

# Economic Review

2/2010

BULGARIAN  
NATIONAL  
BANK



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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 2/2010 was presented to the BNB Governing Council at its 1 July 2010 meeting. It employs statistical data published up to 1 July 2010.

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

The *Economic Review* is available at the BNB website, *Periodical Publications* sub-menu. Please address notes, comments and suggestions to the BNB Economic Research and Projections Directorate at 1000 Sofia, 1, Knyaz Alexander I Square, or to [econreview@bnbank.org](mailto:econreview@bnbank.org).

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## Abbreviations

APRC	Annual percentage rate of charge
BIR	Base interest rate
BOP	balance of payments
BTC	Bulgarian Telecommunications Company
b.p.	basis points
CEECs	Central and East European countries
CEFTA	Central European Free Trade Association
CIF	Cost, insurance, freight
CIS	Commonwealth of Independent States
CZK	Czech koruna
DXY	an index measuring the exchange rate of the US dollar against the basket of six major currencies
EA	Employment Agency
EC	European Commission
ECB	European Central Bank
EIB	European Investment Bank
EMBI	Emerging Markets Bond Index
EONIA	Euro OverNight Index Average
EU	European Union
EURIBOR	Euro Interbank Offered Rate
FDI	foreign direct investment
FOB	Free on board
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
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

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International environment continued to improve, but uncertainty and risks to the sustainable economic development remained high. Growing concerns about a possible worsening of the fiscal positions of some euro area countries intensified international financial market tensions (see the *Greece's Fiscal Problems and the Reaction of International Financial Markets Thereto* box). As a result of the faster-than-expected rise in world demand, currently, the tensions on the government bond market do not affect short-term prospects to global economic growth, but pose upside risks. International prices of major raw materials started to rise in parallel with the recovery of economic activity, which resulted in a higher overall inflation rate.

In the first quarter of 2010 real GDP in Bulgaria declined by 3.6 per cent on an annual basis. Household consumption and investments into fixed assets sustained their negative contribution to GDP dynamics, which was partially offset by the increase in inventories, net exports and government consumption. In the second half of 2010 economic growth is expected to start to recover slowly due to the improved international environment, the positive contribution to growth from net exports and the increase in investment in physical assets. Firms will continue to restructure their expenditure, including labour costs. As a result, the level of unemployment is expected to remain at relatively high levels until the end of 2010. Uncertainty regarding income prospects and higher household saving ratio will continue to restrict consumption growth.

The continuous positive growth in exports of goods and services is indicative of the fact that Bulgarian firms retained their competitive positions. In the first quarter of 2010 the market share of Bulgarian goods in total imports of EU Member States came to 0.68 per cent, rising by 0.57 per cent on the corresponding period of the prior year. The positive growth of exports of goods and services will remain the key factor behind the further decrease in the current and capital account deficit as a percentage of GDP on an annual basis in the second half of the year, which gives grounds to claim that Bulgaria's external position is sustainable. In the third and fourth quarters of 2010 the net foreign direct investment flow is expected to be positive, even though lower compared to the corresponding period in 2009. As a result the foreign direct investment to GDP ratio on an annual basis will decline.

Broad money retained their upward trend, posting an increase of 8.2 per cent on an annual basis as of May. In the third and fourth quarters of 2010 the annual broad money growth is expected to stay close to its current levels. The downward trend in credit growth was sustained due to the weak economic activity and the great uncertainty which resulted in reduced credit demand and contributed to the tightening of banks' credit standards. The reduction in interest rates on deposits will gradually result in lower lending rates.

The cash balance on the consolidated fiscal programme amounted to BGN -1360.0 million in the January – May 2010 period. Despite the government measures for fiscal consolidation, total budget expenditure in the first five months of the year went up by 2.2 per cent on an annual basis, while total revenue and grants decreased by 15.3 per cent. The increase in current non-interest expenditure reported in the first quarter of 2010 resulted in a positive contribution of 1.1 percentage points of government consumption to GDP dynamics in real terms. Following the deterioration of the budget position in the first months of 2010 the government took a decision and deposited in the National Assembly a Draft Law on Amendment to the 2010 State Budget Law that envisages the cash deficit on the consolidated programme to reach BGN 3.3 billion or 4.8 per cent of projected GDP (see the *Major Parametres of the Draft Law on the Amendment to the 2010 State Budget Law of the Republic of Bulgaria* box).

Annual inflation accelerated to 3 per cent in May (from 1.6 per cent at the end of 2009), which was mainly the result of the increase in fuel and tobacco products prices. In the third and fourth quarters of 2010 annual inflation is expected to remain close to its current level, with tobacco products, transport fuels and administratively controlled prices making a major positive contribution to this effect.

In the beginning of the second quarter some positive trends towards a recovery of individual industries were observed. In April the total volume of industrial enterprises exhibited positive growth due to the accelerated volume of exports and gradually moderating rate of decline in domestic market sales. Production capacity utilization in the industrial sector increased from 64.5 per cent in early 2010 to 68.9 per cent in April. The level of registered unemployed started to decline reaching 9.53 per cent in May from 9.95 in April. Based on the National Employment Agency data the competition for occupying vacancies started to weaken, with the number of unemployed applying for a vacant job decreasing from 30 persons in February to 19 in April and 17 in May. The April 2010 NSI consumer survey also shows positive signals. It suggests that consumer confidence rose as a result of improved expectations about household financial state, the general economic performance and unemployment dynamics. Managers in the industrial and construction sectors estimate an increase in the number of staff in the following months.

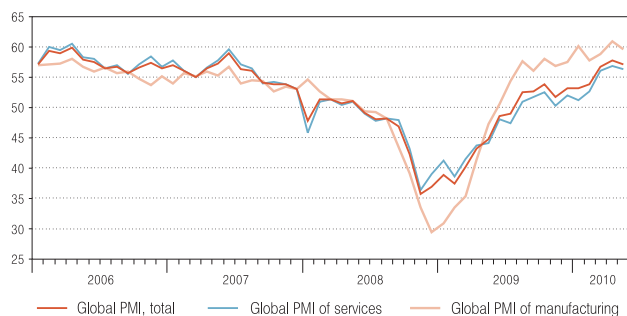
These positive trends are expected to be sustained in the second half of the year and to enhance domestic demand and boost the output in the sectors depending on its dynamics accordingly. However, the sustainability of these positive trends is still uncertain. Currently, the tensions in international financial markets associated with the worsening fiscal position in some euro area countries have no direct impact on short-term prospects to global economic growth prospects, but create uncertainty and pose risks to global recovery process and correspondingly to the speed of the recovery in the Bulgarian economy.

# 1. External Environment

Global economic conditions continued to improve over the first half of 2010. Despite the positive trends to global economic recovery, the risks and uncertainty regarding a sustainable economic development remained on the upside. As a result of the increasing concerns about a possible worsening and instability of fiscal positions across some euro area countries, the tensions in the world financial markets further increased. Currently, tensions in the government bond market have not exerted a direct pressure on short-term prospects of the global economic growth due to faster-than-expected rise in world demand.

Global economic indicators slightly decreased in May. Concerns about a possible worsening and instability of fiscal positions across some euro area countries pushed up the volatility and tensions in the global financial markets and increased the uncertainty around the global economic development. In addition, the measures taken by the Chinese government to more moderate growth in economy also contributed to the slowdown in the pace of improvement of the global business climate over the second quarter of 2010. In spite of this dynamics, high expectations of growth and optimism about the output, employment and new orders were sustained.

## Global PMI

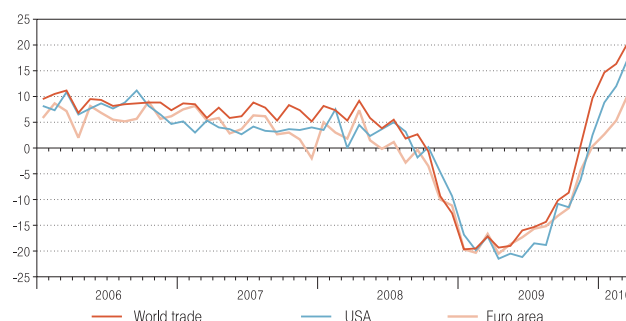


Source: JP Morgan.

In the first quarter of 2010 the economic conditions in the USA continued to be more favourable compared with the other developed economies. The Asian region countries posted high growth rates. The June 2010 ECB forecasts of euro area real GDP growth remained almost unchanged *vis-à-vis* the previous forecast cycle (March 2010), ranging between 0.7 per cent and 1.3 per cent for 2010 and 1.0 per cent and 2.2 per cent for 2011.

## World Trade

(annual rate of volume growth, %)



Source: CPB Netherlands Bureau for Economic Policy Analysis.

In April world trade continued to recover rapidly, posting a 20 per cent growth rate on an annual basis, while world industrial output rose by 10.6 per cent.<sup>1</sup> Global inflation continued to accelerate to reach 3.7 per cent<sup>2</sup> on an annual basis in March 2010. World prices of major raw materials and commodities retained their upward trend, albeit at lower growth rates.

## Euro Area

In the first quarter of 2010 euro area real GDP growth was 0.6 per cent on an annual basis against the declines observed in the previous five consecutive quarters. On a quarterly basis, real GDP rose by 0.2 per cent *vis-à-vis* 0.1 per cent in the fourth quarter of 2009. Inventories had a positive contribution to this growth, while net exports and domestic demand retained their negative contribution.

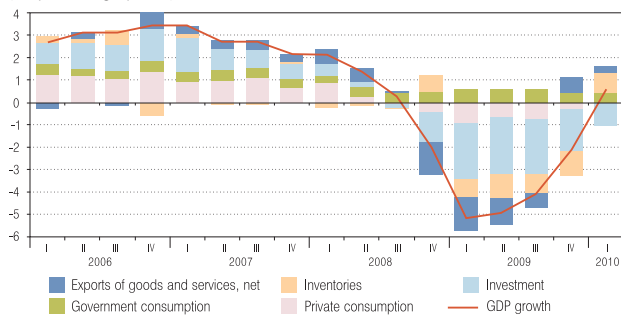
<sup>1</sup> Based on World Bank data as of 14 June.

<sup>2</sup> Based on IMF data as of 21 June.



### Contribution of GDP to Euro Area Growth by Component (Quarterly)

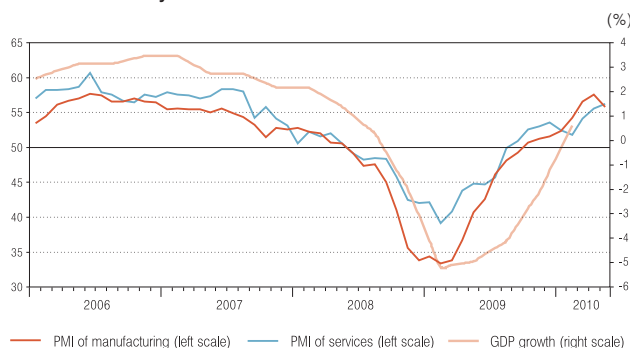
(%, percentage points)



Source: Eurostat.

In the second quarter of 2010 the trend toward improving the leading euro area indicators was retained, though certain fluctuations were reported in individual months. In May the economic sentiment index and the EC business climate indicator reached 98.4 (the previous value: 100.6) and 0.34 (the previous value: 0.28) respectively. According to preliminary estimates for June, the composite PMI (Purchasing Managers' Index) came to 56 (56.4 in May and 57.3 in April). Despite the slight decline, PMI indices remained above the level of 50 which is considered an indicator of strengthening economic activity.

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

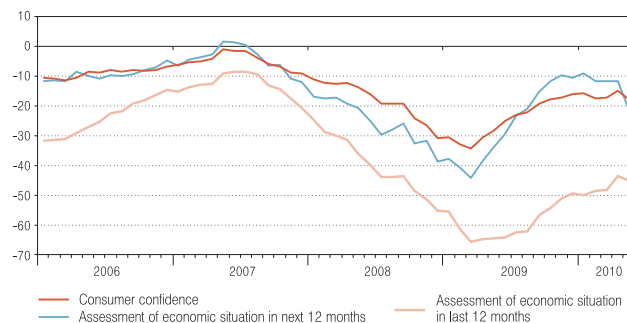


Sources: European Commission and Eurostat.

Recent ECB forecasts for the euro area point to growth acceleration in the second quarter of the year. In 2010 the projected GDP annual growth will vary between 0.7 per cent and 1.3 per cent (0.4–1.2 per cent according to the March forecast) and between 0.2 per cent and 2.2 per cent in the next year (March forecast: 0.5–2.5 per cent). EC forecasts are also positive, pointing to a gradual further recovering of the EU economy. The euro area growth is expected to be 0.9 per cent in 2010 and 1.5 per cent in 2011.

The upward revision for the current year may be explained by the improved external environment, while the weak domestic demand is shown as a factor holding up the recovery. The European Commission conclusion is that a high degree of uncertainty about economic recovery exists depending on the stability of financial markets.

### Euro Area Consumer Confidence Indices

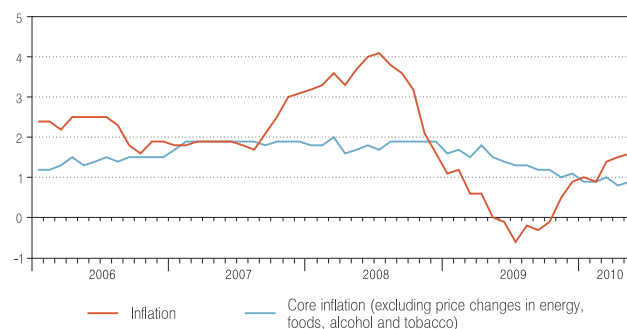


Source: European Commission

In May euro area inflation continued to accelerate to 1.6 per cent on an annual basis against 1.4 per cent in March and 1.5 per cent in April 2010. Core inflation stabilized to reach 0.8 per cent on an annual basis in May (*vis-à-vis* 0.9 per cent in March 2010 and 0.7 per cent in April). According to the ECB forecast, annual inflation will range between 1.4 per cent and 1.6 per cent in 2010 (March forecast: 0.8–1.6 per cent) and between 1 per cent and 2.2 per cent in 2011 (March forecast: 0.9–2.1 per cent). Expectations of inflation were revised upwards, reflecting the effect of higher world prices of major raw materials.

### Euro Area Inflation Rate

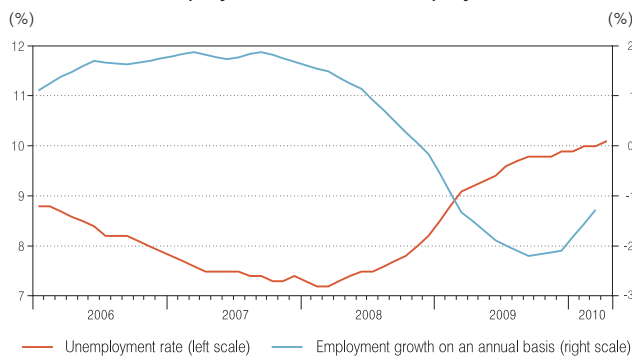
(percentage change on same period of previous year)



Source: Eurostat.

The EC forecast of euro area inflation for 2010 and 2011 was also revised upwards to 1.5 per cent and 1.7 per cent (previous forecast: 1.1 per cent and 1.5 per cent).

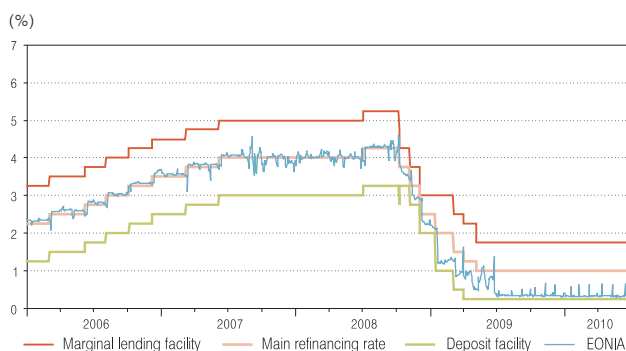
## Euro Area Unemployment Rate and Employment Growth



Source: Eurostat.

In the first half of the year the ECB left unchanged the main refinancing operations rate at 1.00 per cent. The initial strategy directed at withdrawing the additional liquidity provided by the ECB was changed by introducing three-month refinancing operations with full allotment until the end-September. This decision was driven by the unfavourable developments in the euro area government securities market.

## ECB Interest Rates

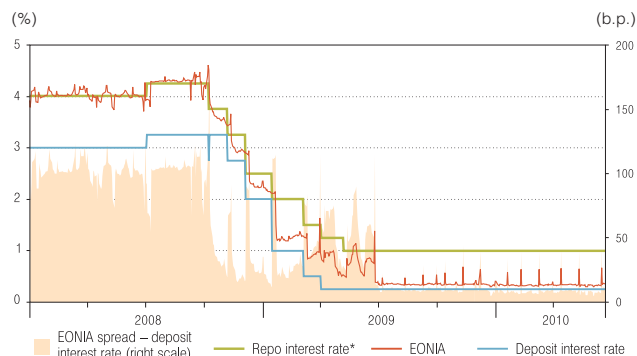


Source: Bloomberg.

On 8 April 2010 the ECB decided to keep the requirement for minimum permissible credit rating of BBB- applied to the assets accepted as collateral in refinancing operations.<sup>3</sup> In addition, as of early 2011 the central bank will introduce a special table for determining haircuts for lowest-rated investment grade instruments (between BBB+ and BBB-). Consequently, the credit rating requirement was temporarily repealed in respect of debt instruments issued or guaranteed by the Greek government.

<sup>3</sup> Excluding collateral in the form of ABS instruments.

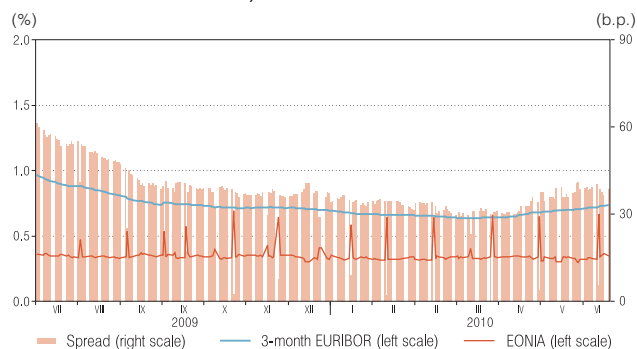
## Short-term Euro Area Interest Rates



\*Interest rate on the ECB's one-week repo operations.

Source: Bloomberg.

## Liquidity Risk Premium (Spread between the Three-month EURIBOR and EONIA)



Source: Bloomberg.

Several specific measures were announced after the extraordinary meeting of the ECB Governing Council on 10 May: 1) introducing a programme for private and public sector government securities purchases in the euro area; 2) reactivating temporary swap lines with the Federal Reserve System for US dollar liquidity-providing operations; 3) conducting an extraordinary supplementary six-month refinancing operation; 4) switching to fixed-rate tenders with unlimited allotment in three-month refinancing operations. The unlimited allocation will be effective in all refinancing operations until at least the end of the third quarter. This suggests that withdrawal of ECB additional liquidity in the money market will be postponed over time.

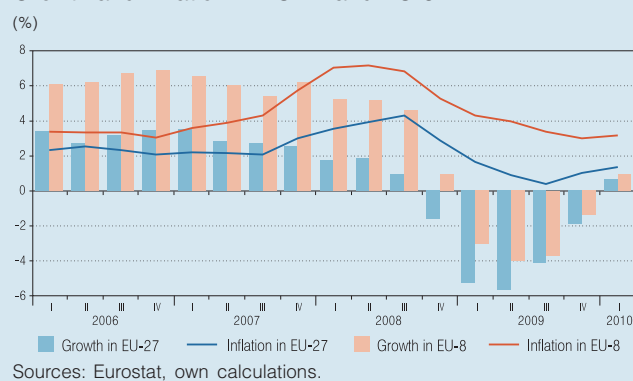
## EU-8\*

The real GDP growth of non-euro area EU Member States increased, reaching 1.0 per cent on an annual basis in the first quarter of 2010, although it still differs by country. Over the same period Poland, the Czech Republic and Hungary reported positive economic growth, while the other five countries reported a sizable slowdown in the pace of decline.

Private consumption continued to moderate and in the first quarter of 2010 in all countries excluding Poland. Romania, Lithuania, Poland and Hungary saw fixed investment growth, while the other countries reported moderation in the pace of decline. Exports were the main driver behind GDP growth in all EU-8 countries in the first quarter of 2010.

Between April and May 2010 inflation in EU-8 decreased to 2.6 per cent\*\* on an annual basis on 3.2 per cent in the previous quarter.

## Growth and Inflation in EU-27 and EU-8



### GDP Growth on an Annual Basis

				2009	2010
	II	III	IV		I
Poland	1.2	1.2	3.5	1.7	2.9
Czech Republic	-5.0	-5.0	-2.9	-4.1	1.1
Hungary	-7.5	-7.1	-4.0	-6.3	0.1
Estonia	-16.1	-15.6	-9.5	-14.1	-2.0
Romania	-8.7	-7.1	-6.5	-7.1	-2.6
Lithuania	-19.5	-14.2	-12.1	-14.8	-2.8
Bulgaria	-4.9	-5.4	-5.9	-4.9	-3.6
Latvia	-18.1	-19.1	-16.8	-18.0	-6.0

Source: Eurostat.

### Exports Growth on an Annual Basis

				2009	2010
	II	III	IV		I
Romania	-10.4	-3.7	3.9	-5.0	21.6
Hungary	-13.9	-6.9	3.1	-8.9	13.7
Czech Republic	-16.0	-9.3	2.6	-10.4	13.0
Estonia	-11.1	-9.6	-7.9	-11.3	11.3
Poland	-13.7	-9.4	0.5	-9.4	10.4
Bulgaria	-15.8	-6.7	0.8	-9.8	5.9
Latvia	-20.2	-15.3	-5.8	-15.4	4.6
Lithuania	-23.4	-16.5	-2.9	-14.0	2.8

Source: Eurostat.

\* EU-8 includes the states that joined the EU from 2004, Slovenia, Malta, Cyprus and Slovakia excluded. As of 1 January 2007 Slovenia, as of 1 January 2008 Malta and Cyprus, and as of 1 January 2009 Slovakia have the status of full members of the European Economic and Monetary Union.

\*\* Based on ECB data for April and May.

## Greece's Fiscal Problems and the Reaction of International Financial Markets Thereto

At the end of October 2009 the new Greek government revised drastically its budget deficit forecast to 12.7 per cent of GDP in 2009, following a deficit projection of 3.7 per cent. Eurostat expressed a reservation on the Greek government finance statistics data and increased the general government deficit estimate for 2008 to 7.7 per cent of the GDP. As a follow-up the Fitch credit rating agency downgraded Greece's credit rating.

The initial fiscal consolidation plan of the Greek government did not succeed in regaining investors' confidence, as it provided for short terms for reducing the budget deficit below 3 per cent of the GDP by 2012 and was based on rather optimistic economic growth forecasts. Greece's fiscal consolidation problems had a powerful influence on the mood of international financial markets due to the growing concerns of similar developments in other European countries with deteriorated fiscal indicators. A highly sensitive reaction was registered in government securities yield indicators and in the credit risk premia for Spanish, Portuguese and Irish government bonds. This led to speculations of possible direct financial support for Greece within the EU. Due to the lack of specific mechanisms and the continuous debates between the Member States, the realization of the support took some time during which the single European currency was under pressure.

On 12 April 2010 the European Commission announced the intergovernmental support mechanism for Greece, adopted at the meeting of euro area ministers of finance held on 25 March. The originally announced amount of

(continued)

the co-financing by the EU and the IMF had undergone several changes after the problems with the management of public finance in Greece reached their peak at the end of April and in the beginning of May. The increase in the budget deficit estimate of Greece for 2009 from 12.7 per cent to 13.6 per cent of GDP and the subsequent downgrading of the country's credit rating by Moody's and S&P influenced market mood unfavourably. In a letter to the European Commission and the European Central Bank the Greek government officially requested financial support for government debt servicing needs. As of 7 May 2010 Greek government securities yields marked a sizable increase, reaching 18.27 per cent and 12.45 per cent in the 2- and 10-year sectors respectively. On the same date the spread against German benchmark papers in the 2-year maturity sector widened to 1773 basis points and that in the 10-year maturity sector reached 965 basis points. This also had a negative effect on other euro area countries. The credit default swaps of Greece, Spain and Portugal recorded the maximum of 965,267 and 451 basis points respectively.

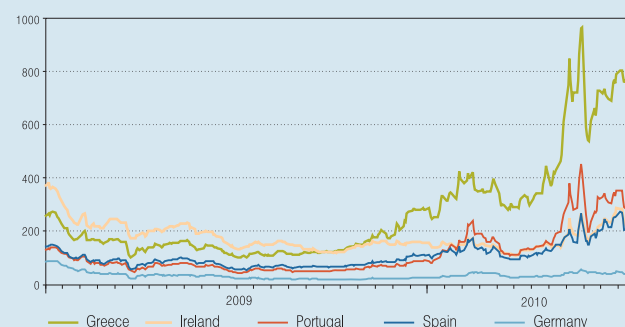
Following the mission of representatives of the European Commission, the European Central Bank and the International Monetary Fund in Greece on 2 May a new programme for stabilisation was announced, aiming at overcoming the excess budget deficit until 2014. It was based on a more pessimistic macroeconomic scenario, which reflects more precisely the current expectations of the IMF and the European Commission with regard to the Greek economy in the process of fiscal consolidation. According to the new parameters of the programme, the decline in real GDP in 2010 and 2011 will be respectively 4 per cent and 2.6 per cent (compared to the previous option for a decline of 0.8 per cent for 2010 and 1 per cent growth for 2011 respectively). A return to economic growth might be expected in 2012 at the earliest. The new programme provides for measures to reduce the budget deficit with a total of EUR 30 billion for a period of three years, including:

- fiscal measures: an increase in VAT rates to 23 per cent from 21 per cent and in the excise tax on fuel, cigarettes and alcohol, introducing luxury goods tax; pension and wage bill cuts in the public sector, and public investment reduction;
- measures to improve competitiveness and economic growth potential over the medium term; enhancing labour market flexibility and restructuring the social security system;
- measures to increase local banks' liquidity and provide equity capital by establishing a fund to stabilize the banking system.

For the whole programme period Greece will receive a total of EUR 110 billion by the IMF and the euro area countries. The latter will provide a total of EUR 80 billion (of which EUR 30 billion in 2010) in proportion to their shares in the ECB capital. The terms and conditions on these loans will be more favourable than the current market ones, but, in the meantime, the programme contains stimuli to restore market financing before 2014. The progress in the implementation of the stabilisation programme will be assessed by the European Commission and the IMF on a quarterly basis and in the event of deviations from the programme objectives additional measures will be imposed.

#### CDS on Greek, Spanish, Irish, Portuguese and German 5-year Government Bonds

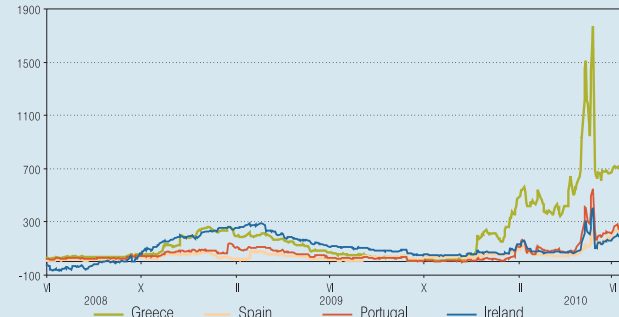
(b.p.)



Source: Bloomberg.

#### Yield Spread of German Benchmark Securities in the 2-year Maturity Sector

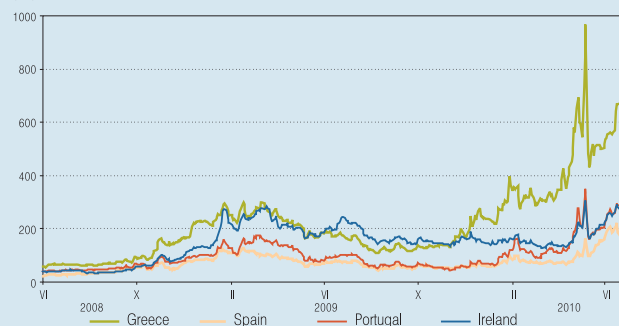
(%)



Source: Bloomberg.

#### Yield Spread in the 10-year Maturity Sector vis-à-vis German Benchmark Securities

(%)



Source: Bloomberg.

(continued)



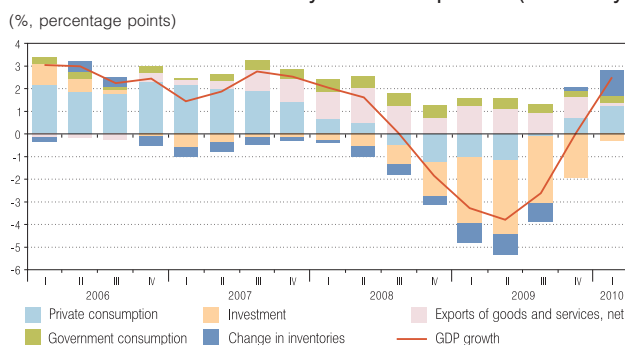
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The Ecofin Council in cooperation with the IMF approved a package of exceptional measures, including the European Financial Stabilisation Mechanism, to halt the spread of the crisis to other EU countries. The package includes government guarantees and bilateral loans to the amount of EUR 440 billion. Furthermore, the medium-term financial assistance mechanism for Member States' balances of payments was increased to EUR 60 billion. To support the European bond market the ECB announced a corporate and government securities purchase programme aimed at ensuring greater liquidity on the markets. Unlike the US Federal Reserve System and the Bank of England the ECB will sterilise the effect of these purchases by special operations so as not to affect the liquidity situation on the euro area money market.

## United States

In the first quarter of 2010 US real GDP growth came to 2.4 per cent on an annual basis (against 0.0 per cent in the last quarter of 2009). Higher private consumption, business investment and finished goods inventories had positive contribution to this growth. On a quarterly basis, the economic activity rate slowed down to 2.7 per cent (from 5.6 per cent in the last quarter of 2009).

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

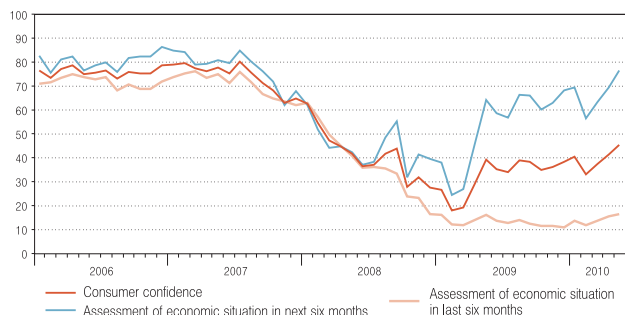


Source: Bureau of Economic Analysis.

The process of economic recovery is likely to continue, albeit at lower rates. The effect of inventories growth will be gradually exhausted, as shown by output economic indicator dynamics.

### US Consumer Confidence Indices

(2000 = 100)

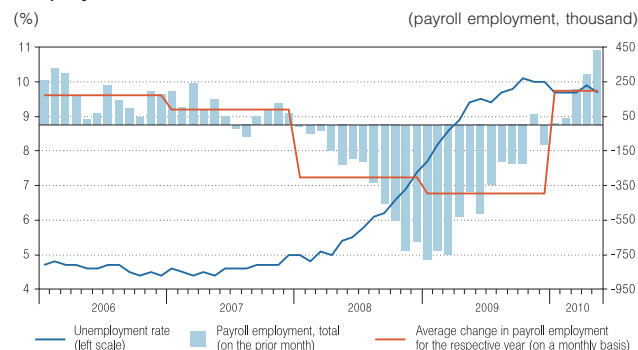


Source: The Conference Board.

Payroll employment outside the agricultural sector has risen since early 2010, which was mainly due to the increased temporary employment in

the government sector, as reported under the official census of the population taken every ten years. The level of unemployment remained high and the number of long-term unemployed continued to rise which would limit the increase in remuneration and household consumption. Private consumption is likely to remain subdued due also to allocated household income to reduce indebtedness and to the fact that bank lending conditions have remained unfavourable. These trends may be tracked on the basis of financial flow data in the recent Federal Reserve report<sup>4</sup> and the Senior Loan Officer Survey on Bank Lending practices.<sup>5</sup>

### US Unemployment Rate and Changes in Payroll Employment



Source: Bureau of Labour Statistics.

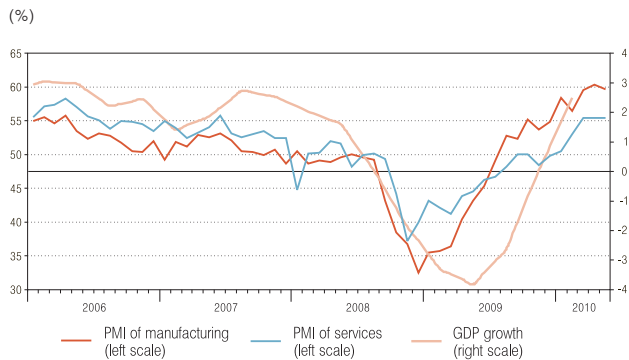
30 April 2010 was the expiry date for granting tax loans for house purchase and with a view to the lack of government financing it is possible that the demand for real estate weakens noticeably. The sizable holdings of real estate for sale will probably continue to increase as a result of the increase in bad loans and weaker demand. This in turn will affect construction activity in the housing sector and will decrease its contribution to real GDP growth.

<sup>4</sup> Flow of Funds Accounts of the United States, June 2010.

<sup>5</sup> This survey was published in April and covers the first quarter of 2010.

On the other hand the easing of conditions on bank lending for large corporations and the improved conditions for direct financing through capital markets create prerequisites for further increase in investment demand from the business sector. This is confirmed by the rise in equity investment observed over the recent months.

#### US PMI of Industry and Services and GDP Growth

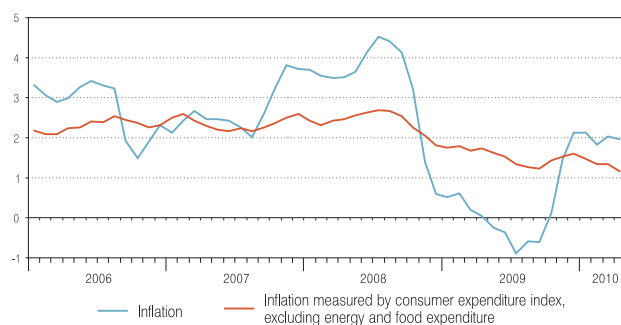


Sources: Institute for Supply Management, Bureau of Economic Analysis (BEA).

In May 2010 the annual inflation, measured by the deflator of personal consumer expenditure, decreased slightly to 1.9 per cent (from 2.0 per cent in April). In April the base inflation index, excluding the impact of the energy and food component, went up to 1.3 per cent from 1.2 per cent respectively. The projections for weak economic growth and high unemployment suggested that the inflation rate will remain below 2.0 per cent by the end of 2010. They are supported by the developments in inflation expectations, which remained stable at relatively low levels.

#### US Inflation Rate

(percentage change on same period of previous year)

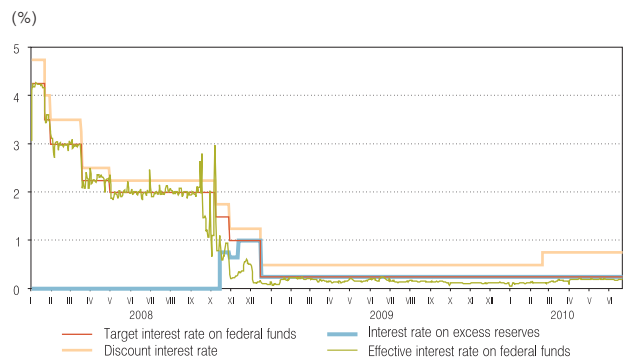


Source: Bureau of Labour Statistics.

The Federal Reserve retained its reference interest rate on US federal funds in the 0.00–0.25 per cent corridor until the end of the second quarter. At their June 2010 meeting the members of the US Federal Open Market Committee (FOMC) confirmed that in the context of low inflation and weak economic growth the reference interest rate

on the money market will remain within this band over an extended period.

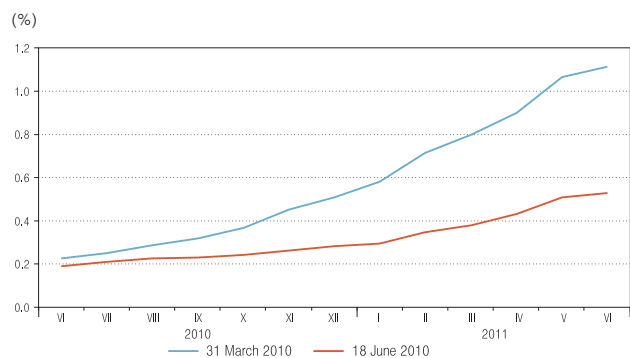
#### Short-term US Interest Rates



Source: Bloomberg.

At present, the markets do not expect an increase in the interest rate on US federal funds by the end of 2010. The first step in increasing these rates is expected to be no earlier than the second quarter of 2011.

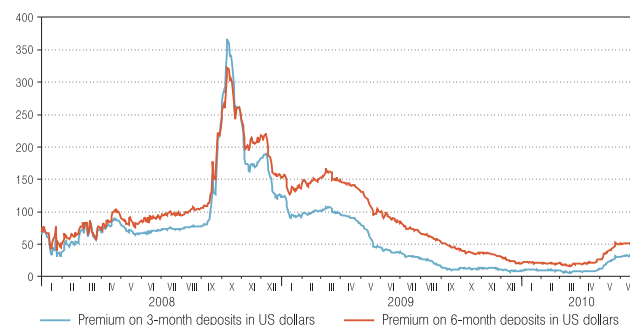
#### Expected Reference Interest Rate on US Federal Funds Based on Futures Contracts



Source: Bloomberg.

#### LIBOR – OIS Spread

(b.p.)



Source: Bloomberg.

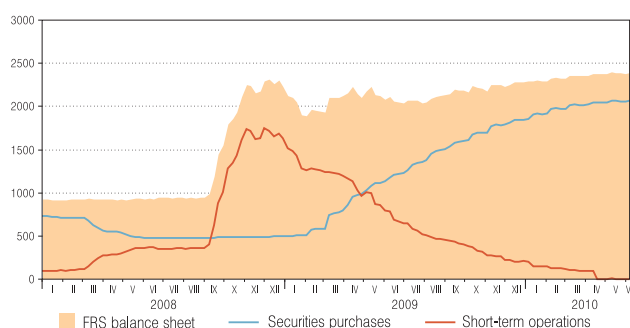
Over the review period US dollar LIBOR deposit rates increased, as well as the credit risk premium measured by the spreads between the LIBOR and the overnight indexed swaps (OIS). To ease the tension in international financial markets when providing resources in US dollars the Federal

Reserve decided on the reactivation of US dollar swap lines with five central banks (Bank of England, the Swiss National Bank, Bank of Canada, Bank of Japan and the European Central Bank).

On 14 June 2010 the first tentative auction of fixed-term deposits was conducted to test their efficiency. The term deposit facility is among the instruments that the US Federal Reserve will use to absorb the additional liquidity provided by it to the banking system. The market participants were offered USD 1 billion of 14-day term deposits at a rate of 0.27 per cent which is above the short-term rates benchmark. Two more auctions were scheduled by the end of June offering 28- and 84-day term deposits.

#### Federal Reserve Balance Sheet

(billion USD)



Source: Bloomberg.

### The USD/EUR Exchange Rate

During the second quarter of 2010 US dollar increased by 7.8 per cent on average against the euro and by 7.6 per cent against the basket of six currencies. Over the same period the single currency followed a sustainable downward trend within the 1.35–1.19 range. Between early April and the end of June the euro depreciated by almost 10 per cent.

#### USD/EUR Exchange Rate

(USD per EUR 1)



Source: ECB.

Over the review period the fiscal crisis in Europe escalated, spreading from Greece to other euro area countries. The sovereign credit rating downgrade of Portugal and Spain also contributed to investors' concerns about the government debt servicing in some euro area countries. The decline observed in stock market indices amplified its impact on the EUR/USD exchange rate. The impact of the interest rate differential between US and European government bond yields on the exchange rate weakened considerably in April and May, rising again in June. A series of negative macrodata from the USA, together with the revised economic growth projections of the Federal Reserve resulted in a shift in investors' focus from Europe to the USA.

By mid-June speculative transactions marked a decrease, as well as the Nymex net short positions. Recent balance sheet data of the Swiss National Bank have shown that in order to curb the appreciation of the Swiss franc the Bank has increased its foreign exchange reserves by EUR 55 billion at a time when the single currency marked its most sizable decline.

### The Balkan Region

In the first quarter of 2010 most Balkan countries reported a moderation in GDP decline. Manufacturing in Turkey continued to increase, going up 18 per cent on an annual basis in March. Over the same period Romania and Bulgaria also reported positive figures: 7 per cent and 1.7 per cent respectively. In the other countries the economic output continued to decline, but at a moderate rate. In the second quarter of 2010 inflation remained broadly unchanged, mainly due to the weak private consumption.

Expectations point to enhanced economic growth in the region, with external demand still the main driving force behind it.

(continued)

(continued)

## Real GDP Growth and Inflation in Balkan Countries

	2008	2009					2010	
	Total	I	II	III	IV	Total	I	II*
Growth (on the corresponding period of previous year, %)								
Bulgaria	6.0	-3.5	-4.9	-5.4	-5.9	-4.9	-3.6	
Greece	2.0	-1.0	-1.9	-2.4	-2.5	-2.0	-2.5	
Macedonia	4.8	-0.9	-1.4	-1.8	1.2	-0.7	-0.9	
Romania	7.3	-6.2	-8.7	-7.1	-6.5	-7.1	-2.6	
Turkey	0.7	-14.5	-7.7	-2.9	6.0	-4.7	11.7	
Croatia	2.4	-6.7	-6.3	-5.7	-4.5	-5.8	-2.5	
Serbia	5.5	-4.1	-4.2	-2.3	-1.6	-3.0	0.6	
Inflation (average for the period, %)								
Bulgaria	12.0	5.1	3.1	0.8	0.9	2.5	1.9	3.0
Greece	4.2	1.8	0.8	0.8	2.0	1.4	3.0	5.0
Macedonia	8.3	0.9	-0.6	-1.4	-2.1	-0.8	0.8	0.8
Romania	7.9	6.8	6.1	5.0	4.5	5.6	4.6	4.3
Turkey	10.4	8.4	5.7	5.3	5.7	6.3	9.3	9.6
Croatia	5.8	3.8	2.8	1.2	1.6	2.4	0.9	0.7
Serbia	12.9	9.7	8.1	7.7	5.8	7.8	4.3	3.9

Sources: Statistical institutes and central banks of respective countries.

\* Based on April and May 2010 data.

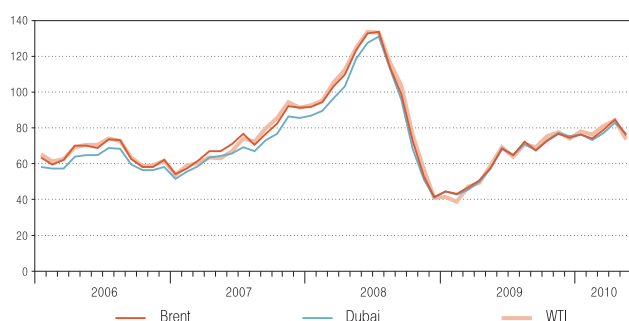
## International Prices of Crude Oil, Major Raw Materials, and Gold

### Crude Oil

During the second quarter of 2010 the price of Brent crude oil fluctuated, trading within a wide interval of USD 68 to USD 88 *per barrel*. In early May, as a result of the concerns about a slow-down in global economic growth, oil prices fell to USD 68, before gradually increasing to USD 80 by mid-June.

### Crude Oil Prices

(USD *per barrel*)



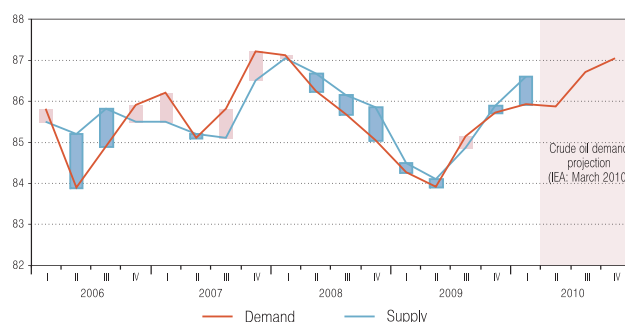
Source: World Bank.

International Energy Agency (IEA) data on crude oil market reported an increase in supply over demand in the first quarter of 2010. Lower demand in OECD countries and increased supply by OPEC were the main factors behind this imbalance. In the first quarter of 2010 oil product inventories in OECD countries went up by 0.3 per

cent on an annual basis (3.3 per cent on average in 2009). The June 2010 IEA forecasts show an increase in demand of 2 per cent on an annual basis, mainly attributed to growth in non-OECD demand. This is 0.2 percentage points higher than the March projection.

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

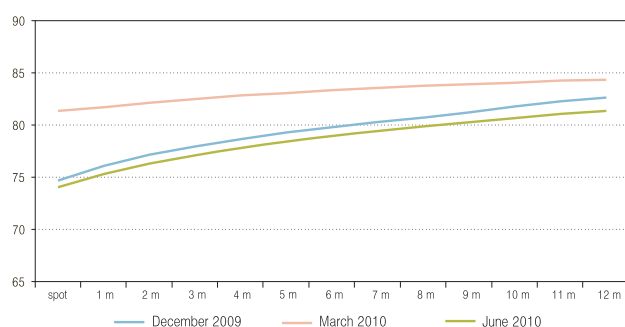
(million barrels *per day*)



Source: IEA.

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

(USD *per barrel*)



Source: JP Morgan.



As a result of the change in economic growth sentiment, market expectations about oil prices in the third and fourth quarters of 2010 remained within the range of USD 70 to USD 85 *per barrel*.

### Major Raw Materials and Commodity Groups

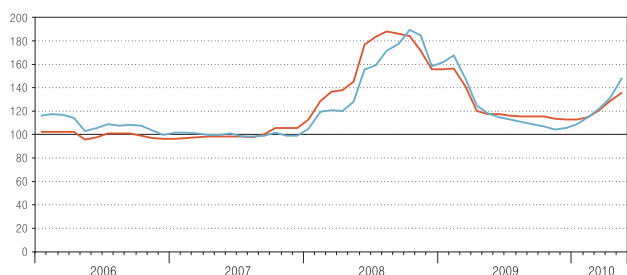
In April and May 2010 world steel production increased by 32.4 per cent<sup>6</sup> on average, with North America and the European Union contributing most by 68 per cent and 59 per cent on an annual basis respectively. In the second quarter of 2010 the metal price index increased by 13.8 per cent on a quarterly basis, reporting a sizable increase in the prices of iron ore (65.4 per cent) and nickel (20.3 per cent). Steel products appreciated on the first quarter of 2010 mainly due to the increase in the iron ore price, which is set on a quarterly and not on an annual basis, as in previous years. The prevailing expectations about metal prices suggest enhanced growth during the third and fourth quarters of 2010 reflecting the increase in industrial production.

In April and May 2010 the food price index went down by 5.2 per cent on a quarterly basis. Cereal and vegetable oil prices dropped simultaneously by around 6.8 per cent and 1.6 per cent respectively. According to the US Department of Agriculture and the International Grains Council, global wheat yields during the 2010 to 2011 period are expected to slow down by approximately 1.1–1.2 per cent on an annual basis, while its consumption is expected to increase by around 1.1–2.4 per cent. An average annual increase of 2.8 per cent in wheat inventories is expected in the second half of 2010.

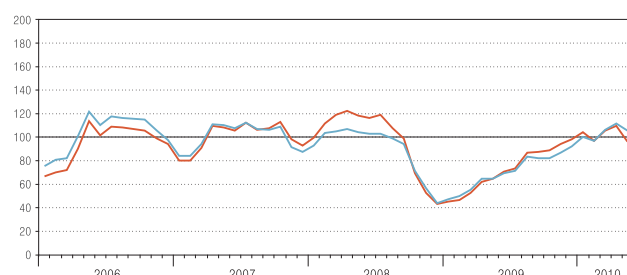
Food prices are projected to remain at their current levels, while cereal prices are projected to decrease given the favourable prospects for higher wheat and maize yields. In May wheat inventories are expected to have reached their highest level for the last decade which may result in global downward pressure on prices.

Price Indices of Major Commodities and Commodity Groups  
(2007 = 100)

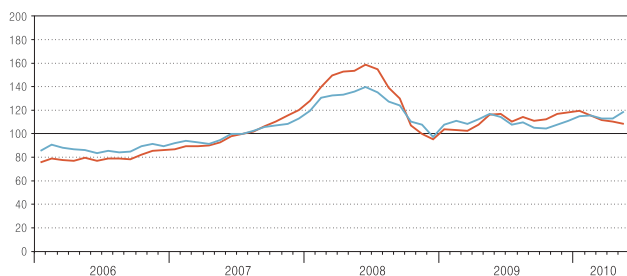
#### Steel



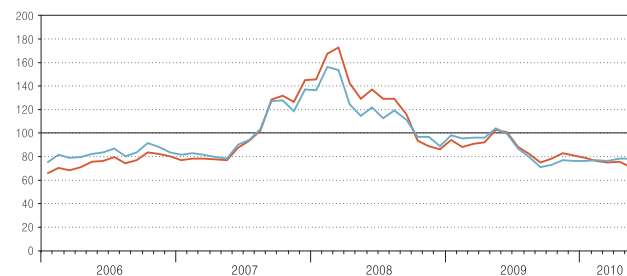
#### Copper



#### Food



#### Wheat



— USD

— EUR

Sources: World Bank, ECB and BNB.

<sup>6</sup> Based on World Steel Association data.

## Gold

In the second quarter of 2010 the average gold price (one-month futures) went up to USD 1190.0 per troy ounce (7.2 per cent on a quarterly basis). The increase in euro was more pronounced (up 16.2 per cent on quarterly basis) due to the depreciation of the European currency against the US dollar.

### Spot Price of Gold

(USD per troy ounce)



Source: The London Bullion Market Association.

Over the review period gold price reflected mainly investors' concerns that the global economic recovery is slowing, as well as the higher volatility observed in the main currencies' exchange rates. As a result, gold price in euro, US dollars and Swiss francs marked a sizable increase. The demand for physical gold and investments in exchange-traded funds backed by physical gold increased, reaching high levels. This was mainly due to the fact that the demand for gold in the jewellery sector was lower than the investor interest therein. The largest fund backed with physical gold, SPDR Gold Trust, increased its inventories to 1307.96 tonnes, which represents 4.2 per cent of global inventories.

## Bulgarian External Debt Dynamics on International Financial Markets

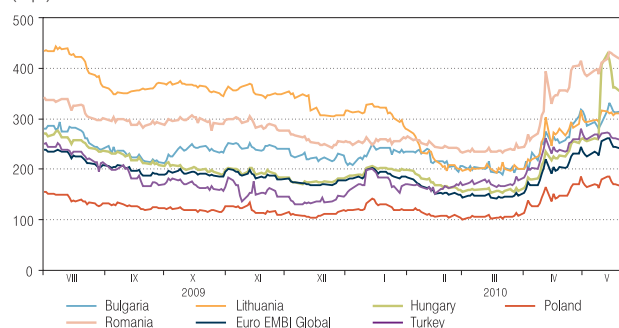
In the second quarter of 2010 the risk premium measured by the yield spread of the government debt in the Central and Eastern European (CEE) countries widened, thus interrupting the contrac-

tion trend observed over the last 12 months. By the end of June the *JP Morgan Euro EMBI Global* index declined by 48 basis points to 262 basis points. The index fluctuated within a wide range of 142 to 262 basis points.

The widening of the premia was dominated by the decreasing investor risk aversion resulting from the fiscal situation in euro area countries, which are the key economic partners of CEE countries. Over the review period no change in the credit ratings of the CEE countries was reported apart from Estonia which successfully fulfilled the Maastricht criteria and was invited to join the euro area from 2011.

### Government Securities Yield Spreads in CEE Counties (Euro EMBI Global index)

(b.p.)



Source: Bloomberg.

Greece's public finance crisis had a negative impact on the debt premia of most Central and Eastern European countries in the beginning of May 2010. Concerns about the indirect effects of the euro area problems in the CEE countries started to gradually fade away by the end of June, with a clear lag observed in the downgrading of the debt premia of Hungary and Romania, which continue to experience difficulties in implementing the measures laid down in their agreements with the IMF and the EU. Bulgaria's government debt spread, measured by the *JP Morgan* index, followed the general market trend throughout the period and broadened by 65 basis points.

## Estonia Joins the Euro Area on 1 January 2011

On 1 January 2011 Estonia will join the euro area and the euro will become legal tender, replacing the Estonian kroon. Estonia will be the fifth new EU Member State after Slovenia, Malta, Cyprus and Slovakia and the first country with a currency board arrangement to join the euro area.

Estonia has been operating a currency board arrangement since 20 June 1992 - less than a year after it regained its independence on 20 August 1991. Upon adopting the currency board system Estonia reintroduced its national currency (the Estonian kroon) and it became legal tender replacing the Russian ruble. Initially the Estonian kroon was pegged to the German mark (8 EKK = 1 DEM), and later to the euro (15.64664 EKK = 1 EUR).<sup>1</sup> The consistent policy of economic reforms, market liberalisation, fiscal and financial stability resulted in high economic growth rates which helped Estonia to swiftly converge to the average income and price level for the EU countries. By end 2009 GDP *per capita* in Estonia came to 62 per cent of the average EU value<sup>2</sup>, and the price level was around 75 per cent of the EU average<sup>3</sup>.

Estonia joined the European Union on 1 May 2004 and the Exchange Rate Mechanism II on 28 June that year. At that time the kroon to euro exchange rate corresponded to that established in 1992 when the currency board arrangement was introduced with unilateral commitment to keep the arrangement until Estonia joins the euro area. On a proposal from the European Commission based on the positive assessment of the fulfilment of the Maastricht criteria, published in the EC and ECB convergence reports in the spring of 2010, the European Council, having consulted the European Parliament, decided that Estonia may adopt the euro as its national currency as of 1 January 2011. The changeover shall take place at the existing exchange rate of the Estonian kroon to the euro at the level established upon introducing the currency board arrangement.

The entry of Estonia into the euro area was a key priority in its economic policy programme. Between 2009–2010 Estonia smoothly fulfilled the criteria for price stability, stable exchange rate, long-term interest rate levels and the requirement for *government debt/GDP* ratio of below 60 per cent. The global economic crisis and the recession in Estonia were serious challenges in the fulfilment of the budget deficit criterion (consolidated state budget deficit to GDP of less than 3 per cent). Against the background of a strong decline in GDP: down 3.6 per cent in 2008 and 14.1 per cent in 2009 the Estonian government took decisive steps aimed at fiscal consolidation in order to fulfil this criteria. Due to the sizable slowdown in budget revenues, resulting from the recession (2 per cent growth for 2008 on 21.8 per cent for 2007 and 21.9 per cent for 2006) the government decided on the increase in direct and indirect tax rates and on the considerable reduction in government expenditure. The increases in direct and indirect taxes resulted in additional budget revenues of 1.15 per cent of GDP in 2009 and 2.25 per cent in 2010. The decrease in government expenditure came to 1.3 per cent of GDP in 2009 and 0.9 per cent in 2010. The reduction in current expenditure of government institutions, including the cuts in wages of government employees, contributed most to the overall cost-cutting. For detailed information see the table below.

### Major Fiscal Consolidation Measures

Effects from the fiscal consolidation measures in Estonia	as a percentage of GDP	
	2009	2010
<b>Direct taxes*</b>		
The non-taxable income threshold was increased.		0.85
The planned value added tax reduction was omitted and some tax reliefs were abolished		
The unemployment insurance premium was raised	0.5	0.3
Measures aimed at the improvement of revenue collection		0.05
<b>Indirect taxes*</b>		
An increase in VAT from 18 per cent to 20 per cent	0.4	0.4
An increase in the fuel, alcohol, tobacco and electricity excise duty	0.25	0.65
<b>Government expenditure**</b>		
Reducing the operational expenditure of state agencies	0.85	0.45
Reducing healthcare costs	0.2	0.25
Cutting local government costs	0.25	0.2
<b>Social assistance**</b>		
Lower than the planned pension rise	0.55	0.75

\* Aiming at the increase in budget revenue.

\*\* Aiming at a decrease in budget expenditure.

Source: Bank of Estonia.

<sup>1</sup> Similarly, on 1 July 1997 the Bulgarian lev was initially pegged to the Deutschmark (1000 BGL = 1 DEM), and after the creation of the single European currency the lev was pegged to the euro at the exchange rate of the Deutschmark to the euro.

<sup>2</sup> GDP *per capita* expressed in purchasing power parities.

<sup>3</sup> Source: Eurostat.

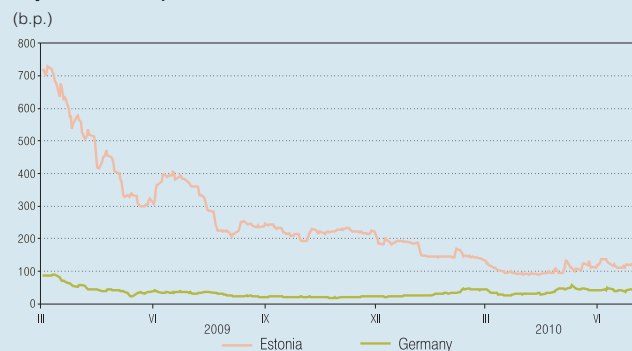
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Due to the prudent fiscal policy pursued over the previous years of economic growth and to the measures taken against the background of a sharp drop in revenues owing to the recession, the budget deficit in Estonia for 2009 was 1.7 per cent of GDP and the public debt was 7.4 per cent, thus meeting the fiscal criteria for euro area membership.

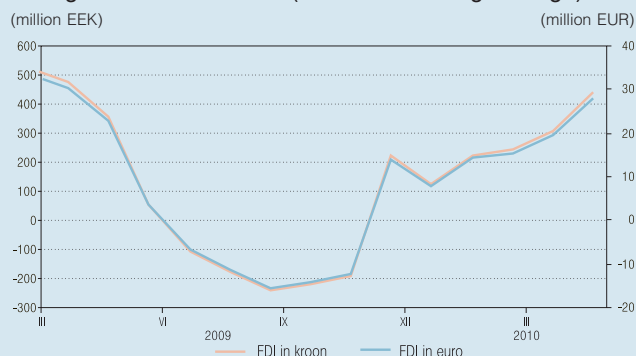
Since early 2010 expectations related to Estonia's entry into the euro area started to have a bearing on the markets by improving the assessments of the prospects for Estonia's economic growth. Foreign direct investment marked a sizable increase in early 2010. The cost of insuring Estonia's debt against default, measured as the credit default swaps premium, decreased. Interests on loans to corporations and households in euro and in national currency started to converge to those in the euro area.

### 5-year CDS Spread



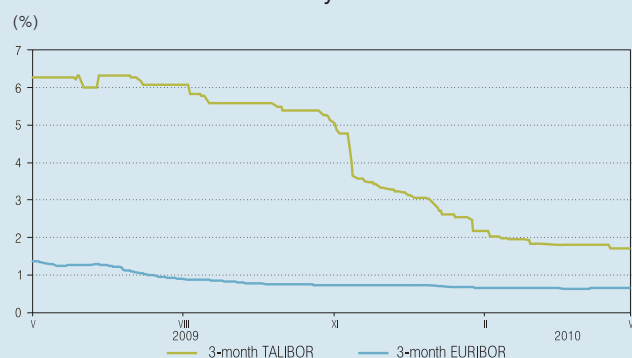
Sources: ECB, BNB and Bloomberg.

### Foreign Direct Investment (12-month moving average)



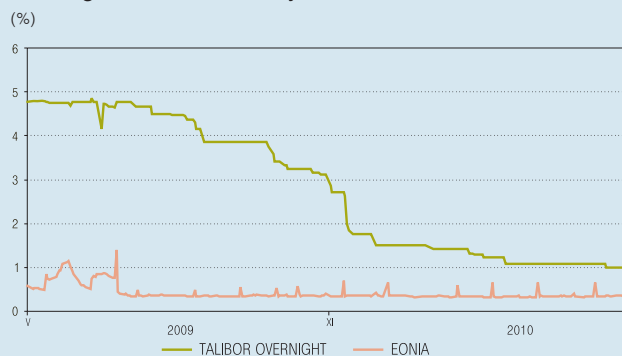
Sources: ECB, BNB and Bloomberg

### Three-month Interbank Money Market Interest Rate



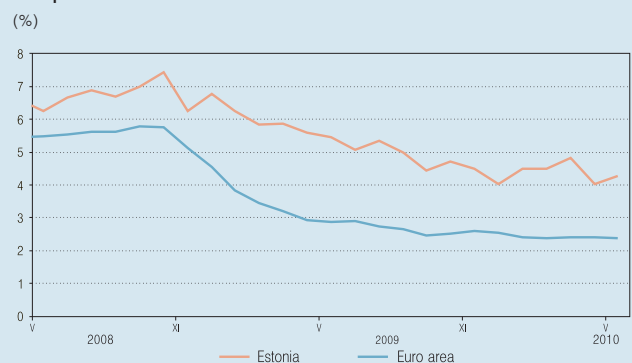
Sources: ECB, BNB and Bloomberg.

### Overnight Interbank Money Market Interest Rate



Sources: ECB, BNB and Bloomberg.

### Interest on Loans in National Currency and in Euro for Corporations



Sources: ECB, BNB and Bloomberg.

### APR on Loans for House Purchase in National Currency and in Euro



Sources: ECB, BNB and Bloomberg.

The adoption of the euro in Estonia will give a new impetus for its economic development and integration. The confidence in the government economic policy will remain high, long-term interest rates will remain low for the business and will foster employment creation. These positive trends will make Estonian economy more flexible and competitive.

The track record of Estonia since the introduction of the currency board arrangement to the confirmation of its entry into the euro area as of 1 January 2011 proves the viability of the fixed exchange rate under a currency board mechanism and its full compliance with the regulatory framework, conditions and criteria for euro area membership.



## 2. Financial Flows, Money and Credit

The trend towards an improvement of the balance of payments current account was sustained in the first four months of 2010. The sustainability of Bulgaria's external position was preserved. According to preliminary data for the January to April 2010 period, the overall deficit on the current and capital accounts amounted to EUR 634.1 million (compared to EUR 1708.4 million in the corresponding period of 2009). Foreign direct investment covered 147 per cent of the deficit on an annual basis.<sup>1</sup>

The Issue Department balance sheet figure reached BGN 23.88 billion (EUR 12.21 billion) by end-May 2010, with assets decreasing by BGN 1.38 billion (EUR 0.71 billion) in the first five months of 2010. BNB's international foreign currency reserves increased by BGN 840 million on May 2009 (EUR 429 million). The average monthly coverage of imported goods and services by BNB international reserves reached 7.6 months by April 2010 against 5.6 months a year earlier.<sup>2</sup>

### Financial Flows and External Position Sustainability

The external position of Bulgaria's economy remained stable. The balance of payments current account deficit contracted further, but was covered on an annual basis by foreign direct investment. Over the same period the positive growth of exports in goods and services will remain the key factor behind the further decrease in the *current and capital account deficit to GDP* ratio on an annual basis. In the third and fourth quarters of 2010 the net foreign direct investment flow is expected to be positive, but lower compared to the corresponding period in 2009. As a result, the *foreign direct investment to GDP* ratio will decline on an annual basis.

For the January – April 2010 period the balance of payments financial account deficit was EUR 948.8 million, with the main flows for the period reported from: 1) a reduction in non-resident deposits with local banks of EUR 460.8 million; 2) a decrease in banks' net credit obligations of EUR 389.4 million and in other sectors of EUR 96.2 mil-

<sup>1</sup> The amount of foreign direct investment for the last 12 months and the deficit on the current and capital accounts for the same period were used in the calculation of this indicator.

<sup>2</sup> The average value of imports of goods and services for the last 12 months and BNB reserves by the end of April 2010 were used in the calculation of this indicator.

### Cash Flows Prompting Significant Changes in Gross International Reserves

(million EUR)			
External flows	2009	I quarter 2009	I quarter 2010
Total for the period	-265	-1 123	-860
Purchases and sales of euro	-1 282	-934	-770
at tills	-35	-9	-6
banks, incl.	-1 247	-925	-764
bank's purchases	112 527	29 591	18 011
bank's sales	-113 774	-30 516	-18 775
Flows on accounts of banks, the MF, etc.	1018	-189	-89
Minimum required reserves	159	-197	-14
Government and other depositors*	859*	8	-75

\* A total of SDR 610.9 million (EUR 665.7 million) received on 28 August and 9 September 2009 have been included in the government and other depositors item.

Source: BNB.

lion; and 3) an increase in local banks' deposits abroad of EUR 80.5 million.

The decrease in BNB international reserves of EUR 707 million observed over the first five months of 2010 was mainly the result of the change in government and other budgetary organisations' deposits of EUR 591 million.<sup>3</sup> Banknotes and coins in

<sup>3</sup> According to Article 28, paragraph 1 of the Law on the BNB, 'the aggregate amount of monetary liabilities of the Bulgarian National Bank shall not exceed the lev equivalent of gross international reserves,' with the lev equivalent determined on the basis of the fixed exchange rate. For further details see the *Currency Board Mechanism in Bulgaria* box, in the Economic Review, 1/2009, p. 20–21.

circulation saw a serious decline of EUR 292 million. Banks deposits with the BNB (minimum required reserves and excess reserves), decreased by EUR 114.5 million, and the BNB Banking Department deposit increased by EUR 209.5 million.

The sustainability of Bulgaria's external position is largely based on the structure of capital inflows, mainly in the form of foreign direct investment and external borrowing of intercompany or long-term nature. The share of portfolio investment in Bulgaria's gross international liabilities was small and came to 3.1 per cent by December 2009. Between January and April 2010 short-term external debt contracted by EUR 631.7 million and its share in Bulgaria's gross external debt fell to 33.3 per cent respectively (35.0 per cent a year earlier). International reserves provided a 98.1 per cent cover of the short-term external debt by April 2010.

Foreign direct investment in Bulgaria came to EUR 168.1 million between January and April 2010 compared to EUR 955 million in the same period of the prior year.<sup>4</sup> By April 2010 on an annual basis foreign direct investment financed 128 per cent of the current account deficit (75 per cent as of April 2009) and 147 per cent of the current and capital account deficit (79 per cent as of April 2009)<sup>5</sup>.

By April 2010 net foreign direct investment accounted for 7.5 per cent of the annual GDP for the last four quarters. In the third and fourth quarters of 2010 the net foreign direct investment flow is expected to be positive, but lower compared to the corresponding period in 2009. As a result, the annual foreign direct investment to GDP ratio will decline.

Direct investments attracted in the first four months of 2010 were mostly in the form of *equity*: EUR 206.8 million, while those to the banking sector were in the form of *reinvested earnings*: EUR 89.9 million. *Other net capital* (the change in net obligations between companies with foreign interest and direct foreign investors on financial, bond and trade credits) was negative and ac-

counted for EUR -128.5 million. Between January and April non-residents' investment in real estate came to EUR 49.6 million (EUR 184 million in the same period of 2009). As a result of the low receipts from real estate acquisition in Bulgaria in 2009 and early 2010 their current levels are close to those observed in the years up to 2006.

The structure of foreign direct investment by sector saw no sizable changes in early 2010, with the most sizable foreign direct investment flow reported in the following sectors: *construction* (EUR 66 million), *real estate operations, lessors activities and business services* (EUR 61 million) and *manufacturing* (EUR 42 million).

The composition of FDI by country in the January – April 2010 period suggests that foreign direct investment attracted from the Netherlands (EUR 579 million), Russia (EUR 48.6 million) and the USA (EUR 47 million) accounted for the largest shares. Net payments related to revolving intercompany loans were made to Austria (EUR -367 million), the Netherlands Antilles (EUR -103 million) and Germany (EUR -88 million).

Between January and April 2010 Bulgaria's gross external debt went down by EUR 863.5 million. Net repayment of borrowed funds amounted to EUR 797.3 million (valuations and the net change in trade and revolving loans excluded). In the first four months of 2010 loans and deposits of EUR 1545.3 million were received, and principal payments of EUR 2342.6 million serviced (compared to EUR 2248.2 million in the corresponding period of the prior year). As a result, by end-April 2010 Bulgaria's gross external debt reached EUR 36.8 billion or 108.6 per cent of the reported GDP for the last four quarters.

Between January and April private non-guaranteed external debt decreased by EUR 951.3 million, mainly due to the decline in banks' short-term loans of EUR 640.4 million. Banks' debt to foreign parent banks incurred in connection with their activity in Bulgaria occupies a large share in banks' external debt (78.3 per cent as of March 2010). Against the background of high liquidity of local banks, lower domestic demand for loans and lack of other alternative investments banks opted to reduce their external liabilities. Non-bank sector enterprises reduced their external liabilities by EUR 122.3 million in the first four months of 2010.

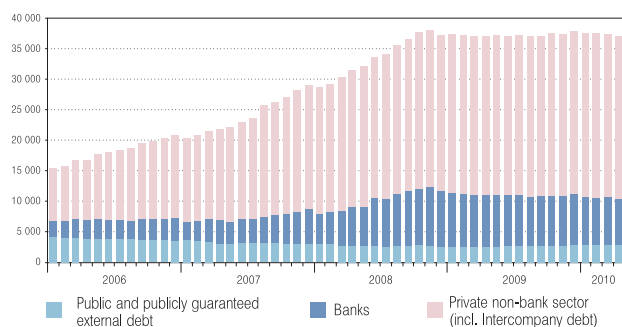
<sup>4</sup> Preliminary data that are subject to revision upon receipt of additional information from direct investment enterprises and the NSI. According to preliminary data for the first quarter of 2010 foreign direct investment were on negative territory (EUR 22 million). After the very first revision foreign direct investment for the first quarter became positive and currently they amount to EUR 131 million.

<sup>5</sup> Practice shows that original data on foreign direct investment are usually revised upwards.

Intercompany loans decreased by EUR 86.1 million in the January – April 2010 period, reflecting mainly the developments in revolving loans. Loans related to direct investment came to EUR 1 billion for the first four months of 2010. The share of intercompany loans in the total amount of external debt increased to 39.1 per cent by April 2010 on 37.6 per cent a year earlier. This dynamics points to a long-lasting interest of foreign owners of local companies.

### Gross External Debt

(million EUR)



Source: BNB.

Between January and April 2010 *general government* external debt increased by EUR 53 million. The total amount of public and publicly guaranteed external debt increased by EUR 87.8 million, reaching 11.5 per cent of Bulgaria's total external debt.

Gross external debt service in the January to April 2010 period reached EUR 2539.2 million compared to EUR 2542.9 million in the corresponding period of the prior year. In the first four months of 2010 the declared new loans and deposits came to EUR 1.5 billion of which intercompany loans – 65 per cent and loans received from banks – 18 per cent.

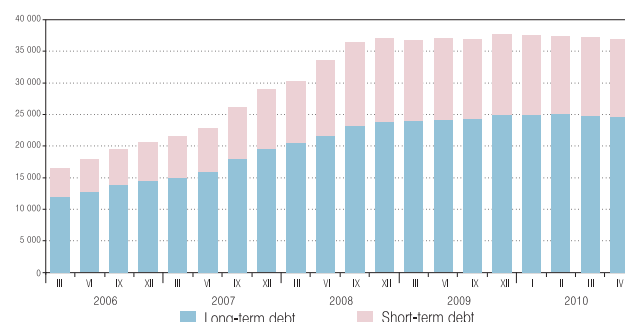
The average weighted interest rates on new loans declared between January and April 2010 suggest a minimum increase (on an annual basis) in the cost of external borrowed funds in euro of 0.5 percentage points to 3.4 per cent. New loans in US dollars reported a decrease in that cost of 0.5 percentage points to 6 per cent.

By April 2010 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 *electricity, gas and water* (20.6 per cent), followed by *real estate operations, lessors activities and business services* (20.3 per cent) and *financial intermediation*

(12.6 per cent). The largest share in intercompany loans was occupied by *real estate operations, lessors activities and business services* (22.8 per cent) and *financial intermediation* (17.7 per cent).

### Long- and Short-term Gross External Debt Dynamics

(million EUR)



Source: BNB.

In the maturity structure of gross external debt short-term external debt trended downwards. It decreased by EUR 631.7 million and its share fell to 33.3 per cent compared to 35 per cent a year earlier. These developments in the first four months of 2010 were largely attributable to the closure of non-residents' deposits with banks (EUR -447.2 million).

By March 2010 the euro occupied a dominant share in the gross external debt currency structure (88.4 per cent). It also had the largest share (92.2 per cent) in intercompany loans and the smallest share in the *general government* sector (72.6 per cent).

Between January and April 2010 Bulgaria's gross foreign assets fell by EUR 670.6 million. Over the same period BNB's foreign currency reserves decreased by EUR 888.5 million and foreign assets of local banks increased by EUR 217.9 million. As a result of Bulgaria's gross foreign assets and external debt dynamics, the net external debt declined by EUR 192.9 million, reaching EUR 19.2 billion by end-April 2010, or 56.6 per cent of GDP on an annual basis.

The interdependence between the capital flows on the balance of payments financial account and the current account balance was retained in the first four months of 2010. In the January to April 2010 period the overall deficit on the current and capital accounts contracted further to EUR 634.1 million against EUR 1708.4 million in the corresponding period of 2009. The annual balance of payments current and capital accounts deficit came to 4.8 per cent of the GDP

on an annual basis compared to 20.8 per cent in the corresponding period of 2009. As a result of the annual developments in the main components of the balance of payments, foreign direct investment covered 128 per cent of the current account deficit by April 2010.

In the January to April 2010 period all current account components improved on the corresponding period of 2009 as follows: trade balance by EUR 688.6 million, income account by EUR 266.8 million, net current transfers by EUR 186.2 million and balance on services by EUR 161.7 million respectively. In the first four months of 2010 a deterioration in the balance of payments capital account was reported of EUR 229 million on the corresponding period of 2009.

Between January and April the balance on trade in goods marked the most sizable improvement compared to the same period of 2009, with trade deficit coming to EUR 925.6 million for the first four months of 2010. Over the same period nominal exports increased by 19.0 per cent and imports decreased by 0.4 per cent on an annual basis. A positive and accelerated annual growth in exports has been observed since November 2009. The trend toward a decrease in trade deficit reflected the lower imports of investment goods, raw materials, supplies and energy resources due to weaker output and investment activity in Bulgaria. Imports and exports are expected to increase on an annual basis in the second and third quarters of 2010, with higher exports growth rate than that of imports.

The balance on services reported a surplus of EUR 129.5 million over the January – April 2010 period against EUR 32.2 million in the corresponding period of the prior year. The improvement in the balance was mainly due to reduced expenditure on travelling and external services (insurance and construction services). The improvement on the debit side came to a total of EUR 244.2 million, with cost reduction setting off the lower receipts on the credit side (a decrease in receipts of a total of EUR 82.5 million).

Between January and April 2010 income deficit was EUR 408.2 million compared to EUR 675 mil-

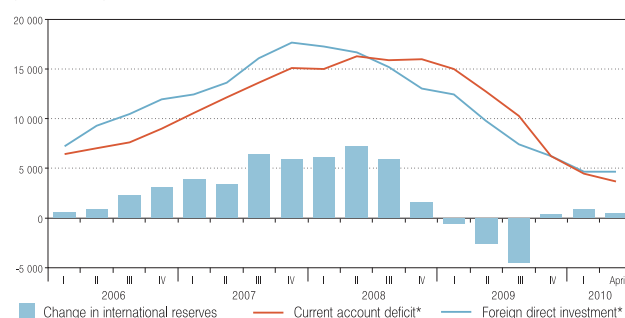
lion in the corresponding period of 2009. The improvement was largely ascribable to lower income payments on direct investments (down EUR 249.1 million) and on other investments (down EUR 84.1 million).

Over the first four months of 2010 net current transfers amounted to EUR 508 million: up EUR 186.2 million on an annual basis, mainly as a result of the increase in transfers to the general government (up EUR 161.4 million). The receipts in the form of private current transfers decreased by EUR 15.3 million on an annual basis and transfers abroad by EUR 22.6 million. As a result, net transfers to the private sector increased by EUR 7.3 million on an annual basis.

The decrease in capital transfers was largely due to the lower receipts of funds from the EU compared to the previous year. Net capital transfers from the EU to the *general government* sector came to EUR 62.1 million: down EUR 229 million on an annual basis.

Our expectations for the developments in balance of payments components in the third and fourth quarters of 2010 point to continuous improvement in the current account balance mainly as a result of higher exports of goods and non-factor services on an annual basis. The balance of payments current and capital account deficit is projected to remain between 2 and 3 per cent of GDP on an annual basis by the end of 2010 and FDI flows are expected to offset it completely.

**Dynamics of International Reserves, Foreign Direct Investment and Current Account (on an Annual Basis)**  
(million BGN)



\* Data as of April 2010.

Source: BNB.

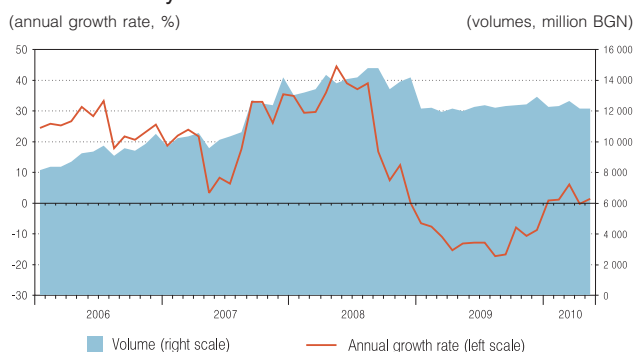


## Monetary Aggregates

Broad money retained their upward trend, marking an annual increase of 8.2 per cent by May 2010. In the third and fourth quarters of 2010 the annual broad money growth is expected to stay close to its current levels. Interest rates on time deposits continued to decrease in April and May.

As of May 2010 reserve money sustained its positive dynamics on an annual basis, posting an increase of 1.3 per cent on May 2009. Banks' deposits with the BNB increased by 10.2 per cent and contributed by 3.6 percentage points to reserve money growth. The rate of decline in currency in circulation continued to moderate and reached 3.6 per cent by the end of May compared to 4.2 per cent by the end of March 2010. Determinants of currency in circulation dynamics relate to weaker demand for currency in circulation due to the contraction in private consumption and lower inflation rates.

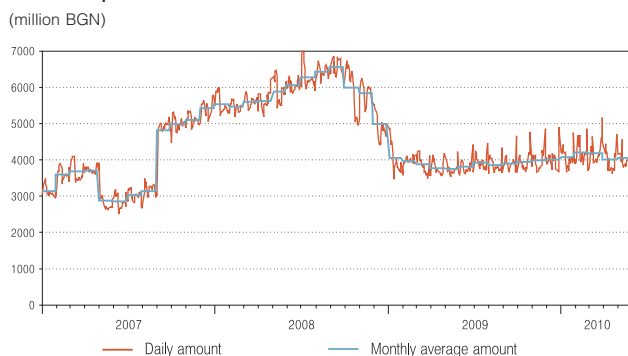
### Reserve Money



Source: BNB.

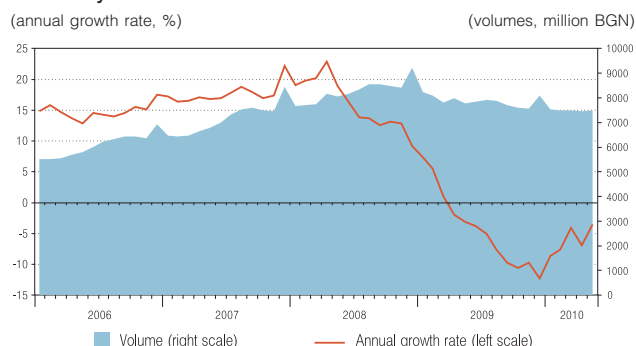
In the third quarter of 2010 currency in circulation is expected to moderately increase. Banks' deposits with the BNB are expected to continue to contribute to reserve money growth, albeit at a slower pace than the observed in the first half of 2010.

### Bank Deposits with the BNB



Source: BNB.

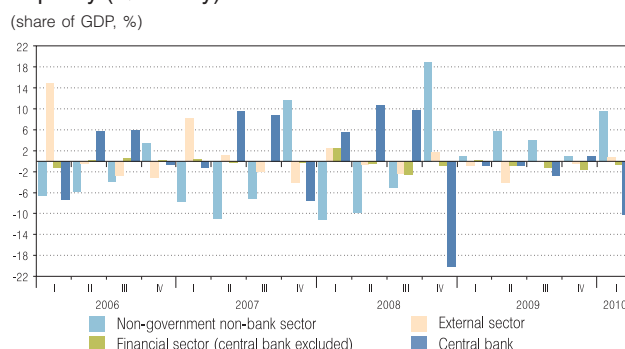
### Currency in Circulation



Source: BNB.

Fiscal policy has influence on the allocation of liquidity by economic sectors.<sup>6</sup> The first quarter of 2010 saw a sizable flow of liquidity to the non-government non-bank sector of 9.7 per cent of the GDP for the quarter at the expense of the reduced government deposit with the BNB. The external sector also was a net beneficiary of liquidity to the amount of 0.9 per cent of the GDP for the quarter, with interests on external borrowings and Bulgaria's contribution to the general budget of the European Union exceeding the aid received from other countries.

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



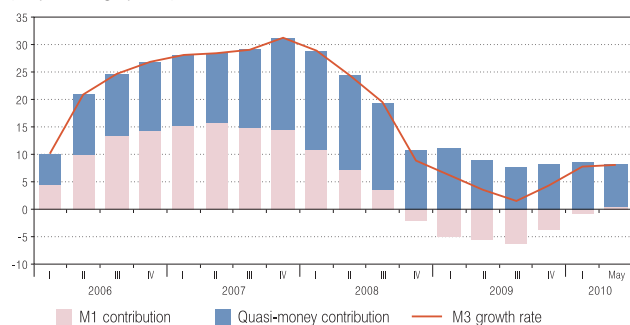
Sources: MF, BNB.

As of May 2010 broad money sustained the upward trend from the previous two quarters, posting an increase of 8.2 per cent on an annual basis. The annual broad money growth is projected to moderate slightly in the second half of 2010, but will remain close to its current levels.

<sup>6</sup> See the *Financial Flows between the Budget and Other Sectors* box, Economic Review, May 2004, p. 30.

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

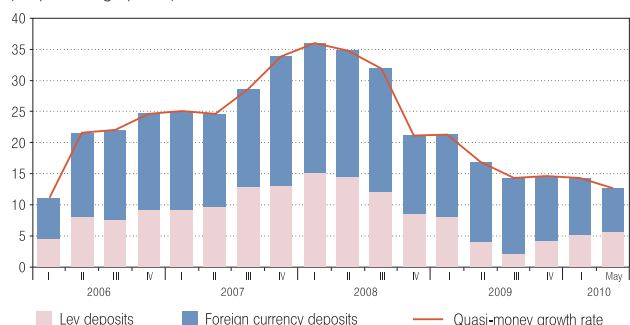
(%, percentage points)



The minimum acceleration in broad money growth observed in May was mainly ascribable to the M1 monetary aggregate which by the end of the same month increased by 1.1 per cent on an annual basis against a decrease of 2 per cent in the first quarter of 2010. M1 developments reflected mainly the increase in overnight deposits: up 4.6 per cent on an annual basis. Overnight deposits of local government and social insurance funds reported a sizable surplus of around BGN 411 million on May 2009. They contributed by 3.9 percentage points to the overall increase of overnight deposits. Overnight deposits of non-financial corporations saw a moderate decline on an annual basis from -8.0 per cent in the first quarter to -1.4 per cent by the end of May, while overnight deposits of households reported a 3 per cent increase by May 2010. Money outside banks also exhibited a gradual moderation in the pace of decline, going down by 4.3 per cent by May compared to a decrease of 5.1 per cent by the end of March.

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

(%, percentage points)



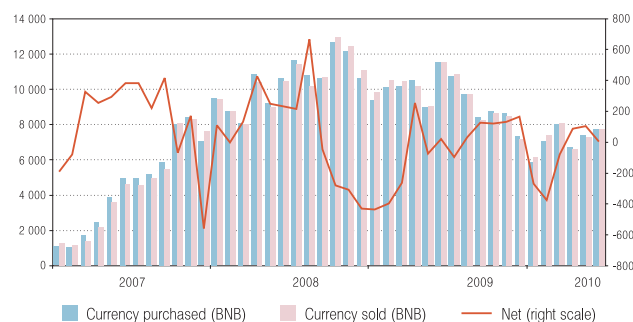
The annual growth rate of quasi-money came to 12.6 per cent by the end of May 2010 and the trend toward a gradual increase in lev-denom-

inated deposits (5.6 percentage points) at the expense of those denominated in foreign currency (7.0 percentage points) was sustained. Deposits with agreed maturity of up to two years rose by 14.8 per cent on an annual basis, with household deposits having the largest share – 13.0 percentage points. By end-May household deposits in lev increased by 25.6 per cent on an annual basis and those in foreign currencies by 18.3 per cent. Non-financial corporations reported an increase of 1.4 per cent in deposits with agreed maturity of up to two years. Their lev deposits went up by 0.3 per cent on annual basis as of May (on 0.8 per cent as of March) and the annual growth of their foreign currency deposits slowed down to 2.5 per cent compared to 12.1 per cent as of March.

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

(million EUR)

(million EUR)



Foreign currency trade with the BNB is the main tool used by banks to manage their lev liquidity. It is used to perform the main function of the Currency Board to buy and sell on demand national currency against euro.

In the second quarter of 2010 the average daily volume of currency trade with the BNB came to EUR 710 million<sup>7</sup>, which was 3.3 per cent more compared to the average daily volume in the first quarter. Over the same period banks realised net sales of euro to the amount of EUR 189.5 million (compared to net purchases of euro of EUR 727 million in the first quarter of 2010).

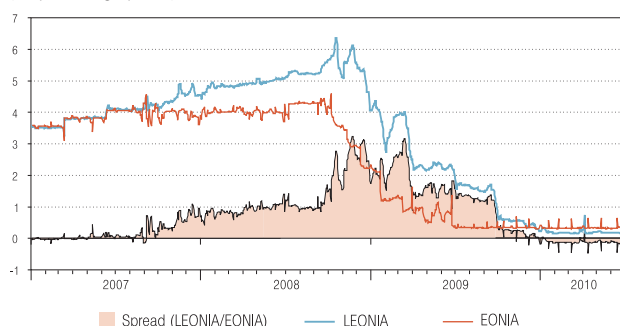
Between April and June interbank money market interest rates remained relatively close to the levels observed in the first quarter of 2010. The average interest rate on transactions concluded on the interbank money market went down from 0.37 per cent in the first quarter of 2010 to

<sup>7</sup> Based on daily data on the currency trade until 30 June 2010.

0.30 per cent in the second quarter<sup>8</sup>.

#### LEONIA/EONIA

(%, percentage points)

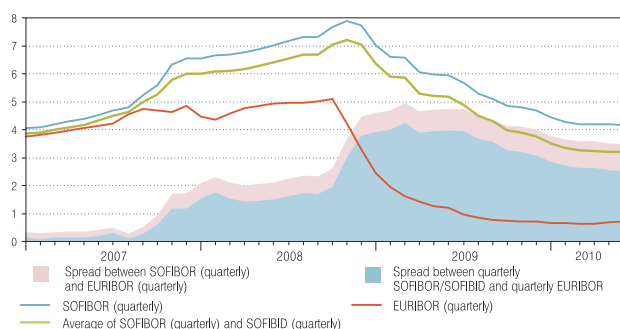


Source: BNB.

LEONIA index exhibited a similar trend going down from 0.20 per cent in the first quarter to 0.19 per cent in the second quarter. The spread between LEONIA and EONIA remained negative, hovering around 14 basis points in the April to June 2010 period. These levels signal normalisation of interbank trade and improved liquidity of banks in Bulgaria and correspond to the average levels observed before the summer of 2007.

#### SOFIBOR, average SOFIBOR/SOFIBID and EURIBOR (Quarterly horizon)

(%, percentage points)



Source: BNB.

The SOFIBOR reference rate (quarterly) – used as an indicator for short-term interest rates – followed a downward trend similar to that observed in EURIBOR (quarterly) since November 2008, reaching 4.2 per cent in June 2010. Similar to LEONIA, the SOFIBOR value (in a quarterly horizon) was close to the levels that prevailed before the onset of the global financial crisis. The spread between SOFIBOR (quarterly) and EURIBOR (quarterly) followed the downward momentum observed since mid-2009 and retained it in the first half of 2010, reaching 346 basis points as of June (down 11 basis points compared to its

<sup>8</sup> Based on daily data on money market transactions until 30 June 2010.

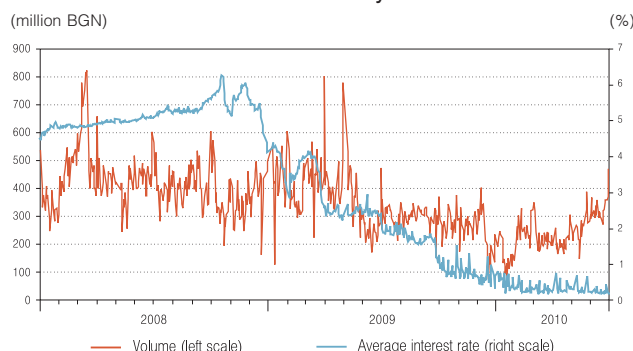
level in March). It declined, mainly owing to the fall in SOFIBOR of 3 basis points between April and June, while EURIBOR increased by 8 basis points. The average SOFIBOR/SOFIBID reference rates on the interbank market in Bulgaria for the quarterly horizon declined to 3.2 per cent in June 2010, and the spread between the average quotation and EURIBOR (quarterly) decreased to 250 basis points.<sup>9</sup> By June 2010 the average index rate formed by the SOFIBOR and SOFIBID was already lower than the respective average quotation that prevailed in Bulgaria before the first signs of the global financial crisis in the summer of 2007.

Further reductions in EURIBOR spreads will be driven by interest rate developments in the euro area which are directly related to the amount of liquidity provided by the ECB to euro area banks.

The average daily volume of transactions on the interbank money market for the April – June 2010 period increased to around BGN 260 million, from BGN 212 million in the first quarter which is indicative of the improved situation on the interbank market.

#### Trade Volume and Interbank Money Market Interest Rates

(million BGN)

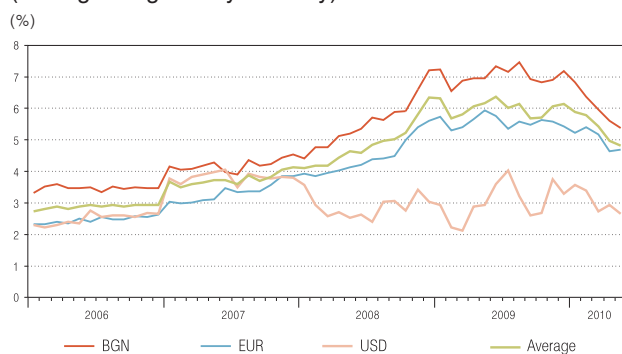


Source: BNB.

Interest rates on new time deposits retained the downward trend observed since early 2010, with lev-denominated deposits reporting the most sizable decrease. By May the average interest rate on new time deposits denominated in levs reached 5.4 per cent and the average interest rate on time deposits denominated in euro came to 4.7 per cent. Between January and May 2010 the average interest rate on deposits fell by 130 basis points to 4.8 per cent.

<sup>9</sup> See the *Differences between the Methodology for Calculating Money Market Indices in the Euro Area and in the New EU Member States* box, p. 27.

### Interest Rates on New Time Deposits (average weighted by maturity)



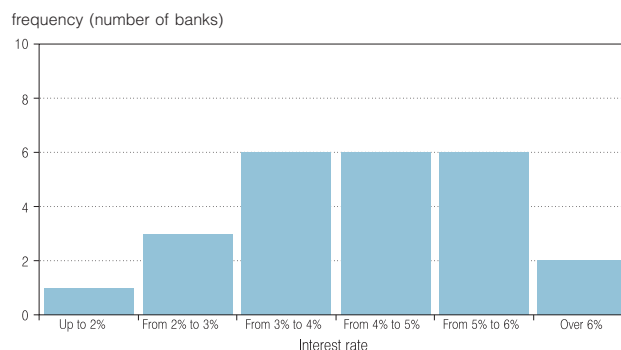
The gradual reduction in interest rates on time deposits is expected to continue in the second half of 2010. This is supported by the high banking system liquidity (the *liquid assets to total liabilities* ratio was 21.94 per cent by end-April) and the expected low lending activity (against the background of relatively tight credit standards) – a contributor to weaker demand for resources for financing credit operations.

As regards the distribution of interest rates on household deposits with maturity of up to one month by bank, the number of banks offering rates within the 2 to 3 per cent and 4 to 5 per cent interval increased at the expense of those offering rates within the 3 to 4 per cent and 5 to 6 per cent band respectively. May saw a decrease in the average interest rate level com-

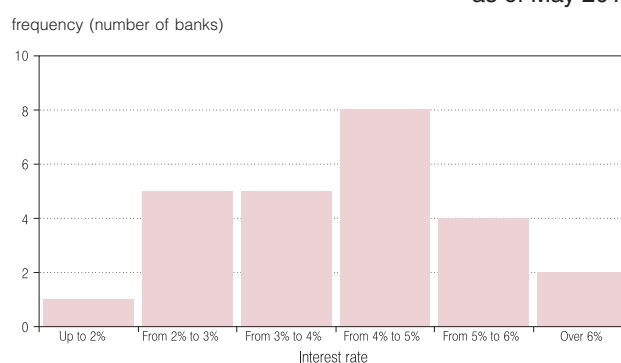
pared with March 2010 and an increase in the dispersion coefficient of 8 basis points to 1.51 percentage points.

### Distribution of Interest Rates on Household Lev Deposits with Maturity of up to One Month

as of March 2010



as of May 2010



## Differences between the Methodology for Calculating Money Market Indices in the Euro Area and in the New EU Member States

The practice in analyzing money markets is to compare the three-month EURIBOR with the respective three-month international market interest rates in the new EU Member States (EU-12). However, some significant differences in the methodology of computing the respective indices are usually not taken into account, which makes the mechanical computation of spreads from these indices incorrect (especially in cases when the money market does not operate normally) and the comparison of the spreads among countries either. The major methodological difference between EURIBOR and the respective indices used in EU-12 is that EURIBOR is not an offer price (bid price) as other indices are, but it is quite close to the actual market price at which the transactions are concluded.

Upon composing EURIBOR in the euro area participating banks should provide only one quotation which should be 'the best price among the best banks in the market'. In this context, EURIBOR is the most representative rate for the price at which deals are concluded on the interbank market. In contrast to the EURIBOR methodology in EU-12, due to the larger dispersion in the prices of deals, banks are required to provide both offer (-IBOR) and bid (-IBID) quotations. In EU-12 -IBOR quotations are an average mean only of the offer quotations provided by a representative panel of banks. In most cases these indices are created as a result of the cooperation among banks, and the central bank participates only with a deliberative vote and as an independent institution computing indices according to the rules approved by banks and publishing them in a fixed time of the day.

Interpreting the spread between -IBOR indices in EU-12 and EURIBOR, it is important to take into account the different formula at which the EU-12 indicators are computed. From this perspective, when analyzing money mar-

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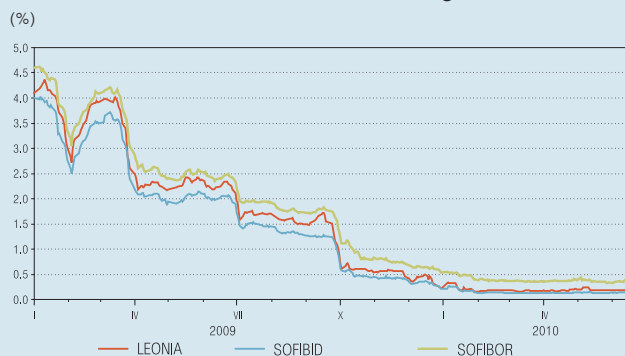
kets it is more correctly to compute a spread between EURIBOR and the average quotation between -IBOR (offer rate) and -IBID (bid rate) in the respective EU-12 Member State, since it gives a better view of the market rate level in that country and is closer to the market representativeness of EURIBOR.

Moreover, some countries have introduced a limit in the spread between -IBOR and -IBID quotations provided daily by the representative panel of banks. Examples of this are Poland and Romania and the actual implementation varies in time and among individual countries. Other things being equal, such a limit means reporting a relatively narrower spread between the published -IBOR and -IBID indices which distorts information of the spread about actual market state. This additional methodological difference also causes difficulties and makes incorrect the mechanical comparison of spreads with EURIBOR among individual countries.

The interbank market is dominated by transactions with a maturity of one month. This also applies to Bulgaria where there are several transactions monthly with a maturity of about three months concluded in a relatively wide price horizon. In the first half of 2010 the volume of overnight transactions accounted for 81 per cent of the inter-bank deposit market and the share of transactions with a maturity of one month, including overnight transactions, comprised 97 per cent. Since the overnight segment of money market is more liquid and with a larger volume of transactions compared with longer maturities, it could be used as a basis on which the -IBOR and -IBID indices to be compared with the market price at which the transactions are concluded. It is seen on the overnight market that LEONIA index (the interest rate on real overnight transactions) varies around the average between the respective -IBOR and -IBID quotations, approaching closer to banks' offer rates in the last three quarters. The average value of the concluded transactions in deposits with three-month maturity was also close to the average between -IBOR and -IBID indices but market interest rates are characterised by a high variation ratio (0.25) against the overnight segment (0.18).

Taking into account the methodological differences in computing the indices, the spreads between money market indices in individual countries should be interpreted cautiously and the attention should be focused on their dynamics rather than to their absolute values.

LEONIA, SOFIBID and SOFIBOR overnight rates



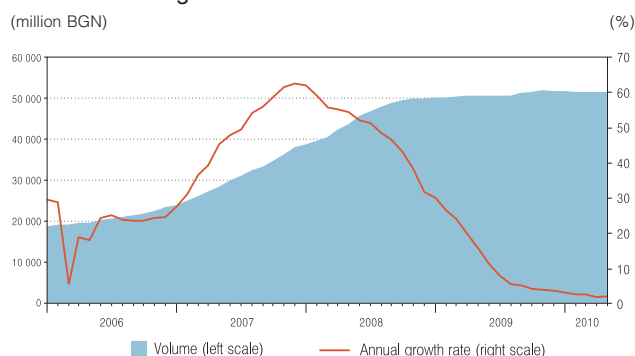
Source: BNB.

## Credit Aggregates

The downward trend in credit growth was sustained due to the weaker macroeconomic activity and the high degree of uncertainty reducing credit demand and tightening banks' credit standards. The effect of the cuts in deposit rates may influence lending rates in the second half of 2010.

In the first half of 2010 banks tightened their credit standards further due to the deteriorated macroeconomic environment and the uncertainty surrounding economic recovery which had a negative effect on lending activity over that period. As a result of the tighter credit standards and conditions and of the lower credit demand, credit growth moderated further and by end-May the annual growth rate of claims on the non-government sector fell to 2.0 per cent.

Claims on Non-government Sector



Source: BNB.

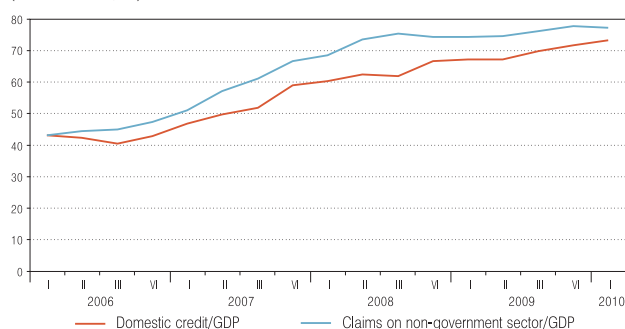


Between April and May 2010 claims on the non-government sector decreased by BGN 9.3 million against an increase of BGN 280.6 million in the same period of 2009. In the first five months of 2010 banks reported minimum net sales of loans to the amount of BGN 12.1 million.

Our expectations point to a relative stabilization of the growth rate of claims on the non-government sector in the second half of 2010, staying close to their current levels. The higher nominal GDP growth than that of lending observed in the previous quarter impacted the dynamics of the *claims on the non-government sector to GDP* ratio. By the end of March 2010 this ratio decreased somewhat reaching 77.4 per cent: down 0.5 percentage point on the previous quarter.

### Domestic Credit

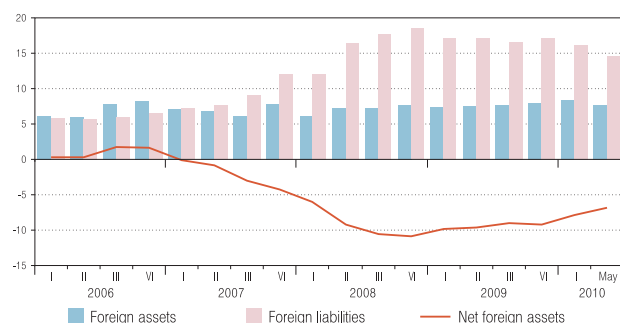
(share of GDP, %)



Source: BNB.

### Foreign Assets and Liabilities of Banks

(billion BGN)



Source: BNB.

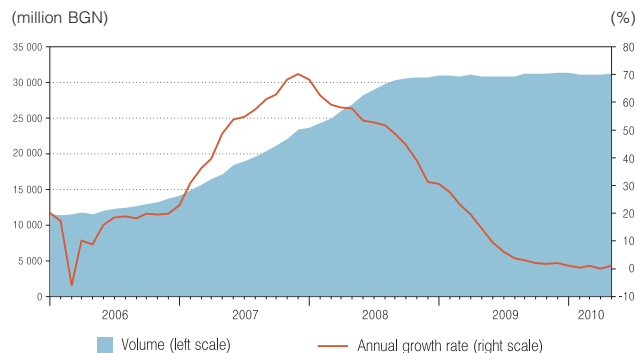
Between April and May 2010 banks' funds attracted from non-residents decreased by BGN 1.55 billion and their foreign assets fell by BGN 613 million. As a result, banks' net foreign liabilities declined by BGN 933.6 million reflecting the trend observed since the first quarter of 2010, namely the banks' preference for reducing their external liabilities in the context of ample liquidity and prudent lending policy. Since the beginning of the year banks' external indebtedness fell by

BGN 2.33 billion. This trend is expected to remain sustained in the second half of 2010.

Weaker credit demand, resulting from the worsened macroeconomic environment, continued to restrict growth in claims on non-financial corporations. Their annual growth rate remained close to the levels observed in the first quarter and by the end of May was 1.1 per cent. Claims on non-financial corporations increased by BGN 43.4 million between April and May 2010.

### Claims on Non-financial Corporations

(million BGN)

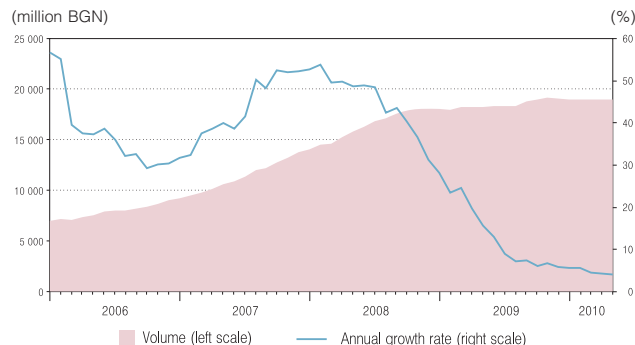


Source: BNB.

Lending to households remained relatively weak. This trend was underpinned by the weaker demand for loans, reflecting the high degree of uncertainty surrounding employment and income, as well as by the tightening of banks' lending policy. Between April and May claims on households declined by BGN 16.5 million *vis-à-vis* an increase of BGN 38.8 million in the same period of 2009. Their annual growth rate still followed a downward trend, reaching 4.1 per cent by the end of May. Housing loan growth came to 6.7 per cent by end-May and sustained its relatively high rates compared to consumer credit (5.8 per cent), mainly due to the continuous decline in house prices and the reduction of interest rates on this kind of long-term loans.

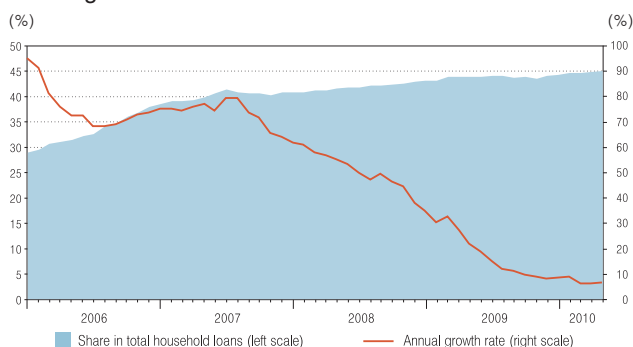
### Claims on Households

(million BGN)



Source: BNB.

## Housing loans



Source: BNB.

In April and May lending rates remained relatively stable compared to the first quarter of 2010. The average annual percentage rate of charges (APRC) on consumer loans reached 13.60 per cent in May (13.56 per cent in March). The annual percentage rate of charges on housing loans declined by 0.4 percentage points on March 2010 and reached 9.3 per cent in May. Between January and May 2010 the new housing loans were 5 per cent up than in the corresponding period of the prior year. Housing loans saw a contraction in the interest spread between lev- and euro-denominated loans, which, as regards the annual percentage rate of charges, declined from 1.12 percentage points in the end of 2009 to 0.04 percentage points in May.

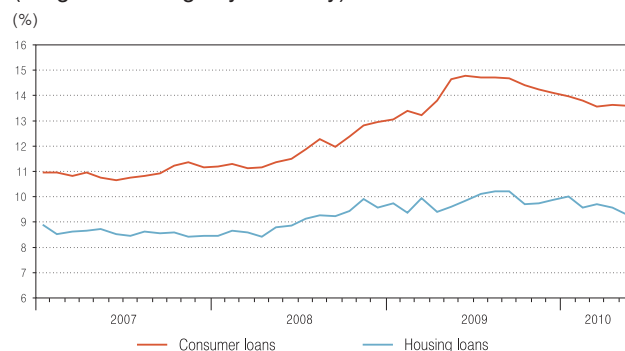
The average interest rate on bank loans to non-financial corporations reached 8.71 per cent by end-May (up by 0.26 percentage points on March), owing to the increase in interest rates on loans in euro to 8.58 per cent.

The more favourable situation on the interbank money market, higher liquidity of banks and the decrease in the cost of deposits have not yet placed serious downward pressure on the lending rates in Bulgaria.

There is a high degree of uncertainty surrounding interest rate developments in the following months.

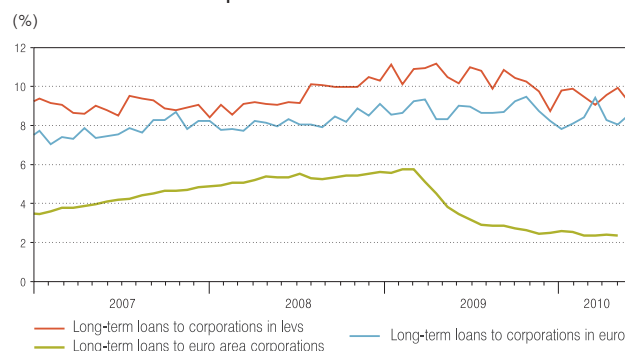
The interbank money market has only a supporting role in bank liquidity management and we cannot expect that changes on this market will largely affect the decrease in lending rates. Provided that a gradual decrease in interest rates on deposits was observed in the first five months of 2010, we might expect a very slow decline in interest rates on loans over the projected horizon. On the other hand, the spread between deposit and lending rates is influenced by the increasing bank provisions due to the depreciation of loans with servicing problems, and to banks' efforts to maintain reasonable profitability levels.

## APRC on New Household Loans (weighted average by currency)



Source: BNB.

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



Source: BNB.

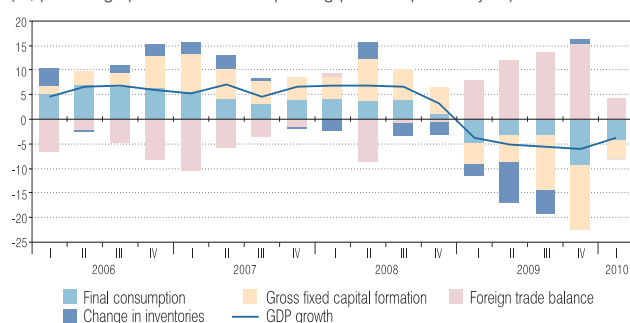
# 3. Economic Activity

In the first quarter of 2010 real GDP declined by 3.6 per cent on an annual basis. The positive contribution of net exports and inventories to the dynamics of real GDP was still insufficient to offset the negative contribution of consumption and investments. The world economic recovery is continuing but the risks to global growth associated with the worsening fiscal position in some euro area countries and the renewed tension on financial markets create uncertainty about the speed of the recovery in the Bulgarian economy. The unemployment level stabilised but improvement on the labour market may be expected only by the end of the year.

The fall in the real GDP continued in the first quarter of 2010, with the annual rate decreasing from nearly 6 per cent in the last quarter of 2009 to 3.6 per cent in the first quarter of 2010.

## Contribution to GDP Growth by Component of Final Consumption (Quarterly)

(%, percentage points on the corresponding period of previous year)



Source: NSI.

Private consumption slowed down in real terms at relatively high rate of 7.3 per cent in the first quarter of 2010 compared with the corresponding period in 2009 and exhibited the highest negative contribution of 5.4 percentage points to real GDP dynamics. Households reacted to the worsened

labour market situation and uncertain income growth prospects by postponing some consumer expenses and increasing the savings rate.

The unstable international economic environment and still high uncertainty as to the prospects of global economic recovery forced companies to postpone their investment expenditure. As a result fixed investment in Bulgaria continued to decline and in the first quarter of 2010 it fell by 15 per cent in real terms from the corresponding quarter in 2009. By sector nominal expenditure on acquisition of fixed assets fell most significantly in industry (by 22 per cent) where the capacity utilisation rates (68.9 per cent in April 2010) remained under the maximum level of 75.7 per cent reached in April 2008. Nominal expenditure on acquisition of fixed assets posted positive growth in trade, transport, hotel and restaurant services, real estate operations and construction, while public investment rose most significantly (by 72 per cent). Thanks to these industries the total decline in the physical volume of investment is significantly lower than the real drop of 35 per cent

## GDP by Component of Final Consumption (Real Rate)

(%, real growth on the corresponding period of previous year)

	2007				2008				2009				2010
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I
Final consumption	6.0	5.0	4.2	4.5	4.7	4.8	5.4	1.4	-5.4	-3.7	-4.2	-10.5	-4.8
incl.													
Household consumption	7.8	6.1	5.1	2.7	6.5	5.4	6.5	1.5	-6.3	-5.6	-5.3	-8.0	-7.3
Final government consumption expenditure	-1.2	-1.0	2.3	8.5	-2.9	4.1	-0.3	4.6	-2.1	-0.4	0.4	-14.2	9.9
Collective consumption	-2.7	0.7	-2.5	13.3	-5.8	0.3	0.9	-1.5	1.2	8.1	1.4	-22.6	5.1
Gross fixed capital formation	35.9	24.7	19.7	14.0	15.5	28.6	22.3	15.8	-14.1	-16.3	-36.5	-35.4	-14.9
Exports of goods and non-factor services	3.7	5.3	5.4	6.0	9.2	5.1	3.8	-6.0	-17.4	-15.8	-6.7	0.8	5.9
Imports of goods and non-factor services	14.7	11.1	9.3	5.7	5.8	13.7	4.2	-3.2	-21.1	-24.3	-23.4	-20.0	-2.6
Real GDP growth	5.5	7.3	4.9	6.9	7.0	7.1	6.8	3.5	-3.5	-4.9	-5.4	-5.9	-3.6

Sources: NSI, BNB.

on an annual basis reported in the last quarter of 2009. Taking into account the seasonal factors investment even posted an increase by approximately 4 per cent on the fourth quarter of 2009.

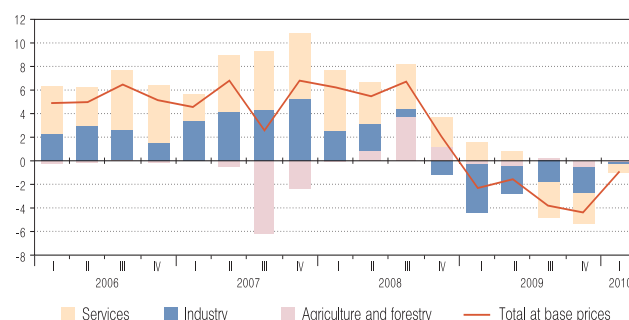
Based on the national accounts data over the first quarter of 2010 the growth in exports of goods and services accelerated to 5.9 per cent in real terms (from 0.8 per cent in the fourth quarter of 2009), with exports of goods increasing by 11 per cent in real terms. Exports growth reflects also the recovery in imports of commodities and raw materials used in the production of export output *e.g.* in oil processing, metallurgy, energy. Therefore, the positive contribution of the net exports to real GDP dynamics decreased from 15 percentage points to 4.5 percentage points.

As regards the supply, the rate of real decline in the value added also started to slow down and from 5.3 per cent in the last quarter of 2009 it reached 1.1 per cent in the first quarter of 2010. Substantial positive growth was posted by the financial intermediation (12 per cent), mining and quarrying (13 per cent) and energy (3.4 per cent) sectors. The real growth in industry, including mining and quarrying, and manufacturing and construction, was negative as the decrease in the domestic demand intensified the fall in the value added in construction (-13 per cent) and the production activity in manufacturing was recovering slowly. The value added in manufacturing rose by mere 2 per cent on an annual basis with a strong base effect from the first quarter of 2009 when this indicator exhibited a fall by 18 per cent. Most

exports sales only offset the continuous decline in domestic market sales.

### Value Added Growth and Contribution by Sector

(%, percentage points on the corresponding period of previous year)



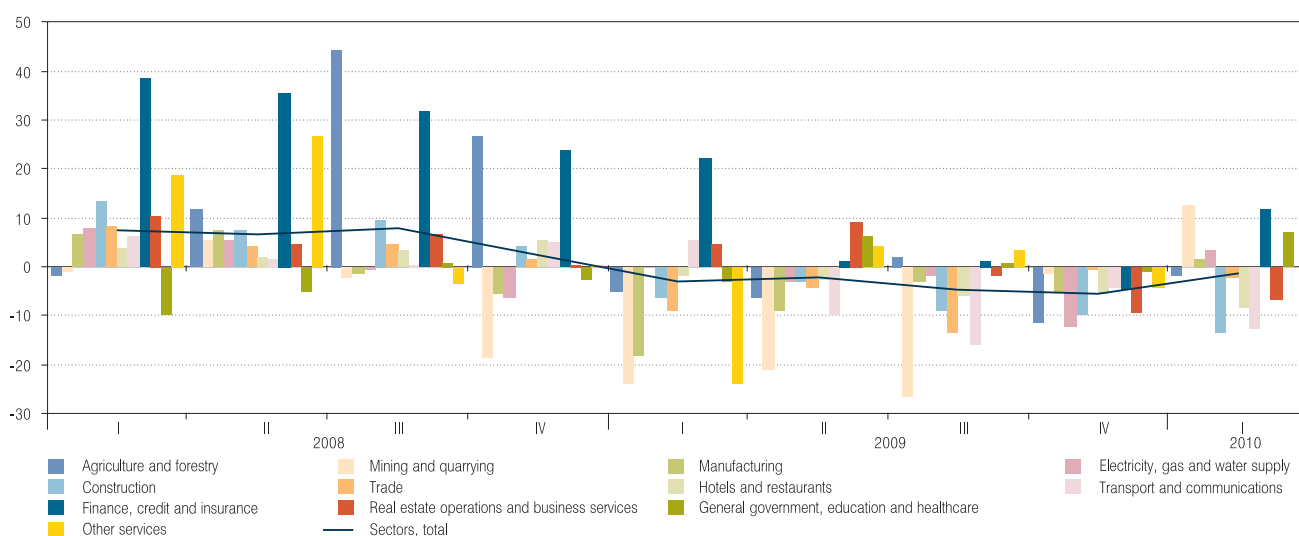
Source: NSI.

In the beginning of the second quarter some positive trends towards a recovery of individual industries were sustained. In April the total turnover<sup>1</sup> of industrial enterprises exhibited positive growth due to the accelerated exports turnover and gradually moderating rate of decline in domestic market sales. Production capacity utilization in the industrial sector increased by 64.5 per cent in early 2010 to 68.9 per cent in April. These trends are expected to be sustained in the second half of the year and to have a positive effect

<sup>1</sup> The volume of industrial enterprises includes all earnings from sales plus all taxes on the products (excises). The industry turnover index is obtained by measuring the change in income from sales of enterprises, including from the sale of goods (purchased and resold without further processing) and from services provided by third parties. This index is calculated on 2005 base by comparing the value of the turnover at current prices and it reflects the development on the market of goods and services. Calculating the industry turnover index the value of sales is not adjusted for price changes. The index reflects simultaneously the change in the value of sales and price changes.

### Dynamics by Value Added by Economic Activity

(%, on corresponding quarter of previous year)



Sources: NSI.

on domestic demand and on the sectors depending on its dynamics accordingly. Due to the sizable fall of investment in physical assets (by 26.7 per cent) in 2009, investment demand is expected to recover more intensively in the second half of the year and to contribute positively to the real GDP dynamics. Household consumer demand will remain weak until the year-end due to slower recovery of the labour market and sustained higher propensity to savings.

Currently the tension on financial markets associated with the worsening fiscal position in some euro area countries does not affect short-term prospects to global economic growth but creates uncertainty and risks to world economy recovery and correspondingly to the speed of the recovery in the Bulgarian economy.

## Household Behaviour

In the first quarter of 2010 household consumption decreased by 7.3 per cent in real terms compared with the corresponding period of the previous year. As in the previous quarters consumption of non-food goods and net tourism had the largest negative contribution: -4 percentage points and -2.5 percentage points respectively. The positive annual rate of food expenditure of about 5 per cent in real terms was sustained.

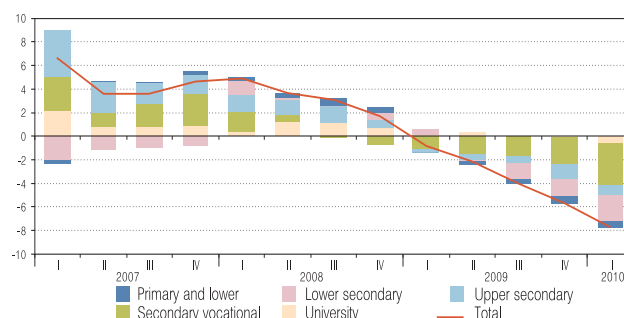
Household behaviour was impacted by the worsened labour market and higher unemployment level. Based on national accounts data for the first quarter employment decreased by 7.3 per cent on an annual basis, and based on the National Employment Agency data over the same period unemployment continued growing to reach 10.1 per cent<sup>2</sup> in March. Labour shedding affected most strongly the youngest (15–34 years old) and the oldest workers and employees (over 65 years). People with a vocational training, that is qualified production workers, specialists and operators of equipment and transport vehicles, contributed most significantly to the employment fall, followed by people with lower and upper secondary education (or without a special qualification).

Over the first quarter the supply of new jobs was weak prompting a stronger competition in employment in early 2010. The higher unemployment level takes more time of unskilled persons to find a job which creates risks for an increase

in the share of long-term unemployed and discouraged people<sup>3</sup>.

## Contribution to Employment Growth by Education

(%; percentage points)



Sources: NSI, BNB.

Although in real terms the average salary posted approximately a 10 per cent annual growth (11.9 per cent in nominal terms) in the first quarter the household average income from salary went down by about 4 per cent in nominal terms (based on NSI household budget survey data in the first quarter of 2010) due to employment declines. Over the same period the total household income went up by 5.3 per cent with pensions and social transfers contributing most significantly to this effect.

Household consumption continued to decline (both in real and in nominal terms) despite the increase in disposable income. This was a result of intensifying propensity to save prompted by uncertainty about future income. The household savings/GDP ratio increased from 11.9% in the first quarter of 2009 to 13.8% in the first quarter of 2010. The stronger propensity to save led to an increase in household deposits in banks which exceeded the disbursed loans by approximately BGN 5 billion by the end of May.

Monthly data on retail trade dynamics suggest that in April 2010 consumer demand continued to decline as the retail trade revenue went down by 11 per cent on an annual basis.

Since the second quarter of the year some favourable trends have occurred; one of them pointed to a decrease in the level of registered unemployed to 9.53 per cent in May. NSI consumer survey data in April also showed positive signs. Consumer confidence rose as a result of improved expectations about household financial state, the general economic performance and

<sup>2</sup> NSI labour force survey data reported a similar trend.

<sup>3</sup> Discouraged people can be motivated by the recovery and growth in the economy.



## Employment and Income Dynamics

(% on corresponding period of previous year, unless otherwise indicated)

	2008				2009				2010	
	I	II	III	IV	I	II	III	IV	I	May
Employed	4.8	3.4	3.0	2.1	-0.3	-1.8	-3.7	-5.8	-7.3	
Real wage	8.2	10.5	7.3	10.5	9.6	8.1	8.9	2.9	9.8	
Wage bill	14.1	14.8	10.6	13.2	9.0	5.5	3.5	-4.3	0.3	
Unemployment at the end of the period, % of the labour force	6.8	6.0	5.8	6.3	6.9	7.3	8.0	9.1	10.1	9.5

Sources: NSI – SNA, Employment Agency.

## Retail Trade Turnover

(% on corresponding period of previous year)

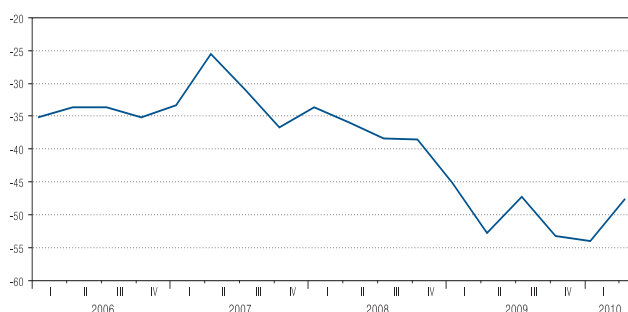
	2008				2009				2010	
	I	II	III	IV	I	II	III	IV	I	April
Retail trade turnover (excluding cars and motorcycles)	13.5	11.3	8.0	4.3	-5.3	-10.2	-9.2	-10.5	-12.1	-11.7
incl.										
Food, drink, tobacco	3.3	-1.0	1.3	3.0	3.2	2.2	2.1	1.0	-0.8	-0.1
Retail trade in non-food goods	37.6	36.6	29.9	22.8	-4.4	-11.5	-13.7	-15.9	-18.2	-16.6
Automobile fuels and lubricants	8.4	9.0	5.8	-1.3	-8.3	-13.4	-3.8	-4.2	-13.8	-14.3
Pharmaceutical and medical goods, cosmetics and toiletries	20.3	23.5	21.8	21.8	6.9	-2.1	-3.2	-2.6	-10.1	-6.8
Textile, clothing, footwear and leather	35.9	25.2	13.3	10.9	-5.1	-8.6	-13.6	-13.2	-10.0	-7.9
Household goods and home appliances	14.1	9.5	4.9	1.9	-7.6	-16.4	-19.0	-19.7	-17.0	-14.8
Computers and communication equipment	26.3	25.2	15.7	6.3	-15.1	-17.5	-20.0	-23.0	-22.2	-24.0

Source: NSI – Household Budgets and Domestic Trade Survey.

unemployment dynamics. Based on the National Employment Agency data the competition for occupying vacancies has started to weaken, with the number of unemployed applying for a vacant job decreasing from 30 persons in February to 19 in April and 17 in May. Expectations of managers in the industrial sector and construction as to the number of staff in the following months have also improved.

## Households Confidence Indicator

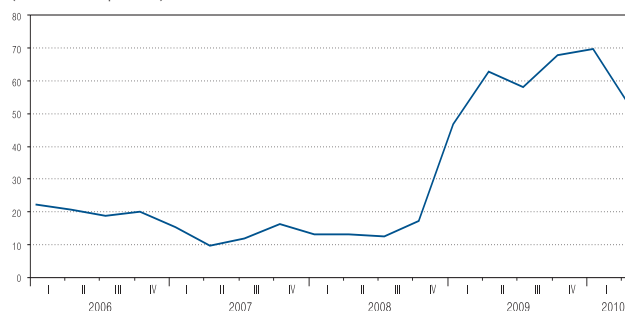
(balance of opinions)



Source: NSI – Consumer Survey.

## Unemployment Expectations (Quarterly)

(balance of opinions)



Source: NSI – Consumer Survey.

The sustainability of these trends is still uncertain and depends on the speed of recovery of the economic activity in Bulgaria. Household consumption is expected to start increasing only at the end of 2010 consistent with the improved conditions on the labour market.

## Government Finance and Consumption

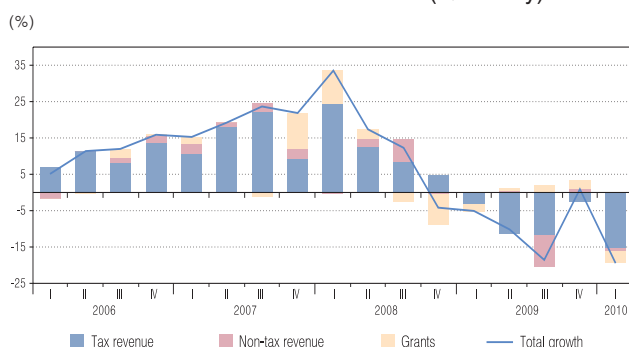
The cash balance on the consolidated fiscal programme amounted to BGN -1360.0 million in the January – May 2010 period. Despite the government measures for fiscal consolidation total budget expenditure in the first five months of the year went up by 2.2 per cent on an annual basis, while total revenue and grants decreased by 15.3 per cent. The increase in current non-interest expenditure reported in the first quarter of 2010 resulted in a positive contribution of 1.1 percentage points of government consumption to GDP dynamics in real terms.

Following the deterioration of the budget in the first months of 2010 the government took a decision and deposited in the National Assembly a Draft Law on Amendment to the 2010 State Budget Law providing for a cash deficit on the consolidated fiscal programme of BGN 3.3 billion (4.8 per cent of GDP).

Between January and May 2010 the cash-based budget balance on the consolidated fiscal programme totalled BGN -1360.0 million; of this BGN 237.4 million was a result of the accumulated deficit on EU programmes. The bulk of the budget deficit was financed by funds from the fiscal reserves which between January and May 2010 went down by BGN 1.09 billion and by the end of May reached BGN 6584.6 million.

The decline in total revenue and grants by 15.3 per cent on annual basis between January and May was the major reason behind the deficit on the consolidated state budget. The analysis of the monthly data on the implementation of the state budget and the consolidated fiscal programme for the first five months of 2010 suggested a slow-down in the annual rate of decline in tax revenue from 24.0 per cent in January to 14.2 per cent in May after the higher revenue reported only in April.

**Contribution of Major Groups of Revenue to Total Growth of Revenue and Grants (Quarterly)**



Sources: MF, BNB.

Value added tax decreased most substantially and in May it reached 11.2 on an annual basis. Between February and April a monthly rise in VAT revenue occurred but in May it went down by 18.9 per cent compared with the previous month.

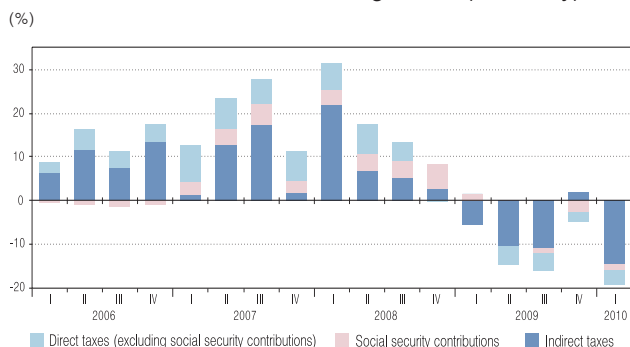
The sizable drop of VAT revenue might be related to the increased number of firms with a turnover falling under the limit requiring VAT registration (BGN 50,000) or firms closing their business.

The more substantial fall in VAT revenue in January and February 2010 compared with the same period of 2009 reflected to a great extent the effect of one-off factors. Reduced consolidated state budget expenditure (current and capital) in the last quarter of 2009 resulted in lower revenue from VAT in early 2010 (in contrast to the substantial revenue from VAT in early 2009 associated with sizable budget spending at the end of 2008). In addition, the bulk of VAT due by the end of 2009 but non-refunded yet was paid in the first months of 2010 which also resulted in lower net revenue from this tax for the review period. The VAT was refunded after the government tax inspections had been carried out in firms entitled to a tax credit.

The lower excise revenue was impacted by the following factors: refunding of excise paid for unsold cigarettes with old excise labels, lower revenue from the excise on the petrol due to planned overhauls at LUKOIL Neftochim in February.

The decline in revenue from personal income taxes and social and health insurance contributions was significantly lower than the fall in VAT revenue but from the beginning of 2010 it tended to accelerate. The proceeds from personal income taxes were significantly lower (by -1.2 on an annual basis) and reflect entirely the lower income declared in April on civil contracts and freelancers. The reduction of the contribution rate of the Pension Fund by 2 percentage points as of January 2010 was the major factor behind the lower revenue from the social security contributions (by -6.8 per cent on an annual basis between January and May).

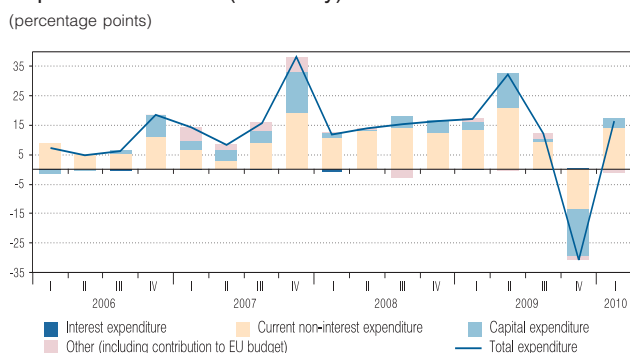
### Contribution of Major Tax Groups to Tax Revenue Growth under the Consolidated Fiscal Programme (Quarterly)



Sources: MF, BNB.

Comparing the data on total revenue and grants for the first five months of 2010 with those in 2009, the difference in funds under EU programmes should be taken into account. In the beginning of 2009 they totalled BGN 677.2 million while in the first five months of 2010 the interim payments<sup>4</sup> under the structural funds and the EU Cohesion fund amounted to BGN 411.3 million.

### Contribution of Major Groups of Expenditure to Total Expenditure Growth (Quarterly)



Sources: MF, BNB.

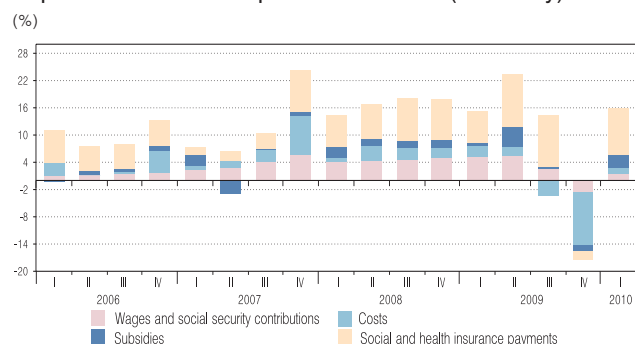
Between January and May total budget expenditure on an annual basis (including also Bulgaria's contribution to EU budget) rose by 2.2 per cent. Social expenses and scholarships (6.3 percentage points) and subsidies (0.5 percentage points) contributed most significantly to this effect. The major factors behind the reported increase in social expenses by 16.4 per cent on an annual basis include the raised pensions in 2009 and higher expenditure on compensations and benefits for households as a result of increased unemployment.

<sup>4</sup> Payments from the EU to Bulgaria are made on three stages: advance, interim and final payment. Advance payments were received in 2007, 2008 and 2009 and were determined as a percentage of the budget of the respective operating programme by fund. Interim payments were refunds of declared eligible expenditure made by the country which were examined by the certifying body. For further details on the stages of payments from the EU to Bulgaria, see the BNB *Economic Review* quarterly bulletin, 4/2009.

The monthly data on the consolidated fiscal programme pointed to a decline in total expenditure in May and April compared with the first three months of 2010. The improvement reflects primarily lower capital expenses. They reported a decline both on a monthly basis and against the first five months of 2009 (by 23.9 per cent) which was due to the base effect of the stronger investment reported by the general government sector in the same period of previous year. Current operating expenditure also decreased by 5.6 per cent on an annual basis.

The growth rate of expenditure on wages and social and health insurance contributions slowed down significantly from 14.7 per cent in January to 1.7 per cent in May, while March and April saw a fall against the corresponding period of the previous year. The redundancies of government employees in early 2010 initially led to a rise in this expenditure due to payment of unemployment compensations and payment of unused paid annual leave. In April the effect of the lower wage fund was stronger compared with the one-off rise of funds for compensations upon leave. As a result, total expenditure on wages and staff remuneration decreased compared to March.

### Contribution of Major Groups of Current Non-interest Expenditure to Total Expenditure Growth (Quarterly)



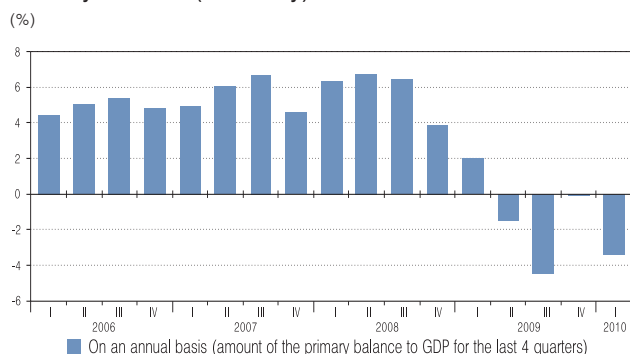
Sources: MF, BNB.

The quarterly data on the implementation of the consolidated fiscal programme allows for a connection between the budget statistics and the national accounts data on the general government sector. In the first quarter of 2010 the primary balance was negative slightly exceeding BGN 1.4 billion and accounted for 10.1 per cent of the GDP for the quarter, or 3.4 per cent of the GDP on an annual basis<sup>5</sup>. As a result of increased current non-interest expenditure by 17.2 per cent on

<sup>5</sup> The ratio of the sum of primary balances for the last four quarters and GDP for the same period.

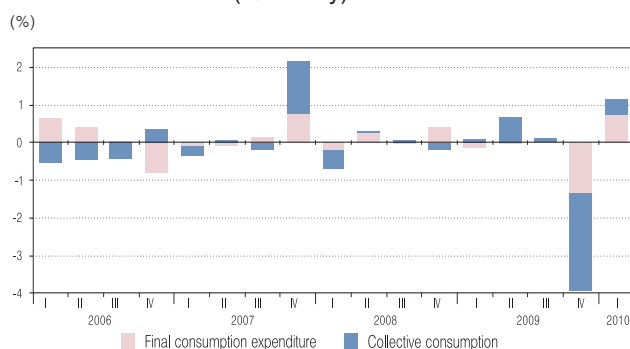
an annual basis in the first quarter of 2010 the contribution of government consumption to the GDP attained a positive value of 1.1 percentage points. Higher spending on public wages (6.7 per cent on an annual basis) and maintenance (8.0 per cent on an annual basis) between January and March were the major factors behind the positive government consumption growth.

#### Primary Balance (Quarterly)



Sources: MF, BNB.

#### Contribution of Government Final Consumption Expenditure and Collective Consumption to Economic Growth (Quarterly)



Sources: MF, BNB.

By the end of May the accumulated deficit on the consolidated fiscal programme totalled BGN 1360.0 million. It was financed by net external loans of BGN 71.1 million, privatisation revenue of BGN 19.1 million, repayable funds and net domestic financing of BGN 1269.8 million. Within the domestic financing the funds used from the fiscal reserves (which fell from BGN 7672.9 million in December 2009 to BGN 6584.6 million by the end of May 2010) amounted to BGN 1088 million. Between January and May 2010 the nominal value of new government securities issues totalled BGN 475.5 million and in January and February two additional auctions were held of ten and five-year government securities respectively. Due to larger maturities of government securities compared with the new issues, the net govern-

ment securities issue in the review period was negative amounting to BGN 113.2 million.

In April a ten-year bonds auction at an average yield of 6.38 per cent was conducted. At the ten-year bonds primary auction conducted at the end of May the Ministry of Finance (MF) rejected all bids due to higher yield offered by investors. At the following auction of the same government securities issue held on 28 June the minimum bid price was set at BGN 90 per BGN 100 nominal value (corresponding to an average yield of 6.35 per cent). As a result the average yield went down to 6.15 per cent.

According to MF data in May the consolidated fiscal programme reported a budget deficit of BGN 60.2 million following the surplus of BGN 369.3 million recorded in April. The fiscal reserve fell to BGN 6584.6 million compared to BGN 6671.4 million by the end of April. It should be noted that the April surplus on the consolidated fiscal programme reflected to a large extent the excess of revenue over expenditure worth BGN 354.7 million deposited by the BNB in the state budget which exceeded the MF projections by BGN 54.7 million.

As a result of significantly worsened budget balance in early 2010 the government decided to amend the 2010 State Budget Law of the Republic of Bulgaria (see the *Major Parametres of the Draft Law on the Amendment to the 2010 State Budget Law of the Republic of Bulgaria* box). The cash deficit on the consolidated fiscal programme of BGN 3.3 billion projected in the draft amendments appears to be realistic given the structural change in GDP growth, which is unfavourable in respect of tax revenue.

Revenue from indirect taxes is expected to stabilise in the third and fourth quarters of 2010, while corporate tax revenue will continue to decline until the year-end. The reduction of social security rates by 2 percentage points in early 2010 and the higher unemployment rate than in 2009 will continue to be the major factors behind the lower revenue of the state social security in the third and fourth quarters.

The increase in pensions in 2009 contributed most significantly to the higher current expenditure in 2010. Even though this effect will be comparatively weaker in the third and fourth quarters, social spending is expected to contribute most significantly to the increase in current non-interest expenditure.

The anticipated fall in government expenses on wages until the end of the year and lower maintenance expenditure will have an adverse effect on the government consumption contribution to GDP growth and will offset its positive contribution reported in the first quarter. As a result government consumption contribution to GDP growth in 2010 is anticipated to be around zero.

In the Draft Amendments to the 2010 Law on the State Budget of the Republic of Bulgaria, the net external financing is projected to be

BGN 2 billion. Between January and April it was BGN 88.1 million. Since the issue of government debt on international financial markets requires certain lead time for preparation and placement, until the end of the third quarter no placement of new external debt is expected to be realised. The deficit accumulated in the review period is expected to be financed primarily with funds from the fiscal reserves, while net government securities financing will remain positive but in the amount of about 2–3 per cent of the expected deficit by the end of September.

### Major Parametres of the Draft Law on the Amendment to the 2010 State Budget Law of the Republic of Bulgaria<sup>1</sup>

#### *Major amendments to the 2010 State Budget Law of the Republic of Bulgaria*

The Draft Law on the Amendment to the 2010 State Budget Law of the Republic of Bulgaria envisages a cash deficit on the consolidated fiscal programme over the current year of BGN 3.3 billion (4.8 per cent of GDP). This deficit is expected to be financed by an issue of new external debt and by funds from the fiscal reserves, the minimum amount of which will be changed to BGN 4.5 billion (compared with BGN 6.3 billion in the 2010 State Budget Law of the Republic of Bulgaria). Based on the Ministry of Finance estimates on accrual basis the deficit for 2010 will account for 3.8 per cent of GDP according to the ESA 95 methodology.

Pursuant to the Draft Law on the Amendment to the 2010 State Budget Law of the Republic of Bulgaria consolidated revenue is estimated at BGN 2 billion (2.9 per cent of GDP) less than the amount projected in the 2010 State Budget Law of the Republic of Bulgaria in December 2009. The major parameters include: a decrease in revenue from indirect taxes by BGN 1.6 billion and from profit tax by BGN 0.4 billion. The Law on the Amendment envisages lower revenue from VAT by BGN 940 million (-13.8 per cent). The revenue from excise duties and customs duties have been reduced by BGN 680 million (-14.9 per cent) and by BGN 46 million (-33.3 per cent) respectively. Only personal income tax is expected to exceed the budget projections by BGN 50 million. The EU funding receipts are expected to be BGN 120 million less than in the previous year.

The Draft Law on the Amendment to the 2010 State Budget Law of the Republic of Bulgaria<sup>2</sup> envisages a decrease by about BGN 0.9 billion of expenditure and transfers. As a percentage share the funds for the government reserves and transfers to universities and the Bulgarian Academy of Science have been reduced most substantially: by 29 per cent and by 20 per cent respectively. Concurrently, inclusion of extra expenditure of BGN 1.1 billion has been proposed. As a result, the expenditure and transfers in the state budget rose by BGN 254 million. The extra expenditure proposed is singled out into reserves for structural reforms (BGN 1.14 billion). The extra expenditure includes funds for repayment of previous years' obligations (BGN 660 million), funds for funding infrastructural works (BGN 180 million), subsidies for tobacco producers (BGN 116 million), funds for social benefits (BGN 142 million) and subsidies for the National Railway Infrastructure Company (BGN 45 million).

In addition to the increase in the state budget deficit by BGN 2.1 billion over the 2010 State Budget Law projections, the projected surpluses on the municipalities budgets and the National Healthcare Fund have been decreased by BGN 365 million and BGN 220 million respectively, while the deficit on the EU funds has been increased by BGN 120 million. Correspondingly, the cash deficit on the consolidated state budget is increasing by approximately BGN 2.9 billion to reach BGN 3.3 billion (4.8 per cent of GDP).

The Draft Law on the Amendment to the 2010 State Budget Law of the Republic of Bulgaria envisages 54 per cent of the deficit to be funded by external sources through an increase from BGN 1.2 billion to BGN 2.0 billion of the amount of government securities which may be issued in the course of the year on international markets. The maximum amount of the new government debt to be issued in 2010 is raised from BGN 2.7 billion to BGN 3.5 billion, and the maximum government debt, which should not be exceeded by the end of 2010, is increased from BGN 12.2 billion to BGN 12.5 billion. Between January and May the net external financing amounted to BGN 71.1 million.

<sup>1</sup> The Law on the Amendment to the 2010 State Budget Law of the Republic of Bulgaria was adopted by the 41st National Assembly on 8 July 2010 and published in *Durjaven Vestnik* on 23 July 2010.

<sup>2</sup> All projections commented below, as envisaged in the Law on the Amendment to the 2010 State Budget Law on the Republic of Bulgaria, are calculated on a cash basis according to the national accounting methodology of the general government sector.

(continued)



(continued)

**Planned Balances on Compound Budgets for 2010**

(Firms' relative share)

Deficit on compound budgets	Budget 2010		Budget revision draft		Difference
	million BGN	percentage of GDP	million BGN	percentage of GDP	million BGN
Consolidated budget	-465.7	-0.7	-3 335.3	-4.8	-2 869.6
National Budget	0.0	0.0	-2 749.6	-3.9	-2 749.6
State Budget	-1 516.6	-2.2	-3 681.2	-5.3	-2 164.6
National Social Security Fund	2.8	0.0	2.8	0.0	0.0
National Healthcare Fund	829.8	1.2	609.8	0.9	-220.0
Municipalities	684.0	1.0	319.0	0.5	-365.0
European funds	-465.7	-0.7	-585.7	-0.9	-120.0

Sources: State Budget Law of the Republic of Bulgaria, Draft Law on the Amendment to the 2010 State Budget Law of the Republic of Bulgaria of 4 June 2010, own computations.

A double increase in net external financing to BGN 1.48 billion is projected in the Draft Law on the Amendment to the 2010 State Budget Law of the Republic of Bulgaria. Between January and May it was BGN 1.27 billion. Net issue of government securities over the same period was negative amounting to BGN 113.2 million. Taking into account the minimum amortisation payments in the second half of the year (less than BGN 1 million) and adhering to the current government issuing policy, net financing by government securities in the domestic market is likely to amount to BGN 200–300 million. Estimates in the revised law suggest a decrease on government consolidated deposits by more than BGN 1 billion accordingly. This decrease was materialised practically in the January – May period when the fiscal reserves fell by BGN 1.09 billion. Consequently, by the end of 2010 the fiscal reserves are supposed to keep levels close to those in May (BGN 6.58 billion). This provides a significant buffer with respect to the planned change in the 2010 State Budget Law of the Republic of Bulgaria for a decrease in the minimum amount of fiscal reserves to BGN 4.5 billion. Retaining the fiscal reserves level at BGN 6.5–6.7 billion will be possible only if a new debt of about BGN 2 billion is issued on international markets.

***Assessment of the effects of the proposed changes***

The changes proposed by the Draft Law on the Amendment to the 2010 State Budget Law of the Republic of Bulgaria are necessary due to the gap between the planned budget revenue and its implementation in the first months of 2010. Given the unfavourable structure of economic growth for the tax revenue, no fast recovery of the tax revenue could be expected until the end of 2010 to offset the current decline. Moreover, the effects of the improved tax collectability projected in the 2010 State Budget Law of the Republic of Bulgaria have not occurred probably due to the impact of the economic activity slowdown.<sup>3</sup>

The downward adjustment of budget revenue projections allows for better expenditure planning and deficit financing. At this stage the revenue projected in the Draft Law on the Amendment to the 2010 State Budget Law of the Republic of Bulgaria proves more realistic. According to our assessments there are risks for the implementation of the projected revenue from grants under EU programmes. The delay in extending these funds in the first four months of 2010 probably entails a more significant downward adjustment of the projected BGN 120 million.

The changes in the budget expenditure side and net financing should be analysed in respect of the following factors: 1) the effect on the expenditure policy in the following years; 2) the efficiency of the extra expenditure; 3) effects on the economic activity; 4) preserving investor confidence and 5) risks associated with deficit financing.

Bulgaria is one of the three EU Member States with the lowest level of consolidated government debt (following Estonia and Luxembourg) and significant fiscal reserves. In this context, other things being equal, the extra expenditure and the cash deficit of 4.8 per cent of the GDP only in 2010 do not threaten neither short-term nor long-term sustainability of public finances. Given the prospect of sustained unfavourable structure of growth for tax revenue in the medium term, the adherence to such a policy in respect of expenditure would mean an accumulation of cash deficits of over 2 per cent of GDP in the following two years.

Channelling the extra expenditure, projected in the revised budget, to the *Reserves for contingency and urgent needs: for structural reform and additional fiscal measures* item increased government discretion of how these funds will be used. As regards the efficiency of these measures it could be expected that rechanneling of extra resources for payment of previous years' obligations, capital expenditure and social support will have a positive effect on the economic activity (versus a scenario under which these funds would be spent on salaries and maintenance expenditure). This effect will probably be limited since the increase in government expenditure in a small open economy

<sup>3</sup> Some one-off factors occurred which contributed to the lower revenue from VAT and excise duties in the beginning of the year. For further details, see Government Finance and Consumption.

(continued)

(continued)

stimulated both output and imports and correspondingly it may have insignificant or no effect on the economic activity. Payment of previous years' obligations as well as other extra expenditure will enhance liquidity in the economy. The higher liquidity may be used by economic agents for reducing their foreign liabilities and the direct effect on the economy could be limited.

The funding of the higher deficit in 2010 and subsequent deficits in the 2011–2012 period (if the current policy is sustained) also implies risks, related particularly to the pending maturity of eurobonds in the amount of EUR 818.9 million in 2013. The issue of debt on international markets until year-end and in the following years could be impeded under the current situation on the international financial markets and the difficulties experienced by a number of EU Member States in funding their deficits. Given the limited access to external financing and underdeveloped government securities domestic market, the deficit of 4.8 per cent of GDP in 2010 projected in the revised budget and maintaining a deficit of over 2 per cent of GDP in 2011 and 2012 will prompt a significant decline in fiscal reserves (to less than BGN 4 billion yet in 2011). This poses risks to investor confidence, particularly in times of dramatic fluctuations and uncertainty on international financial markets. Under this scenario the cost of government and non-government sector financing may increase. This would have a negative effect on economic growth in the long run and on its size which significantly exceeds the possible short-term effects of the extra budget expenditure.

To limit these risks to the fiscal policy it is necessary to deepen the analysis of the policies of capital expenditure and issue of a new debt. Clear communication is critical for the consistent policy implementation. Preserving the confidence of economic agents directly depends on how stable are their expectations of fiscal and economic situation in Bulgaria. Under the conditions of very sensitive international financial markets reacting to any unexpected and inadequate government measures in the EU Member States, adherence to a predictable policy supporting long-term growth and economy's competitiveness should remain a priority of the Bulgarian government.

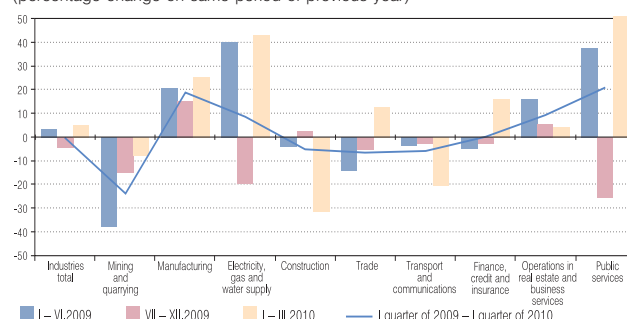
## Behaviour of Firms and Competitiveness

**Weakening economic activity forced firms to restructure production expenditure in order to sustain their financial stability and competitiveness. The recovery in global growth allows exporting firms to increase their export output.**

Under the pressure of the global economic crisis and the need to sustain competitiveness firms continued to restructure their expenses in the first quarter of 2010. This process can be analysed by comparing the gross output dynamics and inter-mediated consumption. As a result of the measures taken by firms, their expenses on intermediate consumption went down in real terms (excluding mining and quarrying) and all industries tended to improve their *value added to gross output* ratio in 2009 and in early 2010. In sectors where the drop in demand had a stronger unfavourable effect, e.g. manufacturing industry, construction and transport, enterprises decreased significantly their spending on intermediate consumption in an attempt to counterbalance the negative effect of the lower physical volume of output on the their financial performance. With the exception of construction and transport, all other industries reported growth in gross operating surplus on an annual basis in the first quarter of 2010.

### Nominal Growth of the Gross Operating Surplus Compared with the Corresponding Period of 2008 (pre-crisis period)

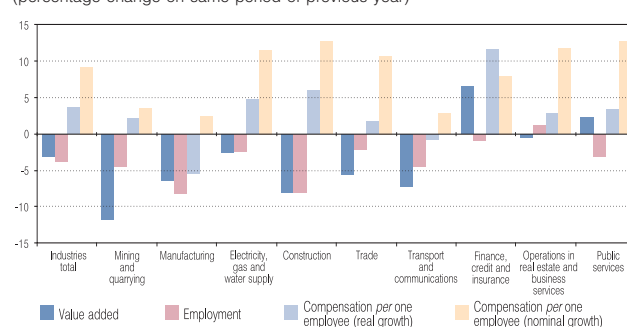
(percentage change on same period of previous year)



Sources: NSI, BNB.

### Average Growth between January 2009 and March 2010 on an Annual Basis

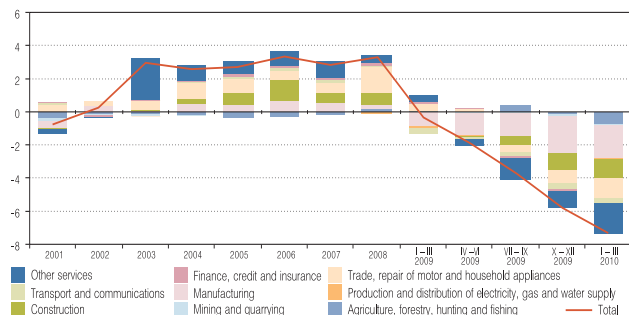
(percentage change on same period of previous year)



Sources: NSI, BNB.

### Contribution to Employment Growth by Sector

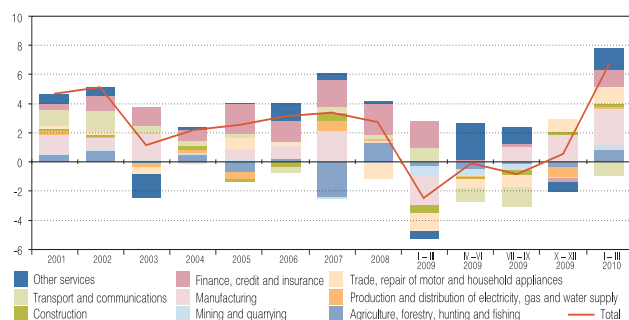
(%, percentage points on corresponding quarter of previous year)



Sources: NSI, BNB.

### Contribution of Economic Activities to Labour Productivity Growth

(%, percentage points on corresponding quarter of previous year)



Sources: NSI, BNB.

Enterprises also make efforts to reduce labour costs growth. In most sectors between January 2009 and March 2010 this process led to decrease in the number of employees. The average annual decline in employment was similar to that in value added. In trade, transport and mining and quarrying labour shedding was insufficient as compared with the significant decline in economic activity. This led to a nominal decrease in gross operating surplus in these industries. Labour costs in these industries are expected to be additionally adjusted in the following periods.

Comparatively strong growth in nominal wages in 2009 and in early 2010 did not impact the financial performance of firms. In real terms, the compensation of an employee was increasing more slowly. In trade, transport and mining and quarrying, where gross operating surplus has been decreasing nominally since early 2009, the average wage in the same period has been increasing comparatively slow in real terms and by end-2009 and in early 2010 the growth was negative or close to zero. In construction real wage growth went down in the second half of 2009 but based on the national accounts data the average wage per employee on an annual basis in construction increased at an accelerated rate (by

24.4 per cent) in the first quarter of 2010. On the other hand, according to the data on the employment short-term statistics and labour costs in the first quarter of 2010 nominal wages in construction rose by just 4.8 per cent on an annual basis. Due to non-declared labour income in construction the reported dynamics of wages is likely to diverge from the actual dynamics.

Given the sound financial performance immediately prior to and in the first months of the global economic crisis firms reduced the total number of staff with a lag as compared with the weakened economic activity. In the first half of 2009 gross operating surplus in most industries (excluding mining and quarrying and trade) continued to increase in nominal terms. In early 2009 firms probably expected a fast recovery of output and therefore they restrained from labour shedding. Employment started to decrease stronger in the second half of 2009 when most industries of the Bulgarian economy had been affected by the global crisis. Labour shedding intensified in early 2010 and employment went down by 7.3 per cent on an annual basis. As a result of lower employment in the first quarter of 2010 the labour productivity measured as a gross value added per employee grew by 6.7 per cent on an annual basis with all industries (excluding transport) posting positive growth of value added per employee.

The choice of enterprises to reduce their labour costs by dismissing employees instead of decreasing nominal wages leads to higher unemployment rate and significant uncertainty about future household income. These factors along with firms' additional costs associated with laying off and recruiting staff enhance the secondary negative effects of the crisis on the economy. The adjustment of labour costs by reducing employment rather than by decreasing wages reflect the expectations of a more protracted recovery of the economy and an attempt to preserve employees' motivation<sup>6</sup>. In addition, salaries of a significant number of employees are close to the minimum social security thresholds for individual professional classes and economic industries, thus limiting the opportunities for a nominal decrease in salaries.

<sup>6</sup> The data from the survey on wage and price-setting behaviour of firms in the non-financial sector in Bulgaria conducted between September and October 2009 suggest that employees' motivation is the major reason for employers to restrain from decreasing the basic salary. See also Economic Review, issue 1 of 2010, for a summary of the survey results.

In the first quarter of 2010 the average wage continued to increase both in nominal and real terms. The annual growth of labour costs per employee slowed down significantly in the last quarter of 2009 when enterprises refused to pay or cut the amount of annual bonuses. However, in early 2010 the average compensation per employee (including the wage and employer's costs on social security and healthcare insurance of the employee) rose nominally by 10.8 per cent in contrast to the lower wage growth observed in 2009. Unlike the previous years in early 2010 institutional factors behind the rise in the nominal wage did not determine wage dynamics: the minimum wage has not been changed and social security thresholds in most sectors have been raised by about 2 per cent. Nevertheless, there are some other reasons which partly explain the relatively high nominal growth of wages in early 2010.

The general wage level in the economy in early 2010 was impacted by the structure of employment and the level of basic wage by industry. In the first quarter of 2010 employment exhibited a stronger decrease in industries where the average wage is comparatively low (construction, and hotel and restaurant services). Moreover in sectors where wages significantly exceed the average wage for the country (finance, information technologies and telecommunications and energy) additional staff was employed. The total effect of these changes contributed by about 1.2 percentage points to the annual change in wages over the first quarter of 2010.

Over the same period the gross operating surplus went up by 5.1 per cent on an annual basis which is indicative of the increasing profitability of the economy. This warranted wage growth in manufacturing and financial intermediation in which the operating surplus has substantially increased since early 2010. On the other hand, wage growth moderated in sectors which reported a dramatic rise in labour costs in 2009. This trend will be sustained in the following months.

The degree of wage adjustment to the economic activity downturn in individual sectors differed. In 2009 nominal growth of the average wage in manufacturing, financial sector, information technologies and telecommunications started to rapidly slow down. In early 2010 wage growth in these sectors accelerated due to improved development prospects in them.

Concurrently, some domestic market-oriented sectors (construction, real estate, trade, energy and public services) maintained relatively high wage growth in 2009 (around and over 20 per cent). In the first quarter of 2010 wage growth in these sectors started to slow down. The more moderate wage growth in these sectors is expected to be sustained in the following periods and to contribute to the slower total wage growth in Bulgaria.

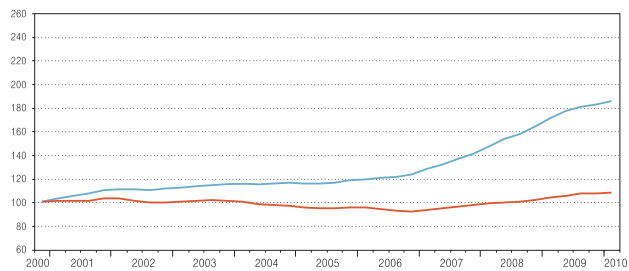
Between January and March 2010 unit labour costs in the whole economy continued to increase more modestly: by 6.6 per cent in nominal terms and 2.1 per cent in real terms. Manufacturing and the financial sector contributed most significantly (by -0.6 percentage points and -1 percentage point) to limiting real unit labour cost growth in the entire economy. Trade also had a negative contribution due to reduced employment and more moderate fall in value added. On an annual basis the gross operating surplus in these sectors grew dramatically, evidencing the improvement of enterprises' financial performance. Real unit labour costs in real estate transactions, construction and hotel and restaurant services continued to increase due to the strong decrease in economic activity in the above industries and insufficient reduction in labour costs. These sectors contributed by around 1.7 percentage points to the real unit labour cost growth. Operating surpluses in these sectors contract on an annual basis and entail further reduction in labour costs in the following periods.

Developments in unit labour costs in manufacturing, exhibiting a very slow growth rate and tending to further moderate, have a direct effect on the external competitiveness of the economy. Exports data support the assessment that firms from the manufacturing industry retain their competitive positions. In nominal terms, the exports turnover, which started growing on a chain basis in mid-2009 along with the recovery of external demand, rose by 26 per cent between January and April 2010 compared with the corresponding period of the previous year. In April the growth rate of exports turnover in industry accelerated to reach 39.4 per cent. Only in the first quarter of the current year export output offset the fall in domestic market sales and the real value added growth in manufacturing turned positive at 2 per cent on an annual basis. Based on the increase in the exports turnover in industry in more than

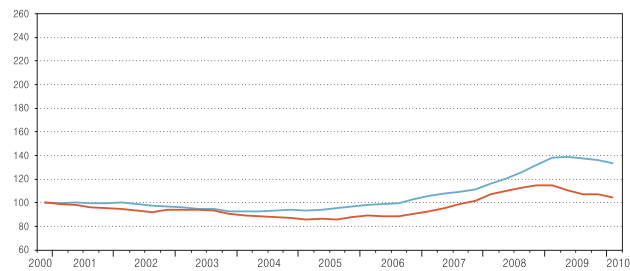
## Unit Labour Cost (4-quarter moving average)

(2000 = 100%)

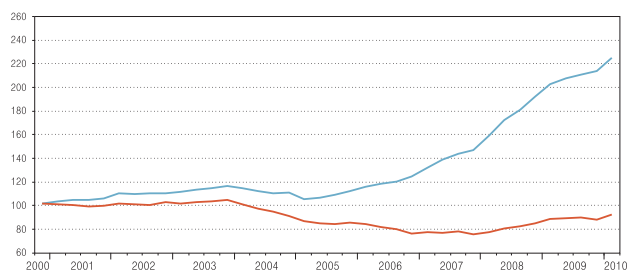
### Total for the Economy



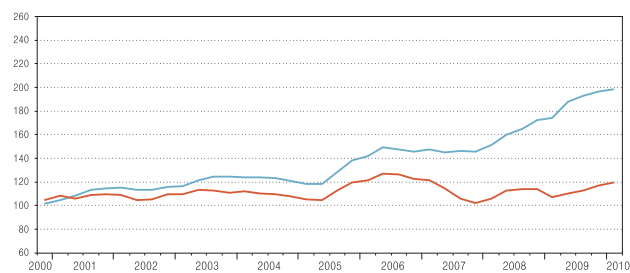
### Manufacturing



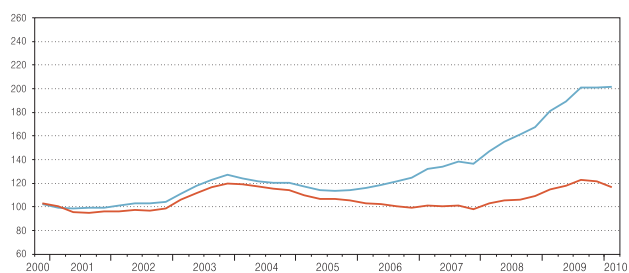
### Construction



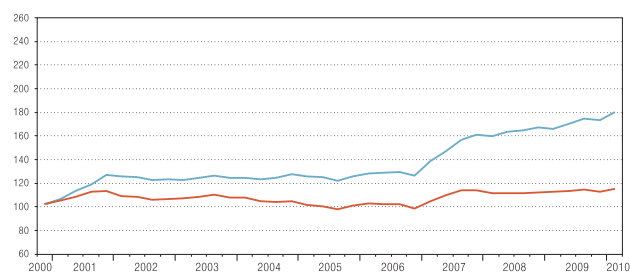
### Electricity, Gas and Water Supply



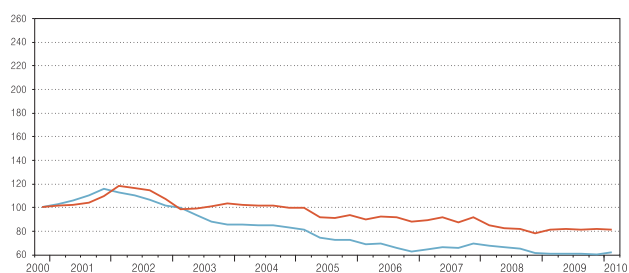
### Trade



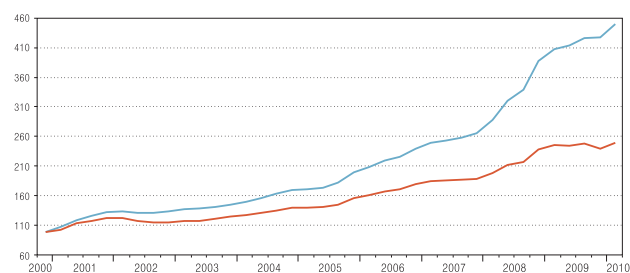
### Transport and Communications



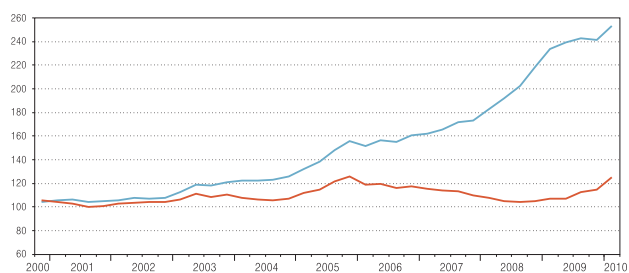
### Financial Intermediation



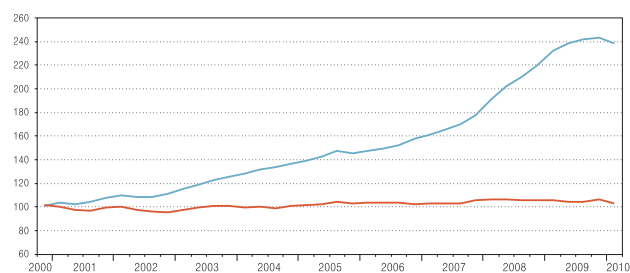
### Real Estate Operations



### Hotels and Restaurants



### Public Services



— Nominal unit labour cost

— Real unit labour cost

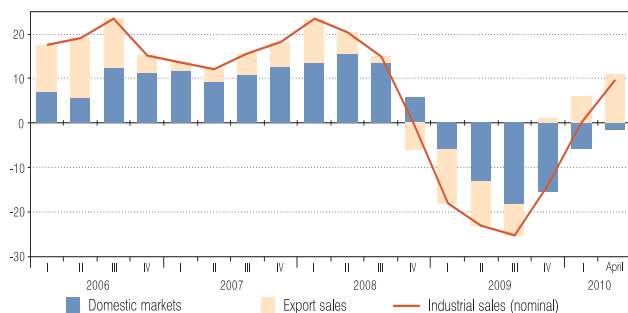
Sources: NSI, BNB



two-thirds of the sub-sectors, broad-based growth is observed. This suggests an effective competitiveness in most of enterprises and sustainable recovery. The favourable dynamics in industrial exports is expected to be sustained in the following quarters.

#### Growth Rate of Nominal Industry Turnover

(percentage change on same period of previous year)



Sources: NSI, BNB.

Lower domestic demand had an adverse effect on the domestic market industrial sales. As total imports in real terms also went down, it may be concluded that difficulties in the industrial sales on domestic market did not reflect the competition of imported goods. The 6.4 per cent fall on an annual basis in the sales on the domestic market between January and April 2010 is attributable mostly to the lower turnover in the manufacturing of products of rubber, plastics and other non-metal mineral raw materials (contributing by -2 percentage points). This industry sub-sector is closely tied to demand for intermediate consumption goods in construction which continued to contract in the first quarter of 2010.

Lower investment in real estates by households and firms affected adversely the value added in construction and real estate operations and business services sectors. In early 2009 the value added in construction started to decline, while

### Exports and Imports of Goods

Between January and April 2010 nominal exports (in euro) rose by 19.0 per cent and imports continued to decrease by -0.4 per cent. Exports and imports in the third and fourth quarters are expected to post positive growth as a result of enhanced external and domestic demand and higher international prices. Export growth rates will outstrip those of imports and trade deficit will continue to decrease.

Between January and April 2010 as a result of restored external demand exports exhibited a positive growth rate (19.0 per cent) and imports continued to decrease (by -0.4 per cent) due to contracted domestic demand. In April exports

real estate operations reacted with a certain lag to the worsened economic environment. Over the first quarter of 2010 the value added in construction and real estate sectors declined by 13.1 per cent and 6.4 per cent respectively and contributed by -2.3 percentage points to the real change in the gross value added in the economy. The return of these sectors to the positive growth territory will follow with a lag the strengthening of total economic activity and the recovery of financing flows to investors in the sector.

The transport and communications sector also depends on the improvement of the economic situation since it is closely tied to trade, sub-sectors of industry and demand for transport services by individuals. Between April and December 2009 the value added in transport contracted by about 10 per cent on an annual basis and in the first quarter of 2010 by 12.3 per cent (contributing by -1.3 percentage points to the real change in the gross value added).

Weaker consumer demand resulted in lower sales in trade in 2009 and early 2010. However, in the last two quarters the decline in the value added in trade slowed down significantly (by -0.1 per cent in the fourth quarter of 2009 and by -1.8 per cent in the first quarter of 2010 on an annual basis).

In the first quarter of 2010 economic activity in the financial sector increased. Gross output grew by 5.2 per cent in real terms following a decline of 1.7 per cent on annual basis in the second half of 2009. The flexible cost management, the lower cost of funding and the banking system stability allowed for growth in value added and gross operating surplus by about 25 per cent nominally and by 12 per cent in real terms respectively.

increased by 37 per cent and imports by 12 per cent on an annual basis<sup>7</sup>.

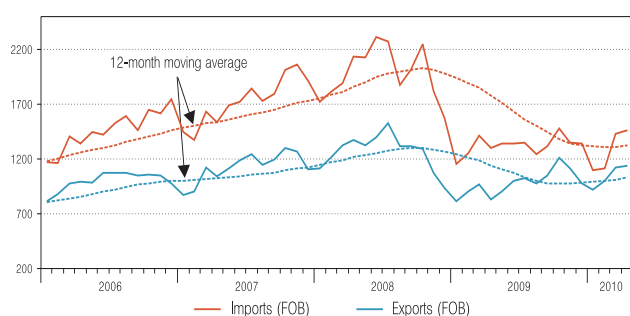
<sup>7</sup> The analysis presented in this section is based on data on nominal exports and imports in euro.

Exports and imports in the third and fourth quarters of 2010 are expected to post positive growth rates which will gradually accelerate as a result of enhanced external and domestic demand and higher international prices. Export growth rates will outstrip those of imports and trade deficit will continue to decrease.

Over the January to March 2010 period investment goods and consumer goods contributed most (by -0.2 and -0.1 percentage points respectively) to trade deficit decrease by EUR 557 million. In both groups exports exhibited positive growth, while imports continued to decline.

### Dynamics of Exports and Imports

(million EUR)

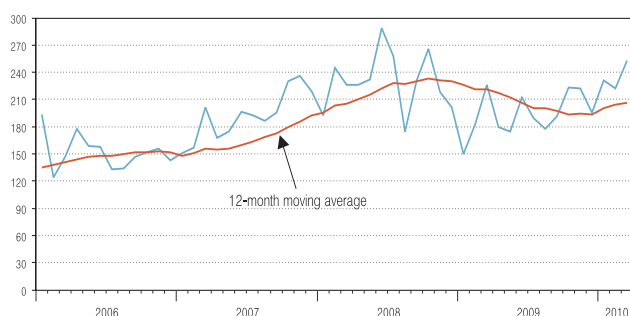


Source: BNB.

Between January and March 2010 all commodity groups contributed to the positive export growth, attributable mainly to the increase reported in machines, vehicles and appliances (by 5.5 percentage points), base metals (by 3.1 percentage points), chemicals (by 1.8 percentage points) and mineral products and fuels (by 1.4 percentage points).

### Exports of Machines, Transport Vehicles and Appliances

(million EUR)



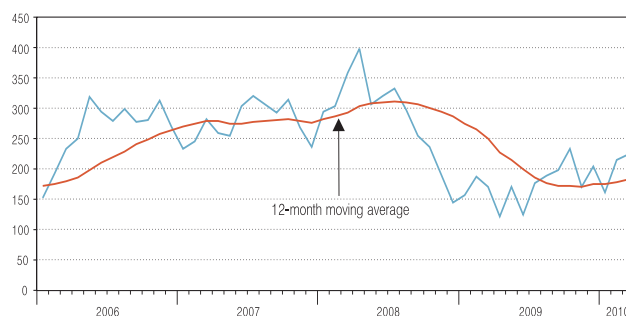
Source: BNB.

Receipts from exports of machines, vehicles and appliances went up by EUR 148.4 million (26.5 per cent). In the first quarter of 2010 the increase in receipts was driven mainly by stronger exports of electrical machines and equipment

(by 2.4 percentage points) optical and medical equipment (by 0.5 percentage points) and ships (by 0.4 percentage points). Over the forecast horizon this group is expected to continue to report positive growth consistent with the continuous recovery in production activity in the EU Member States, Bulgaria's major trade partner.

### Exports of Base Metals

(million EUR)

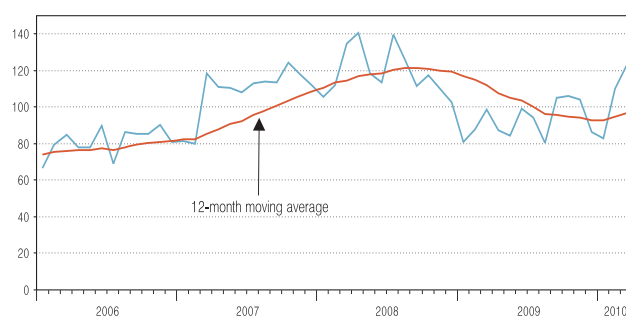


Source: BNB.

Export revenue from base metals amounted to EUR 600.6 million for the January – March 2010 period, up by 16.2 per cent on the corresponding period of 2009. The major positive contribution to the total export dynamics was recorded by copper (1.9 percentage points) and zink (0.7 percentage points) and lead (0.5 percentage points) due to higher international prices and stronger external demand. Over the forecast horizon the increase in external demand and international prices of base metals is expected to continue and, in turn, to accelerate the positive export growth of base metals.

### Exports of Chemical Products, Plastics and Rubber

(million EUR)



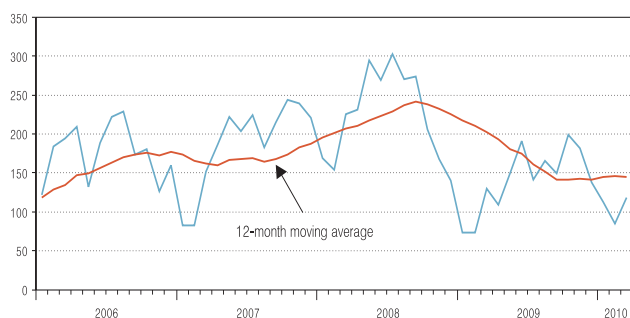
Source: BNB.

Revenue from exports of chemical products, plastics and rubber went up EUR 48.7 million (18.2 per cent). Positive developments over the review period were reported by all major positions of the group, with the exception of plastics and organic chemicals, with fertilizers and pharma-

ceuticals having the strongest effect (contributing by 1.2 percentage points and 0.3 percentage points respectively) due to strengthening external demand. We expect the upward dynamics of receipts from exports of chemical products to be sustained in the forecast horizon consistent with the stronger external demand.

#### Exports of Mineral Products and Fuels

(million EUR)

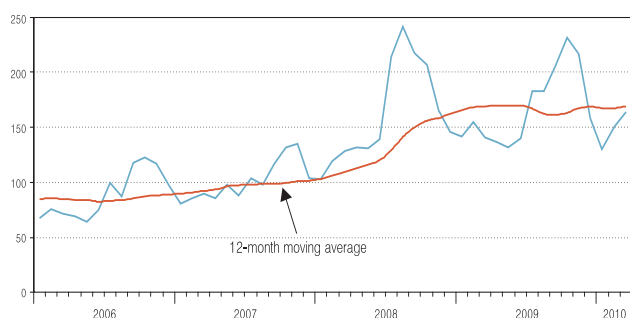


Source: BNB.

Revenue from exports of mineral products and fuels went up by EUR 37.6 million (13.5 per cent) in the first quarter of 2010. Positive developments were reported under all major items in the group over the review period, with fuels contributing most significantly to this effect (by 1.1 percentage points) due to lower prices and stronger external demand. In the third and fourth quarters of 2010 the recovery in foreign trade as a result of improved international environment is expected to continue.

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

(million EUR)



Source: BNB.

The group of animal and plant products, food, drink and tobacco is the only group reporting a positive contribution to total exports in 2009. Over the January to March 2010 period revenue grew by EUR 8.5 million (2.0 per cent), with exports of meat and sunflower seed contributing most substantially to this growth (by 0.4 percentage points and 0.3 percentage points respectively). This

trend is expected to be sustained over the projected horizon with the risks on the downside due to the uncertain agricultural harvests.

#### Contribution of Commodity Groups to Trade Growth, January – March 2010

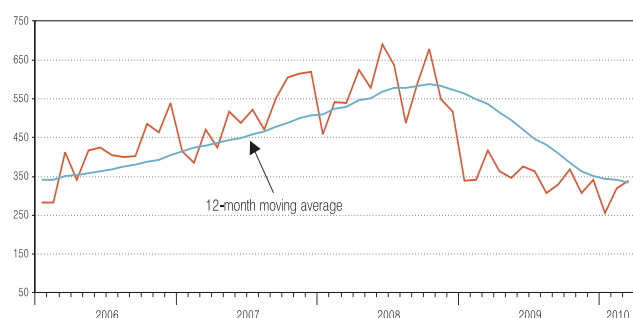
	Exports		Imports	
	growth, %	contribution, p.p.	growth, %	contribution, p.p.
Consumer goods	9.1	2.7	-3.5	-0.7
Raw materials	12.0	-5.2	5.8	1.9
Investment goods	25.1	4.5	-16.9	-4.6
Energy resources	12.1	1.1	-7.1	-1.4
Growth, total	13.5		-4.8	

Source: BNB.

Between January and March 2010 imports (CIF) reached EUR 3831.3 million: a nominal decrease of EUR 195.2 million (-4.8 per cent) on the prior year. In the structure of imports by end use, investment goods and mineral products and fuels recorded the strongest negative contribution (by -4.6 percentage points and by -1.4 percentage points respectively), reflecting the weaker production and investment activity in Bulgaria. The group of raw materials was the only one with a positive contribution: by 1.9 percentage points.

#### Imports of Investment Goods

(million EUR)

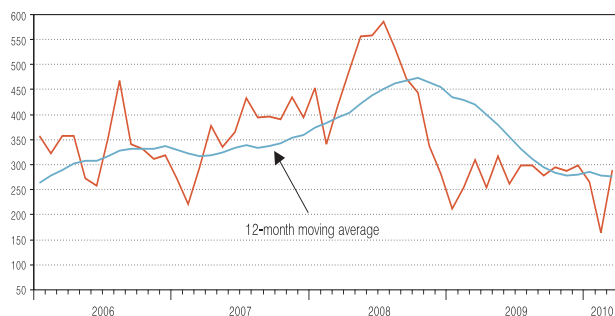


Source: BNB.

Imports of investment goods fell by 16.9 per cent to EUR 910.2 million over the same period, with this commodity group ranking second in imports (after raw materials) with a share of 27 per cent. All items in this group reported negative growth, with the exception of spare parts and equipment. Transportation vehicles has the strongest negative contribution (by -2.4 percentage points), followed by machines and equipment (by -2.3 percentage points) due to the weakened investment activity in Bulgaria. In the third and fourth quarters of 2010 the group of investment goods is expected to restore its positive growth, consistent with the anticipated recovery of domestic demand.

## Imports of Energy Resources

(million EUR)

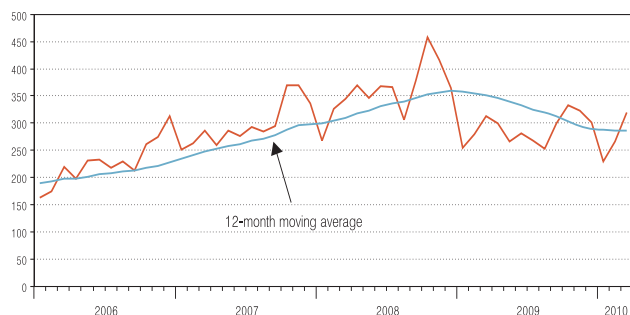


Source: BNB.

In the first quarter of 2010 imports of mineral products and fuels totalled EUR 720 million, exhibiting a fall by 7.1 per cent on the corresponding period of previous year. Negative growth was reported under all items in the group (excluding lubricants), with fuels and coal contributing most significantly to this effect (by -2.2 percentage points and -1.7 percentage points respectively). Imports of mineral products and fuels are expected to report positive growth over the forecast period due to recovering domestic demand and higher oil prices.

## Imports of Consumer Goods

(million EUR)



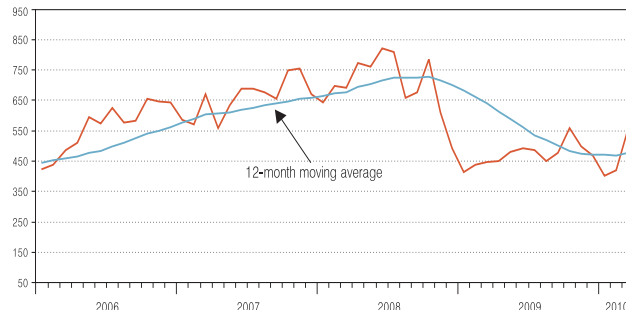
Source: BNB.

Imports of consumer goods in the first quarter of 2010 reached EUR 819.4 million: a nominal decrease of EUR 30.2 million (-3.5 per cent) on the respective period of the prior year. All items in this group, excluding medicines and cosmetics, and clothing reported negative growth. The groups of food, drink and tobacco and furniture

had the strongest negative contribution (by -0.7 percentage points and -0.4 percentage points respectively). Expectations are for recovery of consumer goods imports in the projected horizon due to expected higher final consumer demand.

## Imports of Raw Materials

(million EUR)



Source: BNB.

Imports of raw materials in the first quarter of 2010 amounted to EUR 1372.1 million, exhibiting an increase by 5.8 per cent on the corresponding period of the previous year. All items in this group registered positive growth, with the exception of iron and steel, textile and paper. Over the review period ores and other metals had the strongest positive contribution (by 1.5 percentage points and 0.8 percentage points respectively) due to higher international market prices. Over the projected horizon the upward trend in this group is expected to be sustained consistent with higher prices and stronger domestic demand.

According to preliminary data Bulgaria's exports to other EU Member States between January and March 2010 rose by 2.9 per cent, and exports to non-EU countries by 34.7 per cent. Goods imported from the Community went down by 3.2 per cent, while those from third countries by 6.7 per cent.

In the first quarter of 2010 the market share of Bulgarian goods in total imports of EU Member States came to 0.68 per cent on an annual basis against 0.57 per cent on the corresponding period of the prior year. This market share is expected to continue to increase over the forecast horizon.

# 4. Inflation

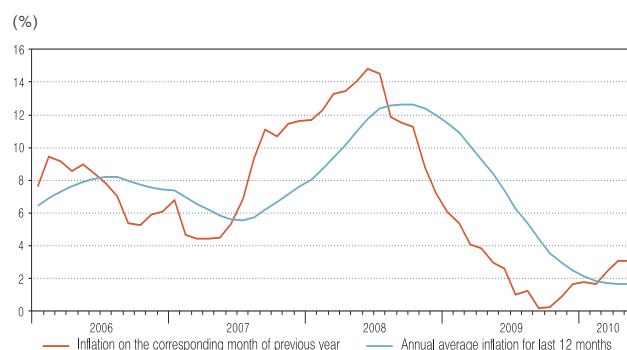
Annual inflation accelerated to 3 per cent in May (from 1.6 per cent at the end of 2009), which was mainly the result of the increase in fuel and tobacco prices. In the third and fourth quarters of 2010 annual inflation is expected to remain close to its current levels, with tobacco products, transport fuels and administratively controlled prices continuing to have or remaining with a major positive contribution to this effect.

As of May 2010 annual inflation accelerated to 3 per cent (from 1.6 per cent at the end of 2009), which was mainly the result of the increase in fuel and tobacco products prices.<sup>1</sup> In the first five months of 2010 inflation dynamics reflected the impact of international prices, the increase in the prices of tobacco products due to the rise in excise duties and the contraction of domestic demand. Although the latter continues to cause downward pressure to inflation, the increase in oil prices, expressed in euro, as well as the appreciation of tobacco products have a proinflationary effect. The increase in overall inflation is slightly higher than expected, which is largely attributable to the more sizable rise in fuel and tobacco products prices, as well as in administered prices. Energy products, tobacco products and administratively controlled prices had the strongest positive contribution to annual inflation as of May 2010: 1.6, 1.4 and 0.6 percentage points respectively. A general trend toward a decline in inflation was observed in the other main components of the HICP compared to the same period of 2009, as well as a decrease in prices in some groups, *i.e.* deflation.

After the second half of 2009 food (processed and unprocessed) prices started to decline on an annual basis from their high levels: a trend which continued at a slower rate in the first five months of 2010. Inflation (excluding food, energy products, administratively controlled prices and tobacco products) followed a clearly pronounced downward trend and in May 2010 was 0.1 per cent (9.4 per cent in December 2008 and 1.8 per cent at the end of 2009). The index of non-food goods prices (excluding fuels) marked a slight decrease on an annual basis, and services price inflation was somewhat less than 1 per cent.

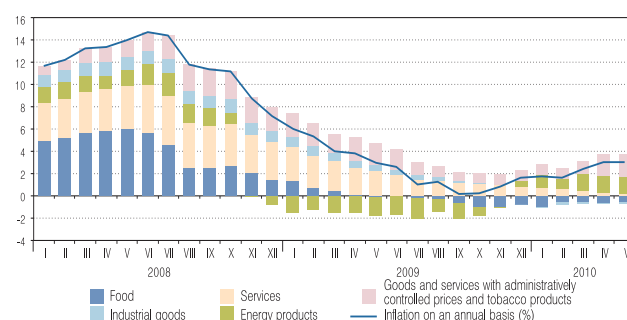
<sup>1</sup> The analysis in this section is based on NSI data on HICP.

## Inflation



Source: NSI.

## Inflation Rate on Corresponding Month of Previous Year and Contribution of Major Goods and Services Groups to It (p.p.; %)



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

Sources: NSI, BNB.

In the third and fourth quarters of 2010 inflation is expected to stay close to its current level of 3 per cent on an annual basis with tobacco products, transport fuels and administratively controlled prices remaining with the largest positive contribution to this effect. As a result of weak domestic demands a subdued price dynamics is expected in the other goods and services groups included in the consumer basket.

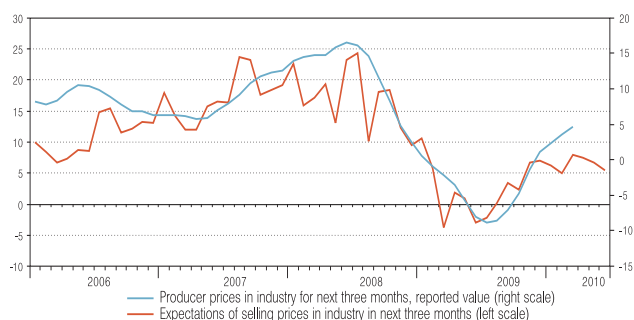
The business tendency survey and producer price dynamics in the domestic market support the expectation of a relative stabilisation of infla-



tion at its current levels. The increase in producer prices on the domestic market on an annual basis mainly reflect oil refining price dynamics, related to the appreciation of the US dollar and oil price increases in international markets. In June selling price expectations of managers in the industry sector remained close to their early 2010 levels.

### Selling Price Expectations and Producer Prices in the Industrial Sector

(balance of opinions) (on corresponding month of previous year, %, 3-month moving average)

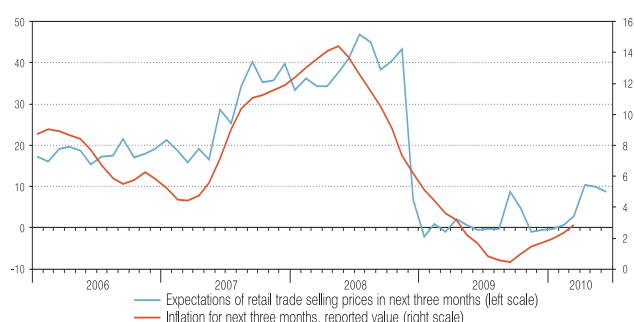


Sources: NSI, BNB.

Recent retail trade survey data suggest that an increase in selling prices is expected over the next three months, but the balance of opinions of retailers remains at a relatively low level. A possible explanation is the trend toward a weakening of optimistic assessments of the current situation of the firms in the sector.

### Expectations of Retail Trade Selling Prices and Reported Inflation

(balance of opinions) (on corresponding month of previous year, %, 3-month moving average)



Sources: NSI, BNB.

The main risks to inflation outlook for the third and fourth quarters of 2010 are associated with the impact of external factors such as the dynamics of international prices and the EUR/USD exchange rate.

As the Bulgarian lev is pegged to the euro, the depreciation of the latter against the US dollar automatically leads to the depreciation of the Bulgarian lev against the US dollar. This has an immediate impact on the domestic prices of oil, natural

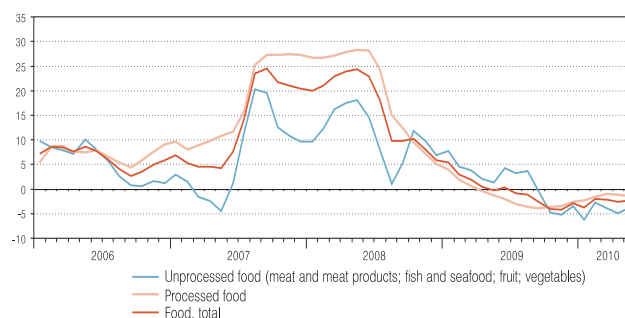
gas and some consumer goods, which go up, as their import price is in US dollars. The changes in the exchange rate affect inflation immediately through oil refining prices, owing to the relatively large share of fuels in the consumer basket. It is more difficult to evaluate the effect of the euro depreciation on the prices of consumer goods produced in Bulgaria through the increase in the cost of production thereof. If we assume that the EUR/USD exchange rate will remain at its current level until the end of 2010, it may be expected that it will not have an impact on inflation.

### Food Prices

Between January and May food prices declined by 2.6 per cent on the corresponding period in 2009 (against a decrease of 3.8 per cent in the fourth quarter of 2009). The decline in processed food prices was 1.5 per cent and that in unprocessed food prices – 4.4 per cent. As of May the overall contribution of food prices to annual inflation was -0.6 percentage points and was mainly due to the following groups: *bread and cereals* (-0.2 percentage points), *meat and meat products* (-0.2 percentage points) and *fruit* (-0.2 percentage points). Vegetable oils and cereals saw the most pronounced slowdown in the rate of price decline compared to the end of 2009.

### Rate of Change of Food Prices

(on corresponding month of previous year, %)



Sources: NSI, BNB.

Over the last two years international prices of food commodities and the harvest in Bulgaria also had a strong contribution to the decline in food prices. The pricing behaviour of firms along the chain to final consumers also has an effect on end-use consumer prices of food.

A good harvest in the second half of 2010 would result in a continuing decline in food prices on an annual basis. These expectations are supported also by international market developments (see chapter 2, *External Environment*).

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

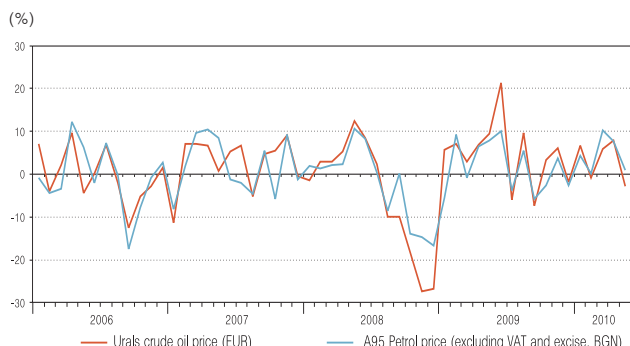
	Accumulated inflation as of May 2009 (December 2008 = 100)		Accumulated inflation as of May 2010 (December 2009 = 100)		Annual inflation as of May 2010 (May 2009 = 100)	
Inflation (%)	1.0		2.4		3.0	
	Inflation rate by group, %	Contribution, p.p.	Inflation rate by group, %	Contribution, p.p.	Inflation rate by group, %	Contribution, p.p.
Food	0.0	0.01	0.6	0.14	-2.4	-0.59
Processed food	-1.9	-0.28	-0.7	-0.10	-1.5	-0.21
Unprocessed food	3.1	0.29	2.8	0.24	-3.9	-0.38
Services	1.0	0.29	-1.3	-0.40	0.6	0.17
Catering services	2.3	0.27	0.9	0.12	3.1	0.37
Transport services	-0.5	-0.03	-2.0	-0.09	-2.7	-0.13
Telecommunication services	-0.7	-0.03	-0.2	-0.01	-0.5	-0.02
Other services	0.9	0.08	-4.3	-0.41	-0.4	-0.04
Energy products	-0.3	-0.03	11.7	1.09	19.2	1.60
Transport fuels	0.2	0.01	12.9	1.08	21.9	1.83
Industrial goods	-0.2	-0.03	-0.9	-0.16	-0.7	-0.14
Goods and services with administratively controlled prices	0.9	0.15	2.8	0.43	3.9	0.59
Tobacco products	22.4	0.65	34.4	1.35	36.0	1.40

Sources: BNB, NSI.

### Energy Products Prices

Oil price developments, expressed in euro, were reflected fairly quickly in domestic fuel prices. In the first half of 2010 transport fuel prices increased by 20 per cent on the corresponding period of the prior year which was mainly due to the depreciation of the euro against the US dollar.<sup>2</sup> The contribution of fuels to annual inflation increased from 0.5 percentage points by end-2009 to 1.8 percentage points in May 2010.

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



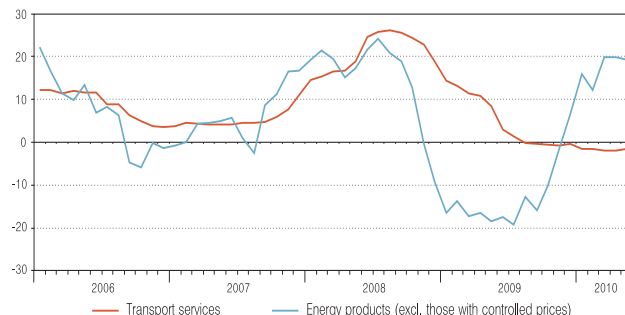
Sources: U.S. Energy Information Administration, NSI.

In the second half of 2010 the positive contribution of fuels to annual inflation is expected to remain high. Assuming that oil prices will increase at a lower annual rate by the end of 2010 and that the EUR/USD exchange rate will stabilise at its current level, it is likely that the contribution of fuels declines somewhat.

<sup>2</sup> In the group of energy products transport fuels occupy the largest relative share. Hence, their price developments determine the price of energy products in general.

### Rates of Change of Energy Products and Transport Services Prices

(on corresponding month of previous year, %)



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

Sources: NSI, BNB.

### Administratively Controlled Prices and Tobacco Products Prices

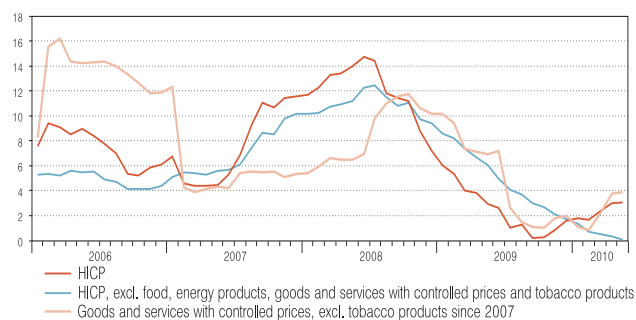
In the first five months administratively controlled prices picked up by 2.4 per cent on the corresponding period of the prior year. As of May the annual rate of increase in the prices of these goods was 4 per cent (2 per cent by end-2009), contributing by 0.6 percentage points to overall inflation.

Since the year start of 2010 the main adjustments in administratively controlled prices included higher fees for issuing identity documents (up 90 per cent) and the increase in the prices of water supply services and heating by 5 per cent and 8.6 per cent respectively. The increase in administrative fees was higher than expected and in April its contribution to annual inflation came to 0.2 percentage points.

In the second half of 2010 an increase in energy prices is expected of around 2 per cent, in the prices of natural gas around 25-30 per cent and in heating prices of around 10-15 per cent on average for the country. Reflecting these adjustments in the end of 2010 inflation in administratively controlled prices will remain around 4 per cent.

#### Rates of Change in Controlled and Uncontrolled Prices

(on corresponding month of previous year, %)



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

Sources: NSI, BNB.

Over the review year tobacco prices went up by 35 per cent due to the increased excise duty.<sup>3</sup> The increase was somewhat higher than expected and the contribution of this group to overall inflation increased from 0.7 percentage points by end-2009 to 1.4 percentage points in April 2010. In the second and third quarters of 2010 the contribution of tobacco products will remain at around 1.4 percentage points, thus playing a crucial role to overall inflation.

#### Industrial Goods Prices

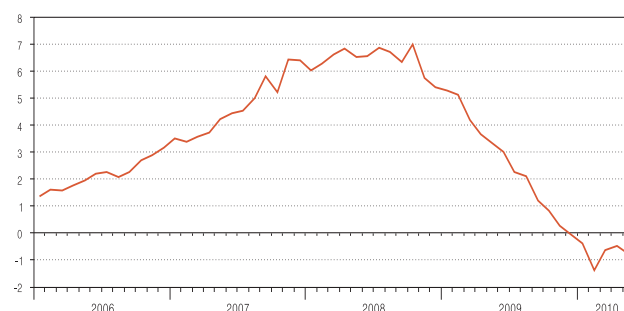
In the first half of 2010 non-food prices, excluding fuels, decreased by 0.7 per cent on an annual basis (compared to an increase of 0.4 per cent in the fourth quarter of 2009). Their contribution to annual inflation was -0.1 percentage points in May.

Against the background of greater uncertainty concerning incomes consumer demand contraction started to curb the increase in non-food prices by the end of 2008. In 2009 the most pronounced decline in inflation was reported in automobile, clothes and shoes prices, which by the end of 2009 had a negative growth rate. In

early 2010 the prices of a broader range of non-food goods, including furniture items and home maintenance goods declined on an annual basis. The other groups reported low positive rates of price increases. These developments continued to reflect weaker consumer demand. Personal computers were the only group where prices marked a more sizable increase as compared to the previous year.

#### Rates of Change of Industrial Goods Prices Excluding Energy Products and Goods with Administratively Controlled Prices

(on corresponding month of previous year, %)



Sources: NSI, BNB.

Consumer demand developments will predetermine to a large extent the price-setting of firms in retail trade and respectively non-food prices' dynamics in the second half year. We expect that the annual decline in prices in this group will remain unchanged with a possible deceleration in the groups which reported a more pronounced decrease such as *automobiles* and *clothes and shoes*.

#### Services Prices

The moderation in services inflation observed since the second half of 2008 continued in early 2010. Between January and May 2010 services prices were 1.4 per cent higher compared to the same period in 2009, which represents a decrease of 2 percentage points on the fourth quarter of 2009. By the end of the second quarter of 2010 services contribution to overall inflation was negligible (0.2 percentage points).

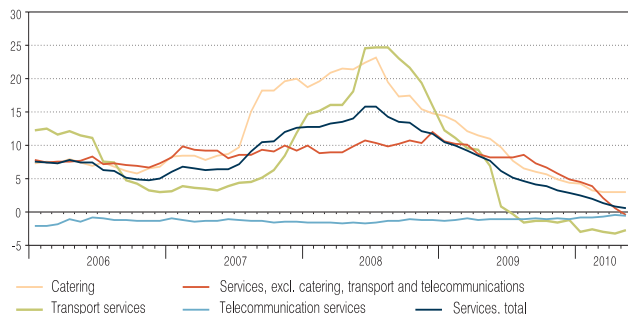
Services price dynamics by components in 2010 differs from that seen in the first half of 2009. In 2009 as inflationary pressure diminished on the back of the expenditure on different raw materials and supplies (such as food and fuel), prices in catering and road passenger transport moderated sizably. In the first half of 2010 the annual inflation moderation in catering services was lower, while transport services prices sustained

<sup>3</sup> Increases in excise rates in Bulgaria over the review year resulted in rates that are 20 per cent higher than the minimum for the EU.

their relatively stable decline of around 1 per cent – close to that by end-2009. Accommodation services, airline tickets and rent prices contributed most to the decline in services inflation in 2010.

#### Rates of Change of Services Prices (Excluding Those with Controlled Prices)

(on corresponding month of previous year, %)



Sources: NSI, BNB.

The contraction of consumer demand continued to push down the increase in prices in all services groups. Another possible factor behind the moderate increase in services prices was the moderating price pressure on the part of raw materials and supplies expenditure, *etc.* This assessment is confirmed by the national accounts data for the first quarter, which show lower intermediate consumption deflator compared to the corresponding period of the prior year. It should be noted that the inclusion of accommodation services in holiday resorts and low-tariff flights in the consumer basket since 2010 also played an important role for the moderation of annual services inflation. Since December 2009 these two groups recorded a fall in prices of around 20 per cent.

In the second half of 2010 services inflation will still be affected by consumer demand developments and will probably remain at low levels.