

# **Economic Review**

4/2012



Bulgarian monetary policy regime seeks national currency stability with a view to price stability. The BNB quarterly *Economic Review* presents information and analysis of balance of payments dynamics, monetary and credit aggregates, their link with the development of the real economy, and their bearing on price stability. External environment is also analyzed since the Bulgarian economy is influenced by international economic fluctuations. This publication contains quantitative assessments of the development in major macroeconomic indicators in the short run: inflation, economic growth, monetary and credit aggregate dynamics and interest rates.

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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

CIF Cost, insurance, freight

CIS Commonwealth of Independent States

CZK Czech koruna

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 Reserv

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

PLN Polish zloty

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

Over the last months of 2012 the global composite PMI indicator continued to improve and the trend toward an increase in the global trade volume remained sustained throughout the year. Conjunctural indicator dynamics differed across regions. Economic indicators for China and the USA improved, while euro area economic indicators remained at low levels. The review period saw divergent global trade developments with the increase in its total volume determined by the exports of the USA, Middle East and Central and Eastern European countries, while the euro area foreign trade turnover retained its negative growth rates. Global economic activity is expected to continue to gradually recover in the first half of 2013, although euro area real GDP growth may report a slight decrease over the same period. As a result, external demand for Bulgarian exports will increase moderately, largely due to the positive developments in non-EU countries.

By end-2012 the price of crude oil retained the downward trend observed since the year start. In early 2013 world oil supply still exceeded demand and this trend is expected to be sustained over the first half year. In the fourth quarter of 2012 metal and food prices declined: a trend which is expected to remain sustained in metal prices, while food prices are likely to increase slightly as a result of higher global demand. If this projection materialises, Bulgaria's terms of trade will improve in the first two quarters of 2013.

Bulgarian economic activity in 2012 continued to be driven mainly by the international economic developments. The euro area recession was a factor behind the decline in external demand for Bulgarian goods and services from the EU, with exports growth rates declining first, and consequently production activity of firms and imports. Corporations continued to improve their efficiency, retaining conservative policy in the area of labour costs and spending on investment projects. It was reflected in reduced labour demand, a slight wage increase and low investment activity. Given the deterioration in economic environment and still low employment, household propensity to save grew further and the consumption was limited. As regards the government, fiscal consolidation policy was directed at curbing government consumption, while capital expenditure increased, supporting investment activity in Bulgaria.

In the first two quarters of 2013 economic growth is expected to increase slightly, if the economy is not hit by new negative external shocks. Export dynamics in real terms will reflect external demand growth, mostly from countries outside the EU. Domestic demand is expected to continue recovering, though at slow rates. The speed of consumer demand recovery will be limited by the low employment rates, moderate wage growth and decreased consumer confidence. Private investment recovery will be limited by the existing spare capacity, while government capital expenditures are expected to favourably affect investment in Bulgaria. The lack of clear prospects for euro area recovery leads to a high level of uncertainty about Bulgaria's economic development in the first half of 2013.

Domestic demand recovery since 2012, supported by foreign direct investment inflows, contributed to the increase in nominal imports. Concurrently, the uncertainty and unfavourable situation in the euro area subdued the rates of export growth. The worsening in the terms of trade (particularly pronounced in the fourth quarter of 2011 and the first nine months of 2012, though at lower rates) was another factor negatively affecting foreign trade. Following these trends, a temporary increase in the balance of payments trade deficit and current account deficit was observed in the first half of 2012. In the second half of the year euro area economic developments resulted in a gradual deterioration of Bulgaria's economic situation, which reflected in weaker domestic demand and lower import growth rates. This in turn led to a decrease of the trade balance deficit compared with the first half of the year, whereas the current account balance turned positive. Balance of payments current account reported a small deficit

Summary

in 2012 against a surplus reported in 2011. Capital account inflows maintained the positive value of the overall current and capital account balance over 2012. If our expectations of a gradual recovery in domestic demand materialise, the BOP current account is likely to record a low deficit in the first half of 2013, while the surplus of the overall current and capital account balance is projected to reach 0.5% of GDP.

The sustained high household propensity to save continued to be a major factor for boosting deposits. As a result, banks retained their high liquidity allocated in various assets and used for reducing their foreign liabilities. In the domestic market, the growth rate of loans to the private sector was driven by the increase in loans to non-financial corporations, while bank claims on households continued to decline. Other assets in which banks allotted their liquidity include: excess reserves on BNB accounts, increased funds on banks' settlement accounts in TARGET2 and investments in government securities, primarily of the Bulgarian government.

In 2012 interest rates on new time deposits continued to decrease. The downward trend in interest rates on deposits was associated mostly with the ample liquidity in the banking system and relatively low demand for bank loans. Lending rates also continued to decrease in the first half of 2012, while in the second half of the year interest rate levels stabilised.

The worsening of the external environment and the expectations about economic activity in Bulgaria in the second half of 2012 will continue to strongly impact financial flows in the first half of 2013. The household propensity to save is expected to remain high and banks to preserve their liquidity high. In the first half of 2013 annual growth of broad money is expected to slightly slow down as a result of the moderate income growth amid the sustained high household propensity to save. Demand for loans will remain relatively low reflecting the slow recovery of consumption and investment activity. The policy of firms and banks to reduce indebtedness will remain the main factor influencing the balance of payments outflows. In the first two quarters of 2013 interest rates on time deposits are expected to stay around their current levels, while the slow decrease in lending rates is anticipated to continue.

In 2012 consumer price inflation remained relatively low. The harmonised index of consumer prices grew at 2.8 per cent annually and the average annual inflation was 2.4 per cent. The hikes in international petroleum and food prices and the increase in the price of electricity had the largest contribution to inflation. The internal economic environment characterised by weak household demand and continuing optimisation of firms' expenditure impacted the core inflation which remained low. In the first half of 2013 the annual inflation is expected to slightly moderate provided the assumptions of a slight petroleum price fall and decreases in some administratively set prices materialise. Core inflation is expected to further increase slowly throughout the period.

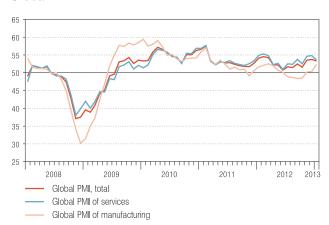
# 1. External Environment

The international economic environment continued to improve, a trend which emerged in the middle of 2012. Significant differences occurred by region. The economic activity remained relatively high in emerging economies and in the USA, while euro area real GDP posted decreases in the second, third and fourth quarters. Only by the close of the year some leading indicators reported a slight increase but it is still early to assert that this is a sign of a sustainable improvement of the economic situation in the region. The global economic activity is expected to continue gradually recovering in the first half of 2013. Euro area GDP is expected to post slight decreases on a quarterly basis in the first and second quarters of 2013. In the second half of 2013 euro area economic growth will start recovering, though at slow rates.

## **Current Business Situation**

The global PMI, indicating an increase from mid-2012, continued to improve in the last months of the year. Among sectors confidence in the services sector started recovering first and only in October expectations about developments in manufacturing improved.

#### Global PMI



Source: JP Morgan.

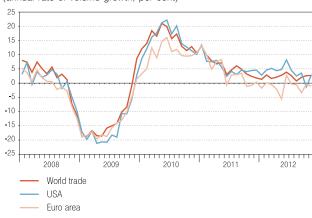
Conjunctural indicator dynamics differed across regions. In the USA expectations of new orders, employment and output continued to increase. Economic indicators in China displayed signs of sustained improvement of the business environment. Concurrently, euro area PMI and business and consumer confidence indices remained at low levels.

International trade developments were also heterogeneous. The upward trend in the volume of global trade was observed during the whole year, with the developments in US, Middle East

emerging markets and Central and Eastern European countries foreign trade having a favourable effect, while the euro area foreign trade turnover retained its negative growth rates.

#### World Trade

(annual rate of volume growth, per cent)



Source: CPB Netherlands Bureau for Economic Policy Analysis.

Global economic activity is expected to continue gradually recovering in the first half of 2013, with mostly emerging markets anticipated to have a positive effect on Bulgarian export growth. At the same time, the demand for Bulgarian goods from the euro area will remain weak due to forecasts about continued weakening of economic activity.

### Euro area

In the third quarter of 2012 euro area GDP went down by 0.6 per cent year on year against 0.5 per cent in the July–September period<sup>1</sup>.

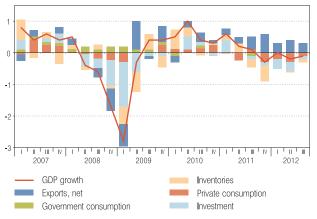
External Environment

<sup>&</sup>lt;sup>1</sup> Eurostat data.

On a quarterly basis, it went down by -0.1 per cent against a previous decrease of 0.2 per cent. Private consumption continued to contract impacted by increasing unemployment and inflation, reflecting mostly energy price hikes. Government consumption did not contribute to GDP change in the third quarter of 2012 compared with the previous period, while private consumption contribution accounted for -0.1 percentage points.

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

(per cent; percentage points)



Source: Eurostat.

Worsened economic indicators and unfavourable credit environment had a negative effect on corporate investment. Contributions of inventories and investments in fixed assets to the change in real GDP were negative at 0.1 percentage points each. As a result of contracting domestic demand imports grew at a slower pace than exports and net foreign trade had a positive contribution to the change of real GDP (by 0.3 percentage points on a quarterly basis).

Based on preliminary data euro area GDP decline intensified in the fourth quarter of 2012 reaching -0.9 per cent year on an annual basis and -0.6 per cent on quarterly basis.

Eurostat estimates about GDP in the fourth quarter of 2012 again suggest serious divergences in growth rates of individual euro area countries. Annual economic growth slowed down significantly in Germany: to 0.4 per cent against 0.9 per cent in the previous quarter. GDP of France went down by 0.3 per cent compared with the corresponding period of 2011 (against 0 per cent in the preceding quarter). On an annual basis GDP decline intensified in Spain in the fourth quarter to -1.8 per cent (against

-1.6 per cent in the previous quarter) and in Italy to -2.7 per cent (against -2.4 per cent in the previous quarter). Estonia<sup>2</sup> reported the largest GDP growth on an annual basis (+3.4 per cent), while Greece<sup>3</sup> and Portugal reported the strongest decline: -6 per cent and -3.8 per cent respectively.

GDP decline on a quarterly basis continued in Spain (-0.7 per cent), Italy (-0.9 per cent), Cyprus (-1 per cent), the Netherlands (-0.2 per cent), Portugal (-1.8 per cent) and Finland (-0.5 per cent)<sup>4</sup>. In Germany and France GDP declined from the previous quarter by 0.6 per cent and 0.3 per cent respectively (against an increase by 0.2 per cent and 0.1 per cent).

In the fourth guarter of 2012 average leading euro area indicators changed slightly as compared to the third quarter, remaining at the low level. A slight increase was observed by the close of the year. Based on the European Commission data the euro area economic sentiment index in January 2013 increased to 89.2 against 87.8 in December 2012, while the business climate indicator rose to -1.09 (from -1.11 in December). The euro area consumer confidence index of the European Commission rose to -23.9 in January 2013 against -26.3 in December. In the fourth quarter of 2012 the euro area PMI declined below the neutral level of 50, signalling a contraction in economic activity and worsening of growth prospects. In December the composite PMI was 47.2 (against 46.5 in November) and sub-indices of manufacturing and services 46.1 and 47.8 respectively (against 46.2 and 46.7 in November). In January 2013 the composite PMI rose to 48.6 and sub-indices of manufacturing and services to 47.9 and 48.6 respectively. In Germany the composite PMI increased to 54.4 (from 50.3 in December) which is a positive sign of strengthening economic activity, while in France this indicator went down to 42.7 (from 44.6 December).

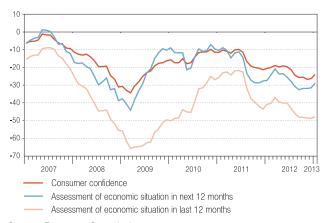
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<sup>&</sup>lt;sup>2</sup> Data have not been seasonally adjusted.

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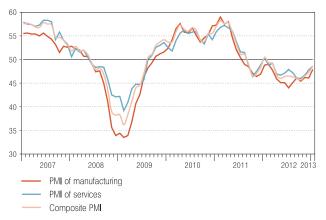
 $<sup>^{\</sup>rm 4}$  Data about Ireland, Luxembourg, Malta and Slovenia have not been published yet.

### Euro Area Consumer Confidence Indices



Source: European Commission.

## PMI of Manufacturing and Services



Source: Markit

Based on the dynamics of economic indicators euro area real GDP is expected to decrease at a slow rate on a quarterly basis in the first and second quarters of 2013. Later in 2013 euro area economic growth will start recovering at slow rates. According to the latest ECB forecasts of December 2012 annual real GDP growth rate will range between -0.6 per cent and -0.4 per cent in 2012 (between -0.6 per cent and -0.2 per cent in the previous forecast of September 2012), between -0.9 per cent and 0.3 per cent in 2013 (between -0.4 per cent and 1.4 per cent in the previous forecast) and between 0.2 per cent and 2.2 per cent in 2014. In January 2013 the IMF forecasts were for a decline in the euro area GDP by 0.2 per cent in 2013 and 1 per cent in 2014 (against +0.2 per cent and +1.1 per cent respectively in previous forecasts).

Measured by the Harmonized Index of Consumer Prices (HICP), annual euro area inflation in December was sustained for a second consecutive month at 2.2 per cent (+0.4 per cent on a monthly basis)<sup>5</sup>. One of the factors contributing to the increase in consumer prices with a rate of over 2 per cent was the rise in indirect taxes and administratively controlled prices in some euro area prices (Spain and the Netherlands). In December core inflation amounted to 1.5 per cent on an annual basis against 1.4 per cent in November. Based on estimates for January consumer price inflation slowed down to 2 per cent on an annual basis.

By commodity group December saw a slowdown in growth of energy prices to 5.2 per cent on an annual basis (from 5.7 per cent in November) and foods appreciated by 3 per cent on an annual basis against 2.9 per cent a month earlier.

By country the lowest consumer price inflation was reported in December 2012 in Greece (+0.3 per cent), Cyprus (+1.5 per cent) and France (+1.5 per cent). In Germany the annual rate of HICP inflation accelerated to 2.0 per cent from 1.9 in November, with the average inflation for the last quarter accounting for 2.0 per cent. Some euro area countries as Spain (+3.0 per cent) and the Netherlands (+3.4 per cent) are characterised by relatively higher HICP between October and December 2012 reflecting the increase in indirect taxes. The effect of higher tax rates is expected to gradually fade away which will contribute to the decrease in inflation in the following months in these countries and in the euro area as a whole.

## Euro Area Inflation Rate

(percentage change on same period of previous year)



Source: Eurostat

According to the European Commission's autumn economic forecasts of November 2012, the euro area annual inflation in 2013 is expected to

External Environment

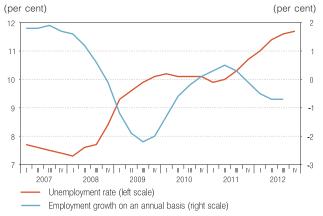
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<sup>&</sup>lt;sup>5</sup> Eurostat data.

decline to 1.8 per cent and in 2014 to 1.6 per cent. According to ECB December 2012 projections the euro area inflation will be between 1.1 per cent and 2.1 per cent (between 1.3 per cent and 2.5 per cent in September projections) in 2013 and between 0.6 per cent and 2.2 per cent in 2014.

The euro area labour market continued to worsen until the end of 2012. Redundancies were mostly in industry (by 0.6 per cent on a quarterly basis). In the services sector the number of employed decreased by 0.1 per cent on a quarterly basis based on the latest data for the July-September 2012 period. In December the number of unemployed rose by 16,000 (in November by 63,000), with unemployment retained at 11.7 per cent. The indicator of the expected unemployment during the following twelve months, included in the EC consumer confidence index, came to 47.7 in December (against the previous value of 46.9) and signalled an expected further decline in employment. In January the indicator went down to 42.7, which marked the first decline in recent seven months.

# Euro Area Unemployment Rate and Employment Growth



Source: Eurostat.

The cross-country variations in unemployment rates remain significant and even intensify. In December unemployment remained at relatively low levels in Germany: 5.3 per cent (for a second consecutive month) and in the Netherlands 5.8 per cent (against 5.6 per cent in November). In other euro area Member States this indicator continued to increase. These are mostly countries most severely affected by debt crisis as Greece where unemployment reached 26.8 per cent in October against 26.2 per cent in the previous period. High levels were reported

in December also in Spain (26.1 per cent) and Portugal (16.5 per cent).

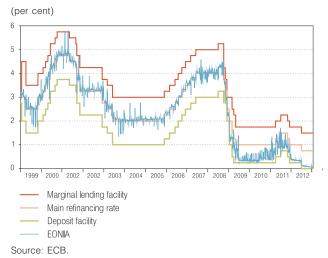
The growth rate of unit labour costs in the third quarter of 2012 was 1.7 per cent on an annual basis (1.3 per cent during the previous quarter). Over the same period compensation of employees picked up by 1.8 per cent on an annal basis (against the previous value of 2.3 per cent) and labour productivity by 0.1 per cent (against the previous value of 0.3 per cent).

On the basis of the analysis of economic indicators dynamics, the expectations about euro area economic activity and inflation, and taking into account monetary aggregates trends in the last quarter of 2012, the ECB made no changes to its interest rate policy. The interest rate on the main refinancing operations, on the deposit facility and marginal lending facility remained at 0.75 per cent, 0 per cent and 1.5 per cent respectively. They remained unchanged also after the ECB meeting on the monetary policy held on 10 January 2013. This decision was adopted by way of consensus and grounded by the stabilisation of some economic indicators though at low levels, as well as by the strengthened confidence of euro area financial markets. Risks of lower than expected growth exist, although ECB's expectations are for a gradual economic recovery later in 2013. Risks associated with inflation which is expected to fall below the target level of 2 per cent during the year were determined as balanced. In February 2013 the ECB kept the reference rates unchanged announcing that there were no changes to the assessment of risks to growth and inflation.

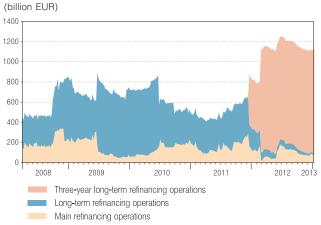
The ECB continued to implement the non-conventional monetary policy measures. At its meeting in December 2012 the ECB announced that it would continue its policy of unlimited liquidity allotment at fixed interest rate on main, special term and long-term refinancing operations at least until the end of the sixth maintenance period of 2013, ending on 9 July 2013. The interest rate on three-month long-term refinancing operations which will be conducted on a monthly basis until mid-2013 will be the average interest rate on main refinancing operations for the period. On 13 December 2012 the ECB decided to extend until 1 February 2014 the term of swap arrangement with the US Federal Reserve System which allows to provide liquidity to

European banks in US dollars through seven-day and three-month refinancing operations. These measures are aimed at facilitating banks' access to refinancing and at further recovering the confidence and the normal transmission process of euro area monetary policy.

## **ECB Interest Rates**



## **ECB Refinancing Operations**



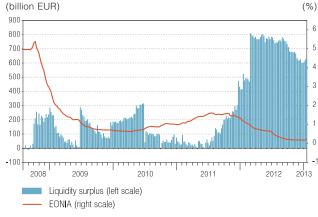
Source: ECB.

By the end of January 2013, 278 euro area banks took the opportunity of early debt repayment on the ECB three-month operation of December 2011, with repaid liquidity in advance amounting to EUR 137.2 billion. The amount appeared to exceed market expectations. With the settlement on 30 January 2013 the outstanding value of the operation decreased to EUR 352 billion. Euro area banks are allowed to decrease the outstanding amount of financing under this operation on a weekly basis. For this purpose, the respective Eurosystem central bank should be informed a week in advance. By the end of February 2013 banks were provided with the opportunity for early repayment on the second

three-month operation amounting to EUR 529.5 billion. The early repayment on ECB long-term operations is not expected to have a strong effect on the euro area money market. The amount of excess liquidity in the banking system remained very high which limits the movement of interest rates in the short maturity sectors. By 25 January 2013 EONIA reference overnight interest was at 0.07 per cent (against an average value of 0.08 per cent in the fourth quarter of 2012).

In the last guarter of 2012 the banking system liquidity surplus<sup>6</sup> in the euro area decreased to about EUR 597 billion by the end of the period against EUR 733 billion by the end of September 2012. This was attributable to the decreased amount of refinancing operations by which net liquidity of EUR 51 billion was drained, and lower amount of excess reserves and banks' funds on the ECB deposit facility. By the end of the fourth guarter of 2012 the ECB balance sheet amounted to EUR 3.018 trillion, down by 2.1 per cent on the end of the previous quarter. The outstanding amount of refinancing operations declined to EUR 1.125 trillion (against EUR 1.176 trillion by the end of September 2012) and the funds on the deposit facility to EUR 261.7 billion (against EUR 315.8 billion by the end of September 2012).

# EONIA and the Banking System Surplus in the Euro Area



Source: ECB.

By the end of December 2012 the market expectations derived from the prices of futures contracts with the three-month EURIBOR applied, pointed to a decline to 0.5 per cent of the money market reference interest rate in 2013.

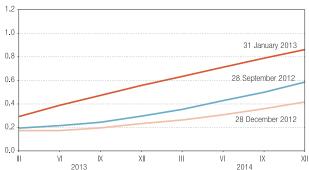
13 External Environment

<sup>&</sup>lt;sup>6</sup> Excess liquidity is measured as the difference between the outstanding amount of ECB refinancing operations and the two covered bond purchase programmes and the amount of required reserves, and autonomous factors.

In January 2013 a change occurred, with the prevailing market expectations currently pointing to retention of the euro area reference rates in 2013. The turnaround reflected the unanimous decision of the ECB Governing Council of January to keep the interest rates unchanged and to provide the opportunity of early repayment of long-term financing by banks.

# Expected Reference Interest Rate in the Euro Area Based on EURIBOR Futures

(per cent)

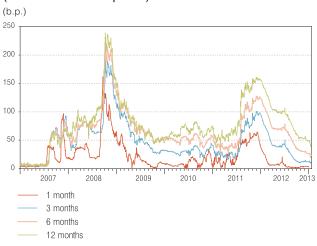


Source: European Banking Federation.

In the last quarter of 2012 short-term interest rates on euro area interbank market deposits continued to decline. Stronger decline in interest rates was reported at the long end of the curve which led to curve flattening. By the end of December 2012 EURIBOR interest rates with maturity of one month were at 0.11 per cent

(-1 basis point on September 2012), and those with maturity of six and 12 months at 0.32 per cent and 0.54 per cent respectively (-12 basis points and -14 basis points against the end of September). Credit and liquidity risk premia, measured by the spread between the EURIBOR and OIS indicated a stronger change in the long maturity sectors. By the end of the review period those in three- and six-month segments declined to 12 basis points and 27 basis points respectively (-1 basis point and -10 basis points respectively compared with the end of September 2012).

# Credit and Liquidity Risk Premia (EURIBOR – OIS spread)



Source: European Banking Federation.

# The Balkan Region

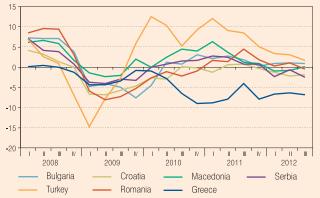
In the third quarter of 2012 economic growth in the Balkan region moderated as a whole showing a decline or weaker real GDP growth rates by country. Greece continued to report significant economic contraction, while Turkey reported the strongest growth.

In the third quarter of 2012 industrial production in Bosnia and Herzegovina declined further on an annual basis (-5.6 per cent). Manufacturing, energy and mining reported a decrease of 5.4, 6.7 and 4.6 per cent respectively. Over the first nine months construction increased compared with the corresponding period of 2011. Employment decreased slightly on an annual basis (-0.5 per cent) by the close of the third quarter. The average annual inflation for the period was 2.1 per cent. Raised alcohol and tobacco excise duties were the major factors behind higher prices, while the downward trend in clothing prices was sustained.

In the third quarter of 2012 Macedonia's gross domestic product increased following the decline in the first half-year. Gross capital formation that continued to increase

## Real GDP Growth Rates in Balkan Countries

(%, on an annual basis)



Note: Bulgaria, Greece, Macedonia, Romania, Serbia, Turkey and Croatia are included in the charts and tables of this section, as by the publication of the present issue, officially published data on GDP, inflation and unemployment level in the first quarter of 2012 were available only for these countries.

Sources: Eurostat, BNB own calculations.

in the second quarter contributed most to this. Net exports and private consumption contracted on an annual basis. Contribution by sector showed that construction reported the most sizeable increase, while manufacturing saw the most pronounced decline. In the third quarter of 2012 unemployment went down by 0.6 percentage point on an annual basis reaching 30.6 per cent while employment remained unchanged at 39.1 per cent. In the third quarter of 2012 inflation accelerated to 3.8 per cent following the first half-year moderation.

The early 2012 trend toward a contraction in the Greek economy was sustained over the same period. Private consumption and investment remained the largest contributors to lower economic growth. Unemployment in Greece accelerated at high rates affecting negatively households' net disposable income and domestic demand respectively. As a result imports declined further and net exports contributed positively to growth. Construction, financial intermediation and trade reported the most sizeable contraction in economic activity on an annual basis over the review period, while the value added of real estate operations continued to increase. Unfavourable labour market developments escalated due to the continuous decline in employment and increase in unemployment. The average annual inflation slowed down over the reporting period, with energy products and transport services contributing most to the higher price level, while healthcare and communication services dampened inflationary pressure.

Between July and September 2012 Romania's real GDP declined following the increase in the previous six months. Investment contributed most to growth, while net exports remained negative. On the supply side, the contraction in GDP was largely due to the decline in value added in agriculture resulting from the poor weather conditions. Unemployment in Romania continued to the decline and according to seasonally adjusted data as of the third quarter it was at the lowest level in the region. Over the same period the average annual inflation in Romania accelerated largely due to higher food and energy product prices, while education services reported the weakest contribution to inflation.

#### Real GDP Growth on an Annual Basis

(per cent; quarterly data)

Country		2	010			2	011	2012			
Courilly	1	Ш	III	IV	1	Ш	Ш	IV	- 1	Ш	III
Bulgaria	-4.5	1.2	0.8	3.1	2.1	2.7	1.9	0.3	0.9	1.0	0.9
Greece	-1.0	-2.8	-6.6	-9.0	-8.8	-7.9	-4.0	-7.9	-6.7	-6.3	-6.9
Croatia	-2.7	-3.0	0.1	-0.2	-1.2	0.6	0.8	-0.4	-1.3	-2.2	-1.9
Romania	-2.6	-1.1	-2.2	-1.0	1.7	1.4	4.4	1.9	0.3	1.1	-0.5
Macedonia	0.0	2.5	4.5	4.0	6.4	3.7	1.2	0.9	-0.9	-0.7	0.2
Serbia	0.0	0.7	1.6	1.7	2.8	2.4	0.7	0.7	-2.3	-0.6	-2.5
Turkey	12.6	10.4	5.3	9.3	12.1	9.1	8.4	5.0	3.4	3.0	1.6

## Contribution to Real GDP Growth on an Annual Basis, Third Quarter of 2012

(per cent, percentage points; quarterly data)

Country	GDP growth	Private consumption	Government consumption	Investment	Exports, net
Bulgaria	0.9	2.1	0.2	1.0	-2.4
Greece	-6.9	-5.8	-1.9	-2.7	4.9
Croatia	-1.9	-1.8	-0.1	-0.9	1.4
Romania	-0.5	-0.9	0.2	3.9	-1.0
Macedonia	0.2	-1.9	0.4	3.8	-2.2
Turkey	1.6	-0.2	0.4	-1.8	3.4

Note: Non-additive contribution to real GDP growth by component due to chain-linked GDP data.

## **Annual Inflation**

(per cent; quarterly data)

Country		20	010			2	011		2012		
Country	I	II	III	IV	- 1	II	III	IV	- 1	II	III
Bulgaria	1.9	2.9	3.3	4	4.5	3.4	3.1	2.5	1.9	1.8	3.0
Greece	3.0	5.1	5.6	5.1	4.5	3.3	2.1	2.6	1.7	1.1	0.8
Croatia	1.1	8.0	1.0	1.4	2.2	2.3	2.0	2.4	1.7	3.2	4.1
Romania	4.6	4.3	7.5	7.8	7.5	8.3	4.2	3.4	2.7	2.1	4.2
Macedonia	1.3	1.9	2.3	3	3.8	4.5	3.6	3.5	2.5	2.1	3.8
Serbia	4.5	4.1	6.5	9.6	12.6	13.6	10.6	7.9	4.6	4.0	8.1
Turkey	9.3	9.2	8.4	7.4	4.3	5.9	6.4	9.2	10.5	9.6	9.1

Note: EU countries' inflation measured by HICP changes. The national CPI has been used for the other countries.

### Unemployment

(per cent; quarterly data)

Country	2010				2011				2012		
Courilly	- 1	Ш	Ш	IV	- 1	Ш	Ш	IV	- 1	Ш	III
Bulgaria	9.3	10	10.4	11.3	11.2	11.2	11.1	11.6	12	12.2	12.3
Greece	11.2	12.1	12.9	14.1	15.3	16.7	18.4	20.6	21.8	23.9	25.6
Croatia	10.5	12.1	12.6	12.2	13.2	13.7	13.5	13.9	14.9	15.2	16.1
Romania	7.5	7.2	7.2	7.2	7.1	7.5	7.5	7.5	7.2	7.2	7.0
Macedonia	33.5	32.1	31.7	30.9	31.2	31.3	31.2	31.2	31.6	31.2	30.6
Turkey	11.5	10.6	10.6	9.9	9.2	9.2	8.6	8.2	8.1	8.0	8.1
	Apr	il	Octob	oer	Apr	il	Novem	nber	Ар	ril	October
Serbia*	22.	2	19.	2	25.	5	23.	7	25.	5	22.4

<sup>\*</sup> Labour force survey in Serbia is conducted twice a year within one calendar month. Sources: Statistical institutes and central banks of respective countries, BNB – own calculations.

The downward trend in real GDP in Serbia from early 2012 remained sustained over the third quarter. Economic growth declined by 2.5 per cent on an annual basis with agriculture and construction reporting the most sizeable decrease. However, labour market indicators improved. According to the October 2012 Labour Force Survey, unemployment rate fell to 22.4 per cent and employment rate picked up to 36.7 per cent of the economic active population. In the third quarter of 2012 inflation boosted to 8.1 per cent largely due to food price rises. Between April and September 2012 the National Bank of Serbia raised its benchmark rate four times to 10.95 per cent. The decision was prompted by the fact that core inflation overshot the upper bound of the target tolerance band in June, for the first time since the inflation targeting regime was introduced in 2009. The rises made thereafter aimed to weaken the inflationary pressure resulting from the appreciation of agricultural products and higher administratively controlled prices.

Turkey's real GDP continued to increase in the third quarter of 2012, albeit at a lower rate. Net exports contributed most to this while investment reported a decline on an annual basis. Agriculture, transport and manufacturing saw the most sizeable increase in gross value added, while trade reported a decline. The unemployment rate remained unchanged on the first half-year in sync with the ongoing increase in economic activity. Over the review period inflation moderated pushed down by the increase in energy prices, higher food prices and higher rents, while services price movements helped dampen inflationary pressure. The downward trend in overall price level allowed the Central Bank of Turkey to decrease its benchmark interest rate to 5.5 per cent in December.

In the third quarter of 2012 Croatia's economic activity decelerated by 1.9 per cent on an annual basis. All GDP components reported a decline but private consumption contributed most to the fall. This had an unfavourable effect on imports and as a result net exports was positive. Gross value added in most sectors declined: construction and industrial production reported the most pronounced fall. The situation on the labour market deteriorated further. In the third quarter of 2012 employment continued to decline and unemployment increased to reach its highest level (16.1 per cent) for the last nine years. Inflation accelerated to 4.1 per cent. The key factors behind this development since early 2012 were indirect tax growth, higher administratively controlled prices and higher energy and food prices.

Industrial production in Montenegro contracted by 7.7 per cent on an annual basis over the first nine months of 2012 and gross value added reported a decline in all three major sectors: industrial production (-3.1 per cent), mining and quarrying (21.7 per cent) and energy (-13.3 per cent). Over the same period real GDP declined by 0.5 per cent on an annual basis largely due to the contraction in domestic credit and investment. Tourism had a positive contribution to growth with the number of tourists who visited the country going up by 4.9 per cent and the duration of their stay – 11.1 per cent. Data on labour market show that annual unemployment decreased to 18.8 per cent (down 0.7 percentage point). The average annual inflation in the first three quarters of 2012 came to 3.8 per cent. Fuels, food, soft drinks and tobacco contributed most to the increase in the overall price level while the lower prices of clothing and some services dampened inflation.

## **United States**

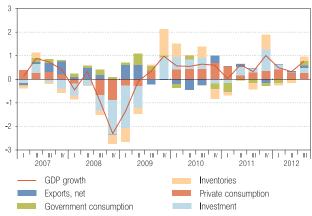
Economic growth in the USA accelerated to 2.6 per cent on an annual basis in the third quarter from 2.1 per cent in the second quarter and 2.4 per cent in the first quarter of 2012. Real GDP also recorded accelerated growth rates to 0.8 per cent on a quarterly basis between July and September (against 0.3 per cent in the previous quarter). The dynamics in the third quarter reflects the increased household consumption and the positive contribution of the change in inventories and government expenditure which had a negative contribution to growth in the previous quarter.

Based on preliminary data in the fourth quarter of 2012, US GDP decreased by 0.03 per cent on a quarterly basis due mostly to the significant negative contribution of the change in inventories

and government expenditure. The estimate about GDP growth in 2012 suggests an acceleration to 2.2 per cent against 1.8 per cent in 2011.

# Contribution to US GDP Growth by Component (Quarterly)

(per cent; percentage points)

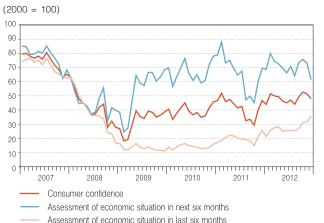


Source: Bureau of Economic Analysis.

In the fourth guarter of 2012 the US consumer confidence indicator changed mostly downward due primarily to the expectations that the Congress and the US government would not reach an agreement on the avoidance of automatic suspension of significant tax relieves and the introduction of sizeable cuts in budget expenditure in early 2013 or for avoidance of the so-called fiscal cliff. After reaching 82.7 percentage points in November (the highest value since August 2007), the University of Michigan Consumer Sentiment Index fell to 72.9 percentage points in December. The Conference Board Consumer Confidence Index also indicated worsened consumer sentiment by the end of the guarter: in December it fell to 66.7 percentage points against 71.5 in November, reflecting couterparties' worsened expectations about economic prospects in the following six months.

Worsened consumer confidence had no strong effect on demand for goods and services. In December retail sales rose by 0.5 per cent on a monthly basis and by 4.8 per cent on an annual basis.

## **US Consumer Confidence Indices**

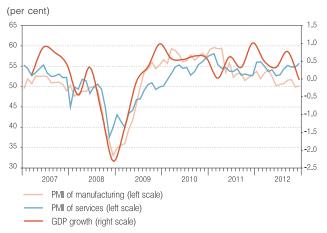


Source: Conference Board.

In the fourth quarter of 2012 the change of economic indicators in manufacturing and services was volatile, a sign of uncertainty which continue to affect the assessments of prospects to the economic activity in the USA. Following the fall of ISM-PMI for industry to 49.9 points in November, in December it increased to 50.2. In the last month of 2012 the ISM-PMI for the services sector posted growth, reaching in

December 55.7 points against 54.8 in the previous two months.

# US ISM Manufacturing and Services PMI and GDP Growth



Source: Institute for Supply Management.

In the fourth quarter of 2012 investment activity in the housing sector continued to improve. In December the National Association of Home Builders (NAHB) index reached its highest value since April 2006. However, steadily improving expectations of building entrepreneurs were yet not underpinned by household sentiments. According to the results of the confidence survey by the Conference Board in December a larger number of households postponed home purchases than in the previous months. The high level of unemployment and tight lending standards also continued to constrain home sales despite low mortgage rates. On the other hand, the renewed purchases of mortgage bonds by the US Federal Reserve System may mitigate the impact of some negative factors and to have a favourable effect on the US housing market.

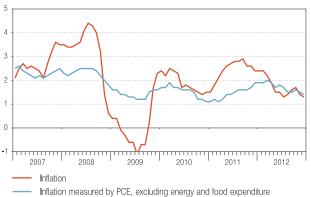
Annual inflation measured by personal consumption expenditure (PCE) deflator slowed down to 1.3 per cent in December against 1.4 per cent in November and 1.7 per cent in October. The core index, excluding foods and fuels, also posted a decline in December to 1.4 per cent on an annual basis against 1.5 per cent in November. The annual growth rate of the personal consumption expenditure index is anticipated to rise in the following two quarters, but to remain close to its current level.

External Environment

<sup>&</sup>lt;sup>7</sup> See the box entitled The US Fiscal Position, Economic Review 2012, issue 3, p. 17.

#### **US Inflation Rate**

(per cent)



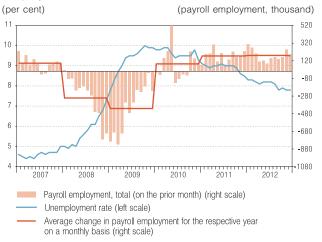
Note: Inflation is measured by the personal consumption expenditure deflator.

Source: Bureau of Labor Statistics.

Consumer price index, the other measure of the US inflation, declined to 1.7 per cent on an annual basis in December 2012 against 1.8 per cent in November and and 2.2 per cent in October. The annual growth rate of the core PCE price index remained at 1.9 per cent in December for a second consecutive month.

The expected consumer price inflation in the period of one to five years, which is a component of the University of Michigan consumer confidence index, posted an increase by 3.2 per cent and 2.9 per cent respectively in December against 3.1 per cent and 2.8 per cent respectively in November. In the following two quarters consumer price inflation in the USA is expected to gradually stabilise around 2 per cent.

# US Unemployment Rate and Changes in Payroll Employment



Source: Bureau of Labor Statistics.

Unemployment in the fourth quarter of 2012 stood at 7.8 per cent although a larger number of jobs were opened in that period com-

pared with the third quarter. In December newly opened jobs numbered 196,000 against 247,000 in November. The average monthly number of employed in the non-agricultural sector rose by 201,000 in the October–December period against 152,000 on average in the previous quarter. In the first half of 2013 the unemployment rate is expected to fluctuate around 8 per cent.

To underpin the recovery of the US economy and to mitigate the negative effects on it from the euro area debt crisis the US Federal Reserve Open Market Committee (FOMC) at its meeting on 11-12 December 2012 decided to implement additional non-standard measures. In addition to the continued programme for purchasing mortgage bonds in the amount of USD 40 billion on a monthly basis, it was decided to adopt a new programme for purchasing US government securities which was intended to replace the programme for extension of average maturity of the assets in the Federal Reserve's portfolio through the sale of short-term and purchase of long-term securities (Operation twist), officially ending at the end 2012. Under the new programme government securities in the amount of 45 billion per month will be purchased with no deadline set for the term of validity of the programme.

A decision was taken to continue investing the receipts of maturing government securities from the US Federal Reserve balance sheet again in US government securities, as well as to reinvest in mortgage bonds the receipts from government-sponsored agencies' mortgage bonds available in the US Federal Reserve balance sheet.

The Committee announced that it would keep the federal funds rate at 0.00 to 0.25 per cent. Regarding the decision for better transparency the FOMC goals and policies pursued for the first time include nominal thresholds for particular economic indicators meeting the Committee's expectations and objectives. The current interval of the reference interest rate of 0 per cent to 0.25 per cent will be maintained at least until the unemployment rate in the USA remains over 6.5 per cent and unless the expected inflation within the one to two year horizon exceed the threshold of 2.0–2.5 per cent and long-term inflationary expectations remain within stable limits. Determining unemployment and inflation rates is

intended to provide more clarity as to the future steps in implementing the US Federal Reserve monetary policy. The above mentioned indicators are not specific objectives and will be considered in the context of remaining major economic indicators characterising the recovery of the economy and labour market in the USA.

The new measures initiated by the US Federal Reserve helped stabilise the yield of two-year US government securities at about 0.25 per cent, while the yield of medium and long-term US bonds was set under the pressure of the new programme for purchasing government securities and disclosed macroeconomic data about the US economy.

#### China

In November 2012 a key change of the political governance was made in China. At the congress of the Communist Party the new China's leaders were elected who became members of the Party's Central Committee. The national leadership will be changed after the Parliament (The National People's Congress) approve in March 2013 the Chairman of the People's Republic of China, the prime minister and the members of the Cabinet. The priorities specified by the new government include a rebalance of the economy by strengthening the domestic demand and implementation of social reforms.

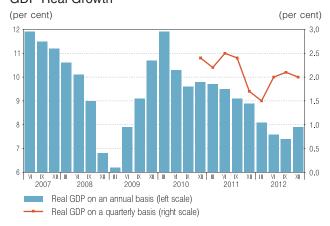
In the fourth quarter of 2012 real GDP growth in China accelerated to 7.9 per cent year on year from 7.4 per cent in the previous quarter, with industry, exports and domestic consumption contributing most significantly.

# GDP, Consumption and Industrial Output (on an Annual Basis)



Based on quarterly data the Chinese economy enters the growth stage of the business cycle. Between October and December 2012 real GDP growth was 2.0 per cent on a quarterly basis against 2.1 per cent (revised) in the previous quarter.

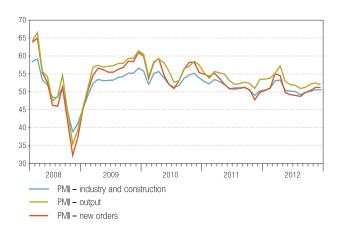
## **GDP Real Growth**



In December PMI indices reflecting the industrial activity remained unchanged compared with November (at 50.6). The sub-index of the current production slightly declined to 52.0 (from 52.5 in November), that of new orders retained its level of 51.2, while PMI indicators on imports and employment rose to 49.0.

In December PMI for the services sector posted an increase reaching 56.1 compared with 55.6 in November, the largest value reported for the last four months. The services sector, including also construction, provides about 43 per cent of China's GDP.

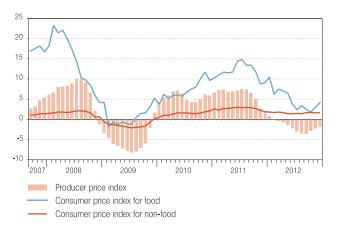
## Manufacturing PMI, Output and New Orders



# Consumer Price Index

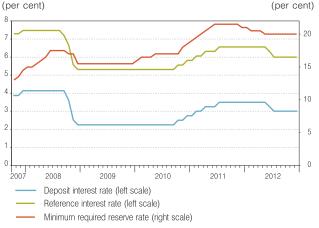


#### Inflationary Indices (on an Annual Basis)



In December inflation in China surprisingly accelerated to 2.5 per cent on an annual basis against 2.0 per cent in November. Food prices, increasing their dynamics to 4.2 per cent on an annual basis (from 3.0 per cent in November), had the major contribution to higher inflation. Consumer price index increased by 0.8 per cent on a monthly basis in December against an increase of 0.1 per cent in November and a decline of 0.1 per cent in October.

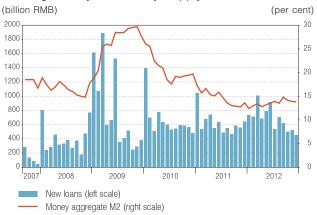
Monetary Policy of the People's Bank of China



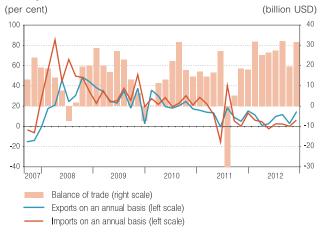
During the review period no changes in the monetary policy of the People's Bank of China were made, the reference rates on one-year deposits and loans were kept at 3 per cent and 6 per cent respectively and the rate on minimum required reserves at 20 per cent.

In December 2012 new bank loans in national currency decreased to RMB 454 billion against RMB 523 billion in November, reflecting the stronger demand for non-bank financing for the economy. Based on central bank's data on the so-called total social financing (TSF), an indicator about the volume of all (bank and non-bank) loans in China, the total financing for the economy in national currency rose to 43 per cent in December to RMB 1630 billion.

## Lending Activity and Money Supply



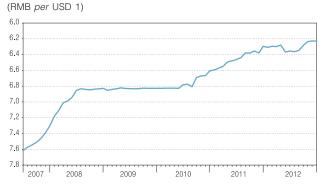
## Foreign Trade and Trade Balance



In December 2012 China's trade surplus increased to USD 31.6 billion exceeding significantly the values reported in November (USD 19.6 billion). Imports rose by 6.0 per cent on an annual basis (against 0 per cent in November) and export growth accelerated to 14.1 per cent (against 2.9 per cent in the previous month). The major factor behind the higher

trade balance surplus was rapidly increasing exports to emerging markets in Asia.

## RMB/USD Exchange Rate



Note: The chart scale is inverted, the upward movement shows an appreciation.

In October and November 2012 Chinese currency appreciated vis-a-vis the US dollar by 0.8 per cent and 0.2 per cent on a monthly basis respectively. December saw a slight depreciation of 0.1 per cent in the Chinese currency.

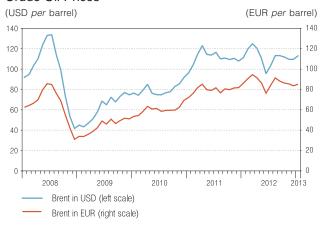
# International Prices (Crude Oil, Major Raw Materials, and Gold) and the EUR/USD Exchange Rate

### **Crude Oil Prices**

By the close of 2012 the price of Brent crude oil continued to decrease, a trend which had occurred since the beginning of the year and in the fourth quarter it was traded at USD 110.5 per barrel on average (EUR 85.1 per barrel).

Oil demand expectedly increased in December 2012 and in early January 2013 the price slightly went up due to seasonal factors.

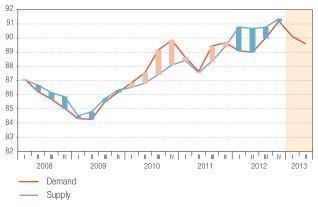
## Crude Oil Prices



Source: World Bank.

## World Crude Oil Supply and Demand (Quarterly)

(million barrels per day)



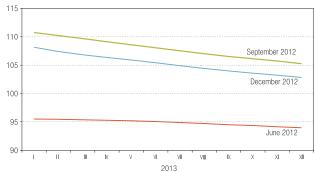
Source: IEA.

Despite the slight price hike in January according to the International Energy Agency (IEA) data the world oil supply still exceeds demand. This trend is expected to be sustained due to further increase in oil extraction by non-OPEC countries. Concurrently, Saudi Arabia and Iraq reduced oil production which is likely to be restored in February.

According to the market sentiment measured by the futures prices Brent crude oil will trade in the USD 103–108 range *per* barrel in the next twelve months. This marks a decrease in the expected price as compared with September. Increasingly accelerating global economic growth, particularly demand for crude oil by China, poses risks of higher than expected oil appreciation.

# Brent Crude Oil Futures Prices (Average Price of the Contract in the Corresponding Month)

(USD per barrel)



Source: JP Morgan.

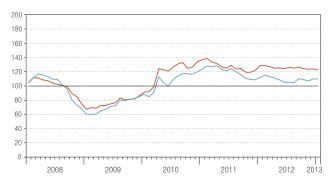
### Major Raw Material and Commodity Prices

In the fourth quarter of 2012 the ECB general index, reporting metal prices, slightly decreased (-1.7 per cent) on the July–September period. Copper depreciated (-1.2 per cent), while non-

# Price Indices of Major Raw Material and Commodity Groups

(2008 = 100)

#### Metals



## Copper



#### Food



# Wheat



Sources: ECB and BNB.

ferrous metals general index posted minimum price growth on a quarterly basis (0.2 per cent). The downward trend in metal prices, which started in mid-2012, is expected to be sustained in the first half of 2013.

In September 2012 wheat and cereals prices started gradually decreasing in international markets. Following the one-off sharp appreciation in July, the prices of wheat and cereals tended to stabilize by the end of the year. In the fourth quarter cereals depreciated by 6.9 per cent on the previous quarter, with maize indicating the strongest decline (-10.2 per cent). The overall index of foods had similar dynamics and declined by 8 per cent. However, based on the International Grains Council consumption of cereals will outstrip production in 2013. As a result an appreciation of foods may be expected in the first half of the year.

Based on the expected dynamics of food and crude oil prices, the terms of trade in Bulgaria are anticipated to improve in the first two quarters of 2013 which will have a positive effect on Bulgaria's exports.

#### **Gold Prices**

Over the fourth quarter of 2012 the average spot price of gold went down by 5.4 per cent on a quarterly basis to USD 1676.2 *per* troy ounce by the end of the period. The euro gold price declined by 7.7 per cent to EUR 1269.8 *per* troy ounce.

During the review period the positive macroeconomic data from the USA had the strongest effect on the gold price mitigating the expectations for US Federal Reserve's new non-standard measures to stimulate the economy.

Demand for physical gold by exchange-traded funds (ETFs), collateralised by gold, picked up dramatically in the fourth quarter. On 20 December 2012 funds' total assets reached a historical peak and started to decrease. By the end of the quarter the assets of funds investing in gold accounted for 2632 tonnes of gold.

Based on IMF data central banks remained net buyers of gold in the fourth quarter of 2012, the larger purchases effected by the central banks of Russia, Brazil and Kazakhstan.

## Spot Price of Gold



Source: London Bullion Market Association.

On 22 January 2013 India raised the gold import duty from 4 per cent to 6 per cent of the value of imported gold intended to limit the deficit increase on the balance of payments current account. India is the largest gold importer worldwide and it may be expected that higher duties will have a negative effect on demand which will contribute to a decrease in gold price in international markets.

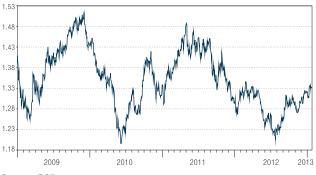
## The EUR/USD Exchange Rate

In the fourth quarter of 2012 the average value of the US dollar depreciated against the euro by 3.7 per cent. By comparison, in the third quarter the US dollar appreciated by 2.5 per cent on average against the euro. Between October

and December the US currency traded within a range of USD 1.27-1.33 per euro.

## The USD/EUR Exchange Rate

(USD per EUR 1)



Source: ECB.

In October and and in early November 2012 the EUR/USD exchange rate decelerated impacted by several events prompting uncertainty in markets. Major factors behind US dollar appreciation against the euro were the President's elections in the USA and the political changes to China's governance.

As of mid-November until the end of 2012 the euro started to appreciate against the US dollar driven by the expected decision for overcoming the so-called fiscal cliff in the USA. The FOMC decision of December to continue the US Federal Reserve incentives by launching monthly government securities purchases of USD 45 billion as of early 2013 also added to the US dollar depreciation.

# 2. Financial Flows, Money and Credit

The deterioration in euro area economic conditions in 2012 had a negative effect on the expectations for Bulgarian economic activity. This was reflected in the sustained high household propensity to save, which is the main factor behind the deposits rise and high bank liquidity. The balance of payments current and capital account remained positive. The financial account balance was also in a surplus mainly due to the Bulgarian government's issue of Eurobonds on international markets and foreign direct investment inflow. As a result of the interaction between the external and domestic economic factors reflected in the recorded financial flows, Bulgaria's international foreign exchange reserves grew to reach EUR 2161.0 million in 2012 according to balance of payments data (excluding valuation adjustments and price revaluation). The worsening of the external environment and the expectations about economic activity in Bulgaria in the second half of 2012 will continue to strongly impact financial flows in the first half of 2013. The household propensity to save is expected to be sustained and banks to continue operating in the context of high liquidity.

The deterioration in euro area economic conditions in 2012 was the reason behind the moderation of nominal Bulgarian export growth. Concurrently, the gradual recovery in domestic demand contributed to the import growth over the first six months. Since mid-2012 the domestic demand has slowed down impacted mainly by euro area recession and the worsening economic situation in Bulgaria, becoming the main driver for lower annual import growth in the second half-year. The trend toward deterioration in labour market conditions seen in late 2011 was sustained over the first nine months of 2012. As a result of these developments, the trade balance deficit increased between January and June 2012. In the second half-year the current account balance was positive. The observed trend led to a small deficit on the current account in 2012 compared with a surplus in 2011. Capital account inflows maintained the positive value of the overall current and capital account balance over 2012. The balance of payments financial account also recorded a surplus in 2012 mainly due to the foreign direct investment inflow and Bulgarian government securities issue in international markets.

The household propensity to save remained high and continued to be the main driver of rising deposits in the banking system, maintaining high bank liquidity.

Low credit demand in the domestic market along with high credit standards was the main reason for banks to maintain a large part of liquidity in the form of excess reserves with the BNB and funds on their settlement accounts in TARGET2. Another part of free funds was invested in government securities, primarily of the Bulgarian government. In the first half of 2012 banks continued to use the inflow of attracted funds both to repay their foreign liabilities and to increase their foreign assets. Over the second half-year the downward trend in foreign liabilities was sustained, while banks' foreign assets went down.8 In the domestic market, loans to the private sector continued to grow at a moderate pace by end-2012. Their growth was mainly driven by the loans to non-financial corporations, while bank claims on households continued to decline.

As a result of the interaction between the external and domestic economic factors reflected in the recorded financial flows, Bulgaria's international foreign exchange reserves increased in 2012. According to balance of payments data, international foreign exchange reserves grew by EUR 2161.0 million in 2012. Analogous trend was observed in the market value of interna-

<sup>&</sup>lt;sup>8</sup> This trend is observed if one-off effect transaction concluded in November 2012 are not reported. These transactions reflect an increase in foreign assets alongside foreign liabilities at the end of 2012.

<sup>&</sup>lt;sup>9</sup> Valuation adjustments and price revaluation excluded.

tional foreign reserves<sup>10</sup> (an asset in the Issue Department balance sheet) which came to EUR 30.4 billion (EUR 15.6 billion) at the end of 2012, up EUR 2203.8 million.

Government obligations, stemming from the issue of five-year government securities with a nominal value of EUR 950 million on international capital markets in July, contributed most significantly to the rise in the Issue Department balance sheet value. The issuance was intended to fund spending on global bonds, maturing in early 2013. Banks' deposits with the BNB also went up in 2012, their dynamics reflecting the significant volume of deposits attracted from residents, the maintained excess reserves and increased funds on banks' settlement accounts in TARGET2. The Issue Department balance sheet value was influenced by the gold price rise, which led to an increase in assets of BGN 109 million on an annual basis by end-December.

External currency flows related to the change in international reserves reflected economic agent needs for cash in foreign currency or levs. In 2012 as in 2011 banks realised net purchases of currency from the BNB. The major factor behind this trend was the sustained policy of both banks and firms to reduce their external indebtedness.

# Monetary Flows Which Prompted Significant Changes in Gross International Reserves

(million EUR)

(Million EUR)					
External flows	2011	2012*			
Total for the period	-24	1527			
Purchases and sales of euro	-543	-317			
at tills	-11	-10			
banks, incl.	-532	-307			
banks' purchases	33 698	46 550			
banks' sales	-34 230	-46 856			
Flows on accounts of banks, the MF, etc.	520	1844			
Minimum required reserves	-128	40			
Government and other depositors	647	1804			
Note: The table shows only currency inflows and outflows to the legue					

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

Source: BNB.

<sup>10</sup> The market value of international foreign reserves includes changes stemming from transactions and revaluation adjustments. The worsening of the external environment and the expectations about economic activity in Bulgaria in the second half of 2012 will continue to strongly impact financial flows in the first half of 2013. The household propensity to save is expected to remain high and banks to preserve their liquidity high. M3 growth will stay at a relatively high level close to that of late 2012. Demand for loans will remain relatively low reflecting the slow consumption recovery and gradually rising investment activity.

## External Financial Flows

The continuing debt crisis and euro area recession were the factors behind the slowdown of nominal Bulgarian export growth in 2012. Concurrently, amid moderately increasing incomes, a gradual recovery in domestic demand was observed, followed by a slowdown since mid-year. Domestic demand dynamics contributed to the nominal import growth and the increase in the balance of payments trade deficit on an annual basis, which were more pronounced in the first half of 2012.11 The deterioration in the terms of trade since early 2012 also contributed to the expanded trade deficit. Following these dynamics, the current account recorded a deficit in the first half of the year and turned to a surplus in the second half. The BOP current account reported a small deficit in 2012 unlike the surplus reported in 2011. Capital account inflows maintained the positive value of the overall current and capital account balance over 2012.

Flows on Balance of Payments Main Accounts (million EUR)

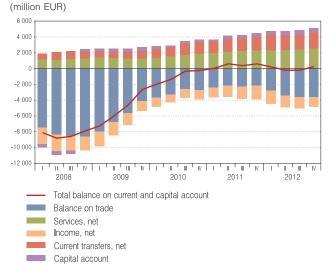
	Data accumulated from the beginning of the year				
	as of 30.XII.2011	as of 30.XII.2012			
Current account	103.5	-267.8			
Trade balance	-2156.1	-3594.1			
Services, net	2314.2	2525.1			
Income, net	-1739.1	-1260.8			
Current transfers, net	1684.5	2062.0			
Capital account	496.8	543.3			
Financial account	-788.4	2138.1			
FDI in Bulgaria	1746.3	1398.0			
Change in reserves	158.7	2161.0			

Source: BNB

<sup>\*</sup> Preliminary data.

<sup>&</sup>lt;sup>11</sup> For a more detailed analysis of exports and imports of goods see Section 3.

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



Source: BNB.

The surplus in the services balance continued its upward trend to reach EUR 2525.1 million on an annual basis by December 2012. Tourist services still occupied the largest share of exports of services, with other business services and construction contributing to this surplus.

Over the year under review the deficit of the income item continued to contract due to lower payments of dividends from foreign direct investments. These dynamics corresponded to the annual decline in gross operating surplus in the first half of the year.

Current transfer inflows tended to grow further, their net balance amounting to EUR 2062.0 million in 2012. This was largely due to the increase in government receipts comprising of both the EU funds receipts and other receipts. The upward trend in current transfers is expected to be retained in the first quarter of 2013.

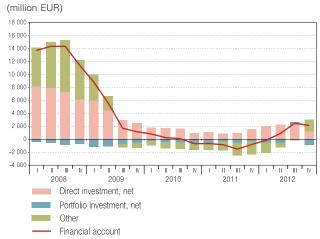
The balance of payments capital account ended in a surplus, posting an increase on the prior year. The more sizeable capital transfers from EU funds to the government contributed the most to this. The surplus is expected to stay at its current levels in the first half of 2013.

If the gradual recovery in domestic demand materialise, the BOP current account is likely to record a low deficit in the first half of 2013, while the surplus of the overall current and capital account balance is projected to reach 0.5 per cent of GDP. Concurrently, a potential escalation of the sovereign debt crisis in the euro area cre-

ates a risk of further deterioration in expectations about future economic activity in Bulgaria. This would depress domestic demand and slow down imports in nominal terms. On the other hand, if the strong recovery of new emerging economies is retained, exports may grow faster that will improve trade and current account balances of the balance of payments.

In 2012 the balance of payments financial account recorded a surplus, reflecting mainly the foreign direct investment (FDI) inflow and Bulgarian Eurobonds issue on international capital markets in July with a nominal value of EUR 950 million.

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



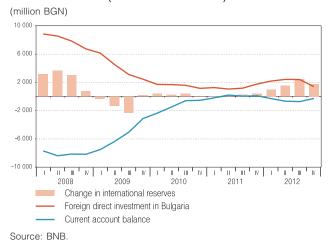
Source: BNB.

In the first half of 2012 banks continued to repay their external liabilities and to increase their foreign assets. Over the second half-year the downward trend in foreign liabilities was sustained, while banks' foreign assets declined. 12 In November, transactions having a one-off effect led to high inflows of funds on other banks' obligations and correspondingly outflows on portfolio assets - debt instruments. Largely as a result of these transactions, banks' gross external debt picked up by EUR 919.2 million in November on the previous month. In comparison, banks' debt posted a decline of EUR 465.2 million on an annual basis by October. Banks' obligations to foreign parent banks incurred in connection with financing their operations in Bulgaria occupied the largest share in overall banks' debt, of which 69.3 per cent in the form of short-term liabilities as of October.

<sup>&</sup>lt;sup>12</sup> Please refer to footnote 8.

The major balance of payments dynamics resulted in an increase of EUR 2161.0 million in BNB international reserves (excluding valuation adjustments and price revaluation) in 2012. By December the coverage of nominal imports in the last twelve months by international reserves was 6.8 months, while the coverage of the short-term debt was 147.0 per cent.

## Dynamics of International Reserves, Foreign Direct Investment in Bulgaria and Balance of Payments Current Account (on an Annual Basis)



Banks' Flows on Balance of Payments Financial Account (million EUR)

		Data accumulated from the beginning of the year				
	as of 30.XII.2011	as of 30.XII.2012				
Net direct investment	178.5	-54.8				
abroad	0.0	-0.4				
in Bulgaria	178.5	-54.4				
Net portfolio investment	220.9	-1132.5				
assets	217.7	-1150.0				
liabilities	3.2	17.4				
Other investments	-1889.3	1400.1				
assets	-695.8	664.9				
liabilities	-1193.5	735.2				
Portfolio and other investments	-1668.4	267.5				
Total	-1489.9	212.8				

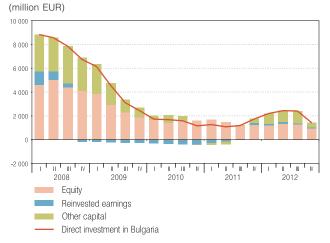
Source: BNB.

In 2012 foreign direct investment flow in Bulgaria was positive <sup>13</sup>, electricity, trade and transport sectors contributing greatly. <sup>14</sup> The bulk of this

<sup>13</sup> Preliminary data that are subject to revision upon receipt of additional information from direct investment enterprises.

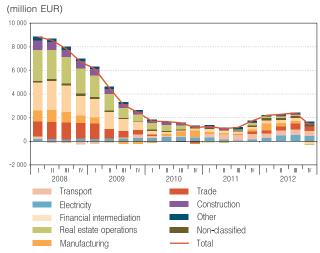
investment was in the form of equity (66.8 per cent) and other capital (26.4 per cent).

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



Source: BNB

# FDI in Bulgaria by Economic Sector (on an Annual Basis)



Source: BNB

In the first quarter of 2013 FDI inflow is expected to remain close to the current level of 4 to 5 per cent of GDP. Risks to the projection still relate to a possible higher uncertainty about global economic developments, which may result in lower-than-expected inflow of FDI into Bulgaria.

The increase in gross external debt was driven mainly by larger FDI liabilities and long-term obligations of the general government sector due to Bulgarian government bonds issue on international capital markets in July. Rising external liabilities of the *Banks* sector in November had an one-off upward effect on gross external debt. As a result of these developments, gross

<sup>&</sup>lt;sup>14</sup> In this section, the headings of the economic sectors should read as follows: real estate operations – real estate operations, lessors activities and business services; electricity – production and distribution of electricity, heating, gaseous fuels and water; transport – transport, storage and communications; trade – trade, repair of motor vehicles and motorcycles, personal belongings and household goods; healthcare – healthcare and social activities; agriculture – agriculture, forestry and fishery.

external debt reached EUR 37,897.4 million: up EUR 2051.9 million on the end of 2011.

Gross External Debt as of November 2012

(million EUR)

	Amount	January – November 2012 *	Last 12 months*
General government	3 377.9	594.9	695.4
Central bank	0.0	0.0	0.0
Banks	6 477.0	828.4	708.7
Other sectors	12 245.8	73.8	-3.3
FDI: Intercompany loans	15 796.7	554.9	580.7
Total	37 897.4	2 051.9	1 981.6

<sup>\*</sup> Change in the corresponding period.

Source: BNB.

Between January and November repayment of borrowed funds of the total economy amounted to EUR 5569.7 million (EUR 6086.4 million in the same period of 2011). In the first eleven months of the year new loans and deposits amounted to EUR 6876.9 million (EUR 4191.6 million between January and November 2011), mainly in the form of intercompany loans (30.8 per cent).

The average-weighted interest rates on new loans declared between January and November 2012 declined by 0.6 percentage points on an annual basis to 3.5 per cent.

In the maturity structure of gross external debt, short-term external debt increased by EUR 647.8 million on an annual basis between January and November, its share falling to 27.9 per cent of gross external debt (28.0 per cent a year earlier).

# Gross External Debt Service by Institutional Sector (million EUR)



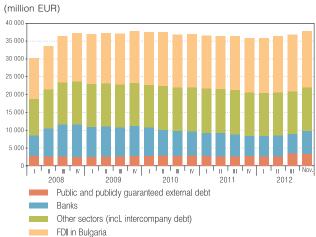
Source: BNB.

# Loans and Deposits Received by Institutional Sector

(million EUR) 4500 4000 3500 3000 2500 2000 1500 1000 500 2008 2009 General government Banks Other sectors Intercompany loans

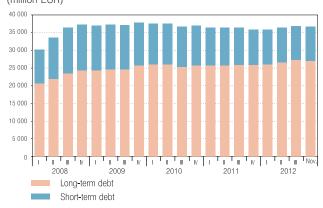
Source: BNB.

# Gross External Debt by Institutional Sector



Source: BNB.

# Long- and Short-term Gross External Debt Dynamics (million EUR)



Source: BNB

In the currency structure of gross external debt, the euro retained its high relative share which came to 88.8 per cent by end-September 2012. The euro occupied the largest share in intercompany loans (92.1 per cent) and the smallest share in the general government sector (82.6 per cent).

Between January and November Bulgaria's gross foreign assets increased by EUR 2677.1 million, with BNB gross international reserves rising by EUR 1747.7 million. As a result of gross foreign asset and gross external debt dynamics, net external debt decreased by EUR 625.1 million, reaching EUR 15.6 billion in November 2012. Based on external debt dynamics, it may be concluded that external financing conditions of the Bulgarian economy improved further. The average-weighted maturity of the Bulgarian external debt continued to grow. The share of short-term debt in total gross external debt remained low, while lending rates on new loans decreased. As a consequence, a drop in the cost of financing in Bulgaria may be expected over the first half of 2013.

# **Monetary Aggregates**

By end-2012 reserve money continued growing at comparatively high rates. Banks' deposits with the BNB and, to a lesser extent, cash in circulation had the major contribution to their growth. The dynamics of banks' deposits with the BNB over the review period reflected the large excess reserves maintained by banks against the background of excess liquidity in the banking system, as well as the increased funds on their accounts in TARGET2. The total amount of banks' deposits with the BNB reflected, to a lesser extent, the rising minimum required reserves with the BNB resulting from the higher deposit base.

Reserve Money



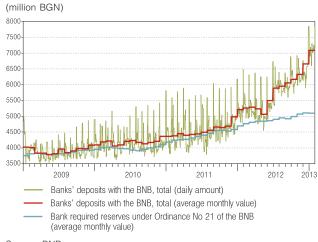
Source: BNB.

The average daily volume of funds attracted from residents<sup>15</sup> increased over the course of

2012, their growth coming to BGN 794 million in the fourth guarter of 2012 or BGN 4280 million in 2012. The average daily volume of funds attracted from non-residents went up significantly over the last quarter: up BGN 2138 million, of which BGN 1603 million from non-resident banks<sup>16</sup> and BGN 536 million from non-residents (banks excluded). Reflecting the developments and structure of attracted funds, the effective implicit rate of minimum required reserves maintained with the BNB was 8.85 per cent. 17 with banks' reserves with the BNB forming 7.73 percentage points, and the remaining 1.12 percentage points formed by cash and funds on banks' settlement accounts in the TARGET2 national system component. 18 The excess of banks' funds on minimum reserve requirements accounts with the BNB under Ordinance No 21 reached 7.7 per cent in the fourth quarter and 8.7 per cent in 2012.

As regards bank deposits with the BNB, their growth is expected to gradually slow down in the first quarter of 2013, which is based on our projection for slower growth rates of resident deposits. In case of further worsening in the business climate, the growth in household deposits and hence in bank deposits with the BNB may accelerate due to the higher savings rate.

### Bank Deposits with the BNB



Source: BNB

<sup>&</sup>lt;sup>15</sup> The definition of residents other than state and local government budges under BNB Ordinance No 21 on the Minimum Required Reserves Maintained by Banks at the BNB is used in the analysis.

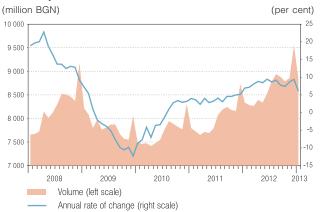
<sup>&</sup>lt;sup>16</sup> The increase in non-resident banks' deposits was mainly due to the one-off effect transactions concluded in November 2012, see note 8.

According to Article 3, paragraph 1 of BNB Ordinance No 21, the rate 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.

<sup>&</sup>lt;sup>18</sup> See Article 4 of Ordinance No 21 of the BNB.

The annual growth rate of currency in circulation accelerated in 2012 to reach 9.4 per cent by end-December. In early 2013 a gradual moderation in the growth of currency in circulation is projected, prompted by the expected slight GDP growth and slow recovery in consumption.

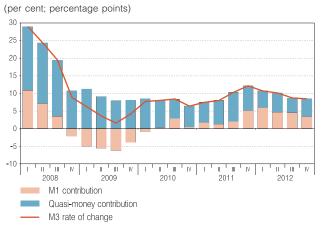
## Currency in Circulation



Source: BNB.

In 2012 the annual broad money growth retained its relatively high levels, gradually moderating over the year under review. By December the annual growth of M3 was 8.5 per cent, with both the lower M1 growth and quasi-money moderation contributing to this.

# Annual M3 Growth Rate and M1 and Quasi-money Contribution (Quarterly)

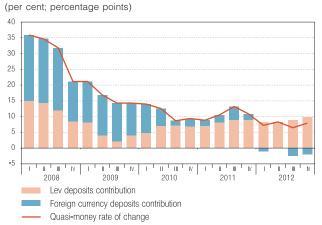


Source: BNB.

In 2012 and mainly in the second half-year foreign currency deposits of firms and households<sup>19</sup> included in the quasi-money posted a decline, while the contribution of lev-denominated deposits remained relatively stable. This trend reflected also on the share of lev-denominated deposits in quasi-money which continued to increase steadily to 53.6 per cent by end-December compared with 47.9 per cent a year earlier. The change in the preferences of firms and households was mainly driven by the higher interest rates on lev-denominated deposits compared to those on foreign currency deposits.

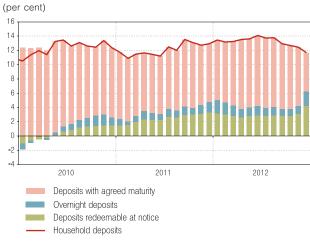
At the end of 2012 a change in the main types of deposits was observed, contributing to the annual growth rate of household deposits. Deposits redeemable at notice and overnight deposits contributed more, while the contribution of deposits with agreed maturity posted a decrease.

# Annual Quasi-money Growth Rate and Contribution of its Components (Quarterly)



Source: BNB.

# Annual Growth of Household Deposits and Contribution by Type of Deposit



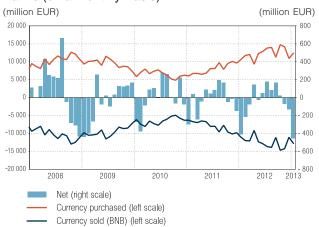
Source: BNB.

In the first half of 2013 annual growth of broad money is expected to slightly slow down as a result of the moderate income growth amid the sustained high household propensity to save.

<sup>&</sup>lt;sup>19</sup> Thus indicated data on deposits and loans of households include also deposits and loans of NPISHs in line with the classification used in monetary and interest rate statistics.

Transactions in reserve currency (euro) with the BNB is the major tool of banks to manage their lev liquidity. Thus, the main function of the Currency Board is performed: buying and selling on demand national currency against euro.

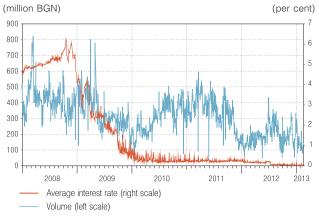
# Currency Sales and Purchases between the BNB and Banks (on a Monthly Basis)



Source: BNB.

In 2012 banks realised net purchases of currency from the BNB. This trend was related to the sustained policy of both banks and firms to reduce their external indebtedness.

# Trade Volumes and Interbank Money Market Interest Rates

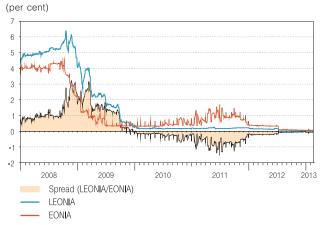


Source: BNB.

Interest rates on the interbank money market in Bulgaria followed their downward trend. The average interest rate on transactions concluded on the interbank market went down to 0.05 per cent. At the same time, the average daily volumes traded in the interbank money market decreased in 2012 compared with 2011. The factors behind these developments relate both to the sustained ample liquidity in the Bulgarian banking system and to the ECB's monetary pol-

icy in 2012 to provide unlimited liquidity to euro area banks and to decrease the interest rate on main refinancing operations.

# Spread between LEONIA and EONIA (Daily Data)

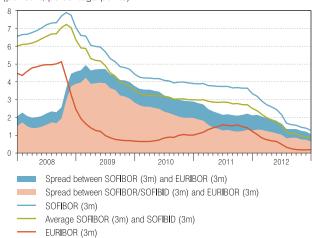


Source: BNB.

LEONIA fell in 2012, fluctuating within a narrow range around 0.03 per cent in the third and fourth quarters. The average value of the negative spread between LEONIA and EONIA narrowed further, fluctuating around 3 basis points over the same period.

## SOFIBOR, EURIBOR and Average SOFIBOR/ SOFIBID Index (Three-month Horizon)

(per cent; percentage points)



Source: BNB.

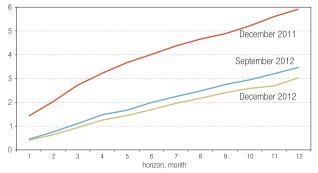
SOFIBOR reference rate (3m) used as an indicator for short-term interest rates tended downwards in 2012, reaching 1.39 per cent by December. The spread between the three-month SOFIBOR and the three-month EURIBOR also decreased, though at a slower pace than in the first half-year, reaching 121 basis points by December. The average three-month

SOFIBOR/SOFIBID reference rate<sup>20</sup> declined to 0.94 in December and the spread between the average quotation and EURIBOR came to 75 basis points.

The downward trend in the long-term maturity sectors of the interbank money market yield curve was retained in the last quarter of 2012. A year-on-year fall of 257 basis points was reported in the six-month horizon, while in the 12-month horizon, it was 328 basis points.

# Interbank Money Market Yield Curve (Based on Average SOFIBOR/SOFIBID Quotations)

(per cent)



Source: BNB.

# Interest Rates on New Time Deposits in Relevant Currencies





Source: BNB.

In 2012 interest rates on new time deposits<sup>21</sup> continued to decrease. The downward trend in interest rates on deposits was associated mostly

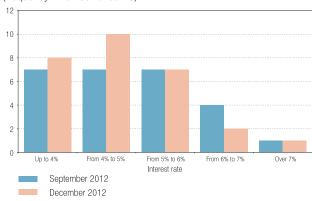
<sup>20</sup> The average SOFIBOR/SOFIBID index gives a better picture of the interest rates in Bulgaria. Correspondingly, it is more correctly to compare this value with EURIBOR as the closest rate to the actual price at which transactions are concluded. For further methodological notes, see the box Differences between the Methodology for Calculating Money Market Indices in the Euro Area and in the New EU Member

with the ample liquidity of the banking system and the relatively low demand for bank loans. In the fourth quarter the average-weighted interest rate was 3.9 per cent. In 2012 interest rates on lev deposits declined most significantly and, to a lesser extent, those in euro. Interest rates on USD deposits marked an increase. Overall, a moderation in the deposit rate decline was observed at year-end compared to the previous quarters.

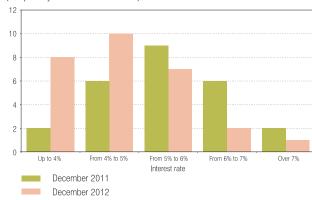
In 2012 the breakdown of interest rates on household time lev deposits showed that the number of banks offering rates in the up to four per cent and from four to five per cent bands increased and those offering rates within the higher bands decreased. The average interest rate level in 2012 decreased by 60 basis points to 4.9 per cent, while the dispersion ratio rose by 48 basis points to 1.60 percentage points.

# Distribution of Interest Rates on New Household Time Lev Deposits

(frequency - number of banks)



(frequency - number of banks)



Source: BNB.

During the first two quarters of 2013 interest rate levels on time deposits are expected to be broadly sustained, tending downwards in the second half-year. The main factor behind this

States, Economic Review, 2/2010, p. 27.

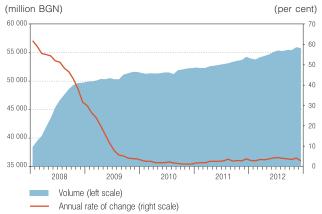
<sup>&</sup>lt;sup>21</sup> The terms *newly agreed*, *new loans and deposits* and *new* refer to the *new business* statistical category.

outlook would be banks' ample liquidity in the context of relatively low demand for loans. The ECB's non-standard monetary policy measures for providing unlimited liquidity to euro area banks will also put downward pressure on interest rates.

# **Credit Aggregates**

Amid high credit standards and low external and domestic economic activity, loans to the private sector continued to grow at a decreasing pace by end-2012. The major factors behind credit dynamics were the low investment activity of corporations and the unfavourable labour market situation, which limited household consumption. After the enhanced lending in the first half-year, the annual growth rate of banks' claims on the non-government sector slowed down to 2.8 per cent by end-December. This slowdown had an impact on the claims on non-government sector to GDP ratio, which fell to 72.0 per cent.<sup>22</sup>

## Claims on Non-government Sector

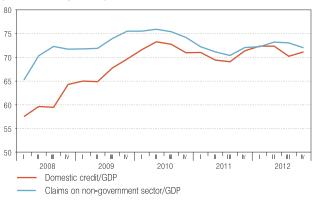


Source: BNB (monetary statistics: monetary survey)

### **Domestic Credit**

Source: BNB.

(share of GDP, per cent)



 $^{\rm 22}$  This ratio is calculated using GDP for the last four quarters

In the first half of 2012 banks continued to use the high inflow of attracted funds not only in credit operations, but also to repay their foreign liabilities and to increase their foreign assets. Over the second half-year the downward trend in foreign liabilities was sustained, while banks' foreign assets declined.<sup>23</sup> The increase in the residents' deposit base is expected to provide enough resources for the banks to increase the volume of domestic credit.

# Foreign Assets and Liabilities of Banks

(billion BGN)



Source: BNB

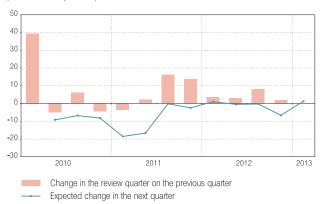
According to the summarised results of the BNB quarterly lending activity survey, corporations and to a lesser extent households reported an increase in demand for loans between October and December 2012 compared to the third quarter. Corporations' demand for short-term loans strengthened, while the demand for long-term remained unchanged unlike the previous quarter, when both categories reported a slight decrease. Households' demand for housing loans has increased for the first time since the third guarter of 2011. Banks have more optimistic expectations regarding the demand for loans in the first quarter of 2013 mainly by corporations and, to a lesser extent, by households. In the fourth quarter of 2012 banks' standards for corporate loans were tightened minimally, while credit conditions for households were eased, most notably for consumer loans and to a lesser extent for housing loans. Expectations of credit standards over the first quarter of 2013 show slight tightening in corporate loans and further easing in housing and consumer loans.

The annual growth of claims on non-financial corporations decreased slightly at the end of

<sup>&</sup>lt;sup>23</sup> Please refer to Footnote 8.

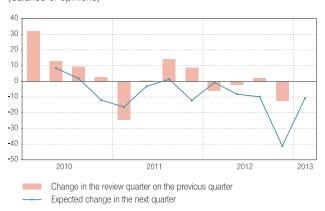
# Changes in Credit Standards Applied to Corporate Loans

(balance of opinions)



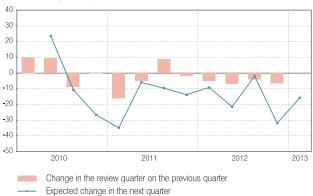
# Changes in Credit Standards Applied to Consumer Loans

(balance of opinions)



# Changes in Credit Standards Applied to Housing Loans

(balance of opinions)

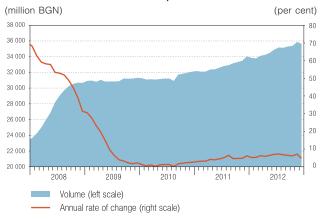


Note: The charts present banks' balance of opinions as the difference in percentage points between the percentage of banks that answered 'tightened' ('significantly' and 'to some extent') and percentage of banks that answered 'eased' ('significantly' and 'to some extent'). All the answers are weighted by banks' market share in the respective credit segment. The expectations are shown in the charts by shifting the data a quarter forward.

Source: BNB, Lending activity survey.

the year, their rate reaching 4.7 per cent by end-December. The major factors behind these dynamics were the low investment activity of corporations and the worsening of firms' expectations about future economic activity at the end of 2012. The ongoing trend towards firms' cost optimisation had a significant influence as well. In this context, demand for corporate loans was mainly driven by the need of working capital and for refinancing of existing loans, while demand for investment loans remained low. The low growth in loans to non-financial corporations reported in 2012 was affected by the base effect in the last quarter of 2011 when the volume was influenced by one-off factors.

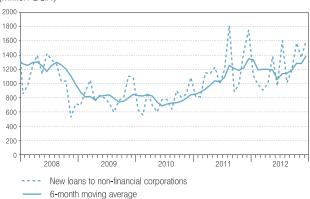
## Claims on Non-financial Corporations



Source: BNB.

# New Loans to Non-financial Corporations (Monthly Volumes)

(million BGN)



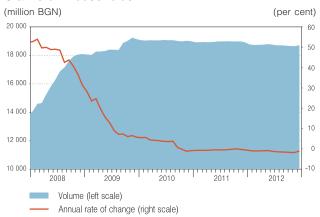
Source: BNB (interest rate statistics: interest rates and volumes of new business: breakdown of loans to the non-financial corporation and household sectors by original maturity).

The trend towards refinancing of existing loans was also reflected in the data on newly extended loans to non-financial corporations, which retained their upward trend. In 2012 monthly volumes of new loans fluctuated around their levels of the period before the global financial and

economic crisis regardless of the higher bank lending standards.<sup>24</sup>

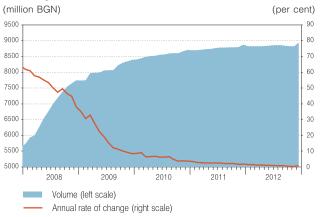
Banks' claims on households posted a slightly higher decline in the second half of 2012 than in the first half, their total volume contracting by 1.0 per cent on an annual basis by end-December. Relatively negative expectations about households' financial position, economic situation and unemployment rate contributed to retaining their high propensity to save and avoiding new obligations. On an annual basis, a slight increase only in housing loans was observed, with a tendency to slow down. Overdraft and consumer loans reported a decline. The statistics of new loans<sup>25</sup> still shows higher agreed volumes of consumer loans compared to housing loans.

#### Claims on Households



Source: BNB.

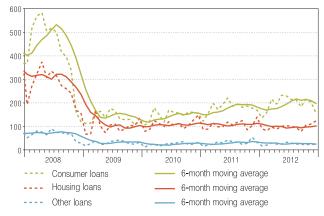
## Housing Loans



Source: BNB (monetary statistics: loans to non-financial corporations, households and NPISHs).

## New Loans to Households (Monthly Volumes)

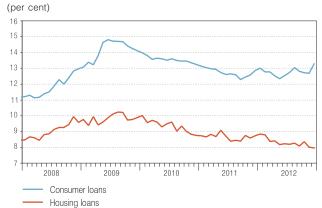
(million BGN)



Source: BNB (interest rate statistics: interest rates and volumes of new business: breakdown of loans to the non-financial corporation and household sectors by original maturity).

Credit growth is expected to be low in the first half of 2013 due mainly to worsened external and internal environment. The current upward trend is expected to be retained mostly in corporate loans, while loans to households are anticipated to continue decreasing slightly at the current rates. These expectations are associated with our projections of a moderate increase in firms' investment activity and their sustained policy of cost optimisation, low growth rates of household income, as well as slow recovery of employment and consumption.

# Annual Percentage Rate of Charges on New Household Loans (Average Weighted by Currency)



Source: BNB (interest rate statistics: annual percentage rate of charges on new business: breakdown of loans to the household sector by original maturity).

Lending rates have been on a downward path since 2009, stabilising at their current levels in the second half of 2012. In December 2012 interest rates on new loans to non-financial cor-

<sup>&</sup>lt;sup>24</sup> Part of these volumes comprises renegotiated loans, which signals that the banking system has reacted adequately to the difficulties experienced by corporations and households.

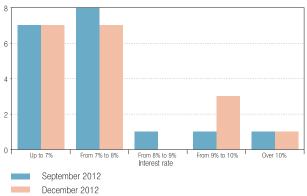
<sup>&</sup>lt;sup>25</sup> See note 24.

porations<sup>26</sup> stabilised at levels around 8.0 per cent on loans in euro and around 8.4 per cent on those in levs. The annual percentage rate of charge (APRC) on new housing loans declined to 8.1 per cent, while the interest rate on consumer loans slightly went up to some 12.9 basis points on end-2011. Interest rate dynamics reflected mainly the ample liquidity in the banking system and reduction of financing costs.

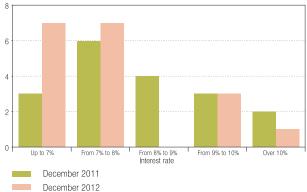
As regards the distribution of interest rates on housing loans in euro by bank, in 2012 the number of banks offering rates up to 7 per cent and from 7 to 8 per cent increased at the expense of those offering rates within the higher bands. In 2012 the average interest rate level declined by 59 basis points and the dispersion ratio fell by 9 basis points to 1.46 percentage points.

### Distribution of Interest Rates on New Housing Loans in Euro

(frequency - number of banks)



(frequency - number of banks)



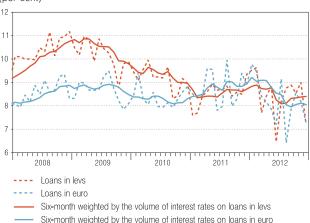
Source: BNB.

The slow decline in lending rates is expected to persist in the first half of 2013. Our expectations are based on the ample banking system liquidity and reduced Bulgaria's risk premium. Deposit

interest rates are likely to slowly decline in 2013, thus having a dampening effect. A possible intensification of the debt crisis will bring about further instability and uncertainty on international financial markets and the effect thereof on Bulgaria's risk premium may push interest rates upwards or leave them unchanged. Generally, we estimate the risks to the outlook for lending rates as balanced.

### Interest Rates on New Loans in Levs and Euro to Non-financial Corporations

(per cent)



Sources: BNB (interest rate statistics: interest rates and volumes of new business on loans to non-financial corporation and household sectors by original maturity).

#### Reallocation Role of the State Budget

Government fiscal policy affects the allocation of liquidity between economic sectors.<sup>27</sup> The government could receive net funds from some economic sectors and redirect them to other sectors through budget operations. In the third quarter of 2012 the government was a net provider of liquid resources to the financial sector, with the volume of newly issued government securities on the domestic market and withdrawn resource in the form of corporate tax from financial institutions being lower than that of maturing government bonds and interest payments on domestic government debt instruments. The sale of Bulgarian government bonds on international capital markets in July was intended to provide funding for the global bonds maturing in 2013. As a result, an inflow of approximately BGN

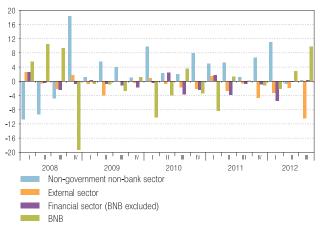
 $<sup>^{\</sup>rm 26}$  The weighted average of the interest rates are analysed on a six-monthly basis.

<sup>&</sup>lt;sup>27</sup> For more details of the 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.

1840 million from the external sector fuelled the government deposit with the BNB.28 As part of international reserves, these funds were invested abroad without affecting Bulgaria's liquidity. In addition to the Eurobond issue, the government provided liquidity inflow from the external sector in the form of new external government loans and grant receipts, mostly coming from EU Structural Funds. These funds exceeded the amount of Bulgaria's contribution to the EU budget and interests and payments on external government loans made by the government, which resulted in total net external funds inflow of 10.5 per cent of GDP in the third quarter of 2012. Over the fourth quarter, as in the previous one, government fiscal policy did not affect seriously the allotment of liquidity to the non-government non-bank sector. For comparison purposes, in the first quarter of 2012 the larger portion of the budget deficit was financed by fiscal reserve funds, and therefore liquidity was withdrawn from the central bank and redirected to the non-government non-bank sector.

### Influence of Consolidated Budget on Other Sectors' Liquidity (Quarterly)

(share of GDP, per cent)



Sources: MF, BNB.

Based on the available information for the fourth quarter, it may be concluded that in the absence of significant amortisation payments on domestic government debt instruments and a realised gross government bond issue to the amount of some BGN 188.7 million, the government withdrew net liquidity from the financial sector. The external sector is a net source of liquidity given the acceleration of the use of funds on EU Cohesion and Structural Funds over the last three months of 2012.<sup>29</sup>

<sup>&</sup>lt;sup>28</sup> Subsequently, some of these government securities were purchased on the secondary market by Bulgarian investors. Bulgarian financial institutions held around EUR 286.3 million (BGN 560 million) by end-October, of which EUR 205.1 million (BGN 401 million) are owned by Bulgarian bank institutions according to the BNB data.

<sup>&</sup>lt;sup>29</sup> According to the Ministry of Finance data on the financial implementation of EU Structural Funds and Cohesion Fund, the tranches received from the European Commission increased by EUR 543.7 million (BGN 1063.3 million) in the fourth quarter of 2012, with the fund utilisation rate rising from 27.4 per cent by end-September to 34.1 per cent at the end of the year. Initially, these funds were deposited on a government account with the BNB and subsequently some of them were redirected to the non-government non-bank sector.

# 3. Economic Activity

The worsened external environment affected Bulgaria's economic activity in 2012, with a slowdown reported in export growth followed by a slowdown in firms' production activity and in imports. At the same time, the rate of the gradual domestic demand recovery, which supported GDP growth over the year, moderated in the third quarter. With the economic situation worsening in the context of still low employment, households increased further their propensity to save, while limiting consumption. Fiscal consolidation policy was directed at curbing government consumption, while capital expenditure increased, supporting investment activity in Bulgaria. The weak final demand and existing spare capacity in economy continued to exert pressure on the firms to improve efficiency and implement strategies for intensive economic growth. These factors are expected to continue affecting Bulgaria's economic activity which will result in low growth of real GDP in the first and second quarters of 2013.

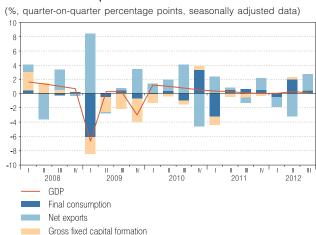
Bulgarian economic activity in 2012 continued to be driven mainly by the international economic environment developments. The euro area recession was a factor behind the decline in demand for Bulgarian goods and services from the other EU countries. Firms managed to redirect a portion of their exports to fast-developing economies outside the EU, such as Turkey and China. Nonetheless, dynamics of the overall goods and services exports remained weak. On the other hand, growth since early-2012 was supported by the recovering private consumption and to a lesser extent by fixed capital investment.

In the context of decreased external and slowly recovering domestic demand, firms continued to improve their effectiveness, while maintaining conservative labour costs policy and limiting investment projects. This was reflected in reported data as a decreased demand for labour, weak wage growth and low investment activity in the private sector.

# <sup>30</sup> The quarter-on-quarter analysis in this section employs seasonally adjusted data, unless otherwise indicated. For indicators on which the NSI or Eurostat do not officially publish seasonally adjusted data, adjustment was made *via* the TRAMO SEATS or OxMetrics programmes by using automated set up for diagnostics and optimisation of adjustment parameters.

GDP flash estimates for the fourth quarter of 2012 became available after the publication of the present issue. In accordance with our expectations, growth of seasonally adjusted real GDP is 0.1 per cent compared with the previous quarter.

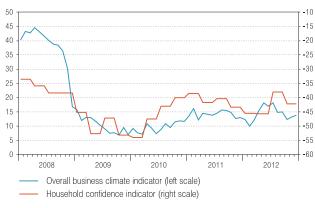
### Contribution to GDP Growth by Component of Final Consumption



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.

### Business Climate and Household Confidence Indicator



Sources: NSI, BNB.

#### GDP Growth by Component of Final Use

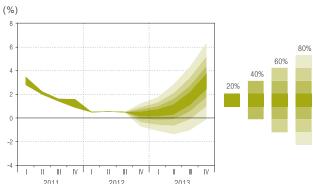
(%, real growth on the previous quarter; seasonally adjusted data)

		20	09			20	10			20	11		2012		
	1	Ш	Ш	IV	- 1	Ш	Ш	IV	- 1	Ш	Ш	IV	- 1	П	Ш
Consumption incl.	-7.2	-0.5	0.6	-0.8	0.0	0.4	-1.2	4.1	-3.7	0.7	0.7	0.6	-0.5	2.4	0.5
Household consumption	-6.8	-0.8	0.3	-0.6	0.2	0.4	-1.0	1.1	-1.3	0.7	0.7	-0.3	0.7	2.9	0.5
Final government consumption expenditure	-12.0	1.6	2.4	-0.8	2.1	0.9	1.6	1.0	2.2	-1.1	-1.1	-0.2	0.2	-0.5	-0.2
Collective consumption	-0.8	0.6	-0.6	-13.2	12.6	-1.5	-0.4	-1.8	-0.1	0.0	-0.6	0.6	-2.1	1.2	0.1
Gross fixed capital formation	-7.1	-6.5	-7.0	-11.5	-4.9	-1.7	-2.2	2.2	-5.0	-2.0	-2.7	-1.2	0.4	1.5	0.4
Exports of goods and non-factor services	-5.9	-2.5	0.2	6.7	1.2	6.8	8.4	-3.2	8.8	-0.6	0.5	2.8	-2.9	3.4	0.0
Imports of goods and non-factor services	-15.7	-1.7	-0.3	-0.2	-1.2	3.4	1.3	3.8	4.3	-0.9	1.5	0.2	-0.8	7.6	-2.8
Real GDP growth	-6.7	0.3	0.3	-2.9	1.2	1.0	0.8	0.6	0.4	0.3	0.1	0.1	0.0	0.3	0.1

Source: NSI.

The reduced external demand and uncertainty around the prospects for a recovery of the euro area led to a weak deterioration in Bulgaria's conjunctural indicators and a slowdown in domestic demand over the third quarter of 2012. At the end of the year further worsening of domestic retail trade and industrial production volumes, as well as the negative signals of the business climate survey are likely to result in a weak quarterly growth of consumption and economic activity over the first and second quarters of 2013.

### Fan Chart of the Expected Annual Rate of Change of GDP



Note: The fan chart shows the expert views 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. 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. The reporting period includes revised GDP growth estimates.

Source: BNB.

In the first two quarters of 2013 domestic demand is expected to revive further, if the economy is not hit by new external shocks. Em-

ployment stabilisation at low levels and limited growth in wages in the context of weak consumer confidence are projected to result in a slow recovery of consumer demand. Investment recovery, however, though limited by the existing spare capacity, will benefit from government capital expenditure in Bulgaria.

Lack of clear prospects for euro area recovery leads to a high level of uncertainty about the materialisation of this forecast both upwards and downwards. In case of faster-than-expected recovery in external demand and confidence in the euro area, higher-than-projected growth rates of exports and foreign capital inflows are expected in Bulgaria. If future developments are more unfavourable, the negative effect on economic agents' confidence and domestic demand is likely to continue in the first and second quarters of 2013.

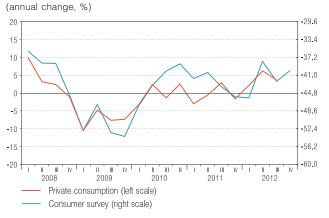
#### Household Behaviour

Household behaviour in terms of consumption, savings rate and labour supply continued to be driven by the low employment along with comparatively weak income dynamics. Still unfavourable situation in the labour market and the temporary deterioration of the economic situation and expectations in both the euro area and Bulgaria contributed to comparatively low consumer confidence<sup>31</sup> and slower growth rate of consumption.

<sup>&</sup>lt;sup>31</sup> The composite confidence indicator is based on consumer expectations in the following twelve months about: financial position and savings of households, the overall economic situation in the country and unemployment (with the sign reversed).

In the third quarter household consumption growth slowed down to 0.5 per cent on a quarterly basis (from 2.9 per cent in the second quarter of 2012). Retail trade volumes indicate a possible additional slowdown in consumption growth over the fourth quarter after their slight decline in the third quarter and deepening falls in the beginning of the fourth quarter<sup>32</sup> (see the *Retail Trade Volume* table on p. 44).

### Private Consumption and Consumer Confidence



Sources: NSI Consumer Survey and BNB own calculations.

According to national accounts data, in the first nine months of 2012 more significant rises were recorded in household expenditure on public catering, transport, heating and electricity, unlike the other groups of goods. In the third quarter of 2012 seasonally adjusted consumption in the foods group increased, unlike public catering costs which posted a decline. No significant changes occurred in the other groups of goods.

Household consumption revival is likely to continue at low rates over the first and second quarters of 2013. Factors limiting this process will remain: comparatively low employment, expectations of its slow recovery and uncertain economic environment which will result in weak consumer confidence and high savings rate of households. However, the continued low growth in the wage bill and increased employment in individual sectors will create conditions for continuing the trend towards a moderate recovery of consumer demand.

Over the third quarter of 2012 total employment retained its second quarter's level (seasonally adjusted data). By sector, a slight increase of employed in construction and financial, insurance and professional activities was recorded.

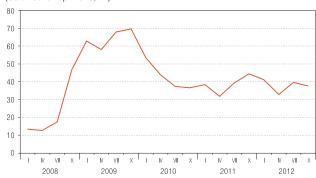
 $^{\rm 32}$  Similar signals come from GDP flash estimates.

Employment dynamics reflected mainly the low labour demand of firms. Given business climate deterioration contributing to more negative expectations of firms about the number of employees, total employment is likely to remain at its present low level in the first half of 2013.

Income dynamics affected household behaviour in terms of labour supply since labour income remains the major source for household financing. Average wage *per* employee continued to rise at comparatively low rates both in real and nominal terms. In the context of an ongoing fall of employment in most industries and low average wage growth rates in the third quarter of 2012, the wage bill in total economy also retained low quarter-on-quarter growth rates both in real and nominal terms.

### Unemployment Expectations in the Following Twelve Months

(balance of opinions; %)



Source: NSI Consumer Survey.

### Expectations about the Financial Position and Economic Situation in the Following Twelve Months

(balance of opinions; %)



Source: NSI Consumer Survey.

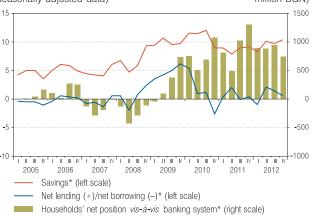
However, relatively negative expectations about households' financial position, economic situation and unemployment rate, as well as the expected inflation acceleration in the following 12 months contributed to the sustained high household propensity to save. This is evidenced by both the

share of savings in disposable income<sup>33</sup> and the net lending to net borrowing ratio<sup>34</sup> based on the data from the household budget survey. Furthermore, households' net assets in the banking system increased according to the BNB monetary statistics. Based on the consumer survey, household intentions to save in the following 12 months increased compared to the first half of 2012 which is likely to continue dampening consumption.

#### Household Propensity to Save

(%, share of disposable income, average *per* household member, seasonally adjusted data)

(quarterly change, seasonally adjusted data, million BGN)



\* NSI data.
\*\* BNB data.

Sources: NSI Household Budget Survey, BNB.

Labour supply by households reflects the employment and income dynamics, slow recovery of activity rate and active labour market policy. Indications of an increased household labour supply have emerged over the recent quarters. This is evidenced in shifts of economically inactive people towards the labour force (mainly as unemployed). The level of unemployment, reflecting developments in both the number of unemployed and labour force, continued to rise moderately over the fourth quarter (in seasonally adjusted terms) based on data from labour force survey (12.5 per cent) and the Employment Agency (11.3 per cent). Employment Agency data for December 2012 and January 2013 indicate stabilisation of seasonally adjusted

33 Disposable income (based on the household budget survey) is obtained by subtracting tax expenditure, social insurvey.

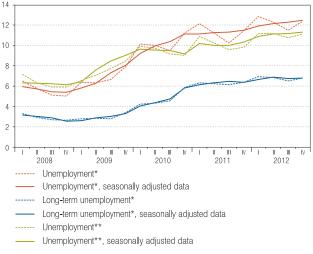
ances and transfers from the total income.

unemployment after a prolonged period of acceleration.

Unlike 2011 and 2012 (up to the third guarter), the increased unemployment reflects, besides further reductions, the shifts of inactive persons (mainly discouraged and to a lesser extent housewives and students) towards the labour force, mostly as unemployed. This increase in supply of labour by persons who have so far been excluded from the labour force is also evidenced in the dynamics of the economic activity rate representing the labour force to working-age persons ratio. Quarter-on-quarter activity rate acceleration from the middle of 2011 broadly reflected the decrease in the number of workingage persons. From January to the third guarter of 2012, however, labour force increases also began to support the activity rate.

#### Unemployment

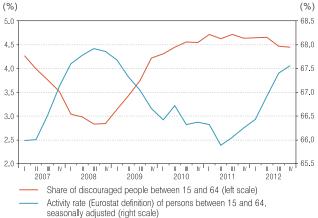
(% of labour force; seasonally adjusted data)



\* NSI data

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

#### Activity Rate and Share of Discouraged Persons



Sources: NSI Labour Force Survey, BNB.

<sup>&</sup>lt;sup>34</sup> This indicator is based on NSI household budget survey data as a difference between deposit amounts, foreign currency and bond purchases and repaid debt and granted loans, on the one hand, and the amount of withdrawn savings, loans and credits, on the other hand.

<sup>\*\*</sup> Employment Agency data.

#### **Employment and Income Dynamics**

		20	109			20	10		2011				2012		
	- 1	Ш	Ш	IV	- 1	Ш	Ш	IV	- 1	Ш	III	IV	- 1	Ш	Ш
Seasonally adjusted data (% on the previous quarter)															
Employed	-0.7	-1.1	-1.9	-1.5	-0.9	-1.3	-0.3	-1.9	-1.2	-0.7	-0.9	0.3	-0.6	-1.3	0.0
Nominal wage per employee*	1.8	2.3	2.4	-2.7	16.1	-2.7	-0.9	2.2	3.0	2.3	0.5	1.0	0.7	2.1	2.0
Real** wage per employee	1.0	3.1	3.3	0.0	6.3	-0.6	1.3	0.8	-1.1	2.3	0.5	0.1	1.0	0.6	0.6
Wage bill, nominal terms	2.7	2.5	1.8	-8.2	13.3	-1.1	-0.2	-0.3	0.3	1.8	0.8	0.7	0.8	0.8	1.1
Wage bill, real terms*	-0.1	1.7	0.9	-2.1	5.5	-2.2	0.9	-1.2	-2.4	2.1	-0.2	-0.7	1.2	0.1	0.2
Seasonally non-adjusted data (% on the previous year)															
Employed	0.0	-1.5	-3.4	-5.5	-5.9	-5.7	-3.4	-3.6	-5.0	-4.5	-5.0	-2.3	-1.6	-2.8	-1.5
Nominal wage per employee*	18.4	15.6	14.8	2.6	19.4	13.4	9.1	12.9	1.7	7.4	8.5	6.3	4.3	4.4	6.3
Real** wage per employee	12.6	12.1	13.8	1.7	17.1	10.3	5.6	8.6	-2.7	3.9	5.2	3.7	2.4	2.5	3.2
Wage bill, nominal terms	18.2	13.3	9.6	-4.2	11.2	5.9	4.0	8.9	-4.2	3.3	4.9	3.4	3.0	2.5	4.2
Wage bill, real terms**	12.4	9.9	8.7	-5.1	9.1	2.9	0.6	4.7	-8.4	-0.1	1.8	0.8	1.1	0.7	1.2

<sup>\*</sup> Wage is calculated on the basis of NSI (SNA) data by deducting social security contributions paid by employers from compensation of employees and dividing the difference by the number of employed.

Sources: NSI - SNA, NSI Labour Force Survey, BNB own calculations, Eurostat.

#### Retail Trade Turnover

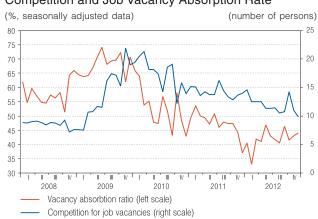
(% on the previous quarter; seasonally adjusted data at constant prices)

		2009				20	10			20	011			2012		
	1	Ш	Ш	IV	-1	Ш	Ш	IV	- 1	Ш	Ш	IV	- 1	Ш	Ш	IV
Retail trade turnover, excluding cars and motorcycles	-3.0	-3.4	-2.0	-1.6	-5.6	-0.4	0.9	-0.4	-0.5	-0.7	-1.3	-1.1	-1.2	2.1	-0.9	-2.6
incl.																
Foods, drinks and tobacco	6.8	-0.4	0.8	0.1	0.8	0.9	0.0	0.1	-1.5	-0.5	0.1	-0.1	1.0	1.1	-0.9	-1.2
Textile, clothing, footwear and leather	-6.4	-2.4	-3.3	1.2	6.9	0.2	1.3	-0.2	-1.0	-2.9	-3.7	1.0	-17.4	1.6	3.6	8.1
Household goods and home appliances	-16.1	-4.6	-4.9	-3.8	-11.1	0.5	-0.3	-2.1	-2.9	-1.4	-2.4	-2.5	-5.4	4.6	-4.7	-4.6
Computers and communication equipment, etc.	-23.4	-1.9	-2.5	-2.7	-1.7	-0.8	8.2	1.5	-8.7	0.5	0.3	-0.9	0.4	1.8	0.2	-6.2
Pharmaceutical and medical goods, cosmetics and toiletries	6.3	-0.9	2.2	1.8	3.3	1.4	1.1	1.7	-1.4	3.1	2.4	3.0	0.9	0.6	0.8	-5.6
Unspecialised shops with different kinds of goods	52.4	-0.3	-0.5	0.1	16.9	1.8	3.4	2.3	1.6	-0.2	-2.1	0.0	-6.6	-1.8	-1.3	5.0
Automobile fuels and lubricants	-2.6	-3.7	0.1	-0.1	-30.2	1.2	2.7	-0.4	1.1	-0.8	-1.8	-1.4	-2.0	2.5	1.3	-2.8

Source: NSI Domestic Trade Survey.

The sustained upward trend in labour supply in a period of further increases of longer-term unemployed (over one year) will broadly depend on the creation of new jobs and the vacancy absorption ratio, though the signals tend to be negative. Available data on vacancy absorption<sup>35</sup> published by the Employment Agency broadly indicate low absorption along with a decreased number of unemployed *per* vacant position, mainly reflecting accumulation of unoccupied positions under employment programmes of previous periods. On the other hand, labour demand by firms is likely to remain weak given the negative signals of business climate data and firms' expectations about the number of their staff.

#### Competition and Job Vacancy Absorption Rate



Sources: Employment Agency, BNB.

In the first half of 2013 employment is likely to stabilise at its low levels and recover slowly throughout the year. Risks to the projection stem mainly from firms' sentiment and euro area debt

<sup>\*\*</sup> Data deflated by HICP.

<sup>&</sup>lt;sup>35</sup> This is the ratio between the number of newly occupied vacancies in a given month and the total number of vacancies in this month (unoccupied posts in the previous month and posts offered in the current one).

crisis developments. Since most of labour cost optimisation through personnel dismissal has been completed since 2009, any decreases in employment are expected to be limited.

Expectations of a slow employment recovery and comparatively high level of unemployment will probably result in a more moderate increase in nominal wages over the first half of 2013, with the strong link between real wage growth and labour productivity being sustained.

In line with these trends, the recovery of consumer demand of households is likely to continue moderately in the first half of 2013.

#### **Public Finance and Consumption**

At the end of the third guarter Bulgaria's budget position continued to improve compared with the first quarter of 2012, with fiscal consolidation enacted mainly through effective reduction of current non-interest expenditure and supported by the increased growth rate of total budget income. At the end of September consolidated fiscal programme (CFP) surplus came to 0.3 per cent of GDP, while CFP budget deficit for 2012 was BGN 350.2 million (MF preliminary monthly data) or -0.5 per cent of GDP, 36 which is significantly lower than the government programme deficit of BGN 1092 million (-1.4 per cent of GDP).<sup>37</sup> At the end of the year CFP balance was formed by a national budget deficit and EU programmes surplus since only in the fourth guarter budget revenue from EU grants amounted to around BGN 1179.7 million.<sup>38</sup>

(million BGN)

		20	12	
	IX	Χ	XI	XII
CFP budget balance incl.	248.1	-74.2	-105.3	-350.2
National budget	735.3	476.9	122.4	-680.5
EU funds	-487.1	-551.2	-227.7	330.2

Source: MF.

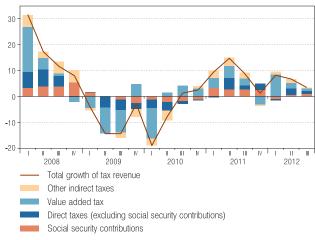
MF quarterly data for the January to September 2012 period show that total budget revenue on consolidated fiscal programme grew by 8.9 per cent. In addition, the first quarter's trend to a

 $^{\rm 36}$  Nominal GDP for the last four quarters as of the end of the third quarter of 2012 is used.

gradual increase in the contribution of non-tax revenue and grants to total budget receipts growth was sustained at the expense of the decreasing contribution of tax revenue.

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

(%, percentage points)

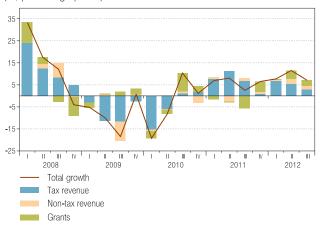


Sources: MF, BNB.

These developments were mainly due to the slowing annual growth rate of VAT receipts. The significant mismatch between the growth rate of VAT revenue and private consumption dynamics was partially due to the measures to improve tax collection, which were initiated in the first months of the year, as well as to the divergent dynamics of tax credit refunding in 2011 and 2012.

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

(%, percentage points)



Sources: MF, BNB.

The increase in the EU structural and cohesion fund absorption rate to 27.4 per cent at the end of September 2012, from 18.8 per cent at the end of December 2011, was another factor driving the changes in contributions of the ma-

 $<sup>^{37}</sup>$  This programme is set out in the report to the Law on the State Budget of the Republic of Bulgaria for 2012.

<sup>&</sup>lt;sup>38</sup> According to preliminary monthly data of the Ministry of Finance on implementation of the consolidated fiscal programme.

jor revenue groups to total government revenue growth. Reflecting the improved fund absorption rate, receipts from grants rose by around 59 per cent compared to the first nine months of 2011.

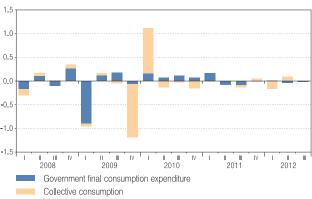
The moderate increase in direct tax revenue which began in the second quarter was sustained during the second half of the year. This development continued to be driven by corporate tax receipts dynamics, while revenue from personal income tax retained the stable annual growth of early 2012.

Once the base effect of the March 2011 one-off transfers of professional pension funds faded, the annual rate of change in revenue from social security contributions in the second and third quarters of 2012 matched the dynamics of compensation of employees in economy (2.6 and 3.6 per cent respectively).

Reflecting the ongoing process of fiscal consolidation, enacted mainly through reducing operating and wage costs in the public sector, the contribution of government consumption to economic growth remained close to zero over the third quarter (-0.02 percentage points).<sup>39</sup>

#### Contribution of Government Consumption to Economic Growth (Quarter-on-quarter Contribution to Seasonally Adjusted GDP Growth)

(percentage points)



Sources: NSI, BNB.

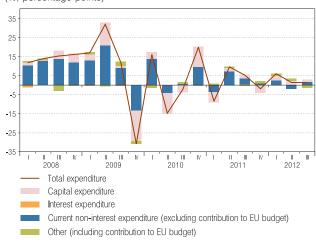
In the third quarter no substantial changes occurred in the major expenditure groups compared with the previous quarter. Subsidy expenditure continued to contribute to limiting the growth of total government expenditure on consolidated fiscal programme over the period, 40 while higher investment expenses and social and

health insurance payments had just an opposite effect.

Following the significant growth in public investment expenditure<sup>41</sup> in the first three months of 2012, a gradual decline in the annual growth rate was recorded in the second and third quarters of the year. The growth of social expenses was mainly due to higher current transfers, compensations and aids for households, while pension payments retained their comparatively constant annual growth of approximately 2 per cent since early-2012.

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

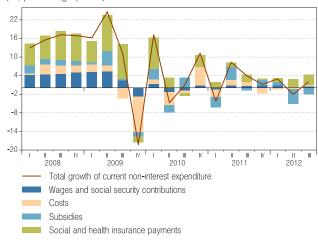
(%, percentage points)



Sources: MF, BNB.

#### Contribution of Major Groups of Current Non-interest Expenditure to Total Expenditure Growth (Quarterly, on an Annual Basis)

(%, percentage points)



Sources: MF, BNB.

Based on MF preliminary monthly data for 2012, growth in total budget revenue and grants on

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<sup>&</sup>lt;sup>39</sup> Operating expenditure and compensation of employees in the public sector are the two major components of government consumption.

<sup>&</sup>lt;sup>40</sup> Including Bulgaria's contribution to the EU budget.

<sup>&</sup>lt;sup>41</sup> Including growth in government reserve.

consolidated fiscal programme was 8.2 per cent on an annual basis. The contribution of tax revenue to the growth in total budget receipts continued to slow down, remaining at the end of the year lower than that of non-tax revenue<sup>42</sup> due primarily to the slowing annual growth in VAT revenue. In the fourth quarter budget revenue from corporate tax<sup>43</sup> continued to decline on an annual basis, mostly reflecting the base effect of one-off payments received in October 2011 from Kremikovtsi AD.44 If this effect is removed, annual growth in corporate tax revenue would be 1.5 per cent for 2012. As in the previous year, grants revenue recorded the most significant underperformance among all revenue groups: merely 61 per cent of government programme projections.

MF preliminary monthly data for 2012 show that budget expenditure on consolidated fiscal programme rose by 3.5 per cent. The increase in total budget expenditure was broadly driven by the annual rise in capital expenditure and social security payments. Lower subsidy and operating expenditure again had the major contribution to limiting the annual growth of total budget expenditure.

Despite the strong annual growth in public investment expenditure (19.2 per cent), its performance rate remained the lowest (69.4 per cent). Operating expenditure performance was significantly lower than the projections (92.5 per cent), while expenses on compensation of employees in the public sector reported the most essential overperformance (103.9 per cent).

MF preliminary monthly data on CFP performance as of end-2012 show that growth in operating and wage expenditure in the public sector remained limited in the fourth quarter which will again result in a close to zero contribution of government consumption to GDP growth. The discontinuation of fiscal consolidation envisaged by the government for 2013, 45 partially

expressed in wage increases in some sectors of the public sector (including the increase of minimum wage), as well as expectations for an acceleration in operating expenditure growth will be the driving factors for increasing the contribution of government consumption to GDP growth over the first half of 2013.

CFP balance in 2012 was financed by positive net foreign financing to the amount of BGN 2060 million, negative net domestic financing of BGN 1810 million and privatisation receipts<sup>46</sup> of BGN 101 million.

Positive net foreign financing was almost entirely formed by the funds received from the Eurobonds sold in the international markets (BGN 1842.8 million). The Eurobond issue was intended to meet payments on maturing Eurobonds in January 2013, and these funds were deposited with the BNB. In 2012 fiscal reserve funds increased by BGN 1082.2 million to BGN 6081 million at the end of December.

The budget was financed primarily through a positive net government bond issue sold in the domestic market (BGN 525.5 million). In 2012 new bonds issued in the domestic market accounted for BGN 1160.0 million and government bond repayments were BGN 634.5 million.<sup>47</sup>

Extremely low interest rate levels in the euro area and high liquidity of the Bulgarian banking system continued to have a favourable effect on demand for Bulgarian government securities in 2012, with their prices gradually increasing in the primary market. The sustained process of fiscal consolidation and the successful Bulgarian Eurobonds issue in July also contributed to reducing the yield of government debt instruments in all maturity segments. The yield attained in the primary market during the last 2012 auction for sale of ten-year bonds fell to 3.45 per cent, from 5.35 per cent upon opening of the benchmark issue in January 2012.

The decline in primary market yields affected bond prices in the secondary market, and European Central Bank data published in December

 $<sup>^{\</sup>rm 42}$  Including the contribution of revenue from grants.

 $<sup>^{43}</sup>$  Including revenue from taxes on dividends and liquidation interests of resident and non-resident legal entities and income tax of non-resident legal entities.

<sup>&</sup>lt;sup>44</sup> In October 2011 taxes due by Kremikovtsi AD from previous periods were paid and amounted to BGN 39.6 million.

<sup>&</sup>lt;sup>45</sup> According to the report to the State Budget Law for 2013, the CFP deficit will remain unchanged nominally *vis-à-vis* the projected budget balance for 2012. Staff wage and remuneration expenses are planned to rise by around 5.4 per cent against the forecast for 2012.

 $<sup>^{\</sup>rm 46}$  Including acquisition of interests, shares and repayable funds, net.

<sup>&</sup>lt;sup>47</sup> For details on individual issues of domestic government securities, see *Government Debt Management* monthly bulletin of the Ministry of Finance.

Revenue and Expenditure on Consolidated Fiscal Programme for 2012 (percentage points, contributions to growth and performance of the programme)

		arter 112		II quarter 2012		III quarter 2012		IV quarter 2012 <sup>1</sup>		January – December 2012 <sup>2</sup>		ntation of gramme <sup>3</sup>
Consolidated fiscal programme									us year ( age point		2011	2012 <sup>4</sup>
	%	p.p.	%	p.p.	%	p.p.	%	p.p.	%	p.p.	% imple- mentation	% imple- mentation
Total revenue and grants	7.7		11.6		7.1		6.6		8.2		96.8	95.6
Tax revenue	8.2	6.8	6.7	5.4	3.6	3.0	0.3	0.3	4.5	3.7	99.5	99.7
Corporate tax	-9.7	-1.0	19.5	1.1	9.2	0.4	-18.8	-0.8	-1.2	-0.1	87.9	93.3
Personal income tax	4.1	0.4	8.6	0.8	6.1	0.5	2.1	0.2	4.7	0.4	104.2	101.3
Value added tax	33.4	7.0	6.7	1.8	2.3	0.7	-0.5	-0.1	8.2	2.1	102.0	100.7
Excise	6.3	0.9	7.9	1.1	3.1	0.6	2.9	0.4	4.9	0.7	101.6	98.0
Customs duties	-2.4	0.0	13.7	0.1	-20.8	-0.1	-21.9	-0.1	-10.4	-0.1	131.3	98.1
Social and health insurance contributions	-3.2	-0.8	2.8	0.6	3.9	0.8	2.5	0.5	1.5	0.3	96.0	100.5
Other taxes	7.2	0.2	0.3	0.0	6.7	0.2	6.8	0.2	5.9	0.2	104.3	100.7
Non-tax revenue	4.7	0.7	15.0	2.3	13.9	1.6	-4.8	-0.5	7.8	1.0	100.4	110.5
Grants	9.1	0.3	104.9	3.8	49.0	2.5	64.9	6.8	61.8	3.6	66.1	60.8
Total expenditure (incl. the contribution to EU budget)	6.0		1.5		1.3		5.2		3.5		95.4	93.3
Wages and social security contributions	2.0	0.4	1.1	0.2	2.1	0.4	1.6	0.3	1.7	0.3	104.9	103.9
Operating expenditure	-1.4	-0.2	-2.3	-0.4	2.8	0.4	2.1	0.4	0.0	0.0	93.1	92.5
Interest	1.8	0.1	44.1	0.3	1.4	0.0	-5.7	0.0	4.7	0.1	82.7	80.2
Social security, support and social care	2.7	1.2	6.0	2.6	5.9	2.6	5.1	1.9	5.2	2.2	102.4	103.2
Subsidies	24.4	1.1	-52.6	-4.2	-31.6	-1.7	-12.1	-0.7	-22.7	-1.3	89.5	102.2
Capital expenditure and state reserve growth	38.3	2.5	23.7	2.3	-3.4	-0.4	27.1	4.3	19.2	2.2	83.2	69.4
Contribution to EU budget	22.7	0.9	36.1	0.7	1.1	0.0	-28.1	-0.9	3.9	0.1	96.0	90.4

Based on preliminary data on CFP performance for the fourth quarter of 2012, relative to the final data on CFP performance for the fourth quarter of 2011

Based on preliminary data on CFP performance for 2012.

Source: MF.

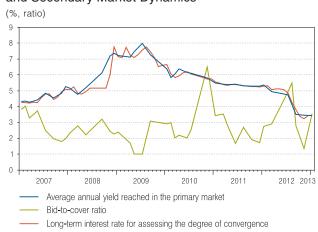
show that the long-term interest rate<sup>48</sup> in Bulgaria reached 3.44 per cent, a decrease of 37 basis points on the end of the third quarter. Compared with the end of the previous year, this decline was 179 basis points.

The price of the five-year Bulgarian Eurobonds issued in international markets also continued to rise: from 107.6 at the end of the third quarter to 109.1 at the end of 2012 and 110.1 at the end of January 2013. Correspondingly, the yield to maturity of these debt instruments went down to 1.8 per cent in January, from 4.4 per cent upon their initial sale in July 2012.

As a result of the MF issuing policy, in the fourth quarter of the year the amount of domestic government securities debt rose by BGN 185.5 million on end-September to BGN 4981.0 million. At the end of the third quarter consolidated debt of

the general government sector was BGN 14,226 million (18.4 per cent of GDP),<sup>49</sup> with the BGN 1839 million increase on end-June reflecting broadly the Eurobond issue in international financial markets.

### Ten-Year-and-Six-Month Government Bond Primary and Secondary Market Dynamics



Source: BNB.

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<sup>&</sup>lt;sup>2</sup> Based on preliminary data on CFP performance for 2012, relative to the final data on CFP performance for 2011.

<sup>3</sup> CFP data are based on the information contained in the reports to the State Budget Law of the Republic of Bulgaria for 2011 and 2012.

<sup>&</sup>lt;sup>48</sup> The long-term interest rate for assessing the degree of convergence is based on the yield to maturity attained on the secondary market for a long-term security (benchmark) issued by the Ministry of Finance (central government) and denominated in national currency.

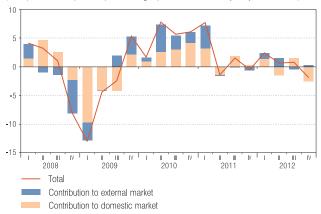
 $<sup>^{\</sup>rm 49}$  Preliminary data on nominal GDP for 2012 based on NSI flash estimates for the fourth quarter of 2012.

#### Behaviour of Firms and Competitiveness

The effect of the unfavourable external environment on the dynamics of export-oriented industry may be seen in the conjunctural indicators of sales turnover and industrial output index. Euro area recession dampened external demand for intermediate consumption and non-durable goods, as evidenced by a decline in the contribution of the external market to total sales of industrial enterprises.

#### **Industry Turnover Dynamics**

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



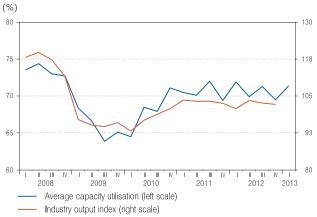
Note: Non-additive data on contributions due to multi-factor seasonal adjustment of the total amount and its components. Sources: NSI, BNB.

In the fourth quarter of 2012 export sales slightly improved as a result of flexibility of corporations which temporarily redeployed exports into third countries, and the contribution of the external market to total industrial turnover turned positive again. The contribution of domestic market sales decreased over the same period. This was mainly attributable to declines in energy products sales, unlike the increases in revenue from sales of domestic intermediate consumption goods most likely driven by the improvement in internal construction activity, measured by the construction output index.

The overall effect on industry was expressed in the decline of the industrial output index over the fourth quarter, coupled with the lower capacity utilisation.

Construction activity in Bulgaria continued to improve gradually thanks to the civil-engineering construction through implementation of infrastructure improvement projects. Building construction had a negative contribution to the overall activity in this sector due to the weak investor interest and continued decline in house prices.

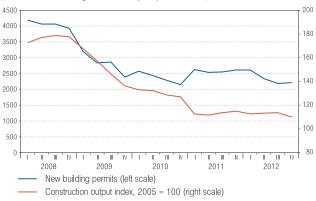
#### Production Capacity Utilisation in Industry



Source: NSI, Industry Trend Survey.

### Construction Output Dynamics and New Buildings Permits Issued

(number of buildings; seasonally adjusted data)



Sources: NSI, BNB,

Deterioration in the economic situation affected also the firms offering services in the domestic market. The most pronounced deterioration was observed in trade where sale volumes at comparable prices started to decrease over the third quarter of 2012, with this trend being sustained in October and November. Reflecting the increase in household propensity to savings, demand contracted and almost all trade subsectors registered declines in sales. Sale volumes dropped in other services sectors, *e.g.* information and communication, creative services and telecommunications, while growth rates in business services slowed down.

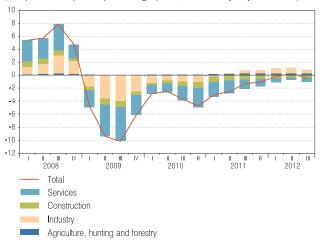
Firms' investment activity improved moderately in the first nine months of 2012. Low growth rates of fixed capital investments reflected the uncertainty surrounding weaker external demand and slow recovery in domestic demand. In this context, firms have been investing in projects focused on increasing efficiency, rather than

 $<sup>^{\</sup>rm 50}$  See the Retail Trade Turnover table in this Section, p. 42.

expanding production capacity which creates conditions for lower investment activity. Based on EC surveys<sup>51</sup> on investment in EU Member States for 2012, namely the improvement of production efficiency was the main reason for the projected investments of entreprises in Bulgaria. This trend was also supported by the data on acquisition of fixed assets by individual sectors. They show that investments in the last quarters of 2012 were concentrated mostly in industry, a higher capital-intensive sector, where the efficiency improvement would contribute most significantly to the output growth. Foreign direct investment inflows and government capital expenditure growth had an additional positive effect on firms' investments over the year.

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

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



Note: Preliminary quarterly data due to the lack of final data. Additive data on contributions due to multi-factor seasonal adjustment of the total amount and its components, with the results representing trend series.

Sources: NSI, BNB.

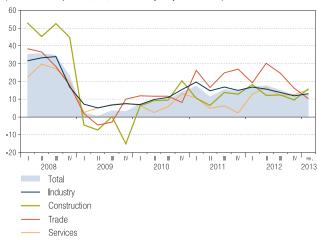
Despite the positive trends to investment demand recovery, short-term expectations of firms about the future economic activity remained at relatively low levels and even worsened by the end of 2012, signalling an expected slack in the economy over the following two quarters.

Based on firms' expectations and relatively low capacity utilisation at the end of 2012 and the beginning of 2013, firms are likely to postpone the implementation of their investment projects. These factors are expected to lead to a short-

term deterioration in dynamics of gross fixed capital formation in the first quarter of 2013.

#### **Expectations about Future Economic Activity**

(balance of opinions, %; seasonally adjusted data)

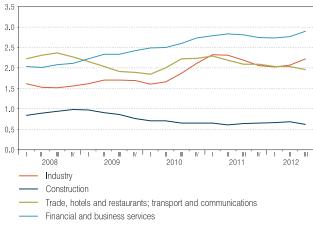


Sources: NSI, BNB.

Due to the low growth in economic activity, gross operating surplus in economy increased slightly over the third quarter of 2012. Industry and financial and business services had the largest positive contributions, while trade and construction recorded downward dynamics.

#### Gross Operating Surplus at Current Prices

(billion BGN; seasonally adjusted data)



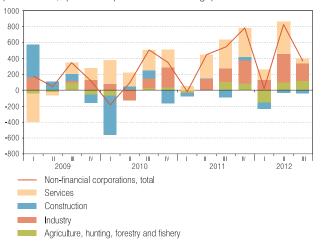
Sources: NSI, BNB.

Based on the developments in gross operating surplus and other financing sources, firms retained their relatively good financial performance which, in case of a change in expectations, will have a favourable effect on the implementation of their investment projects. In addition to gross operating surplus, firms used bank loans and external funds to finance their operations. In 2012 bank loans to the industrial sector showed the strongest dynamics.

<sup>&</sup>lt;sup>51</sup> Based on EC Business and Consumer Survey, Directorate-General for Economic and Financial Affairs (DG ECFIN).

#### Bank Loans to Non-financial Corporations

(million BGN, quarter-on-quarter volume change)

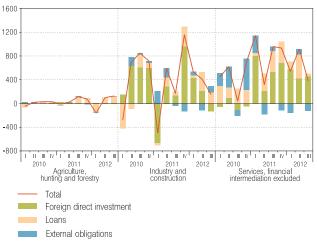


Source: BNB.

By sector, financial flows were directed mainly to firms extending services in the domestic market. A slowdown of financial flow dynamics was registered in industry due to firms' capacity to self-finance their operations through gross operating surplus. Unfavourable conjunctural conditions for expansion in this sector also contributed to the reduced need for additional financial resources by corporations.

#### **Financing Sources**

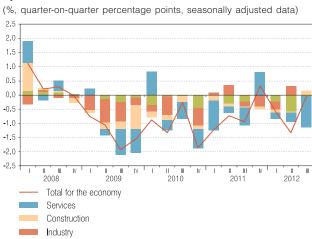
(million BGN, quarter-on-quarter volume change)



Source: BNB.

The overall trend to a slack in internal economic activity created conditions for the firms to continue optimising their investment and labour expenditure. Despite the registered stabilisation in the decline rate of employment over the third quarter of 2012, labour demand remained low.

### Contribution to Changes in the Number of Employed by Economic Sector



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

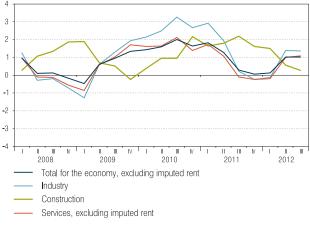
Sources: NSI, BNB.

The strongest employment decline was observed in services and especially in the sub-sectors reporting declines in sale volumes, such as trade, information and communication, and telecommunications. Following this optimisation in total economy, labour productivity retained its positive growth rate. Services and industry had the major contribution to this growth.

### Labour Productivity Developments (Value Added *per* Employee)

Agriculture, hunting and forestry

(%, quarter-on-quarter; seasonally adjusted data)



Sources: NSI, BNB.

In addition, compensation of employees increased nominally at almost the same rates as labour productivity. As a result, nominal unit labour costs in total economy matched their level of the previous quarters. Another sign of the ongoing optimisation process in export-oriented industry was the sustained level of nominal unit

#### Gross Value Added Growth

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

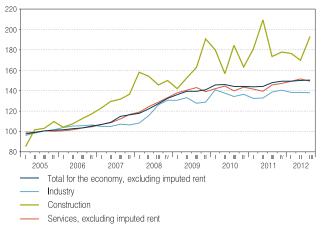
		20	009			20	10			20	011		2012		
	- 1	Ш	Ш	IV	I	Ш	Ш	IV	-1	II	III	IV	-1	Ш	III
Agriculture and forestry, hunting and fishing	-2.9	-4.5	-3.4	-3.7	-2.7	0.5	-0.4	-1.9	-1.0	0.5	2.4	2.9	6.4	-2.3	0.0
Mining and quarrying, manufacturing production and distribution of electricity, gas and water	-0.9	-1.5	0.9	-1.8	-1.4	2.4	1.1	1.9	3.3	1.1	-0.6	1.3	0.1	0.6	0.6
Construction	5.2	-8.4	2.8	-22.4	0.0	1.1	-2.2	0.2	-3.0	-0.1	14.3	-14.1	8.0	1.0	6.6
Trade, cars and motorcycles repair; transport, storage and mail services; hotels and restaurants	1.8	-18.7	4.8	5.2	12.7	-7.8	18.6	-10.2	0.0	2.0	0.1	-0.4	0.9	0.4	0.1
Creation and dissemination of information and author products; telecommunications	-1.5	1.9	-2.7	0.9	0.9	1.8	-0.9	-0.5	2.2	-2.3	1.8	0.0	-1.9	-1.1	-0.1
Finance and insurance activity	9.2	-2.7	-4.4	5.8	4.9	-8.8	4.6	-2.3	0.4	1.4	0.9	-0.1	-1.3	3.7	1.2
Real estate activities	0.8	-2.2	-3.5	-0.1	3.4	0.4	0.2	0.0	-1.2	1.7	0.7	1.2	-0.7	0.9	-0.2
Professional activities and scientific research; administrative and ancillary activities	2.5	6.4	2.8	-1.7	-5.2	7.0	-2.8	1.4	9.2	-6.8	3.8	4.3	-3.2	8.2	0.6
General government; education; healthcare and social services	-2.8	4.3	1.2	-0.1	0.8	-1.6	-2.7	-0.7	0.7	-0.6	0.5	-1.2	0.0	-0.6	-0.1
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	0.2	9.0	-4.2	1.0	-0.8	-2.3	-2.8	-0.7	-0.2	-5.7	-1.2	-6.2	-7.5	12.7	5.3
Gross value added, total for the economy	-4.1	-0.1	-0.2	-0.7	0.1	0.4	0.8	0.9	0.3	0.7	-0.4	-0.3	-0.3	0.6	0.1

Source: NSI.

labour costs since early 2010. Real unit labour costs have declined in total economy since early 2012, with industry and services recording the most significant drop.

#### Nominal Unit Labour Costs

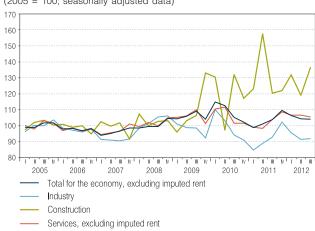
(2005 = 100; seasonally adjusted data)



Sources: NSI, BNB.

#### Real Unit Labour Costs

(2005 = 100; seasonally adjusted data)

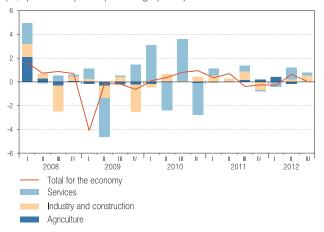


Sources: NSI, BNB.

The improved efficiency of corporations and their prudent expenditure policy contributed to creating value added in economy amid a decline in external demand and slow recovery in domestic demand over the third quarter of 2012. According to the national accounts, gross value added rose by 0.1 per cent quarter on quarter, with the strongest contribution of industry. The improvement in firms' efficiency may be seen through the estimated total factor productivity recording the major contribution to GDP growth in the first nine months of 2012.

#### Value Added Growth and Contribution by Sector

(%, quarter-on-quarter percentage points)



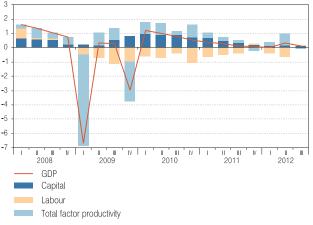
Note: Non-additive data on contributions due to direct seasonal adjustment of value added and its components.

Sources: NSI, BNB

Given the conjunctural indicators pointing to weaker household consumption and slowing investment activity of corporations, economic activity in Bulgaria is expected to remain low in the first half of 2013, and firms are likely to continue optimising their expenditure policy that will lead to a slack in the labour market and a moderate increase in investment activity.

### Contribution of Changes in Production Factors to GDP Growth

(%, quarter-on-quarter percentage points)



Sources: NSI, BNB.

#### **Exports and Imports of Goods**

Since mid-2012 exports growth was dominated by exports to non-EU countries. The 2012 nominal growth rate reached 2.6 per cent as the early-year decline was offset by a moderate annual increase in the March–November period. By end-2012, in December, there was a further deterioration and exports reported a decrease on an annual basis. Over the first nine months of the year the decline reached 0.7 per cent in real terms (on an annual basis, non-seasonally data).

Since mid-2012 the growth in goods imports moderated largely due to weaker domestic demand reporting a decline in December. Over the year the nominal growth rate of exports was 8.8 per cent and for the January–September 2012 period it reached 5.8 per cent in real terms (on an annual basis, seasonally unadjusted data).

Terms of trade deteriorated further in the third quarter of 2012 following the trend that started at the end of 2011. They were underpinned by the annual increase in oil prices, having a more sizeable weight in imports prices in Bulgaria, as well as from the ongoing decline in metal prices having a larger weight in exports prices.

As a result of these factors trade deficit went up to EUR 3594.1 million (from EUR 2156.1 million in 2011).

#### Net Exports of Commodity Groups by Use, January – November 2012

	Balance, million EUR	Change*, million EUR	Exports growth, %	Imports growth, %
Consumer goods	433.3	164.1	8.5	4.8
Raw materials	149.0	-448.1	-4.6	0.5
Investment goods	-2121.5	-870.2	0.6	19.9
Energy resources	-2674.6	-367.8	23.8	20.1
Total	-4253.7	-1517.6	3.1	9.8

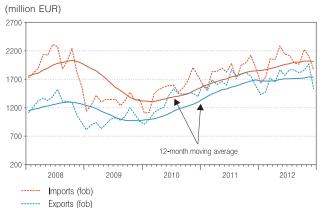
\* Balance change on same period of previous year.

Source: BNB.

A moderate nominal growth in exports and imports is expected in the second and third quarters of 2013. The increase in external demand mainly from non-EU countries will be the main driver behind exports dynamic in real terms, while imports dynamics will depend on the expected moderate recovery in domestic demand. Terms of trade are expected to improve as a result of the fall in fuel prices and higher food and raw materials price. Against this background

trade deficit is likely to remain close to its current level of 9 to 9.5 per cent of GDP.

#### **Exports and Imports Dynamics**



Source: BNB.

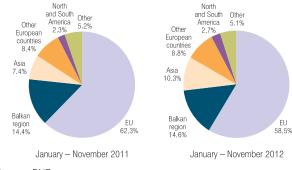
All commodity groups will contribute to the expected moderate exports growth rate. Exports of mineral products and fuels is likely to mark the most sizeable increase in real terms, as the major trading partner in this group's exports are non-EU countries. The opposite trend is to be observed in price dynamics, thus curbing nominal growth. All groups by use are also likely to contribute to the moderate growth of imports and the expected falls in petrol and metal prices will probably be reflected in the weaker dynamics in the energy resources and raw materials groups.

Risks to higher than expected trade deficit relate to the realisation of lower than expected domestic demand, as well as to faster recovery of economic activity an domestic demand in Bulgaria.

The unfavourable dynamics of international commodity prices may also result in a bigger trade deficit, namely in case of higher than expected oil prices and a more sizeable fall in metal prices.

The geographical distribution of Bulgaria's exports for the January and November 2012 period was to a large extent determined by the difference between EU and non-EU countries' economic growth. Exports to EU member states declined by 3 per cent on an annual basis while that to non-EU countries increased by 13.3 per cent. All non-EU regions contributed to this increase, with Asia ranking first.

#### Geographical Distribution of Exports



Source: BNB.

The market share of Bulgarian goods in total EU imports decreased by 0.1 per cent on an annual basis as of November 2012 due mainly to the reorientation of commodity exports to third countries.

The moderate nominal growth rate of exports reflected the divergent dynamics in different commodity groups. Mineral products and fuels contributed most to this growth. Base metals and base metal products and textile, leather, clothing, footwear and other consumer goods had negative contributions.

### Exports by Commodity Groups in the January – November 2012 period

	million EUR	Change*, million EUR	Growth,	Contribution, p.p.
Mineral products and fuels	3 815.6	994.1	35.2	5.3
Chemical products, plastics, rubber	1 912.8	121.0	6.8	0.6
Wood products, paper, ceramics and glass	896.1	66.8	8.1	0.4
Animal and vegetable products, foods, drink and tobacco	3 071.5	25.3	0.8	0.1
Machinery, vehicles, apparatus, instruments, weapon	3 582.5	6.9	0.2	0.0
Textiles, leather, clothing, footwear and other consumer goods	2 443.8	-237.7	-8.9	-1.3
Base metals and base metal products	3 536.4	-394.7	-10.0	-2.1
Exports, total	19 258.9	581.8	3.1	

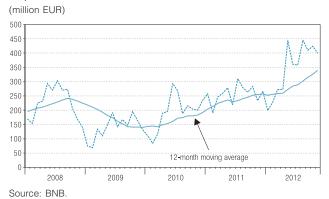
\* On corresponding period of previous year.

Source: BNB

Over the first eleven months of 2012 exports of mineral products and fuels went up by 35.2 per cent on an annual basis. Mineral fuels, mineral oils and distilled products contributed most significantly to this increase (21.3 percentage points) due both to a price effect and to an increase in the exported quantities of these products. This group of products was exported

mainly to non-EU European countries and Balkan countries. The exports of mineral fuels, mineral oils and distilled products to Turkey reported the most sizeable increase. In the first half of 2013 this group's exports is expected to increase at a moderate rate due, on the one hand, to the higher demand for this group of goods mainly from non-EU countries and, on the other hand, to the fall in international oil prices.

#### Exports of Mineral Products and Fuels



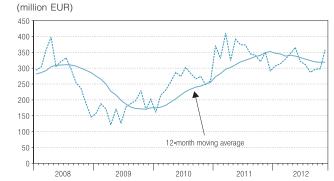
Between January and November 2012 the exports of base metals and base metal products dropped by EUR 394.7 million. The items contributing most to this effect were copper and copper products (-4.6 percentage points) and cast iron, iron and steel (-3.9 percentage points). The factors behind this development were the slower domestic demand growth and the fall in international metal prices on an annual basis.52 The geographical distribution shows a decline in the exports of copper and copper products to EU countries (Germany and Belgium) - a trend offset to certain extent by the higher exports to non-EU countries (China). In the first two quarters of 2013 we expect a weak growth rate of exports in this group reflecting the slight

increase in external demand, on the one hand,

and continuous downward trend in international

metal prices, on the other.

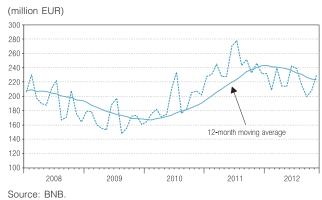
#### Exports of Base Metals and Base Metal Products



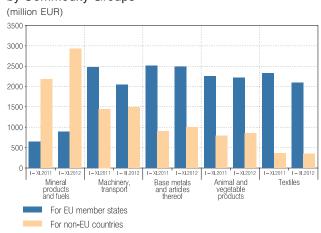
Source: BNB

The exports of textiles, leather, clothing, footwear and other consumer goods declined by 8.9 per cent on an annual basis largely due to the natural and cultured pearls, precious stones and precious metals (by -9.8 percentage points). This is not a key item in the textile, leather, clothing, shoes and other consumer goods group and as a whole it does not determine the exports dynamics of this group. Over the projection horizon it is expected to recover slightly together with the demand in the EU.

### Exports of Textiles, Leather, Clothing, Footwear and Other Consumer Goods



### Geographical Distribution of Exports by Commodity Groups



Source: BNB

**Economic Activity** 

53

<sup>&</sup>lt;sup>52</sup> The export deflator for the precious metals and other non-ferrous metals and cast iron and steel division under SITC was used to estimate the price effect in the first three quarters of 2012.

### Imports of Commodity Groups by End Use, January – November 2012

	million EUR	Change*, million EUR	Growth,	Contribution, p.p.
Consumer goods	4 045.4	186.3	4.8	0.9
Raw materials	8 191.9	44.6	0.5	0.2
Investment goods	5 357.1	889.2	19.9	4.2
Energy resources	5 870.1	982.7	20.1	4.6
Imports, total (cif)	23 512.6	2 099.3	9.8	

<sup>\*</sup> On corresponding period of previous year.

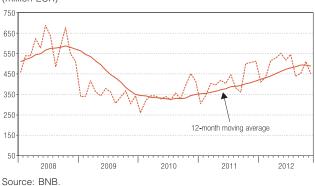
Source: BNB.

All commodity groups by end use contributed to the 9.8 per cent annual increase in imports (c.i.f.) in the January – November 2012 period. Energy resources and investment goods contributed most to this. The increase in imports of consumer goods and raw materials and supplies was moderate.

Investment goods imports increased between January and November 2012. Its nominal growth rate was 19.9 per cent and the strong increase moderated in July and in November reported a decline in line with the lower investment activity in the second half of 2012. Spare parts and equipment (9.5 percentage points) contributed most to this increase. In the first half of 2013 imports of investment goods is expected to gradually increase as a result of the progressively improving investment activity.

#### Imports of Investment Goods

(million EUR)

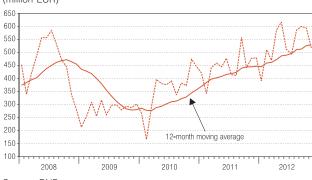


In the first eleven months of 2012 imports of energy resources picked up to EUR 5870.1 million largely due to the crude oil and natural gas item (up 18.4 percentage points) whose imports increased in real terms.<sup>53</sup> Over the projection

horizon the nominal imports growth of this group is likely to be weak due to the gradual improvement of domestic demand and the fall in fuel prices.

#### Imports of Energy Resources

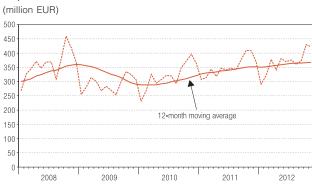
(million EUR)



Source: BNB.

Imports of consumer goods reported nominal growth of 4.8 per cent on annual basis. The food, beverages and cigarettes item contributed most to this (3.1 percentage points). The early 2012 trend to a gradual recovery of consumption played its role for the increase in this group's imports. Over the projection horizon imports of consumer goods are expected to remain positive due to slow improvement of domestic demand.

#### Imports of Consumer Goods



Source: BNB.

Between January and November 2012 imports of the raw materials group went up in nominal terms by EUR 44.6 million on an annual basis. The slight increase reflected the growth in most items and the considerable negative contribution of cast iron, iron and steel (-1.5 percentage point) and ores (-1.2 percentage points). In the first half of 2013 the growth rate of imports of consumer goods is expected to remain positive consistent with improving domestic demand.

<sup>&</sup>lt;sup>53</sup> The imports deflator for the oil and refined oil products division under SITC has been used to estimate the price effect in the first, second and third quarters of 2012.

#### Imports of Raw Materials

(million EUR) 12-month moving average 50-Source: BNB.

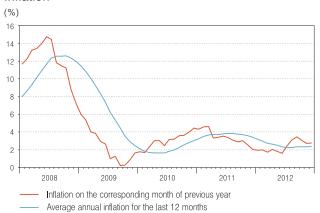
Imports from EU Member States grew by 7.8 per cent, and from countries outside the European Community by 11.7 per cent.

# 4. Inflation

Consumer price inflation remained relatively low in 2012. The increase in international oil and food prices and its comparatively fast pass-through to consumer prices, together with the increase in electricity prices, contributed most to inflation. Domestic economic environment characterised by low household demand and further reduction in firms' labour costs helped sustain the low core inflation levels. In the first half of 2013 annual inflation is expected to slightly moderate provided that the assumed fall in oil prices materialises and taking into account the data on the decrease in some administratively controlled prices. Current data give grounds to expect that core inflation will continue to increase slowly over the period.

In 2012 consumer price inflation remained relatively low.<sup>54</sup> By end-2012 the Harmonised Index of Consumer Prices reported an annual rate of increase of 2.8 per cent (2 per cent at the end of 2011), and average annual inflation for 2012 was 2.4 per cent (3.4 per cent in 2011).

#### Inflation



International petrol and food product price developments reported the most significant pro-inflationary effect over the year and quickly passed through to respective food and fuel prices in Bulgaria. Another important factor behind consumer price dynamics was the sizeable mid-year increase in the administratively controlled price of electricity for households.

Worsened economic environment in 2012 and external shocks to the firms such as those related to the increase in prices of major raw materials were reflected in firms' pricing and expenditure policy. Against the background of free production capacity and weak demand

firms continued to limit their labour costs and investments (see Chapter 3) and applied pricing policy in line with the specificities of individual markets of products and services. Data on total gross operating expenses for the economy in the first nine months of 2012 point to a slight increase in the firms' profit margin on end 2011 observed mainly in manufacturing. This dynamics is consistent with the rise in producer prices on the domestic market of 5.3 per cent on average for 2012: higher than the producer price rise on international markets. Unlike manufacturing, the trade, transport, hotel and restaurant sector reported a slight decrease in gross operating surplus in 2012. The prices of package holidays and durable goods declined on an annual basis, while hotels and restaurants registered low positive inflation over the year. These developments outline the differences between the possibilities for different sector firms to raise their prices.

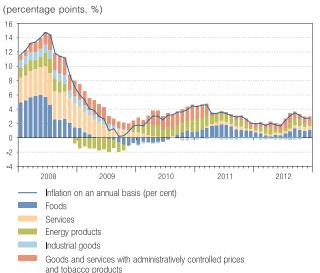
Core inflation (including services and non-food goods) remained at relative low levels over the year (0.3 per cent on average in 2012) tending to increase at a slower pace compared to 2010 and 2011 when there was no such dynamics. The overall index of non-food prices (excluding fuels) continued to follow a steady slow downward trend while services prices reported some stabilisation in the 2009–2010 period, followed by a moderate upward dynamics which is expected to remain consistent with the convergence processes in medium to long-term horizon.

Food products and goods and services with administratively controlled prices contributed most to the inflation accumulated in 2012 (by 1 per-

 $<sup>^{\</sup>rm 54}\,\rm The$  analysis in this section is based on NSI data on HICP.

centage point and 0.8 percentage point respectively). Goods and services with administratively controlled prices (0.85 percentage point), food products (0.73 percentage point) and transportation fuels (0.66 percentage point) contributed most to the average annual inflation for 2012, while core inflation had a low contribution thereto (0.16 percentage points).

#### Inflation Rate on Corresponding Month of Previous Year and Contribution of Major Goods and Services Groups to It



Note: This structure corresponds to the Eurostat classification; tobacco products and goods and services with administratively controlled prices are presented separately. Administratively controlled prices are calculated on the basis of elementary aggregates in the consumer basket.

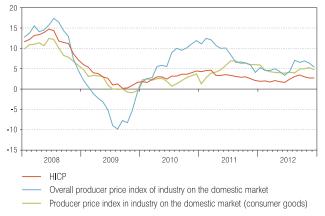
Sources: NSI, BNB.

2012 saw divergent inflation dynamics. In the first half year consumer price inflation remained at a relatively low level (1.9 per cent on an annual basis) against the background of stabilisation of international food prices which resulted in lower food inflation. In the second half of 2012 higher fuel and food prices coupled with higher prices of electricity for households pushed inflation upwards to 3 per cent in the third quarter and 2.8 per cent in the fourth quarter and by end-2012 the drop in oil prices resulted in lower transport fuel prices.

In 2012 the positive dynamics of the overall producer price index on the domestic market to a large extent followed the international food and energy price developments. The higher prices for the production and distribution of electricity, heating and gas were another important factor behind the PPI increase. By end 2012 the PPI reported an annual increase of 5.3 per cent.

#### Rate of Change in PPI in Industry and HICP

(% on corresponding month of previous year)

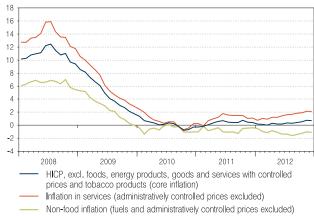


Source: NSI.

Core inflation reported a clear upward dynamics in 2012 (0.7 by end-2012 compared with 0.4 per cent in December 2011). Core inflation developments over the year reflected largely the increase in services price inflation (excluding administratively controlled prices) while non-food prices (excluding fuels) continued to report a marginal decline on an annual basis observed mainly in durable goods. Services inflation reflected two major effects: on the one hand, catering and transport services prices reported a relatively stable rate of increase underpinned by the side effects of the higher food and fuel prices on international markets. On the other hand, the fall in some services prices, e.g. package holidays and accommodation, reporting a sizeable decline between 2010 and early 2012, came to a halt.

#### Core Inflation

(% on corresponding month of previous year)



Sources: NSI, BNB.

The business situation survey data in the second half of 2012 pointed to enhanced selling price expectations in manufacturing, retail trade and services. By the close of 2012 and in January

57 Inflation

2013 all three sectors reported lower expectations of selling price rises over the coming months, and manufacturing where the impact of international price dynamics is comparatively most strongly pronounced continued to follow the 2011 trend of reporting the highest selling price expectations.

Our inflation expectations for the following quarters and the associated uncertainty thereto are presented in the fan chart on quarter-on-quarter annual inflation rate. <sup>55</sup> We expect a moderate decrease in inflation on its current levels of between 2.0 and 2.8 per cent in the first quarter and 1.6 and 2.8 per cent in the second quarter of 2013. <sup>56</sup>

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

(balance of opinions, %)



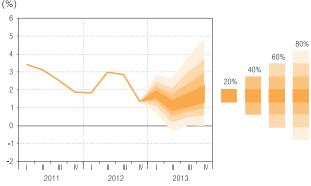
Source: NSI

The forecast is based on the assumption for a slow fall in oil prices expressed in euro in the first and the second quarters of 2013 and for a slight rise in international food prices (see here, Chapter 1). An additional assumption that the structure of the consumer basket in 2013 will be the same as in 2012 was made. The decisions of the State Energy and Water Regulatory Commission to reduce natural gas and electricity prices in the first quarter of 2013 are expected

<sup>55</sup> For further details, see the box entitled Measuring and Presenting Uncertainty in Projections of Economic Indicators, Economic Review, 1/2012.

to contribute to a lower overall consumer price inflation. In the second quarter of 2013 the inflation in the goods and services with administratively controlled prices will also reflect a base effect from price rises resulting from the increase in the minimum wage from the same quarter in the prior year.

#### Fan Chart of the Expected Annual Inflation Rate



Note: The fan chart shows the expert views 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. 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.

At the same time, the gradual increase in core inflation is expected to continued largely due to base effects from international price developments and the slow increase in household consumption. We expect a slight upward dynamics in annual food price inflation. <sup>58</sup>

Major risks to the projected overall inflation dynamics in the first half of 2013 are associated mainly with the uncertainty related to international oil and food price developments. The impact of domestic factors such as economic activity in Bulgaria and rises in administratively controlled prices that have not been included in the projection due to lack of concrete information is likely to be less pronounced. In case of higher than expected food and oil price increase in international markets a higher overall inflation in consumer prices in Bulgaria is likely to be observed. On

<sup>&</sup>lt;sup>56</sup> 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.

<sup>&</sup>lt;sup>57</sup> For a comparison of the structure of the consumer basket according to the HICP between 2010–2012 see Economic Review, Issue 1, 2012, p. 63.

<sup>&</sup>lt;sup>58</sup> Based on preliminary data for January 2013, the annual inflation comes to 2.6 per cent. Food price inflation marked a more sizeable increase reflecting the upward dynamics in non-processed food prices. The slow increase in core inflation will continue. The rate of inflation of energy products moderated significantly and that in administratively controlled prices decline in line with our expectations.

Growth Rates of Major Goods and Services Groups Prices and Their Contribution to Accumulated Inflation

	Annual inf as of Dece (December		as of Dece	flation rate ember 2012 2011 = 100)	Average annual inflation for 2012 (2011 = 100)		
Inflation (%)	1.	.7	2	.7	3.0		
	Inflation rate by group, %			Contribution, p.p.	Inflation rate by group, %	Contribution, p.p.	
Foods	4.0	0.96	4.2	1.09	2.9	0.73	
Processed foods	5.5	0.85	2.2	0.39	2.2	0.36	
Unprocessed foods	1.2	0.10	8.3	0.69	4.4	0.37	
Services	1.1	0.28	2.1	0.54	1.5	0.38	
Catering services	3.8	0.19	3.5	0.18	3.2	0.16	
Transport services	5.0	0.18	3.9	0.17	4.7	0.19	
Telecommunication services	-1.8	-0.08	-1.1	-0.06	-1.4	-0.07	
Other services	-0.1	-0.01	2.3	0.25	0.8	0.09	
Energy products	4.0	0.29	6.3	0.54	7.3	0.66	
Transport fuels	4.0	0.28	6.0	0.49	7.3	0.62	
Industrial goods	-0.4	-0.08	-1.1	-0.21	-1.1	-0.22	
Goods and services with administratively controlled prices*	4.1	0.63	5.0	0.81	5.4	0.85	
Tobacco products	-0.3	-0.02	0.1	0.00	-0.1	-0.01	

<sup>\*</sup> Administratively controlled prices are calculated at an elementary aggregates level in the consumer basket.

Sources: NSI, BNB.

the other hand, in case of a strong decline in oil prices we expect a comparatively low overall inflation in the first two quarters of 2013.

When reporting price change developments on international commodity markets in early 2013 we can estimate the risks to the inflationary projections in the first and the second quarters of 2013 as balanced.

#### **Food Prices**

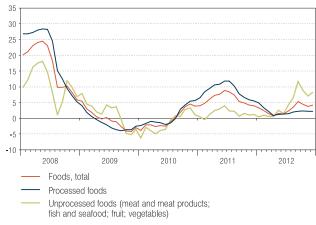
Following the stabilisation in food price inflation in the first half of 2012, the second half year saw enhanced growth of prices in this group. The key factor behind this dynamics was the increase in international foodstuff and raw materials. By December food prices reported a 4.2 per cent annual inflation and had the largest contribution to accumulated total inflation. Average annual food price inflation in 2012 reached 2.9 per cent (6.0 per cent in 2011), with non-processed foods reporting the most pronounced price rise.

Non-processed food inflation (meat and meat products, fruit, vegetables and fish) went up markedly to 8.3 per cent by end 2012. The more enhanced price increases in the group of meat and meat products that could be explained, on the one hand, by the poor 2012 cereal harvest in some of the major producer countries worldwide and the subsequent feedstock price rises

and, on the other hand, by the higher meat prices on international markets contributed most to this trend. The fruit and vegetables groups whose price developments over the recent years showed a growing dependency on international market prices underpinned by imports coupled with reduced domestic production had a sizeable contribution to the accumulated inflation in non-processed food prices. According to NSI data, the first projection for the final agricultural output in Bulgaria in 2012 shows a reduction of the physical volume of 9 per cent and an increase in prices of 11.9 per cent on 2011.

#### Rate of Change of Food Price Index

(%, on corresponding month of previous year)



Sources: NSI, BNB.

59 Inflation

<sup>&</sup>lt;sup>59</sup> See Economic Review, 4/2012, Chapter 4.

The moderation of annual inflation rates in processed food prices between mid-2011 and the first several months of 2012 was followed by a gradual increase in the second half year. Enhanced inflation in vegetable oil and bread prices contributed most to this dynamics. Bread price inflation developments reflected the rise in cereal prices on international and domestic markets, albeit with some lag. The decline of inflation in soft drinks prices and to a lower degree of alcoholic beverages put downward pressure to overall processed food inflation.

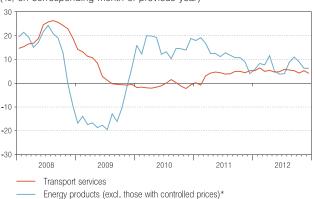
In the first half of 2013 food inflation is projected to continue to gradually increase on an annual basis.

#### **Energy Product Prices**

The sizeable fluctuations in transport fuel prices<sup>60</sup> in 2012 to a large extent followed the movements in oil prices in euro on international markets and by end-2012 inflation in this group came to 6 per cent.

### Rate of Change of Energy Product Price Index and of Transport Services Price Index

(%, on corresponding month of previous year)



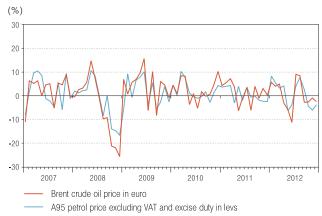
<sup>\*</sup> Energy products, excluding those with controlled prices, include fuels and lubricants for personal transportation vehicles, and solid, fluid and gaseous fuels for households.

Sources: NSI, BNB.

Assuming that there will be a slight decline in oil prices expressed in euro in the first half of 2013, it may be expected a sizeable moderation of the annual inflation rate in this group. These developments result also from a base effect of the sizeable increase in oil prices in the first quarter of 2012 that was reflected in the fuel prices in Bulgaria. The increase in diesel excise duty

(from BGN 630 to BGN 645 per 1000 litres) in effect as of the beginning of 2013 is expected to have a marginal effect on prices.

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



Sources: ECB, NSI, BNB.

The major risks to the projection related to the possible strong fluctuation in oil prices that would result in a similar dynamics and the rates of change of end-use consumer prices of fuels in Bulgaria.

### Administratively Controlled Prices and Tobacco Product Prices

In 2012 accumulated inflation for the group of goods and services with administratively controlled prices was 5 per cent largely due to the price rise of around 13 per cent of the energy for households of July 2012 which contributed most to this. The increase in the prices of heating, water supply and higher GP consultation fees reflecting the increase in the minimum wage of May 2012 and the higher urban transport fares and central gas supply.

Given the decisions of the State Energy and Water Regulatory Commission to reduce natural gas and electricity prices in early 2013, administratively controlled prices are expected to contribute to a slowdown in overall consumer price inflation in the first and second quarters of the year. The projection does not included corrections in other administratively controlled prices due to lack of concrete information about decisions in this direction.

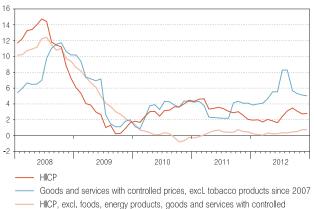
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<sup>&</sup>lt;sup>60</sup> In the group of energy products (excluding administratively controlled prices of energy and heating) transport fuels occupy the largest relative share; hence, their price developments determine the price dynamics of energy products in general

#### Rate of Change in the Overall CPI, Administratively Controlled Price Index and Core Inflation

(%, on corresponding month of previous year)

prices and tobacco products



Note: Given the relation between tobacco product prices and administratively controlled excise rates, tobacco products are discussed separately from the group of goods and services with non-controlled prices regardless of the early 2007 market liberalization of tobacco products. Administratively controlled prices are calculated at elementary aggregates level in the consumer basket.

Sources: NSI, BNB,

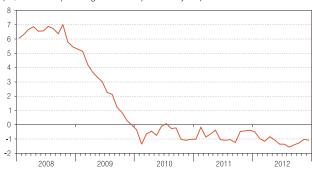
Tobacco product prices whose excise duty remained unchanged in 2012 reported a slight increase of 0.1 per cent on an annual basis as of December with a negative average annual rate of change of 0.1 per cent. In 2013 no significant changes in the prices of these goods are expected.

#### Non-energy Industrial Goods Prices

In 2012 the trend toward a minimum decline in the index of non-food prices (exuding fuels and administratively controlled prices) observed in the previous two years continued. As of December the annual rate of change of manufactured goods prices came to -1.1 per cent and this group contributed -0.2 percentage point to overall inflation.

#### Rate of Change of Industrial Goods Price Index Excluding Energy Products and Goods with Administratively Controlled Prices

(%, on corresponding month of previous year)



Sources: NSL BNB

The decline in the overall price index in this group over the review period was driven, as in the previous year, mainly by the depreciation of durable goods such as automobiles, audio technique, computers and televisions.

Limited consumer demand as suggested by the data on retail trade turnover<sup>61</sup> is one of the possible factors behind the still subdued price dvnamics of non-food goods. Another factor with a potential impact on the prices of some goods is the global trend toward a depreciation of computer and television equipment prices and the increase in the market shares of trade chains whose activity is characterised with economies of scale and possibilities of price declines.<sup>62</sup>

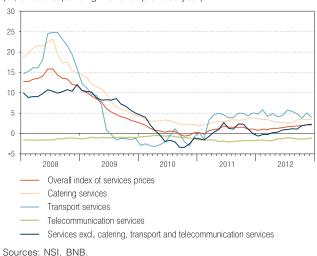
The key factors behind manufactured goods price developments over the first half of 2013 will be the rate of household demand recovery and companies chances for further cuts in those prices which up to 2012 have already reported a sizeable decline (e.g. automobile prices).

#### Services Prices

In 2012 services (excluding administratively controlled prices) saw a slightly pronounces upwards inflationary dynamics. As of December accumulated inflation in services reached 2.1 per cent.

#### Rates of Change of Services Price Index **Excluding Those with Controlled Prices**

(%, on corresponding month of previous year)



Inflation 61

<sup>&</sup>lt;sup>61</sup> See the Retail Trade Turnover table in this Section, p. 42.

<sup>&</sup>lt;sup>62</sup> See Economic Review 2/2012, Chapter 4.

Inflation dynamics in services reflected the different trends in the main groups. 63 Catering and transportation services contributed most significantly to the inflation accumulated by end-2012. Over the year inflation in these two groups remained relatively unchanged, reflecting, on the one hand, the pass through of higher raw material expenses (with regard to the prices of foods and fuels) in end-use prices and, on the other hand, household demand. Over the first nine months of 2012 the 2011 trend toward a positive contribution of catering expenses to household consumption growth remained unchanged.

The recent years' downward trend in telecommunication services (phone services, apparatus and internet services) continued in 2012. As of December 2012 the index of the prices in this group reported a 1.1 per cent declined on an annual basis.

Services inflation (excluding catering, transport and communication services) tended to increase and accumulated inflation came to 2.3 per cent in 2012. The different groups of services saw divergent dynamics over the year which may be explained by the different markets' specificities. Accommodation and package holidays, for example, tended to put a halt to the downward trend in prices which started in 2009 in accommodation services and at the end of 2010 in package holiday services. The higher annual technical examination fare for automobiles was reflected in enhanced inflation in services related to the maintenance and repair of personal motor vehicles. A possible explanation is the launch of a system for registration and control in technical examinations which makes this service more expensive.

Current data point to a continuous gradual increase in services price inflation in the first half of 2013.

<sup>63</sup> In 2012 the services group (excluding administratively controlled prices) included the following components with relatively high weight: catering (5 per cent), transport services (4 per cent), telecommunication services (5 per cent), other services (11 per cent).