economic impact.

Private and government consumption are expected to support real GDP growth at the end of the year in the context of September update of the state budget. Projected employment growth and active supply of lending resources by banks are other factors that are set to boost private consumption in early 2022. Net exports will also contribute positively to economic growth over the following quarters in line with the projected recovery of the economic activity in Bulgaria's main trading partners.

The major risk of lower than projected economic growth in the following two quarters is again related to the spread of COVID-19 and a possible introduction or extension of tighter containment measures in Bulgaria and abroad. The political uncertainty in Bulgaria and the likelihood of postponing the implementation of some of the investment projects included in the forecast also pose a risk of lower growth. At the same time, the risk of higher real GDP growth in 2021 compared to the baseline scenario stems from the possibility of stronger growth in private consumption given the relatively high amount of accumulated savings in the economy, and higher average consumption propensity of households.

⁴⁷ Eurostat seasonally adjusted data are used.

Real GDP Growth by Final Use Component

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

	2016				2017				2018				2019				2020				2021	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
Consumption incl.	0.7	-0.5	0.6	2.9	-1.1	0.7	1.1	2.5	1.0	0.5	0.3	0.0	2.6	2.4	-0.6	1.6	-1.4	-0.5	4.0	-0.4	2.3	1.3
Household consumption	0.9	-1.5	0.6	3.0	-1.5	0.9	1.2	2.7	0.9	-0.1	0.3	-0.2	3.5	3.0	-1.4	1.8	-2.4	-1.3	4.5	-1.1	3.2	2.2
Government final consumption expenditure	-0.8	3.1	0.1	2.2	1.1	-1.2	0.7	0.6	3.8	1.6	0.8	-1.0	0.6	1.0	1.6	2.8	3.5	1.7	1.0	2.7	-1.5	0.7
Collective consumption	-0.8	2.7	1.5	1.1	2.0	0.5	1.3	1.1	0.4	2.5	-0.2	1.9	-0.8	-0.9	2.4	-0.2	2.1	3.4	0.8	2.0	0.9	-0.8
Gross fixed capital formation	-3.0	-2.3	-1.1	-0.8	1.1	2.3	1.1	1.5	2.0	0.6	0.5	0.8	1.9	0.8	-1.0	0.2	0.0	-0.4	0.6	-0.2	-1.9	-0.4
Exports of goods and non-factor services	2.7	4.9	0.1	1.3	1.4	2.4	1.8	-2.4	-0.1	1.7	-0.1	3.9	-0.9	-1.0	5.6	-1.4	-2.1	-20.0	5.7	6.6	8.5	-0.6
Imports of goods and non-factor services	1.5	2.0	0.3	2.0	3.6	0.8	0.2	3.4	1.9	1.6	-1.7	2.3	2.0	0.8	2.2	1.0	-2.7	-15.7	11.4	9.8	1.2	-1.4
GDP	0.8	0.8	0.5	1.0	0.6	0.7	0.7	0.6	0.4	0.9	1.0	0.9	1.2	1.1	0.6	0.8	-3.7	-7.0	7.5	-0.2	-0.1	-0.3

Source: the NSI.

Real GDP Growth by Final Use Component

(per cent, on an annual basis)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Consumption incl.	2.7	-3.7	1.8	1.7	2.1	-2.4	0.9	2.1	1.7	2.2	3.1	3.9	1.2
Household consumption	2.4	-2.7	1.4	1.3	2.3	-2.5	0.8	1.6	1.3	1.5	2.2	3.5	-0.2
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	0.8
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	0.6
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	0.8	0.1
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	1.2	2.6	-7.7
Imports of goods and non-factor services	-3.5	15.5	0.1	-5.1	-3.1	-2.8	-3.3	-3.1	-3.2	-4.3	-3.6	-3.3	3.3
GDP	6.1	-3.3	1.5	2.1	0.8	-0.6	1.0	3.4	3.0	2.8	2.7	4.0	-4.4

Source: the NSI.

Revision of GDP Data

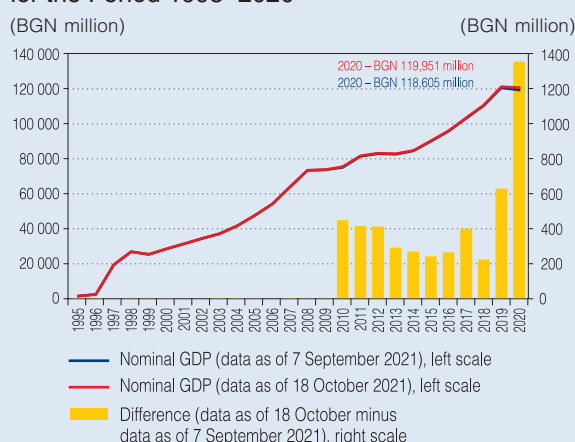
In line with its release calendar, the NSI published on 18 October 2021 revised annual and quarterly data on Bulgaria's gross domestic product (GDP) and its components by production approach, income approach, and components of final expenditure. The revision of the non-seasonally adjusted GDP data covers the whole historical time series from the first quarter of 1995 onwards, and reflects both changes in the methodology used¹, and additional statistical information received. At the same time, the seasonally adjusted series were revised for the period after the first quarter of 2000. This analysis aims to summarise the GDP data revisions, focusing on the changes in the structure according to the expenditure approach for its calculation.

Non-seasonally adjusted data

Nominal GDP was revised upwards for the whole period after 2010 (see Chart 1). For the period 2010–2019, GDP at current prices was revised upwards on average by about BGN 355 million *per year*, while 2020 revision amounted to BGN 1346 million, whereby GDP reached BGN 119,951 million. The increased nominal amount of the indicator for the period after 2010 reflects the stronger rise in the GDP deflator in revised compared to unrevised data, while the estimate of the physical volume of GDP was lowered (see Chart 2). Overall, between 2010 and 2020 the cumulative growth of real GDP declined from 20.9 per cent to 17.3 per cent, with annual average growth of the indicator in real terms (at 2015 prices) coming to 1.5 per cent according to revised data compared to 1.8 per cent previously.

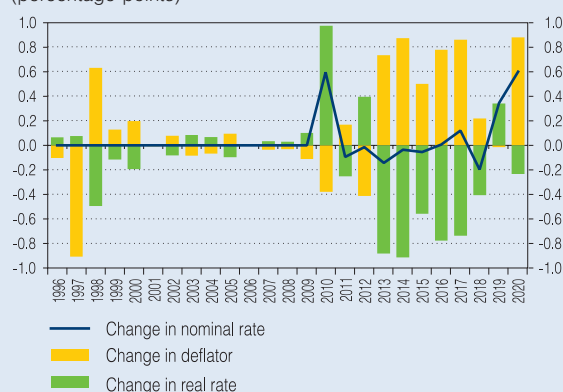
¹ On Eurostat recommendation, the method of time adjustment of taxes was changed. For further details, see p. 15–19 of the [document](#), summarising Eurostat recommendations to the NSI. The used method aims to report cash tax receipts at the time of occurrence of the tax liability. For details, see NSI's [Calendar of data revisions and changes in statistical surveys methodologies](#).

Chart 1. Revisions to the GDP at Current Prices for the Period 1995–2020



Sources: the NSI.

Chart 2. Revisions to the Rates of Change in Nominal GDP for the Period 1996–2020
(percentage points)



Sources: the NSI, BNB calculations.

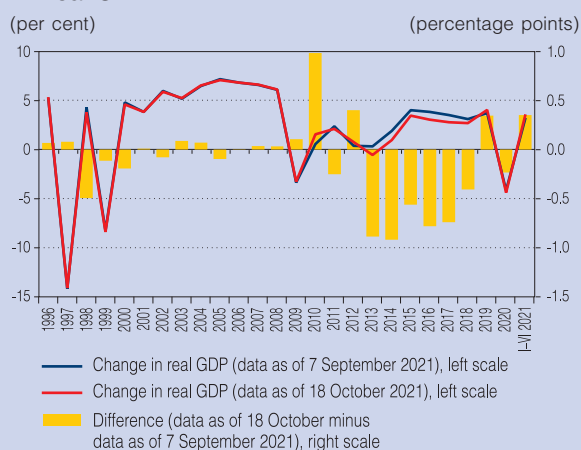
The revisions in the levels of GDP at constant prices have changed the pattern of the annual rate of change of GDP (see Chart 3). For example, according to the newly published data, after the recession in 2009 due to the outbreak of the global financial crisis, the recovery in economic activity in 2010 is now stronger (growth of 1.5 per cent against 0.6 per cent before revision). After the revisions, real GDP in 2011 was lowered by -0.3 percentage points but was increased by 0.4 percentage points in 2012. Revisions for 2013 changed the interpretation of economic developments in that year since real GDP rate of change reversed its sign, *i.e.* from a growth of 0.3 per cent before revision, to a decline of -0.6 per cent after it. In the period after 2013, revisions to the change in real GDP are mostly negative (about -0.6 percentage points on average), except for 2019 (0.3 percentage points upward revision) and the first half of 2021 (0.3 percentage points upward revision).

By final expenditure components, most of the revisions to the change in GDP over the period 2010–2019 are due to changes in private consumption data. Some of those changes are likely to reflect the change in the method of time adjustment of taxes employed by the NSI, resulting in revaluation of tax revenue on an accrual basis, and of household final consumption expenditure, respectively. Although the annual rate of change in real GDP was slightly revised downwards for 2020 and the first half of 2021 (by -0.2 percentage points and 0.3 percentage points, respectively), significant changes with compensatory effect were made across GDP components (see Chart 4). This is likely due to new or updated statistical information received, based on statistical surveys or administrative sources². Consequently, revisions led to a change in the interpretation of factors that had driven the decline in economic activity in 2020 amid the COVID-19 pandemic, including the factors for the subsequent economic recovery. Specifically, the rate of change in private consumption in 2020 was revised by -0.6 percentage points and amounted to -0.4 per cent, compared to a growth rate of 0.2 per cent according to the unrevised data. The negative contribution of net exports in 2020 was increased after the revision, reflecting both a stronger decline in exports of goods and services along with more limited decrease in imports. Concurrently, the revised data show that economic activity in 2020 was underpinned by growth of real investment in fixed capital, increasing by 0.6 per cent compared to a decline of -5.1 per cent according to unrevised data. In terms of asset type, investment activity growth in 2020 according to the revised data was largely driven by investment in machinery and equipment and to a lesser degree in residential buildings. Government consumption in 2020 was revised towards higher growth, *i.e.* from 7.5 per cent to 8.3 per cent (see Table 1).

According to non-seasonally adjusted data, the higher annual real GDP growth in the first half of 2021 reflects largely the base effect of the revisions to GDP components performed in 2020. Contributions of private consumption and net exports were revised positively, while those of gross fixed capital formation and government consumption were lowered.

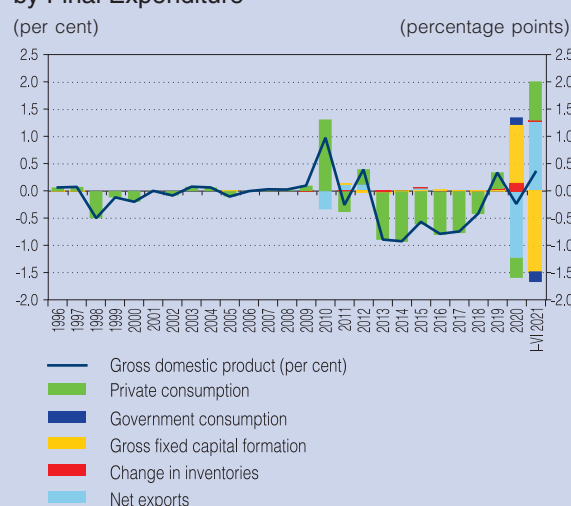
² For further details, see NSI [Calendar of data revisions and changes in statistical surveys methodologies](#).

Chart 3. Revisions to the Annual Rate of Change in Real GDP



Sources: the NSI.

Chart 4. Revisions to the Real GDP Change by Final Expenditure



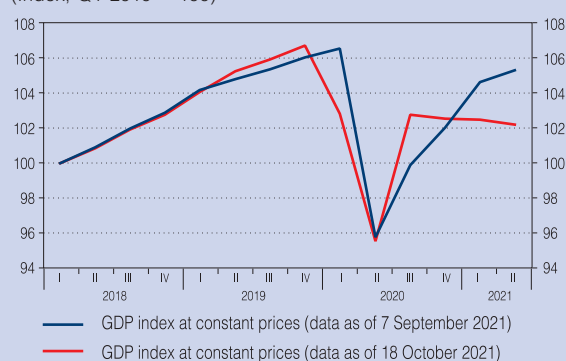
Sources: the NSI, BNB calculations.

Seasonally adjusted data

As a result of the above-mentioned revisions to the GDP historical time series, on 18 October 2021 the NSI also published new quarterly adjusted data on GDP and its components (at current and constant prices)³. Differences are observed between revised and unrevised seasonally adjusted time series in terms of both their level (due to differences in the levels of non-seasonally adjusted time series), and their dynamics over time. The differences in dynamics, namely the quarter-on-quarter growth rates, are most significant in the period from the first quarter of 2020 to the second quarter of 2021 (see Table 2). Revised seasonally adjusted data show that the spread of COVID-19 in Bulgaria and abroad, along with the containment measures introduced on 8 March 2020 contributed to a downturn in economic activity in two consecutive quarters by -3.7 per cent in the first and -7.0 per cent in the second quarter of 2020, respectively. These developments were followed by a partial recovery in seasonally adjusted real GDP in the third quarter of 2020 (by 7.5 per cent), after which GDP posted a slight decline for three consecutive quarters. This profile of seasonally adjusted real GDP differs largely from the dynamics of unrevised time series, where a sharp one-off quarter-on-quarter decline of -10.1 per cent was recorded in the second quarter of 2020, followed by a steady trend of gradual recovery in economic activity. In addition, revised data at the end of the second quarter of 2021 show that real GDP volume has cumulatively declined by -4.2 per cent from the end of 2019, compared to -0.7 per cent according to the unrevised time series (see Chart 5).

Chart 5. GDP Index at Constant Prices

(Index, Q1 2019 = 100)



Sources: the NSI, BNB calculations.

³ Seasonal adjustment of statistical indicators in the NSI is organised according to the 'Guide of the European statistical system for seasonal adjustment'. The procedure is performed using the software developed by Eurostat product Demeter, where the algorithm TRAMO/SEATS is applied. The procedure for obtaining seasonally adjusted data includes correction of the series in terms of calendar effects and abnormal values.

Table 1.
Annual Rate of Change and Contributions to Real GDP Growth (at 2015 prices)

Annual rate of change	Data as of 18 October 2021											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	I–VI 2021
GDP at constant prices	1.5	2.1	0.8	-0.6	1.0	3.4	3.0	2.8	2.7	4.0	-4.4	3.4
Private consumption	2.4	2.0	3.7	-3.9	1.4	2.8	2.2	2.5	3.7	6.0	-0.4	7.4
Government consumption	2.1	2.3	-1.8	0.7	-0.1	1.8	2.2	4.3	5.3	2.0	8.3	3.7
Gross fixed capital formation	-17.6	-4.4	1.8	0.5	3.5	2.7	-6.6	3.2	5.4	4.5	0.6	-5.3
Exports of goods and services	11.0	12.6	2.0	9.6	3.1	6.4	8.6	5.8	1.7	4.0	-12.1	9.0
Imports of goods and services	-0.3	9.6	5.4	4.3	5.1	4.7	5.2	7.4	5.8	5.2	-5.4	12.7

Contributions

Private consumption	1.5	1.3	2.3	-2.5	0.9	1.8	1.4	1.5	2.2	3.6	-0.2	4.4
Government consumption	0.4	0.4	-0.3	0.1	0.0	0.3	0.4	0.7	0.8	0.3	1.4	0.8
Gross fixed capital formation	-4.9	-1.0	0.4	0.1	0.7	0.6	-1.4	0.6	1.0	0.8	0.1	-0.9
Exports, net	4.8	1.2	-2.0	3.1	-1.3	1.1	2.3	-0.7	-2.4	-0.7	-4.4	-1.8

Annual rate of change	Data as of 7 September 2021											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	I–VI 2021
GDP at constant prices	0.6	2.4	0.4	0.3	1.9	4.0	3.8	3.5	3.1	3.7	-4.2	3.1
Private consumption	0.3	2.6	3.3	-2.6	2.9	3.8	3.5	3.8	4.4	5.5	0.2	6.0
Government consumption	2.1	2.3	-1.8	0.7	-0.1	1.8	2.2	4.3	5.3	2.0	7.5	4.8
Gross fixed capital formation	-17.6	-4.4	1.8	0.5	3.5	2.7	-6.6	3.2	5.4	4.5	-5.1	3.0
Exports of goods and services	11.0	12.6	2.0	9.6	3.1	6.4	8.6	5.8	1.7	3.9	-11.3	8.5
Imports of goods and services	-0.9	9.9	5.6	4.3	5.2	4.8	5.2	7.4	5.7	5.2	-6.6	14.4

Contributions

Private consumption	0.2	1.7	2.1	-1.7	1.8	2.4	2.2	2.3	2.6	3.3	0.1	3.6
Government consumption	0.4	0.4	-0.3	0.1	0.0	0.3	0.4	0.7	0.8	0.3	1.3	1.0
Gross fixed capital formation	-4.9	-1.0	0.4	0.1	0.7	0.6	-1.4	0.6	1.0	0.9	-1.0	0.5
Exports, net	5.1	1.0	-2.1	3.1	-1.3	1.0	2.2	-0.7	-2.5	-0.7	-3.2	-3.0

Annual rate of change	Difference (percentage points)											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	I–VI 2021
GDP at constant prices	1.0	-0.3	0.4	-0.9	-0.9	-0.6	-0.8	-0.7	-0.4	0.3	-0.2	0.3
Private consumption	2.1	-0.6	0.4	-1.3	-1.5	-1.0	-1.3	-1.3	-0.7	0.5	-0.6	1.3
Government consumption	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	-1.2
Gross fixed capital formation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	-8.3
Exports of goods and services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	-0.7	0.5
Imports of goods and services	0.7	-0.3	-0.2	0.0	0.0	-0.1	0.0	-0.1	0.1	0.0	1.2	-1.7

Contributions

Private consumption	1.3	-0.4	0.3	-0.9	-0.9	-0.6	-0.8	-0.8	-0.4	0.3	-0.4	0.7
Government consumption	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.2
Gross fixed capital formation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	-1.5
Exports, net	-0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	1.3

Sources: the NSI, BNB calculations.

Table 2.
Quarter-on-quarter Rate of Change in Real GDP (at 2015 prices)

Quarter-on-quarter rate of change	Data as of 18 October 2021													
	2018				2019				2020				2021	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
GDP at constant prices	0.4	0.9	1.0	0.9	1.2	1.1	0.6	0.8	-3.7	-7.0	7.5	-0.2	-0.1	-0.3
Private consumption	0.9	0.0	0.3	-0.2	3.5	3.0	-1.4	1.8	-2.5	-1.3	4.5	-1.1	3.2	1.3
Government consumption	1.8	2.4	0.5	0.7	-0.8	0.1	2.2	1.3	2.7	2.5	0.9	2.9	-0.4	1.9
Gross fixed capital formation	2.0	0.6	0.5	0.8	1.9	0.8	-1.0	0.2	0.0	-0.4	0.6	-0.2	-1.9	-0.4
Exports of goods and services	-0.1	1.7	-0.1	3.9	-0.9	-1.0	5.6	-1.4	-2.1	-20.0	5.7	6.6	8.5	-0.6
Imports of goods and services	1.9	1.6	-1.7	2.3	2.0	0.8	2.2	1.0	-2.7	-15.7	11.4	9.8	1.2	-1.4

Quarter-on-quarter rate of change	Data as of 7 September 2021													
	2018				2019				2020				2021	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
GDP at constant prices	0.6	0.9	1.0	0.9	1.3	0.6	0.6	0.6	0.4	-10.1	4.3	2.2	2.5	0.6
Private consumption	1.0	0.3	0.8	-0.6	2.6	3.6	-0.3	0.0	-0.6	-2.1	5.2	-3.1	2.2	2.9
Government consumption	1.6	2.5	0.5	1.0	-1.3	0.3	2.2	2.0	1.0	-0.6	2.2	4.1	-0.5	-0.5
Gross fixed capital formation	4.7	0.1	-1.7	0.6	4.6	0.2	-1.5	1.1	-8.2	-2.5	3.5	-0.1	0.1	0.4
Exports of goods and services	0.4	1.1	-0.4	4.3	-0.2	-2.0	5.1	-0.8	0.6	-22.2	2.0	11.2	6.7	-0.5
Imports of goods and services	-0.7	0.4	-0.8	2.2	-0.2	2.4	1.6	-1.7	-1.4	-6.0	0.2	0.1	0.6	5.2

Quarter-on-quarter rate of change	Difference (percentage points)													
	2018				2019				2020				2021	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
GDP at constant prices	-0.1	-0.1	0.0	0.0	0.0	0.5	0.1	0.1	-4.1	3.0	3.3	-2.4	-2.6	-0.9
Private consumption	-0.1	-0.3	-0.5	0.4	1.0	-0.5	-1.2	1.8	-1.9	0.8	-0.7	2.0	1.0	-1.6
Government consumption	0.2	-0.1	0.0	-0.3	0.5	-0.2	0.0	-0.7	1.7	3.0	-1.3	-1.2	0.1	2.4
Gross fixed capital formation	-2.8	0.5	2.2	0.2	-2.7	0.5	0.6	-0.8	8.2	2.1	-2.9	-0.1	-2.0	-0.8
Exports of goods and services	-0.4	0.6	0.3	-0.4	-0.7	0.9	0.5	-0.6	-2.7	2.2	3.7	-4.7	1.8	-0.1
Imports of goods and services	2.7	1.2	-0.9	0.1	2.2	-1.6	0.5	2.7	-1.4	-9.7	11.2	9.7	0.6	-6.7

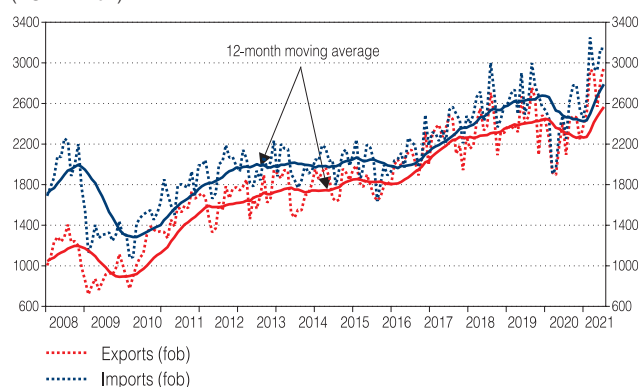
Sources: the NSI, BNB calculations.

Exports and Imports of Goods and Services

In the first half of 2021 Bulgaria's foreign trade flows continued to recover from the negative economic effects of the initial spread of the COVID-19 pandemic in the first six months of 2020.⁴⁸ Foreign trade data from January to June 2021 show that Bulgarian exports and imports of goods rose considerably on an annual basis in nominal terms by 21.5 per cent and 25.3 per cent, respectively. This reflected the low base of foreign trade flows of the previous year, less restrictive measures against the COVID-19 spread globally, the improvement of economic agents' sentiment and higher prices of traded goods. According to non-seasonally adjusted national account GDP data, in the first

⁴⁸ According to NSI seasonally adjusted data on GDP, in the second quarter of 2021 real exports of goods and services remained by 5 per cent lower than their volume in the fourth quarter of 2019, while real imports of goods and services reached their level of the fourth quarter of 2019.

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



Source: the BNB.

Exports by Commodity Group, January – June 2021

	Value (EUR million)	Change* (EUR million)	Growth** (per cent)	Contribution** (percentage points)
Wood products, paper, ceramics and glass	791.7	148.4	23.1	1.1
Machines, vehicles, appliances, instruments and weapons	4,678.0	1,036.7	28.5	7.7
Mineral products and fuels	1,429.8	187.0	15.0	1.4
Base metals and related products	2,983.3	783.0	35.6	5.8
Animal and vegetable products, food, drinks and tobacco	2,640.6	295.0	12.6	2.2
Textiles, leather, clothing, footwear and other consumer goods	1,658.8	108.0	7.0	0.8
Chemical products, plastics and rubber	2,276.3	354.2	18.4	2.6
Total exports	16,458.5	2,912.2	21.5	-

* Change on the corresponding period of previous year.

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

Source: the BNB.

half of 2021 real exports of goods registered annual growth of 7.2 per cent, while real imports increased by 13.6 per cent on an annual basis. The price component made a significant positive contribution to the nominal growth of both imports and exports of goods.

Foreign trade data show that in the first six months of the year all commodity groups contributed positively to the annual nominal growth of total exports of goods, with the groups of machines⁴⁹ and base metals⁵⁰ posting the highest increase. The nominal growth in the group of machines was mainly attributable to the significant increase in real volumes in the half-year and, to a lesser extent, to the rise in the price component.⁵¹ Nominal exports of base metals grew on an annual basis over the half-year mainly driven by price rises.⁵² Concurrently, the groups of chemical products⁵³, food⁵⁴ and fuels⁵⁵ reported declines in real volumes of exports year

⁴⁹ In this chapter, it should read the machines, vehicles, appliances, instruments and weapons group under the Combined Nomenclature.

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

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

⁵² Real volumes of exports of the base metals group have been constructed under the SITC by using NSI data on export prices of the commodity group under the SITC and COMEXT data on nominal values of exports of the commodity group under the SITC.

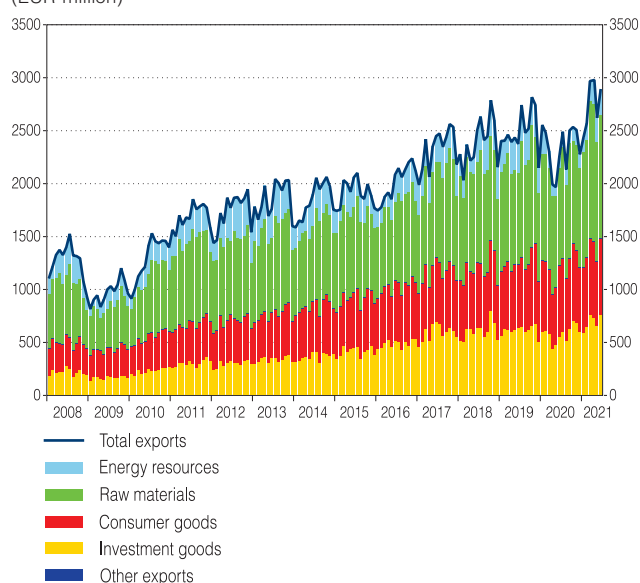
⁵³ In this chapter, it should read the groups of chemical products, plastics and rubber under the Combined Nomenclature.

⁵⁴ In this chapter, it should read the animal and vegetable products, food, drinks and tobacco group under the Combined Nomenclature.

⁵⁵ In this chapter, it should read the groups of mineral products and fuels under the Combined Nomenclature.

Exports of Commodity Groups by Use

(EUR million)



Source: the BNB.

on year, while the increase in their nominal values mainly reflected higher exports prices on an annual basis.⁵⁶

Over the first half of 2021 exports of goods to EU countries⁵⁷ rose by 24.4 per cent year on year, which was largely due to the groups of machines and base metals. Germany, Romania and Italy made the most significant positive contribution to exports growth. Exports to non-EU countries grew by 16.2 per cent on an annual basis from January to June 2021, with the groups of metals and machines again contributing most to the growth. Exports to Turkey and China had the largest positive contribution. As a result of this dynamics, the share of exports to the EU in total Bulgaria's goods exports increased to 66.6 per cent in the first half of 2021 (65.0 per cent a year earlier).

Balance of payments data in July 2021 indicate a slowdown in the annual growth rate of exports of goods in nominal terms compared with the second quarter of 2021, when a strong effect of the 2020 low base was observed reflecting the negative economic impact of the first wave of the COVID-19 spread globally. In line with the assumptions about external environment developments, real exports of goods are projected to continue to grow on an annual basis in the fourth quarter of 2021 and the first quarter of 2022. Export prices are expected to grow further year on year in the fourth quarter of 2021 and to slow down their growth rate in the first quarter of 2022.

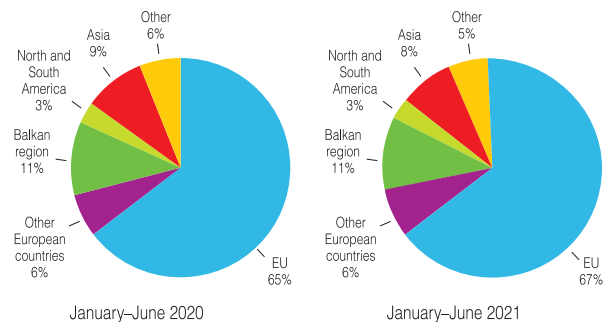
In the first six months of 2021 nominal imports rose substantially on an annual basis. This growth was underpinned by the significant increase in both real volumes and price component reported in the second quarter of 2021. In the first half of 2021 all groups by use contributed to the annual growth in nominal terms⁵⁸, with the groups of raw materials and investment goods making the largest contribution. Nominal growth in these two groups was ascribable to

⁵⁶ Real volumes of exports of chemical products, food and fuels groups have been constructed under the SITC by using NSI data on export prices of the commodity group under the SITC and COMEXT data on nominal values of exports of the commodity groups under the SITC.

⁵⁷ In this chapter, the EU group should read the 27 states of the European Union. In January 2021 the United Kingdom ended its membership in the EU.

⁵⁸ Foreign trade data published by the BNB.

Exports of Goods: Geographical Breakdown



Source: the BNB.

Imports of Commodity Groups by Use, January – June 2021

	Value (EUR million)	Change* (EUR million)	Growth** (per cent)	Contribution** (percentage points)
Consumer goods	4,141.5	596.2	16.8	4.1
Raw materials	7,123.9	1,617.5	29.4	11.1
Investment goods	4,828.9	898.0	22.8	6.2
Energy resources	2,024.5	551.3	37.4	3.8
Other imports	120.6	24.5	25.5	0.2
Total imports (cif)	18,239.3	3,687.5	25.3	-

* Change on the corresponding period of previous year.

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

Source: the BNB.

the combination of higher real volumes and prices on an annual basis compared with the corresponding period of 2020.⁵⁹

Between January and June 2021 the share of goods imported from the EU Member States accounted for 50.2 per cent, slightly declining from 50.8 per cent in the same period of 2020. Imports from the EU Member States rose by 23.9 per cent on an annual basis. Machines and, to a lesser extent, chemical products had the largest positive contribution to the growth by commodity group, and Germany by country. Imports from non-EU countries grew by 26.8 per cent on an annual basis, mainly due to the group of energy products followed by machines. Turkey and China contributed most to the higher imports of goods from non-EU countries.

The balance of payments data in July 2021 give signs of a decelerating annual growth rate in nominal imports of goods compared with the second quarter. Real imports of goods are expected to grow further at slower rates at the end of 2021 and the beginning of 2022. This dynamics is consistent with our forecast of domestic demand and exports development. The price component is projected to increase on an annual basis in the fourth quarter of 2021 and the first quarter of 2022.

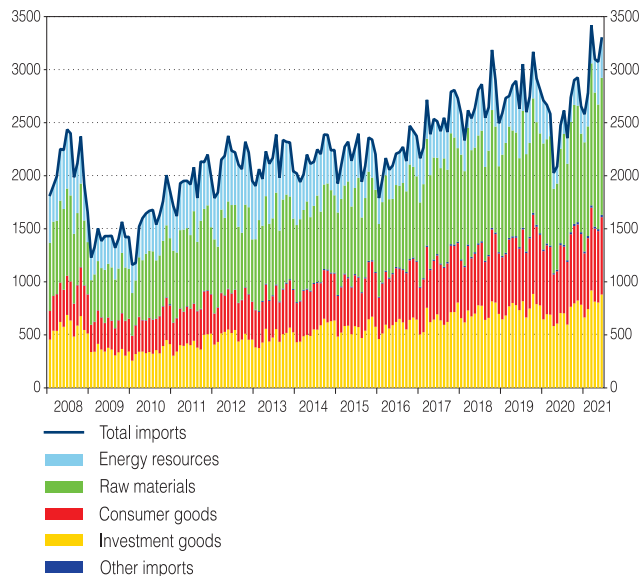
According to balance of payments data for the January–July 2021 period, exports and imports of services increased strongly year on year. Non-seasonally adjusted national account data show that in the first half of the year both real and price component had a positive contribution to the nominal change in imports of goods on an annual basis. Services export growth in the first six months was entirely driven by the real component, while export prices recorded a decline.

In the first seven months of 2021 exports of services increased by 19.0 per cent in nominal terms compared to the corresponding period of

⁵⁹ Real volumes of imports of the raw materials group have been constructed, which includes the commodity groups under the SITC of manufactured goods classified chiefly by materials, inedible (crude) materials (excluding fuels), chemicals and chemical products and imports of the group of investment goods, which includes the group of machines, equipment and vehicles under SITC. NSI data on import prices of the relevant commodity groups and COMEXT data on nominal values of imports of the commodity groups under SITC are used.

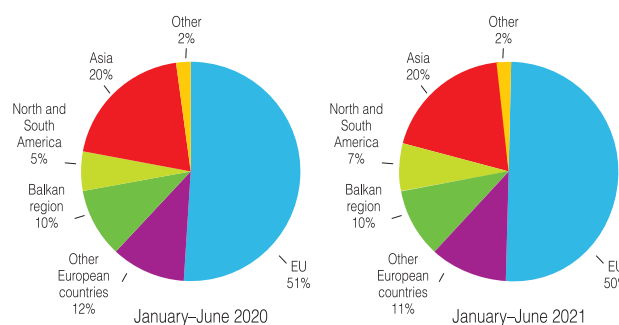
Imports of Commodity Groups by Use

(EUR million)



Source: the BNB.

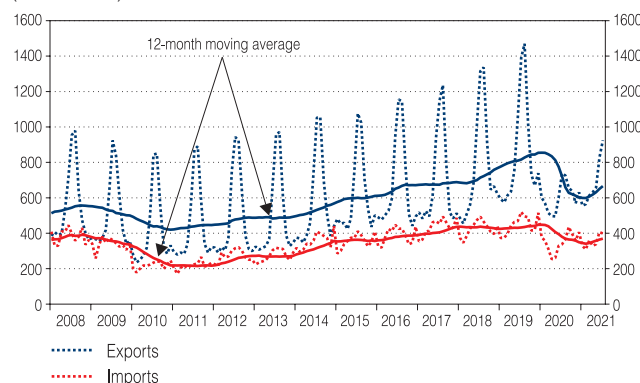
Imports of Goods: Geographical Breakdown



Source: the BNB.

Dynamics of Exports and Imports of Services

(EUR million)



Source: the BNB.

2020. The Other Services sub-item⁶⁰ contributed most to the annual growth, with exports growing by 22.2 per cent on an annual basis, in particular exports of telecommunications, computer and information services. Earnings from visits of foreign nationals to Bulgaria rose by 29.9 per cent year on year from January to July 2021 and the number of foreign nationals' visits to Bulgaria increased by 25.2 per cent on an annual basis in the same period, according to NSI data. A more significant recovery to 2019 levels was recorded in foreign nationals' visits whose purpose is other than holidays or excursions. This reflected the gradual easing of containment measures against the spread of COVID-19 in Bulgaria and in a number of Bulgaria's trading partners between June and August 2021.

Annual nominal growth in imports of services was lower than that in exports coming to 11.1 per cent in the period January–July 2021. The increase in imports of services was mainly the result of the reported annual growth in transport services (23.0 per cent) and higher expenses of Bulgarian residents' travel abroad (20.8 per cent). NSI data for the period January–July 2021 indicate that the total number of Bulgarians' visits abroad rose by 31.8 per cent year on year.

In the fourth quarter of 2021 and the first quarter of 2022 trade flows in services (in real terms) are expected to continue to increase significantly year on year in both exports and imports. The assumptions about growing external demand over the projection horizon and the expectations of domestic demand developments are of key importance for this dynamics.

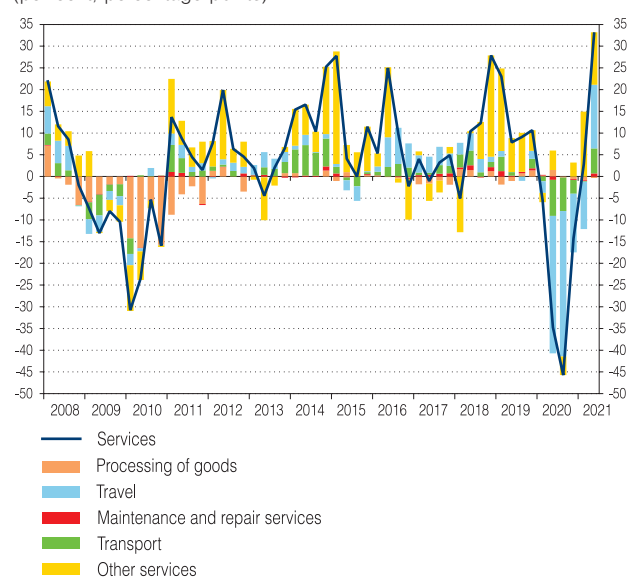
Behaviour of Firms and Competitiveness

In the second quarter of 2021 Bulgaria's gross value added in the total economy continued to decline on a quarterly basis for a third consecutive quarter with a quarterly rate of change of -0.6 per cent. However, the breakdown by economic sector shows an improvement in all major sectors on a quarterly basis in the second quarter of 2021, with discrepancies between

⁶⁰ The group of other services includes the sub-groups of construction; insurance and pension services; financial services; telecommunications, computer and information services; other business services; personal services, cultural recreational and entertainment services; goods and services of the general government not included elsewhere.

Annual Change of Services Exports and Contribution by Sub-component

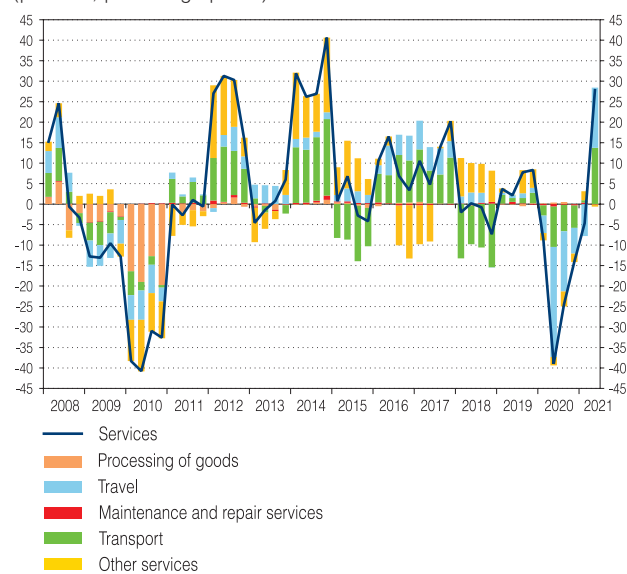
(per cent, percentage points)



Source: the BNB.

Annual Change of Services Imports and Contribution by Sub-component

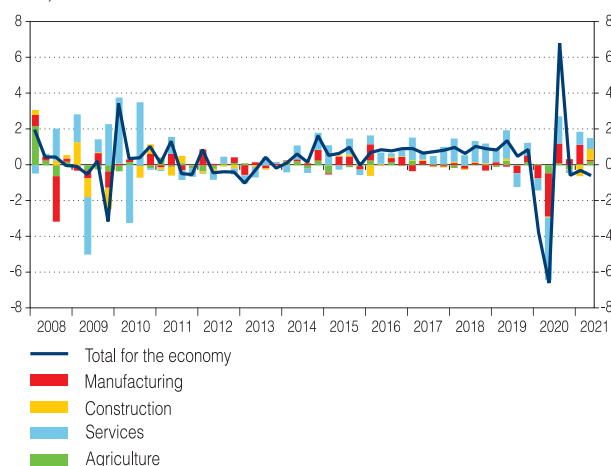
(per cent, percentage points)



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.

the dynamics of gross value added in the total economy and that across sectors stemming from the seasonally adjusted data method employed by the NSI⁶¹. The industry sector⁶² followed by services had the main positive contribution to the value added change.

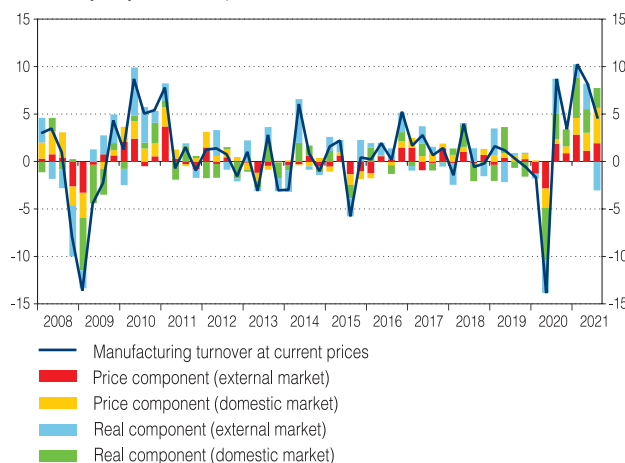
After the negative shock from the initial spread of the COVID-19 pandemic in the beginning of last year, value added in industry continued the recovery trend of the third quarter of 2020 with quarterly growth of 2.7 per cent in the second quarter. The improvement in economic activity in industry was largely driven by the increase in the value added in construction and, to a lesser extent, in the manufacturing sub-sector. The upward dynamics of gross value added in industry corresponded to both the quarterly increase in industrial production index in real terms and the real turnover growth in manufacturing (in both domestic and external markets). The construction production index obtained from the NSI' short-term business statistics also reported quarterly growth between April and June 2021,

⁶¹ The NSI applies a method of seasonal adjustment, in which the aggregates and their components undergo self-smoothing. As a result, there is a non-additivity of the seasonally adjusted components to the seasonally adjusted index in the total economy.

⁶² This includes the sub-sectors of mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities and construction.

Manufacturing Turnover Dynamics

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



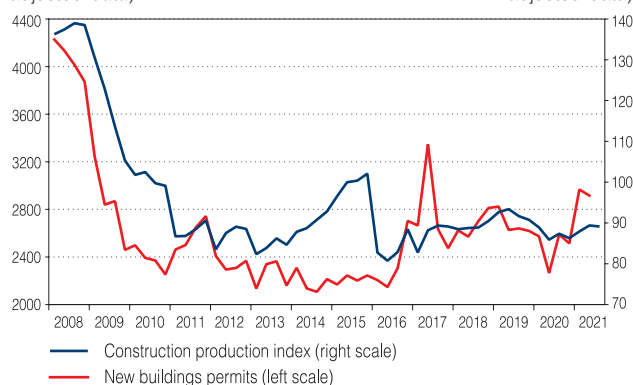
Note: Data on the chart for the third quarter are up to August 2021.

Sources: the NSI, BNB calculations.

Construction Production Dynamics and New Buildings Permits Issued

(number of buildings; seasonally adjusted data)

(2015 = 100; seasonally adjusted data)



Note: Data on the construction production index are up to August 2021.

Sources: the NSI, BNB calculations.

reflecting the positive contribution of both the civil/engineering and building construction⁶³.

Gross value added in services increased by 0.9 per cent on a quarterly basis in the second quarter of 2021 against 1.0 per cent in the previous quarter. Financial and insurance activities sub-sector made the largest positive contribution to the growth. Some of services sub-sectors, which were comparatively more affected by the anti-epidemic measures⁶⁴ imposed in the beginning of last year also recorded quarter-on-quarter growth in the second quarter of 2021, whereby the services production index⁶⁵ recorded an increase of economic activity in most of its sub-sectors. The only exception from this trend is the sub-sector of wholesale and retail trade; repair of motor vehicles and motorcycles; transportation, storage and posts; accommodation and food service activities, where the gross value added declined for a third consecutive quarter.

NSI short-term business statistics data on production and turnover in manufacturing, trade and construction production for July–August 2021 give grounds to expect a deceleration in the quarterly growth rate of gross value added in the respective sectors over the third quarter of the year. Nominal industrial turnover in July and August increased from the second quarter, though at a slower pace. An increase was recorded only in the volume of sales in the domestic market, while sales in the external market declined from the second quarter of the year. Average growth of the seasonally adjusted industrial production index for July–August 2021 also decelerated from the second quarter of 2021, driven by a smaller rise in mining and quarrying and manufacturing sub-sectors. These developments were partially offset by the accelerated quarterly growth of production and distribution of electricity, heating and gas, which was probably driven by market price rises in this sector. Despite the higher level of production assured with orders in construction⁶⁶, the aver-

⁶³ Building construction includes construction of residential and non-residential buildings. Civil and engineering construction covers infrastructure construction of roads, bridges, pipes, power lines, telecommunications and other construction works.

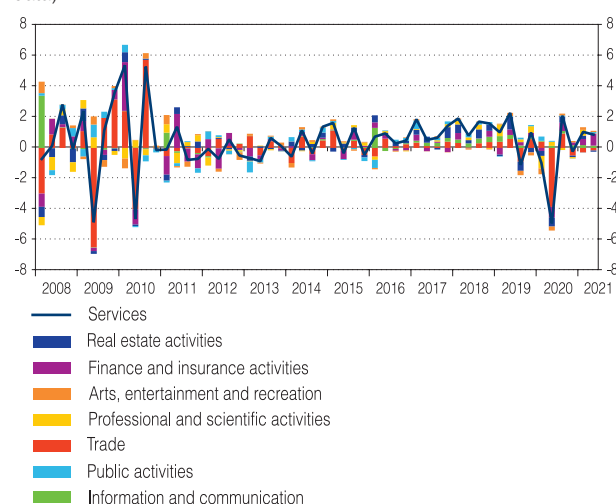
⁶⁴ This refers to the sub-sectors of professional, scientific and technical activities; administrative and support service activities and arts, entertainment and recreation; other activities.

⁶⁵ Eurostat seasonally adjusted data are used.

⁶⁶ NSI Business Situation Survey for July–September 2021.

Services Value Added Change and Contribution by Sub-sector

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

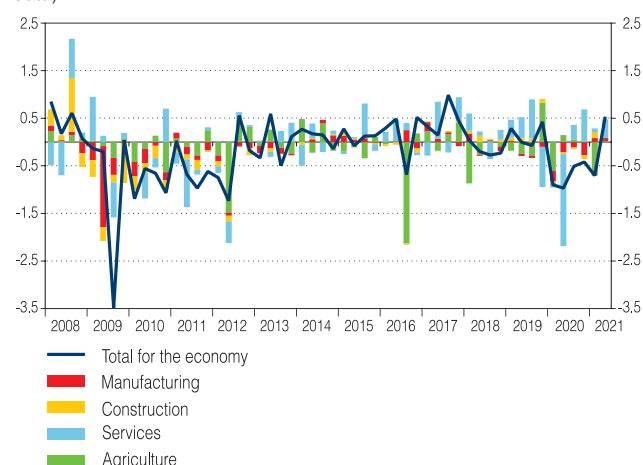


Note: Non-additive data on contributions due to direct seasonal adjustment of value added and its components.

Sources: the NSI, BNB calculations.

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.

age construction production index between July and August 2021 remained at a level similar to that of the second quarter. Over the same quarter, the retail trade turnover at constant prices also remained largely unchanged compared to its level in the second quarter.

Seasonally adjusted NSI national account data show that employment in the total economy rose by 0.5 per cent quarter on quarter in the second quarter of 2021 in line with the increased production activity across sectors over the quarter and companies' expectations of this trend being maintained. Employment growth was registered in all major sectors. The increased employment in services sector contributed most to this growth, largely driven by employment in general government⁶⁷ and arts, entertainment and recreation sub-sectors⁶⁸. Employment growth in the industry sector was attributable to the manufacturing sub-sector, while the employment in construction remained at its level of the previous quarter. The increased employment in services could be explained by higher external and domestic demand for goods and services in the second quarter of the year. Employment in agriculture rose slightly quarter on quarter after a decline recorded in the first quarter of 2021.⁶⁹

Despite the employment growth, the total number of worked man-hours fell by -1.5 per cent on a quarterly basis in the second quarter of 2021. This reflected the contribution of all major sectors of the economy except for construction. Employment Agency data seasonally adjusted by the BNB show that the downward trend in registered unemployed observed since the second half of 2020 was maintained in the third quarter of 2021 due to the higher number of persons recruited or deregistered by the Employment Agency compared to the number of newly reg-

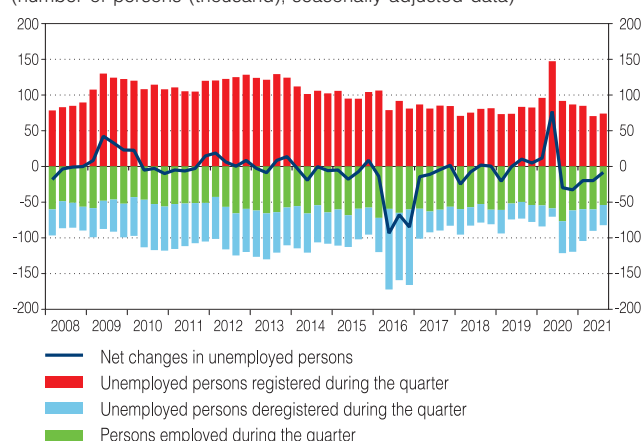
⁶⁷ This refers to the sub-sector of general government, education, and human health and social work activities.

⁶⁸ This refers to the sub-sector of 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.

⁶⁹ In the first quarter of 2021 employment in agriculture declined by -4.4 per cent quarter on quarter due to fewer self-employed in this sector and probably to methodological changes. In the beginning of 2021 the NSI made changes to the methodology of Labour Force Survey mostly related to the definitions of employed and unemployed. LFS data are used for compiling statistics on self-employed in agriculture based on national accounts. For further information, see the methodological notes in the NSI's [press release](#).

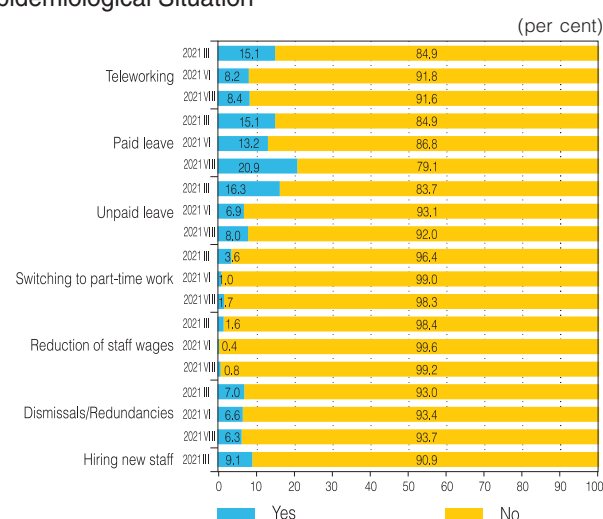
Change in the Number of Employed

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



Sources: The Employment Agency, BNB calculations.

Measures Taken by the Firms in Relation to Their Personnel in March, June and August 2021 amid an Epidemiological Situation



Note: Based on NSI targeted survey data on the activity and position of non-financial corporations amid an epidemic situation.

Source: the NSI.

istered unemployed. These developments are a prerequisite for further growth of employment on a quarterly basis in the third quarter. The expected improvement of economic activity at the end of the year and the beginning of 2022 will help sustain the upward trend in employment over the projected horizon.

The decline in the value added in the total economy amid increasing employment in the second quarter of the year resulted in a quarter-on-quarter fall in labour productivity⁷⁰ compared to the previous quarter. The observed mismatch between the dynamics of value added in the total economy and the value added by individual sectors resulted in a similar mismatch in respect to the labour productivity too. Productivity growth was reported in all economic sectors, but productivity in the total economy declined quarter on quarter in the second quarter of 2021. In case the trend of employees transitioning from part-time to full-time work⁷¹ persists and economic activity improves, labour productivity is expected to increase on a quarterly basis at the end of 2021 and the beginning of 2022.

In the second quarter of 2021, quarterly growth of compensation *per* employee in nominal terms slowed to 0.8 per cent (growth of 1.3 per cent in the previous quarter) in line with the decline in labour productivity growth. Additional factor behind the weaker quarterly growth of compensation *per* employee was the exhausted effects of the increased minimum wage from the beginning of the year⁷² and higher public sector remunerations, reflecting budget framework parameters. Quarterly growth in remunerations in the total economy in the second quarter of 2021 was reported in all major sectors, with the highest increase being registered in agriculture, followed by the industry sector. Corporations' positive expectations of hiring new employees in the following three months and the projected improvement of the economic activity by the end of 2021 and the beginning of 2022 are a precondition for the increase in compensation *per*

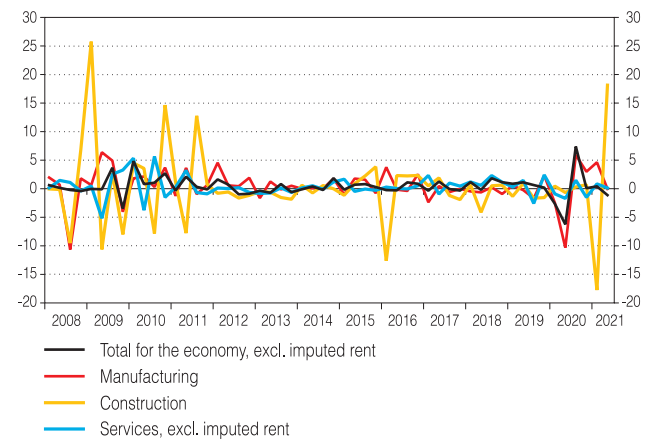
⁷⁰ Labour productivity is calculated after adjusting gross value added (total of economy) for imputed rent.

⁷¹ Based on NSI survey data on the effects of the state of emergency on the business. For details, see: <https://www.nsi.bg/en/content/18153/basic-page/survey-results-related-impact-state-emergency-business>.

⁷² From the beginning of 2021 the minimum wage was raised from BGN 610 to BGN 650.

Labour Productivity Dynamics (Value Added *per* Employee)

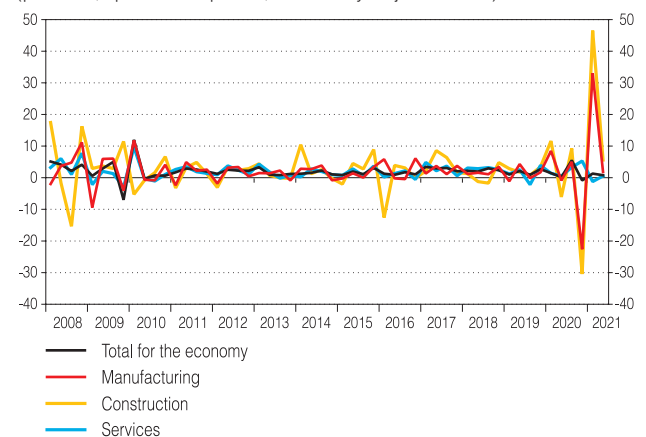
(per cent, quarter-on-quarter; seasonally adjusted data)



Source: the NSI.

Compensation *per* Employee at Current Prices

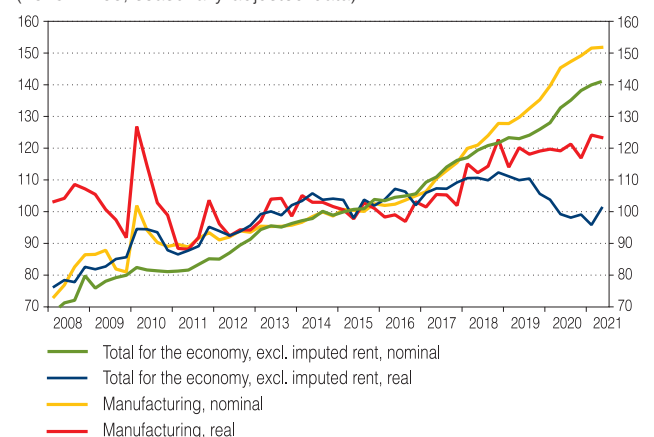
(per cent, quarter-on-quarter; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Unit Labour Costs

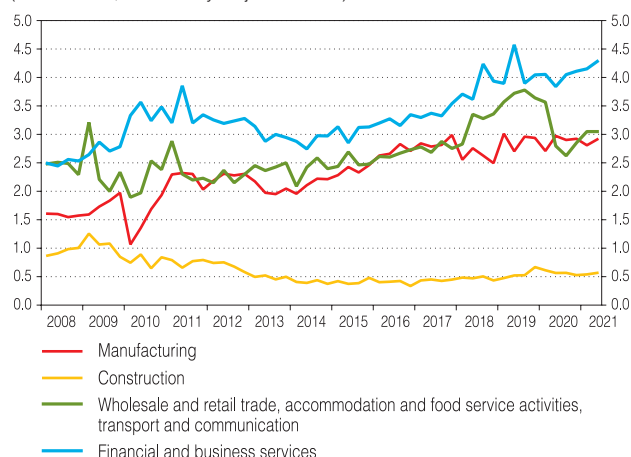
(2015 = 100; seasonally adjusted data)



Sources: the NSI, BNB calculations.

Gross Operating Surplus at Current Prices

(BGN billion; seasonally adjusted data)



Sources: the NSI, BNB calculations.

employee on a quarterly basis over the projection horizon.

According to seasonally adjusted data, developments in compensation *per* employee and labour productivity in the second quarter of 2021 led to a weaker growth of unit labour costs⁷³ in nominal terms compared to that registered in the first quarter of the year. Services sub-sectors of real estate activities and financial and insurance activities reported the most significant increase in nominal labour costs from the previous quarter.

In the context of improving economic activity, seasonally adjusted data show that in the second quarter of 2021 gross operating surplus rose by 4.7 per cent from the previous quarter.

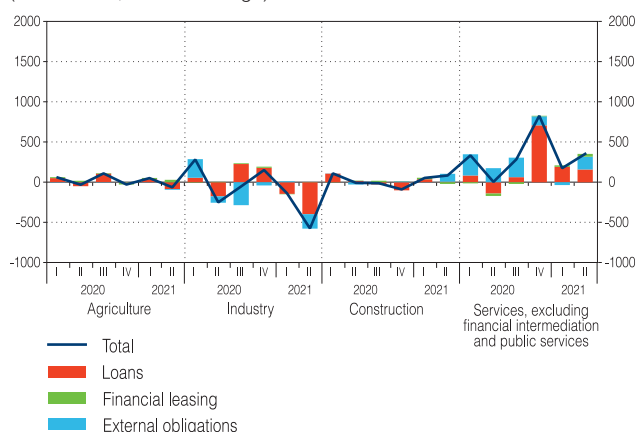
In the second quarter of 2021 external sources of financing used by corporations posted a decline. Across economic sectors, the net amount of attracted sources between April and June 2021 decreased mostly in the industry sector. Concurrently, the amount of external financing of corporations in the construction and services rose. From the perspective of the type of sources, bank loans in the total economy posted a decline, which was partly compensated by attracted foreign funds and financial leasing.

GDP growth decomposition by production factor suggests that the increase in total factor productivity continued to be the main driver of economic activity dynamics in the second quarter. Capital also had a weak positive contribution in

⁷³ Unit labour costs are calculated after adjusting gross value added for imputed rent.

Financing Sources*

(million BGN, volume change)

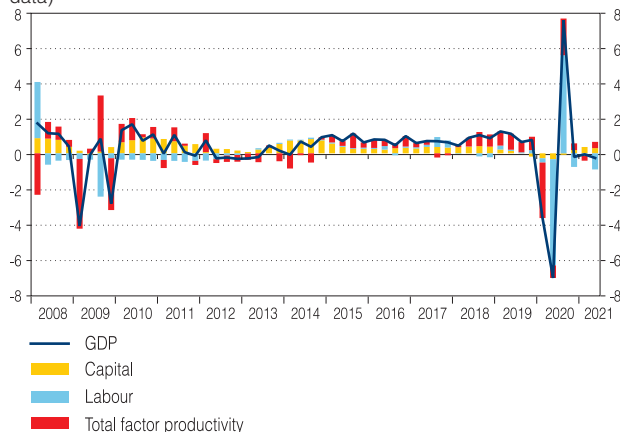


* Sources of financing other than gross operating surplus.

Source: the BNB.

Contribution of Changes in Production Factors to GDP Growth

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



Sources: the NSI, BNB calculations.

line with higher capacity utilisation rates. At the same time, the decrease in hours worked *per* person was the reason for labour to contribute negatively to the quarterly rate of change in real GDP.

Gross Value Added Change

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

	2017				2018				2019				2020				2021	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
Agriculture, forestry and fishing	5.3	0.7	1.3	1.0	-3.1	-0.8	0.9	0.9	-1.9	5.4	-0.9	3.2	1.3	-8.7	2.0	-4.9	1.4	4.8
Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities	-1.4	0.9	-0.3	-0.3	0.5	-0.7	0.4	-1.3	0.7	-0.4	-1.8	1.8	-3.4	-11.1	5.3	1.6	5.1	0.4
Construction	0.9	1.8	-0.6	-1.2	1.9	-1.6	1.0	1.7	0.1	2.7	-0.2	0.0	-0.2	-1.3	-0.1	-0.7	-15.7	18.1
Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities	1.1	0.4	0.3	1.3	1.0	0.1	1.0	1.2	1.3	1.9	-2.9	1.9	1.3	-12.2	3.2	-1.7	-1.0	-0.6
Information and communication	1.4	2.5	2.6	2.6	2.4	2.9	3.2	3.6	3.7	2.6	1.6	1.0	0.5	1.3	1.5	1.6	1.7	1.4
Financial and insurance activities	3.7	-2.0	0.8	-2.6	4.2	-0.3	0.1	3.9	-4.2	3.7	2.2	3.0	-1.9	-6.8	5.4	1.8	3.8	7.2
Real estate activities	2.1	2.5	-0.6	4.6	3.5	1.3	3.6	2.4	-0.6	5.0	-3.5	-1.8	-2.0	-3.7	2.5	-0.6	1.3	-0.5
Professional, scientific and technical activities; administrative and support service activities	0.6	0.0	1.0	2.2	2.5	2.0	3.4	-0.6	8.2	0.1	1.9	4.4	-7.9	2.8	-1.3	-0.9	3.8	0.2
Public administration, education, human health and social work activities	2.7	0.1	0.8	0.8	0.4	1.1	0.7	0.8	-0.2	0.2	0.6	0.4	1.4	0.3	0.3	0.0	0.0	0.4
Culture, sport and entertainment; other activities; activities of households as employers; non-identified activities of households producing goods and services for own use; activities of extraterritorial organisations and bodies	2.2	-0.1	2.9	-0.5	2.0	-2.2	1.3	-1.2	1.5	6.4	-8.3	-6.2	-12.8	-10.1	4.9	3.4	6.5	3.1
Gross value added, total for the economy	0.9	0.7	0.7	0.8	1.0	0.6	1.0	0.9	0.8	1.4	0.5	0.9	-3.7	-6.5	6.7	-0.6	-0.3	-0.6

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 fisheries	31.8	-8.9	-10.9	5.7	-11.0	3.6	7.0	-7.9	7.5	8.5	-2.0	4.1	-3.3
Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities	2.2	-6.9	-1.9	4.3	6.3	-2.0	1.1	4.6	6.1	0.5	-0.2	-0.7	-9.5
Construction	15.1	6.8	-18.7	-4.0	-4.5	-6.3	-2.0	3.5	-7.9	4.0	1.1	3.7	-1.0
Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities	-2.9	-4.3	15.3	2.9	-0.5	3.2	-1.2	5.1	-0.5	2.6	3.1	3.7	-6.4
Information and communication	74.2	-2.5	0.3	12.4	-3.2	0.5	0.8	1.9	16.7	5.5	10.5	13.8	4.1
Financial and insurance activities	10.5	13.2	24.7	-3.3	-4.7	-7.5	0.0	-1.0	6.9	1.4	2.2	3.0	-0.2
Real estate activities	-5.0	1.2	3.6	0.0	2.9	-2.3	2.1	2.3	5.7	7.2	11.4	5.0	-6.4
Professional, scientific and technical activities; administrative and support service activities	-7.8	7.7	-7.1	2.6	-3.8	-1.9	0.1	8.7	0.5	1.1	8.7	13.1	-4.8
Public administration, education, human health and social work activities	1.0	0.9	2.8	-2.6	3.0	-5.5	2.9	1.2	-4.3	5.5	2.7	0.9	3.0
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	-1.5	1.1	6.3	-2.8	4.8	1.8	2.7	-24.2
Gross value added, total for the economy	6.2	-0.9	1.8	1.9	0.3	-1.7	1.0	3.0	2.6	3.3	3.5	3.7	-4.5

Source: the NSI.

Household Behaviour

In the second quarter of 2021 household consumption rose on a quarterly basis, underpinned by the improved consumer sentiment, income growth and lower savings rate. At the same time, labour supply declined mainly due to outflow from the labour force but also to long-term unfavourable demographic developments in Bulgaria.

The NSI data⁷⁴ show that labour force fell on a quarterly and an annual basis in the second quarter of 2021⁷⁵ as a result of a decrease in both the number of employed and unemployed. Concurrently, the number of persons outside the labour force increased by 1 per cent on a quarterly basis, with persons in the age groups of 15–24 and 25–34 years contributing most to the registered growth. The quarter-on-quarter decrease in labour force resulted in a fall in the labour force participation rate⁷⁶ compared with the previous quarter but the annual increase was sustained.

According to the LFS data, the seasonally adjusted unemployment rate⁷⁷ fell to 5.5 per cent in the second quarter of 2021, from 5.7 per cent in the first quarter. Gradual easing of COVID-19 containment measures in the second quarter of 2021 coupled with the extension of government's measures to protect jobs had a positive impact on the unemployment rate. Concurrently, the number of long-term unemployed (over one year) increased further. Administrative statistics data of the Employment Agency, which are published more frequently, also reported a decline in the unemployment rate⁷⁸ over the second quarter of 2021, which was sustained in the third quarter.

⁷⁴ NSI Labour Force Survey data are used.

⁷⁵ Quarterly growth is calculated based on BNB seasonally adjusted data.

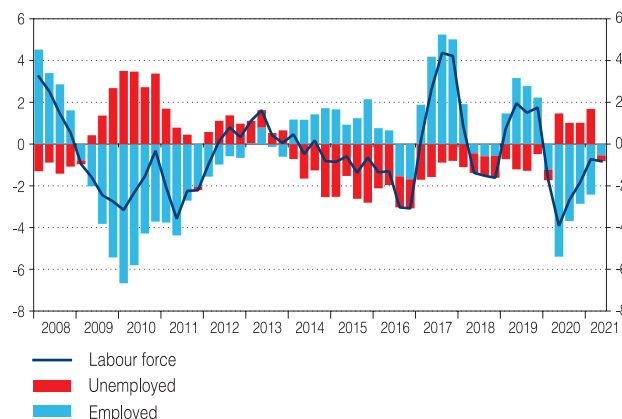
⁷⁶ The labour force participation rate is the proportion between economically active persons (labour force) and population of the respective age.

⁷⁷ The unemployment rate is the proportion between the number of unemployed and the labour force based on Labour Force Survey data. The time series is seasonally adjusted by the BNB.

⁷⁸ The definition of the unemployment rate according to the Employment Agency corresponds to that referred to in note 77, but using a constant rate of labour force comprising the number of persons in the respective age group since the last census of the population. Employment Agency data on the unemployment rate are not directly comparable to NSI Labour Force Survey data on the unemployment rate. The time series is seasonally adjusted by the BNB.

Contribution to the Change in Labour Force by Component

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

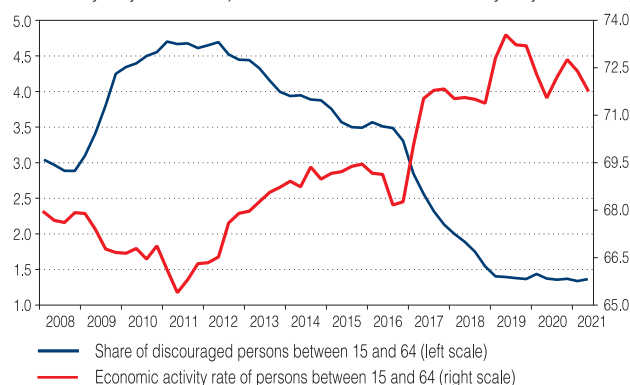


Sources: the NSI, BNB calculations.

Economic Activity and Share of Discouraged Persons

(per cent, seasonally adjusted data)

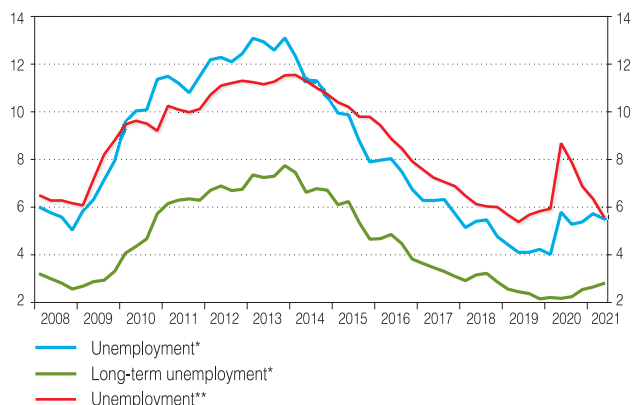
(per cent, seasonally adjusted data)



Sources: NSI Labour Force Survey, BNB calculations.

Unemployment Rate

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



* NSI data.

** Employment Agency data.

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

The NSI national account wage bill data suggest that annual labour income of employed increased further both in nominal and real terms in the second quarter of 2021 in line with the employment growth. Average wage data derived from the NSI short-term statistics on labour costs also reported higher annual growth in the second quarter of 2021 compared to the first quarter, with both public and private sector registering accelerated growth. Concurrently, quarterly labour income growth slowed in real terms reflecting the higher inflation in the second quarter.

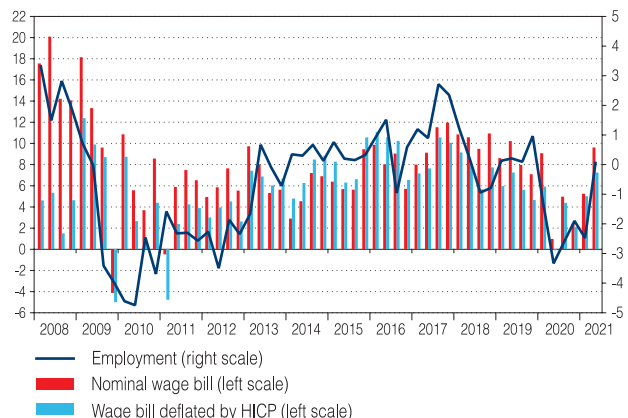
The income increase, recovery of employment growth and rising consumer confidence led to private consumption growth of 2.2 per cent on a quarterly basis in the second quarter of 2021 (against 3.2 per cent in the first quarter). Retail trade turnover also reported a growth in the second quarter, which started to moderate quarter on quarter in real terms, posting a slight decline in July and August mainly due to the fall in retail sales of textile, clothing, footwear and leather. Despite these developments, private consumption is expected to continue to grow on a quarterly basis in the third quarter of 2021, underpinned by a lower unemployment rate⁷⁹ in the same period, higher consumer confidence and strong lending activity.

⁷⁹ Employment Agency data.

Employment and Nominal Wage Bill

(per cent, annual change)

(per cent, annual change)

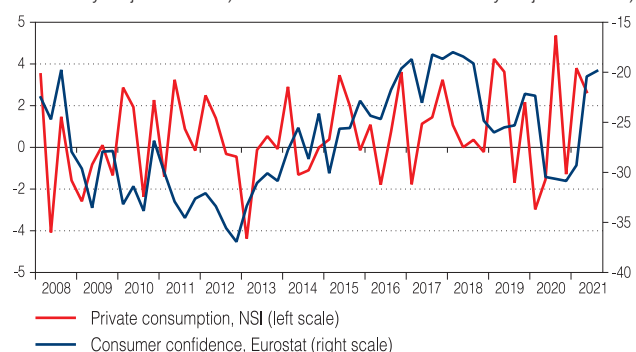


Sources: the NSI – SNA, BNB calculations.

Private Consumption and Consumer Confidence

(quarterly rate of change, per cent;
seasonally adjusted data)

(balance of opinions;
seasonally adjusted data)

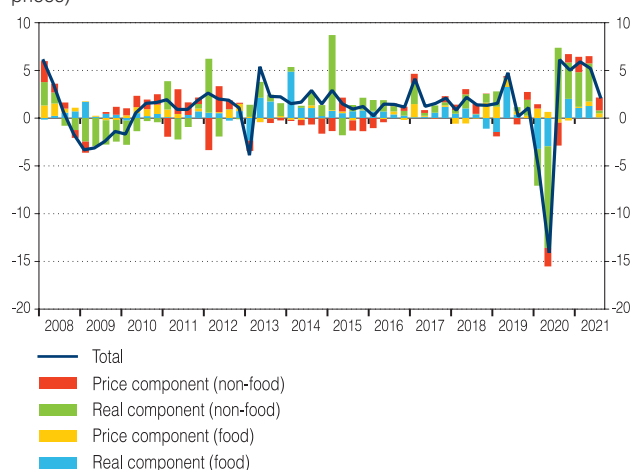


Note: Quarterly data on consumer confidence represent the average monthly values of the Eurostat consumer confidence indicator.

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 on the third quarter of 2021 represent the quarterly change of the average value of the indicator for July and August compared to the second quarter of 2021.

Sources: the NSI, BNB calculations.

Employment and Income Dynamics

	2017				2018				2019				2020				2021	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
(per cent, quarter-on-quarter; seasonally adjusted data)																		
Employed persons	0.3	0.1	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	-0.7	0.5
Nominal wage <i>per employee</i> *	2.9	3.0	2.8	2.1	2.1	1.9	3.0	2.2	1.1	2.7	-0.1	1.9	1.5	4.0	1.1	0.1	1.6	2.5
Real wage <i>per employee</i> **	2.5	2.6	2.9	1.1	1.5	1.1	2.0	1.6	0.9	1.9	-1.2	0.5	0.2	4.1	1.3	1.2	2.1	2.3
Wage bill, nominal terms	2.9	2.7	3.1	2.4	2.7	2.1	2.5	2.6	1.4	3.5	0.6	1.7	1.1	-0.8	2.3	1.1	2.2	2.6
Wage bill, real terms**	2.4	2.3	3.1	1.4	2.1	1.3	1.5	2.0	1.1	2.7	-0.5	0.3	-0.1	-0.7	2.5	2.2	2.7	2.4
(per cent, on corresponding quarter of previous year, non-seasonally adjusted data)																		
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	-2.5	0.1
Nominal wage <i>per employee</i> *	6.9	9.3	11.3	11.7	9.4	9.0	9.5	10.3	8.0	8.5	5.1	5.7	9.0	5.8	9.1	5.0	7.2	7.2
Real wage <i>per employee</i> **	6.1	7.8	10.4	9.8	7.7	6.5	5.6	7.1	5.4	5.6	2.8	3.3	5.9	4.7	8.5	4.7	7.0	4.9
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	9.1	1.0	5.0	2.4	5.2	9.6
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	5.9	-0.1	4.4	2.1	5.0	7.2

Employment and Income Dynamics

(per cent, on an annual basis)

	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
Nominal wage <i>per employee</i> *	13.5	10.6	12.0	6.5	8.0	8.3	5.6	5.8	6.2	9.9	9.6	6.8	7.2
Real wage <i>per employee</i> **	1.6	8.1	8.7	3.0	5.4	8.0	7.4	6.9	7.6	8.6	6.7	4.2	5.9
Wage bill, nominal terms	16.3	8.3	7.1	4.9	6.0	7.1	5.4	6.8	8.1	10.2	10.5	8.4	4.2
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	3.0

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

** Data deflated by HICP.

Sources: NSI – SNA, BNB calculations.

Retail Trade Turnover

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

	2017				2018				2019				2020				2021		
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III
Retail trade, excluding motor vehicles and motorcycles	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	5.6	4.6	-0.3
incl.																			
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	2.9	3.4	0.1
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	25.9	-2.4	-12.8
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	0.7	0.2	3.2
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	6.2	0.8	-2.2
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	3.0	14.7	6.9
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	-2.4	11.7	-4.2
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	3.7	5.1	0.0

Note: Data for the third quarter of 2021 are for July and August.

Source: the NSI: short-term business statistics.

The NSI Household Budget Survey shows that household savings as a share of income⁸⁰ (seasonally adjusted data) decreased in the second quarter of 2021 in line with the increased consumer confidence and expenditure. Household assets measured by their net position in the banking system grew slightly over the same period compared to the previous quarter.

The projected higher economic activity in the country and income increases are expected to translate into a higher labour supply quarter on quarter in the fourth quarter of 2021 and the first quarter of 2022. Higher labour demand and supply, in turn, will reflect in a private consumption increase.

Fiscal Policy Effects on the Economy

In the first eight months of 2021 fiscal policy continued to support economic activity in the country mainly through increased transfers to households in the form of social expenditure and subsidies to preserve employment amid the ongoing COVID-19 pandemic. Concurrently, over the second quarter of 2021 government consumption and investment of the general government sector⁸¹ declined on a quarterly basis for a second consecutive quarter, with data on budget cash performance as of August indicating a continuation of this trend in the third quarter as well.

At end-August 2021 the CFP budget balance was positive at BGN 880.5 million. As a result of the higher increase in total budget expenditure compared to that in total revenue in the first eight months of 2021, the consolidated fiscal programme balance declined⁸² by BGN 735.5 million from the same period of last year.

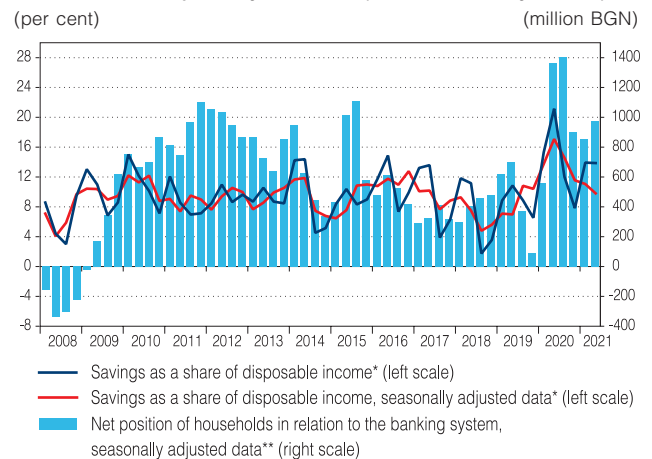
At the end of August total CFP budget revenue posted a 16.2 per cent growth on an annual basis, indicating an acceleration of the growth rate compared to the second quarter of 2021. The upward dynamics of total revenue over that period was driven by stronger growth in tax

⁸⁰ Income is gross income reduced by taxes and social security contributions.

⁸¹ BNB calculations on the quarterly rate of change in government investment, for which quarterly non-financial accounts of the general government sector published by the NSI as well as Ministry of Finance cash data on budget performance are used.

⁸² Based on Ministry of Finance Monthly Bulletins on state budget performance and major CFP indicators for 2020 and 2021. BNB calculations.

Household Propensity to Save (on a Quarterly Basis)



* BNB data.

** NSI data.

Sources: NSI Household Budget Survey, the BNB.

revenue amid improving domestic demand and a gradual decline in the negative contribution of revenue from grants. Concurrently, due to the gradual exhaustion of the one-off effect resulting from Sofia airport concession payment received in April⁸³, the positive contribution of non-tax revenue to total budget revenue growth declined.

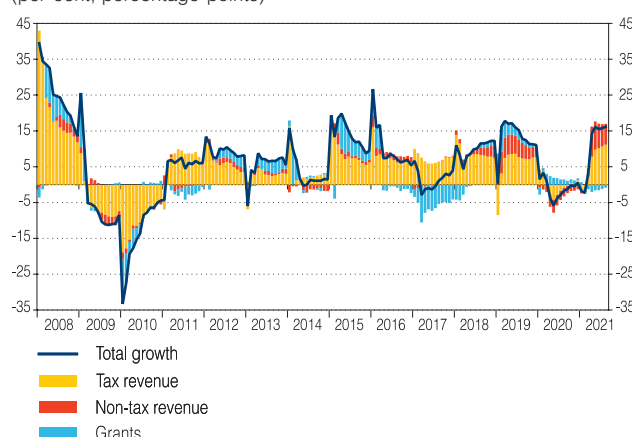
The dynamics of tax revenue in the first eight months of the year continued to be driven largely by the strong annual increase in VAT revenue (19.0 per cent), receipts from social and health insurance contributions (11.0 per cent) and personal income tax revenue (15.5 per cent).

At the end of August VAT revenue contributed most substantially to tax revenue growth. The annual increase in private consumption reported in the second quarter of 2021 amid improving consumer confidence, the low base of the same period of the previous year and the described one-off factor in April⁸⁴ contributed to the higher growth in VAT revenue in the second quarter of 2021, which stabilised thereafter as a result of the accelerated increase in VAT revenue from imports, while VAT revenue growth from domestic and intra-Community acquisitions (net) slowed down⁸⁵. Concurrently, the significant rise in oil prices also contributed to the accelerated annual growth of VAT revenue from imports coming to 26.4 per cent at the end of August.

In the first eight months of the year the annual growth in receipts from social security and health insurance contributions and personal income tax accelerated gradually. Factors underpinning this growth since year start include rises in the minimum wage and minimum insurance threshold of self-employed persons along with an increase in public sector wages. Positive developments in the labour market observed in the first half of the year, related to the growth in the number of employees and accelerated wage increase in the private sector also favoured

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

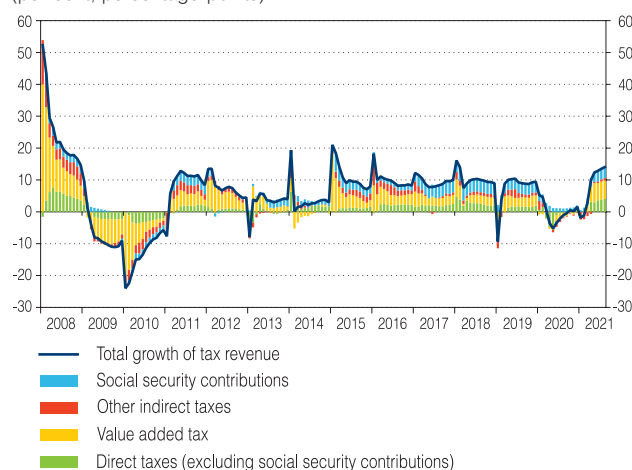
(per cent; percentage points)



Sources: the MF, BNB calculations.

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

(per cent; percentage points)



Sources: the MF, BNB calculations.

⁸³ Concession remuneration for Sofia airport received in April 2021, having a one-off effect, contributed to the significant increase in non-tax revenue and, to some extent, in VAT revenue.

⁸⁴ See footnote 83.

⁸⁵ Based on Ministry of Finance Monthly Bulletin, the dynamics of VAT revenue is driven by factors, some of which are related to the introduction of EU directives on cross-border e-commerce and to Brexit, which according to the MF boosted VAT revenue from imports at the expense of VAT revenue from transactions in Bulgaria and intra-Community acquisitions.

higher direct tax revenue. By end-August corporate tax revenue increased by 25.5 per cent from the same period of the previous year, with higher gross operating surplus in the economy contributing to this upward dynamics.

Annual growth of total CFP expenditure accounted for 19.3 per cent at the end of August 2021. Total expenditure have decelerated since the second quarter with lower growth rates reported in all expenditure items, most pronounced in social expenditure.

Despite the slower annual growth of social expenditure at the end of August 2021, this type of expenditure made the largest positive contribution to the change in total budget expenditure, continuing to support household disposable income. Socio-economic and health measures taken in response to the COVID-19 spread were the main driver behind the increase in social expenditure in the first eight months. Part of these measures included an increase in the minimum and maximum amount of pensions, temporary monthly allowance payments of BGN 50 to pensions, indexation of pensions as of 1 July 2021, the one-off payment of BGN 120 on food products for pensioners whose pension amount is less than BGN 369, higher unemployment benefits⁸⁶ and extended term to receive them, as well as healthcare payments made. The slowdown in social expenditure growth may be explained by several factors, among which the one-off payment of BGN 120 on food products in April for pensioners whose pension amount is less than BGN 369, the base effect of August 2020, when the payment of allowances to pensions has started, and the decline in other social expenditure such as unemployment benefits amid easing of containment measures after March 2021.

Staff and operating expenditure also contributed positively to the dynamics of total budget expenditure in the first eight months. Staff expenditure rose by 17.7 per cent year on year as a result of increased wage costs in the budget sector under the State Budget Law for 2021.⁸⁷ Over the same period operating expendi-

⁸⁶ 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.

⁸⁷ This includes higher staff costs for those working in the education, increased staff costs of units entrusted with activities to overcome the COVID-19 pandemic, as well as 10 per cent wage rises of employees in all other budget sectors.

ture growth stood at 23.1 per cent. Slower annual growth in staff and operating expenditure observed at the end of the second quarter and the first two months of the third quarter suggests a relatively slight change in government consumption over the third quarter.

In the first eight months of the year the growth in subsidy expenditure was mainly driven by the continued implementation of measures to protect jobs. Subsidy expenditure financed by EU funds, which finance 'Save me' and 'Employment for you' measures, and national subsidies under the so-called '60/40' measure contributed most to the growth in total subsidy expenditure⁸⁸.

After the relatively high annual growth reported in the first six months of the year capital expenditure fell by -5.4 per cent at the end of August, reflecting the transaction made in July for reimbursements to the state budget from foreign funds account of the Ministry of Regional Development and Public Works, which represents in essence reimbursed costs and results in reduced cash expenditure.

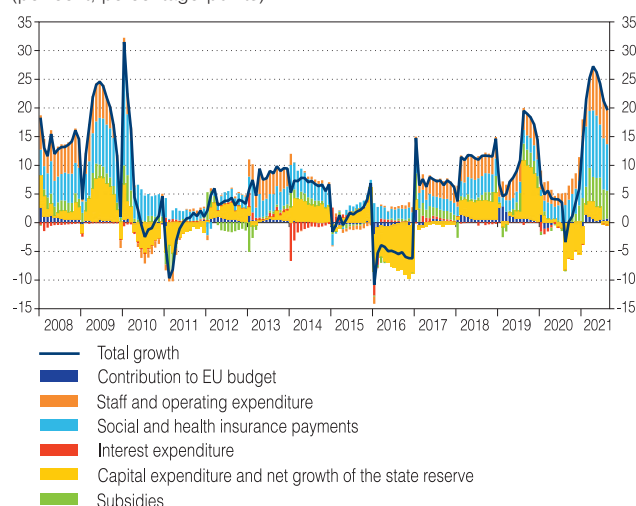
The extension of anti-crisis measures to the end of 2021 and the introduction of additional fiscal stimulus measures based on budgetary framework update⁸⁹ for the current year are expected to continue supporting household disposable income and consumption respectively in the fourth quarter. The package of measures launched to support households in the fourth quarter of 2021 includes a pension supplement of BGN 120 for the three months to the end of the year, an increase in the allowance for small children in the second year of maternity as from 1 October, higher heating allowance, *etc.*⁹⁰ Sub-

⁸⁸ Another subsidised employment programme is the '80/20' measure. According to the MF information, the costs incurred under the 'Working capital support for SMEs affected by temporary anti-epidemic measures' programme, which is implemented under the 'Innovation and Competitiveness' Operational Program and is administered by the NRA, also contributed to growth of subsidy expenditure.

⁸⁹ This refers to the Law amending the State Budget Law of the Republic of Bulgaria for 2021 of 16 September 2021, the Law amending the Law on the Budget of the National Health Insurance Fund for 2021 of 16 September 2021 and the Law amending the Law on the Budget of the Public Social Security of 16 September 2021.

⁹⁰ Other additional costs include monthly targeted allowance in a declared state of emergency or emergency epidemic situation for families with children under 14 years of age, costs under personal assistance mechanism and additional remuneration for working in risky conditions to employees of Social Assistance Agency, Employment Agency and General Labor Inspectorate.

Contribution of Major Groups of Expenditure to Total Expenditure Growth, Cumulatively (on an Annual Basis)
(per cent; percentage points)



Notes: In Consolidated Fiscal Programme reports of January 2016, payroll costs include wage, contributions 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.

sidised employment programmes are projected to be extended to the end of the year, as well as other business compensation measures. The above measures are expected to result in higher government net transfers to households and corporations in the form of social expenditure and subsidies in the last quarter of the year. Pension recalculation and higher minimum and maximum amount of pensions as projected in the updated State Budget Law, effective as of 25 December 2021 will have a positive effect on household disposable income in the first quarter of 2022. At the same time, assuming that part of the temporary measures, such as pension supplements, tax relief for raising a child and subsidised employment programmes are phased-out, it could be expected that net fiscal transfers would have a limited impact on the increase in household disposable income. The fiscal policy impact on the economic activity at the start of 2022 is surrounded by an uncertainty, stemming from the upcoming parliamentary elections in November and the adoption of the Law on the State Budget for 2022, which is essential for the scope and size of the discretionary fiscal measures.

In the fourth quarter of 2021 government consumption is expected to contribute positively to the change in the economic activity in the country in line with higher expenditure on healthcare and remunerations projected in the updated budget. Government consumption in real terms is projected to decline quarter on quarter in early 2022 based on the assumption that some of the healthcare costs related to the COVID-19 pandemic would no longer be required.

In the context of the final phase of 2014–2020 programming period, investments funded by EU funds are expected to contribute positively to Bulgaria's economic activity in the fourth quarter of 2021 and the first quarter of 2022. Concurrently, country's political cycle coupled with the uncertainty surrounding the development of the COVID-19 pandemic and the related government expenditure, pose a potential risk of delays in the implementation of investment projects financed by both national and EU funds.

Key Budget Indicators Performance for 2020 and 2021

Consolidated Fiscal Programme	2020 January – August ¹		2021 January – August ¹	
	BGN million	per cent ²	BGN million	per cent ²
Total revenue and grants	28,820	-1.7	33,484	16.2
Tax revenue	23,012	-1.0	26,235	14.0
incl. social security and health insurance contributions	7,130	3.5	7,918	11.0
Non-tax revenue	3,772	-15.5	5,444	44.3
Grants	2,036	28.3	1,804	-11.4
Total expenditure (incl. the contribution to EU budget)	27,204	-3.5	32,603	19.8
Staff	7,127	11.8	8,386	17.7
Operating expenditure	2,495	-5.8	3,072	23.1
Interest	443	-5.7	402	-9.3
Social expenditure, scholarships	12,068	7.6	14,279	18.3
Subsidies	2,227	-2.5	3,565	60.1
Provided current and capital transfers abroad	22	-6.3	26	18.4
Capital expenditure and government reserve growth	2,013	-52.9	1,901	-5.6
incl. capital expenditure	2,011	-52.9	1,902	-5.4
Contribution to general budget of the European Union	808	-10.5	972	20.3
	BGN million	difference ³ (BGN million)	BGN million	difference ³ (BGN million)
Budget balance, on a cash basis	1,616	503	881	-735
Tax revenue under the state budget	2020 January – August ⁴		2021 January – August ⁴	
	BGN million	per cent ²	BGN million	per cent ²
Tax revenue	15,131	-3.1	17,397	15.0
Corporate tax	1,415	-10.8	1,776	25.5
Personal income tax	2,778	3.2	3,209	15.5
Value added tax	7,067	-4.5	8,407	19.0
Excise duties	3,568	-1.3	3,697	3.6
Customs duties and taxes	139	-9.4	178	28.3
Insurance premia tax	35	5.6	35	2.4
Other taxes	130	-2.3	95	-26.6

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

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

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

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

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

Source: the MF.

4. INFLATION

Annual inflation measured by the HICP continued to accelerate, reaching 4.0 per cent in September 2021 (0.0 per cent in December 2020). Price rise was broad-based across HICP components, reflecting the simultaneous effect of pro-inflationary factors in terms of both external and internal macroeconomic environment. Energy products (excluding administratively controlled prices) and food had the largest positive contributions to the overall inflation in September in the context of significant annual increases in international commodity prices. Core inflation also accelerated amid growth of final consumption expenditure of households and higher production costs of corporations. Administratively controlled prices continued to contribute positively to overall inflation driven mainly by higher prices of electricity, heating and gaseous fuels approved by the Energy and Water Regulatory Commission.

Inflation is projected to accelerate further in the fourth quarter of 2021, and thereafter HICP growth would slow down in early 2022 in line with the technical assumptions for a weaker annual increase in international food and petroleum products prices compared to the corresponding period of 2021. Risks to the inflation forecast are assessed as oriented towards a stronger increase in prices compared to the baseline scenario and stem largely from the possibility that the upward trend in electricity, natural gas and other commodity prices would be maintained over the projection horizon. An additional risk of higher than projected inflation arises from the likelihood that firms would undertake indexation schemes of employee wages to accelerated growth of consumer prices and carry over this increase on end prices, thereby extending in time the effects of an ongoing increase in inflation.

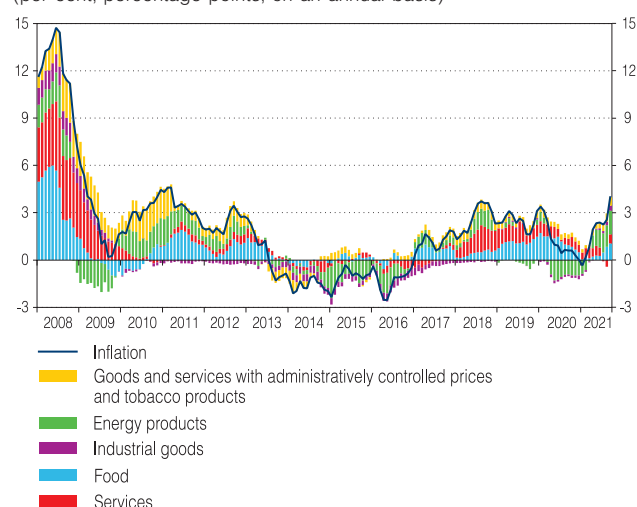
Annual inflation, measured by the HICP, continued to accelerate, reaching 4.0 per cent in September 2021 (0.0 per cent in December 2020). In September year-on-year price increases were reported in each of the main commodity groups, reflecting the simultaneous effect of pro-inflationary factors in terms of both external and internal macroeconomic environment.

The group of energy products had the major positive contribution to the September inflation, reflecting the 81.2 per cent rise in international oil prices in euro in September 2021 from a year earlier. Higher prices of petroleum products were rapidly transmitted through the supply chain on producer prices and consumer prices of transport fuels. This was the reason behind the shift from annual deflation in the group of transport fuels at end-2020 (-17.3 per cent) to a year-on-year price increase of 28.2 per cent in September 2021.

Food inflation accelerated to 4.0 per cent in September 2021 (2.0 per cent at the end of 2020), with both processed and unprocessed food contributing to this. Unprocessed food prices posted a year-on-year increase of 3.0 per cent (compared to -0.8 per cent in December

Inflation and Contribution of Major Commodity and Services Groups to It

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

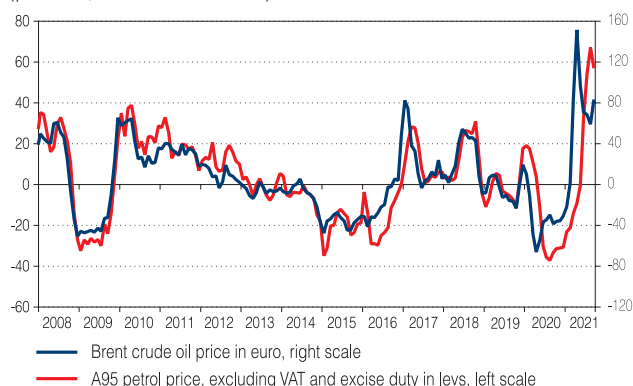


Notes: This structure corresponds to the Eurostat classification; tobacco products and goods and services with administratively controlled prices are presented separately. The price index of goods and services with administratively controlled prices is calculated through the elementary aggregates level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

Sources: the NSI, BNB calculations.

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.

2020). The vegetables sub-group was the main driver for price rises in unprocessed food, with Commodity Exchange and Wholesale Markets State Commission and Ministry of Agriculture data giving grounds for assuming that this was probably due to unfavourable weather conditions and limited supply of domestic production during the summer months of the year. Higher prices of electricity, fuels and other products used for intermediate consumption in agriculture were additional potential factors exerting a pro-inflationary pressure on unprocessed food.

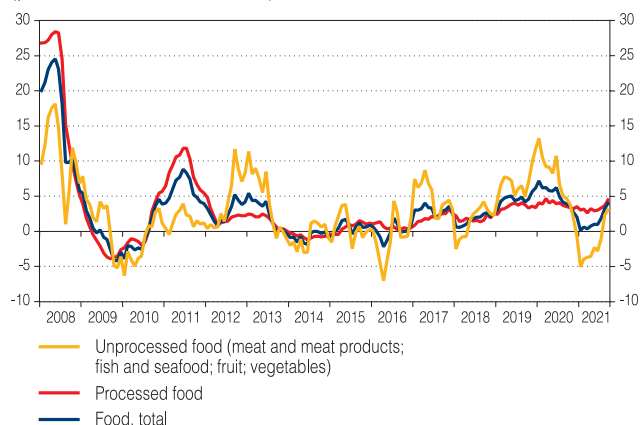
Processed food inflation was 4.5 per cent in September 2021, against 3.5 per cent by end-2020. The groups of bread and cereals, animal and vegetable oil and fats and milk, dairy products and eggs again had the largest positive contributions to the price hike, which was consistent with the upward dynamics in producer prices of these products.⁹¹ These developments were likely to reflect the annual rise in international wheat and other commodity prices in euro along with higher price indices of goods and services intended for current consumption in agriculture in Bulgaria.

In September 2021 core inflation (including services and non-food prices) accelerated to 2.0 per cent from the end of 2020 (0.5 per cent), reflecting the positive contributions of both sub-components of core prices.

⁹¹ According to the producer price index (PPI), as of August 2021 prices related to the manufacture of oils and fats rose by 49.8 per cent on an annual basis, those related to the production of bakery and farinaceous products increased by 5.9 per cent and to the production of milk and dairy products by 2.2 per cent.

Rate of Change of the Food Price Index

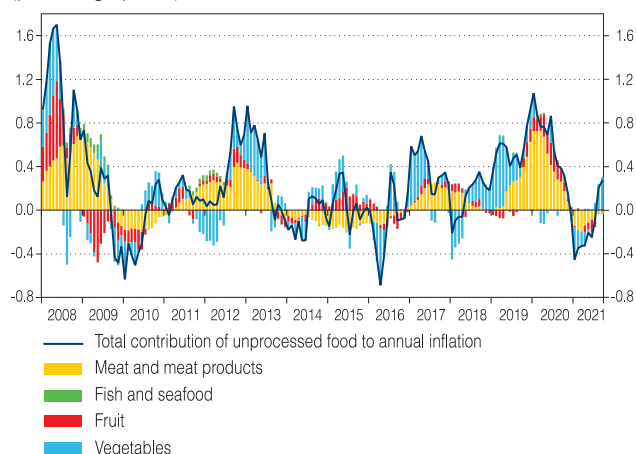
(per cent, on an annual basis)



Sources: the NSI, BNB calculations.

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

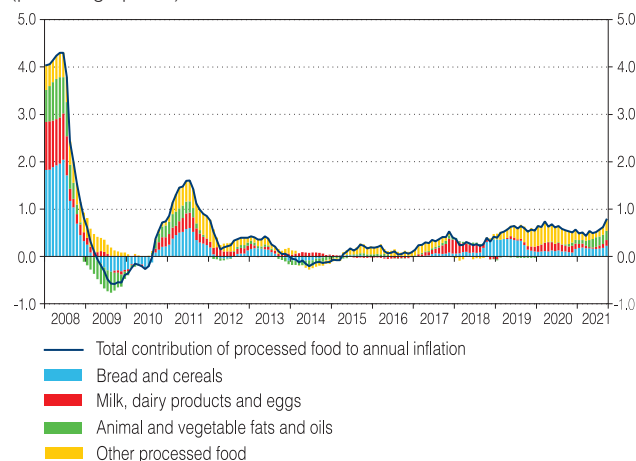
(percentage points)



Sources: the NSI, BNB calculations.

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

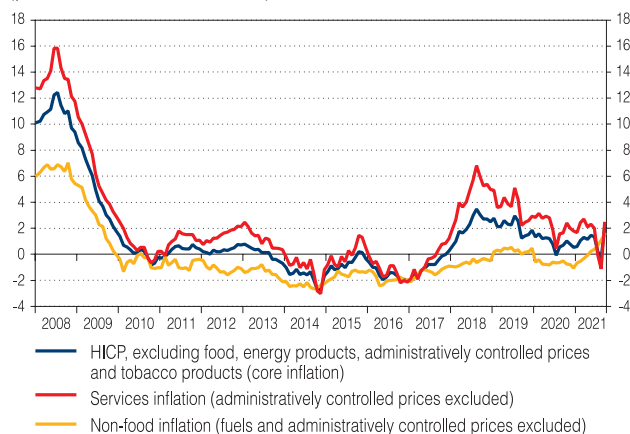
(percentage points)



Sources: the NSI, BNB calculations.

Core Inflation

(per cent; on an annual basis)



Sources: the NSI, BNB calculations.

Annual inflation in services rose to 2.4 per cent in September 2021, from 1.8 per cent by end-2020. These developments reflected exhausted negative effects of subdued demand for certain services in 2020 (primarily package holidays), growth in final consumption expenditure of households, higher unit labour costs and emerging indirect effects of increased food and fuel prices. Telecommunication services prices retained their early 2019 downward trend, with this group making an essential negative contribution to the overall inflation in September 2021.

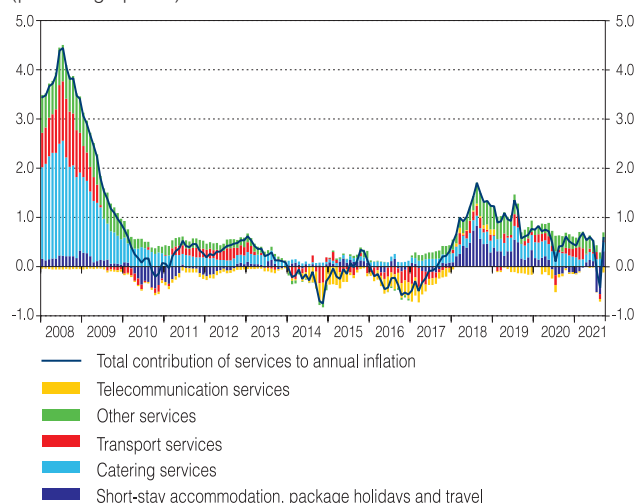
Deflation observed in non-food goods during 2020 was reversed in early 2021, and in September annual inflation in this group was 1.5 per cent (from -1.1 per cent at the end of 2020). This dynamics was largely driven by the price increase in furniture and furnishings, coupled with a moderated rate of decline in prices of clothing and footwear and motor vehicle sub-groups.⁹² These developments resulted from the easing of containment measures in Bulgaria, enhanced demand and the changes retained since the second half of 2020 in the structure of household consumption, involving a larger share of expenditure on home furnishing and maintenance.⁹³ Dynamics in real retail trade volumes as of August 2021 indicated retention of demand for non-food goods, which is a precondition for preserving the current growth rates of their prices in the following months.

⁹² Since the beginning of 2021, prices of new cars have tended to increase, likely to reflect limited supply due to disruptions in global supply chains.

⁹³ According to NSI household budget survey data.

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

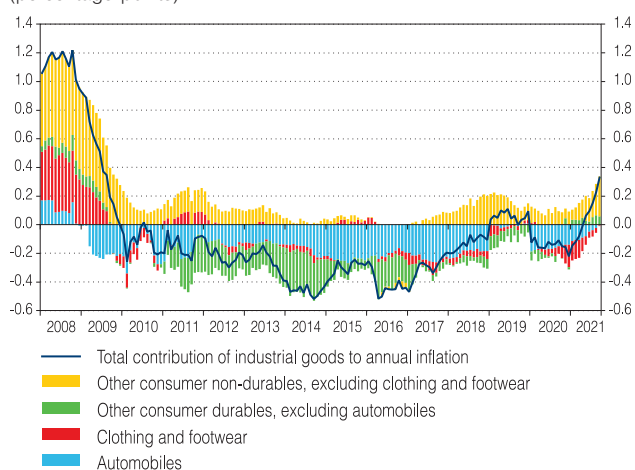
(percentage points)



Sources: the NSI, BNB calculations.

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

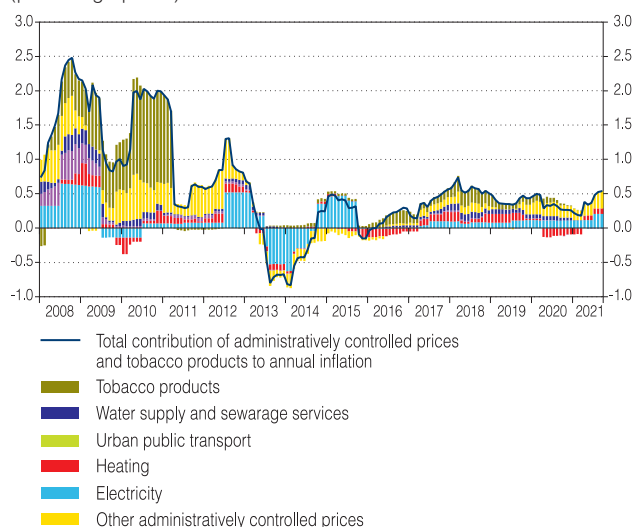
(percentage points)



Sources: the NSI, BNB calculations.

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

(percentage points)



Sources: the NSI, BNB calculations.

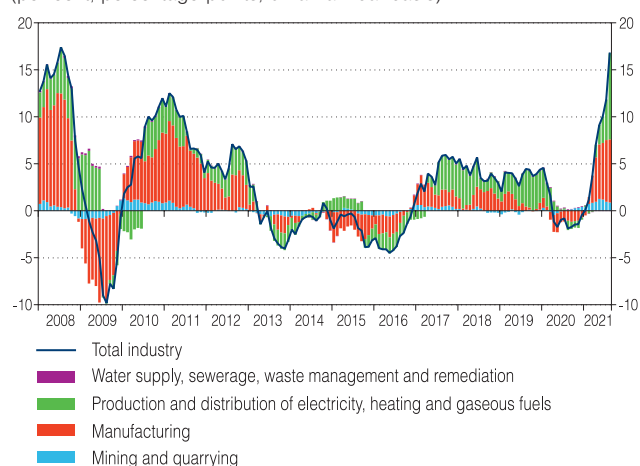
Inflation in goods and services with administratively controlled prices and tobacco products increased to 2.3 per cent in September 2021, from 1.2 per cent by end-2020. Electricity and heating prices, reflecting higher prices of electricity (4.4 per cent) and heating (16.2 per cent) since 1 July 2021, as approved by the the Energy and Water Regulatory Commission (EWRC) for a year ahead, had the main positive contribution to the inflation in this group. Natural gas prices in September 2021 approved by the EWRC, which were 209.0 per cent higher than those in September 2020,⁹⁴ were the reason for gaseous fuels to have also a high positive contribution to the increase in administratively controlled prices. The additional rise in natural gas prices for October, as approved by the EWRC (by 36.2 per cent from September) will be a precondition for an increase in the positive contribution of gaseous fuels to the overall inflation over the coming months. Other groups of regulated prices with a more substantial positive contribution to the September inflation were educational services, followed by postal and social services.

Inflation acceleration in the first nine months of the year reflected the strong upward dynamics of producer prices. In August the total producer price index (PPI) in the domestic market rose by 17.2 per cent on an annual basis compared

⁹⁴ The increase concerns the price at which the public supplier Bulgargas EAD sells natural gas to final suppliers.

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

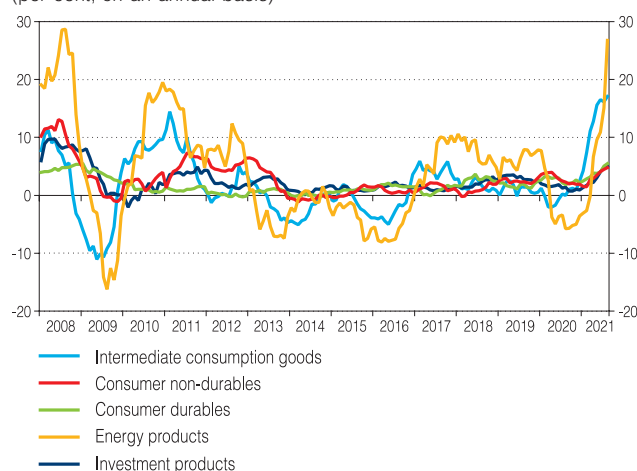
(per cent; percentage points; on an annual basis)



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.

to a fall of -0.5 per cent in December 2020. By economic sector, production and distribution of electricity, heating, and gaseous fuels, followed by manufacturing had the largest positive contribution to the PPI dynamics, while the end-use classification shows a more significant price increase in intermediate consumption products and energy products. The increase in producer prices in manufacturing was driven by higher prices of refined petroleum products, metals, chemical industry products and food products. The upward dynamics in producer prices is a prerequisite for a further increasing pressure on firms to raise final consumer prices in the following months across various HICP sub-components.

In the first nine months of 2021 the number of HICP goods and services with rising prices picked up, with the share of sub-indices with more than 2 per cent price rises growing most substantially followed by those rising from 0 to 1 per cent and from 1 to 2 per cent. In terms of the HICP structure, the most significant growth of the share of sub-indices with price rises was reported in the group of non-food goods followed by food and energy products.

According to the regular NSI business surveys, from the beginning of the year the share of firms which foresee an increase in selling prices in the following three months posted significant growth. This trend was more pronounced in retail trade and manufacturing sectors. In addition, the share of retail trade managers who expect prices to rise faster in the following three months than those observed previously was increasing. These developments imply continued rising inflation in food and non-food goods over the following months.

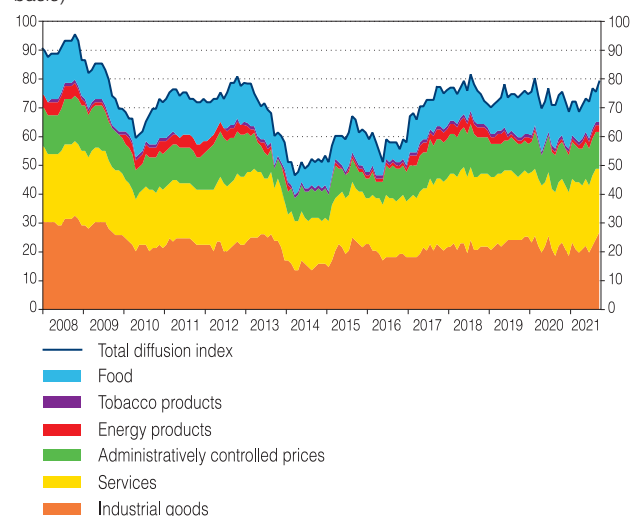
In the second quarter of 2021 the annual growth rate of the house price index accelerated to 9.1 per cent, from 7.5 per cent in the previous quarter, which was also accompanied by a strong increase in the volume of concluded sale and purchase transactions (by 65.7 per cent on an annual basis in the second quarter against 11.4 per cent in the previous quarter).⁹⁵ Higher house prices were reported in all six largest cities, with Sofia recording the most significant house price increase (11.6 per

⁹⁵ Eurostat data are used.

Diffusion Index

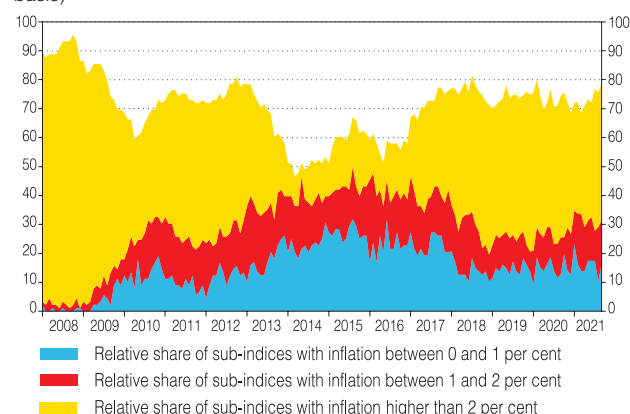
a) by major goods and services groups

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



b) by the size of the increase

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

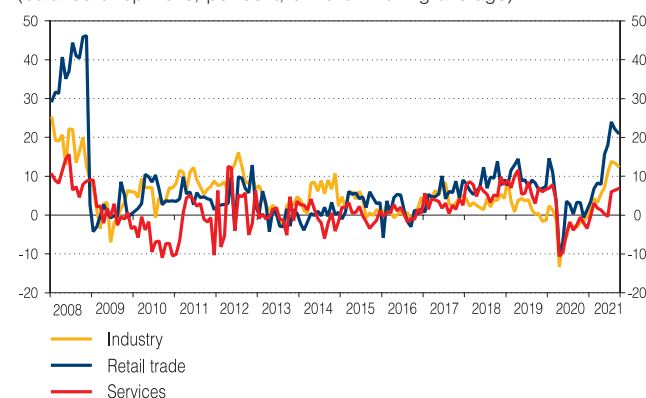


Note: Data on the HICP 4-digit level sub-indices (sub-classes according to the NSI methodology) have been used. The diffusion index shows the share of sub-indices reporting an increase in value on an annual basis. When calculating the relative shares, the weight of the relevant sub-indices in the consumer basket is not taken into account.

Sources: the NSI, BNB calculations.

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.

Key Indicators of the Housing Market in Bulgaria

(per cent; year-on-year change)

Indicators	2016	2017	2018	2019	2020	2020		2021	
						III	IV	I	II
Price developments									
House Price Index, total	7.0	8.7	6.6	6.0	4.6	5.2	5.4	7.5	9.1
New dwellings	6.4	6.7	5.7	8.5	2.2	3.5	2.3	6.7	7.2
Existing dwellings	7.3	9.7	7.0	4.8	6.0	6.2	7.2	8.0	10.2
Inflation (HICP)	-1.3	1.2	2.6	2.5	1.2	0.6	0.3	0.2	2.2
House rentals, paid by tenants (HICP)	0.6	1.0	1.9	3.3	2.5	2.3	2.3	1.7	1.5
Lending									
New housing loans	7.4	32.7	14.9	12.4	18.1	15.5	12.3	6.1	23.1
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	3.3	3.2	3.1	3.1
Housing loans balances	-16.7	12.7	19.4	0.0	-15.5	12.3	11.6	11.9	14.5
Construction and investment									
Permits issued for the construction of new residential buildings (square meters)	4.8	32.5	39.0	-7.9	-9.0	-13.2	27.5	26.1	43.5
Value added in construction (at average annual prices for 2015)	-7.9	4.0	1.1	3.7	-1.0	-0.7	-3.5	-16.6	-1.3
Constriction Production Index, building construction	-16.1	10.9	2.6	8.4	-8.3	-6.9	-8.1	-3.9	4.7
Fixed investment; residential buildings	102.1	19.2	-2.2	6.6	-6.4	4.7	7.0	-6.1	-4.8
Construction cost index for new buildings	0.8	2.5	2.9	5.1	2.1	1.0	2.4	5.2	8.5

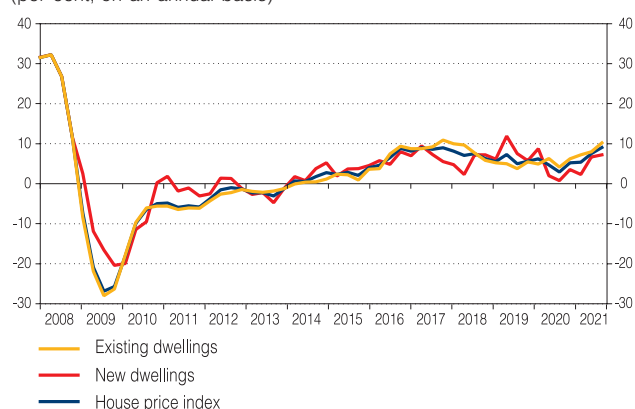
Note: Values indicating the amount of the APRC on housing loans to households are averages weighted by the relevant volumes of new loans for a 12-month period.

Sources: the NSI, the BNB, Eurostat.

cent). By HPI sub-component, prices of existing houses increased more (10.2 per cent) than new ones (7.2 per cent). Factors supporting further housing demand and thereby contributing to higher house prices were the increased labour income, improved household sentiment for home purchase along with enhanced lending activity in the context of a preserved historically low annual percentage rate of charge (APRC) on new housing loans. Accumulated savings in the economy and the lack of enough alternatives for their investment amid low interest rates continued to be the other factors with a pro-inflationary effect on house prices. In addition, the continuing acceleration of the annual growth in the construction cost index (due to higher labour and material costs) was a supply-side pro-inflationary factor. In the second quarter of 2021 house prices in Bulgaria were 5.0 per cent lower than the maximum values recorded in the third quarter of 2008. Estimates based on the BNB macroeconomic model⁹⁶ suggest that in the second quarter of 2021 the output gap of current residential property prices in

Rate of Change of House Price Index

(per cent; on an annual basis)



Source: the NSI.

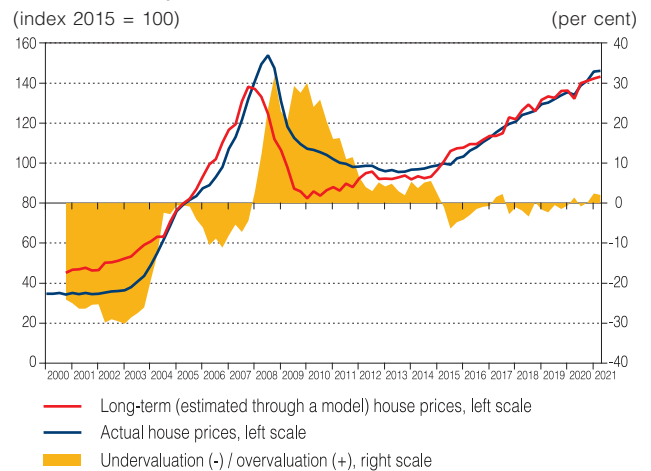
⁹⁶ For more information on this model, see the research topic on *Dynamics of House Prices in Bulgaria between 2000 and 2016*, Economic Review, 1/2017.

Bulgaria from their long-term equilibrium value remained slightly positive at about 2.0 per cent. The slight output gap was due to the fact that rising household income in combination with persistently low interest rates on housing loans have pushed up housing affordability which is recorded as an increase in their equilibrium level within the macroeconomic model. Over the second quarter of 2021 the price-to-rent ratio, which represents an alternative indicator of undervaluation/overvaluation of houses, continued to exceed significantly (23.7 per cent) its long-term (historical) value. This signals that household decisions to purchase a home were driven by reasons other than an immediate financial advantage by renting newly acquired properties. Such reasons could be expectations of a continuing increase in house prices (and realised capital gains after a sale in the future) or perception of residential properties as an alternative asset for preserving wealth in an environment of very low interest rates. In the following quarters the house price index is expected to increase further on an annual basis at rates close to the current ones. The NSI Consumer Survey shows that this will be driven by the increased demand for houses in line with the projected improvement of the economic activity in the country and the observed increased propensity of households to buy homes since the year's start.

Inflation is projected to accelerate further in the fourth quarter of 2021, and thereafter HICP growth would slow down in early 2022 in line with the technical assumptions for a weaker annual increase in international food and petroleum product prices compared to the corresponding period of 2021.⁹⁷ As regards core HICP components, a persistent tendency of a simultaneous rise in services and non-food goods inflation is expected to continue mainly due to projected growth in both private consumption and unit labour costs. The continued rise in the market price of electricity of the Independent Bulgarian Energy Exchange EAD in October and the EWRC approved increase in natural gas prices by 36.2 per cent in October compared to September 2021 will be the other factors with a strong pro-inflationary effect on production costs.

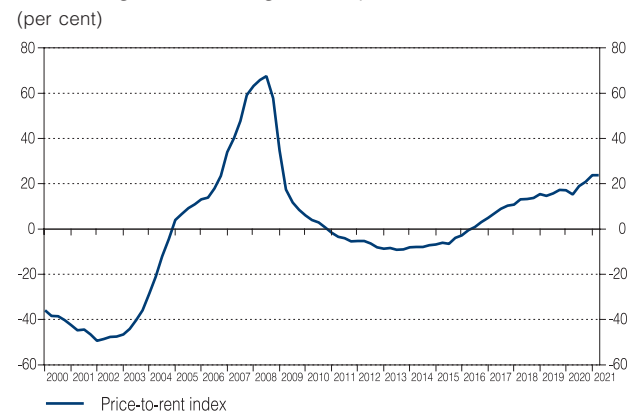
⁹⁷ For further details, see the BNB Macroeconomic Forecast, September 2021.

Actual and Equilibrium House Prices



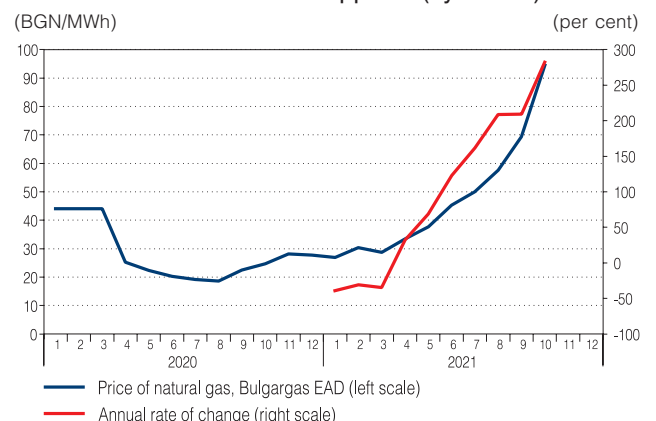
Sources: the NSI, BNB calculations.

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



Sources: the NSI, BNB calculations.

The Price at Which the Public Supplier Bulgargas EAD Sells Natural Gas to Final Suppliers (by Month)

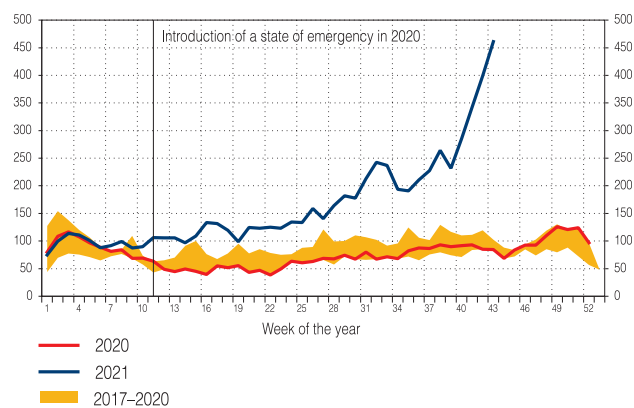


Sources: Bulgargas EAD, BNB calculations.

Risks to the inflation forecast are assessed as oriented towards a stronger increase in prices compared to the baseline scenario. Over the forecast horizon, the increase in electricity, natural gas and other commodity prices may exceed the level projected in the technical assumptions. The significant difference between the market price of electricity for business customers and the regulated price for households since July 2021 pose risks of price reviews for households in the coming months which would exert a strong direct effect towards increasing the overall inflation rate. To this end, risks to the inflation forecast are assessed as oriented towards a stronger increase in prices compared to the baseline scenario. An additional risk for realising higher than projected inflation stems from the likelihood that firms would undertake indexation schemes of employee wages to accelerated growth of consumer prices and carry over this increase on end prices, thereby extending in time the effects of an ongoing increase in inflation. Retention of the upward trend in inflationary expectations in the economy is also a precondition for realising higher inflation over the projection horizon.

The Average Market Price of Electricity in the Day Ahead Market Segment of the Independent Bulgarian Energy Exchange EAD (by Week)

(BGN/MWh)



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

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

	Inflation accumulated as of September 2020 (December 2019 = 100)		Inflation accumulated as of September 2021 (December 2020 = 100)		Annual rate of inflation as of September 2021 (September 2020 = 100)	
Inflation (per cent)	-0.7		3.3		4.0	
	inflation rate by group (per cent)	contribution (percentage points)	inflation rate by group (per cent)	contribution (percentage points)	inflation rate by group (per cent)	contribution (percentage points)
Food	1.9	0.5	3.9	1.0	4.0	1.0
Processed food	2.8	0.4	3.7	0.7	4.5	0.8
Unprocessed food	0.3	0.0	4.1	0.4	3.0	0.3
Services	0.3	0.1	0.9	0.2	2.4	0.6
Catering	3.4	0.2	3.7	0.2	4.1	0.2
Transport services	3.4	0.1	-0.5	0.0	0.9	0.0
Telecommunication services	-0.5	0.0	-6.3	-0.3	-6.3	-0.3
Other services	-1.5	-0.2	3.4	0.3	6.1	0.7
Energy products	-14.0	-1.0	21.4	1.4	22.3	1.5
Transport fuels	-18.5	-1.0	27.0	1.3	28.2	1.4
Industrial goods	-1.8	-0.4	0.8	0.2	1.5	0.3
Goods and services with administratively controlled prices*	1.1	0.2	2.5	0.5	2.9	0.5
Tobacco products	0.2	0.0	0.0	0.0	0.0	0.0

* The index of goods and services with administratively controlled prices is calculated through weighting the relevant elementary aggregates in the consumer basket.

Sources: the NSI, BNB calculations.

ISSN 2367-4962

ELEMENTS OF THE 20 LEV BANKNOTE, ISSUES 1999 AND 2007, ARE USED IN COVER DESIGN.