



# **Economic Review**

4/2011



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.

The *Economic Review, issue 4/2011* was presented to the BNB Governing Council at its 23 February 2012 meeting. It employs statistical data published up to 17 February 2012.

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

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# Contents

	Summary	
1.	External Environment	
	Current Business Situation	
	International Prices (Crude Oil, Major Raw Materials, and Gold) and the EUR/USD Exchange Rate	
	Bulgarian External Debt Dynamics in International Financial Markets	22
2.	Financial Flows, Money and Credit	24
	Financial Flows and External Position Sustainability	2
	Monetary Aggregates	28
	Credit Aggregates	3
3.	,	37
	Household Behaviour	40
	Government Finance and Consumption	4
	Behaviour of Firms and Competitiveness	48
	Exports and Imports of Goods	5
4.	nflation	50
	Highlights	
	Impact of the Additional ECB Measures on the Money Market and the Government Securities Markets in the Euro Area	11
	Economic Reading of the EC Scoreboard of Indicators     Relevant to the Detection of Macroeconomic Imbalances	63

#### **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 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

In the fourth quarter of 2011 the global economic indicator remained at the low levels of the previous two quarters. A slight increase was reported in December 2011 and January 2012, although it is still early to assert that the international business environment tends to improve. Euro area economic indicators posted a decline in the second half of 2011 due to the intensification of the debt crisis in some Member States and financial market tensions. At the same time, signals of acceleration in global economic recovery and improvements of labour market conditions appeared in the USA. Downside risks to global economy growth enhanced as a result of declining economic growth in China and other developing countries.

Slowdown in euro area economic growth led to a lower-than-expected rate of recovery in Bulgaria's economic activity. In the first nine months of the year the economy recovered smoothly, its real growth reaching 2.3 per cent on an annual basis in this period. The growth rate of exports of goods and services in the January-September 2011 period remained high in real terms: 11.3 per cent on an annual basis. Despite the worsening international environment, exports in the third quarter rose quarter on quarter by 1.7 per cent, offsetting the decline of 1.3 per cent in the previous quarter. In the first nine months of 2011 real growth of imports was 8.5 per cent. As a result, net exports retained their positive contribution to GDP growth. In the same period final consumption increased in real terms by 1.4 per cent on the first nine months of the previous year, contributing most significantly to GDP growth. On an annual basis, gross fixed capital formation rose slightly in real terms by 2.4 per cent for the nine months of the year. According to NSI seasonally adjusted flash estimates, real GDP increased by 0.4 per cent in the fourth quarter of 2011 compared with the previous quarter. Final consumption grew by 0.4 per cent, and investment in fixed capital by 4 per cent. Export growth was 3.8 per cent, and import growth came to 1.3 per cent. In 2011 flash GDP estimates show an increase in real terms by 1.6 per cent on 2010 (seasonally unadjusted data), with net exports retaining a leading contribution to growth, private consumption rising insignificantly (0.5 per cent), and government consumption further declining (0.8 per cent). The decline rate of fixed capital investment slowed down from 16.5 per cent in 2010 to 5.9 per cent in 2011.

In the first half of 2012 the rate of economic recovery is expected to slow down due to unfavourable developments of external environment. Domestic demand will continue to gradually increase and a negative contribution of net exports may be expected in the first quarter of 2012 due to lower external demand. Firms are expected to remain conservative in their decisions on the number of employees due to uncertain external conditions which will have an adverse effect on the speed of consumer expenditure recovery. The investment demand dynamics will be impacted by factors with divergent effects. On the one hand, the recovery of domestic demand and the retained level of firms' financial performance, will boost investment expenditure irrespective of the expected slow rates of this process. On the other hand, the instability and uncertainty of international financial markets will result in a contraction of investment demand. Unfavourable weather conditions in the first two months of 2012 will have an additional negative effect on economic activity in the first quarter of 2012. Therefore, the rate of economic activity growth is expected to remain low in the first half of 2012, retaining the positive contribution of final consumption and net exports.

Bulgaria's external position remained sustainable and the positive current account balance allowed for the smooth servicing of Bulgaria's external obligations and the gradual reduction in gross external debt. The balance of payments current account was positive for the January to December 2011 period, amounting to EUR 743.7 million or 1.9 per cent of GDP. In the first and second quarters of 2012 the current account surplus is expected to be around 0.5–1.5 per cent of GDP on an annual basis.

5 Summary

Foreign direct investment inflow in Bulgaria was positive. Preliminary balance of payments data for 2011 show that net FDI was 2.4 per cent of GDP. In the first and second quarters of 2012 FDI inflow is expected to remain positive between 2.5 and 3.5 per cent of GDP on an annual basis.

By end-2011 broad money growth accelerated to 12.2 per cent on an annual basis compared to 10.3 per cent in September. Quasi-money contributed mainly to this, with its growth reaching 10.9 per cent on an annual basis against 13.2 per cent at the end of the third quarter. Lev-denominated deposits contributed most significantly to this by 9.1 percentage points. The annual growth of broad money is expected to gradually slow down in the first half of 2012.

In 2011 banks' claims on non-financial corporations increased, while claims on households decreased. Improved economic environment partially affected loan demand by non-financial corporations, while households preferred to repay their old obligations due to the continuous uncertainty regarding their future income and relatively high level of unemployment. In 2011 claims on non-government sector rose by BGN 2021.2 million and by December 2011 their growth rate was 3.9 per cent on an annual basis (3.5 per cent if the effect of some one-off factors is recognised). Claims on non-financial corporations continued to improve and by end-2011 their annual growth reached 6.4 per cent, while claims on households decreased slightly to record a negative annual rate of change (0.4 per cent) by end-2011. As regards claims on households, housing loans and other loans increased by 1.1 per cent and 4.3 per cent respectively, while overdrafts and consumer loans decreased by 9.5 per cent and 0.7 per cent respectively. Growth in the deposit base generated from residents is projected to ensure sufficient bank resources for increasing the volume of domestic credit over the first half of 2012.

In 2011 interbank money market interest rates fluctuated within a narrow band around the attained low levels. The average interest rate on concluded transactions increased slightly by 3 basis points to 0.26 per cent as a result of the rise in interbank overnight deposit rates. The ample liquidity of banks resulting from the high savings rate of households and cautious lending policy were the factors behind this dynamics. However, low interest rates in the interbank money market are not a decisive factor for setting lending rates, since this market's role in bank liquidity management is just auxiliary. Lending rates were primarily affected by the cost of attracted financial resources. In the first two quarters of 2012 deposit interest rates are expected to slightly decline. At the same time, the instability and uncertainty in international financial markets, as well as the possible increase in the risk premium of Bulgaria will be the factors limiting the possible decrease in lending rates.

According to preliminary data, the balance on the consolidated fiscal programme came to BGN -1582.2 million in 2011 (-2.1 per cent of GDP). The improvement of the deficit by 1.9 percentage points of GDP compared to 2010 was entirely attributable to the limited government expenditure whose share in GDP decreased by 2.8 percentage points on 2010, while the relevant share of total consolidated fiscal programme revenue in GDP fell by 0.9 percentage points.

Government consumption over the third quarter of 2011 had a negative quarter-on-quarter contribution of 0.2 percentage points to GDP growth. Based on NSI flash estimates of GDP, the contribution of the government consumption to GDP growth remained negative in 2011. In the first two quarters of 2012 this contribution is expected to be around nil.

International energy and food prices were the main determinants of inflation in 2011. Core inflation remained comparatively low with an insignificant contribution to overall inflation. The average annual inflation in 2011 was 3.4 per cent (3.0 per cent in 2010), and end-year accumulated inflation decreased to 2.0 per cent (4.4 per cent at end-2010). In the first two quarters of 2012 we expect annual inflation to be relatively low in the range from 1.8 to 2.4 per cent, benefiting from the continued moderation in food price rises and expected slow increase in core inflation. Preliminary data for January 2012 show that overall inflation remains low: 1.9 per cent on an annual basis. Major risks to the projection stem from the upward movement in world energy prices and possible direct and indirect effects on consumer prices in Bulgaria.

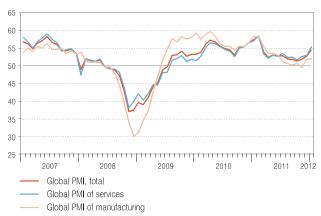
# 1. External Environment

In the fourth quarter of 2011 global economic indicator remained at levels close to those in the previous two quarters. A slight increase of this indicator was reported in December 2011 and January 2012, although it is still early to assert that the international business environment tends to improve. Euro area economic indicators posted a decline in the second half of 2011 due to the intensification of the debt crisis in some Member States and financial market tensions. At the same time, signals of acceleration in global economic recovery and improvements of labour market conditions appeared in the USA. Downside risks to global economy growth enhanced as a result of declining economic growth in China and other developing countries.

#### **Current Business Situation**

Over the fourth quarter of 2011 no changes occurred in the expectations for international economic developments. Global economic indicator remained at levels close to those in the previous two quarters. A slight increase of this indicator was reported in December 2011 and January 2012, although it is still early to assert that the environment tends to improve.

#### Global PMI



Source: JP Morgan.

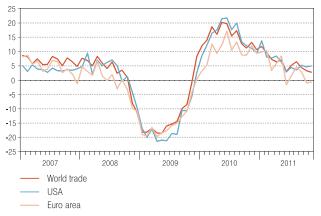
In the services and industry sectors, the levels of the major business activity indicators at the end of 2011 and the beginning of 2012 went up. The economic indicators of both sectors were above the threshold of 50, showing that expectations for strengthening economic activity prevail. These indicators' dynamics was driven mainly by the trend in the USA, where industrial production and new orders accelerated their rate of recovery. On the other hand, the continuing debt problems in some euro area countries and consequences of the floods in Thailand contributed to the decline in

economic indicators in the advanced economies of Europe and Asia.

In November 2011 world trade growth moderated to 2.8 per cent on an annual basis, mainly driven by the drop in foreign trade of the euro area by 0.6 per cent (down by 3.5 percentage points on the third quarter of 2011). The floods that swept Thailand between July and October, and in some parts of the country even in mid-January, significantly dampened Thailand's industrial output by 80 per cent on an annual basis in the fourth guarter of 2011. The country is an important producer of high technology (mainly electronics) and vehicle products. The break in the supply chains affected negatively industry and foreign trade in Asia (Japan, Singapore) and Europe. Concurrently, foreign trade in the USA accelerated its growth in November to 5.0 per cent on an annual basis.

#### World Trade

(annual rate of volume growth, %)



Source: CPB Netherlands Bureau for Economic Policy Analysis.

Based on the economic indicators and short-term developments in world trade, it may be expected

that the global economic growth will remain low at the beginning of 2012.

Global inflation increased to 4.9 per cent on an annual basis in the third quarter, despite the fall in November to 4.7 per cent. Downward trends in inflation, though more clearly pronounced in Asia, were observed in the developed and developing countries.

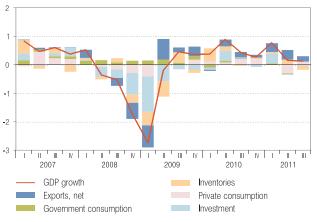
#### Euro area

Based on preliminary data for the fourth quarter of 2011, euro area GDP decreased by 0.3 per cent on a quarterly basis against 0.1 per cent growth in the previous quarter. On an annual basis, GDP growth moderated to 0.7 per cent, from 1.3 per cent in the third quarter.

In Germany and France, economic growth went down on an annual basis over the fourth quarter (preliminary data) to 2.0 per cent (previous guarter: 2.7 per cent) and 1.4 per cent (previous quarter: 1.5 per cent) respectively, while in Spain, it declined to 0.3 per cent (previous quarter: 0.8 per cent). GDP recorded a decrease of 0.5 per cent in Italy (compared to a 0.2 per cent increase in the previous quarter), Greece (-7.0 per cent), Cyprus (-0.5 per cent), Portugal (-2.7 per cent) and Netherlands (-0.7 per cent). In the fourth quarter a negative quarter-onquarter real GDP rate was reported in Germany (-0.2 per cent), Netherlands (-0.7 per cent), Italy (-0.7 per cent), Spain (-0.3 per cent), Belgium (-0.2 per cent), Portugal (-1.3 per cent), Austria (-0.1 per cent) and Estonia (-0.8 per cent).

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

(%; percentage points)



Source: Eurostat.

Over the fourth quarter of 2011 the average values of euro area leading economic indicators were lower than their averages in the third quarter.

The euro area economic sentiment index of the European Commission rose to 93.4 in January 2012 (against 92.8 in the previous month), reflecting the increases in the following subindices: construction, consumer confidence and services. Only trade registered a decline.

Business climate indicator in the euro area improved to -0.21 in January (previous: -0.32). As regards its components, assessment of current production capacity level and export orders were revised upwards. Assessments of domestic market orders and stocks of finished products along with the production trends observed in recent months were revised downwards.

#### Euro Area Consumer Confidence Indices



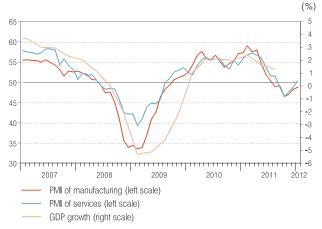
Source: European Commission.

The euro area consumer confidence index of the European Commission rose to -20.7 in January against -21.3 in December.

The euro area PMI remained below the neutral level of 50 in the fourth quarter of 2011 as well. Despite the upward trend at the end of the year, the average levels of the indicators in the fourth quarter were lower than their averages in the third quarter. With values below the level of 50 and a downward trend, a contraction in economic activity in the last quarter of 2011 and first quarter of 2012 may be expected. As early as in December index dynamics improved marginally, with the composite PMI rising to 48.3 against 47 in November, including manufacturing and services sub-indices slightly increasing to 46.9 (previous value: 46.4) and 48.8 (previous value: 47.5) respectively. Further improvements were observed

in January 2012 when the composite PMI was above the 50-point threshold (reaching 50.4).

## PMI of Manufacturing and Services and Euro Area GDP Growth



Source: European Commission.

Due to the slowdown in the growth dynamics and the deteriorating economic indicators for the euro area, in November 2011 the European Commission revised downwards the euro area GDP growth projection for 2011 and 2012 to 1.5 per cent (previous projection: 1.6 per cent) and 0.5 per cent (previous projection: 1.8 per cent) respectively. The EU Commission assessment of the growth in the fourth quarter of 2011 was -0.1 per cent (previous projection: 0.4 per cent), while the growth rate in the first quarter of 2012 is expected to be 0 per cent guarter on quarter (previous projection: 0.5 per cent). According to the ECB forecast released in December 2011, real GDP growth in the euro area for 2011 will range between 1.5 per cent and 1.7 per cent (previous forecast: 1.4-1.8 per cent on an annual basis) and that for 2012 between 0.4 and 1 per cent (previous forecast: 0.4-2.2 per cent).

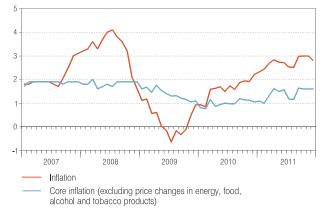
The euro area inflation reached 2.7 per cent on an annual basis in December 2011 and January 2012 (preliminary assessment) against 3 per cent in the previous three months. Lower growth in energy prices, after decelerating to 9.7 per cent on an annual basis in December (previous value: 12.3 per cent) contributed to the decline in the growth of consumer prices. In the last four months core inflation remained at 1.6 per cent on an annual basis.

In January 2012 the annual inflation moderated to 3.4 per cent in Italy (previous level: 3.7 per cent) and 2.0 per cent in Spain (previous level:

2.4 per cent), while in Germany it was sustained at 2.3 per cent level.

#### Euro Area Inflation Rate

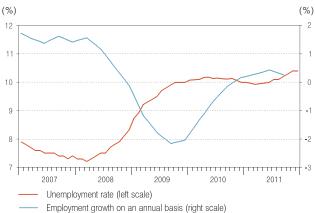
(percentage change on same period of previous year)



Source: Eurostat.

Downward trend of the euro area inflation and expectations for stabilization of international commodity and fuel prices were reflected by the European Commission in its projection for euro area inflation, published in November 2011. The EU Commission revised downwards its forecast of euro area inflation for 2012 to 1.7 per cent compared to the previous projection of 1.8 per cent. In the December 2011 ECB projections for the euro area, inflation values for 2012 were increased to 1.5–2.5 per cent compared to the previous revision of 1.2–2.2 per cent.

## Euro Area Unemployment Rate and Employment Growth



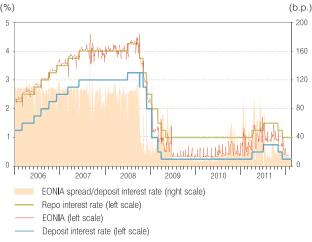
Source: Eurostat.

According to the Eurostat data, euro area unemployment in December 2011 matched the 10.4 per cent level registered in November. The indicator of the expected unemployment during the following twelve months included in the EC consumer confidence index declined to 33.1 in January (against the previous value of 34.8). Unit labour costs increased in the third quarter of 2011 by 1.3 per cent on an annual basis (1.2 per cent in the previous quarter). Over the same period compensation per employee picked up by 2.4 per cent (against 2.5 per cent) and labour productivity by 1 per cent on an annual basis (against the previous value of 1.3 per cent).

#### **ECB Interest Rates**



#### Short-term interest rates



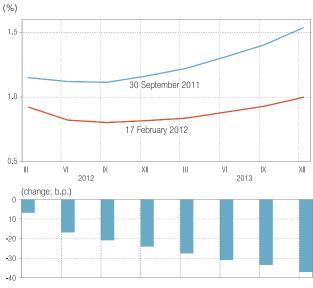
Source: Bloomberg.

At its last meeting for 2011 (on 8 December), the ECB decided to cut the interest rate on main refinancing operations by 25 basis points to 1.00 per cent effective from 14 December 2011. The interest rates on deposit facility and marginal lending facility were also reduced to 0.25 per cent and 1.75 per cent respectively. At the 12 January 2012 meeting, the ECB left these interest rates unchanged. The rates are based mostly on the ECB inflationary trends analysis and achievement of price stability. According to the ECB economic analysis, although the inflation remained over 2 per cent, it is expected to decrease in 2012. Due to the worsened eco-

nomic situation, low rate of wage developments and relatively high level of unemployment, no risk of creating high inflation expectations exists. Concurrently, financial market tensions associated with the debt crises continued to dampen economic activity in the euro area and the growth is very likely to stay at its current low levels.

The ECB continued implementing the non-conventional monetary policy measures, providing unlimited liquidity allotment on main and long-term refinancing operations in order to support bank lending and liquidity in the euro area money market. By end-October 2011 one-year longer-term refinancing operation of EUR 56.9 billion was conducted and allocated to 181 euro area credit institutions.

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

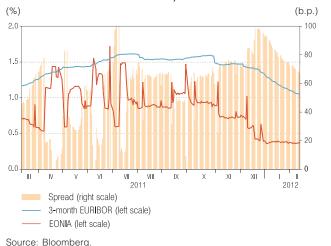


Source: Bloomberg.

The ECB launched a new Covered Bond Purchase Programme (CBPP2) and continued to implement the Securities Markets Programme (SMP). At its 8 December 2011 meeting the ECB approved additional measures to support bank lending activity and liquidity on the euro area money market<sup>1</sup>. These actions were aimed at easing tensions in the financial markets and supporting economic activity amid high uncertainty and significant risk of decline in euro area economic growth.

<sup>&</sup>lt;sup>1</sup> For further details, see the box entitled Impact of the Additional ECB Measures on the Money Market and the Government Securities Markets in the Euro Area.

#### Liquidity Risk Premium (Spread between the Threemonth EURIBOR and EONIA)



In the short run the additional measures taken by the ECB boosted banking system liquidity and significantly cut the interest rates on the euro area money market. The achievement of long-term macroeconomic stability in the euro area and the EU as a whole will be determined mainly by the adherence to the Treaty on the stability, coordination and governance in the Economic and Monetary Union<sup>2</sup>, which was signed by the Heads of State or Government of the 25 EU Member States on 2 March 2012. The Treaty aimed at ensuring strong fiscal discipline in the EU and strengthening economic policy coordination between the member states. In the short run, the adoption of the Treaty should contribute to the financial market stabilisation, while in the long run it should guarantee macroeconomic stability and confidence in the EU economic policy.

# Impact of the Additional ECB Measures on the Money Market and the Government Securities Markets in the Euro Area

In December 2011 the Governing Council of the ECB approved the implementation of an additional package of extraordinary measures to support bank lending and liquidity in the euro area money market. It has decided to:

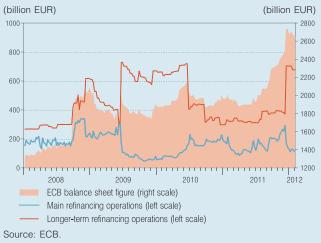
- conduct two longer-term refinancing operations (LTROs) with a maturity of 3 years (on 21 December 2011 and on 29 February 2012) and the option of early repayment after one year;
- reduce the reserve ratio, which is currently 2 per cent, to 1 per cent as of the reserve maintenance period starting on 18 January 2012 (the first for 2012);
- expand the set of instruments that are accepted as collateral;
- discontinue the fine-tuning operations carried out on the last day of each maintenance period.

At the first Governing Council meeting for 2012 held on 12 January 2012 the ECB President Mario Draghi underlined the satisfactory results of the first 3-year longer-term refinancing operation which had a sizeable contribution to the increase of euro area bank liquidity. The operation was conducted on 21 December 2011 and amounted to

EUR 489.2 billion allocated to 523 credit institutions participating in the auction. This sum included the EUR 45.7 billion transferred by banks from their participation in the one-year longer-term refinancing operation of the ECB, conducted in October 2011. So far the outstanding amount of this one-year operation comes to EUR 11.2 billion. On 29 February the ECB conducted the second 3-year longer-term refinancing operation that is expected to enjoy high interest. Banks' participation in this operation will be facilitated further by the extended eligible collateral framework (credit claims are accepted as collaterals) which according to a decision of the ECB Governing Council of 9 February 2012 is implemented by seven Eurosystem central banks (Austria, France, Italy, Ireland, Spain, Portugal and Cyprus).

The high interest in the first 3-year ECB operation conducted in December 2011 resulted in a significant increase in euro area bank liquidity. After the settlement

# Refinancing Operations and Balance Sheet Figure of the ECB



External Environment

<sup>&</sup>lt;sup>2</sup> The United Kingdom and Czech Republic did not sign the Treaty on the stability, coordination and governance in the Economic and Monetary Union.

of the operation on 22 December 2011 the total outstanding amount of ECB refinancing operations reached EUR 873 billion, with the net liquidity provided to the system coming to around EUR 200 billion. The average residual maturity of ECB refinancing operations also increased sizeably and is estimated to around 680 days.

As of 31 December 2011 the ECB balance sheet figure reached EUR 2.736 trillion: up 36 per cent on end-2010 (the increase in the last two months was 17 per cent). The liquidity surplus of the euro area banking system measured as the difference between the outstanding amount of ECB refinancing operations and the required reserves and autonomous factors increased to around EUR 500 billion. Meanwhile, ECB deposit facility funds increased considerably reaching EUR 528 billion as of 17 January 2012.

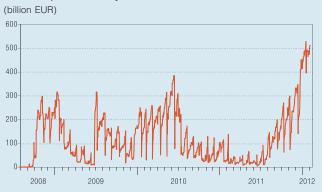
On 18 January 2012 started the first reserve maintenance period for euro area banks and as of this date the minimum reserve requirement rate was reduced from 2 to 1 per cent. As a result of this measure, liquidity of between EUR 70 billion and EUR 100 billion was released.

With the increase of excess liquidity in the banking system the demand for the weekly main refinancing operations of the ECB and for its 3-month longer-term refinancing operations weakened. Euro area money market interest rates also reported a sizeable decline. As of 17 February 2012 the euro area overnight interest rate EONIA fell to 0.36 per cent and the spread between EONIA and the ECB deposit facility interest rate narrowed to 11 basis points.

Due to the sizeable decrease in interest rates in shortterm maturity sectors, the slope of the EURIBOR curve steepened. Between 20 December 2011 (prior to the first 3-year operation of the ECB) and 17 February 2012 EURIBOR interest rates with a maturity of 1 week and 1 month went down by 39 basis points and 53 basis points respectively to 0.37 per cent and 0.61 per cent, while for the 3, 6 and 12-month maturities they declined on average by 35 basis points to 1.04 per cent, 1.33 per cent and 1.66 per cent respectively. Meanwhile, the spread between the EURIBOR and the rates on overnight deposit index swaps (OIS) in the 3 and 6-month segments narrowed significantly to 69 basis points (down 26 basis points) and 99 basis points (down 23 basis points) respectively due to the slight decrease in swap interest rates.

As in end-November 2011 the ECB in cooperation with the Federal Reserve announced a decrease in the cost of financing to OIS + 50 basis points (down 50 basis points), demand for refinancing operations in US dollars increased. Accordingly, they have decided to conduct 3-month operations in US dollars and to reduce the foreign exchange risk premium from 20 per cent to 12 per cent. At its 8 December 2011 three-month operation the ECB allocated USD 50.7 billion at a fixed rate of 0.59 per cent, and at its 5 January 2012 operation it allocated

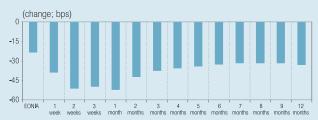
#### **ECB Deposit Facility**



Source: ECB.

#### Change in Money Market Interest Rates





Source: Bloombera

#### **EURIBOR/OIS Spreads**

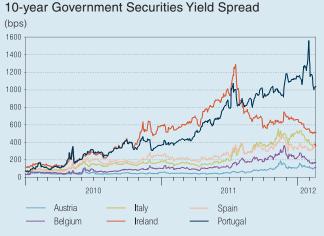


Source: Bloomberg.

USD 25.5 billion at a fixed rate of 0.58 per cent. The spread at the EUR/USD basis swaps narrowed significantly: the negative spread on 3-months swaps halved from its mid-October levels reaching -70 basis points by 17 February.

The extraordinary measures of the ECB made a significant contribution to the euro area government securities markets. The late December 2011 and early 2012 euro area primary market auctions enjoyed high investor interest while government securities yields declined significantly. The demand in Spain and Italy in particular, was underpinned mainly by domestic investor interest.

At the primary auctions in Italy and Spain held immediately after the 3-year operation of the ECB, yield marked a sizeable fall of some 100 – 200 basis points, and this trend continued at the following auctions. Due to the high interest in medium-term 3 and 4-year Span-



Source: Bloomberg

ish government bonds shown at the auction of 12 January 2012 when government securities of a total of EUR 10 billion were sold, their target amount was doubled compared to the initially planned one. By mid-February the country managed to fulfil around 29 per cent of its issuance programme for 2012. Using the favourable market conditions Austria also succeeded in selling bond issues on the primary market, of which one with a maturity of 50 years, realising 27 per cent of the planned issues for the year.

Italian and Spanish government securities yields on the secondary market declined substantially and the spreads in other euro area countries such as Ireland, Belgium and Austria narrowed. The decline in the short end of the yield curve was substantial compared to that in longer maturities (down to -225 basis points in Italy and -200 basis points in Spain). As of 17 February the yield on 10-year Italian and Spanish government securities came to 5.6 per cent and 5.3 per cent respectively compared to 6.6 per cent and 5.1 per cent as of 20 December 2011. At the same time the yield curves steepened: a trend that was most pronounced for the Italian, Spanish and Irish government securities.

In early 2012 the short end of the yield curve of German and Dutch government securities (for T-bills of up to one year) returned to positive territory and a moderate increase in the other curve sectors was observed. As of 17 February the yield on the two-year German government bonds was 0.25 per cent and that of 10-year securities: 1.93 per cent.

According to the weekly ECB data, the Securities Markets Programme continued to be implemented but at slower pace. In January securities purchases came to a total of EUR 8.7 billion, while in the first three weeks of February they were only EUR 0.2 billion. As of 17 February the cumulative purchases value under this programme reached EUR 219.5 billion.

#### **United States**

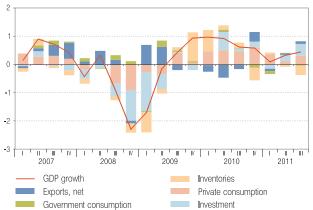
Based on initial data, GDP growth in the USA over the fourth quarter reached 0.7 per cent on a quarterly basis against 0.5 per cent in the previous quarter, while it was 1.6 per cent on an annual basis in the fourth quarter *vis-à-vis* 1.5 per cent in the third quarter. Major factors behind growth were investment in the business sector and strong household consumption. Over the review period the positive contribution of household consumption to GDP growth accounted for 0.36 percentage points (0.31 in the previous quarter), while investment came to 0.10 per-

centage points (0.28 in the previous quarter). The change in inventories (-0.34 in the previous quarter) also made a positive contribution of 1.94 percentage points to real GDP growth in the review quarter. Government expenditure continued to contribute negatively to economic growth by -0.23 percentage points (-0.01 in the previous quarter).

Favourable developments in the economic activity over the second half of 2011 refuted the negative market expectations of forthcoming second recession in the USA.

## Contribution to US GDP Growth by Component (Quarterly)

(%; percentage points)

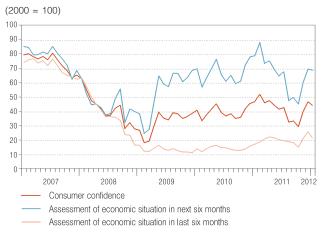


Source: Bureau of Economic Analysis.

Rising household consumption and investment in the business sector contributed to accelerating economic growth over the fourth quarter. The positive dynamics of both GDP components is expected to be sustained also in the first half of 2012.

US consumer confidence indicators significantly improved in the fourth quarter of 2011, after falling in July and August. In January 2012 the University of Michigan Consumer Sentiment Index reached 75.0 percentage points compared with 69.9 in December 2011. At the same time, the leading Conference Board Consumer Confidence Index<sup>3</sup> recorded a deterioration in the consumer sentiment, down to 61.1 percentage points in January 2012.

#### **US Consumer Confidence Indices**



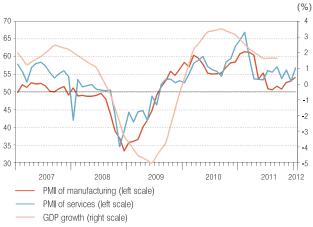
Source: The Conference Board.

A positive change was observed in the expectations of both the current economic environ-

ment and economic prospects in the coming six months. Positive trends in the labour market also contributed to the consumer confidence strengthening since the beginning of the fourth quarter of 2011. The improvement in consumer sentiment, in turn, had a favourable effect on demand for goods and services. Retail sales, accounting for almost 60 per cent of the household consumption in GDP, increased by 1.9 per cent on average in the fourth quarter against the third quarter despite the slowdown of the indicator to 0.1 per cent on a monthly basis in December against 0.4 per cent in November.

Over the fourth quarter tax incentives and stronger consumer demand continued to support investment activity in the business sector. Easing price pressures on production resources and strong sales in the review period contributed to the corporate profit growth. Measures taken by the US Federal Reserve System to cut interest rates at the long end of the reference curve, made the financing conditions advantageous for the companies through the corporate bond issues. The ongoing investment growth can be weakened by statutory changes effective as of early 2012.

## US PMI of Manufacturing and Services and GDP Growth



Source: Institute for Supply Management.

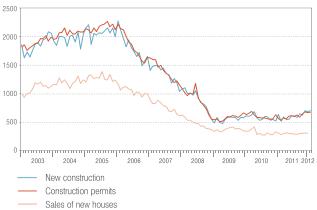
In the fourth quarter of 2011 and early 2012 major economic industrial and services indicators reported improved expectations for economic activity in the USA. In January 2012 ISM-PMI for industry went up to reach 54.1 points against 53.1 points a month earlier. The ISM-PMI for services also rose to 56.8 in January *vis-à-vis* 53.0 in December. These developments indicate positive economic growth at the end of 2011 and the beginning of 2012.

 $<sup>^{\</sup>rm 3}$  The Conference Board (Organisation for Economic Research)

The low investment activity in the housing sector will continue to affect adversely the gross capital formation in the following quarters. In the last quarter of 2011 and early 2012 an increase was registered in the National Association of Home Builders (NAHB) index. The number of builders with improved expectations of future demand for family houses increased. Regardless of the reported increase, the index remained significantly below its pre-crisis averages.

### Sales of Houses and construction investment in the USA

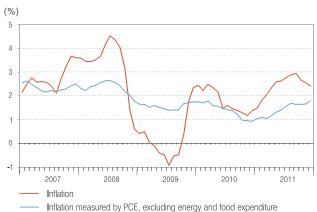
(number, in thousands)



Source: Bloomberg.

Despite the increasing sales of houses observed in the second half of 2011, the new construction in the USA continued to be weak because of the large number of unsold houses on the market. The high level of unemployment and low income growth impede many households' ability to purchase new homes. Ongoing uncertainty regarding the rates of economic recovery and improving employment on labour market, as well as the still limited access to lending contributed to the slow home-buying activity.

#### **US Inflation Rate**



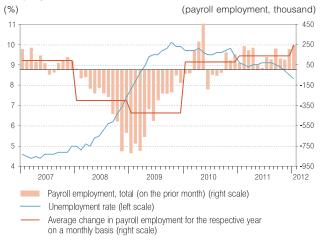
Note: Inflation is measured by the personal consumption expenditure deflator.

Source: Bureau of Labor Statistics.

Inflation measured on an annual basis by personal consumption expenditure deflator (PCE) decreased to 2.4 per cent in December against 2.6 per cent in November. In December the personal consumption expenditure index rose to 1.8 per cent on an annual basis against 1.7 per cent in the previous month. The annual growth rate of the personal consumption expenditure index is anticipated slightly to rise in the first half of 2012, but to remain close to its current level.

The change in a consumer price index, the other measure of the US inflation, posted a moderation in its annual rate to 2.9 per cent in January 2012 against 3 per cent in December and an increase by 0.2 per cent on a monthly basis. The personal consumption expenditure index rose to 2.3 per cent in January 2012 mainly due to the price rises in rents, health services and clothing. Expected domestic consumer price inflation up to one year, which is a component of the University of Michigan consumer confidence index, posted a decline in December, while longterm inflation expectations remained stable. In the first half of 2012 the US consumer inflation is likely to continue gradually declining due to the expected slowdown in economic growth and stabilization of international commodity prices.

## US Unemployment Rate and Changes in Payroll Employment



Source: Bureau of Labor Statistics.

US unemployment rate in the fourth quarter 2011 and early 2012 exhibited a clear downward trend and remained high *vis-à-vis* the long-term pre-crisis average. In January 2012 the indicator reached 8.3 per cent against 8.5 per cent in the previous month and 9.0 per cent by end-2011. In January 243,000 new jobs were created in the non-agricultural sector (compared to 203,000 in

December). In the fourth quarter new jobs came to 157,000. In 2012 unemployment rate is expected to decline further.

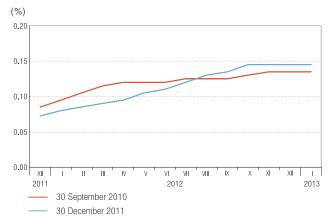
At its last meeting for 2011 (13 December) and at its first meeting for 2012 (24-25 January), the US Federal Reserve Open Market Committee (FOMC) decided to keep its reference interest rate unchanged within a range of 0.00-0.25 per cent to support the economic growth even amid lower short-term inflationary expectations. The assessment that the range of the US federal funds interest rate should stay unchanged was confirmed, and the time horizon for keeping interest rates levels was extended to 2014. The decision to continue implementing the programme for extension of average maturity of the assets in the Federal Reserve portfolio, announced in September 2011, was also confirmed. The members of the Committee also approved that the Federal Reserve balance sheet figure will stay at its current level through reinvestment of earnings from mortgage-backed securities from the Federal Reserve assets and debt securities of government agencies in new mortgage bonds. The earnings of US maturing government bonds will continue to be reinvested back in US government bonds.

In addition to the statement of January meeting of the FOMC (24–25 January 2012) a notice was published, by which monetary policy objectives were unambiguously formulated in line with the Committee mandate, namely that it should strive to achieve maximum level of employment in the economy, price stability and moderate long-term interest rates. For the first time in the history of the US Federal Reserve System, an explicit quantitative 2 per cent inflation target was defined, that was measured on an annual basis by personal consumption expenditure index (PCE). Since the maximum level of employment is determined by non-monetary factors,

the Committee did not specify a quantitative indicator of this long-term goal. However, it would use own assessments of the maximum level of employment based on a complex analysis of economic developments. Committee's decisions will be based on an analysis of deviations of inflation from its longer-run goal and deviations of employment from the Committee's assessments of its maximum level. The Committee's policy decisions shall be subject to revision or change every year at its meeting in January.

The Committee members' estimates, first published on 25 January 2012, projected slower economic growth in the next three years between 2.3–2.6 per cent, decreasing inflation to 2 per cent and gradual decline in the level of unemployment to 5.2–6.0 per cent. Most members expected interest rate changes only in 2014–2015.

## Expected Reference Interest Rate on US Federal Funds Based on Futures Contracts



Source: Bloomberg.

Expected reference interest rate in the money market on US federal funds based on futures contracts remained unchanged to the end of 2012. Market expectations will continue to retain the cost of US short-term resources at levels close to those of the first half of 2012.

#### The Balkan Region

In the third quarter of 2011 economic recovery continued in Balkan countries, albeit at a slower pace. A contribution to the growth in the region had Turkey's economy, reaching 8.2 per cent real growth rate. The lowest real growth was recorded in Greece, its economy contracting by 5.0 per cent.

#### Annual Real GDP Growth

(quarterly unadjusted data)

Country	2010				2011		
Country	- 1	Ш	Ш	IV	- 1	Ш	Ш
Bulgaria	-4.8	1.0	0.3	3.1	1.5	2.2	2.3
Greece	0.4	-0.7	-4.6	-8.6	-8.3	-7.4	-5.0
Croatia	-2.3	-2.3	0.3	-0.6	-0.8	0.8	0.7
Romania	-2.2	-0.4	-2.2	-0.6	1.7	1.4	4.4
Macedonia	-0.4	1.7	1.8	3.5	5.3	5.0	2.3
Serbia	-0.2	1.0	1.7	1.2	3.7	2.5	0.5
Turkey	12.2	10.2	5.3	9.2	11.6	8.8	8.2

#### Contribution to Real GDP Growth

(quarterly unadjusted data)

Country	GDP growth	Private consump-tion	Govern- ment consump- tion	Investment	Exports, net
Bulgaria	2.3	2.7	0.0	-0.7	-3.4
Greece	-5.0	-3.9	-0.7	-2.3	2.1
Croatia	0.7	0.0	-0.1	-1.9	4.9
Romania	4.4	2.7	-0.1	3.3	-2.2
Macedonia	2.3	1.5	-1.3	8.3	-6.2
Turkey	8.2	4.7	1.2	3.3	2.0

Note: Non-additive contribution to real GDP growth by components due to chain-linked GDP data. Data for the third quarter of 2011.

#### **Annual Inflation**

(quarterly unadjusted data)

Country	2010				2011		
Country	I	II	III	IV	- 1	II	Ш
Bulgaria	1.9	2.9	3.3	4.0	4.5	3.4	3.1
Greece	3.0	5.1	5.6	5.1	4.5	3.3	2.1
Croatia	0.9	0.7	1.1	1.5	2.2	2.3	2.1
Romania	4.6	4.3	7.5	7.8	7.5	8.3	4.2
Macedonia	1.3	1.9	2.3	3.0	3.8	4.5	3.6
Serbia	4.5	4.1	6.5	9.6	12.6	13.6	10.6
Turkey	9.3	9.2	8.4	7.4	4.3	5.9	6.4

#### Unemployment

(quarterly unadjusted data)

Country	2010				2011		
Country	- 1	Ш	Ш	IV	- 1	II	Ш
Bulgaria	9.4	10.0	10.2	11.3	11.1	11.2	11.0
Greece	11.1	12.1	12.9	14.1	15.4	16.7	18.3
Croatia	10.5	12.1	12.5	12.3	13.3	13.6	13.4
Romania	7.4	7.1	7.2	7.3	7.1	7.4	7.5
Macedonia	33.5	32.1	31.7	30.9	31.2	31.7	31.2
Serbia	:	20.0	:	22.9	:	24.4	:
Turkey	11.5	10.6	10.5	9.9	9.2	9.1	8.6

Sources: Statistical institutes and central banks of respective countries.

#### Real GDP Growth Rates in Balkan Countries

(%, on an annual basis)



Note: Bulgaria, Greece, Romania, Macedonia, 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 third quarter of 2011 were available only for these coountries.

Sources: Eurostat, own calculations.

Industrial output between January and November in Bosnia and Herzegovina slowed down in the second half of 2011 growing by 6.1 per cent, including mining by 16.7 per cent and industry by 4.9 per cent. In construction, economic activity continued to weaken. Unemployment in the country was high (43.3 per cent), with employment falling in construction and hotel services. Average inflation between July and September was 4.0 per cent. The overall price level was mainly affected by raising tobacco excise duties, transport and communication prices, though decline in clothing prices dampened inflationary pressures.

Macedonia's economy real growth remained high on an annual basis, despite significant moderation compared to the first half-year. Gross fixed capital formation and private consumption were the main drivers of growth, while increased imports were the reason for the negative contribution of net exports in the review period. In line with economic activity, industrial output slowed down from 5.6 per cent in the second quarter to 1.4 per cent in the third quarter, following the declines reported in textile industry and metal products. Labour market situation remained almost unchanged: no changes occurred in employment compared to the respective period of the prior year and unemployment fell only slightly. Downward trends in inflation were observed in the third quarter mainly due to low levels of core inflation that offset the inflationary pressure of rising food and rental costs.

Greece's economy posted a 5 per cent decline in real GDP. Investment and private consumption posted the strongest decline, while weak imports led to a positive contribution of net exports to GDP growth.

Decreased domestic demand was due to rising unemployment and falling household disposable income. Agriculture and real estate services posted an increase on an annual basis, while construction, information and communication services experienced the most pronounced decline. Labour market conditions deteriorated further amid falling employment and lower wages; and unemployment reached 18.3 per cent. Inflation measured by the Harmonized Index of Consumer Prices slowed down due to weak domestic demand, while the main drivers of the existing inflationary pressure were government tax measures.

Romania's real economy growth rate increased in the third quarter of 2011 supported by investment and private consumption. High imports were the main factor behind the negative contribution of net exports to GDP growth. Gross value added in industry, agriculture and construction increased most significantly. Almost no changes occurred in labour market conditions, with employment and unemployment growing minimally. Due to the slight rise in unprocessed food prices, the inflation in the country slowed down, while administrative and energy prices contributed to the increase in the HICP.

In Serbia, real growth remained sluggish. Seasonally adjusted quarterly data reported even a decline in economic activity in the third quarter. Investment in the private and public sectors had a significant contribution to GDP growth, while final demand had a negative effect on it. Industrial output and trade exhibited an annual decrease. Industry, mining and energy were the most affected. On the other hand, agriculture, transport, financial and real estate sectors had a positive contribution to the growth. No significant changes occurred on the labour market: lower employment in public sector and construction was offset by the rising employment in industry and services. The decline in food prices helped to moderate the inflationary pressure, enabling the Central Bank of Serbia to cut its key interest rate in four steps to 10 per cent between July and November.

In the third quarter **Turkey** achieved the highest GDP real growth among the other countries in the Balkan region. Economic activity continued to expand at an accelerating rate of 8.2 per cent on the same quarter of the previous year. Private and public consumptions had a positive effect on GDP growth underpinned by industrial output and trade. On the other hand, gross capital formation decelerated, contributing negatively to the growth. Unemployment declined by 1.5 percentage points over the third quarter, while employment increased in services and industry. Inflation in the country accelerated, resulting from the stronger domestic demand, weaker Turkish lira, rising unprocessed food prices and higher indirect taxation.

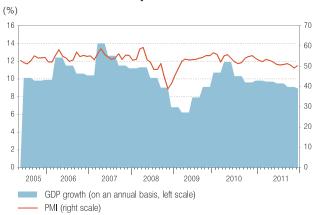
In Croatia, the most significant contribution to the growth had net exports of goods and services, positively affecting the industrial output and trade, while gross capital formation and inventories recorded a decrease. The major factor behind the increase in economic activity was tourism. After declining markedly in the first half-year, construction continued to worsen. Low economic growth and delayed recovery contributed to the further decline in employment and increase in unemployment. Over the third quarter average inflation remained almost unchanged on the second quarter, despite some signs of acceleration in September. Core inflation had a major contribution to the rising prices, while the sluggish domestic demand pushed them down. Trying to ease the pressure on the Croatian kuna, the Croatian National Bank intervened in foreign exchange markets and sold EUR 420 million in order to stabilise the exchange rate. In October banks' minimum required reserve ratio was raised from 13 per cent to 14 per cent as an additional measure to curb liquidity in the economy.

According to the assessment of the Central Bank of Montenegro the economy of the country continued to recover, with real GDP growing by an average of 3.5 per cent on an annual basis in the first nine months of 2011. Industrial output increased by 4.5 per cent between July and September compared with the same period of the prior year. The strongest contribution had mining (25.3 per cent) and industry (10 per cent), while energy posted the most significant decline (12.7 per cent). Tourism also recorded an increase on the previous year, with the number of tourists visited the country rising by 8.5 per cent and the duration of their stay by 11.1 per cent. The number of employed went up by 5.6 per cent on an annual basis, although unemployment grew by 0.3 percentage points to 19.5 per cent due to a higher number of economically active population. Over the third quarter the inflation in Montenegro was 3.0 per cent mainly driven by rising rents, utility and clothing prices. On the other hand, the lower prices of some foods and soft drinks helped to dampen inflationary pressure.

#### China

In China, real GDP exceeded the projected annual rate reaching 8.9 per cent in the last quarter of 2011 against 9.1 per cent in the third quarter. Relatively weak economic activity was driven by the decreasing contribution of net exports partially offset by the high growth of domestic consumption and investments.

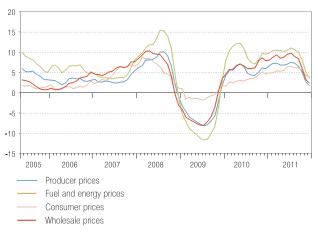
#### GDP and PMI in Industry



Source: Bloomberg.

Real GDP growth was 2.0 per cent quarter on quarter, equal to 8.2 per cent on an annualised quarterly basis. This indicates slower GDP growth in the fourth quarter against 9.5 per cent growth on an annualised quarterly basis in the third quarter.

#### Inflationary Indices



Source: Bloomberg.

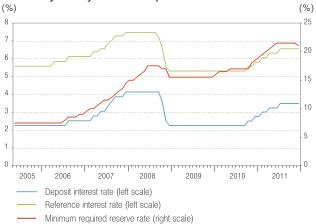
The inflation slightly decreased to 4.1 per cent in December on an annual basis against 4.2 per cent in November. The major factor behind the slight fall was lower price pressure in non-food segment and mainly in housing cost component. Food price rises remained relatively high,

posting an annual growth of 9.1 per cent and a monthly growth of 1.2 per cent.

In the fourth quarter of 2011 the downward trend in credit growth intensified, especially in October and November. On 30 November the People's Bank of China partially facilitated the measures aimed at cooling down the economy and decreasing inflation. The minimum required reserves maintained with the People's Bank of China by banks was cut (effective as of 5 December 2011) from 21.5 per cent to 21.0 per cent, which immediately affected the credit in the economy<sup>4</sup>.

The exchange rate dynamics was also an element of the instruments driving growth and inflation. In 2011 the Chinese currency (renminbi) appreciated *vis-à-vis* the US dollar by 4.7 per cent and by 1.4 per cent in the fourth quarter.





Source: Bloomberg.

#### Monetary aggregate M2

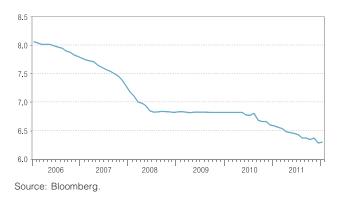


Source: Bloomberg.

External Environment

<sup>&</sup>lt;sup>4</sup> On 19 February 2012 the People's Bank of China again lowered the banks' reserve requirements ratio by 0.5 percentage points, to 20.5 per cent.

#### RMB/USD Exchange Rate



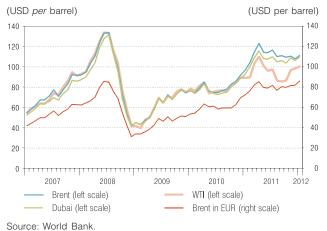
# International Prices (Crude Oil, Major Raw Materials, and Gold) and the EUR/USD Exchange Rate

#### **Crude Oil Prices**

Over the fourth quarter of 2011 the price of Brent crude oil in US dollars decreased and the oil was traded at USD 109.3 per barrel on average. The price in euro increased to EUR 81.1 per barrel due to the change in the exchange rate of the currencies. The lower price of crude oil on international markets reflected the increased supply of Libya, which managed to recover its production faster than expected, after its oil exports had been interrupted as a result of the war earlier in the year. By end-2011 Saudi Arabia and Angola also continued to increase their output which additionally contributed to the decline observed in the crude oil prices.

Since early 2012 oil prices began to rise, reaching USD 117 (about EUR 88) *per* barrel in the beginning of February.

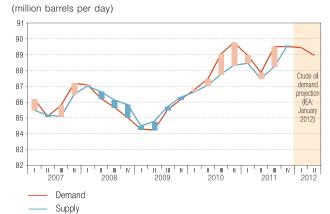
#### Crude Oil Prices



oil market as of January 2011 reported an increase both in supply and demand due to the extreme cold weather. Increases in oil production and exports were reported by both OECD and OPEC counties, the two major groups of producing countries.

International Energy Agency (IEA) data on crude

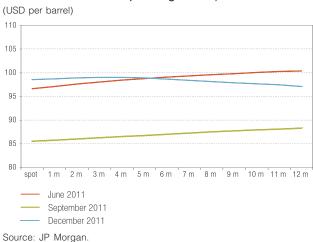
#### World Crude Oil Supply and Demand (Quarterly)



Source: IEA.

On the other hand, the stability in the region is challenged due to the tensions between Iran and the USA over Iran's nuclear programme. A potential military conflict in the Gulf could lead to significant oil price volatility. This risk was reflected in the market expectations, on the basis of futures contracts in December 2011 WTI crude oil was expected to be traded in the range between USD 95–100 per barrel in the next twelve months.

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



Source: JP Worgan

#### Major Raw Material and Commodity Prices

In the fourth quarter steel product prices grew by 14 per cent on average compared with the fourth quarter of 2010, rising by 6.7 per cent on an annual basis in January 2012. The general metal price index fell by 7 per cent on the third quarter, while in January the decline came to 9 per cent on the same month of 2011. Non-ferrous metal prices also decreased over the fourth quarter by 14.7 per cent (by 13.9 per cent in January), lead (by 18.8 per cent), nickel (by 16.5 per cent) and copper (by 16.4 per cent) posting the most significant decline. Given the expectations for lower economic growth in early 2012, metal prices are likely to continue falling, but they could turnaround later this year.

The index recording the global food price level declined over the fourth quarter by 8.5 per cent on the third quarter and the downward trend was sustained at the beginning of 2012. Some food prices posted an increase: rice and meat rose by 8.9 per cent and 4.4 per cent respectively, while the price of maize fell by 12.2 per cent and that of wheat by 6.7 per cent.

In January 2012 the International Grains Council revised upwards its forecast of the global cereal production in 2012 by 4.6 per cent compared to the previous, while consumption is foreseen to grow by 2.6 per cent; hence, cereal prices are not expected to rise on international product markets in the first two quarters of 2012.

#### **Gold Prices**

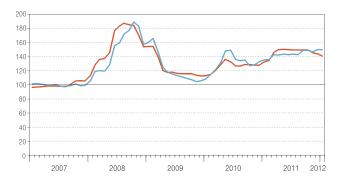
Over the fourth quarter of 2011 the average spot price of gold went down by 1.3 per cent on a quarterly basis to USD 1683.0 per troy ounce. In euro terms, the price of gold posted 13.7 per cent growth due to its depreciation against the US dollar. In January 2012 gold appreciated by 10.2 per cent to USD 1723.4 per troy ounce on 17 February, the gold price in euro went up by 8.5 per cent to EUR 1311.1 per troy ounce.

In the review period the gold was traded as a risk asset losing its safe-haven status due to its increased price volatility of the end of the third quarter. It closely reflected US stock market indices dynamics and commodity price developments. The gold price reflected also the USD/EUR exchange rate. By the end of the review quarter the price of gold went down slightly owing to the appreciation of the US dollar, deliver-

# Price Indices of Major Raw Material and Commodity Groups

(2007 = 100)

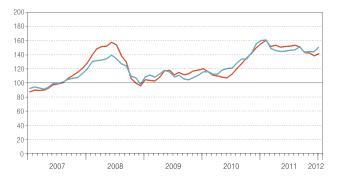
#### Steel



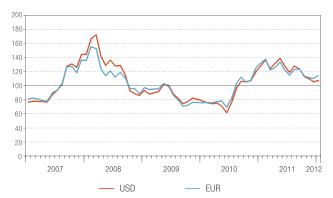
#### Copper



#### Food



#### Wheat



Sources: World Bank, ECB and BNB

aging of hedge funds at the end of the year and technical selloffs. At the beginning of 2012 it continued to be traded as a risky asset, appreciating together with the rise in US stock market indices and commodity prices. The US Federal Reserve System's intention to keep the interest rate at the current low levels until end-2014 also pushed up the gold price.

Demand for physical gold by exchange-traded funds (ETFs) collateralized by gold also picked up in the fourth quarter. However, in December the value of their asset began to decrease. In the beginning of 2012 the demand for gold by ETFs strengthened again. The gold assets of SPDR Gold Trust, the largest gold-backed exchange-traded fund, rose by 1.8 per cent in the fourth quarter, whereby the fund managed 1281.3 tonnes of gold by 17 February.

The latest World Gold Council data in the fourth quarter of 2011 reported a 2 per cent decline of the demand for gold on the same period of the previous year. This was mainly attributable to the decreased demand in the jewellery sector (by 15 per cent), which was offset by the increased investment demand (by 19 per cent).

According to the World Gold Council data, the demand for gold by the so-called official sector over the fourth quarter amounted to 93 tonnes. The biggest purchase of gold was made by the central banks of Mexico, Russia and South Korea.

#### Spot Price of Gold



#### The EUR/USD Exchange Rate

Over the fourth quarter of 2011 the average value of the US dollar against the euro appreciated (by 4.6 per cent). Over the review period the US

currency was traded within a range of 1.29–1.42. The main factors behind its rise were the growing concerns about the debt crisis intensification in the euro area and the cut in ECB interest rate on main refinancing operations to 1.0 per cent in two steps. Long-term interest rate differential between the euro area and USA had a seizable impact on the developments in the USD/EUR exchange rate. The ECB interest rate decrease on the refinancing operations led to a narrowing of interest rate differentials.

The exchange rate dynamics were also influenced by the concerns about the 'mild recession' in the euro area expressed in ECB announcements. They impacted investors' behaviour and expectations. Short positions in euro still tended to prevail on the futures markets.

In early 2012 demand for US dollars increased due to the continuing uncertainty over Europe's debt crisis and the credit rating downgrade in some euro area countries. Between end-2011 and 17 February 2012 the average value of the US dollar appreciated by 3.5 per cent against the euro.

#### The USD/EUR Exchange Rate



# Bulgarian External Debt Dynamics in International Financial Markets

In the fourth quarter of 2011 the spreads on yields of the Central and Eastern European countries' government debts continued to widen steadily. The JP Morgan Euro EMBI Global index increased by 53 basis points to 435 basis points at the end of the review quarter. The index fluctuated within a wide range of 333 to 438 basis points.

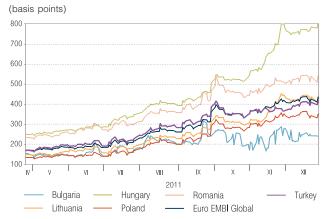
The main factors behind this volatility were the growing investors' concerns about the debt crisis intensification in the euro area. Widening credit

spreads in the euro area countries and investors' subsiding risk appetite also contributed to the widening of credit spreads in Central and Eastern European countries.

Almost all index sub-components reacted negatively to the news from Greece and heightened risk aversion among investors. The exception was the Hungary's index, which generated own trajectory taking into account the internal political tensions. A number of disputable legislative initiatives of the Prime Minister of Hungary, the difficult dialogue between the IMF and Hungary, as well as the deteriorating major economic indicators in Hungary led to a warning by the credit rating agencies, followed by two-step downgrade from BBB+ to BB+ by Fitch.

Bulgaria's external government debt spreads, measured by the JP Morgan index, followed the general market trend throughout the whole period, reporting a 22 basis point cumulative increase to 239 basis points by the end of the quarter.

#### Government Debt Spreads in Bulgaria, Lithuania, Hungary, Poland, Romania and Turkey (according to the Euro EMBI Global index)



Source: Bloomberg

# 2. Financial Flows, Money and Credit

Balance of payments current account surplus reached EUR 743.7 million in 2011. The cumulative balance of payments current and capital accounts came to EUR 1232.5 million. The balance of payments financial account balance was negative, reflecting the increase in foreign assets and the decrease in foreign liabilities of residents: mainly banks. According to the 2011 balance of payments data, foreign exchange reserves excluding, valuation adjustments and changes related to the price of gold, increased by EUR 158.7 million.

The Issue Department balance sheet figure at market value came to BGN 26.1 billion (EUR 13.3 billion) by end-December 2011 with the assets going up by BGN 727.7 million (EUR 372.1 million) on end-2010. The increase in the price of gold over the review period influenced foreign exchange reserves dynamics which resulted in an increase in the market value of gold in the Issue Department balance sheet of BGN 384.1 million (EUR 196.4 million) and contributed to the increase in the Banking Department deposit of BGN 473.6 million (EUR 242.1 million). These developments also reflect the market revaluations of other assets, as well as the positive financial result of the foreign reserve management in 2011. The increase in the deposit of other depositors by BGN 502.7 million (EUR 257 million) contributed to the rise in international foreign currency reserves. Over the same period government and other budgetary organisations' deposits decreased by BGN 1040.6 million (EUR 532 million).

By December 2011 the average monthly coverage of imported goods and services by BNB international reserves was 6.4 months<sup>1</sup>.

Monetary Flows Which Prompted Significant Changes in Gross International Reserves

(million EUR)

External Flows	January – December 2011	January – September 2010
Total for the period	-24	-463
Purchases and sales of euro	-543	-321
at tills	-11	-16
banks, incl.	-532	-306
banks' purchases	33 698	57 241
banks' sales	-34 230	-57 547
Flows on accounts of banks, the MF, etc.	520	-141
Minimum required reserves	-128	-385
Government and other depositors	647	243

Source: BNB.

Monetary flows, which prompted stronger changes in gross international reserves, provided additional information about the major operations of the central bank. On a cash basis, disregarding valuation adjustments and changes in the price of gold, gross international reserves decreased by EUR 24 million. Banks' net purchases of euro from the BNB came to EUR 532 million and banks' reserves denominated in euro decreased by EUR 128 million. These bank operations were underpinned by the increase in their foreign assets and the decrease in their foreign liabilities reported according to the balance of payments data.

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<sup>&</sup>lt;sup>1</sup> The average value of imports of goods and services for the last 12 months and BNB reserves by the end of November 2011 were used in the calculation of this indicator.

# Financial Flows and External Position Sustainability

The balance of payments current account in 2011 was positive, amounting to EUR 743.7 million or 1.9 per cent of GDP. In the first and second quarters of 2012 the current account is expected to realise a surplus of around 0.5 - 1.5 per cent of GDP on an annual basis.

The foreign currency flow to Bulgaria resulting from the balance of payments current account surplus of EUR 743.7 million in 2011 allowed the residents to use these funds to increase their foreign assets and to reduce their foreign liabilities. As a consequence, the balance of payments financial account for 2011 reported a deficit of EUR 1385.5 million. Transactions of resident banks, which increased their foreign assets by EUR 685.3 million and reduced their foreign liabilities by EUR 1205.9 million over the review period contributed most to the financial account deficit.

Foreign direct investment inflow in Bulgaria was positive. According to preliminary balance of payments data for 2011 foreign direct investment in Bulgaria amounted to EUR 1064.5 million. The bulk of this investment was in the form of equity capital (EUR 1091.9 million) and reinvested earnings in the banking sector (EUR 82.5 million). The net amount of Other capital was EUR 109.9 million<sup>2</sup>. Non-residents' investment in real estate came to EUR 246.1 million in 2011 against EUR 225.1 in the corresponding period of 2010, returning to the typical pre-2006 level.

In 2011 foreign direct investment inflow was directed mainly to the transport sector (EUR 446.3 million). As of September 2011, the economic sectors with a considerable share in the stock of foreign direct investment were real estate operations and business services (23.5 per cent), financial intermediation (17.8 per cent) and manufacturing (16.4 per cent).

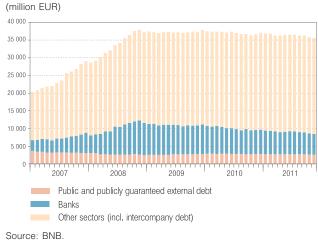
The composition of FDI by country suggests that the foreign direct investment attracted from Austria (EUR 553.3 million) and the Netherlands (EUR 331.2 million) accounted for the largest shares. Net payments related to revolv-

ing intercompany loans were made to the UK (EUR 217.9 million) and Hungary (EUR 196.2 million)<sup>3</sup>.

By December 2011 net foreign direct investment accounted for 2.4 per cent of GDP. In the first and second quarters of 2012 the foreign direct investment inflow is expected to remain positive between 2.5 per cent and 3.5 per cent of GDP on an annual basis.

The repayment of external debt of the banking sector and the non-bank private sector contributed to the gradual reduction of Bulgaria's gross external debt. Between January and November 2011 it went down by EUR 1499.2 million and by end-November amounted to EUR 35.5 billion or 92 per cent of GDP reported for the last four quarters. Over the same period net repayment of borrowed funds was EUR 5975.7 million (revaluations and changes in trade and revolving loans excluded). In the first eleven months of 2011 loans and deposits came to EUR 3688 million, of which bank loans occupied 28 per cent and intercompany loans comprised 41 per cent. Principal payments amounted to EUR 5433.5 million against EUR 6340.0 million in the corresponding period of the previous year.

#### Gross Foreign Debt by Institutional Sector



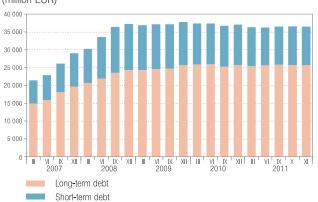
<sup>&</sup>lt;sup>3</sup> See footnote 2 in this Section.

Financial Flows, Money and Credit

<sup>&</sup>lt;sup>2</sup> An explanation for the negative net value of the *other capital* item is provided in the BNB January 2012 Balance of Payments Monthly Bulletin. Matching the preliminary data, the difference between the flows for the reporting period and for the previous year resulted mainly from intercompany loans and the repayments thereon in accordance with the repayment schedules of corporations.

In the maturity structure of gross external debt short-term external debt trended downwards. It decreased by EUR 936.3 million on an annual basis and its share fell to 29 per cent compared to 30 per cent a year earlier.

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 by end-September 2011 reached 88.3 per cent. The euro occupied the largest share in intercompany loans (92.7 per cent), and the smallest share in the general government sector (74.8 per cent).

Private non-guaranteed external debt declined by EUR 1283.7 million between January and November 2011, mainly due to the decrease in banks' external obligations (EUR 1094.6 million). Banks' debt to foreign parent banks incurred in connection with their activity in Bulgaria occupied a large share in banks' external debt (71 per cent as of September 2011). The relatively high resident bank liquidity allowed them to reduce their dependence on external financing by repaying their external obligations<sup>4</sup>.

Non-bank sector enterprises increased their external liabilities by EUR 5.3 million in the January to November 2011 period. Over the same period intercompany loans decreased by EUR 209.4 million. By November the share of intercompany loans in the total amount of external debt was 41 per cent.

Between January and November 2011 the general government external debt went down by EUR 200.6 million. The total amount of public and publicly guaranteed external debt decreased by EUR 215.5 million and occupied 11.6 per cent

of Bulgaria's total external debt. New loans and deposits disbursed to the general government sector amounted to EUR 140.6 million, down EUR 23.1 million on the previous year. New loans were mainly investment loans from the European Investment Bank provided to finance infrastructure projects.

The average weighted interest rates on new loans declared between January and November 2011 suggest an appreciation (on an annual basis) in the cost of external borrowed funds in euro by 0.6 percentage points to 4.1 per cent. The cost of new loans in US dollars reported a decrease of 1.8 percentage points to 3.8 per cent.

By September 2011 there was no notable change in the structure of private non-bank external debt by industry. The largest share in the external debt of other sectors was occupied by real estate operations and business services (23.5 per cent), followed by electricity, gas and water (20.5 per cent), trade and repair of motor vehicles and motorcycles (10.9 per cent) and financial intermediation (10.6 per cent). The largest share in intercompany loans was occupied by telecommunications (17.7 per cent), real estate operations and business services (14.5 per cent) and financial intermediation (13.0 per cent).

According to international investment position data, Bulgaria's gross foreign assets increased by EUR 601.7 million between January and November 2011, including the increase in BNB international reserves of EUR 221.3 million, while local banks foreign assets went up by EUR 507.5 million. As a result of Bulgaria's gross foreign assets and external debt dynamics, the net external debt decreased by EUR 2100.9 million, reaching EUR 16.1 billion by end-November 2011, or 41 per cent of reported GDP for the last four quarters.

The current and capital account balance reported a surplus of EUR 1232.5 million in 2011 against a deficit of EUR 184.9 million in the corresponding period of 2010. By December the surplus came to 3.2 per cent of GDP compared to 0.5 per cent in 2010.

In 2011 all current account components improved save for the income account. The trade balance improved by EUR 918.8 million, services

<sup>&</sup>lt;sup>4</sup> For further details on the banking system see the Monetary Aggregates and Credit Aggregates Sub-sections.

balance by EUR 384.6 million and net current account transfers by EUR 158.4 million, while the deficit of the income component was EUR 242.5 million.

In 2011 the net inflow of funds on the capital account increased by EUR 198.1 million on the corresponding period of 2010.

The trade balance reported a sizeable improvement: a deficit of EUR 1844.9 million. In nominal terms (in euro) exports increased by 29.1 per cent and imports by 19.7 per cent on an annual basis<sup>5</sup>. We expect moderate growth rates in both exports and imports in the first and second quarters of 2012 with imports rate outstripping the exports rate.

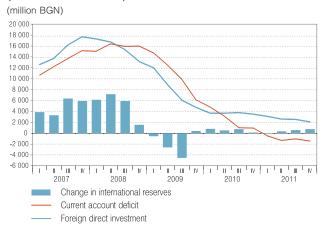
The services balance reported a surplus of EUR 2400.4 million in 2011 compared to a surplus of EUR 2015.9 million in the corresponding period of the prior year. The improvement was mainly a result of higher transport and lower external services costs (other business services). Earnings on the credit side (assets) increased by EUR 230.2 million and on the debit side (liabilities) increased by a total of EUR 154.3 million.

In 2011 net current transfers amounted to EUR 1706.5 million: up EUR 158.4 million on an annual basis, mainly due to the increase in transfers to the general government sector of EUR 143.5 million. The receipts in the form of private current transfers increased by EUR 22.6 million on an annual basis. Transfers abroad declined by EUR 5.0 million. As a result, net transfers to the private sector increased by EUR 27.6 million on an annual basis.

The income account deficit in 2011 was EUR 1518.3 million: a deterioration of EUR 242.5 million on 2010. This was mainly due to higher income paid on foreign direct investments (a deterioration of EUR 187.4 million) part of which represent reinvested earnings reported in the balance of payments financial account as foreign direct investment.

The increase in capital transfers on the previous year reflected lower net receipts from EU funds. Capital transfers from the EU to the general government sector amounted to EUR 457.4 million.

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



Source: BNB

In the first and second quarters of 2012 the current account is expected to realise a surplus of between 0.5 per cent and 1.5 per cent of GDP on an annual basis.

Bulgaria's external position remained sustainable and the positive balance of payments current account balance allowed for the smooth servicing of external obligations of Bulgaria and the gradual reduction in gross external debt.

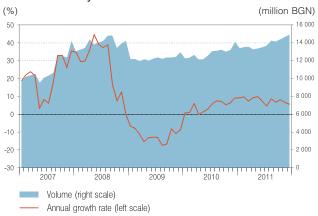
<sup>&</sup>lt;sup>5</sup> A more detailed analysis of exports and imports is presented in Section 3.

#### **Monetary Aggregates**

The increase in residents' deposits reflecting the higher savings rate resulted in an increase in banks' reserves with the BNB of 6.3 per cent by end-2011. Currency in circulation went up by 5.1 per cent reflecting the moderate recovery in consumption. The annual growth rates of banks' deposits with the BNB and currency in circulation are expected to be retained in the first quarter of 2012 and to increase slightly in the second quarter of 2012. Interest rates on time deposits are likely to fall insignificantly in the first two quarters of 2012.

By end-December 2011 reserve money went up by 5.6 per cent and banks deposits with the BNB by 6.3 per cent on an annual basis contributing by 2.6 percentage points to reserve money growth. The increase in banks reserves with the BNB is associated with the increase in residents' deposits reflecting the high savings rate of households reported over the last two years. Household behaviour was determined by the sustained high uncertainty about future income and the prevailing pessimistic expectations related to labour market conditions.

Reserve Money



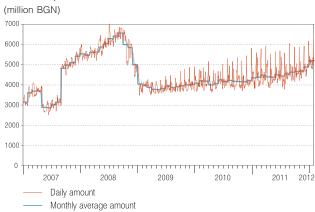
Source: BNB.

The average daily volume of funds attracted from residents<sup>6</sup> continued to increase coming to BGN 465 million in the fourth quarter of 2011. Over the same period the average daily volume of funds attracted from non-residents declined by BGN 312 million. Over the year funds attracted from residents totalled BGN 5323 million and those from non-residents decreased by BGN 782 million. As a result of the dynamics and structure of attracted funds, the effective implicit rate of minimum required reserves maintained with the BNB continued to increase reaching 8.93 per cent<sup>7</sup>, with bank reserves with the BNB com-

<sup>6</sup> Residents other than state and local government budgets. <sup>7</sup> According to Article 3, paragraph 1 of BNB Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks, the rate of funds attracted from residents is 10 per cent, from non-residents 5 per cent and from the state and local government budgets 0 per cent.

ing to 7.74 percentage points, and the other 1.20 percentage points were formed of cash balances and funds on banks' settlement accounts in the national system component TARGET2<sup>8</sup>. In the fourth quarter of 2011 banks increased their excess reserves and their share in the total reserves maintained by banks went up to 4.3 per cent from 1.8 per cent on average in the third quarter.

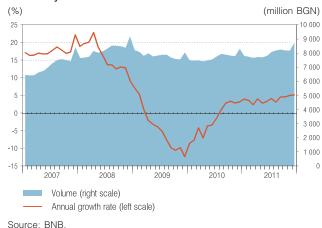
#### Bank Deposits with the BNB



Source: BNB.

Currency in circulation retained its moderate growth rate reflecting the gradual recovery of economic activity. By end-2011 it reached 5.1 per cent on an annual basis.

#### Currency in Circulation



<sup>8</sup> See Article 4 of Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks.

In the first half of 2012 currency in circulation is expected to continue to increase at a moderate pace which reflects our expectations for a continuous recovery in household consumption. The gradual increase in bank deposits with the BNB resulting from higher bank deposit amount is expected to continue to contribute to the increase in reserve money on an annual basis.

In the third quarter of 2011 the government's fiscal policy affected the allocation of liquidity between economic sectors only moderately. As a net beneficiary of liquidity the central bank received funds to the amount of 0.3 per cent of GDP over the review quarter as the budget deficit financing and the payments on maturing government debt instruments were financed mainly by new government securities issues coming to BGN 321.2 million and privatisation proceeds of BGN 27.9 million. By realising a net positive issue of government securities of BGN 183.7 million and corporate tax receipts from financial institutions of BGN 60.8 million the government withdrew liquidity from the financial sector. Part of these funds were distributed back to the sector in the form of interest budget payments on domestic and external loans (including interests on government securities), used by the government to allocate liquidity to the external sector. As a result mainly of the received current and capital grants from abroad that outstripped the interest payments on external loans, Bulgaria's contribution to the EU's common budget and the negative net external budget financing over the period, the external sector was a net source of liquidity for the government amounting to 0.6 per cent of GDP over the review quarter.

In the fourth quarter of 2011 the government withdrew liquidity from the central bank, as the cumulative amount of the received net external loans, the net government debt issue and the receipts from privatisation was not enough to cover the budget deficit for the period. The external sector was also a source of liquidity given the privatisation income of EUR 232 million reported in October and the tranches of the structural and cohesion funds of the EU received from the European Commission of around BGN 530 million. As a result of the positive net financing with government securities and the low amount of interest paid on domestic loans, in the fourth quarter of 2011 the government withdrew resources also from the financial sector.

Over the same period a considerable amount of liquidity was transferred to the non-government non-banking sector due to the distributive function of the government's fiscal policy.

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

Sources: MF, BNB.

Central bank

By end-2011 broad money growth accelerated to 12.2 per cent on an annual basis compared to 10.3 per cent in September. The annual growth of broad money is expected to gradually slow down in the first half of 2012.

Financial sector (central bank excluded)

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

(%; percentage points)

35
30
25
20
15
10
5
-10
M1 contribution
Quasi-money contribution
M3 growth rate

Source: BNB.

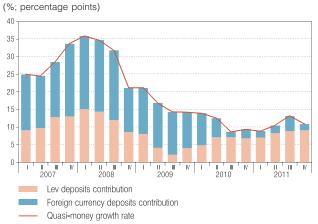
Quasi-money remained the main driver behind broad money accelerating growth. The narrow monetary aggregate M1 contribution increased sizeably in the fourth quarter of 2011 (M1 growth accelerated to 14.4 per cent on an annual basis). This development was underpinned by overnight deposits which grew by 20 per cent on an annual basis by December 2011 against 6.2 per cent by the end of the third quarter.

Overnight deposits increased in all sectors with non-financial corporations contributing most to this with an annual growth of 19.3 per cent. An important factor behind overnight deposit developments were also social security funds reporting a 22.8 per cent growth compared with the decrease of 49.6 per cent in September due to a base effect<sup>9</sup>.

Money outside banks retained the moderate upward trend in annual growth (5.9 per cent by end-2011).

By December 2011 quasi-money grew by 10.9 per cent on an annual basis against 13.2 per cent at the end of the third quarter, with lev-denominated deposits still contributing most significantly to this by 9.1 percentage points. The contribution of foreign currency deposits decreased from 4.3 percentage points in September to 1.9 percentage points in December. The share of lev-denominated deposits in quasi-money continued to increase steadily reaching 48 per cent by end-2011 compared with 44.2 per cent a year earlier.

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



Source: BNB

Deposits with agreed maturity of up to two years went up by 9.4 per cent on an annual basis, mainly due to household deposits (contributing by 7.7 percentage points)<sup>10</sup> which continued to increase as a result of the high savings rate. By end-2011 household deposits in levs increased by 22.8 per cent on an annual basis and those in foreign currencies by 3.5 per cent respective-

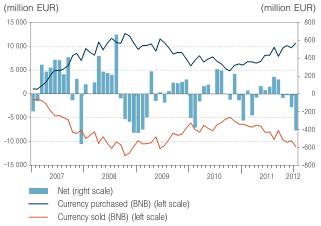
 $^{9}$  For further details on these developments see Economic Review, 4/2010.

ly. Non-financial corporations also increased their deposits with agreed maturity of up to two years with lev-denominated deposits going up by 12 per cent by December and foreign currency deposits going down slightly by 0.3 per cent.

Banks' reserve currency (euro) transactions with the BNB served as a major lev liquidity management tool. It is used to perform the main function of the Currency Board: purchases and sales of national currency against euro on demand.

Between October and December 2011 the average daily volume of euro purchases and sales between the banks and the BNB came to EUR 919 million against some EUR 800 million in the third quarter. Over the same period banks realised net purchases of euro to the amount of EUR 207 million (compared to net sales of EUR 436 million in the third quarter of 2011). In January banks' net purchases from the BNB amounted to EUR 408 million.

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



Source: BNB.

As a result of the sustained ample liquidity in the Bulgarian banking system in the fourth quarter of 2011 international money market interest rates have been fluctuating in a narrow range close to the attained low levels. The average interest rate on concluded transactions went up marginally by 3 basis points to 0.26 per cent due to the rise in interbank overnight deposit interest rates.

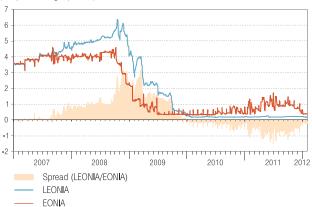
LEONIA index increased by 4 basis points on the previous quarter reaching 0.22 per cent. The average value of the negative spread between LEONIA and EONIA narrowed further reaching 58 basis points in the fourth quarter of 2011 compared to the negative spread of 78 basis

<sup>&</sup>lt;sup>10</sup> The cited data on deposits and loans of households include also deposits and loans of NPISHs in line with the classification used in monetary statistics.

points in the third quarter. The narrowing of the spread was mainly due to the decrease in euro area interest rates reflecting lower interest rates on ECB's main refinancing operations. In contrast to the euro area, interest rates in Bulgaria were still characterised by very low volatility. The ample liquidity of banks resulting from the high savings rate of households and the cautious lending policy were the factors behind this dynamics. In January 2012 the negative spread between LEONIA and EONIA went down to 21 basis points as a result of the ECB's policy for longer-term liquidity provision to European banks and the decline in EONIA resulting from these actions 11.

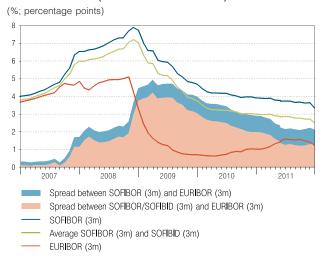
#### LEONIA/EONIA

(%; percentage points)



Source: BNB.

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



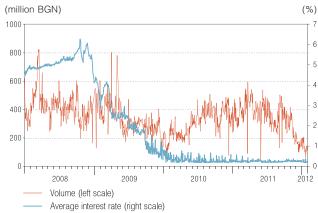
Source: BNB

SOFIBOR (3-month) used as an indicator of short-term interest rate developments went down slightly in the fourth quarter of 2011 reaching

 $^{\rm 11}$  See here sub-section Euro area of Section 1.

3.64 per cent on average in December 2011 on 3.67 per cent in September. The spread between the three-month SOFIBOR and the three-month EURIBOR has been fluctuating in a narrow range in the fourth quarter of 2011 coming to 222 basis points by December: up 9 basis points from its September level. The spread widening resulted from the 11 basis point decline in the EURIBOR between October and December and the 2 basis point decrease in SOFIBOR over the same period. The average SOFIBOR/SOFIBID index gives a better picture of the market interest rate level in Bulgaria. Correspondingly, it is more correctly to compare this value with EURIBOR which is the closest rate to the actual market price at which transactions are concluded 12. In December the average SOFIBOR/SOFIBID reference rate in the interbank market in Bulgaria over the three-month horizon declined by 8 basis points on September (reaching 2.72 per cent) and the spread between the average quotation and EURIBOR (3m) increased to 130 basis points compared with 124 basis points in September 2011. In January 2012 the spread narrowed, the interest rates on the Bulgarian interbank market decreased by around 30 basis points on December and the euro area interest rates reported a decline of around 20 basis points.

# Trade Volume and Interbank Money Market Interest Rates



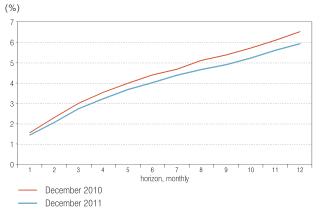
Source: BNB.

Between October and December the average daily volumes traded in the interbank money market amounted to BGN 243 million, a decrease of 29 per cent on the previous quarter.

<sup>&</sup>lt;sup>12</sup> 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 States, Economic Review, 2/2010.

As of January 2012 the average daily traded volumes declined to BGN 147 million. A possible factor with an adverse effect on interbank market trading volume in Bulgaria was heightened uncertainty on international financial markets<sup>13</sup>.

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



Source: BNB.

The downward trend in the long end of the money market yield curve continued in the fourth quarter of 2011. By December a fall of 59 basis points on an annual basis was reported in the 12-month horizon, while in the 1-month horizon it was 12 basis points.

#### Interest Rates on New Time Deposits



Note: The average interest rate is calculated using the interest rates in all sectors, maturities and currencies weighted at their respective new deposit volumes.

Source: BNB (interest rate statistics: interest rates and volumes of new business on time deposits of the non-financial corporate and household sectors).

Between October and December 2011 the average weighted interest rate on new deposits arrangements<sup>14</sup> went down by 13 basis points to 4.3 per cent.

 $^{\rm 13}$  See Sub-section Euro Area of Section 1.

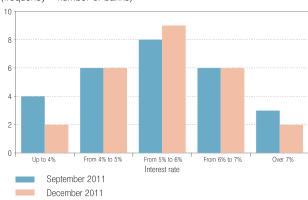
The breakdown by currency shows that US dollar-denominated and euro-denominated deposits over the review period went down by 0.6 percentage points and 0.1 percentage points to 2.3 per cent and 4.2 per cent respectively. Lev-denominated deposits remained unchanged from their level in the previous quarter (4.8 per cent). The average weighted deposit rate declined by 26 basis points to 4.4 per cent on an annual basis.

By December 2011 the breakdown of interest rates on time lev deposits of households by bank showed that the number of banks offering rates in the up to 4 per cent and over 7 per cent bands decreased and those offering rates within the 5 to 6 per cent band increased. The average interest rate level in December increased by 3 basis points on September coming to 5.48 per cent, while the dispersion coefficient fell by 21 basis points to 1.13 percentage points.

In the first half of 2012 interest rates on time deposits are expected to remain broadly unchanged tending slightly downwards. These expectations are underpinned by the ample banking system liquidity<sup>15</sup> against the background of a moderate bank lending activity and sustained high household savings ratio.

#### Distribution of Interest Rates on New Household Time Lev Deposits

(frequency - number of banks)



Source: BNB.

Economic Review • 4/2011

<sup>&</sup>lt;sup>14</sup> The terms "new agreement on" and "new loans and deposits" refer to the statistical category new business.

<sup>&</sup>lt;sup>15</sup> The liquid assets to liabilities ratio retained their high levels reaching 25.57 per cent in December.

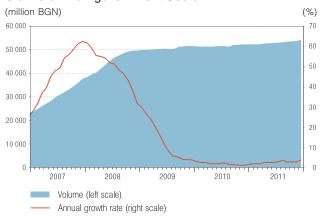
#### **Credit Aggregates**

In 2011 banks' claims on non-financial corporations increased while claims on households decreased. Improved economic environment increased loan demand on behalf of non-financial corporations, while households preferred to repay their old obligations due to the continuous uncertainty regarding their future income and the high unemployment rate. Banks had sufficient resources to extend lending and at the same time to continue to repay foreign liabilities. On average, interest rates on new consumer and housing loans went up in the fourth quarter of 2011 while those on new loans to corporations declined slightly. Lending rates are expected to remain close to their current levels in the first half of 2012.

In the fourth quarter of 2011 claims on the non-government sector went up by BGN 930.9 million (up BGN 340.4 million over the same period in 2010) reporting an annual growth rate of 3.9 per cent in December (compared to 2.8 per cent in September)<sup>16</sup>.

In 2011 the total amount of claims on the nongovernment sector went up by BGN 2021.2 million. The recovery in economic activity over the review year contributed to the increase in demand for financial resources from the nonfinancial corporations mainly in the trade, manufacturing and professional activities sectors<sup>17</sup>. Banks' claims on households decreased insignificantly by BGN 84.9 million including: overdraft and consumer loans went down by BGN 171.3 million and BGN 50.7 million respectively while housing and other loans reported an increase of BGN 98.3 million and BGN 39.3 million respectively. Households preferred to repay their old obligations and to increase savings due to the continuing high income uncertainty and the relatively high level of unemployment.

#### Claims on Non-government Sector



Source: BNB (monetary statistics: monetary survey).

In the fourth quarter of 2011 net sales of bank loans reached BGN 356.9 million (most of the sales were to non-residents). In 2011 total net sales came to BGN 532.4 million.

According to the summarised results of the BNB quarterly lending activity survey, in the fourth quarter of 2011 growth of demand for loans by corporations and by households slowed down especially as regards housing loans. Higher growth was reported only in household demand for consumer loans. The demand for short-term loans from corporations to cover their working capital and inventories needs outstripped the demand for long-term loans needed for investments. Over the review period banks' standards for loans to enterprises and consumer loans to households were tightened while those for housing loans were slightly eased. The number of banks that tightened their standards remained unchanged compared to the previous quarter, but the share of those which define the tightening as sizeable increased. As key factors behind this trend the banks outlined credit risk, business climate in the sectors with a large share in the bank's credit portfolio, collateral related risk and the state of the macroeconomic environment.

Banks have less optimistic expectations with a view to demand for loans in the first quarter of 2012 both by corporations and households. The credit standards applied to housing loans to households are likely to be tightened and those applied to loans to corporations and consumer loans are expected to remain unchanged.

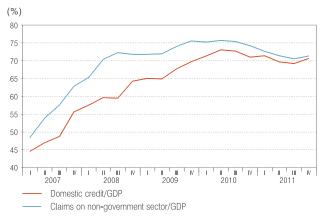
The downward trend in claims on the non-government sector to GDP ratio observed since mid-2010 was reversed and in the fourth quarter of 2011 it went up to 71.3 per cent<sup>18</sup>: an increase of 0.8 percentage points on the previous quarter.

<sup>&</sup>lt;sup>16</sup> According to the BNB Banking Supervision Division data the annual growth rate reflecting the impact of certain oneoff factors came to 3.5 per cent.

 $<sup>^{\</sup>rm 17}$  According to the 2008 Classification of Economic Activities.

<sup>&</sup>lt;sup>18</sup> The ratio is calculated using the annual GDP.

#### **Domestic Credit**



Source: BNB.

#### Foreign Assets and Liabilities of Banks



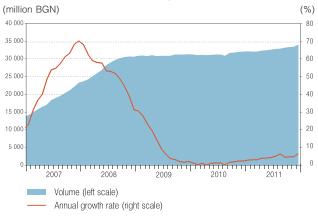
Source: BNB (monetary statistics: analytical reporting of other MFIs).

In 2011 bank liquidity remained high as a result of the flow of funds attracted form residents which marked an increase of BGN 1299.1 million over the last guarter<sup>19</sup>, while in the course of 2011 it came to BGN 5854.1 million. The larger volume of attracted funds was enough to finance a moderate increase in the volume of new business loans and at the same time to reduce banks' external obligations. In the fourth quarter of 2011 banks' funds attracted from nonresidents decreased by BGN 1038.1 million and their foreign assets went down by BGN 1071.8 million. As a result banks' net foreign liabilities increased insignificantly: up by BGN 33.7 million. In 2011 the decline of banks' foreign liabilities totalled BGN 2278.7 million and the increase in foreign assets came to BGN 1058.5 million which resulted in a decrease in their net foreign liabilities of BGN 3337.2 million. In the first half of 2012 banks are expected to continue to reduce their net foreign liabilities. The increase in

 $^{\rm 19}$  See Sub-section Monetary Aggregates of Section 2.

the residents' deposit base is projected to provide enough resources to the banks to increase the volume of domestic credit.

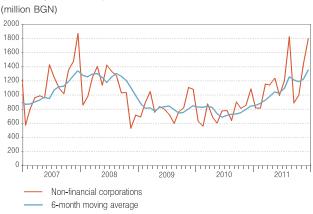
#### Claims on Non-financial Corporations



Source: BNB (monetary statistics: monetary survey).

Non-financial corporations' claims continued to improve and by end-2011 their annual growth reached 6.4 per cent. A favourable factor behind this trend was the increase in domestic demand where the services sector played a key role.

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



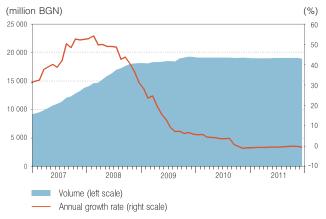
Source: BNB (interest rate statistics: interest rates and volumes of new business: breakdown of loans to the non-financial corporate and household sectors by original maturity).

In the fourth quarter of 2011 new loans to non-financial corporation were BGN 4225.8 million on BGN 3901.5 million in the previous quarter<sup>20</sup>. The high volumes of new loans to corporations in the second half of 2011 suggest a normal functioning of the banking system and reaching the preglobal crisis levels against the background of tight credit standards.

<sup>&</sup>lt;sup>20</sup> Part of these volumes are renegotiated loans which signals that the banking system has reacted adequately to the difficulties experienced by corporations and households.

Over the review period claims on non-financial corporations rose by BGN 965.1 million compared with BGN 553.5 million in the previous quarter, while over the year they went up by BGN 2021.2 million of which 87.8 per cent were in the form of bank loans.

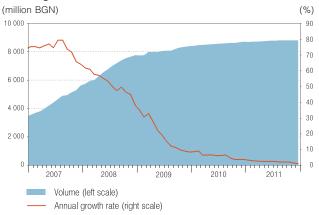
#### Claims on Households



Source: BNB (monetary statistics: monetary survey).

Household lending remained weak during 2011. The total amount of banks' claims on households went down by BGN 84.9 million. Despite the signs of gradual recovery in private consumption loan demand on behalf of households continued to dampen due to the ongoing uncertainty regarding their future incomes and the relatively high level of unemployment. Households remained cautious to new liabilities and preferred to repay their old obligations and to save.

#### Housing Loans



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

Between October and December 2011 claims on households marked a decrease of BGN 83 million against an increase of BGN 5.1 million in the previous quarter. Their annual growth rate remained negative, reaching -0.4 per cent by end-2011. Housing loans and other loans increased

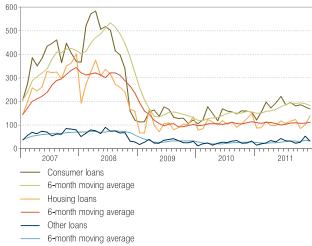
by 1.1 per cent and 4.3 per cent respectively while overdrafts and consumer loans decreased by 9.5 per cent and 0.7 per cent respectively.

The statistics of new loans still reports higher agreed volumes of consumer loans compared to housing loans. In the fourth quarter of 2011 new consumer loans accounted for BGN 532.1 million: up by 11.9 per cent on the corresponding period of the prior year while new housing loans came to BGN 327.9 million: down by 13.7 per cent on an annual basis. Banks loans to households totalled BGN 3811 million in 2011 reporting an increase in the share of consumer and other loans at the expense of housing loans<sup>21</sup>.

Between October and December 2011 interest rates on new consumer and housing loans increased compared with the previous quarter.

#### New Loans to Households (Monthly Volumes)

(million BGN)



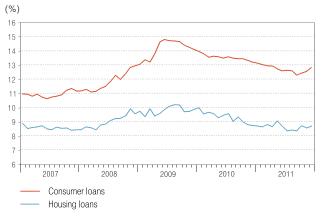
Source: BNB (interest rate statistics: interest rates and volumes of new business: breakdown of loans to the non-financial corporate and household sectors by original maturity).

Over the review period the average annual percentage rate of charges (APRC) on new consumer loans amounted to 12.63 per cent (against 12.51 per cent in the third quarter) and the average interest rate on these loans went up by 5 basis points on the previous quarter reaching 11.08 per cent<sup>22</sup>.

<sup>&</sup>lt;sup>21</sup> See footnote 20 in this section.

<sup>&</sup>lt;sup>22</sup> The average annual percentage rate of charges is the total amount of credit to the credit borrower expressed as an annual per cent of the total sum of extended credit (Directive 87/102/EEC on Consumer Credit amended by Directive 90/88/EEC and Directive 98/7/EC).

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

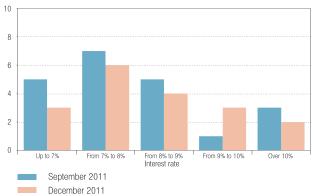


Source: BNB (interest rate statistics: annual percentage rate of charges on new business: breakdown of loans to the household sector by original maturity).

The average annual percentage rate of charges on new housing loans went up by 28 basis points on the third quarter reaching 8.69 per cent between October and December 2011. The average interest rates on housing loans over the same period rose to 7.95 per cent.

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

(frequency - number of banks)

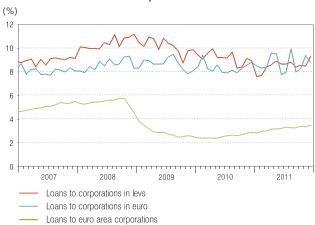


Source: BNB.

As regards the distribution of interest rates on housing loans in euro<sup>23</sup> by bank in December the number of banks offering rates within the 9 to 10 per cent band increased at the expense of those offering rates of up to 7 per cent; between 7 and 8 per cent, between 8 and 9 per cent and above 10 per cent band compared to September 2011. Over the same period the average interest rate level rose by 40 basis points and the dispersion coefficient went down by 33 basis points to 1.55.

Over the review quarter the average rate on new bank loans to non-financial corporations reached 8.76 per cent: down 6 basis points on the third quarter of 2011. Interest rates on lev-denominated loans marked an increase of 17 basis points while those on loans in euro and US dollar reported a decrease of 3 basis points and 15 basis points respectively.

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



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

Lending rates are expected to remain relatively unchanged in the first half of 2012. Lower interest rates in the interbank market are not a decisive factor for the reduction of lending rates, since this market's role in bank liquidity management is just auxiliary. The cost of the attracted financial resource has a sizeable impact on lending rates and in the first two quarters of 2012 we expect a slight downward move in deposit interest rates. At the same time, the instability and uncertainty in international financial markets as well as the possible increase in the risk premium of Bulgaria will be factors limiting the possible decrease in lending rates.

 $<sup>^{23}</sup>$  Housing loans in euro comprise the largest share in the new housing loans over the last three years (around 75.6 per cent).

# 3. Economic Activity

The real GDP rose by 0.3 per cent in the third quarter of 2011 compared with the previous quarter, with private consumption contributing most significantly to growth. According to NSI flash estimates, real GDP increased by 1.6 in 2011.

In the first half of 2012 the rate of economic recovery is expected to slow down due to unfavourable developments of external environment. In the first quarter of the year unfavourable weather may additionally depress the economic activity. Therefore, the rate of economic activity growth is expected to remain low in the first half of 2012, retaining the positive contribution of final consumption and net exports.

In the third quarter of 2011 real GDP increased by 0.3 per cent quarter on quarter. The economic activity was gradually recovering in the first nine months of the year and the real annual growth for this period reached 2.3 per cent with final consumption contributing most significantly.

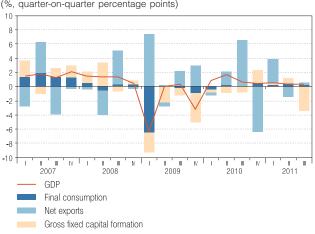
More favourable consumer expectations about employment and future economic situation in early 2011, as well as the increase in consumer real income in the second and third quarters of 2011 helped maintain an even rate of recovery of consumer expenditure between January and September. Final consumption of households rose by 1.4 per cent in real terms compared with the first nine months of 2010 and growth in the third quarter of 2011 accounted for 0.5 per cent quarter on quarter.

Growth rate in exports of goods and services in the January-September 2011 period remained high in real terms: 11.3 per cent on an annual basis. Despite the worsening international environment exports in the third quarter rose by sis. Changes in inventories retained their positive contribution to real GDP growth.

Contribution to GDP Growth by Component of Final Use (Seasonally Adjusted Data)

(%, quarter-on-quarter percentage points)

on the second quarter.



1.7 per cent quarter on quarter offsetting the de-

cline of 1.3 per cent in the previous guarter. In

the first nine months of 2011 the real growth of

imports was 8.5 per cent. As a result the net ex-

growth. Over the third quarter of 2011 imports of goods and services increased by 1.1 per cent

Gross fixed capital formation in the third guarter

vestment rose by 2.4 per cent on an annual ba-

of 2011 declined by 13.5 per cent quarter on

guarter. Over the first nine months of 2011 in-

ports retained their positive contribution to GDP

Note: Non-additive data due to direct chain-linking and seasonal adjustment of GDP and its components.

Sources: NSI, BNB.

**Economic Activity** 

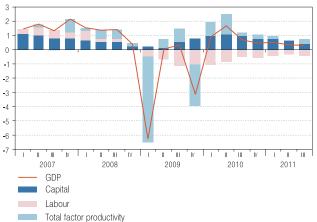
<sup>&</sup>lt;sup>1</sup> The analysis in this section employs seasonally adjusted data, unless otherwise indicated. For indicators on which the NSI or Eurostat do not officially publish seasonally adjusted data, adjustment was made via the TRAMO SEATS programme by using automated set up for diagnostics and optimization of adjustment parameters.

<sup>&</sup>lt;sup>2</sup> According to NSI flash estimates published on 15 February 2012, real GDP increased by 0.4 per cent in the fourth quarter of 2011 compared with the previous quarter. Total growth in 2011 accounted for 1.6 per cent. Flash estimates on the total Gross Domestic Product as a whole were close to the first official estimates but very often significant revisions in components were made. Therefore, the analysis of this section is based only on official quarterly estimates and does not include the flash estimates for the fourth quarter.

Based on the growth breakdown by input costs the contribution of the used capital<sup>3</sup> and labour went down in the third quarter compared with the previous quarter. The retained GDP growth rate reflects the larger contribution of total factor productivity. The contribution of the used capital decreased from 0.6 percentage points in the second quarter to 0.4 percentage points in the third quarter impacted by the drop in investment and lower capacity utilisation. The contribution of the labour factor to real GDP growth measured by hours worked per person in economy also decreased pertaining to a large extent to the decreased number of employees and to a lesser extent to the decrease in the average hours worked per person.

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

(%, quarter-on-quarter percentage points)



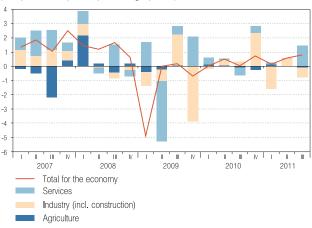
Sources: NSI, BNB.

Gross value added quarter on quarter growth accelerated from 0.2 per cent and 0.6 per cent in the first two quarters of 2011 to 0.8 per cent in the third quarter. In the first half of the year industry contributed most substantially to growth, while the third quarter saw a decline by 1.6 per cent in this sector on the previous quarter. The sector of construction is characterised by significant quarter-on-quarter volatility. In general the drop in construction between January and September 2011 moderated on the corresponding period of 2010 to 6.7 per cent against 16.7 per cent in 2010.

In the third guarter of 2011 the value added in almost all services sub-sectors posted an increase with the exception of the value added in the public finance sector. The total real growth in services accounted for 2.3 per cent on the previous quarter after the first half-year when the growth rate was close to nil. Between January and September 2011 trade, repair of motor vehicles and motorcycles, transport, storage and mail services, hotels and restaurants (4.3 per cent on an annual basis), professional and scientific activities and administrative and ancillary activities (6.2 per cent on an annual basis), and culture, sports and entertainment and other activities (3.9 per cent on an annual basis) posted the largest growth.

#### Value Added Growth and Contribution by Sector

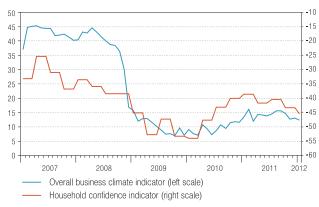
(%, quarter-on-quarter percentage points)



Note: Non-additive data due to direct chain-linking and seasonal adjustment of GDP and its components.

Sources: NSI, BNB.

### Business Climate and Household Confidence Indicator



Sources: NSI, BNB.

 $<sup>^3</sup>$  Calculations are based on the capital estimated through seasonally adjusted accumulated capital corrected for the capacity utilisation rate in manufacturing according to the Industry Trend Survey. The HP filter (parameter  $\lambda=$  10) is applied to the capacity utilization indicator.

By January 2012 the economic situation assessed by the overall business climate indicator remained more negative compared with the third guarter of 2011. This is attributable mainly to further worsening of current and expected business performance in the construction over the fourth quarter and also to more pessimistic sentiment in industry. Following the positive trend in trade in the second quarter of 2011 the business climate indicator in this sector in January 2012 returned to its mid-2011 levels. Due to significant fluctuations of the indicator and the changes in carrying out the study which could also have an effect on changes, it is early to make conclusions about business activity in the sector. Over the fourth quarter the industrial turnover both in the domestic and international market decreased on the prior quarter.

In the first half of 2012 the rate of economic recovery is expected to slow down due to unfavourable developments of external environment. Domestic demand will continue to gradually

increase and due to lower external demand a negative contribution of net exports may be expected in the first quarter of 2012. Firms are expected to remain conservative in their decisions as to the number of employees due to uncertain external conditions which will have an adverse effect on the speed of consumer spending recovery. The investment demand dynamics will be impacted by factors with divergent effects. On the one hand, the recovery of domestic demand, irrespective of the expected slow rate and the retained level of firms' financial performance, will boost the increase in investment expenditure. On the other hand, the instability and uncertainty of international financial markets will result in a contraction of investment demand. In the first quarter of the year unfavourable weather may additionally depress the economic activity. Therefore, the rate of economic activity growth is expected to remain low in the first half of 2012 retaining the positive contribution of final consumption and net exports.

### Gross Value Added Growth

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

		200	08			20	09			20	10			2011	
	- 1	Ш	Ш	IV	-1	II	Ш	IV	- 1	Ш	Ш	IV	- 1	Ш	Ш
Agriculture and forestry, hunting and fishing Mining and quarrying, manufacturing, production and distribution	45.8	2.9	-6.2	2.8	-6.0	-3.2	1.0	0.2	2.5	1.1	-1.5	-3.6	2.7	0.0	-1.3
of electricity, gas and water	1.5	-1.4	-3.0	-3.5	-4.2	-3.2	13.8	-13.5	1.1	5.1	1.8	2.8	1.5	1.4	-1.6
Construction	5.7	3.3	4.3	6.2	-0.6	-1.8	-8.4	-8.1	-5.5	-9.5	-1.0	28.4	-24.9	4.4	-5.7
Trade, cars and motorcycles repair; transport, storage and mail services; hotels and restaurants	-5.2	0.3	3.0	-0.4	7.2	-26.8	9.5	9.9	-2.2	8.9	-4.3	3.2	2.0	-3.5	4.8
Creation and dissemination of information and author products; communications	69.2	1.0	2.3	-1.0	-0.8	1.9	-2.7	-0.1	1.0	-0.8	2.3	-0.5	-1.5	0.4	3.4
Finance and insurance activity	-10.5	11.2	2.3	5.2	7.2	-3.2	-0.8	4.9	3.4	-5.5	0.7	-2.8	-0.5	4.5	1.6
Operations in real estate	-0.1	-5.7	4.4	-7.5	4.4	-2.2	-6.9	0.2	3.1	0.7	1.0	0.4	-4.7	3.3	0.3
Professional activities and scientific research; administrative and ancillary activities	-2.5	-12.5	2.2	-8.1	-6.0	29.0	0.3	-6.1	3.9	-10.4	1.2	9.9	1.2	-3.5	2.4
General government; education; healthcare and social services	-1.4	-2.1	0.6	1.8	-2.1	4.0	1.0	0.3	1.3	-2.2	-1.7	-1.5	0.3	0.6	-0.2
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	20.9	0.6	3.8	2.1	-5.2	18.3	-9.5	6.6	-3.2	-12.0	8.1	-5.5	5.1	5.4	0.3
Gross value added, total for the economy	1.4	1.2	1.7	0.6	-4.9	0.0	0.2	-0.7	0.0	0.5	0.0	0.7	0.2	0.6	0.8

Sources: NSI, BNB.

#### GDP Growth by Component of Final Use

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

		2008				20	09			20	10			2011	
	- 1	Ш	Ш	IV	- 1	Ш	III	IV	1	П	Ш	IV	- 1	Ш	III
Consumption incl.	0.6	-0.6	0.4	0.4	-7.7	0.1	-0.2	-1.1	-0.4	0.3	0.1	0.6	0.2	0.5	0.3
Household consumption Final government consumption	1.9	-1.6	-0.6	-1.6	-3.3	-1.6	-1.2	-1.2	0.1	0.7	-0.2	0.4	0.4	0.6	0.5
expenditure	-4.9	2.0	-1.5	7.1	-14.2	1.8	2.9	-2.8	2.7	0.5	1.9	0.1	0.9	2.6	-1.8
Collective consumption	-1.5	0.6	0.3	1.4	-1.1	0.0	-1.4	-15.6	12.7	-3.0	-0.6	-1.5	0.8	0.0	-0.5
Gross capital formation	5.5	10.6	-2.0	1.6	-8.2	-6.9	-3.5	-14.1	-1.6	-3.4	-3.5	8.1	0.8	3.0	-13.5
Exports of goods and non-factor services	2.6	-0.3	-3.1	-4.9	-6.7	-2.7	2.0	6.6	0.0	7.0	11.8	-3.8	5.6	-1.3	1.7
Imports of goods and non-factor services	2.3	4.1	-7.9	-3.1	-15.1	-1.3	-1.8	8.0	0.7	3.1	0.6	5.9	0.1	0.8	1.1
Real GDP growth	1.5	1.4	1.4	0.4	-6.3	0.0	0.3	-3.1	0.9	1.6	0.7	0.5	0.5	0.3	0.3

Sources: NSI, BNB.

#### Household Behaviour

In the third quarter of 2011 the growth rate of household consumption of the first two quarters of the year was sustained. The rate of consumer demand recovery is expected to match the 2011 level, which will reflect the additional decline in the number of employed and household pessimistic expectations about economic situation.

Household consumption posted a quarter on quarter increase of 0.5 per cent in the third quarter of 2011 following the growth of 0.4 per cent and 0.6 per cent in the first and the second quarter of 2011 respectively. Some sectors reported an increase in employment and income from remuneration which had a slight positive effect on the household propensity to consume. However, given the total decline in employment (at a moderating rate) and worsening household expectations as to the economic situation and their financial situation associated with the pessimism about labour market situation, it may be expected that the speed of consumption recovery will remain at 2011 levels.

Within the structure of household expenditure, spending on food continued to increase in the third quarter of 2011 (based on data from national accounts) but unlike the first half-year, catering services expenses and spending on purchased non-production services went down.<sup>4</sup> In the third and fourth quarters of 2011 retail trade volumes continued recovering in pharmaceutical and medical goods, and cosmetics. No sustain-

able recovery has occurred yet in the Other group.

In the third guarter of 2011 the decrease in employment slowed down to 0.6 per cent guarter on guarter (down from 1.2 per cent in the second quarter of 2011).<sup>5</sup> Unlike previous periods, this decline reflects the stronger fall in the number of self-employed (mostly in agriculture and in some services sub-sectors), while the number of employed quarter on quarter started to grow in the third quarter of 2011. According to seasonally adjusted data of the Labour Force Survey, unemployment of individuals at and above the age of 15 slightly decreased in the third quarter of 2011 to 11 per cent compared with second guarter. Based on non-seasonally adjusted data, unemployment went down to 10.2 per cent, from 11.2 per cent in the second quarter. In the fourth quarter of 2011 and in early 2012 the seasonally adjusted unemployment rate based on the Employment Agency data slightly went up and January 2012 reached 10.4 cent (11.1 per cent based on non-seasonally adjusted

<sup>&</sup>lt;sup>4</sup> Purchased non-production services include services other than catering services, water supply, heat energy and electricity, transport and communications.

<sup>&</sup>lt;sup>5</sup> According to the employment data from national accounts.
<sup>6</sup> Based on preliminary results from the Labour Force Survey conducted by the NSI the unemployment rate in the fourth quarter of 2011 increased to 11.4 per cent.

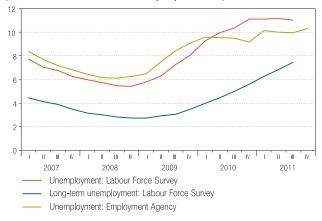
data for January<sup>7</sup>). In the first half of 2011 short-term unemployed contributed most significantly to the decline in unemployment (in the first quarter: unemployed persons of up to six months; in the second quarter: unemployed persons of up to 12 months), while in third quarter longer-term unemployment (up to two years) also decreased. However, the increase in the indicator reflects the rise in the number of long-term unemployed of over two years and therefore the share of long-term unemployed continued to increase in the total number of jobless people. Most of the dismissed persons by age structure in the second and third quarters were unemployed people of up to 44.

The continued reductions in employment had a negative effect on household behaviour in terms of labour supply. The increasing number of discouraged people indicates potential problems in labour supply. In the third quarter of 2011 the increase in the number of discouraged people remained low compared with 2009. The recovery of active supply of employment will depend on the speed of labour demand growth. Based on seasonally adjusted data the economic activity ratio in the third quarter of 2011 continued declining to reach 66 per cent, a value reported in early 2007.

Labour supply may be also assessed on the basis of the competition for occupying vacancies indicator. Based on the Employment Agency data in 2011 the competition for occupying a vacancy remained comparatively constant: 14 persons for a vacant job on average, against 17 persons applying for a vacant job on average in 2010. The vacancy absorption ratio<sup>8</sup> signals some increase in labour demand/supply imbalances by the close of 2011. Between January and October 2011 the ratio remained at its comparatively low but constant level observed in the second half of 2010, while in November and December the absorption of vacancies slowed down.

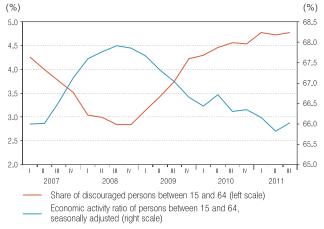
#### Unemployment

(%, share of labour force; seasonally adjusted data)



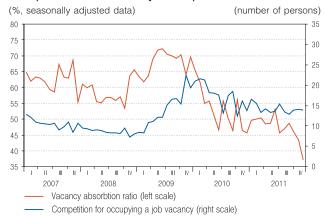
Sources: NSI, Employment Agency, BNB.

### Economic Activity and Share of Discouraged Persons



Sources: NSI, BNB.

#### Competition and Vacancy Absorption Rates



Sources: Employment Agency, BNB.

Both labour supply and household consumption reflect income dynamics. Based on the national account data on overall economy the growth rate of wage per employee both nominal and real (deflated by HICP) moderated in the third quarter of 2011. The rate of nominal wage growth reached 1.9 per cent quarter on quarter (after

**Economic Activity** 

Unemployment was based on the economically active population aged 15–64 under the February 2011 census survey.
 A ratio between the number of vacancies in a particular month which were occupied in a given quarter and the number of offered job vacancies in the same quarter.

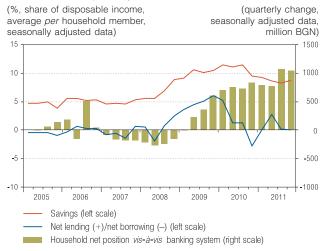
an increase by 4.1 per cent and 4.3 per cent in the first and second quarters of 2011 respectively), and the rate of real wage growth was 1.4 per cent (after an increase by 3.3 per cent in the second quarter). A decline was observed in construction and in some services sub-sectors such as the information and communication.

Based on NSI data and household budgets survey data the growth rate of average household income from wages per household member slowed down in the third and fourth quarters of 2011 to 6.7 per cent and 5.7 per cent respectively in nominal terms on an annual basis (against 8.4 per cent in the second quarter).

The wage bill in the total economy also went up at a slower pace compared with the second quarter both in real and in nominal terms.

Savings measured by the net assets of households in the banking system continued to increase in the third and fourth quarters of 2011. The share of savings in household disposable income gradually declined on 2010, but still remained at a relatively robust level. Net lending as a share of disposable income suggests a higher propensity to increase expenditures.

#### Household Propensity to Save



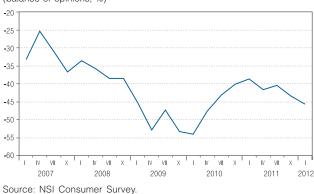
Sources: NSI Household Budget Survey, BNB.

Current and future household investment demand may be assessed by the available statistics of the housing market. The weak growth observed in the number of issued building permits in the third and fourth quarters of 2011 may reflect an improvement in investment demand irrespective of the fact that the number of residential dwellings under the issued building permits remained at relatively low levels. In addition, the average market prices of dwellings continued to decline from mid-2010 to the fourth quarter of 2011 by about 6 per cent annually on average.

The NSI consumer survey shows that after the temporary improvement in July as a result mainly of more optimistic expectations about the level of unemployment, the total household confidence indicator further worsened in October 2011 and January 2012, showing more pessimistic expectations of all its components. Based on the business situation survey (NSI), firms' employment expectations also worsened. In construction expectations of hiring new employees subsided since the third quarter of 2011. As of November 2011 expectations started gradually worsening also in industry and services and as of January 2012 in trade. These trends give grounds to expect a postponement in employment recovery for the second half of 2012.

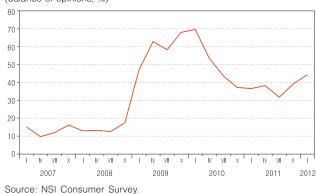
#### Households Confidence Indicator

(balance of opinions; %)



## Unemployment Expectations over the Next Twelve Months

(balance of opinions; %)



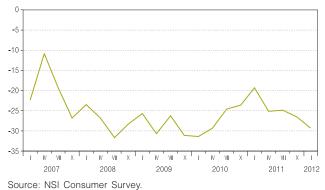
Consumer survey data also suggest a decline in expected inflation over the next 12 months.

Economic Review • 4/2011

<sup>&</sup>lt;sup>9</sup> This indicator is based on NSI household budget survey data as a difference between deposit amounts, foreign currency and bond purchases, and the amount of withdrawn savings, loans and credits.

### Expectations about the Financial Situation of Households over the Next Twelve Months

(balance of opinions; %)



The expectations of a slow employment recovery and low inflation will probably result in a more moderate increase in nominal wages in 2012.

In line with these developments, the recovery of consumer and investment demand of households is likely to retain its 2011 growth rates.

#### Retail Trade Turnover

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

	2008				20	009			2010			2011				
	1	Ш	Ш	IV	1	Ш	Ш	IV	- 1	Ш	Ш	IV	1	Ш	Ш	IV
Retail trade turnover (excluding cars and motorcycles) incl.	2.8	1.9	-0.8	-0.9	-2.3	-3.5	-2.6	-2.1	-2.4	-0.9	-0.4	-1.2	2.4	-0.9	-2.1	-0.8
Foods, drinks and tobacco	0.2	0.0	1.0	1.4	7.5	-0.8	0.6	0.0	-0.2	0.5	0.1	0.2	-0.4	-0.7	-0.2	-0.1
Textile, clothing, footwear and leather	9.0	0.0	0.3	0.8	-4.2	-4.0	-5.1	0.9	-1.8	-2.3	-1.2	-0.9	2.0	-2.5	-3.7	-2.0
Household goods and home appliances	2.0	1.2	-0.6	-2.0	-15.6	-5.0	-5.0	-2.9	-2.8	-1.6	-0.7	-2.2	-1.4	-0.3	-3.9	-3.7
Computers and communication equipment, etc	5.5	2.6	-0.2	-1.5	-18.7	-3.9	-5.9	-5.0	-4.6	-2.6	0.1	0.2	1.2	0.4	-2.7	-3.9
Pharmaceutical and medical goods, cosmetics and toiletries	6.3	7.0	4.3	3.3	4.6	0.1	2.8	2.7	-15.1	3.4	2.6	3.5	-4.6	3.5	2.2	4.3
Unspecialised shops with different kinds of goods	8.9	5.7	2.4	0.2	65.9	-3.6	-4.2	-3.7	-4.1	-2.4	-1.7	-2.3	11.9	-1.4	-2.3	0.1
Automobile fuels and lubricants	4.1	1.3	-4.0	-2.7	-1.3	-4.3	-0.5	-1.6	-4.2	-0.2	0.5	-1.8	4.9	-0.5	-2.2	-1.2

Source: NSI Domestic Trade Survey.

### **Employment and Income Dynamics**

(% on the previous quarter; seasonally adjusted data unless otherwise indicated)

		2008				20	09			20	2010			2011	
	1	Ш	III	IV	- 1	Ш	Ш	IV	- 1	Ш	III	IV	- 1	Ш	III
Employed	1.0	0.2	0.4	-0.3	-0.6	-1.2	-1.8	-1.8	-1.8	-1.2	-0.9	-0.8	-0.7	-1.2	-0.6
Compensation per employee*	0.1	1.5	0.7	5.9	-1.2	3.1	2.5	-1.4	3.8	-1.6	0.2	0.9	2.7	2.9	1.4
Compensation of employees*	1.7	1.6	0.8	5.4	-1.2	1.3	0.3	-4.0	1.6	-3.0	-0.7	0.6	1.2	2.4	1.9
Unemployment (15+), average for the period, % of the labour force	6.0	5.7	5.5	5.4	5.9	6.3	7.3	8.1	9.2	10.0	10.3	11.1	11.2	11.4	11.0

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

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

### Government Finance and Consumption

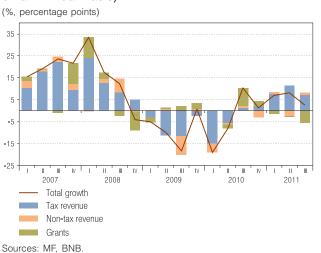
According to preliminary data the balance on the consolidated fiscal programme amounted to BGN -1582.2 million in 2011 (-2.1 per cent of GDP). The primary balance for 2011 reported a deficit of BGN 1035 million or -1.35 per cent of GDP.

Quarter on quarter government consumption over the third quarter of 2011 had a negative contribution of 0.2 percentage points to GDP growth. Based on NSI flash data the contribution of the government consumption to GDP growth remained negative in 2011. In the first two quarters of 2012 the contribution of government consumption to GDP growth is expected to be around nil.

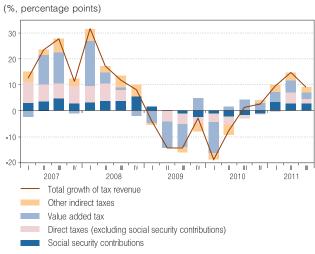
Over the third quarter of 2011 total budget revenue on consolidated fiscal programme accounted for BGN 6312.4 million, their annual growth slowing down to 2.5 per cent. The recovery of tax revenue continued in the third quarter, while revenue from grants posted a significant fall of 51.6 per cent as compared to the same period of previous year.

Indirect taxes were the major factor behind tax revenue growth in the third quarter, with effective implementation recorded in all major components. VAT revenue maintained its strong annual growth which to a large extent reflects the 8.3 per cent increase in household consumption on an annual basis. The revenue in the direct tax group also reflected the dynamics of the respective macroeconomic bases. In the third quarter receipts from personal income tax increased by 9.6 per cent on an annual basis against the nominal change of employees' compensation in the economy of 12.6 per cent. However, the annual growth of corporate tax revenue slowed down compared with the second quarter reflecting the nominal decline in the growth rate of gross operating surplus to 6.7 per cent (against an increase of 13.3 per cent in the second quarter).

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



### Contribution of Major Tax Groups to Tax Revenue Growth under the Consolidated Fiscal Programme (Quarterly, on an Annual Basis)



Sources: MF, BNB.

Budget receipts from social security contributions retained their constant growth since the beginning of the year (11.0 per cent on an annual basis). However a similar increase in the fourth quarter will be insufficient for achieving the revenue target set fourth in the National Social Security budget for the year.

Revenue from grants was the only group among major budget revenue groups reporting a negative rate of change due to the fact that no tranches under structural and cohesion funds were received by the European Commission in the third quarter.

In the third quarter of 2011 total budget expenditure (including also Bulgaria's contribution to EU budget) amounted to BGN 6489.3 million. Thus the expenses made from the beginning of the year accounting for 81.0 per cent of the annual projections in the Republic of Bulgaria State Budget Law.

In the third quarter social expenditure and investment expenditure contributed most substantially to the 5.2 per cent annual growth of consolidated government expenditure. As in the

second quarter of 2011 the increase in social expenditure was mainly due to higher healthcare payments, while spending on pensions almost matched the 2010 third quarter's level. Despite the strong growth of capital expenditure in the third quarter, between January and September its level remained much lower than in the prior year (-7.4 per cent). Among major expenditure groups subsidies payments (-0.9 per cent) remained lower compared with the January—September 2010 period. These expenses had contributed most strongly to current non-interest expenditure growth in the second quarter, but their rate of change in the third quarter turned negative (-10.2 per cent).

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

(%, percentage points) 35 25 15 -5 -15 -25 2007 2008 2010 2009 Total expenditure Capital expenditure Interest expenditure Current non-interest expenditure (excluding contribution to EU budget) Other (including contribution to EU budget)

Sources: MF, BNB.

Sources: MF, BNB.

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

(%, percentage points)

22

16

10

4

-2

-2

-8

-14

-20

Total growth of current non-interest expenditure

Wages and social security contributions

Costs

Subsidies

Social and health insurance payments

In line with the fiscal consolidation policy announced by the government wage and pension expenditure accumulated since the beginning of the year remained close to the level of 2010, indicating an insignificant increase of 0.5 per cent and 1.3 per cent respectively. Between January and September 2011 current operating expenditure also matched the level of 2010, after a 7.8 per cent increase reported in the third quarter alone.

According to the Ministry of finance preliminary monthly data the budget balance of the Consolidated Fiscal Programme is negative amounting to BGN 533 million for December while the total deficit accumulated under the Consolidated Fiscal Programme for 2011 reached BGN 1582.2 million (2.1 per cent of the projected GDP). As a result of grants receipts in December for approximately BGN 515 million the balance on EU funds for 2011 was positive and amounted to BGN 167.9 million.

The improvement of the deficit in 2011 by 1.9 percentage points of GDP as compared to 2010 was entirely attributable to limited government expenditure which decreased by 2.8 percentage points of GDP, while the the change in total revenue under the Consolidated Fiscal Programme remained negative accounting for 0.9 percentage points of GDP.

Monthly data suggest that total budget revenue and grants reached BGN 25,378 million, up 6.0 per cent compared with revenue reported in 2010. As a percentage of the projected GDP budget revenue is expected to decrease to 33.1 per cent against 34.0 per cent in 2010.

Budget revenue received in 2011 accounted for 96.8 per cent of the annual projections in the Republic of Bulgaria State Budget Law. The implementation of tax revenue was 99.5 per cent, non-tax revenue 100.6 per cent, and receipts from grants accounted for just 66 per cent.

In accordance to our expectations, at the end of the year the annual growth of tax revenue slowed down to 8.3 per cent reflecting mainly the base effect from the last months of 2010. Revenue reported in the group of indirect taxes exceeded by 2.2 per cent the projections for 2011, while the most significant underperformance was recorded in corporate tax revenue

(87.9 per cent) and in social security contributions revenue in the National Social Security budget (95.8 per cent).

By the end of the year the annual VAT revenue growth moderated to 5.5 per cent reflecting to a large extent the lower monthly receipts from VAT in November (down 21 per cent on an annual basis) and in December (by 16.6 per cent on an annual basis). This was attributable to the base effect in the corresponding months of the previous year when monthly revenue was higher due to a slowdown in VAT refund.

The annual growth of revenue from excise duties in 2011 remained high (8.2 per cent on an annual basis), but a moderate slowdown in growth was observed in both major excise duties groups (fuels and tobacco products) compared to the second and third quarters of the year.

Revenue from personal income tax increased by 7.4 per cent as compared to 2010 and corporate income tax revenue<sup>10</sup> by 10.5 per cent. The factors behind the higher receipts from personal income tax include: the increase in the average wage in Bulgaria compared with the same period of the prior year, one-off receipts from obligations paid by Kremikovtsi AD under the Law on Income Tax of Natural Persons, 11 increased minimum insurable income for 2011 and increased minimum wage as of September 2011. Higher corporate tax revenue was mainly due to receipts from non-financial corporations and one-off revenue from taxes due by Kremikovtsi AD from previous period amounting to BGN 39.6 million. Despite the reported growth corporate tax revenue for 2011 was lower than planned in the Republic of Bulgaria State Budget Law.

Revenue from social security contributions retained its relatively constant growth of about 10 per cent, but the implementation (95.8 per cent) was lower than projected in the Law on the Social Security Budget by the end of the year. In 2011 budget receipts from grants indicated the strongest underperformance. In December significant revenue was reported from grants as a result of reported tranches received by the European Commission on structural and cohesion funds in the amount of approximately BGN 515

million. Notwithstanding the aid received in 2011 remained 8.8 per cent lower than in 2010.

The annual growth in major tax revenue is expected to slow down in the first and second quarter of 2012 in line with projected nominal dynamics in the respective macroeconomic tax bases. Another factor behind the slowing growth in indirect and direct taxes will be the higher base of the first half of 2011 when these tax receipts recovered rapidly. The increase in the minimum wage in two steps in September 2011 and May 2012 is expected to have a minimal positive effect on receipts from income tax for individuals.

Expenditure on the Consolidated Fiscal Programme, including Bulgaria's contribution to the EU budget, amounted to BGN 26,960 million as of the end of the year, or 35.1 per cent of projected GDP against 37.9 per cent of GDP in 2010. Total government expenditure rose by 0.9 per cent on an annual basis accounting for 95.7 per cent of State Budget Law projections.

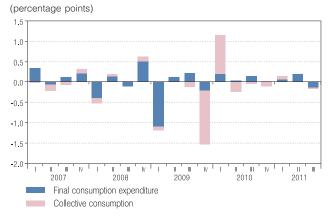
In 2011 social expenditure and subsidy payments contributed most substantially to total expenditure growth on the Consolidated Fiscal Programme by 1.24 and 0.54 percentage points respectively. In December wage expenditure rose by approximately BGN 100 million compared with the average monthly amount since early 2011. Notwithstanding, the change compared to the corresponding month of the previous year and for the whole 2010 remained close to zero. Current operating expenditure also remained almost unchanged from 2010. Among major expenditure items only investment expenditure continued to report a negative contribution of 1.79 percentage points to total expenditure growth. The reported annual decline was 13.4 per cent or BGN 477.2 million less than investment expenditure in 2010.

In the first two quarters of 2012 the government consumption contribution to GDP growth is expected to be close to nil given the government intents to continue the fiscal consolidation and the policy of non-indexation of public-sector wages.

<sup>&</sup>lt;sup>10</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>11</sup> Law on Income Tax of Natural Persons.

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



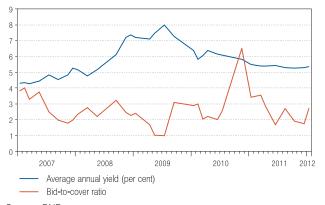
Sources: NSI, BNB.

The negative budget balance and payments on maturing government debt instruments in 2011 were funded mainly by using BGN 1013.0 million from the fiscal reserves. Net domestic financing was positive: BGN 539.6 million by government securities and BGN 238.2 million by privatisation proceeds. Net external financing was also positive (BGN 153.6 million) after funds worth BGN 161.1 million were received in December under the programme loan from the European Investment Bank and the amount of BGN 93.5 million was disbrsed on government investment loans.

### **Government Securities Market**

The activity of government securities primary market participants remained relatively high in the fourth quarter of 2011 but the volume of auction bids for a sale of securities went down compared with the January–September period. The average bid-to-cover ratio (the ratio between the bids admitted to auctions and total government securities offered) in the fourth quarter was 1.78<sup>12</sup> compared with 3.53, 2.35 and 2.18 in the first, second and third quarters of the year respectively. The bid-to-cover ratio for 2011 was 2.33 against 3.31 for 2010.

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



Source: BNB.

Throughout the year 31 government securities auctions were conducted, including 26 auctions for a sale of government securities (one auction for a sale of government securities by payment and/or replacement with government securities from another issue) and five auctions for repurchase of government securities (two auctions for repurchase of government securities from one issue by replacement with government securities from another issue). Government securities from six issues different by maturity and currency denomination were offered at the auctions totalling BGN 1225.5 million nominal value, an increase by BGN 277.1 million compared with 2010. The total nominal value of budget receipts from government securities sold amounted to BGN 1124.2 million (including those acquired by replacement of government securities worth BGN 56.3 million and the lev equivalent of EUR 144 million). In the fourth quarter of the year alone bonds totalling about 345 million were sold. The opening of the issue of government securities with initial maturity of seven years in November enjoyed the strongest interest, with investors' bids exceeding 2.44 times the quantity offered by the Ministry of Finance.

In the fourth quarter of 2011 the average annual yield attained at the primary auctions of fiveand ten-year government securities remained close to the previous quarter's values, while the yield attained at the auctions of government securities with maturity of three years and six months and seven years posted a decline compared with the previous openings.

By the end of the year the downward trend in the long-term interest rate used to evaluate the

Economic Activity

<sup>&</sup>lt;sup>12</sup> Including the the bid-to-cover ratio (0.93) of the auction conducted on 5 December 2011 when the Ministry of Finance did not approve the bids for a sale of 5-year government securities denominated and payable in euro totalling EUR 35 million.

degree of convergence was sustained<sup>13</sup> in December 2011 (5.23 per cent) and this was the lowest value reported since October 2008. However, in January 2012 this indicator posted an increase by 0.07 percentage points to 5.30 per cent.

The increase in government securities in circulation and higher average volume of the issues compared with 2010 were factors favouring the development and correspondingly the liquidity on the secondary market of government debt instruments. Compared with the previous year the volume and number of transactions in government

securities posted an increase by 20 per cent and 13 per cent respectively. As a result the liquidity ratio reached 13.6 against 12.9 in 2010.

The MF indicative issue calendar published for the January–March 2012 envisages the issuance of government securities totalling BGN 470.5 million. In accordance with the MF issuing policy announced in 2012 the positive net domestic government securities financing from government securities transactions in the domestic market will account for approximately BGN 580 million, with the nominal value of issued government securities expected to reach BGN 1220 million.<sup>14</sup>

### Behaviour of Firms and Competitiveness

The improvement of the economic activity in Bulgaria had a favourable effect on the services sector, while the worsened external environment affected the industry sector in the third quarter of 2011. Firms are expected to continue implementing a policy of improving their cost competitiveness which will help preserve their stable financial performance and competitiveness in the context of moderating external demand.

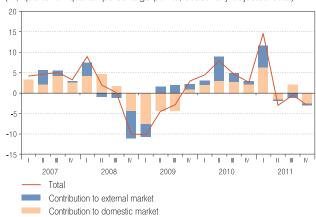
In the third quarter of 2011 restored domestic demand contributed to the 0.8 per cent increase in gross value added in the economy compared with the previous quarter. The improvement of the economic activity in Bulgaria had the most favourable effect on the services sector, while the worsened external environment affected adversely the industry sector. The decline of output in industry had a negative contribution to growth of gross value added in the economy as a whole.

More favourable expectations of the first and second quarter of 2011 about future economic activity in industry did not materialise in the third quarter. As a result firms failed to improve their costs on intermediate consumption which led to a decline in sector's value added and an increase in inventories in the economy. Worsening business climate in Bulgaria's major trading partners had also a negative effect on the nominal volume of sales in industry on international markets. Due to the serious deterioration of consumer confidence and consumer demand in the euro area accordingly, industries exporting non-durable consumer goods as food and textile

were most strongly affected. On the other hand, firms producing intermediate consumption products were favourably affected by the enhanced economic activity of non-euro area corporations and earnings from exports of goods from the groups of basic metals and metal products (excluding machines and equipment), rubber, plastics and other non-metal mineral products and chemical products exhibited an increase in the third quarter against the previous quarter.

#### **Industry Turnover Dynamics**

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



Note: Non-additive data due to direct seasonal adjustment of total turnover and its components. Sources: NSI, BNB.

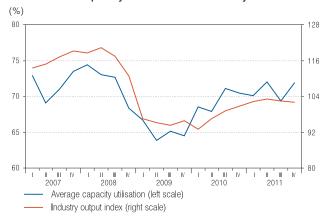
<sup>&</sup>lt;sup>13</sup> Based on the yield to maturity on the secondary market according to (10-year reference) security issued by the Ministry of Finance (central government) and denominated in national currency.

<sup>&</sup>lt;sup>14</sup> For further details see *The Issuing policy of the Ministry of Finance for 2012* available on the website of the Ministry of Finance.

The recovery of the domestic demand driven by the steady private consumption growth mitigated the industrial output decline. As a result domestic market turnover increased from the prior quarter at the expense of food, beverages and tobacco products and textile, clothing, footwear and other products.

The net effect of the lower external demand and the recovery of domestic demand was a slight decrease in the industrial output index in the third quarter compared with the previous quarter accompanied by lower capacity utilisation.

#### Production Capacity Utilisation in Industry



Source: NSI, Industry Trend Survey.

Construction activity in the country went down in the third guarter compared with the previous quarter, with gross value added in the sector contracting by 5.7 per cent quarter on quarter. The decrease in Bulgarian firms' expectations of housing selling prices combined with the weak household interest in financing house purchases by housing loans continued to adversely affect the economic activity in the sector. Firms postponed the implementation of their investment plans due to insufficient demand and uncertain economic environment. This is supported by the continued slack of construction output index despite the upward trend in the number of issued building permits for construction of new buildings as well as from the Construction Tendency Survey.

In the services sector the pace of economic activity picked up in the third quarter of 2011 compared with the previous quarter. The recovery of household demand and the steady improvement of firms' economic activity in Bulgaria in recent quarters contributed to the higher gross value added in real terms in the sectors of trade, ho-

tels and restaurants, transport, communications and financial and business services.

### Construction Output Dynamics and New Buildings Permits Issued

(number of buildings; seasonally adjusted data)



Sources: NSI, BNB.

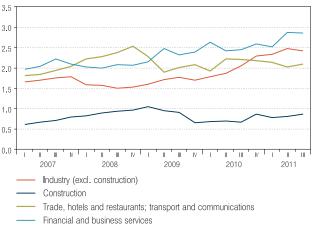
Data on trade and other services turnover remained divergent. In the second half of 2011 firms' earnings from sales in the trade sector measured both in nominal terms and at constant prices continued to decline guarter on guarter which does not correspond to the trends of household consumption in the third quarter in the national accounts. Data suggest that sales of automobile fuels and lubricants, computer and communication equipment and other consumer goods and household appliances, furniture and other household goods experienced the strongest decline. However, the orders to suppliers in Bulgaria and abroad increased significantly which is indicative of enhanced economic activity in trade. In the other services sector nominal volumes continued to improve, with the strongest activity reported in the field of information technologies and advertising activities and marketing. In the computer and information services sector earnings improved as a result both of high domestic demand and continued upward trend in nominal exports.

The gross operating surplus which is an approximation of the firms' financial performance retained its upward trend in the third quarter of 2011 compared with the previous quarter but at a slower rate. A factor behind the slower growth was the slight deterioration of firms' financial performance in industry due to weakening external demand and contracting value added in the sector. In services the quarter-on-quarter growth of gross operating surplus in the third quarter of 2011 was attributable to the sectors of trade, ho-

tels and restaurants, transport and communications consistent with higher household demand.

### Gross Operating Surplus at Current Prices

(billion BGN; seasonally adjusted data)



Sources: NSI, BNB.

The improved economic activity in Bulgaria coupled with the banking sector high liquidity contributed to the positive change in loans to non-financial corporations in the second half of 2011. Trade and business services contributed most significantly to total growth of loans in the services sector due to enhanced managers' optimism and probably the need of working capital for current production. In construction solely loans went down in the third quarter, with the fall partly offset by increased foreign debt of firms and the positive inflow of foreign direct investment.

### Loans to Non-financial Corporations

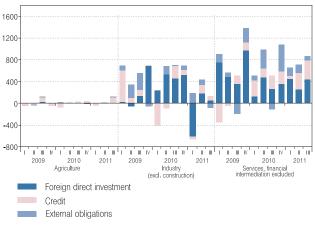
(million BGN, quarter-on-quarter volume change) 1 000 800 600 400 200 -200 -400 -600 -800 2009 2010 2011 Non-financial corporations, total Services Construction Industry (excl. construction) Agriculture, hunting, forestry and fishery

Source: BNB.

In the third quarter the foreign investment flow remained stable compared with the previous three months and was directed mainly to the services sector. In the fourth quarter foreign direct investment inflow strengthened and the main share of it directed to industry. In services investment in transport, storage and communications had the major contribution to growth of foreign direct investment in the second half of the year.

### **Financing Sources**

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

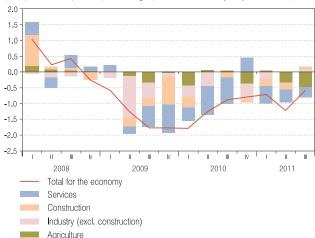


Sources: NSI, BNB.

Firms' efforts intended to improve the cost competitiveness amid increased uncertainty as to the future economic conditions continued to prompt job reductions though at a slower pace compared with previous quarters. Based on business situation surveys the uncertain economic environment remained the major factor impeding corporations' activity in all sectors. In addition to agriculture, the services sector also contributed negatively to employment slowdown in the third quarter of 2011. To increase profitability and labour productivity firms from the services sector continued to reduce their staff.

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

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



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

The policy of improving labour costs pursued by firms continued in the third quarter. As a result the real labour productivity in overall economy also continued to increase. The services sector, where the employment decline continued, had the largest positive contribution to labour productivity growth.

### Labour Productivity Developments (Value Added per Employed Person)

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



Sources: NSI, BNB

The staff reduction policy intended to improve the cost competitiveness of corporations is expected to be sustained in the first and second quarters of 2012. This is supported by the NSI survey data on expectations about staff in the following three months based on which expectations about employment in the construction and services sectors in the fourth quarter were most pessimistic. In the January survey this indicator posted also a significant decline in trade.

#### Nominal Unit Labour Costs

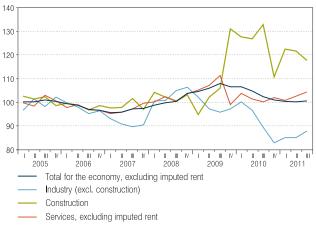
(2005 = 100; seasonally adjusted data)



Sources: NSI, BNB.

#### Real Unit Labour Costs

(2005 = 100; seasonally adjusted data)



Sources: NSI, BNB.

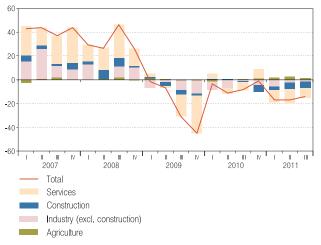
Labour productivity growth lagged behind the wage growth rate in the economy. As a result the quarter-on-quarter nominal unit labour costs rose by 1.8 per cent and in real terms by 0.3 per cent in the third quarter of 2011. Given the relatively low share of labour costs in the value added, the faster growth of wages than labour productivity is not expected to worsen firms' financial performance.

Investment activity of corporations measured by expenditure on acquiring fixed assets at current prices continued to decrease in the third guarter compared with the corresponding quarter of the previous year. Construction and services experienced the strongest decline: 55 per cent and 14 per cent respectively. Despite the overall decline in expenditure for acquiring fixed assets in the services sector, investment in the information services and finance sub-sectors went up by 35.8 per cent and 61.6 per cent respectively due to improved financial performance of firms. This is supported by the quarter-on-quarter increase in the nominal turnover index in the information technologies sub-sector by 2.1 per cent and 8.8 per cent in the second and third quarter of 2011 respectively. In the finance sub-sector banks' profit after tax and discontinued operations rose by 0.2 per cent and 7.5 per cent quarter on quarter in the second and third quarters of 2011 respectively. In industry the decline tended to stabilise. The NSI survey of October 2011 on the expected investment activity in industry in 2012 shows firms' intents to restore the acquisition of fixed assets which are anticipated to grow by 17.4 per cent. The largest share of investment

is earmarked for production of intermediate consumption goods and for energy and water-related industries. However, firms' investment activity in real terms is expected to remain subdued in the first and second quarters of 2012 impacted by the increased uncertainty of international economic conditions and worsened managers' expectations about future economic activity.

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

(%, percentage points, growth on an annual basis)

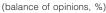


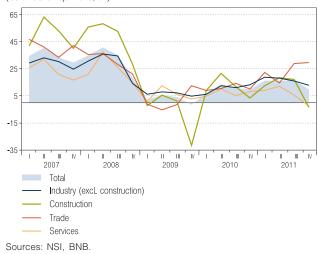
Note: Due to the lack of final data, the quarterly data are preliminary. Sources: NSI, BNB.

In the fourth quarter of 2011 the worsened economic environment in Bulgaria's major trading partners impacted the expectations of Bulgarian managers about future economic activity in all sectors except trade. In the first two quarters of 2012 we expect weaker external demand to continue to have a negative impact on the export-

oriented manufacturing industries. The growth rate of new export orders slowed down. The monthly data of the Industry Trend Survey point to the increasing role of uncertain economic environment and insufficient demand as factors limiting the activity of corporations. The gradual recovery of domestic demand is expected to have a stabilising effect. The expectations of managers in the trade sector remained relatively optimistic by the end of 2011, but in January 2012 they trended downward. Despite the expected recovery of private consumption the increase in domestic market sales will not offset the slower growth of sales earmarked for exports due to contracted external demand. Therefore, the rate of economic activity growth is expected to be positive but to remain low in the first two quarters of 2012.

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





### Exports and Imports of Goods

Despite the gradual slowdown of exports in 2011, caused mainly by the external demand decline, the nominal growth rate of exports continued to outstrip that of imports. As a result the trade deficit contracted to 4.7 per cent of GDP against 7.7 per cent in 2010.

In the first half of 2012 export growth rate is expected to further moderate due to lower external demand growth and a decrease in international prices. Imports are also expected to decline though slower due to improved domestic demand.

In 2011 the export growth rate in nominal terms moderated (29.1 per cent) due to lower external demand. However, it continued to outstrip the nominal import growth rate (19.7 per cent) resulting in a decrease in trade balance deficit in 2011 by EUR 918.8 million against 2010 to EUR 1844.9 million.<sup>15</sup>

tional prices. Nominal growth rate of imports is also expected to slow down though slower than

In the first two quarters of 2012 nominal growth

rate of exports is expected to further moderate

due to weaker external demand, reflecting weak

global economy growth, and decreased interna-

 $<sup>^{\</sup>rm 15}$  The analysis presented in this section is based on nominal export and import data in euro. Data in real terms by

commodity group are derived from deflators published by the NSI under the Standard International Trade Classification (SITC).

exports due to positive growth of domestic demand.

The shrinkage in trade deficit between January and November 2011 was mainly a result of the increased surplus on the balance of raw materials (EUR 802.5 million) and consumer goods (EUR 123.7 million) and a lower deficit on balance of investment goods (BGN 142.8 million). The negative balance of energy resources worsened by EUR 398.0 million.

In the January–November 2011 period all commodity groups contributed to total nominal growth of exported goods. Base metals and their products (7.5 percentage points), machines, transportation vehicles, appliances, instruments and weapons (5.5 percentage points), mineral products and fuels (5.2 percentage points), animal and plant products, foods, drinks and tobacco (4.5 percentage points) had the major contribution to this growth.

### Dynamics of Exports and Imports

(million EUR)

2700

2200

1700

1200

1200

12-month moving average

200

2007

2008

2009

2010

2011

Imports (fob)

Exports (fob)

Source: BNB

Over the January to November 2011 period exports of base metals and their products rose by 37.9 per cent on the respective period of 2010 to reach EUR 3861.1 million. The Copper and copper products position (24.0 percentage points) again had the major contribution. The nominal growth of exports of this group slowed down markedly between January and September 2011 impacted mainly by slower real growth, a result of contracted external demand. In the first half of 2012 exports growth rate of this group is expected to further moderate due to slow external demand growth and a decrease in international prices of metals.

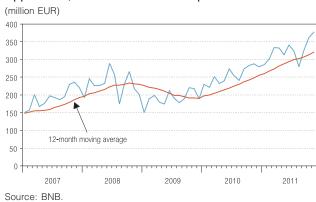
### Exports of Base Metals and Base Metal Products



Source: BNB

Over the review period exports of machines, transportation vehicles, appliances, instruments amounted to EUR 3570.6 million: an increase of 28.1 per cent on the corresponding period of the previous year. The electrical machinery and equipment (11.1 percentage points) and nuclear reactors, boilers, machines, appliances and machinery (10.9 percentage points) sub-groups contributed substantially to nominal growth. Nominal growth was mostly attributable to the increased volume of exports.<sup>17</sup> This group had the major contribution to real growth of total exports. Between January and September 2011 its growth rate in real terms decreased but much slower than the rest of the groups. In the first half of 2012 the exports of this group are expected to grow at a slower pace due to weaker external demand.

## Exports of Machines, Transportation Vehicles, Appliances, Instruments and Weapons



Exports of mineral products and fuels between January and November 2011 amounted to EUR 2028.6 million, up 35.7 per cent on the corresponding period of 2010. Mineral fuels, mineral oils and distilled products (28.6 percent-

Economic Activity

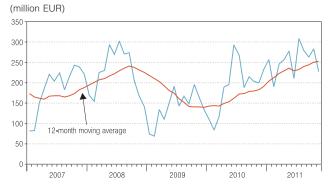
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<sup>&</sup>lt;sup>16</sup> The export deflator for the precious metals and other nonferrous metals division under SITC was used to estimate the price effect in the first three quarters of 2011.

<sup>&</sup>lt;sup>17</sup> The export deflator for the machines, equipment and transportation vehicles group under SITC was used to estimate the price effect in the first three quarters of 2011.

age points) contributed most significantly to the growth of this group. Nominal growth over the review period was mainly attributable to price effect. In the first two quarters of 2012 the export growth rate in this group is expected to moderate due to the weakening external demand and a slow increase in fuel prices in the first quarter and a decline in the second quarter of 2012.

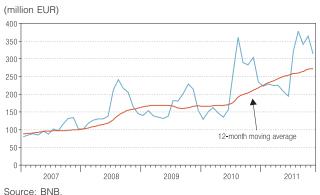
### **Exports of Mineral Products and Fuels**



Source: BNB.

Over the review period exports of animal and plant products, foods, drink and tobacco came to EUR 3024.1 million, up EUR 644.0 million on the corresponding period of 2010. Oil seeds and fruit, different types of seeds (by 11.6 percentage points) had the major contribution to this growth due to the high real growth in the first half of the year. <sup>19</sup> In the first two quarters of 2012 exports of this group are expected to moderate due to both weaker external demand and a decline in international food prices.

### Exports of Animal and Vegetable Products, Foods, Drinks and Tobacco



<sup>18</sup> The export deflator for the mineral fuels, oils and related products group under SITC was used to estimate the price effect in the first three quarters of 2011.

### Contribution of Commodity Groups to Trade Growth in the January–November 2011 Period

	Exp	oorts	Imports (CIF)			
	growth, %	contribution, p.p.	growth, %	contribution, p.p.		
Consumer goods	13.8	3.5	10.7	2.1		
Raw materials	38.2	16.8	25.3	9.1		
Investment goods	33.3	5.7	17.4	3.8		
Energy resources	34.7	4.7	27.7	6.1		
Growth, total	30.7		21.2			

Source: BNB.

Between January and November 2011 imports (CIF) reached EUR 21,067.1 million: an increase by 21.2 per cent (EUR 3679.9 million) on an annual basis. Raw materials (9.1 percentage points) contributed most significantly to import growth. The remaining groups also had a positive contribution: energy resources (6.1 percentage points), investment goods (3.8 percentage points) and consumer goods (2.1 percentage points).

Over the review period imports of raw materials amounted to EUR 7827.4 million: an increase by 25.3 per cent on the corresponding period of the previous year. The Other position (5.9 percentage points), cast iron, iron and steel (5.0 percentage points), ores (4.2 percentage points), and textile (2.6 percentage points) contributed most significantly to the increase. The nominal growth of cast iron, iron and steel, and textile between January and September was due both to increased imports in real terms and to price effect. In the first half of 2012 the growth rate of imports of consumer goods is expected to moderate due to price effect but to remain positive consistent with improving domestic demand.

#### Imports of Raw Materials



<sup>20</sup> The import deflators for the cast iron and steel, textile and textile products and textile fibres divisions under SITC were used to estimate the price effect in the first three quarters of 2011

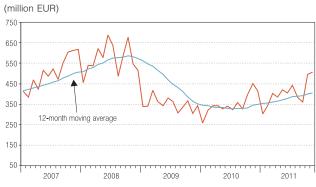
<sup>&</sup>lt;sup>19</sup> The export deflator for the oil seeds and fruit division under SITC was used to estimate the price effect in the first three quarters of 2011.

#### Imports of Energy Resources



Over the review period imports of energy resources amounted to EUR 4886.5 million, an increase of 27.7 per cent on the corresponding period of 2010. The crude oil and gas position (17.4 percentage points) contributed most significantly to this growth. The increase was due to annual growth in international oil prices, and in real terms imports of this group's products registered even a slight decline.<sup>21</sup> In the first two quarters of 2012 the nominal growth rate of imports in this group is expected to moderate due to low or negative growth rate of international

### Imports of Investment Goods



Source: BNB.

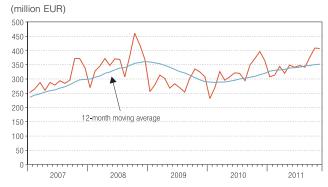
fuel prices.

Between January and November 2011 imports of investment goods amounted to EUR 4447.1 million, an increase by 17.4 per cent on the January–November 2010 period. The transport vehicles (7.1 percentage points), spare parts and equipment (6.5 percentage points) and machines, vehicles and appliances positions (5.6 percentage points) contributed to this increase. The price effect was weak. The real growth rate of imported investment goods was relatively constant over the past three quarters

<sup>21</sup> The export deflator for the mineral fuels, oils and related products group under SITC was used to estimate the price effect in the first three quarters of 2012.

of 2011.<sup>22</sup> Over the projected horizon the growth rate is expected to be weak due to low investment activity in Bulgaria.

### Imports of Consumer Goods



Source: BNB

Imports of consumer goods over the review period recorded nominal growth of 10.7 per cent, reaching EUR 3854.5 million. This dynamics reflects mainly the contributions of food, drink and tobacco (5.8 percentage points), medicines and cosmetics (2.9 percentage points) and automobiles (1.5 percentage points). The nominal growth of food, drink and tobacco and medicines and cosmetics was due also to price effect, while in the automobile imports the price effect was insignificant.<sup>23</sup> Consumer good imports are expected to remain positive in the first half of 2012 due to improving domestic demand.

Over the January to November 2011 period Bulgarian exports to other EU Member States rose by 33.3 per cent on an annual basis, while exports to non-EU countries increased by 26.6 per cent. Imports from EU Member States increased by 15.3 per cent and that from non-EU countries by 27.3 per cent.

The market share of Bulgarian goods in total EU imports picked up to 0.73 per cent by November 2011 *vis-à-vis* 0.63 per cent in November 2010.

**Economic Activity** 

<sup>&</sup>lt;sup>22</sup> The import deflator for the machines, equipment and vehicles group under SITC was used to estimate the price effect in the first three quarters of 2011.

<sup>&</sup>lt;sup>23</sup> To estimate price effects, the following deflators were used: for food, drink and tobacco – the weighed import deflator of the foods and live animals, soft and alcohol beverages, and tobacco groups; for medicines and cosmetics – the deflator of the medicinal and pharmaceutical products item; for automobiles – the deflator of the motor vehicles, motorcycles, bicycles, trailers and semi-trailers under SITC in the first three quarters of 2011.

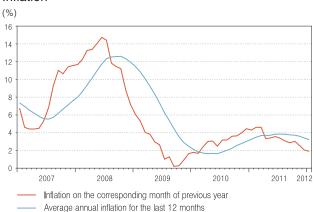
# 4. Inflation

International energy and food prices were the main determinants of inflation in 2011. Core inflation remained relatively low, contributing insignificantly to the overall inflation. Inflation accumulated by end-2011 declined to 2.0 per cent (4.4 per cent at the end of 2010), and average annual inflation for 2011 was 3.4 per cent (3.0 per cent in 2010).

In the first two quarters of 2012 we expect inflation to be at comparatively low levels, ranging between 1.8 and 2.4 per cent. Preliminary data for January show that inflation remains low, irrespective of the higher-than-expected fuel price inflation. Major risks to this projection relate to the upward dynamics in international energy product prices and possible direct and indirect effects on consumer prices in Bulgaria.

International energy and food price dynamics had a decisive role in consumer price increases in Bulgaria in 2011,<sup>1</sup> as in the previous year. In March 2011 the annual rate of inflation reached its maximum value of 4.6 per cent in the context of a sizeable rise in international prices.

#### Inflation

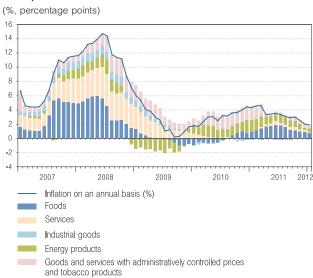


Note: Preliminary data for January 2012. Source: NSI.

In the second half of 2011 the high growth rates of food and fuel prices began to decline. This trend was driven by the relative stabilisation of internation prices, including decreases in the prises of some commodity groups and the 2010 base effect. As a result, overall inflation of consumer prices decreased to 2.0 per cent at end-2011 (4.4 per cent in December 2010). Comparatively fast spillover of international price developments and the high share of foods and energy products in the consumer basket (around 30 per cent in 2011) are among the main factors behind the acceleration in the inflation rate over

2010 and in early 2011, as well as its decline at the end of 2011. The base effect associated with the lack of change in tobacco excise duties over the year also affected significantly the moderation of annual inflation.<sup>2</sup>

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. Preliminary data for January 2012.

Sources: NSI, BNB.

Average annual inflation for 2011 was 3.4 per cent (3.0 per cent in 2010) with processed foods (1.2 percentage points) and energy products (1.1 percentage points) contributing mainly to it.

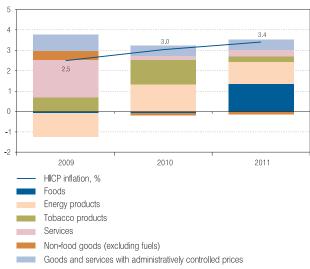
<sup>&</sup>lt;sup>1</sup> The analysis in this section is based on NSI data on HICP.

<sup>&</sup>lt;sup>2</sup> In 2011 smoking tobacco excise duties were raised. However, this product is not included in the consumer basket and therefore has no effect on consumer price inflation.

Core inflation, comprising non-food goods (excluding fuels) and services prices, had a low contribution to the average annual inflation rate (0.2 percentage points).

### Average Annual Inflation and Contribution of Major Goods and Services Groups to It

(%, percentage points)

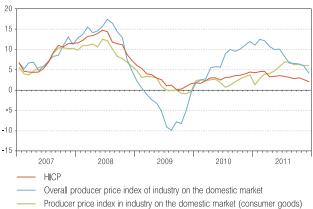


Sources: NSI, BNB.

Reflecting the developments in international markets, dynamics of imported goods prices and of producer prices followed a trend to a gradual growth moderation. In the third quarter of 2011 the import deflator of goods posted an 8.9 per cent annual rate of growth (16 per cent in the first three months of the year) and the overall producer price index in industry for the domestic market slowed down to 4.1 per cent (from 11.9 per cent in the first quarter). PPI in consumer goods production also started to decline gradually on an annual basis.

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

(on corresponding month of previous year, %)



Source: NSI.

Core inflation remained low in 2011, reaching 0.4 per cent by the end of the year, and its average annual growth was 0.3 per cent. The decreased prices of durables and comparatively low services inflation were the key factors driving core inflation dynamics.

Firms' pricing policy which is made according to the specific conditions in the individual markets of goods and services was the major factor for consumer price dynamics. The 2009 survey of wage and price setting mechanisms in non-financial corporations in Bulgaria shows that following competitors' policy is the most widespread practice in setting prices in Bulgaria. This practice prevails in the trade sector, while prices in industry and services sectors are also determined on the basis of costs and a profit margin which firms have chosen themselves.

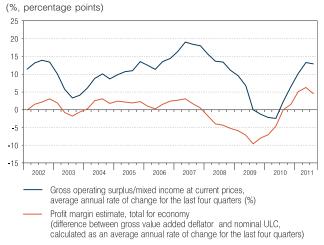
The faster growth rate in value added deflator vis-à-vis the rate of change in nominal unit labour costs, a mid-2010 trend which continued in 2011, may be seen as an indicator of an increase in economy's profit margin.4 This is also evidenced by the change in the share of gross operating surplus in value added. However, there are divergences across sectors. In the industrial sector the share of operating surplus in value added reached its pre-crisis levels in 2011, in the combined trade, transport, hotel and restaurants whereas the share remained lower than its 2007 and 2008 levels. If the trend to a recovery in domestic demand is retained over the medium term, it may be expected that firms in the the trade, transport, hotel and restaurant sector will gradually begin to work with a higher profit margin which will exert a potential inflationary pressure on consumer prices in Bulgaria.

<sup>&</sup>lt;sup>3</sup> The survey was ordered by the Bulgarian National Bank and carried out within the Wage Dynamics Network of the ESCB. Summarised results from the survey on the price setting policy in the non-financial sector in Bulgaria are to be published in the BNB *Discussion Papers* research series.

<sup>&</sup>lt;sup>4</sup> For a more detailed information on gross operating surplus dynamics, considered also as approximation of firms' financial performance, see Behaviour of Firms and Competitiveness section in Chapter 3.

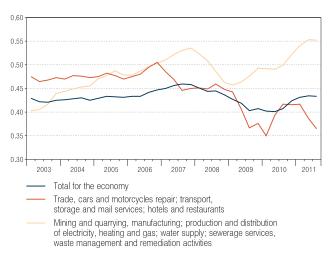
<sup>&</sup>lt;sup>5</sup> Data on gross operating surplus/mixed income are adjusted with a proxy for compensation of self-employed, as calculated on the basis of the number of self-employed and compensation *per* employee in total economy. The share of accordingly adjusted gross operating surplus in value added is based on four-quarter moving average.

### Dynamics of Gross Operating Surplus/Mixed Income and Profit Margin Estimate in Economy



Sources: NSI, BNB.

### Share of Gross Operating Surplus/Mixed Income in Value Added

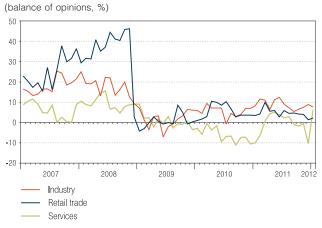


Note: Gross operating surplus/mixed income is adjusted with proxy for compensation of self-employed, as calculated on the basis of the number of self-employed and compensation *per* employee. Data presented as four-quarter moving average.

Sources: NSI, BNB.

Business situation survey data in the second half of 2011 and in early 2012 show lower expectations of selling prise increases compared with the first half of 2011. Industry is the sector where these expectations are most pronounced, while expectations of price rises in trade are sustained at relatively low levels. Managers' sentiment in construction by end-2011 and in early 2012 points again to a decrease in prices after the slight upward dynamics reported previously.

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



Source: NSI.

In the first two quarters of 2012 inflation is expected to retain its relatively low levels. Declines in annual inflation of the most volatile components - fuels and foods - are expected to continue, driven by the base effect of the increase in these goods' prices over the first half of 2011. The decrease in inflation rates is likely to be more pronounced in food prices. Risks to the projection stem from possible oil price rises coupled with the euro depreciation against the US dollar. As a result, energy product prices may increase beyond the expectations and exert an inflationary pressure on the overall level of consumer prices in Bulgaria. Our expectations for the dynamics of inflation reflect adjustments in administratively set prices announced so far. Our expectations are based on the assumption that the structure of the consumer basket in 2012 will be the same as in 2011. Core inflation is expected to follow a trend to a slow increase.

Preliminary data for January 2012 show that inflation of consumer prices remains low. Its annual rate was 1.9 per cent, staying close to the end-2011 level. As regards the major groups of goods and services, inflation acceleration was reported mainly in transport fuels, reflecting primarily the significant increase in oil prices over the review period. Slowing growth in food prices and low core inflation (close to 0 per cent in January) had just the opposite effect on overall inflation. Administratively set prices and tobacco inflation

<sup>&</sup>lt;sup>6</sup> Preliminary data show that the structure of the consumer basket in 2012 underwent no significant changes on 2011. For a more detailed information on the weights of major groups of goods and services in the consumer basket according to HICP in 2011, see *Economic Review*, 2011/1.

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

	as of Dece	flation rate ember 2010 2009 = 100)	Annual int as of Dece (December		for 2	nual inflation 2011 = 100)	as of Jan	flation rate uary 2012 011 = 100)*	
Inflation (%)	4	.4	2	.0	3	.4	1.9		
	Inflation rate by group, %	Contribution, p.p.	Inflation rate by group, %	Contribution. p.p.	Inflation rate by group, %	Contribution, p.p.	Inflation rate by group, %	Contribution, p.p.	
Foods	3.9	0.84	4.0	0.96	6.0	1.36	3.3	0.78	
Processed foods	5.7	0.74	5.5	0.85	8.7	1.23	4.9	0.76	
Unprocessed foods	1.1	0.10	1.2	0.10	1.6	0.13	0.3	0.02	
Services	0.2	0.07	1.1	0.28	1.1	0.32	0.7	0.18	
Catering services	2.2	0.27	3.8	0.19	3.0	0.22	3.7	0.18	
Transport services	-0.8	-0.04	5.0	0.18	3.6	0.14	4.8	0.16	
Telecommunication services	-1.3	-0.05	-1.8	-0.08	-1.8	-0.08	-1.6	-0.07	
Other services	-1.1	-0.11	-0.1	-0.01	0.7	0.04	-0.8	-0.09	
Energy products	18.7	1.74	4.0	0.29	12.3	1.07	5.9	0.48	
Transport fuels	20.5	1.71	4.0	0.28	12.8	0.89	6.0	0.49	
Industrial goods	-1.0	-0.19	-0.4	-0.08	-0.7	-0.15	-0.6	-0.12	
Goods and services with administratively controlled prices	4.3	0.65	4.1	0.63	3.3	0.51	3.9	0.59	
Tobacco products	33.9	1.33	-0.3	-0.02	5.8	0.28	-0.3	-0.02	

<sup>\*</sup> Preliminary data for January 2012.

Sources: NSI, BNB.

remained stable around its level of the last quarter of 2011.

Latest February data point to further increase in already elevated levels of transport fuels prices whereby risks of comparatively higher-than-expected fuel inflation are likely to materialise and this group will exert an upward pressure on the overall inflation in the first two quarters of 2012. Despite this trend, the downward dynamics in food prices and low core inflation are expected to subdue the overall increase in consumer prices. In the first half of 2012 overall consumer price inflation is expected to vary between 1.8 and 2.4 per cent.

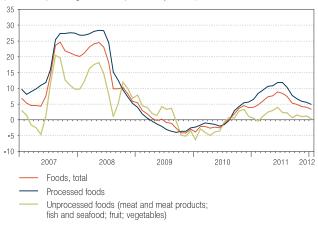
### **Food Prices**

At the end of 2011 food prices reported a rise of 4.0 per cent and had the largest contribution to accumulated total inflation (0.96 percentage points). Average annual food price inflation in 2011 was 6.0 per cent: 8.7 per cent in processed foods and 1.6 per cent in unprocessed foods (meat and meat products, fruit, vegetables and fish). The total contribution of foods to the

average annual inflation was 1.4 percentage points, with bread and cereals, sugar, jams, honey, chocolate and sugar products, milk, dairy products and eggs, as well as animal and vegetable oil and fats contributing most significantly.

#### Rate of Change of Food Price Index

(on corresponding month of previous year, %)



Note: Preliminary data for January 2012. Sources: NSI, BNB.

The trend towards an accelerated increase in the processed food price index, formed in the second half of 2010, continued in the beginning of 2011. In the second half of the year annual inflation of processed products began

<sup>&</sup>lt;sup>7</sup> Based on information on retail prices of fuels published by LUKOIL Bulgaria in February.

to slow down *vis-à-vis* the attained high levels, with stabilisation of international prices (including declines in prices of some commodity groups) and the base effect of 2010 domestic price rises contributing to this.

Unprocessed food inflation remained significantly lower than processed food inflation. It reflected the volatile dynamics of fruit and vegetable prices and the gradual rise in the growth rate of prices in the meat and meat product group.

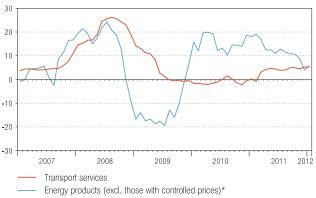
In the first half of 2012 food inflation is projected to continue declining on an annual basis. These developments are expected to reflect the stable international situation coupled with the base effect of high price levels in the beginning of 2011.

### **Energy Product Prices**

Accumulated inflation in transport fuels came to 4.0 per cent by end-2011 with a 0.3 percentage points contribution to overall inflation. Fuel prices reported an annual average increase of 12.8 per cent and had a sizeable contribution to annual inflation (0.9 percentage points).

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

(%, on corresponding month of previous year)



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

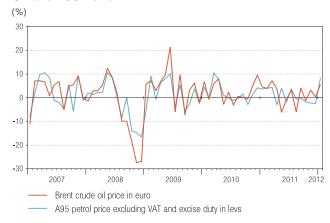
Note: Preliminary data for January 2012.

Sources: NSL BNB

The continuous upward trend in petrol prices on international markets that was very clearly pronounced in the first half of 2011 was a key factor behind the upward dynamics in transport fuel prices, while the impact of higher excise du-

ties on unleaded petrol and diesel in 2011 had an insignificant effect on the increase in prices. The annual inflation in fuels marked a significant decline at the end of 2011, mainly as a result of a base effect related to the 2010 price rise.

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



Sources: ECB, NSI, BNB.

The annual rate of change in energy product prices is expected to moderate in the first quarter of 2012 as a result of the base effect of their sizeable increase reported over the same period of the prior year. Administrative changes related to the increase in diesel excise duty (from BGN 615 to BGN 630 per 1000 litres) in effect as of the beginning of 2012 are expected to have a marginal effect on prices.

The current upward trend in petrol prices, given the depreciation of the euro, poses a risk of further rise in energy products prices which will continue to imply inflationary pressure on consumer prices in Bulgaria.

## Administratively Controlled Prices and Tobacco Product Prices

Accumulated inflation in administratively controlled prices reached 4.1 per cent by end-2011 contributing 0.6 percentage points to overall inflation. The average annual inflation in this group came to 3.3 per cent contributing 0.5 per cent to inflation.

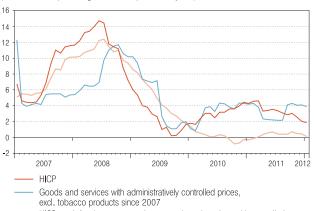
The main adjustments in administratively controlled prices in 2011 included the increase in hospital services and higher fees for visits to GPs which are directly linked to the minimum wage. The appreciation of electricity and higher urban transport and education fares had a relatively lower contribution to inflation by end-2011.

<sup>&</sup>lt;sup>8</sup> Transport fuels have the largest share in the group of energy products; hence, their price developments determine the overall price dynamics of energy products.

In the first two quarters of 2012 inflation in administratively controlled prices is expected to be around 4 per cent on average. The projection takes into account the announced increase in railway transport prices, that of natural gas price and the expected additional increase in medical services prices which will take place due to the increase in the minimum wage in the second quarter of 2012.

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

(%, on corresponding month of previous year)



 excl. tobacco products since 2007
 HICP, excl. foods, energy products, goods and services with controlled prices and tobacco products

Note: Given the fact that tobacco product prices are largely dependent on their administratively controlled excise rates, tobacco products are discussed separately from the group of goods and services with non-controlled prices, regardless of the liberalisation of the market of tobacco products in the beginning 2007. Administratively controlled prices are calculated at elementary aggregates level in the consumer basket. Preliminary data for January 2012.

Sources: NSI, BNB.

Tobacco product prices reported an annual increase of 29.8 per cent in the first quarter of 2011 contributing 1.2 percentage points to inflation as a result of the higher excise duties introduced in 2010. In line with our expectations, this group of goods contributed most to the decline in overall inflation in the second quarter of 2011 due to the base effect of the increase in prices in 2010 and unchanged excise duties in 2011. In 2011 tobacco prices contributed by 0.3 percentage points on an annual basis to overall inflation.

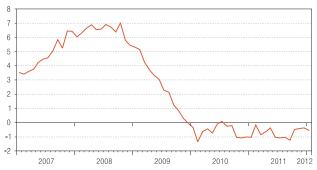
### Non-energy Industrial Goods Prices

In 2011 inflation in non-food goods (excluding fuels) fell marginally on an annual basis. By the end of the year the price index of non-food products went down by 0.4 per cent contributing -0.1 percentage points to overall consumer price inflation. The prices in the group fell by 0.7 per

cent on average on an annual basis compared to 2010.

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

(%, on corresponding month of previous year)



Note: Preliminary data for January 2012.

Sources: NSI, BNB.

While in 2010 the decrease in non-food goods prices was mainly the result of automobile price developments, over the past year the negative dynamics in non-food goods prices reflected both the fall in automobile prices and the depreciation of other consumer durables such as computers, televisions and furniture items. The fall in automobile prices accumulated between end-2008 and end-2011 reached 18 per cent.

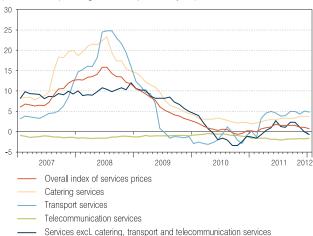
Inflation developments in other non-food goods varied and can be explained by the specific characteristics of different markets but, in general, a slight upward trend in price increases was observed in most groups. In the next two quarters non-energy industrial goods' price developments will depend on the recovery in domestic demand. If the downward trend in prices of durables discontinues in the first half of 2012, the overall inflation in the non-food goods group is likely to be low and positive.

#### **Services Prices**

In 2011 services prices (excluding administratively set prices) reported a lower inflation rate which by the end of 2011 came to 1.1 per cent contributing 0.3 percentage points to inflation. The average annual inflation in services was 1.1 per cent.

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

(%, on corresponding month of previous year)



Note: Preliminary data for January 2012.

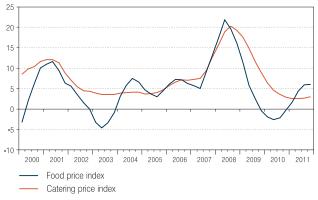
Sources: NSI, BNB.

Inflation dynamics in services reflected the different trends in the main groups having a relatively high weight in the consumer basket.9 Catering and transport services contributed most to the inflation accumulated by end-2011 (0.19 percentage points and 0.18 percentage points respectively). Both groups of services reported higher accumulated inflation at the end of 2011 compared to 2010. One of the factors that can explain these developments is the pass-through of higher costs related to raw materials to enduse prices. Catering price dynamics shows dependence on food product prices and transport services on petrol prices. However, the lower weight of catering (5 per cent in 2011 compared to 12 per cent in 2010) accounted for the lower contribution of this group to overall inflation over the review year.

The index of telecommunication services prices (telephone services, apparatus, internet services) that has been following a continuous downward trend over the recent years reported a decline of 1.8 per cent by end-2011 contributing -0.1 percentage points to overall inflation.

#### Catering and Food Price Developments

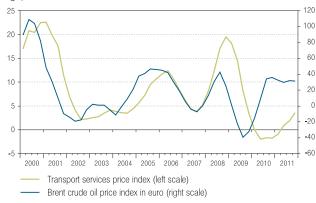
(%, on corresponding period of previous year; 4-quarter moving average)



Sources: NSI, BNB

### Transport Services and Petrol Price Developments

(%, on corresponding period of previous year; 4-quarter moving average)



Sources: NSI, ECB, BNB.

The accumulated services price inflation, excluding catering, transport and telecommunication services came to -0.1 per cent and had a marginal contribution to consumer price inflation in 2011. Price dynamics varied in individual groups of services with medical services and insurances connected with transport reporting the highest positive contribution and accommodation and package holiday services reported the largest negative contribution.

The current data point to a relatively low overall inflation in services in the first half of 2012.

<sup>&</sup>lt;sup>9</sup> In 2011 the services group included the following components with relatively high weight: catering (5 per cent), transport services (4 per cent), telecommunication services (5 per cent), other services (12 per cent). The other services group comprises of different services with a relatively low weight.

## Economic Reading of the EC Scoreboard of Indicators Relevant to the Detection of Macroeconomic Imbalances

On 14 February 2012 the European Commission (EC) published its Alert Mechanism Report (AMR) under the new framework on the prevention and correction of macroeconomic imbalances in the EU based on two new regulations of the European Parliament and the Council. This report aims to provide an initial assessment of the scoreboard containing ten macroeconomic indicators (see the scoreboard) which are used by the EC to identify the EU Member States whose developments require further in-depth review. In the final part of the report, the Commission identifies 12 EU countries, including Bulgaria, for which more in-depth analyses of developments are required. This report provides the basis for possible recommendations to be addressed to the respective EU member state to take corrective actions and also a basis for a possible decision of the Council for opening an excessive imbalances procedure.

#### Scoreboard of Indicators Relevant to the Detection of Macroeconomic Imbalances

			Inter	nal imbal	lances					
2010	Current ac- count balance as a per cent of GDP (three- year moving average)	Net international investment position as a per cent of GDP	Real effective ex- change rate based on HICPdeflators, relative to 35 other industrial countries (three-year percent- age change)	Export market share (five-year percentage change)	Nominal unit labour cost (three- year percentage change)	Real house prices (annual percentage change)	sector credit flow	Private sector debt (as a per cent of GDP)	Public sector debt (as a per cent of GDP)	Unemployment rate (three- year moving average)
Thresholds	+6%/-4	-35%	±5% (euro-area countries) and ±11% (non- euro-area countries)	-6%	+9% (euro-area countries) and +12% (non-euro-area countries)	+6%	15%	160%	60%	10%
Belgium	-0.6	77.8	1.3	-15.4	8.5	0.4	13.1	233	96	7.7
Bulgaria	-11.1	-97.7	10.4	15.8	27.8	-11.1	-0.2	169	16	7.5
Czech Republic	-2.5	-49.0	12.7	12.3	5.1	-3.4	1.7	77	38	6.1
Denmark	3.9	10.3	0.9	-15.3	11.0	0.5	5.8	244	43	5.6
Germany	5.9	38.4	-2.9	-8.3	6.6	-1.0	3.1	128	83	7.5
Estonia	-0.8	-72.8	5.9	-0.9	9.3	-2.1	-8.6	176	7	12.0
Ireland	-2.7	-90.9	-5.0	-12.8	-2.3	-10.5	-4.5	341	93	10.6
Greece	-12.1	-92.5	3.9	-20.0	12.8	-6.8	-0.7	124	145	9.9
Spain	-6.5	-89.5	0.6	-11.6	3.3	-3.8	1.4	227	61	16.5
France	-1.7	-10.0	-1.4	-19.4	7.2	5.1	2.4	160	82	9.0
Italy	-2.8	-23.9	-1.0	-19.0	7.8	-1.4	3.6	126	118	7.6
Cyprus	-12.1	-43.4	0.8	-19.4	7.2	-6.6	30.5	289	62	5.1
Latvia	-0.5	-80.2	8.5	14.0	-0.1	-3.9	-8.8	141	45	14.3
Lithuania	-2.3	-55.9	9.1	13.9	0.8	-8.7	-5.3	81	38	12.5
Luxembourg	6.4	96.5	1.9	3.2	17.3	3.0	-41.8	254	19	4.9
Hungary	-2.1	-112.5	-0.5	1.4	3.9	-6.7	-18.7	155	81	9.7
Malta	-5.4	9.2	-0.6	6.9	7.7	-1.6	6.9	212	69	6.6
Netherlands	5.0	28.0	-1.0	-8.1	7.4	-3.0	-0.7	223	63	3.8
Austria	3.5	-9.8	-1.3	-14.8	8.9	-1.5	6.4	166	72	4.3
Poland	-5.0	-64.0	-0.5	20.1	12.3	-6.1	3.8	74	55	8.3
Portugal	-11.2	-107.5	-2.4	-8.6	5.1	0.1	3.3	249	93	10.4
Romania	-6.6	-64.2	-10.4	21.4	22.1	-12.1	1.7	78	31	6.6
Slovenia	-3.0	-35.7	2.3	-5.9	15.7	0.7	1.8	129	39	5.9
Slovakia	-4.1	-66.2	12.1	32.6	10.1	-4.9	3.3	69	41	12.0
Finland	2.1	9.9	0.3	-18.7	12.3	6.8	6.8	178	48	7.7
Sweden	7.5	-6.7	-2.5	-11.1	6.0	6.3	2.6	237	40	7.6
United Kingdom	-2.1	-23.8	-19.7	-24.3	11.3	3.4	3.3	212	80	7.0

Note: Based on data as of 30 January 2012.

Source: EC.

<sup>&</sup>lt;sup>1</sup> Regulation (EU) No 1174/2011 of the European Parliament and of the Council of 16 November 2011 on enforcement measures to correct excessive macroeconomic imbalances in the euro area and Regulation (EU) No 1176/2011 of the European Parliament and of the Council of 16 November 2011 on the prevention and correction of macroeconomic imbalances.

The BNB presented some of the main shortcomings of the scoreboard and risks related to its mechanical reading in BNB *Economic Review*, issue 3 of 2011.<sup>2</sup> In accordance with the requirements of Regulation (EU) 1176/2011 (Article 3, paragraph 2) the European Commission presents in its report an economic reading of the scoreboard. This requirement is intended to reduce the shortcomings and risks stemming from its automatic implementation. Namely, the mechanical interpretation of the above indicators in the light of their reported dynamics *vis-à-vis* the set upper and lower thresholds, may result in misleading and even wrong conclusions. The EC assessment should reflect the historical dynamics of these indicators, their recent developments and medium-term expectations. In addition, the assessment should be comprehensive given the available additional information and country-specific characteristics. In this context, Article 4, paragraph 4 of the Regulation states:

'4. In undertaking its economic reading of the scoreboard in the alert mechanism, the Commission shall pay close attention to developments in the real economy, including economic growth, employment and unemployment performance, nominal and real convergence inside and outside the euro area, productivity developments and its relevant drivers such as research and development and foreign and domestic investment, as well as sectoral developments including energy, which affect GDP and current account performance.'

According to our economic reading of the scoreboard, the EC report does not capture adequately the characteristics of the Bulgarian economic development. It does not contain a satisfactory economic assessment of the indicators and their interrelatedness and fails to present important additional information. The main shortcomings related to the risk of mechanical interpretation of the scoreboard outlined by the BNB have not been overcome, namely: i) insufficient consideration of the effects of real and nominal convergence processes; ii) disregarding important links due to the very limited set of indicators; iii) backward-looking rather than forward-looking analysis. In addition to these shortcomings, the EC report poses another problem: lack of clear criteria on the basis of which the EC assesses whether a Member State 'may be affected by, or may be at risk of being affected by, imbalances' (Article 5, paragraph 1 of the Regulation) and offers further in-depth review of this Member State.

With a view to the above shortcomings contained in the economic reading of the scoreboard and with the intention to support eventually better understanding and analyses of the characteristics of the countries with ongoing convergence processes, we present some underestimated aspects of the economic reading of the analysed indicators. In the case of Bulgaria, we consider that the significance of export dynamics in assessing the competitive position of economy is underestimated, and the trends in the current account of the balance of payments. The net international investment position and unit labour costs (ULC) are not explained and assessed deeply.

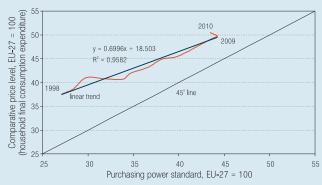
#### The Effect of Real and Nominal Convergence Processes

Real and nominal convergence processes (see Chart 1) have a direct effect on all indicators included in the scoreboard, and insufficient consideration of this effect in the economic reading of their values leads to formulation of wrong and misleading conclusions. It is important to note that in the 1998 to 2010 period, the rate of convergence

process in Bulgaria was faster in real than in nominal terms. The linear regression analysis shows that over this period each 1 percentage point of catching up in real terms to the average GDP *per* capita within the EU corresponds to 0.7 percentage point convergence of the relative price level to the EU average.

The free movement of persons, goods, capital and services within the EU in the context of different levels of productivity and income in individual countries is the main driver for the higher investment activity and outpacing economic dynamics in catching-up Member States. Foreign direct investment inflow in Bulgaria reflects the higher rate of return on equity and its increasing integration to the single European market. It is also an important factor behind the developments in the indicators included in the scoreboard.

Chart 1: Real and Nominal Convergence of the Bulgarian Economy



Sources: Eurostat, BNB.

The competitiveness analysis of the Bulgarian economy and the interpretation of the indicators included in the scoreboard should cover and give more weight to the role of FDI for the net borrowing from the rest of the world and for the dynamics of: the net investment position of Bulgaria, exports and international competitive positions of

 $<sup>^{2}</sup>$  See the box in the  $\ensuremath{\textit{Economic Review}},$  issue 3 of 2011, p. 11-14.

the Bulgarian industry, labour productivity and real unit labour costs. The dynamics of these macroeconomic indicators, which show important aspects of Bulgaria's economic development but have been underestimated by the European Commission in its economic reading, is presented in the following table.

#### Additional Indicators Relevant to the Economic Reading of the Scoreboard

Bulgaria	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011*	2012*	2001– 2010 average
Export market shares (annual percentage change)	17.0	13.2	20.4	22.5	9.3	10.7	14.9	11.2	1.3	-4.3	9.3**	-0.8**	11.6
Export market shares (physical volumes), annual percentage change	12.2	3.6	5.7	-0.4	2.4	-0.3	1.0	2.4	-0.1	3.9			3.0
Net borrowing/lending from/to the rest of the world (balance of payments current and capital account), % of GDP	-5.5	-2.4	-5.3	-5.6	-10.6	-16.9	-27.1	-22.3	-7.6	-0.5	3.2	2.2	-10.4
FDI inflow, % of GDP	5.0	3.8	10.1	13.4	13.6	23.5	29.4	18.9	9.4	4.9	2.7	3.3	13.2
Net international investment position (excluding direct investment), % of GDP	-8.5	-5.3	0.7	10.2	6.0	8.1	0.8	-12.0	-6.8	-0.6	0.6	3.1	-0.7
Labour productivity (annual percentage change)	4.9	4.4	2.5	4.1	3.6	3.1	3.2	3.5	-2.9	6.4	5.3	2.6	3.3
Gap in annual growth of labour productivity between Bulgaria and the EU, percentage points	3.7	3.5	1.5	2.2	2.6	1.4	1.8	4.1	-0.4	3.9	4.1	2.1	2.4
Real unit labour costs (total for economy), annual percentage change	1.8	-3.3	-0.6	-2.1	-1.7	-3.5	0.1	3.6	8.1	-2.3	-1.6	0.5	0.0
Real unit labour costs (industry), annual percentage change	-6.7	-8.1	-8.5	-3.0	-6.7	-2.6	-6.3	12.1	-6.0	-5.5			-4.1

<sup>\*</sup> BNB projections.

The role of FDI in the analysis of Bulgaria's economic development stems from the fact that the average FDI inflow for the 2001–2010 period was 13.2 per cent of GDP and that the net investment position, less assets and liabilities related to direct investment, fluctuated over the same period around zero, reaching -0.6 per cent of GDP in 2010. With FDI reported in liabilities and assets, the net investment position to GDP ratio was -98 per cent. Net borrowing from the rest of the world in the period before the global economic crisis<sup>3</sup> also reflects largely the inflow of foreign direct investment. With the fall of FDI inflow and the decreased domestic investment demand, the total deficit on the balance of payments current and capital accounts also started to decline, reaching 0.5 per cent of GDP in 2010 and turning to a surplus of 3.2 per cent of GDP in 2011.

As regards the export dynamics, the economic reading of indicators should have stressed the sustainable increase in the Bulgarian market share both in volumes (in value and physical terms) of world exports and in total imports from EU Member States. One of the main factors driving this trend is the outstripping growth rate of labour productivity in Bulgaria *vis-à-vis* the EU average, with the average annual difference reaching 2.4 percentage points over the ten years up to 2010. This is the main reason behind the equilibrium upward trend in both the real effective exchange rate (REER)<sup>4</sup>, reflecting real convergence and the nominal unit labour costs reflecting nominal convergence. The sustained cost competitiveness of the Bulgarian economy and strengthened competitive positions of Bulgaria's industrial sector are reflected in the dynamics of real unit labour costs, its value for total economy did not change over the ten-year period to 2010, while it decreased in industry at an average annual rate of 4.1 per cent.

### Current Account, Net Investment Position and FDI

In the several years before and after Bulgaria's accession to the European Union (2005–2008) a process of widening the balance of payments current account deficit was observed due mainly to acceleration in real convergence. The increasing FDI flows supported the strong domestic investment demand and accelerated imports of investment goods. Current account deficit was entirely financed by FDI inflow consistent with the catching-up process. Hence, the deficit posed no threat to the sustainable economic development of Bulgaria. This was confirmed during the

<sup>\*\*</sup> EC projections of exports of goods only. Sources: BNB, EC.

<sup>&</sup>lt;sup>3</sup> In this analysis, the global economic crisis is considered to be the 2008-2009 crisis.

<sup>&</sup>lt;sup>4</sup> Namely, REER appreciation.

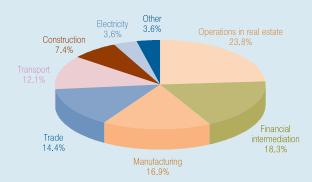
crisis when the current account deficit adjustment took place without any shocks and in line with our expectations.

After the ratification of the Treaty on Accession of the Republic of Bulgaria to the European Union in 2005, FDI flows increased mainly due to expectations of relatively high risk-adjusted returns and expectations of high growth based also on the almost completed restructuring of the Bulgarian economy (following the fast privatisation in 1998–2001). Financial inflows were directed mainly to the private sector reflecting the need for replacing and modernising of old production equipment, and a significant portion of them were directed to the export-oriented sector (see Chart 2).

The global economic crisis was a strong external shock to the Bulgarian economy, testing its resilience in the context of comparatively large external imbalances in the years before the crisis. In practice, the trade deficit declined smoothly and without any shocks. Initially, both exports and imports contracted, exports decreasing slower than imports, while subsequently exports began to recover at faster rates.<sup>5</sup> As a result, the current account deficit narrowed to 1.3 per cent of GDP in 2010, turning to a surplus in 2011 of 1.9 per cent. Over the projection horizon, the surplus is expected to remain at low positive levels (see Chart 3 on BNB projections and Chart 4 which includes also the European Commission projections. The current account adjustment reflected the gradual decline in FDI inflows and the net repayment of external debt by banks and in 2011 also by non-financial corporations.

FDI inflow remains positive (in 2011 net FDI amounted to 2.4 per cent of GDP) though registering substantially lower levels than in the three years before the crisis. In 2011 the low level of FDI was due to weaker gross capital inflows and net repayment of intercompany loans in accordance with the repayment schedules of corporations. With the moderation in economic activity and weaker investment demand in the context of increased savings rate, it became possible to repay foreign liabilities. Relatively high internal savings provided excess liquidity to local banks, which they used to repay loans to non-resident parent banks. As a result of these flows on the balance of payments financial account, gross external debt began to decrease (from 105 per cent of GDP as of December 2008 to 92 per cent as of November 2011), with the banking sector contributing most sizably to this.

Chart 2: FDI by Economic Sector in 2008

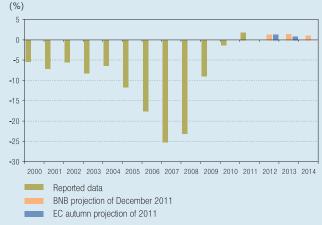


Source: BNB.

Chart 3: Savings, Investment and Current Account Balance to GDP Ratio



Chart 4: Current Account Balance as a Share of GDP



Sources: BNB, EC.

<sup>&</sup>lt;sup>5</sup> An initial fall in exports over the fourth quarter of 2008 was reported in many countries. Over the same period world trade declined by almost 20 per cent.

### Export Dynamics and Competitive Positions of the Bulgarian Economy

In the period before and after the global economic crisis, the Bulgarian economy retained its competitive position. Exports were the main driving factor for its recovery (its potential was built and strengthened in the years of large investment and significant FDI inflows).

Objectivity in assessing the competitive position of the economy may be reached by using a broad range of indicators which take into account specific circumstances related to the economic development of the country, undergoing a process of real and nominal convergence. An objective assessment is supposed to analyse the deviations of these indicators from their equilibrium trend. The assessment needs to be based on an analysis of a broad set of indicators intended to overcome the limitations of using only the real effective exchange rate as a measure of competitiveness. Important aspects and signs of the economy's competitiveness are the quality and variety of exported

### Chart 5: Real Effective Exchange Rate Based on Unit Labour Costs

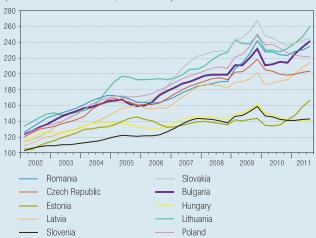
(1999 = 100)220 200 180 160 140 120 100 80 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 Czech Republic Bulgaria Estonia Hungary Latvia Lithuania Slovenia Poland

Note: Member States are listed in descending order on the basis of the indicator in the last period.

Source: EC, January 2012.

### Chart 6: Export Shares of New EU Member States in the Imports of EU-27

(index on an annual basis, 2000 = 100)



Note: Member States are listed in descending order on the basis of the indicator in the last period.

Source: EC.

products, export dynamics and the country's market share in international markets, the flexibility of the internal market for goods and factors of production, labour productivity dynamics, as well as the economy's resilience to shocks.

Real effective exchange rates in the new EU Member States over the last ten years have been on an upward trend. Empirical evidence shows that this is mainly due to fundamentals and to the successful nominal and real convergence attained through higher growth in labour productivity compared with the EU average (weighted by the volumes of trade realised by trading partners). The increase in REER needs to be viewed as an equilibrium development driven by fundamental factors rather than a loss of competitiveness.

Data on REER for the total economy (based on nominal unit labour costs) and on REER for manufacturing (based on nominal unit wage costs in manufacturing) show that REER in Bulgaria appreciated compared to 1999 but not to the extent observed in other Member States, including those with floating exchange rate (see Chart 5).<sup>6</sup>

In the medium term, REER in the new EU Member States is expected to continue appreciating as a result of and depending on maintaining a positive differential in labour productivity growth and real convergence speed *vis-à-vis* advanced EU countries.

Dynamics of market shares in EU imports was similar in all new EU Member States. Increases in these shares were observed again after the third quarter of 2010. Bulgaria's market share was marked by upward dynamics and the value of the base index reached 241 per cent (2000 = 100) in September 2011 (see Chart 6).

The dynamics of total exports in euro of the new EU Member States also does not differ significantly by country. International trade contracted in a synchronised manner in all of them from end-2008 and in 2009 which is explained by the common shock of the global crisis: the significant drop in external demand. Sustainable growth in exports was observed since the beginning of 2010, with average annual growth by end-2011 reaching almost 25 per cent in the ten new Member States.

<sup>&</sup>lt;sup>6</sup> See also Bulgaria's Convergence Programme for the 2011–2014 period, Appendix 2, Competitiveness of the Bulgarian Economy.

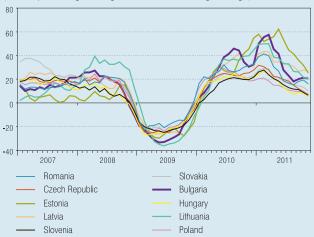
In Bulgaria, this rate was 32 per cent. As of November 2011 Bulgaria registered one of the highest growth rates in exports compared to the other new Member States (see Chart 7).

The persistently increasing technological level and quality of exported products evidence the improving export competitiveness. The share of high- and medium-technology products in exports rose from 20.7 per cent in 2000 to 27.6 per cent in 2010. Over the same period, Bulgaria reported the strongest increase in the unit value of exports among the new Member States which in combination with the robust export dynamics evidences the improving quality of production.

Based on the analysis showing an upward trend in Bulgaria's competitive positions, we can make a conclusion about the sustainability of the current account deficit adjustment. On the basis of the changed model of Bulgarian economic growth and the expected moderate positive inflow of FDI to Bulgaria in the medium term, the overall current and capital account balance is projected to remain positive.

### Chart 7: Total Export Dynamics in Euro of the New EU Member States

(annual percentage change, three-month moving average)



Note: Member States are listed in descending order on the basis of the indicator in the last period.

Sources: Eurostat, BNB.

### Labour Market Flexibility

Over the years preceding the global financial and economic crisis – a period in which Bulgarian economy posted high economic growth – nominal unit labour costs (see Chart 8) followed an upward trend, reflecting real and nominal convergence. Nominal ULC in the manufacturing sector rose marginally, while real ULC decreased. In response to the strong decline in external demand following the global crisis, industry was one of the first sectors in which rapid cost-cutting measures, including reduction of labour costs. This ensured an adequate adjustment of nominal and real ULC in the industry sector (in 2011 real ULC in industry were at historical low levels) and hence helped preserve the cost competitiveness of the Bulgarian economy in 2008–2011.

#### Chart 8: Nominal Unit Labour Costs



Sources: NSI, BNB.

# Chart 9: Share of Compensation of Employees in Gross Value Added at Current Prices Relative to 2000: Cumulative Change



Note: The ratio for 2011 is calculated on the basis of available data as of the third quarter of 2011.

Sources: Eurostat, BNB.

Furthermore, labour cost dynamics led to a cumulative decline in the share of compensation of employees in industry's value added (see Chart 9) which allowed competitiveness to be preserved amid a continuing significant increase in labour productivity.

### Chart 10: Gross Operating Surplus and Mixed Income at Current Prices

(billion BGN; seasonally adjusted data)



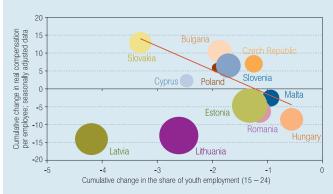
Sources: NSI, BNB,

Bulgarian enterprises' flexibility during the global economic crisis helped maintain sustainable labour productivity growth despite its temporary worsening in 2009, which in tandem with the adequate employment and wage adjustments pushed down the growth rate of nominal ULC in 2010. Gross operating surplus in the economy (see Chart 10) increased, with its level in industry exceeding that in 2007, while still lagging behind pre-crisis levels in construction and trade.

Between 2009 and 2011 the average wage growth was affected by institutional factors as the annual increases in minimum wage and minimum insurance income, as well as by structural effects driven by changes in the employment structure mainly due to their uneven allocation by sector, age/skills. The latter resulted from the significant reduction in youth employment (see Charts 11–13) and among workers from sectors with relatively lower wages (mainly in

2009 and 2010). Moreover, at the end of 2010 and in 2011 the share of higher-paid sectors (information and communication, telecommunications and financial and insurance activities) increased (see Chart 14). These developments were also observed in other EU Member States with similar declines in economic activity. Some cross-country differences correspond to the differences in wages by age group and by country, and to the degree of nominal convergence *vis-à-vis* the average EU level.

Chart 11: Correlation between Changes in the Share of Youth Employment and Real Compensation *per* Employee from the Beginning of the Decline in GDP to the Third Quarter of 2011\*

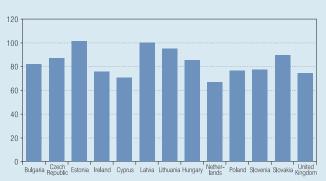


\* In interpreting this chart, it should be taken into account the degree of the decline in GDP in 2008–2009, the initial conditions, the degree of convergence in terms of compensation *per* employee against the average EU level and the differential between young peoples' wages and the average wage in each country (see Charts12–13).

Note: Circles indicate the degree of maximum decline in GDP over 2008–2009, i.e. the cumulative decline from top to bottom. The line refers to the countries reporting similar declines in GDP and does not include the Baltic countries.

Sources: Eurostat, BNB.

Chart 12: Hourly Compensation of Employees Aged up to 30 *vis-à-vis* average Hourly Compensation for Relevant Country, 2006 = 100



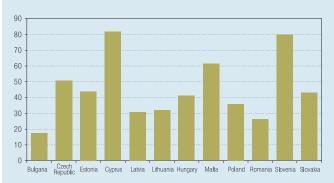
Source: Eurostat.

The expected decrease in the share of unregistered employed over the medium term due to the increased control and inspections specified in the National Reform Programme, as well as structural effects of the still ongoing changes in the structure of employment are likely to exert an upward pressure on the average wage level. However, the increased uncertainty about the global economic situation and the expected low inflation in the present period of high unemployment and discourage-

ment are most likely to subdue wage growth over the medium term. Hence, there are no risks stemming from loss of competitiveness due to the nominal developments in ULC (real ULC growth remains negative) as well as due to the labour market flexibility.

<sup>&</sup>lt;sup>7</sup> Redundancies were most clearly pronounced in sectors such as construction where employment growth was higher than the average prior to the crisis, but after its outset, a strong decline in investment activity was recorded. Therefore, wage cuts could not offset the employment adjustments in the construction sector.

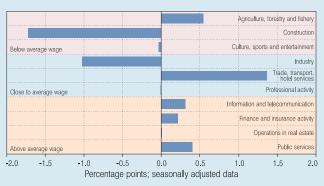
Chart 13: Nominal Compensation *per* Employee *vis-à-vis* Average EU-27 Level, 2010 = 100



Note: The average EU-27 level excludes Austria and Romania. Data on Romania refer to 2009.

Source: Eurostat

Chart 14: Change in the Share of Employed by Sector in the Third Quarter of 2011 *vis-à-vis* the Average for 2008



Note: This chart depicts the change in the share of employed by sector in the total employment for the period from 2008 to the third quarter of 2011. Sectors are grouped in three categories based on the difference in the average wage level in the sector over the first to third quarters of 2011 *vis-à-vis* the average value for total economy. The group close to average wage is defined as +/- 15% difference, while differences vary from -39% to 121%.

Sources: Eurostat, BNB.

#### Conclusions

In the 2005–2008 period the account deficit of BoP increased as a result of higher FDI inflow attracted by the high rate of return of capital. Investment activity in Bulgaria accelerated rapidly financed mainly by the FDI inflow, but was also associated with investment goods imports growth and trade balance and current account worsening. FDI flows covered fully the current account deficit over the most of the period. Financial flows were directed both at the services sector and export-oriented industrial sectors.

Thanks to the high investment activity, the Bulgarian economy's competitive position and its export potential increased over the period. This reflected in the higher growth rate of Bulgaria's labour productivity relative to the EU average and the sustainable increase in the country's market share in the volume of world exports and in the total imports of EU Member States.

Based on this economic analysis, a conclusion may be drawn that the dynamics of the indicators for Bulgaria, which are included in the scoreboard to detect macroeconomic imbalances, reflects the real and nominal convergence processes. These indicators show no loss of competitiveness of the Bulgarian economy. Accordingly, our assessment is that the adjustment of past imbalances, which took place in an orderly manner during the global crisis, is not short-lived but sustainable in nature.

The above economic reading of the scoreboard for Bulgaria which takes into account real and nominal convergence processes and medium-term projections of the economic trends in Bulgaria gives grounds to make the following assessment: the Bulgarian economy has retained its competitiveness, currently it is not affected and is not exposed to a risk over the medium term to be affected (based on the projections, including those of the EC) by the macroeconomic imbalances, subject to analysis under the new procedure on the prevention and correction of macroeconomic imbalances in the EU Member States.