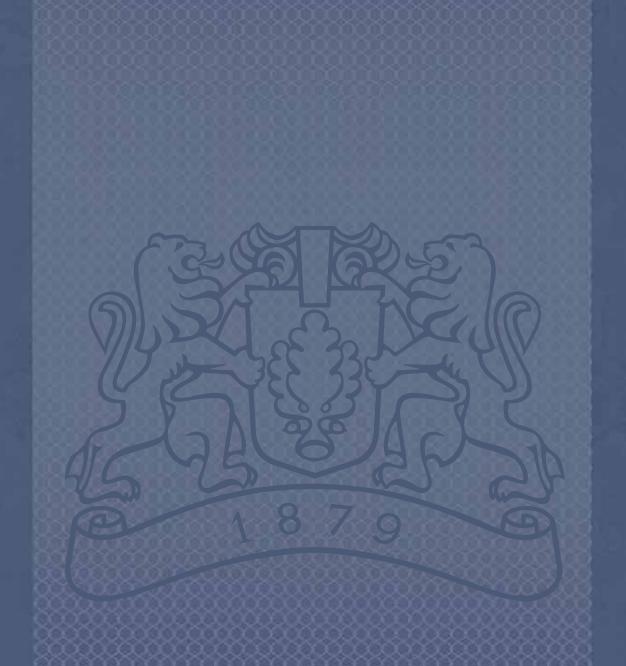
Economic Review

2/2015





Economic Review

2/2015



The BNB quarterly *Economic Review* presents information and analysis of balance of payments dynamics, monetary and credit aggregates, their link with the development of the real economy, and their bearing on price stability. Processes and trends in the external environment are also analysed since the Bulgarian economy is directly influenced by them. This publication contains also quantitative assessments of the development in major macroeconomic indicators in the short run: inflation, economic growth, exports, imports, trade balance and BoP current account, foreign direct investment, monetary and credit aggregate dynamics.

The *Economic Review, issue 2/2015* was presented to the BNB Governing Council at its 9 July 2015 meeting. It employs statistical data published up to 2 July 2015.

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.

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Abbreviations

APRC Annual percentage rate of charge

BIR Base interest rate
BOP balance of payments

BTC Bulgarian Telecommunications Company

b.p. basis points

CEECs Central and East European countries
CEFTA Central European Free Trade Association
CFP Consolidated Fiscal Programme

CIF Cost, insurance, freight

CIS Commonwealth of Independent States

CNY Chinese Yuan

DXY an index measuring the exchange rate of the US dollar against the

basket of six major currencies

EA Employment Agency
EC European Commission
ECB European Central Bank
EIB European Investment Bank
EMBI Emerging Markets Bond Index
EONIA Euro OverNight Index Average

EU European Union

EURIBOR Euro Interbank Offered Rate FDI foreign direct investment

FOB Free on board

FRS Federal Reserve System
GDP Gross Domestic Product
GFMS Gold Fields Mineral Services

HICP Harmonized Index of Consumer Prices

HRW hard red wheat HUF Hungarian forint

IEA International Energy Agency
IMF International Monetary Fund
ISM Institute for Supply Management
LEONIA LEv OverNight Index Average
LIBOR London Interbank Offered Rate

M1 narrow money
M2 M1 and quasi-money
M3 broad money
MF Ministry of Finance

MFIs Monetary Financial Institutions

mt metric tons

NPISHs Non-profit institutions serving households

NSI National Statistical Institute

OECD Organization for Economic Cooperation and Development

OPEC Organization of Petroleum Exporting Countries

PBoC People's Bank of China
PMI Purchasing Managers' Index
p.p. percentage points
PPP Purchasing Power Parity

CIS Commonwealth of Independent States

RON Romanian new leu WTI West Texas Intermediate

Summary

In April and May 2015 the global business indicator declined, still staying above the neutral limit of 50 and signalling an ongoing improvement in the global economic activity. Divergences continued to be observed across geographic areas: in the second quarter of 2015 the business indicators showed retained economic growth in the euro area, accelerating growth in the USA and a slowdown in the economic activity in some of the developing countries as China and Brazil. Political developments and the implementation of capital control and restrictions of bank operations in Greece significantly worsened the growth outlook of the Greek economy. However, this is not expected to have a strong direct negative effect on the euro area, given the small size of the Greek economy.

The January-April 2015 annual average global inflation decreased, reporting in January the lowest value of this indicator over the last decade. A deceleration in the annual inflation rate was observed both in developed and developing economies and declines in international prices of fuels and major commodity groups were among the main factors behind this dynamics.

The latest developments of the global economic environment are likely to have prevailingly a positive effect on Bulgaria's economic growth due to the expected moderate acceleration of the economic activity in the euro area, the euro depreciation, low oil prices and low interest rates.

Between January and April 2015 the overall current and capital account balance was positive, improving on an annual basis due to the increase in the capital account surplus and the trade deficit decline compared to the corresponding period of 2014. The decrease of the trade balance deficit on the corresponding period of 2014 was mainly driven by both higher annual growth in real exports compared to real imports and favourable terms of trade. Over the second half of 2015 the total current and capital account surplus, as a share of GDP, is expected to shrink on an annual basis compared to the levels observed in the first half of 2015, mainly due to the projected narrowing of the capital account surplus and slight deterioration in goods and services trade balance.

In the first five months of 2015 bank liquidity continued to rise impacted by sustained inflows of attracted funds, still low lending activity in Bulgaria and limited investment opportunities in international financial markets. In the third and fourth quarters of 2015 broad money growth is expected to increase moderately against the background of a gradual economic recovery, while loans to the private sector are expected to slightly rise on a quarterly basis.

Deposit and lending interest rates in Bulgaria continued declining, reflecting the interbank money market developments and high liquidity of the banking system. They are expected to continue gradually declining in the second half of 2015.

In the first quarter of 2015 quarterly growth of real GDP accelerated on the previous quarter accounting for 0.9 per cent. The change in inventories and private consumption, which continued its slow recovery in line with the slight increase in employment and growth in compensation *per* employee, and unemployment decline had the major contribution to growth. The decrease in government consumption as a result of the implementation of fiscal consolidation measures had the major negative contribution to economic activity growth. Fixed capital investment fell down on a quarterly basis impacted by the private sector investment dynamics. Quarterly growth of exports and imports of goods and services rose approximately equally, and net exports had a neutral contribution to GDP growth.

Summary

Based on the improved labour market conditions and increased consumer confidence, private consumption is expected to continue growing on a quarterly basis in the third and fourth quarters of 2015. Private investments are projected to moderately increase in the context of positive sentiment, business expectations and high production capacity utilisation in industry. Government consumption is expected to rise at slow rates in the second half of 2015. Slow but similar growth rates are projected for exports and imports of goods and services. Given the described dynamics by component quarterly GDP growth is expected to slightly slow down in the third and fourth quarters of 2015 against the first quarter of 2015.

The annual inflation, which is negative since mid-2013, came to -0.3 per cent in May 2015 (-0.2 per cent in December 2014). The fall in transport fuel prices affected by falling international oil prices had the highest negative contribution to the dynamics of the overall consumer price index, while the increase in unprocessed food prices between April and May 2015, the depreciation of the euro and correspondingly the lev against the currencies of Bulgaria's major trading partners, and administrative price growth had a positive contribution to the overall inflation.

Deflation is expected to continue to slow down in the third and fourth quarters of 2015 and at the end of the year consumer prices are anticipated to increase on an annual basis. An increase in international food and oil prices in euro will have a major contribution to this effect.

1. External Environment

In April and May 2015 the global business indicator declined, but stayed above the neutral limit of 50 signal-ling an ongoing improvement in the global economic activity. Divergences continued to be observed across geographic areas: in the second quarter of 2015 the business indicators showed retained economic growth in the euro area, accelerating growth in the USA and a slowdown in the economic activity in some of the developing countries as China and Brazil. Political developments and the implementation of capital control and restrictions of bank operations in Greece significantly worsened the growth outlook of the Greek economy. However, this is not expected to have a strong direct negative effect on the euro area, given the small size of the Greek economy.

The January–April 2015 annual average global inflation decreased, reporting in January the lowest value of this indicator over the last decade. A decline in the annual inflation rate was observed both in developed and developing economies and declines in international prices of fuels and major commodity groups were among the main factors behind this dynamics.

The latest developments of the global economic environment are likely to have prevailingly a positive effect on Bulgaria's economic growth due to the expected moderate acceleration of the economic activity in the euro area, the euro depreciation, low oil prices and low interest rates.

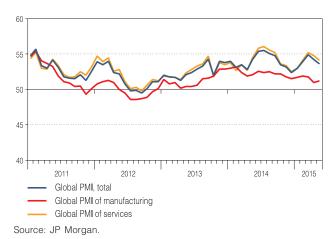
Current Business Situation

Following a significant increase in the first quarter of 2015, in April and May the global composite PMI indicator decreased on a quarterly basis but remained above the neutral limit of 50. The decrease in the composite index may be interpreted as an indicator signalling a stabilisation of global economic activity growth. The decline in the composite index in May was a result of worsened sentiment in the services sector as compared with the previous month, while expectations in manufacturing slightly improved on a quarterly basis.

In the first quarter of 2015 economic growth in developing economies slowed down, while growth in the euro area tended to accelerate. As of June 2015 the OECD composite leading indicators (CLIs) signalled a moderate increase in the economic activity in the euro area and slower growth in China and Brazil.

In the first quarter of 2015 world trade volumes continued to rise on an annual basis. Growth in the USA continued to outstrip euro area's growth despite the decline in the volume of the US trade on the previous quarter.

Global PMI



World Trade

(annual rate of growth, per cent)



Source: CPB Netherlands Bureau for Economic Policy Analysis.

The January–April 2015 annual average global inflation decreased, recording in January the lowest value of this indicator over the last decade. An inflation slowdown on an annual basis was reported both in developed and developing economies and lower international prices of crude oil and major commodity groups were among the main factors behind this dynamics.

International environment will have a prevailingly favourable effect on Bulgaria's economy in the second half of 2015 due to the expected moderate acceleration of euro area economic growth on an annual basis, the depreciation of the euro and low petroleum prices and low interest rates.

Euro Area

In the first quarter of 2015 euro area real GDP grew by 1.0 per cent on an annual basis against 0.9 per cent in the fourth quarter of 2014. Economic growth in Germany slowed down to 1 per cent, while in France accelerated to 0.8 per cent. Growth in Italy was positive for the frst time since mid-2011 and reached 0.1 per cent. Slovakia posted the strongest economic growth (2.9 per cent), followed by Spain (2.7 per cent).

Euro area real GDP on a quarterly basis rose by 0.4 per cent matching growth in the fourth quarter of 2014. Household consumption (0.3 percentage points), investment (0.2 percentage points), government consumption (0.1 percentage points) and the change in inventories (0.1 percentage points) had a positive contribution to growth. Net exports (-0.2 percentage points) had a negative contribution. A quarter-on-quarter decline in GDP was observed in Lithuania (-0.6 per cent), Estonia (-0.3 per cent), Greece (-0.2 per cent) and Finland (-0.1 per cent)¹.

In June 2015 the euro area composite PMI² slightly increased to 54.1 against 54.0 in March indicating a moderate acceleration of euro area growth. Manufacturing and services sub-indices also posted an increase: by 52.5 and 54.4 respectively (against 52.2 and 54.2 in March). Over the same period the euro area economic sentiment index of the European Commission declined to 103.5 from 103.9 in March, while the euro area consumer confidence index of the European Commission went down to -5.6

Inflation Measured through CPI

(per cent, annual rate of change, seasonally adjusted data)

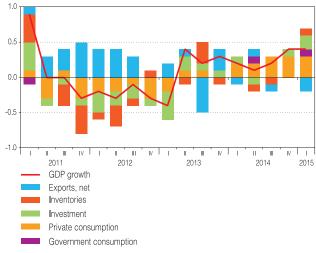


Note: The World Bank measures the change of CPI in individual groups as a weighted average of CPI changes in the countries of the group. For calculating the weights of the countries, real GDP based on purchasing power parity is used. Groups include only World Bank Member States classified by the World Bank as developing and developed countries.

Source: World Bank.

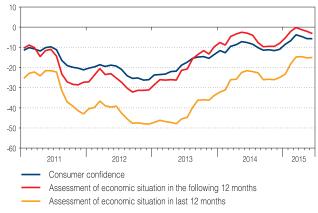
Contribution to Real GDP Growth in the Euro Area by Component (Quarterly)

(per cent; percentage points)



Source: Eurostat.

Euro Area Consumer Confidence Indices



Source: European Commission.

¹ No data published about Ireland, Luxembourg and Malta.

² Preliminary data.

against -3.7 in March 2015. The EC business climate index in the euro area, an indicator of investment activity, also posted a decrease.

In May the EC revised upward its forecast of euro area GDP growth for 2015 to 1.5 per cent, thus matching the ECB projection. The forecasts of the two institutions suggest a moderate acceleration of euro area economic growth in the second half of the year.

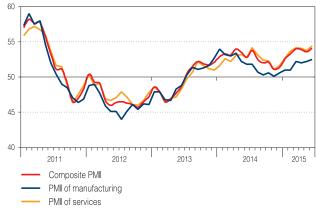
Political developments in Greece in recent months resulted in a higher economic uncertainty in the country, which deteriorated growth prospects for the Greek economy. Additional similar effects occurred due to the capital control and constraints on bank operations introduced in Greece. Given the small size of the Greek economy no strong direct adverse effect on the euro area economy is expected as a result of the events in Greece.

Since February 2015 HICP in the euro area had been gradually increasing and in May the change in the index reached 0.3 per cent on an annual basis (against 0.0 per cent in the previous period). The increase was due to the slower rate of decline in energy prices and accelerated growth of food and services prices. The strongest decrease in the consumer price index was reported in May in Cyprus (-1.7 per cent), Greece (-1.4 per cent) and Slovenia (-0.8 per cent), and the highest inflation in Malta (1.3 per cent). Latvia (1.2 per cent) and Portugal (1.0 per cent).

Projections of the euro area average annual inflation for 2015 were increased by the EC in May and by the ECB in June. The ECB projection is higher and foresees a 0.3 per cent price increase.

In April 2015 unemployment in the euro area decreased slightly to 11.1 per cent (against 11.2 per cent in the previous two months). In recent months Greece reported the highest unemployment level (25.4 per cent)³ followed by Spain (22.7 per cent), but both countries posted an unemployment decline. An increase in the share of persons actively seeking a job was observed in Finland, Austria and Estonia⁴ where the indicator rose by 0.1 percentage points in April 2015.

Manufacturing and Services PMIs



Source: Markit.

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

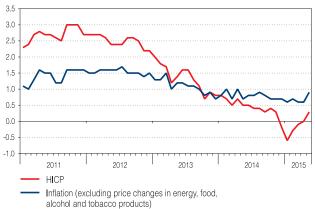
(per cent)

Institution	Publish-	2015		20)16
	ing date	last	previous	last	previous
EC	May 2015	1.5	1.3	1.9	1.9
ECB	June 2015	1.5	1.5	1.9	1.9

Sources: EC, ECB.

Euro Area Inflation Rate

(per cent, on an annual basis)



Source: Eurostat.

Projections of Euro Area Annual Inflation Rate

(per cent)

Institution	Publishing	2015		20)16
	date	last	previous	last	previous
EC	May 2015	0.1	-0.1	1.5	1.3
ECB	June 2015	0.3	0.0	1.5	1.5

Sources: EC, ECB.

³ The latest data available for Greece refer to February 2015.

The latest data available for Estonia refer to March 2015.

Unemployment in Germany and Austria remained the lowest at 4.7 and 5.7 per cent respectively. The dynamics of the indicator of expected unemployment over the next twelve months included in the EC consumer confidence index showed improving consumer expectations about labour market developments. In April and May 2015 the average value of the sub-index fell down to 10.3 points from 13.4 points in the first quarter.

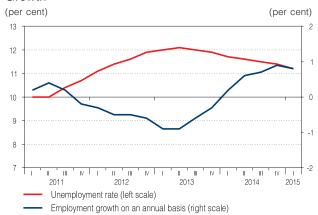
At its last monetary policy meeting the Governing Council of the ECB confirmed its intention to continue implementing the extended assets purchase programme until the end of September 2016⁵ or until the inflation target is reached (below but close to 2 per cent over the medium term).

As of 19 June 2015 the ECB balance sheet posted an increase by 8.9 per cent compared with end-March 2015 and reached EUR 2.451 trillion. The increase was mainly due to public asset purchases under the PSPP (EUR 141 billion from end-March), covered bond purchases under the CBPP3 (EUR 27 billion from end-March), asset-backed securities purchases under the ABSPP (EUR 3.6 billion from end-March), and to the results of the fourth targeted longer-term refinancing operation (TLTRO), conducted on 18 June when the ECB allotted EUR 73.8 billion among 128 participants (against previously allotted EUR 97.8 billion among 143 banks).

As a result of ECB operations and programmes for providing liquidity to banks, the amount of excess liquidity in the euro area banking system grew to EUR 357 billion as of 24 June 2015 (against EUR 273.2 billion at the end of March 2015).

Due to increased excess liquidity in the second quarter of 2015, the average value of the EONIA fell to -0.10 per cent (against -0.05 per cent in the first quarter of 2015), moving within the range of -0.03 per cent to -0.14 per cent over the review period. With the increase in the excess liquidity the volume of overnight deposits in euro area's interbank market trade decreased as their daily average value in the second quarter

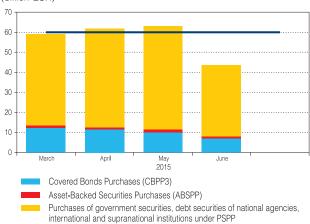
Euro Area Unemployment Rate and Employment Growth



Source: Eurostat.

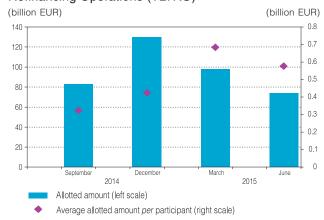
Securities Purchases Under the Extended APP of the ECB

(billion EUR)



Source: ECB.

Allocation of Funds on ECB Targeted Longer-term Refinancing Operations (TLTRO)



Source: ECB

⁵ For further details, see the boxes Details on ECB Public Sector Purchase Programme (PSPP), Economic Review, issue 1/2015 and New Decisions of ECB Governing Council on Monetary Policy of 22 January 2015, Economic Review, issue 4/2014.

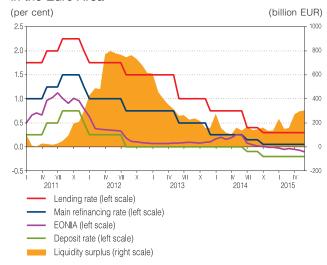
amounted to EUR 20.5 billion (against EUR 27.3 billion in the first guarter of 2015).

In the second quarter of 2015 EURIBOR interest rates on interbank market deposits declined. As of 23 June one-month interest rates were -0.07 per cent (-5 basis points on end-March), and those on deposits with maturities of six and twelve months were 0.05 per cent (-4 basis points on end-March) and 0.16 per cent (-3 basis points on end-March) respectively. Given the policy pursued by the ECB the euro area banking excess liquidity is expected to further grow and to exert a downward pressure on money market interest rates.

The USA

In the first quarter of 2015 US real GDP growth accelerated to 2.9 per cent on an annual basis from 2.4 per cent in the previous quarter. The US real GDP posted a slight decrease of 0.04 per cent on a quarterly basis against 0.5 per cent growth in the previous quarter. The decline was mainly due to the significant negative contribution of net exports and business investments. Household consumption growth slowed down and the decline in government sector consumption and investments was slower than in the fourth quarter of 2014. The change in inventories had a positive contribution to economic growth on a quarterly basis.

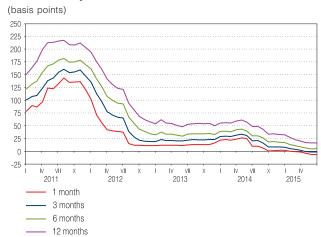
ECB Interest Rates, EONIA and Excess Liquidity in the Euro Area



Note: EONIA data are averaged for the month.

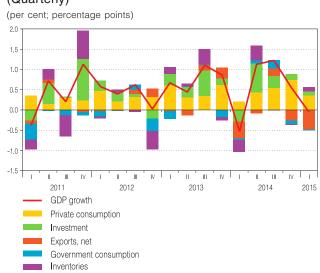
Source: ECB.

EURIBOR Dynamics



Source: ECB

Contribution to US GDP Growth by Component (Quarterly)



Source: Bureau of Economic Analysis.

In the first two months of the second quarter of 2015 US leading economic activity indicators fluctuated within a narrow range of over 50, which signalled a recovery of GDP growth and confirmed the prevailing expectations according to which the economic slowdown in the beginning of the year was due mostly to temporary factors (unfavourable weather conditions and the West Coast ports strike).

Consumer confidence indicators also fluctuated across months but remained at a relatively high level. In April consumer expenditure reported zero monthly growth following a significant acceleration in March. In May retail sales posted an increase for a third consecutive month.

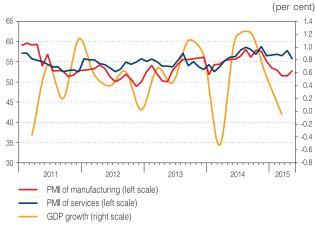
The change in the ISM-PMI indices for manufacturing and services sectors and in the National Association of Home Builders (NAHB) index, signalled an increase in US economic activity in the second quarter.

In April the annual inflation rate measured by the personal consumption expenditure (PCE) deflator decreased to 0.2 per cent from 0.3 per cent in the previous two months. The annual growth rate of the core PCE price index (excluding food and fuels) decreased to 1.2 per cent in April against 1.3 per cent in four consecutive months.

Consumer price index (CPI), the other measure of the US inflation, posted zero annual growth in May following an annual decline in two consecutive months. Among the components of the indicator energy prices continued to report the strongest decline, particularly fuel prices, albeit to a lesser extent than in previous months. Medical goods and non-energy services exhibited the strongest annual growth. The annual growth rate of core inflation moderated to 1.7 per cent in May against 1.8 per cent in April and March.

In the second quarter of 2015 the expectations of consumer price inflation in the period of one to five years, a component of the University of Michigan consumer confidence index, posted a similar insignificant change. In June 2015 according to preliminary data both indicators posted a decline to 2.7 per cent from 2.8 per cent in May and 2.6 per cent in April. In the third and fourth quarters of 2015 inflation in the USA is expected to rise, but to remain below 2 per cent on an annual basis.

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



Source: Institute for Supply Management.

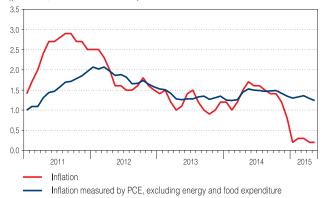
US Consumer Confidence Indices



Source: The Conference Board.

US Inflation Rate

(per cent, on an annual basis)



Note: Inflation is measured by the personal consumption expenditure deflator.

Source: Bureau of Labor Statistics.

The recovery of the US labour market continued in the second quarter of 2015. In May unemployment increased insignificantly to 5.5 per cent against 5.4 per cent in April which was the lowest level reported since May 2008. Growth was due mainly to the increased number of persons included in the labour force and the related rise in the rate of economically active population. The average quarterly value of the increase in employment in non-agricultural sector numbered 207,000 persons against 202,000 in April and 195,000 in March.

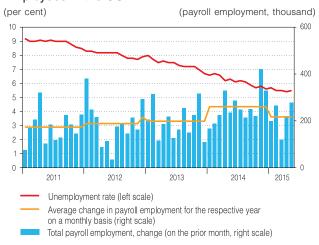
At its meeting of 16 and 17 June, the US Federal Open Market Committee (FOMC) decided to keep the target for the federal funds rate unchanged within a range of 0.00 to 0.25 per cent. To avoid strong fluctuations in financial markets, it was stated that FOMC would continue to communicate its views and intents about its future policy in most complete and clear way. The published individual forecasts of the FOMC members for the appropriate level of the reference rate at the end of 2015, 2016 and 2017 were revised downward, reflecting expectations for a more gradual reference rate increase in less number of steps in the following two years.

China

In April and May manufacturing PMI in China stabilised at a level slightly over 50 points. The dynamics of individual components of the index showed an increase both in the current activity and in new orders, including export orders. In May growth rates of industrial output slightly accelerated to 6.1 per cent on an annual basis against 5.9 per cent in April and 5.6 per cent in March. However, the annual growth rate of investment continued to slow down accounting for 12.0 per cent in April and 11.4 per cent in May. In May consumer inflation slowed down to 1.2 per cent on an annual basis against 1.5 per cent in April. On a monthly basis inflation declined by 0.2 per cent.

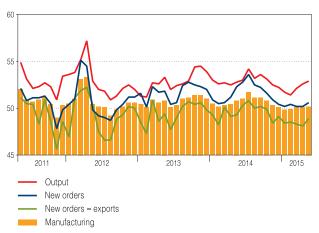
The ongoing deflation of producer prices and still available excessive spare production capacities remained the major factors having an adverse effect on the China's economy. The economic slowdown in the first quarter and low inflation entailed the launch of a series of measures by the government and the central bank intended to stimulate the Chinese economy and

US Unemployment Rate and Number of New Employees in the USA



Source: Bureau of Labor Statistics.

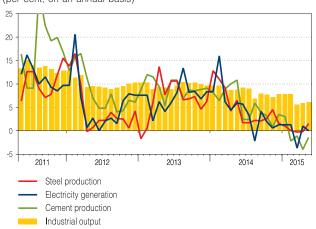
Manufacturing PMIs, Output and New Orders in China



Source: China Federation of Logistics and Purchasing.

Industrial Output and Output in Selected Sub-sectors in China

(per cent, on an annual basis)



Source: National Bureau of Statistics of China.

to support the smooth economic restructuring and rebalancing.

In early April the People's Bank of China lowered the banks' reserve requirements rate by 100 basis points to 18.5 per cent, aiming at increasing the aggregate credit. The estimated effect of the decreased rate was assessed as an increase in the volume of the interbank market in China by CNY 1.2 trillion (USD 194 billion). This measure of the central bank was supplemented by a two-fold cut in rates on loans with a maturity of one year by 25 basis points each (to 5.10 per cent in May and to 4.85 per cent in June) and by a two-fold cut in rates on deposits with a maturity of one year by 25 basis points each (to 2.25 per cent in May and to 2.00 per cent in June). According to the central bank the restructuring of the domestic economy accelerated, while fluctuations in external demand had an adverse effect and contributed to the slowdown of China's economic growth.

The government initiated a number of administrative measures which were also intended to encourage lending activity. In early May the government announced a replacement of bonds issued by local governments by government securities of the central government in the amount of CNY 1 trillion aimed at supporting the local authorities experiencing financial difficulties. Given the enhanced credit risk Chinese banks decreased lending to indebted local governments in recent quarters, which had a an adverse effect on the effectiveness of the transmission mechanism of the monetary policy measures to the real economy. At the end of May financial institutions were ordered by the central government to continue financing the projects of local authorities.

As a result of these measures annual growth of new loans in April and May stabilised at about 14 per cent. The monetary aggregate M2 went up exhibiting an increase by 10.6 per cent on an annual basis in May against 9.6 per cent in April and 9.9 per cent in March. Between April and May real estate prices also increased on a monthly basis following the continuous depreciation during the last year.

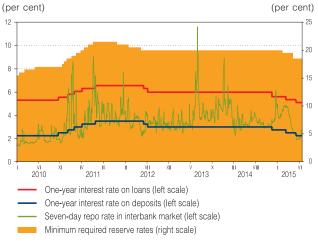
In the second quarter of 2015 the People's Bank of China again kept the CNY/USD exchange

Inflation Indices in China



Source: National Bureau of Statistics of China.

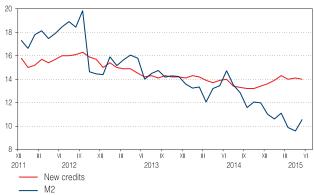
Interbank Interest Rate and Minimum Required Reserve Rate in China



Source: People's Bank of China.

Lending and Money Supply in China

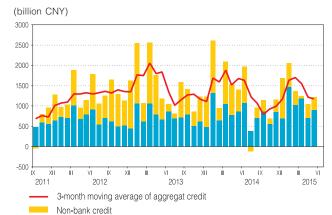
(per cent, on an annual basis)



Source: People's Bank of China.

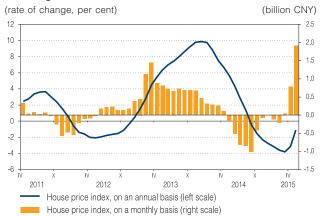
rate within a strongly narrowed band, with the fixing hovering close to CNY 6.20 per USD 1. According to the IMF report of end-May the Chinese currency has no longer been considered an underestimated currency. In May Chinese authorities again announced a new step to facilitate convertibility of the Chinese renminbi yuan, removing constraints to foreign investments by individuals and companies from China in direct purchases of shares, bonds and real properties abroad.

New Loans



Bank credit
Source: People's Bank of China.

Housing Prices



Source: National Bureau of Statistics of China.

CNY/USD Exchange Rate and Trading Band Set by the People's Bank of China



Source: People's Bank of China.

International Commodity Prices

Crude Oil

Increased demand for petroleum products pushed up crude oil prices on a quarterly basis in April and May 2015. The price rise was also underpinned by concerns that supply of petroleum products may be limited due to lower US oil inventories and escalating geopolitical tensions in the Middle East. Between January and May Brent crude oil was traded at USD 57.1 per barrel (EUR 51.4 per barrel) on average, down 47.3 per cent on the corresponding period of 2014.

In June 2015 the International Energy Agency (IEA) revised upward its crude oil demand projections in 2015, which is a precondition for a an increase in the oil prices compared with current values.

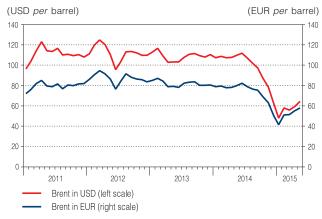
In June expectations of crude oil futures prices pointed to an increase on March which confirmed the International Energy Agency expectations that the enhanced demand and lower supply may push up the price. At the OPEC meeting of 5 June 2015 a decision was taken to maintain the member states' production quota at 30 million barrels *per* day, which makes less probable the sharp oil price hike until the following meeting of the organisation. In the second half of 2015 the rise in oil prices is expected to be supported by higher consumption by China and India. Market expectations of oil prices remained within the range of USD 60–70 *per* barrel in the third and fourth quarters of 2015.

Major Raw Material and Food Prices

Between April and May 2015 international prices in US dollars of major commodity groups continued to decrease on an annual basis. Concurrently, due to the euro depreciation against the US dollar by 20.4 per cent on an annual basis over the the review period, some price indices, such as the composite food price index, exhibited a divergent dynamics in US dollars and in euro.

The metals price index in euro published by the ECB decreased by 6.9 per cent on an annual basis (down 25.9 per cent in US dollars) between April and May 2015. Iron ore posted

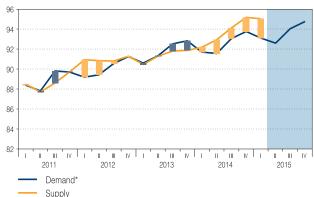
Crude Oil Prices



Source: World Bank.

World Crude Oil Supply and Demand (Quarterly)

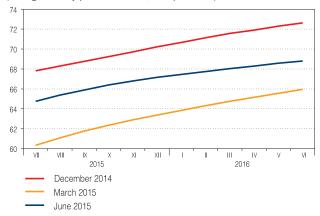
(million barrels per day)



* Including the May 2015 IAE latest available data about crude oil demand in the last quarter of 2014 and the first two quarters of 2015. Source: IEA.

Brent Crude Oil Futures Prices

(average monthly price of contract, USD per barrel)



Source: JP Morgan.

a significant decline over the review period, a result of commissioned production capacities in Australia and Brazil and the weaker demand by China. These effects were limited by the measures launched by the Chinese authorities for encouraging the economic activity in China. These measures also helped decrease the annual price fall of copper in US dollars over the April–May 2015 period. The copper price in euro went up over the review period.

In the third and fourth quarters of 2015 prices in euro of industrial (ferrous and non-ferrous, excluding precious metals) metals are expected to decline due to the expectations of weaker Chinese demand and enhanced global supply. Risks of price hikes (on an annual basis) relate to higher than expected efficiency of the measures initiated by the Chinese authorities which may boost demand for industrial metals.

Between April and May 2015 the food price index decreased by 18.7 per cent in US dollars against the corresponding period of 2014, while the euro price posted an increase of 2.1 per cent. Over the review period prices of all index sub-components in US dollars went down while prices in euro exhibited a divergent dynamics. Between April and May 2015 the wheat price in euro went down by 16.2 per cent on an annual basis (down 33.3 per cent in US dollars). The major factor behind the decline was the good harvest in the USA and the EU, and higher exports from Russia and Ukraine.

Projections of food prices in euro over the third and fourth quarters of 2015 point to an increase on an annual basis. A factor behind higher prices in euro will be the expected depreciation of the euro against the US dollar. On the other hand, price hikes will be limited by the strengthening supply.

If the expectations of food price dynamics materialise, the trade balance of Bulgaria, which is a net food exporter, may improve in the second half of 2015. The appreciation of food prices may prompt a decrease of deflation in Bulgaria due to the large weight of food in the consumer basket. The sustained upward trend of the copper price in euro would contribute to the improvement of Bulgaria's trade balance due to the significance of copper in nation's exports.

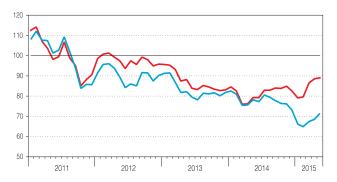
Price Indices of Major Raw Materials and Commodity Groups

(2009 = 100)

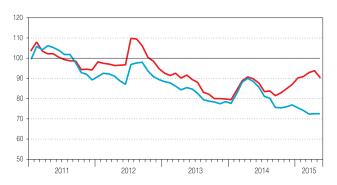
Metals



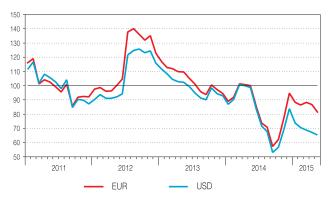
Copper



Food



Wheat



Sources: ECB and BNB calculations.

2. Financial Flows, Money and Credit

Between January and April 2015 the overall current and capital account balance was positive, improving on an annual basis due to the increase in the capital account surplus and the trade deficit decline compared to the corresponding period of 2014. The decrease of the trade balance deficit on the corresponding period of 2014 was mainly driven by both higher annual growth in real exports compared to real imports and favourable terms of trade. Over the second half of 2015 the total current and capital account surplus, as a share of GDP, is expected to shrink on an annual basis compared to the levels observed in the first half of 2015, mainly due to the projected narrowing of the capital account surplus and slight deterioration in goods and services trade balance.

In the first five months of 2015 bank liquidity continued to rise impacted by sustained inflows of attracted funds, still low lending activity in Bulgaria and limited investment opportunities in international financial markets. In the third and fourth quarters of 2015 broad money growth is expected to increase moderately against the background of a gradual economic recovery, while loans to the private sector are expected to slightly rise on a quarterly basis.

Deposit and lending interest rates in Bulgaria continued declining, reflecting the interbank money market developments and high liquidity of the banking system. Deposits and lending interest rates are expected to continue gradually declining in the second half of 2015.

Reflecting financial flows generated through interactions between external and internal economic factors, Bulgaria's international foreign exchange reserves (excluding valuation adjustments and price revaluation) posted a year-on-year increase of EUR 4927.7 million in April 2015 (based on BOP data). The market value of international reserves⁶ (assets on the Issue Department balance sheet) rose by EUR 4901.6 million to EUR 19.2 billion (BGN 37.6 billion) at the end of June 2015.

The change in international reserves in line with the currency board principles corresponded to the increase in the Issue Department balance sheet liabilities⁷. The rise in liabilities to the government and other budget organisations and liabilities to banks contributed most to the change in the value of liabilities of the Issue Department balance sheet on an annual basis as of June 2015.

External Cash Flows in Foreign Currency

(million EUR)

External flows	2014	I quarter 2014	I quarter 2015*
Total for the period	2 050	-530	2 011
Euro purchases and sales	-2 970	-1 096	-275
At tills	-44	-4	-7
With banks, incl.	-2 926	-1 092	-267
Purchases from banks	38 337	6 453	14 018
Sales to banks	-41 263	-7 545	-14 286
Flows on accounts of banks, the MF, etc.	5 020	566	2 286
Minimum required reserves	-101	-17	773
Government and others	5 122	583	1 513

^{*} Preliminary data.

Note: The table shows only currency inflows and outflows to the Issue Department balance sheet. Lev inflows to and outflows from the Issue Department balance sheet are not reported. Transactions between accounts in foreign currency and levs in the Issue Department balance sheet liabilities are not reported, as they do not prompt changes in gross international reserves.

⁶ The market value of international reserves includes changes stemming from transactions, valuation adjustments and price revaluation.

⁷ The Law on the BNB Article 28, paragraph 1 provides that 'the aggregate amount of the monetary liabilities of the BNB shall not exceed the lev equivalent of gross international reserves,' with that equivalent based on the fixed exchange rate

By April 2015 the international reserves coverage of the average nominal imports of goods and non-factor services over the last 12 months came to 7.9 months.

By June 2015 currency trade between banks and the BNB retained the trend observed since the beginning of 2013 of BNB sales exceeding purchases of foreign currency.

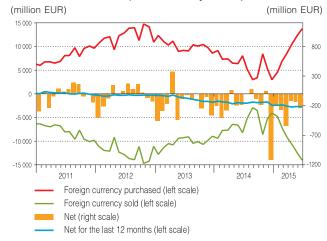
Our expectations point to a further year-on-year increase in international reserves in the third and fourth quarters of 2015. According to the BNB projections, banks' deposits with the BNB will retain their high levels due to the limited investment opportunities in Bulgaria and abroad. Government deposit dynamics will be driven mainly by budget performance. If the deficit projected in the 2015 State Budget Law materialises, government deposit with the BNB would decrease on an annual basis in the fourth quarter of 2015. Currency in circulation is expected to grow at a decelerating pace in the second half of 2015.

External Financial Flows

Between January and April 2015 the current and capital account balance reported a surplus against a deficit reported in the corresponding period of the prior year. This largely reflected the higher capital account surplus due to transfers received from EU funds and the trade deficit decline. The annual decrease of the trade balance deficit on the corresponding period of 2014 was mainly driven by both higher annual growth in real exports compared to real imports and favourable terms of trade in the first quarter of 2015.

The positive balance on services trade rose on an annual basis compared to the same period of 2014, reporting simultaneously export growth and a decrease in services imports.⁹

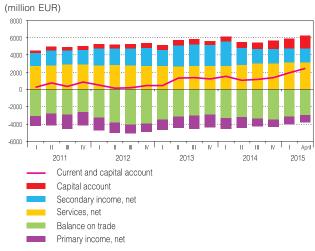
Foreign Currency Purchases and Sales between the BNB and Banks (on a Monthly Basis)



Note: Net means currency bought by the BNB less 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: BNB.

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



⁸ The analysis in this section is based on statistical data in accordance with the balance of payments analytical reporting, complied under the sixth edition of the IMF Balance of Payments and International Investment Position Manual (BPM6), starting from 17 April 2015.

⁹ For a more detailed analysis of exports and imports of goods and services, see Chapter 3.

Financial Flows, Money and Credit

Between January and April 2015 the deficit on the primary income account 10 contracted compared with the same period of 2014 due to higher inflows on compensations to employees and lower outflows on dividends and distributed profit.

The review period saw an annual increase in the secondary income account¹¹, reflecting the higher inflows of the general government sector linked to stronger growth in the receipts under EU programmes in March and April.

Over the second half of 2015 the current and capital account surplus, as a share of GDP, is expected to shrink on an annual basis compared to the levels observed in the first half of 2015, mainly due to the projected narrowing of the capital account surplus and slight deterioration of trade in goods and services balance. Uncertainty surrounding this projection would grow provided that the Greek crisis intensifies, impacting the demand for Bulgarian goods and services in Greece, and in case of a possible new escalation in the geopolitical conflict between Russia and Ukraine.

The financial account balance for the January to April 2015 period was negative against a positive balance in the corresponding period of 2014. In February and March financial account assets reported a decrease after the banks had reduced their foreign assets (currency and deposits). Financial account liabilities also declined in the January to April period.

¹⁰ With the introduction of the BPM6, the former income and current transfers sub-items have been redistributed among the new primary income and secondary income items in compiling the balance of payments statistical data. The primary income item encompasses revenue and expenditure from/on income associated with the use of labour force, capital and land, as well as taxes on output and imports and subsidies. In addition to compensation of employees and investment income, the primary income item comprises also some ot the components of the former current transfers items: taxes on output, subsidies and rent. The secondary income item reflects income redistribution.

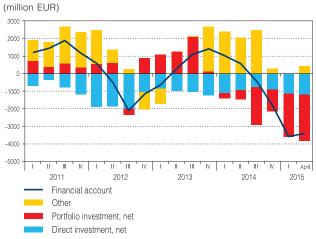
Flows on Balance of Payments Accounts

(million EUR; cumulative since the beginning of the year)

	2013	2014	January – April 2015
Current account	765.2	359.2	163.8
Trade balance	-2 890.7	-3 429.2	-911.1
Services, net	2 735.1	3 048.3	478.3
Primary income, net	-1 474.9	-876.1	-281.3
Secondary income, net	2 395.6	1 616.3	877.9
Capital account	469.3	992.4	604.4
Financial account	1 421.6	-1 845.3	-1 407.1
Direct investment, net	-1 243.1	-924.9	-492.3
Changes in reserves	-531.8	1 810.4	2 691.7

Source: BNB.

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



¹¹ See footnote 10.

¹² With the introduction of the BPM6, the financial account balance is computed by deducting the value of liabilities on the account from the value of assets in compiling balance of payments statistical data. According to the new reporting, an increase in assets and liabilities is recorded with a plus sign and a decrease with a minus sign (under the Balance of Payments Manual fifth edition, the plus sign denoted a decrease of assets and an increase of liabilities and the minus sign denoted an increase of assets and a decrease of liabilities).

This was mainly driven by the reduced banks' foreign liabilities, payment of government bonds maturing in January 2015 and early repayment in March 2015 of the bridge loan undertaken by the government in late 2014 irrespective of the new external government debt issue in March 2015.

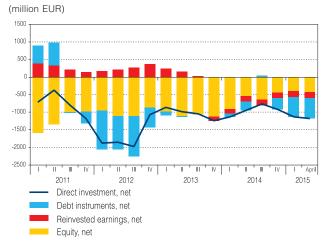
Net direct investment between January and April 2015 was negative accounting for EUR -492.3 million. An annual increase in this item's deficit was observed on the corresponding period of 2014, broadly reflecting the fall in the assets of non-financial corporations and households abroad. Concurrently, liabilities of this item fell on an annual basis mostly due to the debt instrument sub-item.¹³

Between January and April 2015 banks' financial account transactions reported a decline in foreign assets and liabilities, mainly in the other investment sub-item. Net foreign assets of banks were negative for the review period, reflecting the stronger fall in the assets than in the liabilities.¹⁴

By April 2015 Bulgaria's gross external debt posted a decline on December 2014 mainly owing to the lower debt of banks and debt of other sectors. At the same time, government debt issue on international financial markets in March pushed up long-term external debt of the general government sector, which led to an increase in the share of long-term debt in total gross external debt.

Decreasing interest rates on international financial markets continued to affect positively the conditions for access to new external financing and residents' external debt service between January and April 2015, with lending transactions declared by non-residents rising on an annual basis over the review period.

Net FDI in Bulgaria by Type of Investment (on an Annual Basis)



Source: BNB.

Banks' Flows on Balance of Payments Financial Account

(million EUR; cumulative since the beginning of the year)

	2013	2014	January – April 2015
Direct investment			
assets	18.1	27.2	-0.5
liabilities	109.1	106.1	52.9
Portfolio investment			
assets	292.3	-309.4	-173.0
liabilities	67.0	-50.6	1.3
Other investment			
assets	2007.5	1228.5	-1582.4
liabilities	-811.7	-240.3	-460.0
Assets, total	2318.0	946.3	-1755.9
Liabilities, total	-635.6	-184.8	-405.8
Assets, net	2953.6	1131.1	-1350.1

Source: BNB

Gross External Debt in January 2015

(million EUR)

		Change		
	Amount	Since December 2014	For the last 12 months	
General government	6 341.9	315.4	2 900.6	
Central bank	0.0	0.0	0.0	
Banks	5 048.8	-473.5	-740.9	
Other sectors	11 691.3	-357.8	-366.8	
FDI: intercompany loans	15 842.6	-324.7	-33.9	
Total	38 924.5	-840.5	1 759.0	

¹³ With the introduction of the BPM6, direct investment is recorded in accordance with the assets/liabilities principle in compiling balance of payments statistical data. It is of primary importance whether the transaction/position is related to an asset or liability of the resident entity. The initial relationship between the parties to the transaction comes second by significance. In practice, this means that direct investment is reported on a gross basis similar to the remaining financial account items.

¹⁴ A more detailed analysis of banks' behaviour is presented in the *Monetary and Credit Aggregates* section of Chapter 2.

Monetary and Credit Aggregates

Broad money (monetary aggregate M3) posted an increase of 1 per cent on an annual basis at the end of May 2015 against annual growth of 1.1 per cent at the end of 2014. In the January-May period an increase was reported mainly in overnight deposits, deposit with agreed maturity of up to two years and deposits redeemable at notice as compared with December 2014. Household sector had the major contribution to growth of deposits in the banking system. Since the beginning of the year households preferred to keep their savings mainly in time and overnight deposits, while the contribution of deposits redeemable at notice of up to three months in total growth of household deposits was negative. As regards the currency structure of household deposits, between January and May 2015 lev-denominated deposits contributed more strongly to their growth. Overnight deposits held by non-financial corporations retained their upward trend of mid-2013, unlike the fall in deposits with agreed maturities. By currency, deposits denominated in foreign currency contributed most to growth of non-financial corporations' deposits.

In the first five months of 2015 bank liquidity continued to rise impacted by sustained inflows of attracted funds, low lending activity in Bulgaria and limited investment opportunities on international markets. The latter was a result of the ECB policy of low euro area interest rates and negative interest rates in the maturities of up to three months. Given the low yield on assets invested abroad, banks reduced their foreign assets by BGN 4.5 billion in the January to May 2015 period, which provided additional liquidity into the banking system. Substantial part of this liquidity allowed banks to decrease foreign liabilities, increase reserves on their accounts with the BNB and, to a lower extent, to increase their claims on the Bulgarian government. Banks' foreign assets and liabilities dynamics was also affected by the BNB supervisory policy measures on the banks with Greek equity. (See here the BNB Precautionary Measures to Counteract External Risks to Bulgaria's Banking System box).

M3 and Contribution of Individual Components

(million BGN)

80 000

From November 2014, KTB was excluded as a reporting unit from monetary statistics.

60 000

40 000

20 11 2012 2013 2014 2015

Broad money M3

Deposits redeemable at notice up to 3 months

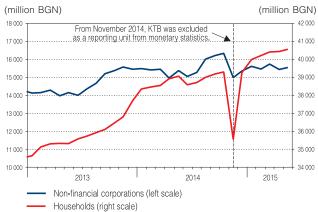
Deposits with an agreed maturity up to 2 years

Overnight deposits

Note: The contribution of marketable instruments is not shown on the chart due to their insignificant contribution to broad money growth. Source: BNB.

Deposits of Non-financial Corporations and Households

Money outside monetary financial institutions



Source: BNB.

Bank Deposits with the BNB

(million BGN)

Since November 2014, KTB does not maintain minimum required reserves.

11 000

9 000

2011

2012

2013

2014

2015

Banks deposits with the BNB, total (daily amount)

Banks deposits with the BNB, total (average monthly value for the maintenance period)

Minimum required reserves under Ordinance No 21 of the BNB (average monthly value for the maintenance period)

By end-May 2015 the liquidity ratio 15 of the banking system increased to 33.58 per cent against 30.12 per cent in December 2014. Excess reserves on banks' minimum reserve accounts with the BNB over the required minimum under Ordinance No 21 came to 90.6 per cent on an average daily basis in May 2015 (56.5 per cent in December 2014). The effective implicit rate of minimum required reserves reached 9.09 per cent 16 in May, with bank reserves with the BNB comprising 8.0 percentage points of required reserves, and the remaining 1.09 percentage points being formed by cash and funds on banks' settlement accounts in the TARGET2-BNB system. 17

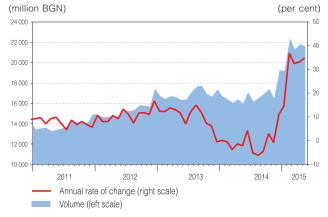
In the first five months of 2015 reserve money, comprising bank deposits with the BNB and currency in circulation, retained their high levels. By May the reserve money growth rate accounted for 34.9 per cent on an annual basis (against an increase of 11.1 per cent in December 2014). Growth of banks' excess reserves with the BNB continued to contribute most substantially to the monetary base dynamics. Currency in circulation contributed to a lesser extent to this growth, posting an increase of 12.9 per cent on an annual basis by May 2015 (13.0 per cent at the end of 2014). The relatively high positive contribution of currency in circulation to reserve money dynamics was probably related to the continuous decline in deposit interest rates, on the one hand, and the gradual recovery of household consumption, on the other hand.

Despite the ongoing downward trend in interest rates on loans, lending activity in Bulgaria remained weak in the first five months of 2015 against the background of a moderate economic recovery. The volume of new loans to non-financial corporations for the last 12 months stayed above BGN 1 billion in May. Concurrently, the share of new loans to non-financial corporations with a maturity of over five years

¹⁵ See Ordinance No 11 of the BNB.

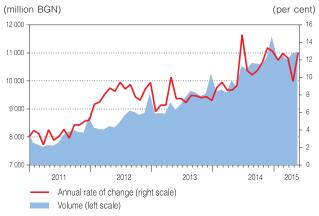
¹⁷ See Article 4 of Ordinance No 21 of the BNB.

Reserve Money



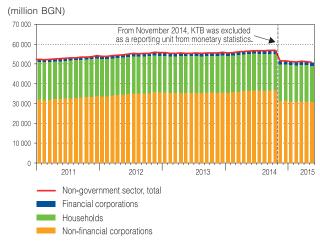
Source: BNB (monetary statistics).

Currency in Circulation



Source: BNB

Receivables from the Non-government Sector and Contributions of Individual Sectors



¹⁶ According to Article 3, paragraph 1 of BNB Ordinance No 21, the rate of minimum required reserves of 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.

retained its upward trend in total new loans. By May 2015 the volume of these loans for the last 12 months came to 55.4 per cent of all newly extended loans to corporations in the same period. As regards the currency structure of loans, the upward trend in the share of new loans extended to non-financial corporations in levs was sustained at the expense of the new loans denominated in euro and US dollars. Over the last 12 months the share of new levdenominated loans went up to 38.9 per cent of total new loans extended to corporations by May. Loans denominated in euro accounted for 59.2 per cent of the total amount, whereas the share of US dollar-denominated loans was 2.0 per cent.

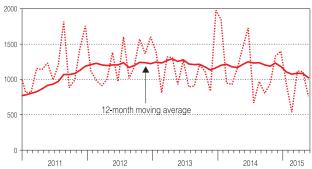
Loans to households in the January to May 2015 period followed a downward trend, with all categories of household loans reporting declines except for consumer loans. In May 2015 the fall was most strongly pronounced in the other loans category (by 13.2 per cent) and less strong in overdrafts and housing loans (by 2.6 and 2.4 per cent on an annual basis). Consumer loans exhibited slightly positive growth of 0.1 per cent. Concurrently, as regards the volume of newly extended loans to households the upward trend observed since the second half of 2014 was sustained, driven by the upward dynamics of both new housing loans and newly extended consumer loans.

According to the results of the BNB quarterly lending survey, in the first quarter of 2015 banks reported an increase in demand for loans by corporations (both short-term and long-term corporate loans). Over the same period household demand for loans to satisfy consumer and housing needs also posted growth, which was stronger in demand for consumer loans. In the second quarter of 2015 banks expect increasingly rising demand for loans by both households and corporations.

In the first quarter of 2015 Bulgarian banks eased their credit standards in corporate lending. Easing referred mainly to offered interest rates, interest spread, and fees and commissions. As regards consumer and housing loans,

New Loans to Non-financial Corporations (Monthly Volumes)

(million BGN)

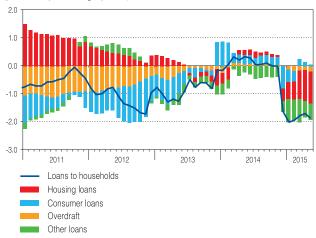


Note: For data characterised by significant volatility additionally moving averages computed for suitably selected periods are provided, in order to smooth the fluctuations in corresponding time series and present the trends in their development.

Source: BNB.

Annual Growth of Loans to Households and Contribution by Type of Loans

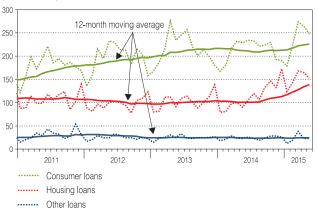
(per cent; percentage points)



Source: BNB

New Loans to Households (Monthly Volumes)

(million BGN)

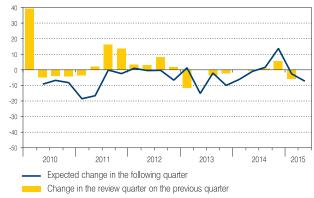


easing of conditions was also observed in respect of lending rates, and fees and commissions. Banks reported that lower cost of attracted resources and their increased amount, enhanced competition in the sector and the lack of high-yield alternative investment were the main factors behind this. In the second quarter of 2015 banks expect further easing of credit standards in extending financial resources to corporations and housing loans to households.

In the third and fourth quarters of 2015 in line with expectations of a gradual recovery of private consumption and continuous decrease in deposit interest rates, currency in circulation is projected to increase further, though at slowing rates, due to the effect of the higher base observed since mid-2014. At the same time, in the context of low interest rates in the euro area, negative in the maturity of up to three months, and the lack of high-yield alternative investment abroad, projections suggest that banks will continue to maintain relatively high excess reserves on their accounts with the BNB. Broad money growth is expected to increase moderately in the following two quarters against the background of a gradual recovery in the economic activity. Loans to the private sector are anticipated to slightly grow on a quarterly basis. Liquidity in the banking system is expected to remain high.

Changes in Credit Standards Applied to Corporate Loans

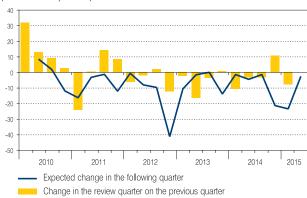
(balance of opinions)



Source: BNB

Changes in Credit Standards Applied to Consumer Loans

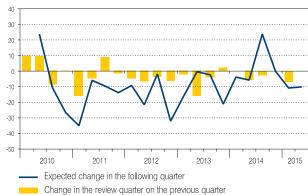
(balance of opinions)



Source: BNB

Changes in Credit Standards Applied to Housing Loans

(balance of opinions)



BNB Precautionary Measures to Counteract External Risks to Bulgaria's Banking System

The Bulgarian National Bank regulates and supervises credit institutions' activities in Bulgaria for the purpose of maintaining the stability of the banking system and protecting depositors' interests. In this function, the BNB monitors the potential sources and channels of occurrence, transfer and spread of risks stemming from the internal or external environment and affecting banking system or individual credit institutions, and takes measures to counteract those risks.

For Bulgaria's banking system, characterised by a dominated presence of foreign banks *via* their subsidiaries or branches, an important channel for transferring potential risks comes from the countries of origin to Bulgaria. In fulfilling its statutory mandate and within its powers, the BNB therefore monitors the relations and operations of foreign bank subsidiaries and branches with their shareholders and legal entities from the respective bank group by taking precautionary measures for counteracting potential external risks.

In line with this policy, as early as during the first bail-out programme to Greece (in May 2010) the BNB required the banks with Greek equity in Bulgaria to implement more conservative policy on the placements to the group, to develop a programme to reduce exposures and impose a ban on new investment in government securities issued or guaranteed by the Greek government. Measures included also the requirement to maintain minimum indicators of cash and total liquidity above those required for the other credit institutions. Moreover, these banks were required to implement plans for a reduction of their dependence on funds attracted from the parent company or group entities. These measures were a part of the general framework of strict requirements for all credit institutions in Bulgaria, including: keeping the capital buffers, maintaining high liquidity, and non-distribution of profit through dividends.

The euro area debt crisis in 2012 and the second bail-out programme for Greece called for strengthening the existing and introducing new BNB measures, including:

- tightened liquidity and capital requirements on all credit institutions;
- requirements for the banks with Greek equity in Bulgaria to achieve operational independence in their activities on the territory of Bulgaria;
- requirements for the banks with Greek equity in Bulgaria to ensure their own liquidity management which shall be independent of group decisions. Moreover, these banks were recommended to reduce their net balance item (assets less liabilities) to the parent and entities from the group.

The demand on a bank in Bulgaria for operational independence from the parent company includes: safeguarding information systems' autonomy; requiring all payment transactions to be processed through Bulgaria's payment systems that are independent of the parent bank or the Greek authorities; as well as independence of the remote points of sale (ATM and POS terminals).

In January 2015, prior to the parliamentary elections in Greece, the banks with Greek equity in Bulgaria were directed:

- to carry out no placements to group entities and swiftly undertake actions to minimise the funds provided to group entities to the minimum required for the purpose of day-to-day execution of usual payment transactions;
- to stop the operations at group level, which may jeopardise the control over liquid resources locally in case of a hypothetical Greek financial crisis;
- to draw up reaction plans in case of potential liquidity pressure taking into account the hypothesis of unfavourable developments in Greece.
- not to have investment in Greek government securities.

In line with the existing EU supervisory practice, the BNB has informed about these measures the Single Supervisory Mechanism, the home supervisory authority for the euro area bank subsidiaries and branches operating in Bulgaria since November 2014.

The introduction and implementation of the measures described above prevents the transfer and spreading of external risks from the international environment to the banking system and banks in Bulgaria, including the banks with Greek equity, and helps preserve their capital buffers and liquidity position.

Interest Rates

The ample liquidity in the Bulgarian banking system and the ECB monetary policy¹⁸ continued to be the main drivers behind the dynamics of interbank money market interest rates in Bulgaria in the first half of 2015. Quotations declined across all maturity sectors on the end of 2014, with a more pronounced drop in maturities of over one month.

In the first half of 2015 LEONIA remained almost unchanged compared with the end of 2014. As a result of the increased negative value of EONIA, the spread between those indices widened reaching 13 basis points on average in June 2015.

Since the year start interest rates on interbank deposits with a term of three months in the euro area and in Bulgaria continued to follow a downward trend¹⁹. In the first half of the year the spread between the average three-month SOFIBOR/SOFIBID index and EURIBOR remained unchanged. Interest rates on long-term deposits quoted on the interbank money market in Bulgaria continued to decline in the review period. In June 2015 interest rates on 6-month and 12-month deposits were lower than those in late 2014 by 11 and 25 basis points respectively.

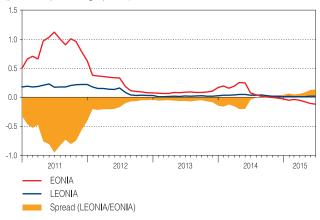
Interbank money market trends and continuous attracted funds growth in the banking system in the context of low credit demand remained the major factors driving the downward dynamics of interest rates on new deposits of households and non-financial corporations.²⁰ As of May 2015 the average weighted interest rate on new time deposits of households and non-financial corporations accounted for 1.3 per cent (2.1 per cent in December 2014). Interest rate declines were observed in both sectors com-

18 For further details on the ECB monetary policy, see Chapter 1 External Environment and the box The Effect of 2014 ECB Monetary Policy Measures on the Euro Area Financial Market and Bulgaria's Banking System, Economic Review, 3/2014.

Interbank Money Market Interest Rates

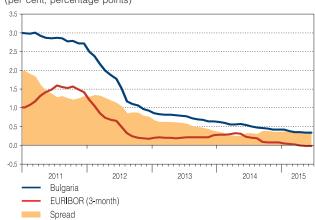
a) Overnight deposits

(per cent; percentage points)



b) Deposits with a maturity of three months

(per cent; percentage points)



Note: The values for Bulgaria reflect the average value of SOFIBOR and SOFIBID of unsecured three-month deposits in levs.

Source: BNB, ECB.

Interbank Money Market Yield Curve

(per cent)

2.5

2.0

1.5

1.0

0.5

0.0

1 2 3 4 5 6 7 8 9 10 11 12 maturity, months

Note: The values reflect the average value of SOFIBOR and SOFIBID of unsecured deposits in levs.

Source: BNB.

December 2014

June 2015

¹⁹ The analysis is based on the average value between the quotations of SOFIBOR and SOFIBID of unsecured threemonth deposits in levs.

²⁰ As of November 2014, Corporate Commercial Bank was excluded as a reporting agent from interest rate statistics data.

pared with the end of the 2014, with household deposit rates falling more significantly.

As regards the currency structure of deposit rates, in May 2015 interest rates on deposits in all currencies posted a decline on the end of the prior year. New lev-denominated deposits decreased most significantly, while interest rates on deposits denominated in euro and US dollars declined less. Data on the currency structure of non-government sector's deposits suggest that the share of foreign currency deposits, mostly denominated in euro, increased to 43.2 per cent in May 2015 from 42.3 per cent at the end of 2014.

The comparison between the March and May 2015 breakdown of interest rates on new household time lev deposits in individual banks shows an increase in the number of banks offering rates in the band of up to 1 per cent and from 2 to 3 per cent at the expense of the decreased number of banks offering rates within the 1 to 2 per cent band. In May 2015 no bank reported interest rates on household time lev deposits of over 3 per cent. In the March to May 2015 period the average interest rate level dropped by 23 basis points to 1.67 per cent and the standard deviation fell by 14 basis points to 0.86 per cent.

The downward trend in lending rates continued to be driven by the weak demand amid increased competition among banks, decreasing cost of bank resources attracted from residents, low interest rates on the interbank money market in Bulgaria and the euro area and ample banking system liquidity. In May 2015 interest rates on new lev-, euro- and USDdenominated loans to non-financial corporations decreased on December 2014. The decline was most pronounced in loans denominated in euro and US dollars and in May 2015 interest rates on these loans accounted for 7.4 per cent and 8.6 per cent respectively. Interest rates on levdenominated loans were 6.6 per cent over the same month.21

Interest Rates on New Time Deposits

a) By sector

(per cent) 3 2011 2012 2015 2013 2014 Households Average Non-financial corporations

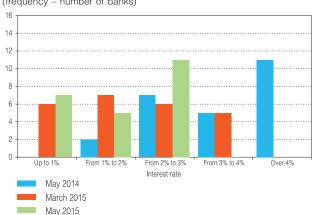
b) By currency

(per cent) 2011 2012 2013 2014 2015 BGN EUR USD

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

Distribution of Interest Rates on New Household Time Lev Deposits

(frequency - number of banks)



 $^{^{\}rm 21}\,\mbox{These}$ values are the weighted average of the interest rates on loans to non-financial corporations on a 12-month basis.

The downward trend in the annual percentage rate of charge (APRC) on new consumer loans to households, observed since August 2014, was sustained in the current year. In May 2015 it accounted for 11.9 per cent²², declining by 50 basis points between January and May 2015. In line with the early 2015 trend towards a stronger contribution of interest expenditure to APRC fall, the interest rate in the review period fell by 34 basis points, while non-interest expenditure contracted by 16 basis points.

APRC on new housing loans to households came to 7.0 per cent in May 2015, following a long-term downward trend. Interest expenditure dropping by 35 basis points in the January to May 2015 period contributed most to the dynamics of this indicator, while the implicit rate of non-interest charges fell by 9 basis points in the same period.

The distribution of interest rates on new housing loans in euro by bank shows that between March and May 2015 the number of banks extending loans at rates between 6 per cent and 7 per cent increased, while banks offering rates below 6 per cent and between 7 per cent and 8 per cent decreased, and only one bank offered a rate between 8 and 9 per cent. In May 2015 the average interest rate level dropped by 8 basis points on March 2015 to 6.29 per cent, and the standard deviation rose by 10 basis points to 0.94 per cent.

The dynamics of interest rate on time deposits in the second half of 2015 is expected to remain downward. Major factors behind this will continue to be the ample banking system liquidity and decreasing interest rates on the interbank money market in the euro area and in Bulgaria. Interest rates on loans are projected to fall in the following two quarters as a result of the expected further declines in the cost of attracted funds.

In the first five months of 2015 the primary government bond market exhibited an increase in the yield on five-year government securities (from 1.00 per cent in February to 1.28 per

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

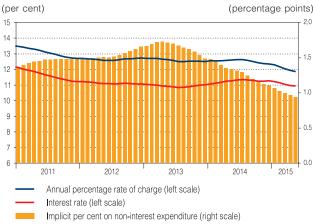
(per cent)

11
10
9
8
7
6
5
4
12-month moving average.
weighted by the volume of loans
3
2011
2012
2013
2014
2015
Loans in levs
Loans in euro
Loans in US dollars

Source: BNB.

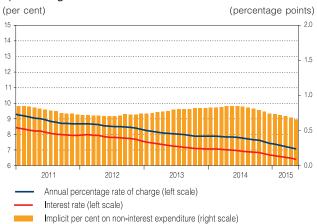
Interest Rates and Annual Percentage Rate of Charges on New Household Loans

a) Consumer loans



Source: BNB

b) Housing loans



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

²²The values indicating APRC and interest rates are the weighted average of the interest rates on household consumer and housing loans on a 12-month basis.

cent in May), while three-year bond yields experienced no significant changes (from 0.69 per cent in January to 0.68 per cent in May). The quantity of government securities offered on the primary market in the first half of 2015 was minimal: half of the scheduled government securities auctions in the MF issue calendar was cancelled. This MF policy was driven by the issue of a significant volume of new Eurobonds on international capital market (totalling EUR 3.1 billion) at the end of the first quarter of 2015, which covered the budget financing requirements.

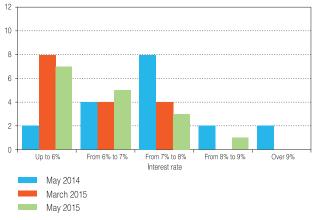
On the government bond secondary market, the downward trend in long-term interest rates was retained, falling by 60 basis points on the end of 2014. Given the minimal issued volume in circulation of the benchmark issue and the lower investor interest on the domestic government securities market, in the last two months no transaction with the benchmark issue was concluded on the secondary market and the long-term interest rate in May matched that of April (2.36 per cent).

The volatility in asset prices on international capital markets since early May and the trend towards an increase in government bond yields in Germany and in the other euro area countries pushed up the yields of all Bulgarian Eurobonds. The subsequent yield decrease in the second half of June and correspondingly the rise in the price of Bulgarian government securities was reversed at the end of the same month, when domestic government bond yields rose, largely reflecting the increased uncertainty surrounding the situation in Greece.

In the second half of the year a strengthening of investor interest may be expected on the primary and secondary government bond markets given the substantial volume of government securities maturing in September and December. If fluctuations in international capital markets decrease and the relatively weak supply of government securities in the domestic market is retained as suggested by the favourable budget implementation and significant amount of fiscal reserves by end-May, government securities yields are likely to decline.

Distribution of Interest Rates on New Housing Loans in Euro

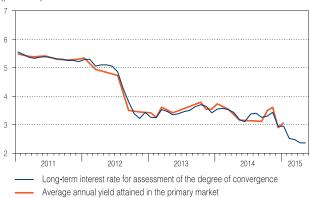
(frequency - number of banks)



Source: BNB.

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

(per cent)



Financial Flows between the General Government and the Other Sectors of the Economy

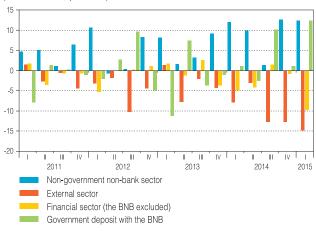
The government revenue and expenditure policy and budget financing operations affected the allocation of liquidity among economic sectors.²³

Over the first quarter the external sector continued to be the main source of liquidity for the consolidated state budget, the inflow of liquid resources from this sector to the budget accounting for 14.9 per cent of GDP for the review quarter. The inflow of liquid funds was formed by refunds under the EU Common Agricultural Policy (BGN 1184.9 million), net external financing (BGN 979.7 million) and grants received under the EU funds (BGN 757.7 million). By the end of March new benchmark issues²⁴ purchased by non-residents totalled EUR 1.9 billion. Over the first quarter a bridge bank loan was repaid (EUR 1.5 billion, including EUR 987.6 million held by non-resident banks²⁵) and USD-denominated global bonds (equivalent to BGN 1766 million, of which BGN 1030 million²⁶ held by non-residents) matured.

Between January and March 2015 the banking sector (excluding the BNB) was a net source of liquidity to the budget amounting to 9.8 per cent of GDP over the quarter. The inflow of liquid funds came from the new benchmark bonds issued on international capital markets (EUR 1.2 billion) and purchased by residents on the primary and secondary markets by the end of the quarter and government securities issued on the domestic market (BGN 349.7 million). Concurrently, the repayment of a bridge bank loan (the portion held by residents: EUR 512.4 million), the maturity of USD-denominated global

The Effect of Consolidated Budget on Other Sectors' Liquidity (Quarterly)

(share of GDP, per cent)



Sources: MF, BNB calculations.

²³ For more details on financial flows between the budget and other sectors, see Economic Review, May 2004, p. 28. The sign '+' of the respective financial flow indicates that as a result of its operations the budget provided net funds to the respective sector, while the sign '-' means that the budget withdrew net funds from the respective sector.

²⁴ On 19 March Bulgaria's government issued three new benchmark issues (7-year, 12-year and 20-year) totalling EUR 3.1 billion.

²⁵ Based on balance of payments data in accordance with the sixth edition of the IMF Balance of Payments and International Investment Position Manual.

²⁶ Based on data of the Government Debt Management monthly bulletin as of the end of 2014.

bonds (BGN 717.2 million) and maturities of government securities in the domestic market (BGN 152.0 million) led to a reallocation of liquid resources from the budget to the financial sector.

The net financial inflows from the external and the financial sector were allocated equally to increase the government deposit with the BNB (BGN 2136 million) and to provide liquidity to the non-government non-bank sector.

Preliminary monthly data of mid-June 2015 indicate that in the second quarter of 2015 the external sector continues to be the main source of liquidity for the consolidated state budget, with the funds received under the EU Structural Funds and Cohesion Fund (BGN 876.1 million in April and May) contributing most to this effect. As a result of the government budget surplus reported in April and May, a shift of liquid funds from the non-government non-bank sector to the budget may be expected. Financial flows directed to the budget were used to increase the government deposit with the BNB by BGN 1061.2 million in the second quarter.

3. Economic Activity

In the first quarter of 2015 quarterly growth of real GDP accelerated on the previous quarter accounting for 0.9 per cent. The change in inventories and private consumption, which continued its slow recovery in line with the slight increase in employment and growth in compensation *per* employee, and unemployment decline had the major contribution to growth. The decrease in government consumption as a result of the implementation of fiscal consolidation measures had the major negative contribution to economic activity growth. Fixed capital investment fell down on a quarterly basis impacted by the private sector investment dynamics. Quarterly growth of exports and imports of goods and services rose approximately equally, and net exports had a neutral contribution to GDP growth.

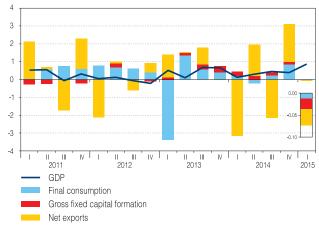
Based on the improved labour market conditions and increased consumer confidence, private consumption is expected to continue growing on a quarterly basis in the third and fourth quarters of 2015. Private investments are projected to moderately increase in the context of positive sentiment and expectations of firms and high production capacity utilisation in industry. Government consumption is expected to rise at slow rates in the second half of 2015. Slow but similar growth rates are projected for exports and imports of goods and services. Given the described dynamics by component, quarterly GDP growth is expected to slightly slow down in the third and fourth quarters of 2015 against the first quarter of 2015.

In the first guarter of 2015 guarterly growth of real GDP accelerated on the previous guarter to reach 0.9 per cent (seasonally adjusted NSI data).²⁷ Major drivers to growth were changes in inventories and private consumption which continued its slow recovery in line with the slight increase in employment, growth in compensation per employee and decline in unemployment. The decrease in government consumption as a result of implemented fiscal consolidation measures had the major negative contribution to economic activity growth. Real fixed capital investment also went down guarter on guarter driven by investment dynamics in the private sector. Exports and imports of goods and services rose at similar quarterly rates, with net exports having a neutral contribution to GDP growth.

Short-term economic indicators improved over the second quarter of 2015, signalling continued upward trends in economic activity and employment. The household confidence indicator also improved. These are prerequisites for private consumption to continue recovering in the third and fourth quarters of 2015.

Contribution to GDP Growth by Final Use Component

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



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

Sources: NSI, BNB calculations.

Economic Activity

²⁷ The quarter-on-quarter analysis in this section employs seasonally adjusted data, unless otherwise indicated. The seasonal adjustment of indicators, on which the NSI or Eurostat do not officially publish seasonally adjusted data, was made *via* the TRAMO SEATS or OxMetrics programme by using automated set up for diagnostics and optimisation of adjustment parameters.

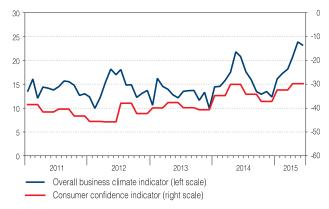
The business climate indicator tracking business sentiment went up over the second quarter of 2015 compared to the first quarter, notwithstanding the marginal decline recorded in June. The improved assessment of the expected business situation was the main contributor to this rise. All sectors reported an increase, with construction and trade experiencing the most significant improvements. Nevertheless, the uncertain economic environment in all sectors continued to be considered as one of the major limiting factors for firms' business. Therefore, firms are expected to remain cautious about their plans to hire personnel and invest in the future. On the other hand, they are expected to gradually recover their investment activity in the context of the high capacity utilisation recorded in industry.

In the third and fourth quarters of 2015 private consumption is projected to recover further, reflecting the improved consumer confidence and the gradual recovery of labour market conditions. Private investment is projected to moderately increase in the context of positive sentiment and business expectations, as well as high production capacity utilisation in industry. Government consumption is expected to rise slowly in the second half of 2015. Exports and imports of goods and services are projected to grow at slight but similar quarterly rates. The described component dynamics shows that quarterly GDP growth is expected to moderate slightly in the third and fourth quarters of 2015 against the first quarter of 2015.

Based on quarterly developments, over the projection horizon real annual growth is expected to stay close to that in the first quarter. Private consumption and fixed capital investment are anticipated to have the largest positive contribution to economic activity growth, whereas net exports are likely to have a slight negative contribution.

The external environment remained a source of uncertainty for this projection. The ECB monetary policy may have a stronger than expected impact on euro area growth and on the Bulgarian economy in terms of higher external demand and FDI infows. A possible deterioration in the political and economic situation in Greece would pose a risk of lower than projected growth in Bulgarian exports to this country. Additional negative effects on the domestic economic activity stemming from further worsening of the situation

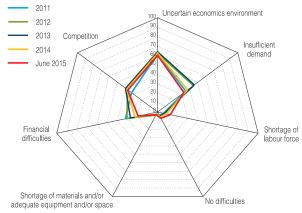
Business Climate and Consumer Confidence



Sources: NSI, BNB calculations.

Factors Limiting Economic Activity of Corporations

(relative share of all corporations)

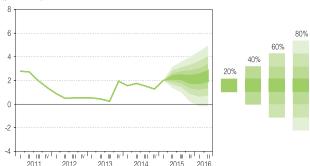


Note: Data for 2011-2014 are average for the period and sector-weighted (industry, construction, trade and services).

Sources: NSI, BNB calculations.

Fan Chart of the Expected Annual Rate of Change of GDP

(per cent)



Note: The fan chart shows the expert views of the forecasters on the uncertainty around the projected value based on probability distribution. The reporting period includes revised GDP growth estimates. The middle band of the chart, depicted in the darkest colour, includes the central projection and the probability distribution shows 20 per cent probability for the actual value to fall in this band in each of the quarters. If neighbouring bands (in the same brighter colour) are added to the middle band, there would be 40 per cent coverage of the probability mass. Thus, by adding each same colour couple of bands, the probability for the value to fall there would be increased by 20 percentage points to reach 80 per cent. The probability for the value to remain outside the coloured part of the chart is 20 per cent based on the distribution chosen.

Source: BNB.

Real GDP Growth by Component of Final Use

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

		2012				2013				2014			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Consumption	1.0	0.9	0.7	0.5	-4.1	1.7	0.7	0.5	0.3	-0.3	0.3	1.1	0.0
incl.													
Household consumption	2.0	0.6	0.1	-0.4	-2.2	0.7	-0.3	0.4	1.3	-0.4	0.4	0.9	0.2
Final government consumption expenditure	4.7	-6.2	0.8	-0.2	-0.3	4.9	-3.4	-2.5	7.5	1.9	-2.1	1.5	-3.1
Collective consumption	-0.6	0.7	0.5	1.6	1.2	8.0	0.9	-0.1	0.5	0.4	0.2	0.5	-0.4
Gross fixed capital formation	0.0	1.0	-0.2	-0.4	0.5	0.7	1.4	1.6	1.1	0.9	0.7	0.6	-0.1
Exports of goods and non-factor services	-5.9	6.6	-1.4	8.0	5.8	1.3	3.3	-0.1	-2.2	2.2	-2.6	8.3	4.8
Imports of goods and non-factor services	-2.3	6.1	-0.4	-0.1	3.5	1.2	1.8	-0.1	2.6	-0.5	0.7	4.6	4.7
Real GDP growth	0.1	0.1	-0.1	-0.2	0.5	0.1	0.7	0.6	0.1	0.3	0.4	0.4	0.9

Source: NSI.

in Greece may emerge in case of declining FDI flows from Greece to Bulgaria and a slump of Greek tourists in Bulgaria. Another source of uncertainty would be a further escalation in the geopolitical conflict between Ukraine and Russia given the sensitivity of the Bulgarian economy to crude oil and natural gas imports from Russia. As for the risks stemming from the internal conditions, a potential strong deterioration in expectations and perceptions of corporations may affect negatively the expected gradual recovery in investment and employment.

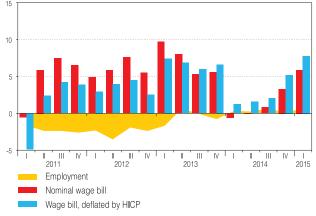
Household Behaviour

The first quarter of 2015 was marked by slight growth in consumption, sustained high savings rate and a weak decrease in labour supply. Still comparatively high unemployment rates are likely to continue contributing to these developments. The gradual employment recovery and accelerating labour income growth are expected to favour household consumption.

Employment continued to recover in the first quarter, following the slight growth in 2014, albeit remaining at comparatively low levels. The growth rate of household income from remuneration also increased compared with lower growth rates in 2014 (both annually according to nonseasonally adjusted data on wage bill and average wage *per* employee²⁸ and quarterly according to seasonally adjusted national account data).²⁹ Reflecting the gradual shrinkage of

Employment and Nominal Wage Bill

(annual change, per cent)



Sources: NSI - SNA, BNB calculations.

Economic Activity

²⁸ The seasonal adjustment of indicators, on which the NSI does not officially publish seasonally adjusted data, was made via the TRAMO SEATS programme by using automated set up for diagnostics and optimisation of adjustment parameters.

²⁹ Quarter-on-quarter rates of change in seasonally adjusted data indicate recent developments in indicators that

deflation in 2015 and retention of comparatively low employment, labour income is expected to grow in most of the economic sectors despite the cautious labour cost policy pursued by firms. In the short-term horizon, however, consumption is expected to grow at comparatively low rates.

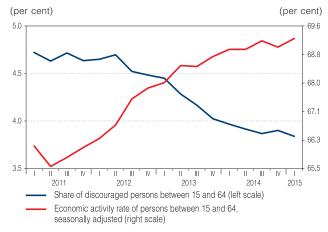
In the context of relatively low labour demand by corporations, household labour supply (as measured by the labour force changes³⁰) decreased slightly according to the NSI Labour Force Survey. In the first quarter the increase in the economic activity rate,³¹ like in most of 2014, was driven by the fall of working-age persons. The number of discouraged persons remained broadly unchanged at comparatively high levels.

The Labour Force Survey shows that in the first quarter of 2015 the seasonally adjusted unemployment rate³² sustained its downward 2014 trend, reaching 10.3 per cent (according to non-seasonally adjusted data: 10.6 per cent). The seasonally adjusted unemployment rate³³ calculated using the Employment Agency data also decreased slightly in 2014 and the first five months of 2015 to reach 10.2 per cent in May (10.1 per cent according to non-seasonally adjusted data). Decreases were recorded in both short-term (up to one year) and long-term unemployed persons (those jobless for more than a year). According to the NSI Labour Force Survey, in the first quarter of 2015 the share of long-term unemployment decreased to 6.0 per

According to seasonally adjusted national accounts data, household consumption rose slightly (0.2 per cent on a quarterly and 1.5 per cent on an annual basis). Over the first guarter

are not subject to base effects in the corresponding period of prior year.

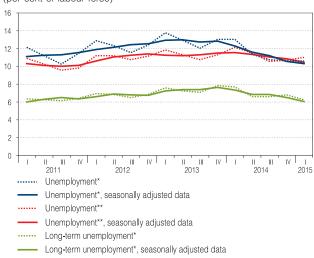
Economic Activity Rate and Share of Discouraged Persons



Sources: NSI Labour Force Survey, BNB calculations.

Unemployment Level

(per cent of labour force)



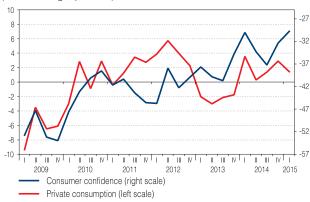
* NSI data.

** Employment Agency data.

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

Private Consumption and Consumer Confidence

(annual change, per cent)



Sources: NSI Consumer Survey and BNB calculations.

³⁰ The labour force (currently economically active population) comprises persons aged 15 and older who provide the supply of labour for the production of goods or services. The labour force includes both employed and unemployed persons.

³¹ Economic activity rate is the ratio between economically active persons (labour force) and the population of the same age.

³² Unemployment rate is the proportion between the number of unemployed and the labour force based on Labour Force Survey data.

³³ The definition of the unemployment rate according to Employment Agency data corresponds to that referred to in note 32, 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.

retail trade turnover remained unchanged from the average level in the fourth quarter of 2014, with quarterly declines observed mainly in foods, beverages, textile, clothing and computer and communication equipment.

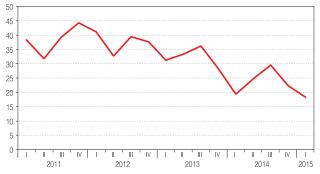
Retail trade data of April suggest moderation in the annual consumption growth in the beginning of the second quarter of 2015. In April retail trade volumes at constant prices declined from the average value for the first quarter, with their annual rate of growth slowing in real terms. Nevertheless, the continued improvements in household expectations regarding the economic situation, their financial position, and unemployment along with the improved consumer confidence indicator reported in the NSI consumer survey³⁴ for April 2015 gave grounds to expect a further recovery in consumption over the coming months.

The household savings rate remained comparatively high in the first quarter of 2015. The NSI household budget survey data show that the share of savings in household disposable income retained its comparatively high levels. A high share was also reported by households which intend to increase their savings in the following 12 months (consumer survey of April 2015). Net assets of households measured by their net position *vis-à-vis* the banking system (BNB monetary statistics) continued to increase over the first quarter.

Consumer demand is expected to increase at comparatively low rates, the household savings rate to remain relatively high and labour supply relatively low in the third and fourth quarters of 2015. Balanced risks to the projection relate mainly to factors which would affect consumer confidence, as employment and labour income.

Unemployment Expectations in the Following 12 Months

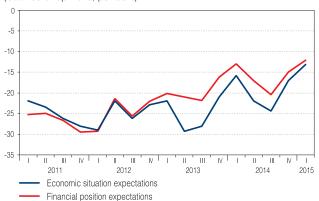
(balance of opinions; per cent)



Source: NSI Consumer Survey

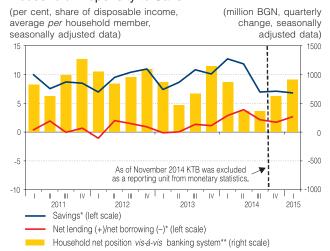
Expectations of Households about Their Financial Position and Economic Situation in the Following 12 Months

(balance of opinions; per cent)



Source: NSI Consumer Survey.

Household Propensity to Save



Note: Since November 2014 KTB has been excluded as a reporting agent from monetary statistics.

Sources: NSI Household Budget Survey, BNB.

Economic Activity

³⁴ Final results of the Consumer Survey represent balances of opinions calculated as a difference between the relative shares of positive and negative opinions on raised issues. The composite consumer confidence indicator is calculated as the arithmetic mean of expectation balances in the following 12 months for the development of: financial position and savings of households, the overall economic situation in the country and unemployment (the latter with the sign reversed).

^{*} NSI data.

^{**} BNB data

Employment and Income Dynamics

		20	112			2	013		2014				2015
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
(per cent, on the previous quarter, seasonally adjusted data)													
Employed	-0.7	-1.0	0.1	-0.2	-0.2	0.4	-0.2	-0.1	0.2	0.0	0.2	0.0	0.3
Nominal wage <i>per</i> employee*	1.7	2.1	2.3	1.5	3.5	0.5	0.7	0.5	-1.2	1.0	1.1	1.6	1.4
Real wage per employee**	2.1	1.7	1.9	1.7	2.7	1.1	1.3	0.3	0.5	1.1	1.0	2.6	0.6
Wage bill, nominal terms	1.0	1.6	2.2	0.8	3.4	0.5	0.5	0.3	-1.3	1.2	1.0	1.5	1.7
Wage bill, real terms**	1.4	1.1	1.8	1.0	2.6	1.1	1.0	0.1	0.3	1.2	1.0	2.5	0.9
(per cent, on the corresponding period of the previous year, non-seasonally adju	sted d	ata)											
Employed	-2.3	-3.5	-1.9	-2.3	-1.7	0.7	-0.1	-0.7	0.3	0.3	0.7	0.1	0.8
Nominal wage <i>per</i> employee*	7.1	7.9	8.5	8.3	12.3	8.6	6.2	6.6	0.0	-0.2	0.9	3.7	5.1
Real wage per employee**	5.2	6.0	5.4	5.3	9.9	7.4	6.9	7.7	1.9	1.5	2.1	5.6	6.9
Wage bill, nominal terms	4.9	5.8	7.6	5.5	9.8	8.0	5.3	5.6	-0.6	0.0	0.9	3.3	5.9
Wage bill, real terms**	3.0	3.9	4.5	2.6	7.4	6.9	6.0	6.7	1.3	1.6	2.1	5.2	7.8

^{*} The wage is calculated on the basis of NSI (SNA) data by substracting employers' social contributions from the compensation of employees and the difference is divided by the number of employees.

Sources: NSI - SNA, BNB calculations, Eurostat.

Retail Trade Turnover

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

	2012		2013				2014				2015			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	April
Retail trade turnover, excluding cars and motorcycles	5.9	-1.0	-0.5	-0.5	1.0	3.1	1.4	1.4	1.0	-0.1	1.9	0.9	0.0	-1.3
incl.														
Foods, beverages and tobacco	1.5	0.9	0.0	1.5	-4.6	3.6	3.9	0.2	0.8	0.7	0.9	0.8	-1.7	-0.3
Textile, clothing, footwear and leather	8.2	-4.8	2.3	3.5	2.2	4.6	6.3	-3.4	-3.6	1.8	3.1	-0.1	-5.2	-3.5
Household goods and home appliances	8.4	0.5	-2.4	-0.8	1.4	2.7	2.4	2.4	0.0	0.6	1.5	2.5	1.2	-0.6
Computers and communication equipment, etc.	-3.3	1.4	0.0	-8.1	5.1	5.6	1.5	5.5	4.2	-2.5	1.1	0.7	-0.9	-1.0
Pharmaceutical and medical goods, cosmetics and toiletries	2.6	0.8	1.2	-4.6	7.2	5.3	4.3	1.7	-1.2	0.0	1.8	3.9	0.7	-0.4
Non-specialised stores with different kinds of goods	8.6	-1.4	-1.3	1.2	0.5	11.7	-4.6	-1.2	-1.2	0.4	-0.3	0.1	0.0	0.1
Automobile fuels and lubricants	5.1	0.2	1.3	0.9	-3.6	4.6	-5.4	-0.8	1.3	-0.9	6.8	-1.1	6.2	-6.7

Source: NSI Domestic Trade Survey.

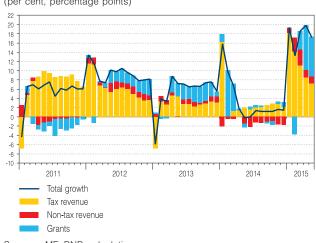
Fiscal Policy Effects on the Economy

In the first five months of 2015 Bulgaria's budget position improved significantly on the corresponding period of 2014. The budget balance on the consolidated fiscal programme was positive at BGN 1091.1 million (1.3 per cent of GDP) against a deficit of BGN 888.6 million (-1.1 per cent of GDP) for the January-May 2014 period. The balance improvement was largely due to the increase in revenue rather than a decline in consolidated fiscal programme expenditure.

Over the first five months total consolidated fiscal programme revenue was marked by a high growth rate, with payments under EU programmes contributing most significantly to its growth at 17.3 per cent. Tax revenue also had

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

(per cent, percentage points)



^{**} Data deflated by HICP.

an essential significance for total revenue growth in the January-May period. Indirect taxes had the major contribution to tax revenue growth, with their improved performance reflecting mainly the measures to boost overall tax collection performance, and to much lesser extent, favourable dynamics of household consumption at the end of 2014 and early 2015. VAT revenue rose strongly (11.3 per cent), reflecting mainly higher January VAT receipts from domestic and intra-Community transactions (net), unlike VAT on imports which posted a decline. Excise revenue grew by 8.7 per cent in the January-May period driven mainly by higher fuel excise duties, with tobacco excise revenue contributing less significantly. Social and health insurance contributions (up 11.0 per cent on May 2014) added to the tax revenue growth, reflecting partially early 2015 legislative changes³⁵ and measures addressing collection performance along with developments in compensation of employees in the economy.

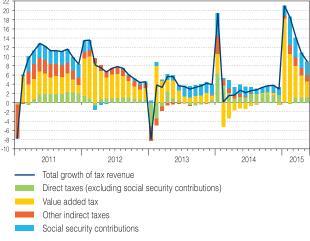
In the January–May 2015 period total revenue on consolidated fiscal programme posted low growth on an annual basis (0.5 per cent). Current operating expenditure, subsidies, and to a lesser extent, the EU budget contribution had negative contributions, whereas social, capital and interest expenses had the highest positive contributions. Pension, benefit and transfer expenses under the Social Insurance Code increased by 4.2 per cent on the same period of 2014, posting a low positive contribution to the rise in household disposable income.

The temporary decline in monthly capital expenditure on consolidated fiscal programme over the first two months of the year was offset by higher investment expenses between March and May. Hence, their growth in the first five months was 5.9 per cent on an annual basis, entirely due to the capital expenditure made under EU programmes. In comparison with the same period of the previous year, capital expenditure of the general government sector had a much lower contribution to GDP growth over the first quarter of the year.

In the first quarter of 2015 government consumption had a negative contribution of -0.3 percentage points to seasonally adjusted GDP

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

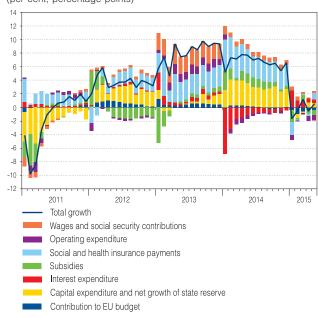
(per cent, percentage points)



Sources: MF, BNB calculations.

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

(per cent, percentage points)



Sources: MF, BNB calculations.

Economic Activity

41

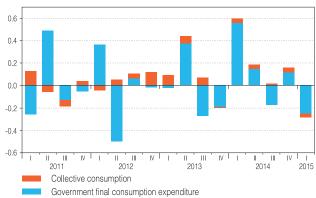
³⁵ For further details, see *Basic Parameters of the 2015* Law on the State Budget of the Republic of Bulgaria and the Updated Medium-term Budget Forecast for the Period 2015–2017, Economic Review, 4/2014.

compared to the fourth quarter of 2014, reflecting mostly government's measures to reduce current operating costs and health insurance payments. The effect of the measures for wage expenditure optimisation contributed to the significant slowdown in the increase of compensation of employees which posted annual growth of 1.4 per cent for the first five months of the year. Given the increase in capital expenditure under EU programmes, fiscal policy effects on the economic activity may be assessed as neutral.

Over the second half of the year tax revenue growth is expected to remain high, but to begin slowing down. Assuming that most of the measures to reduce operating costs and health insurance payments are concentrated in the beginning of the year and the effects of measures to limit compensation of employees will be more pronounced in the following quarters, it may be

Contribution of Government Consumption to Real GDP Growth

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



Sources: NSI, BNB calculations.

Revenue, Expenditure and Budget Balance on Consolidated Fiscal Programme for 2014–2015

					20)14					20	15	20	114	20	15
Consolidated Fiscal Programme	Q	11	C)2	C)3	C)4	To	tal	Q	11	January	/ – May ¹	January	/ – May ¹
	million BGN	per cent ²														
Total revenue and grants	6 576	6.8	7 595	-5.2	7 386	3.4	7 853	2.4	29 409	1.5	7 796	18.6	11 776	-0.2	13 819	17.3
Tax revenue	5 200	1.6	5 980	3.7	5 895	4.6	5 953	1.8	23 028	2.9	5 937	14.2	9 436	2.7	10 284	9.0
Corporate tax	453	-2.4	496	10.2	219	13.9	511	14.6	1 679	8.1	464	2.4	874	-0.7	912	4.3
Personal income tax	623	21.6	678	13.8	645	2.6	652	6.4	2 597	10.6	616	-0.1	1 101	7.5	1 137	3.3
Value added tax	1 617	-10.3	1 869	3.5	2 029	8.4	1 749	-7.2	7 264	-1.4	1 969	21.8	2 936	-3.8	3 267	11.3
Excise	855	6.1	980	-2.1	1 152	-2.7	1 052	-1.2	4 039	-0.4	950	11.1	1 507	3.4	1 639	8.7
Customs duties	35	9.6	35	2.1	42	-5.4	41	15.6	153	4.8	39	12.5	11	4.9	12	8.1
Social and health insurance contributions	1 396	5.8	1 641	3.4	1 644	6.0	1 768	10.2	6 449	6.4	1 625	16.4	59	8.1	63	11.0
Other taxes	221	21.6	281	-4.5	165	-0.3	180	-9.5	847	0.8	274	21.1	2 503	12.4	2 779	6.6
Non-tax revenue	859	-3.1	966	-26.0	874	20.2	762	-26.1	3 460	-12.4	1 080	25.9	447	-9.8	476	11.3
Grants	518	238.0	649	-30.6	616	-20.7	1 138	43.8	2 921	10.0	779	50.6	762	-11.7	1 756	133.4
Total expenditure (incl. the contribution to EU budget)	7 450	7.1	7 717	6.9	7 868	5.0	9 447	8.0	32 482	6.8	7 539	1.2	12 665	7.7	12 727	0.5
Wages and social security contributions	1 396	3.7	1 492	3.2	1 471	3.3	1 659	3.3	6 020	3.4	1 415	1.4	2 413	3.7	2 447	1.4
Operating expenditure	1 016	-5.7	1 145	2.9	1 023	-0.3	1 541	4.1	4 725	0.6	1 005	-1.3	1 784	-3.1	1 686	-5.5
Interest	199	-37.4	41	-33.4	271	-1.6	69	103.8	580	-15.8	263	31.8	219	-39.5	293	33.8
Social security, assistance and social care	3 375	10.8	3 364	3.8	3 388	5.8	3 582	10.0	13 709	7.5	3 388	0.4	5 641	8.2	5 756	2.0
Subsidies	329	5.7	510	50.2	291	4.6	421	-13.6	1 551	9.5	401	22.0	724	29.9	624	-13.8
Capital expenditure and state reserve growth	786	49.5	951	17.3	1 285	19.3	1 920	13.1	4 942	20.2	766	-2.3	1 389	40.2	1 472	5.9
Contribution to EU budget	349	6.4	213	3.6	139	-35.1	255	36.1	955	2.2	302	-13.4	495	6.4	451	-8.9
	million BGN	difference ³ (million BGN)														
Budget balance on a cash basis	-874.7	-77.0	-121.7	-913.2	-482.6	-127.2	-1 593.9	-514.6	-3 072.9	-1 632.0	257.1	1 131.0	-888.6	-934.1	1 091.1	1 979.7

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

Source: MF.

Based on monthly reports on cash budget implementation and EU fund accounts of first-level budget spending entities.

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

³ Budget balance changes on the same period of previous year.

expected that government consumption will have a positive, though close to zero, contribution of real GDP growth over the third and fourth quarters of 2015.

Behaviour of Firms and Competitiveness

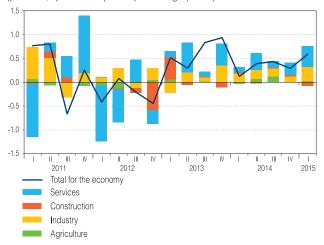
In the first quarter of 2015 real value added for the total economy rose by 0.6 per cent from 0.3 per cent in the fourth quarter of 2014, driven mainly by services and industry.

Rising moderately over the first quarter, the industrial production index at constant prices posted a slight quarter-on-quarter fall in April. Manufacturing, especially manufacture of metal products, except machinery and equipment, had the main negative contribution to this fall. However, production and distribution of electricity, heating and gas increased over the review period.

In line with the slight drop in the output, production capacity utilisation marked a slight decline in the beginning of the second guarter of 2015, though remaining higher than the average level for the 2009 to 2014 period, as in the previous three guarters. In the second guarter higher capacity utilisation was again observed in the following industrial sub-sectors:36 repair and installation of machinery and equipment and manufacture of vehicles, except motor vehicles. Capacity utilisation in manufacture of wood and wood products, except furniture, declined, while that in manufacture of electrical equipment increased over the period. The upward trend of capacity utilisation in production of investment goods was reversed, though the level remained comparatively high.³⁷ The high capacity utilisation signals an increased urgency for investments to boost production capacity in some industrial sub-sectors, especially those expecting an increase in orders. At the same time, the Industry Trend Survey shows that managers continued to indicate the economic uncertainty as a main factor impeding their business. Given the above factors, firms in this sector are expected to remain cautious about their investment policy. A possible deterioration in their perceptions may

Value Added Growth and Contribution by Sector

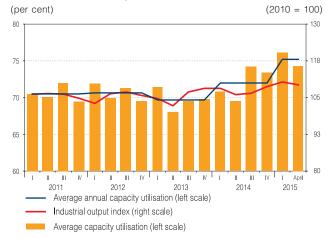
(per cent, quarter-on-quarter percentage points)



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

Sources: NSI, BNB calculations.

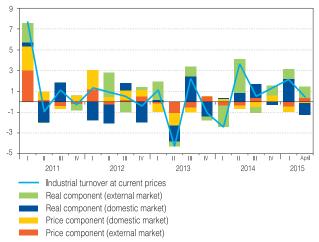
Industrial Production Index and Production Capacity Utilisation in Industry



Sources: NSI, BNB calculations.

Industrial Turnover Dynamics

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



Sources: NSI, BNB calculations.

Economic Activity

³⁶ Data by sub-sector from the European Commission's Survey of Business Developments in Industry.

³⁷ The Major Industrial Groupings classification was used covering the following sections: manufacture of intermediate consumption goods, energy products and water related activities, investment products and consumer goods.

postpone the expected slow recovery of private investment.

Despite the fall in industrial output in April, the nominal industrial turnover posted growth from the first quarter, continuing its upward tendency observed in the previous four quarters. In April 2015 real income from external market sales and the slight external price rises had the main positive contributions to this growth. Declines in real revenue from sales in the domestic market had the major negative contribution. In April increased volumes in external markets corresponded to growth of nominal exports in the balance of payments, appearing to be the first signal that real export growth would be positive in the second quarter of 2015.

Over the first quarter value added in construction dropped by 1.1 per cent on a quarterly basis. The construction output index (at constant prices) shows that building construction continued to decline unlike civil construction which recorded an increase. Similar component developments were observed in April compared to the first quarter. Despite the low economic activity in the sector of construction and construction output index dynamics, managers' perceptions and expectations in the first quarter retained their high level compared to the beginning of the year, likely to reflect the continued growth in civil construction.

In the services sector, value added growth accelerated from the fourth quarter of 2014. Real estate operations had the largest positive contribution, unlike trade, transport, hotels and restaurants,³⁸ and professional and scientific activities³⁹ contributing less significantly.

After increasing for three consecutive quarters, in April retail trade volumes at constant prices declined on a quarterly basis compared with the first quarter. Retail trade in automobile fuels and lubricants contributed most strongly to this drop. Otherwise, slight turnover declines were recorded in almost all groups of goods except unspecialised shops with different kinds of goods.

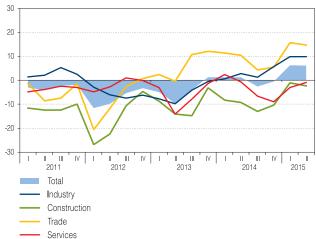
Construction Output Dynamics and New Buildings Permits Issued



Sources: NSI, BNB calculations.

Current Economic Activity Perceptions

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



Sources: NSI, BNB calculations.

Expectations about Future Economic Activity

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



³⁸ The sub-sector of trade, repair of motor vehicles and motorcycles, transport, storage and mail services, hotels and restaurants according to A10 breakdown of economic activities.

³⁹ The sub-sector of professional and scientific activities, administrative and ancillary activities according to A10 breakdown of economic activities.

Despite these developments, managers' expectations about future economic activity in this sector reversed their downward trend observed in the previous three guarters.

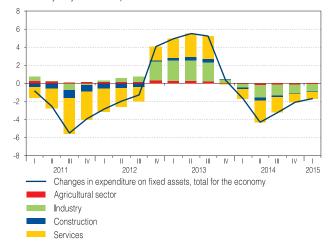
Compared with the end of 2014, the first half of 2015 saw a tendency toward an improvement in business sentiments and expectations of the economic environment. Over the second quarter perceptions of the current economic activity stood at comparatively high levels. In the context of a positive assessment of the current economic environment, expectations of the future activity deteriorated in all sectors excluding trade. In industry, the estimation of production assured with orders from both Bulgaria and abroad continued to improve in May compared with early 2015. Between April and May all sectors except trade exhibited higher expectations about the number of personnel, giving positive indications that employment will continue recovering gradually.

According to national account data, in the first quarter of 2015 investment in fixed capital posted a quarterly fall of 0.1 per cent in real terms, driven mainly by private investment developments. Nominal expenditure on acquisition of fixed assets, indicating allocation of investments across sectors, continued to decline over the first quarter, though a slowdown in the downward trend was observed over the last four quarters. Industry and services had the major negative contributions to investment dynamics. In the context of relatively positive sentiments and expectations of corporations, retention of sound economic activity growth and high capacity utilisation, fixed capital investment is expected to recover in the third and fourth quarters of 2015.

In the first quarter of 2015 gross operating surplus declined on both quarterly and annual basis. This reflects increasing labour costs and intermediate consumption prices which are likely to have been only partially passed on end-user prices. The sub-sector of trade, repair of motor vehicles and motorcycles; transport, storage and mail services; hotels and restaurants had the major contributions to this fall. Positive developments were observed in industry, construction and agriculture. If negative inflation continues do decelerate, reflecting production costs spillovers along the supply chain and the simultaneous

Contribution to the Quarterly Rate of Change in Expenditure on Acquiring Fixed Assets by Industry

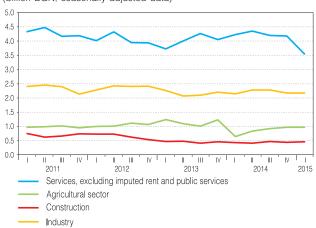
(per cent, quarter-on-quarter percentage points,



Note: Preliminary quarterly data due to the lack of final data. Sources: NSI, BNB calculations.

Gross Operating Surplus at Current Prices

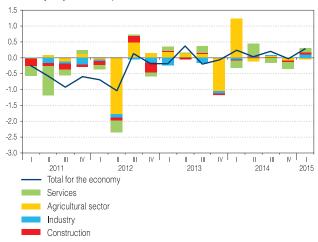
(billion BGN, seasonally adjusted data)



Sources: NSI, BNB calculations.

Contribution to Changes in the Number of Employed by Economic Sector

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



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

consumer demand recovery, the decline in operating surplus is expected to be temporary with no significant effect on economic activity in the second half of the year.

Financing sources other than gross operating surplus reported weak quarterly dynamics in most economic sectors. Over the first quarter industry recorded growth in lending and repayment of external obligations other than intercompany loans.

According to seasonally adjusted national account data, employment continued to improve in almost all economic sectors. The gradual economic activity recovery and improved business indicators of firms' sentiments about the number of personnel and business environment affected positively employment.

In the context of employment and value added revival in almost all economic sectors, over the first quarter labour productivity growth accelerated from the previous quarter, its overall dynamics fuelled by the sectors of industry and services. The quarter-on-quarter decline in labour productivity in construction was a result of a decrease of gross value added and an increase of employment in this sector.

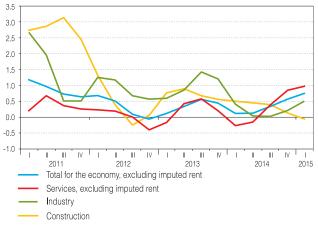
In the first three months of 2015 compensation *per* employee in nominal terms continued to pick up on a quarterly basis. Compared with the fourth quarter of 2014, compensation *per* employee increased in industry and some services sub-sectors (trade, real estate operations, professional and scientific activities) and decreased slightly in construction and agriculture.

Reflecting the stronger growth of compensation *per* employee compared to labour productivity, over the first quarter unit labour costs in the total economy continued their gradual upward trend of 2014. This indicator picked up nominally in all economic sectors, increasing its real growth rate in industry and construction.

The significant contribution of capital to real GDP, decomposed into production factors, was sustained in the first quarter of 2015. With the rising employment, the contribution of labour was positive, while total factor productivity had a smaller negative contribution to growth.

Labour Productivity Developments (Value Added *per* Employee)

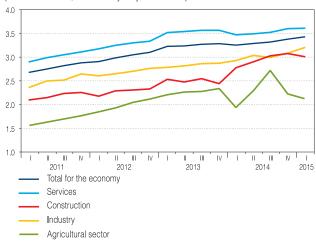
(per cent, quarter-on-quarter data; seasonally adjusted data)



Sources: NSI, BNB calculations.

Compensation per Employee at Current Prices

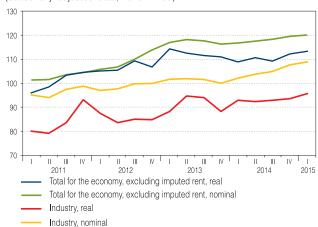
(thousand BGN; seasonally adjusted data)



Sources: NSI, BNB calculations.

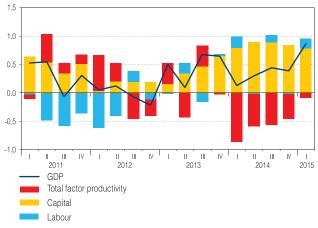
Unit Labour Costs

(seasonally adjusted data; 2010 = 100)



Contribution of Changes in Production Factors to GDP Growth

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



Sources: NSI, BNB calculations.

Gross Value Added Growth

(per cent on the previous quarter; real growth, seasonally adjusted data)

		2012			2013				2014				2015
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Agriculture and forestry, hunting and fishing Mining and quarrying, manufacturing, production and distribution of electricity, gas and water	-1.4 0.5	-2.8 1.4	-0.3 -0.5	1.0	1.2	-0.1 0.9	0.4	0.1	-0.7 0.8	1.5 0.8	2.7	0.3	0.5
Construction Trade, cars and motorcycles repair; transport,	0.1	-0.3	-1.5	-8.7	7.6	-0.8	0.3	-1.6	0.7	-0.5	0.4	0.5	-1.1
storage and mail services; hotels and restaurants Creation and dissemination of information	0.4	0.4	0.6	0.6	0.5	0.4	0.8	0.5	0.1	0.8	0.3	0.3	0.4
and author products; telecommunications	-2.1	0.2	0.2	0.4	0.5	0.0	1.2	0.4	0.1	0.1	0.2	-0.4	0.4
Finance and insurance activities	-2.6	-7.9	3.1	-5.3	0.6	3.5	-3.4	-1.8	2.2	1.3	-1.7	0.6	0.3
Real estate activities Professional activities and scientific research;	-3.9	1.8	-0.5	0.1	0.6	-0.1	0.9	0.1	-0.1	0.3	1.2	1.1	1.8
administrative and ancillary activities General government; education;	-10.3	-3.0	5.4	2.8	-3.0	4.0	-3.9	4.3	1.7	0.3	1.3	0.9	1.5
healthcare and social services	0.9	-0.3	-0.7	1.0	-0.4	0.4	1.3	0.8	0.0	0.2	-0.2	0.0	0.0
Culture, sport and entertainment; other activity; activities of households as employers; non-identified activities of households producing goods and services for own use; activities of extraterritorial organisations and bodies	0.9	-4.3	-0.6	-11.5	3.5	0.3	3.4	5.6	-6.8	0.0	0.1	-0.6	0.7
Gross value added, total for the economy	-0.4	0.1	-0.0	-0.4	0.5	0.3	0.8	0.9	0.1	0.4	0.1	0.3	0.6

Source: NSI.

Economic Activity

Exports and Imports of Goods and Services

In early 2015 nominal exports and imports significantly grew on a monthly basis against the corresponding months of 2014, partly due to one-off factors, which limited their growth in the beginning of 2014. According to non-seasonally adjusted GDP data real annual growth in exports of goods came to 13.5 per cent in the first quarter of 2015, while real imports of goods increased to 10 per cent. In the first quarter of 2015 cross-checking the changes in exports and imports of goods in nominal and real terms showed that the falls in global prices limited nominal growth of international trade flows in the context of significant real growth.

In the third and fourth quarters of 2015 nominal exports of goods are expected to increase on an annual basis against the background of enhanced external demand, with growth rates being lower than those in the first guarter of 2015. Both, imports of goods and domestic demand growth are projected to decelerate against the first guarter of 2015. In the third and fourth quarters of 2015 the trade balance deficit is projected to decline as a percentage of GDP against the same period of 2014. A lower trade deficit could be recorded in the event of a faster than expected increase in exports driven by growing external demand and new higher efficiency production capacities in the exportoriented sectors of manufacturing. A risk of an increase in the trade deficit vis-à-vis the forecast may evolve if lower than projected growth in goods and services exports is reported due to crisis escalation and demand contraction in Greece. The potential effect on the trade balance in case of a new escalation in the geopolitical conflict in Russia and Ukraine also increases uncertainty.

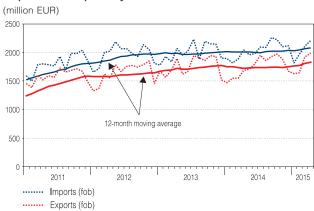
According to the balance of payments data for the January-April 2015 period only exports rose in nominal terms and imports decreased on an annual basis in the services trade. In the first quarter of 2015 real growth of exports and imports of services came to 23.9 and 14.1 per cent year on year according to national accounts data. A comparison of real and nominal exports and imports of services suggests that the price increase in imports and exports of services contributed to their nominal growth.

Net Exports of Commodity Groups By Use, January–March 2015

	Balance, million EUR	Change*, million EUR	Export growth** per cent	Import growth** per cent
Consumer goods	133.2	-65.5	3.8	10.0
Raw materials	-95.1	137.4	16.5	8.7
Investment goods	-423.0	-45.2	18.4	16.6
Energy resources	-403.3	277.0	11.4	-18.9
Total	-807.9	305.6	12.8	5.3

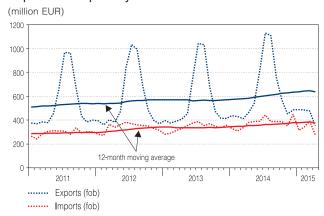
^{*} The change in balance on the same period of previous year.

Export and Import Dynamics



Source: BNB.

Export and Import Dynamics in Services



Source: BNB.

^{**} Growth of exports and imports for the period (on an annual basis).

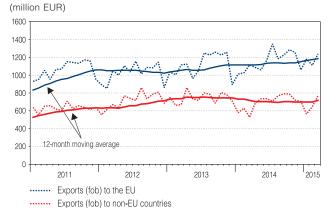
In the third and fourth quarters of 2015 real exports and imports of services are expected to rise, with growth rates of exports of services moderating against the rates recorded in the first quarter of 2015. The risk of a slower growth rate in exports of services derives from a possible decline in the number of tourists from Greece and Russia if the economic situation in both countries deteriorates.

In the first quarter of 2015 exports to EU Member States increased by 12.0 per cent on an annual basis in line with the improved EU economic activity. Exports of machines⁴⁰ contributed mostly to nominal growth in export of goods to the EU, with exports to Germany and Italy increasing most significantly by geographical breakdown. In the first quarter of 2015 exports to non-EU countries rose by 14.2 per cent on an annual basis, mainly due to the increased exports to Turkey. Machines and animal and plant products⁴¹ contributed mostly to growth of exports by commodity group to non-EU countries. The share of exports of goods to non-EU countries increased slightly at the expense of that to EU Member States.

In the first quarter of 2015 nominal exports of all commodity groups, excluding textile products, 42 grew year on year, with exports of machines having the most significant positive contribution.

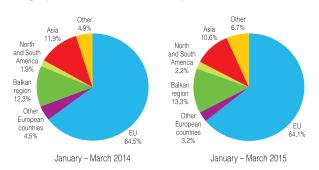
The first quarter of 2015 saw a strong annual increase in exports of oil products, 43 after the reported year-on-year decline in nominal exports of the group in 2014 due to international oil price falls and one-off factors. 44 The increase in exports in the group was mainly due to exported volumes, while international prices

Dynamics of Exports to the EU and non-EU Countries



Source: BNB

Geographical Distribution of Exports



Source: BNB.

Exports by Commodity Group, January–March 2015

	million EUR	Change* (million EUR)	Growth** (per cent)	Contribution** (percentage points)
Wood products, paper, ceramics and glass	286.5	26.1	10.0	0.5
Machines, vehicles, appliances, instruments and weapons	1326.5	229.2	20.9	4.7
Mineral products and fuels	689.1	89.9	15.0	1.8
Base metals and related products	985.9	68.4	7.5	1.4
Animal and plant products, food, drinks and tobacco	836.8	158.3	23.3	3.3
Textiles, leather, clothing, footwear and other consumer goods	724.5	-8.3	-1.1	-0.2
Chemical products, plastics and rubber	639.9	57.8	9.9	1.2
Total exports	5489.2	621.5	12.8	

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

Source: BNB.

⁴⁰ In this chapter it should read the machines, vehicles, appliances, instruments and weapons group under the Combined Nomenclature.

⁴¹ In this chapter it should read the animal and plant products, foods, drinks and tobacco group under the Combined Nomenclature.

⁴² In this chapter it should read the textiles, leather, clothing, footwear and other consumer goods group under the Combined Nomenclature.

⁴³ In this chapter it should read the mineral products and fuels group under the Combined Nomenclature.

⁴⁴ For further details, see the press release (http://www.neftochim.bg/en/press-center/press-releases/official-opening-ceremony-of-the-new-heavy-residue-processing-complex. html) of 20 May 2015 on LUKOIL Neftochim Burgas AD's website about the official opening of the new Heavy Residue Process Complex. The production and corresponding exports of petroleum products were reduced in 2014 due to the construction of the complex.

 $^{^{\}star\star}$ Growth/contribution to total export growth over the period on an annual basis.

limited nominal export growth.⁴⁵ In the third and fourth quarters of 2015 exports in the group are expected to keep increasing year on year as the new higher efficiency production capacities⁴⁶ presuppose export growth. Over the projected horizon petroleum product prices in US dollars are expected to remain below their levels in the third and fourth quarters of 2014 limiting nominal growth of exports in the group.

The upward trend in exported machines of the recent years continued in the beginning of 2015. In the first quarter of 2015 machines exports had the largest positive contribution to growth of exported goods both to EU countries and the rest of the world. In 2015 the dynamics of the group was determined mainly by the increase in exported quantities. The Steady growth of group's exports is expected to be sustained in the third and fourth quarters of 2015 due to increasing external demand.

In the first guarter of 2015 exports of base metals⁴⁸ increased entirely at the expense of higher exports to EU countries on an annual basis. This increase was mainly due to the exported copper quantities⁴⁹ compared to the same period of 2014, with prices of exported metals positively contributing to nominal growth of group's exports. Growth of exported quantities may be explained with completed renovation of production capacities in the sector. In the third and fourth guarters of 2015 nominal exports in the group are expected to further grow year on year mainly due to the increased volumes. At the same time metal prices in euro are expected to decrease on an annual basis, limiting nominal growth of exports in the group. A favourable effect on nominal growth of exports in the group can be expected, if the upward trend in the copper price in euro observed since the

⁴⁵ According to the Balance of Payments of Bulgaria, April 2015, p. 52, and using the quarterly export deflators of the mineral fuels, oils and related products group under SITC for the first quarter of 2015.

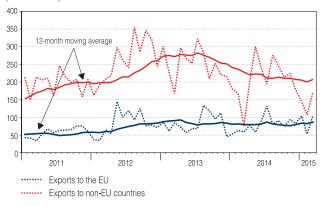
⁴⁷ The quarterly export deflators for the machines, equipment and vehicles group under SITC were used to estimate the price effect in the first quarter of 2015.

⁴⁸ In this chapter it should read the base metals and their products group under the Combined Nomenclature.

⁴⁹ According to the Balance of Payments of Bulgaria, April 2015, p. 52, for the non-ferrous metals subgroup using the quarterly export deflators for the precious metals and other non-ferrous metals group under SITC in the first quarter of 2015.

Exports of Mineral Products and Fuels

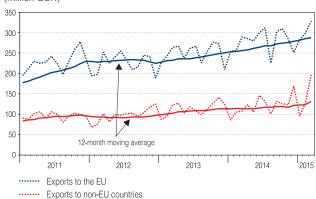
(million EUR)



Source: BNB.

Exports of Machines, Vehicles, Appliances, Instruments and Weapons

(million EUR)



Source: BNB.

Exports of Base Metals and Related Products

Source: BNB.

..... Exports to non-EU countries

⁴⁶ See footnote 44.

beginning of 2015 is sustained, as copper is an important contributor to exports of the group.

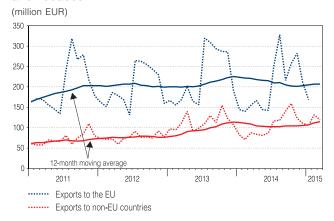
Exports of animal and plant products exhibited an annual increase in the first quarter of 2015 which was attributable to the larger exports of cereals and oil seeds and fruit mainly to non-EU countries. In the first quarter of 2015 nominal growth of exports in the group was driven by the increased export quantities, while the falling international goods prices in this group limited nominal growth of exports in the group. Our expectations for the third and fourth quarters of 2015 point to a rise in international food prices in euro, which will support nominal exports in the group.

In the first quarter of 2015 exports of chemicals⁵¹ both to EU countries and the rest of the world increased on an annual basis. Higher physical volumes had the major positive contribution to exports of the group, with prices remaining almost unchanged.⁵² Over the projected horizon the group's exports are expected to continue increasing at rates close to current ones.

According to balance of payments data, for the January-April 2015 period exports of services rose by 3.3 per cent year on year, with exports of technical trade-related services and consultancy services having the main positive contribution. Between January and April 2015 earnings from tourism increased to 4.7 per cent on an annual basis, with NSI data showing growth in foreigners visiting Bulgaria against the corresponding period of 2014. The increase was mainly attributable to the increase in the number of visits from Turkey, Macedonia and Romania, while the number of visits from the EU remained almost unchanged. Concurrently, visits from Greece and Russia fell significantly, which may be explained by the worsening economic situation in these countries.

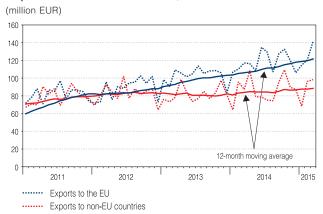
In the first quarter of 2015 nominal imports of goods (cif) registered a 5.3 per cent increase

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



Source: BNB.

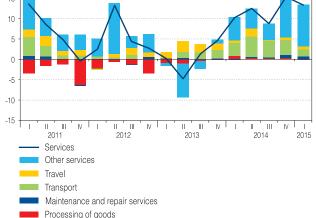
Exports of Chemical Products, Plastics and Rubber



Source: BNB

Annual Changes in Services Exports and Contributions by Sub-component

(per cent; percentage points)



Source: BNB

Economic Activity

51

⁵⁰ The quarterly export deflators for the cereals and mill products and oil seeds and fruit subgroups under SITC were used to estimate the price effect in the first quarter of 2015.

⁵¹ The chemical products, plastics and rubber under the Combined Nomenclature.

⁵² The quarterly export deflators for the chemicals and chemical products group under SITC were used to estimate the price effect in the first quarter of 2015.

on the corresponding period of the previous year. According to NSI data on price indices of imports it may be concluded that this growth was attributable to the increase in imported physical volumes. Investment goods contributed most significantly and raw materials to a lesser extent to nominal growth of goods imports by use. The increased imports of these goods in the beginning of 2015 may be explained by investment growth in fixed capital and the substantial increase in exports of goods over the review period.

In the first quarter of 2015 imports of goods from EU Member States increased by 6.8 per cent year on year, with imports from Germany having the strongest positive contribution. Imports from non-EU countries grew by 3.7 per cent on an annual basis over the same period, with imports from China increasing most significantly. Over the review period the share of imports from the EU reached 51.8 per cent.

The downward trend of nominal imports in the energy resources persisted in the first quarter of 2015. This was mainly due to the declining international prices of imported energy resources⁵³ year on year. In the third and fourth quarters of 2015 the oil price in US dollars is expected to slightly increase on quarterly basis, albeit staying lower compared to the corresponding period of 2014. This will continue to dampen the nominal change in imports of the group.

In the first quarter of 2015 imports of raw materials group increased. The assessment of price changes suggests that growth in nominal imports of the group is mainly due to higher imported quantities, while the decrease in international prices of these goods limited nominal growth of the group. The projected horizon for the reviewed period. Over the projected horizon, the growth rate of the group is expected to moderate due to a deceleration in domestic demand growth.

Imports of Commodity Groups By Use, January–March 2015

	million EUR	Change* (million EUR)	Growth** (per cent)	Contribution** (percentage points)
Consumer goods	1291.2	117.1	10.0	2.0
Raw materials	2444.0	194.7	8.7	3.3
Investment goods	1580.8	225.0	16.6	3.8
Energy resources	951.7	-221.1	-18.9	-3.7
Imports, total (cif)	6297.1	315.9	5.3	

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

Source: BNB.

Imports of Energy Resources

(million EUR)



Source: BNB.

Imports of Raw Materials

(million EUR)

950

850

750

650

450

12-month moving average

250

50

2011

2012

2013

2014

2015

Source: BNB

⁵³ According to the Balance of Payments of Bulgaria, April 2015, p. 52, and using the quarterly import deflators of the mineral fuels, oils and related products group under SITC for the first quarter of 2015.

⁵⁴ According to the Balance of Payments of Bulgaria, April 2015, p. 52, and the quarterly import deflators of the groups of food and live animals, inedible (crude) materials (excluding fuels), chemicals and chemical products and manufactured goods classified chiefly by materials under SITC for the first quarter of 2015.

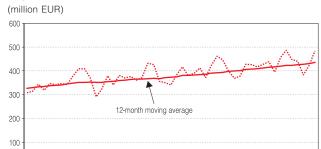
^{**} Growth/contribution to total import growth over the period on an annual basis.

In the first three months of 2015 imports of consumer goods rose year on year, with food, drinks and tobacco, and pharmaceuticals and cosmetics groups having the largest contribution. Dynamics of imports in the group corresponded to increased consumption in Bulgaria. In the third and fourth quarters of 2015 imports of the group are expected to grow at similar rates impacted by private consumption dynamics, which is projected to remain close to that in the first quarter of the year.

For a period of two years growth of imported investment goods continued to have the most significant contribution to total import growth. In the first guarter of 2015 group's nominal growth was mainly driven by higher imported physical volumes, and prices registered a slight increase on an annual basis.55 Growth rates of group's imports are projected to be sustained in the third and fourth quarters of 2015, with the expected moderate increase of private investment in Bulgaria contributing to this effect.

According to the balance of payments data for the January-April 2015 period imports of services fell down year on year. This decline is concentrated in imports of processing and construction services. Concurrently, in the first four months of 2015 imports of transport services and expenditure of Bulgarians travelling abroad rose by nearly 13 per cent year on year. According to NSI data Bulgarians' visits abroad increased on an annual basis. The number of visits to Greece increased most significantly, while that to Turkey exhibited the strongest decline.

Imports of Consumer Goods



2013

2014

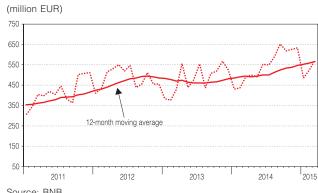
2015

Source: BNB

2011

Imports of Investment Goods

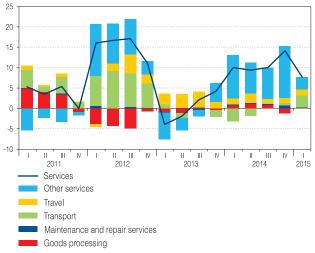
2012



Source: BNB.

Annual Changes in Imports of Services and Contributions by Sub-component

(per cent; percentage points)



Source: BNB

Economic Activity

⁵⁵ The quarterly import deflators for the machines, equipment and vehicles group under SITC were used to estimate the price effect in the first guarter of 2015.

4. Inflation

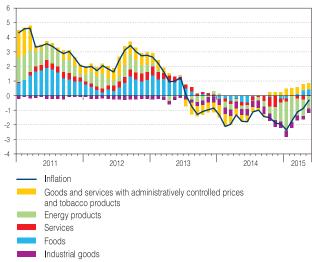
The annual inflation, which is negative since mid-2013, came to -0.3 per cent in May 2015 (-0.2 per cent in December 2014). The fall in transport fuel prices affected by falling international oil prices had the highest negative contribution to the dynamics of the overall consumer price index, while the increase in unprocessed food prices between April and May 2015, the depreciation of the euro, and correspondingly the lev against the currencies of Bulgaria's major trading partners, and the administrative price growth had a positive contribution to the overall inflation.

Deflation is expected to continue to slow down in the third and fourth quarters of 2015 and at the end of the year consumer prices are anticipated to increase on an annual basis. An increase in international food and oil prices in euro will have a major contribution to this effect.

The annual inflation, which is negative since mid-2013, decreased to -0.3 per cent as of May 2015 (on -0.2 per cent as of December 2014).56 Prices of imported goods contributed negatively to the overall price index dynamics. According to the national account data, the import deflator of goods posted a year-on-year decline to -3.0 per cent in the first guarter of 2015. Over the first five months of 2015 the decline in international oil prices in euro and the pass-through to transport fuel prices in Bulgaria contributed to the negative inflation. The depreciation of the euro and correspondingly the lev against the currencies of Bulgaria's major trading partners was a prerequisite for limiting the decline in consumer prices of food and durable goods, part of which imported and invoiced in currencies other than the euro.⁵⁷ Between January and May 2015 internal factors had mainly pro-inflationary effect, reflecting the increase in producer prices of fruit and vegetables, the positive annual growth rate of administratively controlled prices, further improvement in consumer demand, the expansion in unit labour costs and the exhausted effect of one-off price declines in some services since the beginning of 2014.⁵⁸ Administratively

Annual Inflation and Contribution of Major Commodity and Services Groups to It

(per cent, percentage points)



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

 $^{^{\}rm 56}\,\rm The$ analysis in this section is based on NSI data on HICP.

⁵⁷ According to Eurostat data in 2014, 46 per cent of the imported industrial goods from third countries (groups from 5 to 8 of the SITC) were invoiced in currency other than the euro, while the share of unprocessed goods was 43 per cent (groups from 0 to 4 of the SITC, excluding oil and oil products).

⁵⁸ For further details, see Inflation Dynamics in Bulgaria and EU Member States between August 2013 and September 2014, Economic Review, 3/2014.

controlled prices contributed positively to the overall inflation rate, mostly due to the base effect related to the increase in regulated price of electricity for households by 1.7 per cent in July and 10.1 per cent in October 2014. As of April 2015 the regulated prices of heating and natural gas fell down, having a relatively small contribution to overall price dynamics due to declining prices of some alternative fuels.

Between January and May 2015 the gradual decrease started in the second quarter of 2014 in the number of commodity and service groups with year-on-year decreasing prices was sustained. By end-May 2015 the diffusion index of these groups was 36.6 per cent against 40.9 per cent at the end of the prior year. ⁵⁹ At the same time, the number of goods and services with increased prices of more than 1 per cent began to grow.

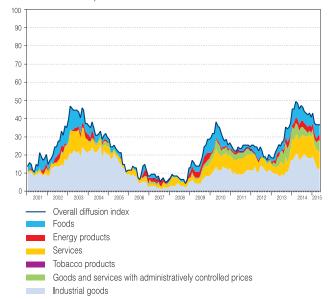
In the first five months of 2015 domestic producer prices, affecting end-use consumer prices, continued to decline on an annual basis, though at a slower pace compared to end-2014. In May 2015 a year-on-year decline of 0.4 per cent was recorded in producer prices (on 0.9 per cent decrease at end-2014), reflecting the negative contribution of prices in manufacturing. This was mainly due to the decrease in prices for producing refined oil products⁶⁰ and to a lesser extent to prices for producing food products.⁶¹ As of May 2015 mining and quarrying, and the electricity production subsector⁶² had a positive contribution to the annual rate of change in producer prices. The higher prices of electricity production reflected the administrative increase in prices of electricity in 2014.

In the first five months of 2015 a decline in producer prices of energy products and to a lesser extend in consumer products was reported by major commodity group⁶³, with food having the largest weight. This signals that the downward trend in oil prices, import prices of food and

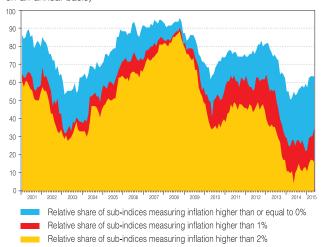
⁵⁹ The diffusion index is calculated as a share of declining HICP sub-indices on an annual basis. Based on the four-digit COICOP index (classification of individual consumption by purpose).

Diffusion Indices of Major Commodity and Service Groups

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



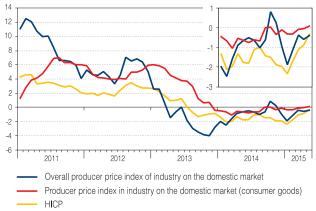
(per cent, relative shares of increasing HICP sub-indices on an annual basis)



Sources: NSI, BNB calculations.

Rate of Change in Manufacturing CPI and HICP

(per cent, on an annual basis)



Source: NSI.

55 Inflation

⁶⁰ Production of coke and refined petroleum products.

 $^{^{\}rm 61}$ Production of food, drinks and tobacco products.

⁶² Production and distribution of electricity, heating and gas.

⁶³ These are intermediate consumption goods, energy products, investment products, durable consumer goods and non-durable consumer goods.

domestic agricultural prices will continue to put downward pressure on end-use consumer prices over the following months. Concurrently, prices of intermediate consumption goods, forming firms' cost of production, showed annual growth in the March-May 2015 period, which may lead to an increase in prices. In the first quarter of 2015 the annual gross operating surplus suggests that firms currently carry over only partially higher cost of production on end-use consumer prices.⁶⁴

The degree of production cost pass-through to end-use consumer prices in the following quarters will be limited due to the projected slow recovery of household consumption and it will depend on firms' perceptions of the economic environment. According to NSI business surveys, in the January-May 2015 period the role of demand as a factor limiting companies' activity weakened, but the recovery of demand for products of individual economic sectors remained uneven. According to the NSI business situation survey, as of May 2015 most managers in industry, retail trade and services expect that selling prices will remain unchanged in the following three months. This policy probably reflects the uncertainty of firms about the economic environment, competition in the industry and weak demand despite the reported business climate improvement in all sectors in early 2015.

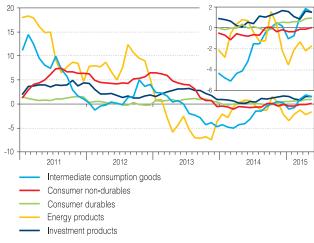
In the first five months of 2015 the negative core inflation declined to -0.7 per cent as of May 2015 (against -1.6 per cent in December 2014). Services and non-food goods contributed to this.

In May non-food inflation was negative at -1.5 per cent (-2.2 per cent by end-2014) and continued to be driven mainly by the decrease in prices of durables. Consumer demand recovery and the depreciation of the euro against the currencies of Bulgaria's major trading partners were factors behind the deflation fall in this group. Since the beginning of the year a continuing fall in automobile, television and computer equipment prices was observed. As of May non-durable prices went up slightly year on year, driven by clothing and footwear prices.

In the January-May 2015 period a downward trend in the negative contribution of the services

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

(per cent)



Source: NSI.

Share of Firms Pointing to Insufficient Demand as a Factor Limiting Their Activity

(per cent)



Sources: NSI, BNB calculations.

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

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



Source: NSI.

⁶⁴ See Chapter 3.

group to the overall inflation rate occurred. In May the change in the prices of this group amounted to -0.2 per cent (against -1.2 per cent at end-2014). Lower deflation reflected mainly the base effects of one-off price declines in medical, dental⁶⁵ and telecommunication services, and the appreciation of package holidays, accommodation and cultural recreation services.

Between January and May 2015 energy product prices decreased strongly and inflation was strongly negative impacted by international oil price declines at end-2014 and early 2015. ⁶⁶ As of May transport fuel prices decreased by 10 per cent on an annual basis and had the largest negative contribution to overall inflation (-0.83 percentage points).

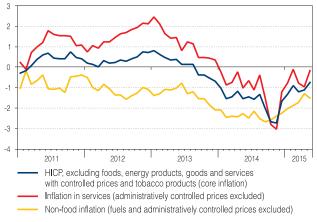
Since the beginning of 2015 inflation in administratively controlled prices remained positive, reaching 2.1 per cent in May. The increases in regulated price of electricity for households by 1.7 per cent and 10.1 per cent in July and October 2014 were the major factor behind the posive contribution of this group. The lower price at which Bulgargas purchased natural gas was the reason for a decrease in regulated heating and natural gas prices by the Energy and Water Regulatory Commission (EWRC) since April 2015. The contribution of these administrative price declines to overall HICP dynamics was relatively small.

In May 2015 the inflation in the group of food accounted for 1.7 per cent (-0.7 per cent at the end of 2014), reflecting growth in unprocessed food prices and to a lesser extent in processed foods. As of February the appreciation of unprocessed food prices was driven mainly by fruit and vegetables groups due to the weak supply and adverse weather conditions in the first quarter of the year. The 2014 downward trend in prices of meat and meat products was sustained on an annual basis in the context of a continuous decrease in import prices, animal breeding

⁶⁵ Since January 2014 fees paid to GPs, specialists and dentists having concluded contracts with the National Health Insurance were administratively reduced to 28.6 per cent.

Core Inflation

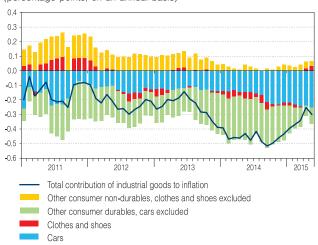
(per cent, on an annual basis)



Sources: NSI, BNB calculations.

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

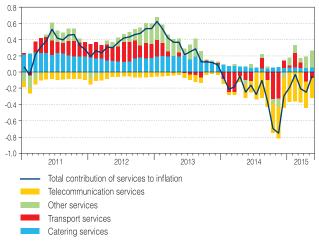
(percentage points, on an annual basis)



Sources: NSI, BNB calculations.

Contribution of Services and Major Services Subgroups to Overall Inflation

(percentage points, on an annual basis)



Sources: NSI, BNB calculations.

57 Inflation

⁶⁶ In the group of energy products (excluding the administratively controlled prices of energy, heating and central gas supply) transport fuels occupy the largest relative share; hence, their price developments determine the price dynamics of energy products in general.

⁶⁷ For more details, see Fruit and Vegetables Situational Perspective Analysis, Ministry of Agriculture and Food, June 2015.

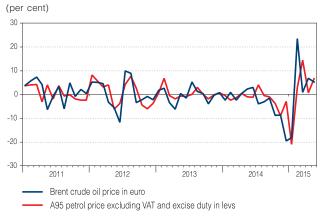
costs⁶⁸ and animal husbandry producer prices. Since the beginning of the year processed food prices have been characterized by subdued price dynamics under the falling import prices of food⁶⁹ and their quick spillover to producer prices through the supply chain.

Inflation expectations for the third and fourth quarters of 2015 and related uncertainty are presented in the fan chart on the annual rate of change in the HICP. 70 The projection is based on the assumption for international food prices growth in the third and fourth guarters of 2015. The petroleum price (in euro) is expected to increase in the following quarters, but annual rates of change will remain negative.

In the third guarter of 2015 inflation is projected to range from -1.0 per cent to -0.1 per cent and in the fourth quarter of 2015 between -0.8 per cent and 0.4 per cent.⁷¹ The slower annual rate of decline in consumer price index in these quarters will reflect mainly the projected lower quarterly growth of international oil prices in euro until the end of the year.

Major risks to the outlook relate largely to the possibility that oil prices will not follow the expected upward trend, thereby the inflation will be lower than the projected one. In the third quarter of 2015 an additional depreciation in some goods and services may be expected as a result of EWRC cut in the price of the natural gas. Concurrently, a possible increase in the regulated price of electricity for households and/ or firms in the following months appears to be a prerequisite for a faster than expected decrease in deflation.

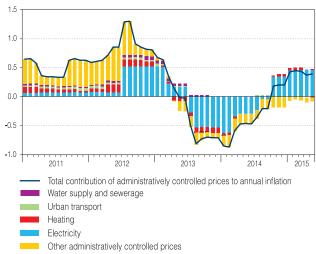
Monthly Rate of Change in the Prices of Brent Crude Oil and A95 Petrol



Sources: ECB, NSI, BNB calculations.

Contribution of Major Sub-groups of Administratively Controlled Prices to Overall Inflation

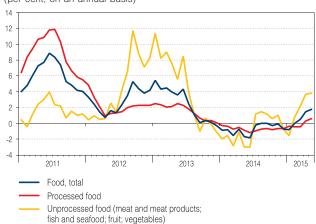
(percentage points)



Sources: NSI, BNB calculations.

Rate of Change of Food Price Index

(per cent, on an annual basis)



⁶⁸ NSI data on goods and services prices of current consumption in agriculture and electricity, fuels and other, and feed are used.

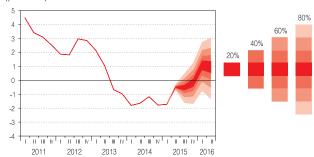
⁶⁹ Data on import deflators under the Standard International Trade Classification (SITC).

⁷⁰ For further details, see the Measurement and Presentation of Uncertainty in Forecasting Economic Indicators box, Economic Review, 1/2012.

⁷¹ Thus presented ranges of the expected annual rate of inflation correspond to 40 per cent probability distribution according to our expert forecast of the probability distribution for the relevant quarter.

Fan Chart of the Expected Annual Inflation Rate

(per cent)



Note: The fan chart shows the expert views of the forecasters on the uncertainty around the projected value based on probability distribution. The middle band of the chart, depicted in the darkest colour, includes the central projection and the probability distribution shows 20 per cent probability for the actual value to fall in this band in each of the quarters. If neighbouring bands (in the same brighter colour) are added to the middle band, there would be 40 per cent coverage of the probability mass. Thus, by adding each same colour couple of bands, the probability for the value to fall there would be increased by 20 percentage points to reach 80 per cent. The probability for the value to remain outside the coloured part of the chart is 20 per cent based on the distribution chosen.

Source: BNB.

Rate of Change in Prices of Major Commodity and Services Groups and Their Contribution to Inflation

Inflation (per cent)	as of M (December	ccumulated ay 2014 2013 = 100)	as of M (December	ecumulated ay 2015 2014 = 100)	as of M (May 20	flation rate ay 2015 14 = 100)
	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
Foods	-0.1	-0.02	2.4	0.62	1.7	0.45
Processed food	-0.8	-0.14	0.4	0.07	0.6	0.10
Unprocessed food	1.4	0.13	6.1	0.54	3.8	0.34
Services	-2.2	-0.55	-1.2	-0.31	-0.2	-0.05
Catering services	0.4	0.02	0.5	0.03	1.1	0.06
Transport services	-2.9	-0.10	-7.1	-0.27	-2.1	-0.07
Telecommunication services	-2.7	-0.13	0.1	0.00	-5.0	-0.24
Other services	-3.1	-0.34	-0.7	-0.08	1.9	0.20
Energy products	-5.0	-0.46	0.0	0.00	-9.4	-0.84
Transport fuels	-5.2	-0.45	0.1	0.01	-10.0	-0.83
Industrial goods	-1.0	-0.20	-0.3	-0.06	-1.5	-0.30
Goods and services with administratively controlled prices*	-1.4	-0.22	-0.3	-0.05	2.3	0.39
Tobacco products	0.4	0.01	0.2	0.01	0.8	0.03

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

Sources: NSI, BNB calculations.

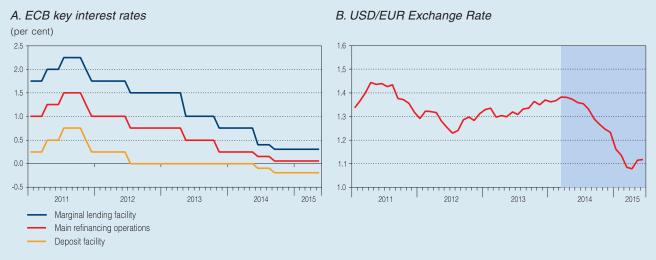
59 Inflation

Research Topics

Potential Effects of the USD/EUR Exchange Rate Change on the Bulgarian Economy

From the beginning of the second quarter of 2014 the euro depreciated dramatically against the US dollar, a result of the opposite signals about economic developments in the euro area and the USA and divergent monetary policies pursued in both regions. Stronger growth of the US economic activity created expectations for an increase in interest rates, while the slow economic activity and low inflation in the euro area entailed the pursuit of an expansionary monetary policy by the ECB cutting the interest rates on the main refinancing operations and on deposit and lending facilities in several steps (in June and September 2014 and in January 2015). As a result in the January-May 2015 period the euro depreciated against the US dollar by 18.8 per cent on an annual basis. Since Bulgaria is not a member of the euro area, the ECB monetary policy has no direct effect on Bulgaria's monetary conditions and the banking system. Concurrently, the currency board, the Bulgarian monetary system using the euro as a reserve currency, and the strong linkage of the Bulgarian economy with the euro area economy is a prerequisite for a partial ECB monetary policy transmission to the Bulgarian economy. The present analysis studies the major channels through which the euro depreciation against the US dollar may influence the Bulgarian economy. The effects on Bulgaria's foreign trade and inflation are studied in details and an attempt of a quantitative assessment is made.

Chart 1. The ECB Monetary Policy and USD/EUR Exchange Rate Movements



Source: ECB.

In accordance with the theory the USD/EUR exchange rate change may have an effect on the Bulgarian economy through several channels. The main channel through which the exchange rate depreciation would have an effect is on competitiveness due to a change in the real effective exchange rate assuming that price developments in Bulgaria and in Bulgaria's major trading partners are similar. The appreciation of the US dollar has a direct effect on the nominal value of imports and exports. From the point of view of the Bulgarian economy the appreciation of the US dollar leads to an appreciation of the price of imports (in US dollars), and to a depreciation in the price of exports for the countries to which Bulgarian firms export in US dollars. Furthermore, depending on the degree to which the euro depreciation contributes to the decline in the real exchange rate of the Bulgarian lev, it may be expected that households will substitute more expensive imported goods by domestic goods. Thus, the euro depreciation would have an effect on the volume of net exports. On the other hand, depending on the degree of the past-through of higher

import prices in Bulgaria through the supply chain, end-user prices may increase and/or firms' profits decrease. An additional channel through which the depreciation of the euro against the US dollar may have an effect on the economy is indebtedness: if the share of USD-denominated claims on corporations and households is large, debt burden will increase. This analysis encompasses only the effects of the euro depreciation which are considered to have the strongest effect on the Bulgarian economy.

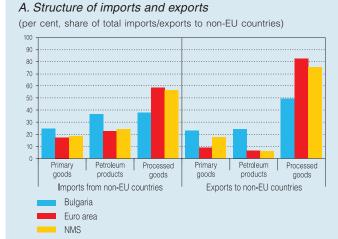
Effects on External Trade

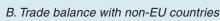
The classical economics suggests that the depreciation of the euro against the US dollar and other major currencies will make exports of euro area countries, and Bulgaria accordingly, more competitive. Concurrently, the price of imports will appreciate which will stimulate consumption of goods and services produced at home. Materialisation of this assumption will depend on the currency structure of export and import transactions of the respective country. Eurostat publishes in two years information about the currency structure of import and export transactions of EU Member States in their trade with non-EU countries. Commodity groups under the Standard International Trade Classification are aggregated in three major groups: primary goods, processed goods and petroleum products.²

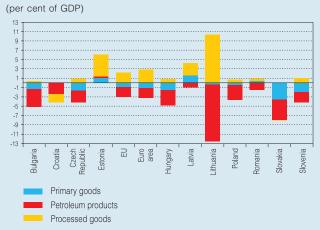
Due to a lack of latest data on the currency composition of foreign trade among EU Member States, we suppose that trade transactions of Bulgarian exporters and importers with EU partners are settled in euro. This means that Bulgaria's trade with non-EU countries is the major channel through which the euro depreciation may affect Bulgaria's foreign trade. Correspondingly, the degree to which the euro depreciation will have an effect on a particular EU Member State depends on the significance of this state's trade with non-EU countries.

Given the small size and openness of the economy and the structure of Bulgarian exports/imports the share of trade with third countries is relatively higher than the average share of the EU, the euro area and New Member States (NMS)³ with similar historical and economic development.

Chart 2. Foreign Trade of Bulgaria and the EU with Non-EU Countries and the Trade Balance of the EU and NMS with Non-EU Countries (Average for the 2010–2014 Period)







Source: Eurostat, own calculations

Research Topics

¹ This factor is considered to be insignificant for Bulgaria given the small share of claims on the internal and external market denominated in currencies other than levs and euro.

² The group of primary goods includes commodity groups from 0 to 4 of the Standard International Trade Classification with the exception of group 33; the group of processed goods includes commodity groups from 5 to 8 of the Standard International Trade Classification; the group of petroleum products includes group 33 of the Standard International Trade Classification.

³ New Member States mean central and eastern European states which acceded the EU after 2004: the Czech Republic Estonia, Croatia, Latvia Lithuania, Hungary, Poland, Romania, Slovania, Slovakia.

The share of imported petroleum products and primary goods from non-EU countries is larger than the average levels for the EU, euro area and NMS similar to Bulgaria. Major Bulgaria's exports to non-EU countries include processed goods. Concurrently, the share of exported petroleum products and primary goods in total exports to non-EU countries is higher in Bulgaria than in other similar EU economies.

It should be noted that on average most EU countries were net importers of goods from non-EU countries in the 2010–2014 period. Bulgaria ranked fifth among Member States by trade deficit with non-EU countries as a percentage of GDP. A similar common feature of reviewed countries is that the deficit in the trade with non-EU countries was mainly due to imported petroleum products, and to a lesser extent to primary goods, while most EU Member States were net exporters of processed goods.

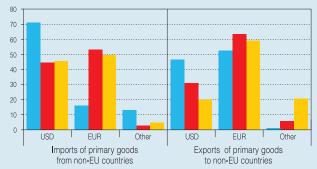
Eurostat data on the currency structure of trade payments with non-EU countries suggest that Bulgaria's trade transactions with third countries are most often settled in US dollars, with their share exceeding significantly the average for the euro area and NMS. In addition, the share of USD payments in imports is higher than that in exports. With this in mind and the fact that Bulgaria is a net importer of goods from non-EU Member States (Bulgaria's trade deficit with non-EU countries amounted to about 5 per cent of GDP), the appreciation of the US dollar against the euro is expected to worsen the terms of trade in Bulgaria if raw material prices remain unchanged. It is worth noting that historically a feedback between prices in US dollars and USD exchange rate *visà-vis* other major currencies is observed in primary goods (metals and food) and petroleum products. Consequently, the negative effect of the USD appreciation on the terms of trade is partially offset by the response of US dollar prices to the downward USD exchange rate dynamics.

Chart 3. Bulgaria's Foreign Trade with Non-EU Countries (Average for the 2010–2014 Period)

All goods, total (per cent, share of payments in corresponding currency) 70 60 50 40 30 20 10 USD EUR Other USD EUR Other Exports to non-EU countries, total

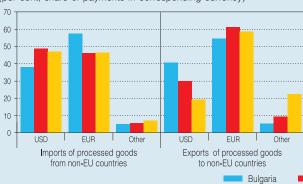
Primary goods

(per cent, share of payments in corresponding currency)



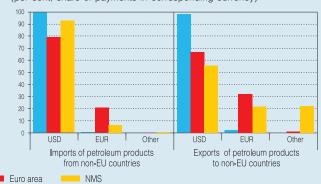
Processed goods

(per cent, share of payments in corresponding currency)



Petroleum products

(per cent, share of payments in corresponding currency)



Note: The scale shows the share (per cent) of payments in the respective currency in total import/export payments of a particular commodity group in trade with non-EU countries. Eurostat data published on the currency composition of payments are available for 2010, 2012 and 2014 and the shares shown in the chart are averaged for the three surveys. The result of the NMS is obtained by averaging the shares of payments in the respective currencies of the countries from the group in the corresponding period.

Source: Eurostat, own calculations

Bulgaria imports primary goods mostly in US dollars and exports mostly in euro. The share of payments in US dollars in imports of primary goods from non-EU countries is significantly larger in Bulgaria than the average for the euro area and NMS. Imports of primary goods in Bulgaria is concentrated in several product groups, with imported natural gas accounting for the largest share followed by copper ore, coal and metal ores. These commodity groups comprise about 70 per cent of primary goods imported from non-EU countries. Primary goods exported to non-EU countries are paid mostly in euro but the share of payments in US dollars is higher than that in the EU and NMS. Similar to imports, exports of primary goods from Bulgaria to non-EU countries is concentrated in a small number of commodity groups, with wheat, tobacco, copper ore and electricity accounting for the largest share in the group in 2014. Taking into account that Bulgaria is net importer of primary goods and the share of payments in US dollars is higher in imports than that in exports, the appreciation of the US dollar against the euro is expected to worsen the terms of trade for Bulgaria in this commodity group.

As regards processed products, the currency composition of Bulgaria's import and export payments in extra-EU trade was nearly the same, with most of the trade denominated in euro. Processed product export payments from Bulgaria also show a higher share of the US dollar payments compared to the EU and NMS. Bulgaria's imports of processed goods from non-EU countries was broadly evenly distributed by commodity group, unlike exports where copper occupied the largest share (around 21 per cent in 2014) followed by pharmaceuticals and machines. The similar currency composition of import and export payments and the positive, though low, processed goods trade balance with non-EU countries indicate that the US dollar appreciation against the euro would have a similar effect on exports and imports. Thus, the terms of trade in processed goods are likely to stay comparatively unchanged for Bulgaria.

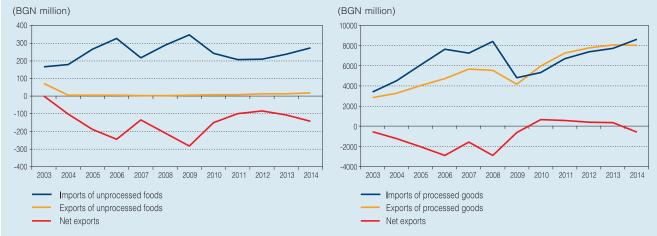
As for petroleum products, Bulgaria's trade is almost entirely in dollars, with their share in payments exceeding significantly that of the EU and NMS, especially in exports. Given the similar currency composition of petroleum product import and export payments, the terms of trade in Bulgaria are unlikely to worsen as a result of the stronger dollar against the euro. At the same time, the large trade deficit of Bulgaria in oil product trading with non-EU countries may lead to a deterioration in the nation's nominal trade balance.

Effects on the Real Economy and Inflation

The euro rate fluctuations affected price developments in Bulgaria through a number of channels. The first channel concerned imports which had a direct effect and reflected price increases in imported finished consumer goods. The second channel also referred to imports but it had an indirect effect of higher expenses on raw materials which raised production costs of firms and drove the rise in end-user prices. The third channel with an indirect effect is related to the positive influence of the weak euro on Bulgaria's net exports and income which might put some upward pressure on end-user prices.

A direct effect of the euro rate movements on end-user prices could be seen in foods and non-food products. In unprocessed foods, a component of HICP, Bulgaria is traditionally a net importer in trade with non-EU countries. This is a precondition for the pass-through of higher import prices to end-user prices. A similar effect may be expected in some non-food goods, as motor vehicles, computer, communication and office equipment.

Chart 4. Net Exports of Unprocessed Foods (Fruit and Vegetables, Meat, Fish) and Processed Goods in Trading with Third Countries



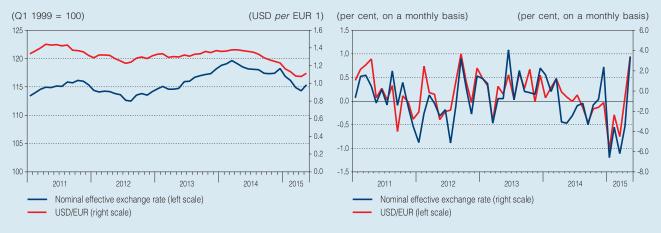
Note: The group of processed goods includes 5 to 8 commodity groups according to SITC.

Source: Eurostat, own calculations.

Effects for the Bulgarian economy are estimated below through the nominal effective exchange rate, rather than the USD/EUR rate. This allows for an assessment of the effect of euro exchange rate movements against the currencies of Bulgaria's major trading partners.

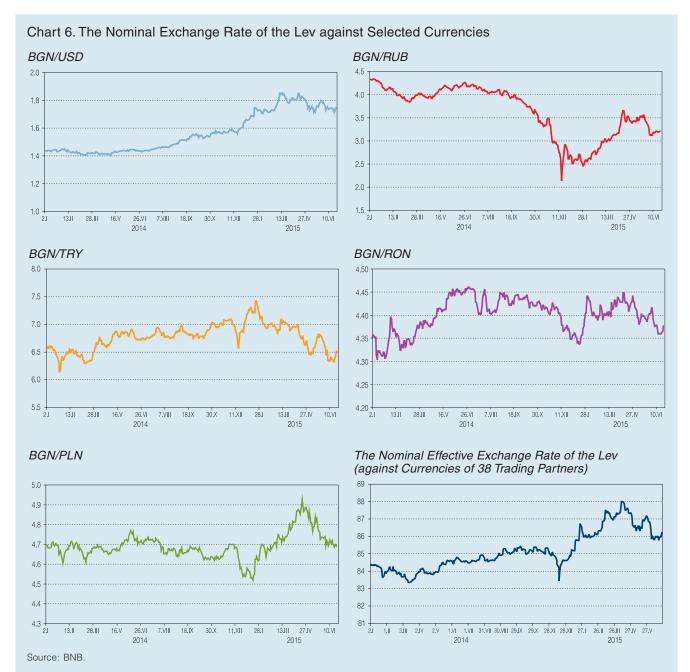
From the beginning of 2014 the nominal effective exchange rate of the lev against 38 major trading partners largely followed the USD/EUR exchange rate developments, particularly in the period between January and May 2015. Divergences may be seen in the periods of strong movements in these currencies' rates against the euro.

Chart 5. The Nominal Effective Exchange Rate of the Lev against the Currencies of 38 Major Trading Partners and the USD/EUR Exchange Rate



Source: ECB, own calculations.

Among Bulgaria's trading partners whose currencies depreciated against the euro in 2014 and early 2015, of note are Russia, Turkey, Romania and Poland having a stronger effect on the nominal effective exchange rate of the lev. The Russian rouble depreciated against the euro and US dollar due to the Ukraine crisis and subsequent sanctions of a number of countries on Russia, as well as the dramatic fall in oil prices and economic implications for the Russian economy.



From December 2014 the Turkish lira also depreciated against the dollar and euro due to concerns that the US Federal Reserve System would raise its reference interest rate which might lead to capital flights from developing countries as Turkey. The Turkish central bank cut the reference rate in February 2015, thus contributing to early 2015 trend of depreciating Turkish lira against the euro and the lev. Concurrently, interest rate cuts by central banks of Romania and Poland in 2014 and early 2015 resulted in a depreciation of the national currencies against the euro.

Reflecting the similar price processes in Bulgaria and its trading partners and competitors, the nominal and real exchange rates of the lev against 38 major trading partners' currencies have followed a similar pattern since early 2014. If the real exchange rate is considered as an indicator of competitiveness, the depreciation would have a positive effect on Bulgaria's competitive positions *vis-à-vis* other countries. It is essential to note, however, that the euro depreciation and hence the lev depreciation against the US dollar counteracted the fall in the price of petroleum whose imports are almost entirely invoiced in US dollars. In this context, the positive effects of oil price declines were somewhat neutralised by euro exchange rate movements *vis-à-vis* the US dollar.

The impact of the lev nominal effective rate changes on domestic supply-side prices are estimated quantitatively⁴ using the Hahn methodology (2003).⁵ The pass-through of the exchange rate is explicitly modelled by including indicators of import prices (imported goods deflator), producer prices and consumer prices. In addition, an economic activity indicator (real GDP) has also been included. The effects are estimated on the basis of impulse responses at a one percentage point decrease in the exchange rate.

Chart 7. Nominal and Real Effective Exchange Rates of the Lev against the Currencies of 38 Major Trading Partners



Source: ECB.

Chart 8. The Cumulative Response of Prices along the Distribution Chain at a One Per cent Depreciation of the Nominal Effective Exchange Rate of the Lev

(percentage points)



Source: ECB.

Results show that the response along the distribution chain is smallest for consumer prices and largest for import prices. If the nominal effective exchange rate decreases by 1 percentage point in a given quarter, consumer prices would increase by around 0.1 percentage point. This may be interpreted as an instantaneous elasticity of approximately 10 per cent in consumer prices *vis-à-vis* the exchange rate. It is clear that the more time passed since the shock, more effects are accumulated, and in almost a year, the cumulative effect on consumer prices is estimated at about 0.5 percentage points.

In analysing the effect of real exchange rate changes on real exports and imports of goods and services and on GDP, the Goldschein and Hahn theory has been followed (1985).⁶ Real imports and exports are modelled using indicators of external and internal demand, competitiveness (real effective exchange rate) and import prices. The effects are again estimated on the basis of impulse

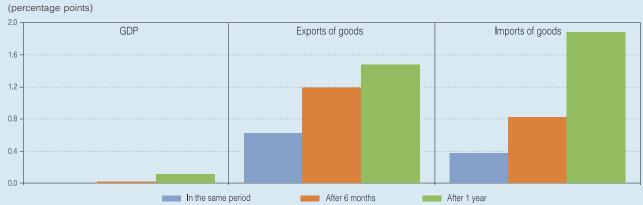
⁴ A vector autoregression model estimated using Bayesian methods for quarterly data and a Choleski decomposition for identification of the shocks are used.

⁵ Hahn, E., Pass-through of External Shocks to Euro Area Inflation, 2003, European Central Bank Working Paper No. 243: 14–23.

⁶ Goldstein, M., Khan, M., Income and Price Effects in Foreign Trade, 1985, Handbook of International Economics, Vol. 2, Chapter 20: 1041-1105.

responses at a one percentage point depreciation in the real exchange rate, *i. e.* a positive shock on competitiveness is observed.

Chart 9. The Cumulative Response of Real GDP, Exports and Imports at a One Per cent Depreciation of the Real Effective Exchange Rate of the Lev



Source: ECB.

The results suggest that in the period of the depreciation, goods exports respond by an increase of around 0.6 percentage points. Goods imports post growth since exported goods have a significant import component. After six months, the response of imports and exports is identical to that over the first period: exports rise cumulatively faster than imports. Subsequently, after a year, the effect on GDP becomes stronger by around 0.2 percentage points. This reflects the positive effect of net exports on income in Bulgaria and the corresponding increase in domestic demand. Hence, even after a year, goods imports increase cumulatively more significantly than goods exports since imports are stimulated by the expanded domestic demand.

Through various channels, the effects of the euro depreciation have both positive and negative implications for the Bulgarian economy. In terms of price and cost competitiveness, the depreciation of the real effective exchange rate of the lev against the currencies of Bulgaria's major trading partners would have positive implications for goods exports. At the same time, the euro depreciation is a factor fuelling domestic price increases along the supply chain. Deterioration of Bulgaria's terms of trade as a result of the currency structure of imports and exports with third countries would have a negative nominal effect on the trade balance, and balances on trade in primary goods and petroleum products would have been most affected. The estimation for the total economy shows that the positive effects of the euro depreciation against the US dollar are stronger than the negative ones.