

# Economic Review

3/2011

BULGARIAN  
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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 analysed since the Bulgarian economy is influenced by international economic fluctuations. This publication contains quantitative assessments of the development in major macroeconomic indicators in the short run: inflation, economic growth, monetary and credit aggregate dynamics and interest rates.

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

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## Abbreviations

APRC	Annual percentage rate of charge
BIR	Base interest rate
BOP	balance of payments
BTC	Bulgarian Telecommunications Company
b.p.	basis points
CEECs	Central and East European countries
CEFTA	Central European Free Trade Association
CIF	Cost, insurance, freight
CIS	Commonwealth of Independent States
CZK	Czech koruna
DXY	an index measuring the exchange rate of the US dollar against the basket of six major currencies
EA	Employment Agency
EC	European Commission
ECB	European Central Bank
EIB	European Investment Bank
EMBI	Emerging Markets Bond Index
EONIA	Euro OverNight Index Average
EU	European Union
EURIBOR	Euro Interbank Offered Rate
FDI	foreign direct investment
FOB	Free on board
FRS	Federal Reserve System
GDP	Gross Domestic Product
GFMS	Gold Fields Mineral Services
HICP	Harmonized Index of Consumer Prices
HRW	hard red wheat
HUF	Hungarian forint
IEA	International Energy Agency
IMF	International Monetary Fund
ISM	Institute for Supply Management
LEONIA	LEv OverNight Index Average
LIBOR	London Interbank Offered Rate
M1	narrow money
M2	M1 and quasi-money
M3	broad money
MF	Ministry of Finance
MFIs	Monetary Financial Institutions
mt	metric tons
NPISHs	Non-profit institutions serving households
NSI	National Statistical Institute
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
PLN	Polish zloty
PMI	Purchasing Managers' Index
p.p.	percentage points
PPP	Purchasing Power Parity
CIS	Commonwealth of Independent States
RON	Romanian new leu
WTI	West Texas Intermediate

# Summary

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In the third quarter of 2011 global economic indicators continued to worsen. The latest data on annual real GDP growth were in support of the expected moderation in developed countries growth over the second quarter of 2011. By end-2011 and in early 2012 economic activity is expected to continue to moderate worldwide due to the negative effect of the slow economic recovery in the United States and the debt crisis in some euro area countries.

Bulgaria's external position remained sustainable on the basis of both the positive balance of payments current account balance and the structure of foreign liabilities, with intercompany loans comprising 41 per cent of total external debt. Balance of payments current account deficit reached EUR 1499.4 million for the January–September 2011 period. The foreign currency flow to Bulgaria resulting from the balance of payments current account surplus allowed the residents to use these funds to increase their foreign assets and to reduce their foreign liabilities. Gross external debt gradually declined reaching 93 per cent of GDP in August. International foreign currency reserves covered more than 100 per cent of Bulgaria's short-term foreign liabilities. In the fourth quarter of 2011 and in the first quarter of 2012 the current account is expected to record a surplus of around 0.5–1.5 per cent of GDP on an annual basis.

As of September broad money growth accelerated to 10.3 per cent on an annual basis compared to 8 per cent in June. Annual broad money growth is anticipated to remain at its current levels in the fourth quarter of 2011 and the first quarter of 2012. The increase of household deposits in the banking system contributed most to this. Credit to the non-government sector started accelerating as a result of the increase in claims to non-financial corporations. The households' demand for loans remained weak as a result of the uncertainty regarding future income and the related higher savings rate. Interest rates on loans, both to non-financial corporations and households, marked a slight decrease in the third quarter of 2011. This trend is likely to continue in the fourth quarter of 2011 and in the first quarter of 2012.

In the first half-year real GDP in Bulgaria went up by 2.7 per cent on the corresponding period of the prior year. Net exports and domestic demand had a positive contribution to this growth, but in line with the worsening international environment in the second quarter of 2011, exports reported a decline in real terms in the first quarter. In the third quarter of 2011 the overall business climate in Bulgaria continued to improve slowly, but October saw a slight overall decline in the business indicators. By the end of 2011 and in the first quarter of 2012 we expect a gradual increase in domestic demand, but the growing uncertainty around the rate of global economic recovery and especially of the economic recovery in the euro area, that was observed over the last month, poses a risk of lower economic growth in Bulgaria by the end of the review year. The final consumption expenditure of households will depend on the pace of improvement in the labour market, while investment demand will largely depend on financial market developments.

Over the first nine months of 2011 the consolidated fiscal programme deficit came to BGN 826.0 million (1.1 per cent of GDP projections for the year). Government spending is expected to increase by end 2011 but the consolidated fiscal programme deficit will remain below 2.5 per cent of GDP. In the fourth quarter of 2011 and the first quarter of 2012 government consumption is expected to have a slight positive contribution to GDP growth.

As of October 2011 annual inflation came to 3.0 per cent. The main contributors to inflation were food and transport fuel price rises reflecting international food and energy price developments. If the current international price dynamics is sustained, annual inflation is expected to remain relatively low and close to its current levels in the fourth quarter of 2011 and in the first quarter of 2012.

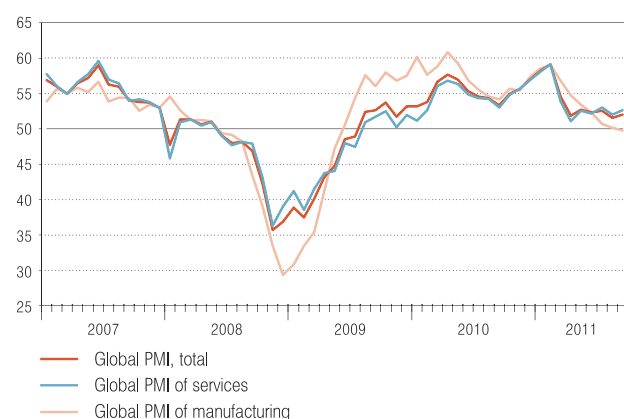
# 1. External Environment

In the third quarter of 2011 preliminary statistical data show that euro area GDP growth decreased to 1.4 per cent on an annual basis against 2.4 per cent and 1.7 per cent in the first and second quarters respectively. Until the end of the year economic activity will continue to be weak due to the moderating recovery of the US economy and euro area sovereign debt crisis. The euro area inflation rose further and in September and October the annual growth of HICP was 3.0 per cent against 2.5 per cent in August. Due to the expected slow-down in economic activity in the euro area, the ECB cut the interest rates on its main refinancing operations and continued implementing its non-standard monetary policy measures.

## Current Business Situation

Over the third quarter of 2011 the global economic indicator remained at its low level of March 2011.<sup>1</sup>

### Global PMI



Source: JP Morgan.

The low levels of business indicators in the third quarter showed a moderation in GDP growth of advanced economies at the end of the first quarter and in the second quarter, reflecting the temporary interruption of Japanese deliveries<sup>2</sup>. However, these indicators reacted largely to the heightened tensions in the United States in relation to the debates over raising the government debt limit and the re-intensification of the debt crisis in some euro area countries.

<sup>1</sup> The deterioration of business expectations in March and the corresponding decrease in business indicators reflected the enormous damages of Japan's economy after the catastrophic earthquake during the same month and its adverse effects on the global supply chains.

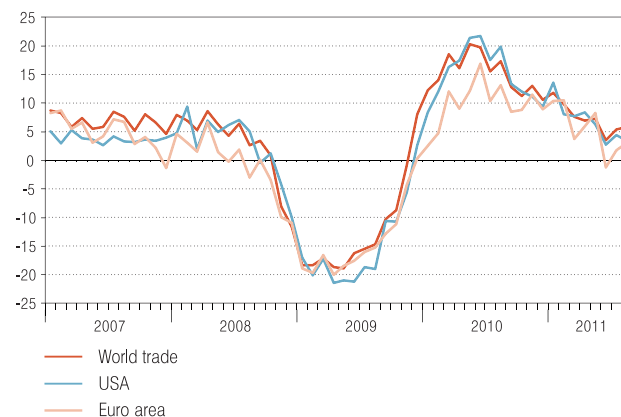
<sup>2</sup> In the third quarter Japan began to recover from the disaster effects in March and tended to return to moderate growth.

The global business indicator for industry continued to worsen and the outlook of the world industrial output dynamics was revised downwards.

On an annual basis, world trade volume retained its growth at 5.9 per cent in August. The US foreign trade turnover moderated most significantly, posting 3.4 per cent growth, or a decrease of 2.4 percentage points compared with the second quarter.

### World Trade

(annual rate of volume growth, %)



Source: CPB Netherlands Bureau for Economic Policy Analysis.

Based on the economic indicators and world trade developments, a further moderation in the global economic growth may be expected until the end of the year especially in developed countries, though another deep economic and financial crisis is unlikely to occur. In 2012 the increase in economic activity is expected to remain at levels close to those of the second half of 2011.

The global inflation accelerated to 5.0 per cent on an annual basis as of September, remaining



high in the developing countries and showing signs of acceleration in the developed countries. This trend has been observed since the first half of 2011.

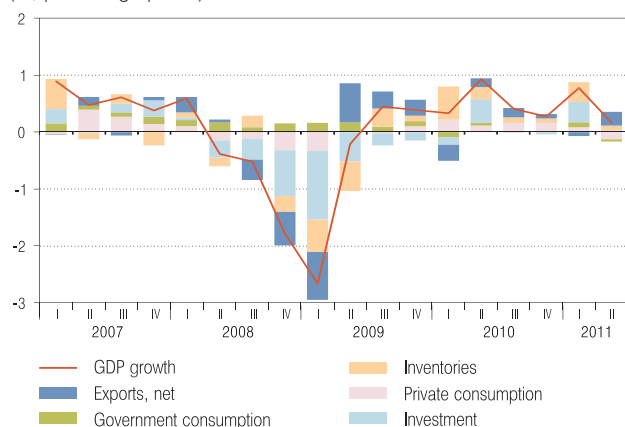
## Euro Area

According to preliminary data, in the third quarter of 2011 quarter-on-quarter economic growth in the euro area came to 0.2 per cent, matching the previous period's growth. On an annual basis, GDP growth moderated to 1.4 per cent in the third quarter, from 1.7 per cent in the second quarter.

Country data show that the economic growth in Germany over the third quarter slowed down to 2.6 per cent on an annual basis (against 2.9 per cent in the previous quarter), while in France and Spain, the previous quarter's levels were retained (1.6 per cent and 0.8 per cent respectively). An annual downturn was reported in Greece (by -5.2 per cent), Cyprus (by -0.6 per cent), Slovenia (by -0.1 per cent) and Portugal (by -1.7 per cent). Netherlands' real GDP decreased by -0.3 per cent on the previous quarter.

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

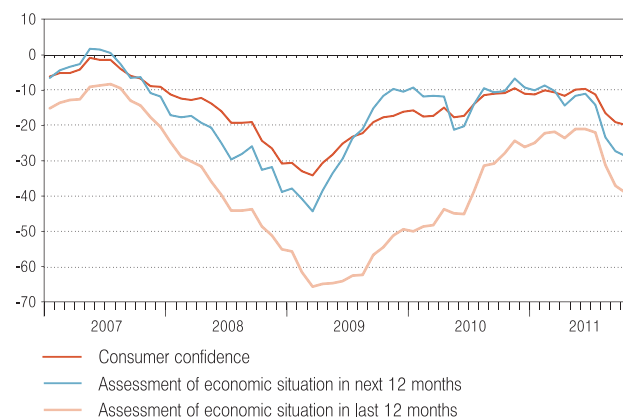
(%, percentage points)



Source: Eurostat.

Over the third quarter the euro area business indicators continued to decrease. In October the euro area economic sentiment index of the European Commission declined to 94.8 against 95 in September, while the business climate index fell to -0.18 against the previous value of -0.06. The euro area consumer confidence index of the European Commission declined in October to -19.9 against -19.1 in September. Over the third quarter its average value decreased compared with the previous period.

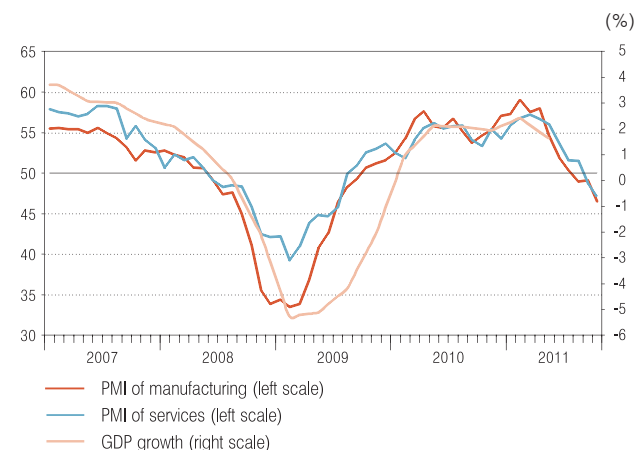
## Euro Area Consumer Confidence Indices



Source: European Commission.

By the end of the third quarter the euro area *PMI* declined below the neutral level of 50, indicating expectations about contraction of economic activity. In October the composite *PMI* declined to 46.5 (against 49.1 in September). Production and services subindices also declined to 47.1 (against the previous value of 48.5) and 46.4 (against 48.8) respectively. The average value of these indicators in the third quarter was lower than their averages in the second quarter.

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



Source: European Commission.

On the basis of economic indicators dynamics, the economic growth in the fourth quarter of 2011 is expected to remain close to or weaker than that in the third quarter.

In its November projections, the European Commission revised downwards its euro area GDP growth assessment for 2011 and 2012 to 1.5 per cent and 0.5 per cent on an annual basis *vis-à-vis* the previous forecast of 1.6 per cent and 1.8 per cent growth. The International

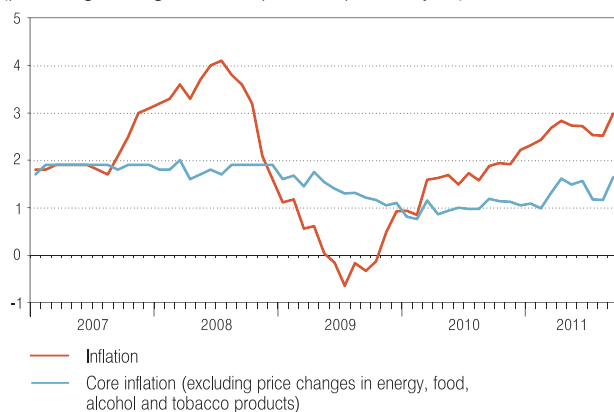
Monetary Fund (IMF) left unchanged its outlook of 1.6 per cent economic growth in the euro area over 2011, while revising downwards its growth expectations for 2012 from 1.8 per cent in April to 1.1 per cent in September. According to the latest ECB forecasts of September 2011, annual GDP growth in the euro area for 2011 will range between 1.4 per cent and 1.8 per cent (the previous revision: from 1.5 to 2.3 per cent) and that for 2012 between 0.4 per cent and 2.2 per cent (the previous revision: from 0.6 to 2.8 per cent).

In September and October 2011 the annual consumer price inflation in the euro area reached 3 per cent against 2.5 per cent in August. On a monthly basis, HICP rose in October by 0.3 per cent against the previous 0.8 per cent growth. This development was mainly driven by changes in energy and commodity prices. The annual growth in energy prices for September and October was 12.4 per cent. In October core inflation matched that of the previous month and came to 1.6 per cent on an annual basis.

Country data for October indicate rises in consumer prices in Germany and France (according to HICP) by 2.9 per cent (unchanged from September) and 2.5 per cent (against 2.4 per cent in September) on an annual basis respectively. The analogous indicators for Italy and Spain came to 3.8 per cent (against 3.6 per cent in September) and 3 per cent (unchanged from September) respectively.

#### Euro Area Inflation Rate

(percentage change on same period of previous year)



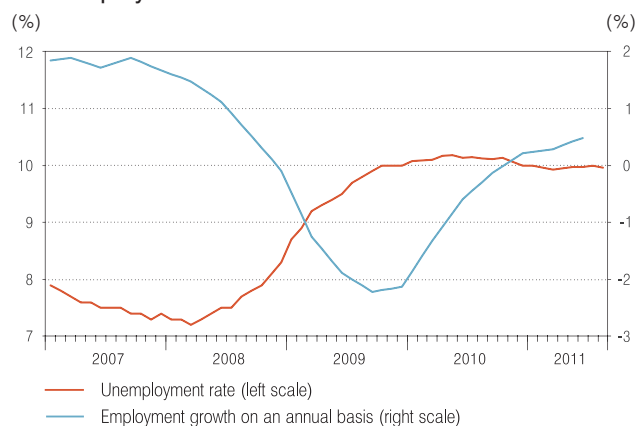
Source: Eurostat.

In November the EC forecast of euro area inflation for 2011 and 2012 was revised to 2.6 per cent and 1.7 per cent (previous forecast: 2.6 per cent and 1.8 per cent). According to ECB pro-

jections of September 2011, the increase in euro area HICP will move between 2.5 per cent and 2.7 per cent in 2011, *i.e.* unchanged compared to the projections of June 2011, and between 1.2 per cent and 2.2 per cent in 2012, *i.e.* a narrowing range.

The latest Eurostat data on euro area unemployment in September 2011 point to an increase in its level to 10.2 per cent from 10.1 per cent in August. The indicator showing the expected euro area unemployment over the following twelve months included in the EC consumer confidence index rose to 32.5 in October (against the previous value of 29.8). Unit labour costs increased in the second quarter of 2011 by 1.3 per cent on an annual basis (0.2 per cent in the previous quarter). Over the same period compensation *per employee* picked up by 2.4 per cent (against 2.3 per cent) and labour productivity by 1.1 per cent on an annual basis (against the previous value of 2.1 per cent).

#### Euro Area Unemployment Rate and Employment Growth



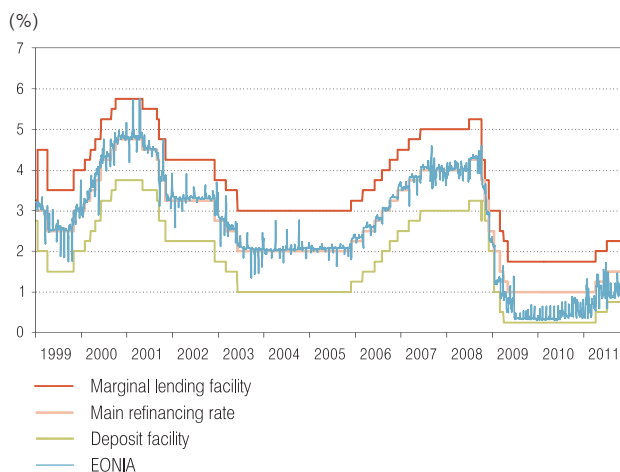
Source: Eurostat.

In July the ECB decided to increase the interest rate on the Eurosystem's main refinancing operations by 25 basis points to 1.50 per cent with effect from 13 July 2011. Moreover, the interest rates on the deposit facility and on the marginal lending facility were also increased by 25 basis points to 0.75 per cent and 2.25 per cent respectively. This was the second increase (the first was in April) of ECB interest rates since the beginning of the year geared towards reducing inflationary pressure.

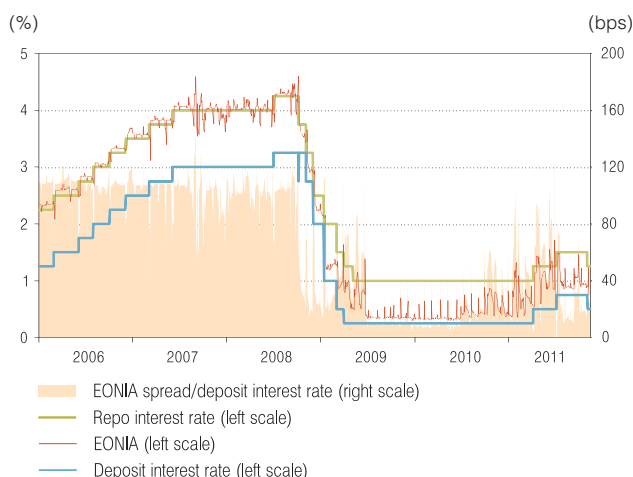
The economic activity slowdown in the second and third quarters coupled with the anticipated decrease in the real euro area growth to zero in the last quarter was the reason for the ECB

to cut on 3 November its interest rate on main refinancing operations by 25 basis points to 1.25 per cent, with effect from 9 November 2011. Interest rates on marginal lending facility and deposit facility were also reduced by 25 basis points to 2 per cent and to 0.50 per cent respectively.

### ECB Interest Rates



### Short-term Interest Rates

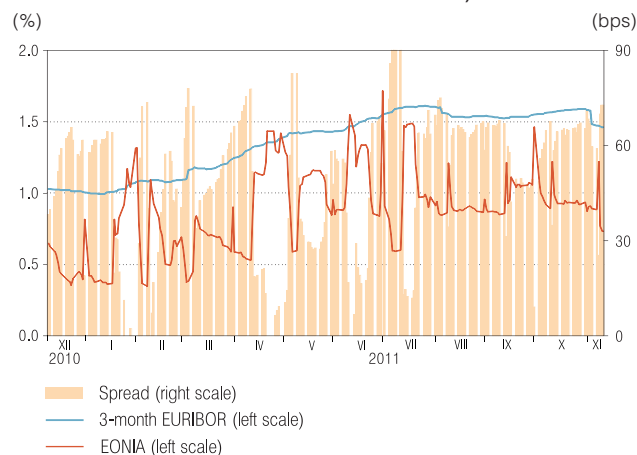


Due to the intensified tensions in the money market and in the euro area government securities market, the ECB continued implementing its non-standard monetary policy measures. In August 2011 it was announced that by the end of 2011 three long-term refinancing operations with a maturity of three months will be conducted, as well as a long-term operation with a six-month maturity. To limit government bond yields in Italy, Spain, Belgium and Portugal and their widening spreads *vis-à-vis* yields of German government bonds, in mid-August the ECB relaunched its bond purchase programme

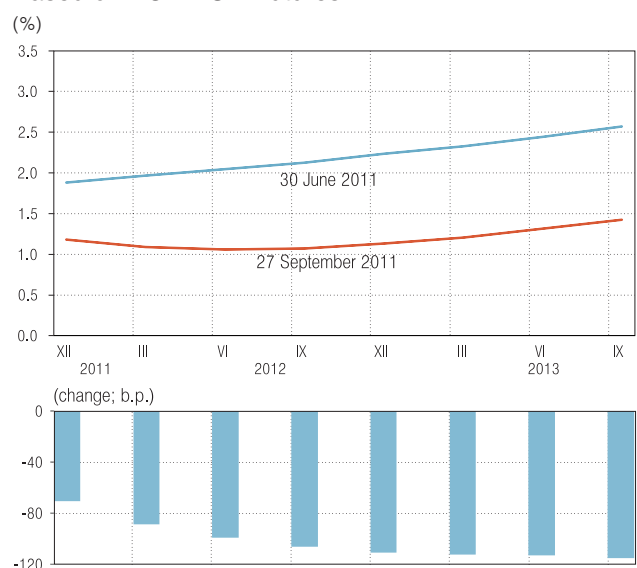
in relatively high volumes. The programme was not used over the prior five months.

In October the ECB decided to continue its policy of unlimited liquidity allotment on main and long-term refinancing operations at least until the end of the sixth maintenance period of 2012, on 10 July. In this month it was decided two one-year operations to be conducted in the last quarter of 2011 and six three-month operations in the first half of 2012. They will be put out to tender with full allotment and an interest rate equal to the average rate on main refinancing operations for the period. Again in October the ECB announced a new covered bond purchase programme with effect from November 2011. As in the first programme of 2009, its volume will be EUR 40 billion.

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



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



At the end of the third quarter market expectations of ECB interest rates on main refinancing operations underwent sizeable decreases as a result of debt crisis intensification in some euro area countries. Market expectations show a decline in the reference market rate to 1.00 per cent over the fourth quarter of 2011.<sup>3</sup>

To counteract the debt crisis intensification in the euro area, on 21 July the EU leaders decided to increase the capacity of the *European Financial Stability Facility (EFSF)*. The purpose was to support both the countries facing higher capital market funding costs and the euro area banking system. The decision became effective in mid-October, following ratification by all Member States.

At the 21 July meeting, a new bailout plan of EUR 109 billion for Greece was adopted. Funds will be delivered by the EU, the IMF and private investors. The detailed plan will become availa-

ble by the end of 2011 and private investors will voluntarily participate in the 50 per cent debt reduction plan, as specified in October.

At the end of October the European Council decided to increase the capacity of the EFSF up to five times by including a supporting option of up to around EUR 1 trillion. The two discussed approaches include the establishment of a *Co-Investment Fund*, which will provide funding for the Member States by private and public sources, and the sale of credit insurance amounting to 20–30 per cent of the euro area government bond issuance. Both schemes intended to increase the EFSF capacity will be used simultaneously. Moreover, the European leaders decided that banks in Europe would need recapitalisation, and tier-one capital adequacy ratio would be increased to 9 per cent until June 2012 in order to respond to the worsened debt quality of some euro area countries' debt. If the private funding of European banks' recapitalisation turns to be insufficient, it should be provided by the national governments and eventually *via* loans by the EFSF.

<sup>3</sup> At its monetary policy meeting on 8 December 2011, the ECB cut its reference interest rate in the euro area by 25 basis points to 1.0 per cent.

## Scoreboard of Indicators Relevant to the Detection of Macroeconomic Imbalances: Weaknesses and Risks Related to Its Implementation

November 2011 saw the adoption of six legislative proposals (five regulations and one directive) related to the enhanced economic governance in the EU.<sup>1</sup> Two of them were new regulations implementing a new framework on the prevention and correction of macroeconomic imbalances in the EU.

In line with these regulations, the process of early identification of macroeconomic imbalances started with the publication of a scoreboard of indicators accompanied by an EC report containing a qualitative economic and financial assessment to ensure that all pieces of information have been taken into account. In case of a signal that a country is experiencing imbalances, the European Commission prepares an additional comprehensive economic analysis which will serve as a basis for the decision for opening a special excessive macroeconomic imbalances procedure in the respective country. Once this procedure has been opened, the country receives recommendations on the correction of the identified imbalances. These recommendations will have to be taken into account and applied effectively in the economic policy-making process.<sup>2</sup> Non-observance of the recommendations will result in financial penalties for the euro area Member States.<sup>3</sup>

The scoreboard is an early-warning device signalling macroeconomic imbalances, comprising a close set of indica-

<sup>1</sup> Regulation (EU) No 1173/2011 of the European Parliament and of the Council of 16 November 2011 on the effective enforcement of budgetary surveillance in the euro area.

Regulation (EU) No 1174/2011 of the European Parliament and of the Council of 16 November 2011 on enforcement measures to correct excessive macroeconomic imbalances in the euro area.

Regulation (EU) No 1175/2011 of the European Parliament and of the Council of 16 November 2011 amending Council Regulation (EC) No 1466/97 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies.

Regulation (EU) No 1176/2011 of the European Parliament and of the Council of 16 November 2011 on the prevention and correction of macroeconomic imbalances.

Council Regulation (EU) No 1177/2011 of 8 November 2011 amending Regulation (EC) No 1467/97 on speeding up and clarifying the implementation of the excessive deficit procedure.

Council Directive 2011/85/EU of 8 November 2011 on requirements for budgetary frameworks of the Member States.

<sup>2</sup> Regulation (EU) No 1176/2011 of the European Parliament and of the Council of 16 November 2011 on the prevention and correction of macroeconomic imbalances.

<sup>3</sup> Regulation (EU) No 1174/2011 of the European Parliament and of the Council of 16 November 2011 on enforcement measures to correct excessive macroeconomic imbalances in the euro area.



tors<sup>4</sup>, grouped with a view to make a quantitative assessment of external and internal macroeconomic imbalances as follows:

- External imbalances and competitiveness
  - Current account balance as a per cent of GDP;
  - Net international investment position as a per cent of GDP;
  - Real effective exchange rate, deflated by the HICP;
  - Export market shares;
  - Nominal unit labour cost;
- Internal imbalances
  - Real house prices, calculated using the private consumption deflator;
  - New credit to the private sector<sup>5</sup> as a per cent of GDP;
  - Private sector debt as a per cent of GDP;
  - Public debt as a per cent of GDP;
  - Unemployment rate.

Each indicator has a lower and upper quartile, calculated on the basis of the data covering all EU Member States (for some indicators statistical data series date back as far as 1970) and applied equally irrespective of whether the country's economy is developed or a nominal convergence process is going on. The only exceptions are the real effective exchange rate and nominal unit labour cost thresholds where it has been differentiated between euro area countries and those outside the euro area.

The scoreboard shows that there are significant weaknesses which imply risks to its implementation and may result in incorrect and even wrong conclusions with a view to the existence or lack of macroeconomic imbalances in an economy. It is necessary to understand these weaknesses and risks so that the economic analysts remain objective in their judgement with a view to the state and development perspectives of a certain EU Member State, using the whole set of statistical information, publicly provided by government institutions.

### What are the major weaknesses of the scoreboard

First, greater dynamics of the scoreboard indicators may be observed in countries with ongoing nominal and real convergence processes and hence, they may reach levels above the set thresholds but this does not necessarily signal macroeconomic imbalances. The balance of payments current account balance as a per cent of GDP is a good example. Return on capital in converging economies is higher compared to developed countries and against the background of free movement of capital higher return attracts financial resources. Investment activity enhanced and the exports of investment goods increased which may result in a higher trade deficit. This, in turn, will contribute to the emergence or the increase of the balance of payments current account deficit. In the scoreboard of indicators, the current account thresholds as a per cent of GDP have been calculated on the basis of all Member States data, and all data series start from 1970. Using this calculation method means that the thresholds are strongly restrictive and as a whole disregard both the ongoing convergence processes in a number of EU Member States and the deep structural changes in the 1990s, especially with a view to the policy of full liberalisation of the movement of capital in the EU.

In the period between Bulgaria's accession to the EU in 2007 and the global financial crisis in 2008, the balance of payments current account deficit was increasing due to the sizeable flow of foreign investments which financed investment in physical assets and resulted in higher imports of investment goods. As a consequence of the global crisis, the foreign investment flow in Bulgaria started to decline at a quick pace and hence imports of investment goods curbed sizeably, while the balance of payments current account deficit was falling progressively for a period of two years and in 2011 the current account reported a surplus. This balance of payments current account deficit adjustment was made gradually and without disturbances.

Second, the use of a limited set of indicators may result in missing some important details, explaining the economic development in a certain country. Using a single indicator is not enough to identify the reasons behind its values or why it is beyond the set threshold. According to the economic theory and practice, for example, the external position of a country is assessed as stable when balance of payments current account deficit is financed by foreign investment flows. However, the indicator for the net investment position as a per cent of GDP does not differenti-

<sup>4</sup> Commission staff working paper (SEC(2011) 1361 final) "Scoreboard for the surveillance of macroeconomic imbalances: envisaged initial design".

<sup>5</sup> Private sector is defined as households, non-profit institutions serving households and non-financial corporations.

ate the foreign investment flows from the other capital flows and may give the unwarranted impression for unstable external position due to incurred external obligations part of which may be in the form of foreign direct investment. This is the case with Bulgaria, where the current account deficit was entirely financed by foreign direct investment. Therefore, almost 40 per cent of the external debt was in the form of foreign direct investment.

Misleading conclusions can also be drawn on the basis of the so called competitiveness indicators: real effective exchange rate and unit labour costs. In economies with ongoing real and nominal convergence, the upward trend in these two indicators reflects the convergence processes and this should not unilaterally be treated as a consequence of macroeconomic imbalances.

Apart from convergence, unit labour costs dynamics depends also on when the reporting starts, on the state of the economy at that time, on wages and labour productivity, on the structure of the labour market and on the corporate sector profit margin. These are important factors underpinning unit labour costs dynamics but they remain outside the scoreboard. Real convergence suggests an increase in nominal wages which at times may exceed that in labour productivity without causing decline in firms' revenue or profitability, *i.e.* the increase in unit labour costs does not result in deterioration of competitiveness. Similar processes are observed in Bulgaria's economy over the recent years – nominal wages increased faster than labour productivity but the relative share of labour costs in added value remains unchanged.

The increase in the real effective exchange rate deflated by the Harmonised Index of Consumer Prices also should not automatically be taken as measure of competitiveness. Amid nominal and real convergence, the increase in the real effective exchange rate largely reflects labour productivity growth and price levels.

The export market share indicator included in the scoreboard is far more meaningful with a view to competitiveness compared to the above two indicators. Typically, export market shares of new EU Member States increase and Bulgaria is not an exception to this rule. The increase of the market share, on the one hand, suggests good competitiveness, while the appreciation of the real effective exchange rate and the increase in unit labour costs reflect the natural real and nominal convergence processes.

Another example of a possible unilateral interpretation of economic processes in a certain country is using the unemployment rate as an indicator of internal imbalances. Unemployment rate is an indicator which usually lags behind movements in economic activity. A rise in the unemployment rate resulting from a deep restructuring of the economy, especially in the initial post-crisis recovery period, reflects an increase in labour productivity and improved competitiveness. In the future, the better structure of the economy allowing for higher economic growth will contribute to the increase in employment and a fall in the unemployment rate but now with higher labour productivity.

Third, the structure of the scoreboard is backward-looking rather than forward-looking. Values of the indicators are calculated as annual moving averages and as percentage changes for three or more years back. This statistical approach does not allow for a timely identification of changes in patterns related to these indicators. If a certain indicator suggests an imbalance because it is beyond the set threshold for the previous year, its adjustment over the current year will be seen with a big lag and the indicator will continue to suggest an imbalance even when it has already been corrected.

### Risks posed by the publication of the scoreboard of indicators

The shortfalls and the risks related to the automatic application of the scoreboard are partly mitigated by the wording of Article 3, item 2 of the Regulation No 1176/2011 of the European Parliament and of the Council on the prevention and correction of macroeconomic imbalances, according to which the scoreboard should not be accepted mechanically and conclusions should not be made solely on the basis of the reading of the indicators thereof.<sup>6</sup> This stipulation is particularly important because, as noted above, the scoreboard contains a limited number of indicators, presenting unilaterally the economic developments in individual countries and their mechanical reading might result in wrong and misleading conclusions. As regards market reactions, however, the comprehensive analysis of economic developments that is to be made by the European Commission when on the basis of the scoreboard and the accompanying report thereto it considers that there is/are risks of macroeconomic imbalances in a certain country, would be delayed.<sup>7</sup> With the very publication of the scoreboard and the accompanying report, doubt may arise with a view to the economic stability of the respective country if indicators are not within the set limits. Whether these doubts are justified or not would become evident only after the comprehensive economic review. After publishing the scoreboard and the accompanying report, it will take several months before taking the final decision on

<sup>6</sup> Regulation (EU) No 1176/2011 of the European Parliament and of the Council of 16 November 2011 on the prevention and correction of macroeconomic imbalances.

<sup>7</sup> See Article 5 of Regulation (EU) No 1176/2011 of the European Parliament and of the Council of 16 November 2011 on the prevention and correction of macroeconomic imbalances.

whether to open an excessive macroeconomic imbalance procedure or not. During this period the markets will not have sufficient information and the misleading scoreboard of indicators will be used for speculations.

If the scoreboard of indicators reveals macroeconomic imbalances, that have already been corrected what would be the recommendations to the respective Member State? Is it necessary to open excessive deficit procedures in such cases? Economic logic shows that the correct answer is no – if macroeconomic imbalances of past periods have already been corrected, the application of additional restrictive economic policy measures will have an adverse effect on economy and economic activity will moderate further. If the economy is in crisis or in a post-crisis recovery period, the measures to counter non-existing macroeconomic imbalances will increase the impact of the crisis on growth or will slow down the recovery process.

The sizeable impact of past movements on the indicators included in the scoreboard turns it into a meaningless early-warning instrument. The economic situation changes rapidly and factors which in the past have led to macroeconomic imbalances may now be irrelevant. At the same time, the recommendations that the country under a macroeconomic imbalances procedure will have to implement will aim to lower the effect of the factors that brought about these imbalances.

On the other hand, given the heterogeneity in EU economies, it is doubtful that the applied economic policy measures will result in adherence to the set scoreboard indicator thresholds. These variables are not controlled directly by the economic policy pursued by the governments and even assuming that such policies may exist, the application of a package of measures aimed at the mechanical adherence to the thresholds implies risks of lower GDP growth and a moderation in real and nominal convergence. These thresholds punish the high foreign direct investment flow, as it results in a balance of payments current account deficit and in deterioration in the net international foreign investment position. Observance of the thresholds would result in lower investment activity of firms and hence to lower economic growth.

To conclude, the scoreboard in itself cannot clearly detect the imbalances and provide full explanation of the economic developments in EU countries. As a result of the use of a limited set of indicators and inadequate thresholds for the eligible range of change, the scoreboard cannot serve as an early-warning instrument for the existence of macroeconomic imbalances, let alone as an instrument for the assessment of the competitiveness and the sustainable development of an economy.

## Economic Development of EU-7<sup>1</sup>

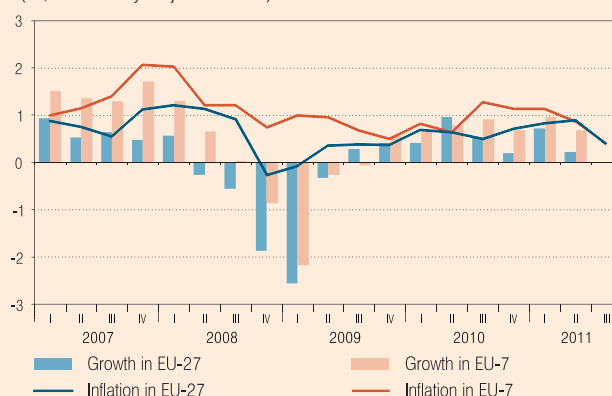
In the second quarter of 2011 the real growth rate of EU-7 states slowed down, with Hungary solely reporting a negative rate of growth. The real GDP on a quarterly basis for EU-7 grew by 0.7 per cent against 1.0 per cent in the first quarter. Inflation continued to moderate and it was 0.4 per cent against 0.9 per cent in the second quarter.<sup>2</sup> Stabilised international oil and food prices contributed most significantly to the fall in inflation.

Dynamics of growth and inflation indicators measured on average for EU-7 displayed divergent trends by country.

In **Romania** government consumption contributed to economic growth in the second quarter of 2011, with the contribution of the change in inventories and net exports posting a significant decline compared with the first quarter. Industrial output slowed down due to weak domestic and external demand over the review period, with chemical and pharmaceutical industries being most strongly affected. On the other hand, the contribution of agriculture and construction to growth went up.

### Growth Rate of Real GDP and Inflation in EU-27 and EU-7, Quarterly

(%; seasonally adjusted data)



Sources: Eurostat, own calculations.

<sup>1</sup> EU-7 includes the newly acceded states, excluding Estonia, Slovenia, Malta, Cyprus and Slovakia. As of 1 January 2007 Slovenia, as of 1 January 2008 Malta and Cyprus, as of 1 January 2009 Slovakia and as of 1 January 2011 Estonia are members of the euro area. EU-7 indicators are calculated by weighing the time series; the weights of the relevant countries in total GDP of the group have been used in calculating the growth, while in measuring inflation, the weights of EU-27 countries in HICP as calculated by Eurostat have been used.

<sup>2</sup> Harmonised indices of consumer prices for the respective countries are used in the analysis.

## Real GDP Growth, Quarterly

(%; seasonally adjusted data)

	2010				2011	
	I	II	III	IV	I	II
Bulgaria	0.9	1.6	0.7	0.5	0.5	0.3
Czech Republic	0.8	0.6	0.8	0.5	0.9	0.1
Hungary	1.0	0.4	0.8	0.2	0.3	0.0
Lithuania	1.3	1.0	0.3	1.8	3.5	0.4
Latvia	1.1	0.0	1.1	0.8	1.1	2.0
Romania	0.0	0.1	-0.2	0.4	0.5	0.2
Poland	0.7	1.1	1.3	0.9	1.1	1.1
Total	0.7	0.8	0.9	0.7	1.0	0.7

Source: Eurostat.

## Contribution to Real GDP Growth, Quarterly

(%; percentage points; seasonally adjusted data)

	GDP growth, second quarter 2011	Private consumption	Government consumption	Investment	Exports, net
Bulgaria	0.3	0.4	0.1	0.8	-1.6
Czech Republic	0.1	-0.1	-0.1	0.7	0.6
Hungary	0.0	0.0	-0.1	-0.5	3.2
Lithuania	0.4	0.8	0.0	-0.7	5.7
Latvia	2.0	0.3	-0.1	-4.2	-0.7
Poland	1.1	0.5	0.1	0.4	0.2
Romania	0.2	0.2	0.9	0.0	-2.4

Source: Eurostat.

## Inflation

(%; quarterly, seasonally adjusted data)

	2010				2011		
	I	II	III	IV	I	II	III
Bulgaria	0.6	1.5	0.8	1.2	1.1	0.3	0.5
Czech Republic	0.6	0.5	0.4	0.5	0.4	0.5	0.6
Hungary	1.2	0.9	1.0	1.1	1.1	0.6	0.7
Latvia	-0.8	0.6	1.1	0.8	1.3	1.3	0.9
Lithuania	0.8	0.4	0.9	0.9	1.0	1.8	0.8
Poland	0.5	0.3	0.7	1.2	1.3	0.8	0.4
Romania	1.7	0.9	3.5	1.6	1.3	1.6	-0.4
Total	0.8	0.6	1.3	1.1	1.1	0.9	0.4

Source: ECB.

## Unemployment

(%)

	2010				2011	
	I	II	III	IV	I	II
Bulgaria	9.4	10.1	10.3	11.2	11.1	11.3
Czech Republic	7.8	7.3	7.1	7.0	6.9	6.9
Hungary	11.2	11.3	11.1	11.0	11.0	10.9
Latvia	19.8	19.4	18.2	17.1	16.2	16.2
Lithuania	17.3	18.2	18.3	17.3	16.5	15.6
Poland	9.8	9.6	9.5	9.6	9.3	9.5
Romania	7.4	7.1	7.2	7.3	7.1	7.4

Source: Eurostat.

Financial services and real estate services had the most substantial positive contribution to services growth. The unemployment rate (seasonally adjusted data) accelerated to reach again the crisis levels of the second half of 2009. The inflation rate in the third quarter was negative with lower prices of processed food contributing most substantially. The inflation is expected to be sustained between 2 per cent and 4 per cent until the end of 2011 and early 2012, with the central bank target being set at 3 per cent.

Hungary was the only EU-7 country posting a 0.04 per cent decline of the real GDP in the second quarter compared with the first quarter. The positive contribution of net exports was high but insignificant to offset the contracted domestic demand and reduced gross capital formation. Investments in construction and transport sectors went down, while growth was reported only in industry. Agriculture contributed positively to economic growth and individual production and construction surprisingly continued to decrease irrespective of the expectations for a stronger recovery. In Hungary inflation measured by HICP accelerated and the major factor behind its rise were prices of processed food. At the same time, the weak domestic demand helped keep the inflation at relatively low levels.

The economy of Poland reported strong growth in the second quarter reflecting the enhanced consumer demand and investment. Construction and financial services contributed most significantly to the growth across industries. Industrial output and trade posted moderate growth. Compared with most of other countries in the region, Poland reported significant economic growth in the first half of 2011. Expectations for the second half of the year are for further growth though at a more moderate rate. The total price level in the country increased in the third quarter, with price rises in telecommunication services and energy resources contributing most significantly to this effect. Although the central bank increased the reference



interest rate in two steps and by June it reached 4.5 per cent, the inflationary pressure remained strong. In the medium run the stabilisation of prices of major commodity groups in international markets and the fiscal consolidation in Poland are expected to help subdue inflation.

In the second quarter **Latvia** reported 2 per cent growth on the previous quarter. Changes in inventories and private consumption had a positive effect on real GDP growth, while gross capital formation and exports had a negative contribution. Industrial output, transport and trade contributed substantially to growth. Despite the positive data about economic activity, unemployment in the country retained its high levels in the second quarter. Inflation increased mainly due to higher utility and transport prices. This reflected the increased excise on liquid fuels. Alcohol and tobacco taxes were also raised and contributed to the increase in consumer inflation.

Economic growth in the **Czech Republic** was positive but moderate. Investment and net exports contributed most to this growth. The cut in budget expenditure, slow real growth of salaries, high unemployment rates and household uncertainty as to their future income led to a decline in consumer demand which adversely impacted growth. Production of transportation vehicles, machines and equipment supported the increased economic activity, while production of food and financial services had a negative effect. In the third quarter inflation in the Czech Republic reflected the high prices of imported goods and administrative prices.

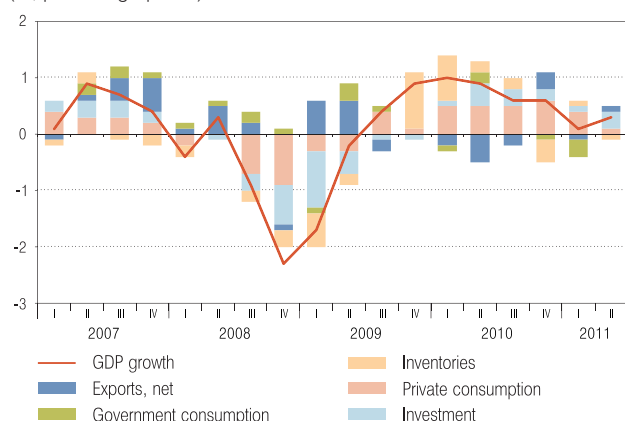
Following the strong growth in the first quarter of the year **Lithuania** reported slower real GDP growth between April and June, with private consumption and net exports having a positive contribution. The strongest increase in economic activity was reported in construction, industrial output and trade, while growth in financial services and real estate services moderated. Over the review quarter agriculture solely posted negative growth. Unemployment went down by 0.9 percentage points following the employment growth in construction and trade. The inflation pressure in Lithuania intensified in the third quarter due to the price hikes of food and utilities.

## United States

Over the second quarter of 2011 the US real GDP growth reached 0.3 per cent against 0.1 per cent over the first quarter, while on an annual basis, it moderated to 1.6 per cent against 2.2 per cent in the first quarter. Investment in the business sector, household consumption and net exports contributed positively to the growth. Only the government consumption and investment had a negative contribution. Based on preliminary data, GDP growth in the USA over the third quarter accelerated to 0.6 per cent on the previous quarter, although the annual growth remained unchanged from the second quarter (1.6 per cent).

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

(%; percentage points)



Source: Bureau of Economic Analysis.

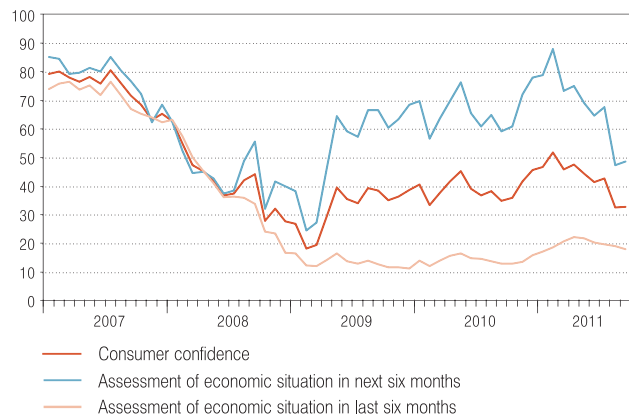
Dynamics of macroeconomic indicators at the beginning of the third quarter also increased the concerns that the US slowing economic growth reflected the effect of both external and internal factors. Economic expectations of the business sector and households deteriorated significantly over the review period showing some improvements in the October and November data.

The recovery of regular Japanese car and car components deliveries had a positive effect on the US production, and the drop in crude oil prices increased the households' real disposable income in the third quarter. Both factors had a favourable effect on goods and services demand. From the end of the second quarter, growth in retail sales accounting for almost 60 per cent of the household consumption component in the GDP index increased, posting 1.1 per cent growth on a monthly basis in September.

In the last months consumer confidence decreased due primarily to the uncertainty stemming from the delayed August decision on the increase in statutory debt limit and the resulting long-term credit downgrading by *Standard & Poor's (S&P)*.

## US Consumer Confidence Indices

(2000 = 100)

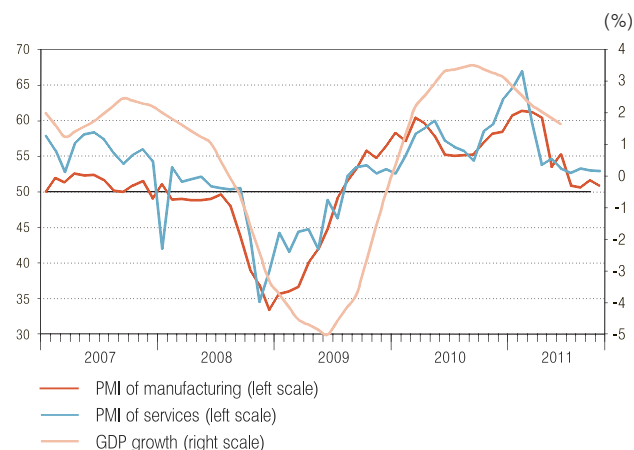


Source: The Conference Board.

Labour market developments were another key factor which continued to affect negatively consumer sentiment. In September the non-agricultural sector registered positive employment growth (by 158,000 persons against previous 104,000 persons), the level of unemployment still remaining high at 9.1 per cent.

Over the third quarter investment activity in the business sector contributed positively to GDP growth. The rise in the prices of some raw materials, however, put the corporate profits under downward pressure which in combination with the uncertainty of the future economic development may have a negative effect on companies' investment decisions. The review quarter saw also a trend towards paying dividends to shareholders and decreasing the amount of retained earnings which could be otherwise used for investing. In this respect, a slowdown in the business investment growth could be expected in the coming months.

## US PMI of Manufacturing and Services and GDP Growth

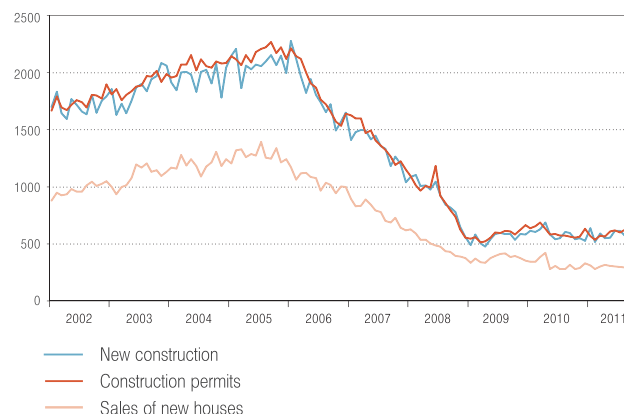


Source: The Conference Board.

Over the third quarter major industrial and services indicators mainly decreased, creating expectations of economic activity slowdown. In September ISM-PMI for industry went up to 51.6 against 50.6 in August, though remaining noticeably below its levels of the end of the second quarter (55.3). The ISM-PMI for services fell to 53 in September *vis-à-vis* 53.3 in August.

## Sales of Houses in the USA

(number, in thousands)



Source: Bloomberg.

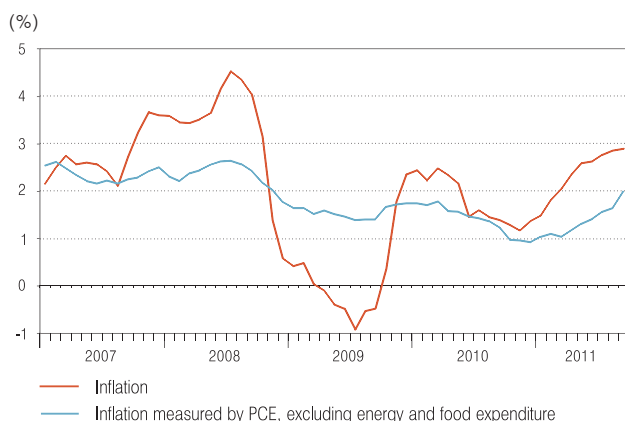
The low investment activity in the housing sector will continue to affect adversely the gross capital formation. The National Association of Home Builders (NAHB) index, which in the last three months continued to fluctuate around its lowest historical levels, supported these expectations.

The new US construction remained subdued by the significant number of unsold houses, while sales in this sector contracted further despite the fall in prices of real property and the favourable mortgage rates. Ongoing uncertainty regarding the rates of labour market recovery and still limited access to lending contributed to the weaker housing demand. Declines in the house prices were, to a large extent, driven by the increasing number of sold real estates of borrowers not servicing their mortgage loans.

Inflation measured on an annual basis by personal consumption expenditure deflator (PCE) decreased to 2.7 per cent in October against 2.9 per cent in September. Consumer price index data show moderation in its annual growth to 3.5 per cent in October, from 3.9 per cent in September. The monthly index growth posted again a slowdown, resulting from the lower world prices of major raw materials. In the third quarter expected consumer price inflation also declined in the short run, while long-term inflation expec-

tations remained stable. If the downward trend in world prices continues, annual inflation is expected to decrease over the fourth quarter.

### US Inflation Rate

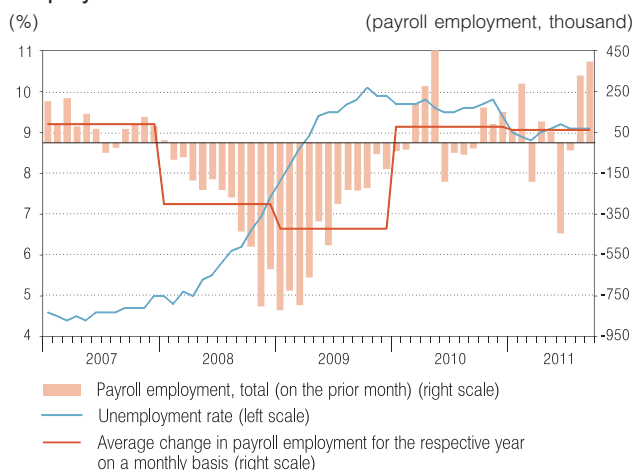


Note: Inflation is measured by the personal consumption expenditure deflator.

Source: Bureau of Labor Statistics.

The price indices, excluding fuel and food items, registered lower growth and remained within the range of 1.7–2.0 per cent that is deemed to be compatible with price stability. In October 2011 the personal consumption expenditure index rose to 1.7 per cent on an annual basis against 1.6 per cent in September.

### US Unemployment Rate and Changes in Payroll Employment



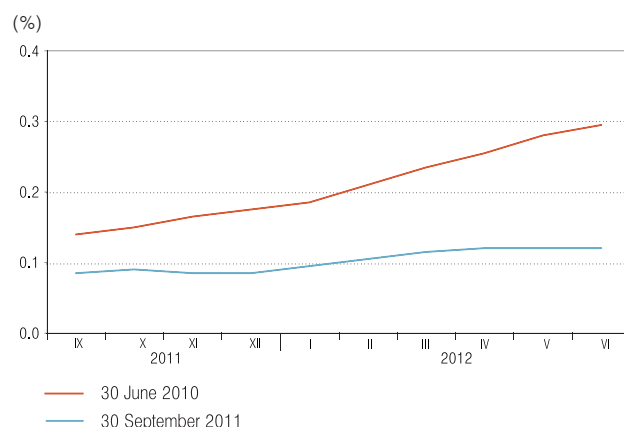
Source: Bureau of Labor Statistics.

The relatively high level of unemployment, which slightly declined to 9.0 per cent in October from 9.1 per cent in three consecutive months, will contribute further to inflation deceleration. In October 100,000 new jobs were created in the non-agricultural sector. In the review quarter new jobs came to 138,000 which though increasing on the previous quarter (97,000) still remained

considerably below the average employment rate of 166,000 persons in the first quarter. Until the end of the year no real decrease in unemployment, nor wage increases are expected due to the increase in the number of people seeking jobs and the low rate of job creation.

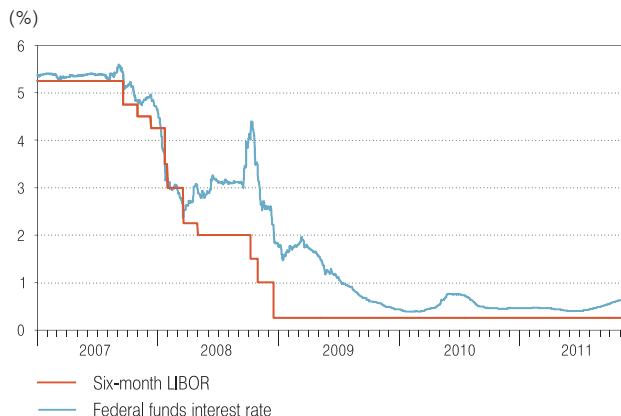
At its meeting on 21–22 September, the US Federal Reserve Open Market Committee decided to keep its reference interest rate unchanged at least till mid-2013 within a range of 0.00–0.25 per cent, reflecting projections of weak economic activity and lower inflation expectations over the medium term. It was decided a programme for extension of the average maturity of assets in Federal Reserve System portfolio to be implemented. These measures will be focused on selling of US government securities with a maturity from three months to three years. Earnings from these sales will be reinvested in securities with a maturity from six to 30 years. The programme worth USD 400 billion will be effected between October 2011 and July 2012. These measures aim at reducing main interest rates at the long end of the US yield curve, so as to stimulate the economic growth without practically increasing the assets in the Federal Reserve balance sheet. Additional measures to stimulate the recovery of the US housing market were also adopted. The earnings from mortgage bonds and government agencies bonds in the Federal Reserve assets will be reinvested in new mortgage bonds, while the earnings of US maturing government bonds will be reinvested in US government bonds.

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



Source: Bloomberg.

## US Federal Funds Interest Rates and Six-month LIBOR in US Dollars



Source: Bloomberg.

The expectations that the reference interest rate in the money market will remain unchanged will continue to keep the cost of US short-term resources at levels close to those at the end of 2011.

## US Fiscal Deficit and Government Debt

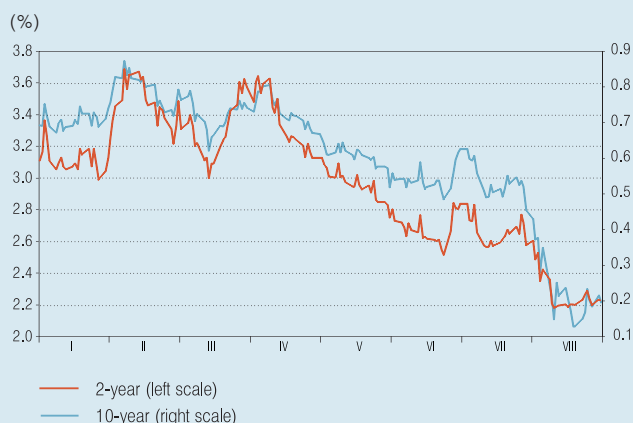
The crisis in the financial markets of late 2008 and 2009 had a strong negative effect on the US real economy. Since 2008 three economic stimulus packages have been adopted so far coming to a total of USD 2 trillion. As a result of this interference and against the backdrop of the lower rates of recovery in the economy, US fiscal indicators worsened significantly. Unlike euro area Member States which started discussions on fiscal consolidation measures in 2010 and subsequently implemented them, a key priority of the US government for most of 2011 remained the provision of stimulus to boost economic activity.

Deteriorated fiscal indicators suggested that a decision should be taken (the sixth since September 2007) for an increase of the national debt limit<sup>1</sup> of USD 14.3 trillion, in order to continue to repay its financial liabilities and to avoid undesirable consequences for the economy. The statutory limit has restricted government debt since 1917. Prior to its implementation, the US Treasury had to ask the Congress for a permission to issue new bonds, when this resulted in an increase in government debt.

After the adoption of the last fiscal stimulus package in December 2010, market concerns about the US fiscal sustainability began to mount.

This convinced both the ruling Democratic Party and the opposition Republican Party which has a majority in the Lower House of Congress, that the rise of the ceiling should be accompanied by the adoption of a plan for the stabilisation of the US fiscal position in the long term. To this end, the two parties presented their own draft laws on cutting budget deficit for a ten-year horizon. Both draft laws provided for a similar debt reduction of USD 4 trillion, but the un-

### Yield of US Government Securities



Source: Bloomberg.

<sup>1</sup> The US statutory debt limit is the total amount of money that the US government has been authorised to borrow in order to repay its obligations it has already undertaken, including social and health insurance payments, wages of the employed in the public sector, interest payments on government debt, recovery of taxes and all other monetary obligations. The limit does not give rise to new expenditure obligations. It just provides the government with the opportunity to repay the existing obligations undertaken by the Congress or the President. If the government debt limit is reached but not increased, the government will have to stop, limit or delay payment on existing obligations. So far the US debt ceiling has not been reached, nor exceeded, as, where necessary, the US Congress has always raised it.



### Credit Risk Premium on US Five-year Government Bonds

(basis points)



Source: Bloomberg.

derlying measures for the achievement of these goals differed considerably and this resulted in raging debates in Congress. The Republicans plan suggested curbing government expenditure and cutting sizeably the Medicaid and Medicare health insurance programmes. The Democrats had a more balanced suggestion: a combination of budget expenditure reduction and an increase in corporate taxes, as well as in taxes for households with an annual income of more than USD 250 thousand.

The debate on the suggested measures brought about no concrete results and on 16 May 2011 the United States reached the statutory debt limit.

In order to repay their debt obligations until 2 August 2011, the deadline for a compromise on the increase of the debt limit, the US Treasury had to take extraordinary measures, including: suspension of Treasury securities issues (for the states and local authorities), debt issuance suspension for the Civil Service Retirement and Disability Fund, suspension of the reinvestment of Treasury securities with forthcoming maturities from the Government Securities Investment Fund and the Exchange Stabilization Fund. Nevertheless, the big CRAs (S&P, Moody's and Fitch) reacted and in early June the US credit rating was placed under observation with a possibility of a downgrade. The CRAs stated that the country's credit rating will be downgraded if prior to 2 August 2011 political leaders have not reached an agreement on a suitable strategy for reducing the fiscal burden in the long term, and on the increase of the debt ceiling.

In line with market participants expectations, the representatives of both the ruling political party and the opposition managed to reach a compromise in the last moment. On 2 August 2011 the amendments to the law regulating the US government debt ceiling came into force. The budget cuts set out in the final document provided for a deficit reduction of between USD 2.1 trillion and USD 2.4 trillion over the next ten years. Of these, USD 917 billion will be allocated between defence spending and other government expenditure with a reduction in defence spending of USD 350 billion. A decision on the concrete programmes and on the time when these reductions will be made is to be taken. The social insurance Medicare programme and other government programmes aimed at supporting low-income households will not be affected.

In addition to the adopted measures, a committee with representatives of the two parties was formed with the mandate to present a plan for cutting budget expenditure by another USD 1.5 trillion after 2013. The Congress will vote on the proposed measures and will submit a draft law for approval by the President by 23 December 2011. In the event that the committee could not agree on a recommendation or the full Congress failed to pass it by mid-January 2012, an automatic spending cut of USD 1.2 trillion will be enacted. The cut will be split between national security and other government programmes, Medicare including. However, Medicaid and Social Security Programmes will not be affected. According to the last agreement, the US statutory debt limit will be increased by at least USD 2.1 trillion (up to USD 16.4 trillion) in several consecutive steps.

Upon signing the plan, the government debt limit was automatically raised by USD 400 billion and a further increase of USD 500 billion is to be put to the vote. The remaining portion of the agreed increase will be approved in the beginning of 2012, hoping that it will be enough to meet government's needs by the start of 2013.

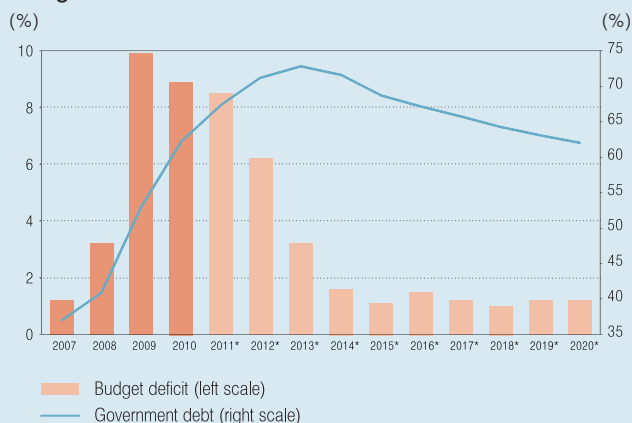
Moody's and Fitch welcomed the results achieved. The Fitch credit rating remained unchanged (AAA) and the outlook was changed to stable. Moody's kept the rating unchanged, but the outlook remained negative. According to the credit agency, broad-based reforms in the social and health-

care system are needed, coupled with measures aimed at boosting tax revenues.

Regardless of the decisions taken with a view to US budget deficit and government debt, S&P downgraded the long-term rating to AA+ which was an unprecedented act in US history of ratings. The agency stated that they do not consider the adopted fiscal consolidation plan good enough to stabilise the US fiscal position in the medium term. S&P was the only leading credit rating agency stating a concrete amount of the budget cuts needed for a ten-year horizon, namely USD 4 trillion, emphasising that the adopted plan does not provide for measures aimed at raising revenues. Another reason behind the step taken by the S&P was the lack of political will for a timely increase of the government provisional debt limit and for reaching a consensus decision on budget deficit cuts.

Given the gap between the approved deficit reduction plan and the goals set by S&P, as well as the existing differences in political leaders' views on the issue, this downgrade did not surprise financial market participants. Regardless of the temporary increase in the credit risk premium on five-year Treasury securities, measured by the CDS spread, the United States continued to obtain financing from the capital markets. The news did not result in withdrawal of resources from the US Treasury securities market and they continued to appreciate.

## Budget Deficit and Government Debt



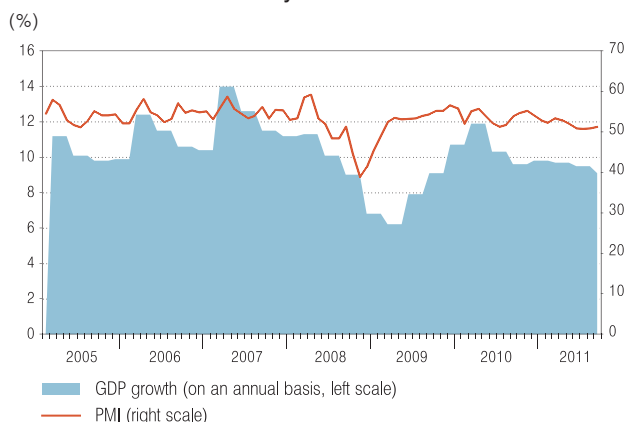
\* Preliminary data.

Source: Congressional Budget Office.

## China

Over the third quarter of 2011 China posted insignificant moderation in economic growth to 9.1 per cent on an annual basis against 9.5 per cent in the second quarter. On a quarterly basis, GDP growth slowed down to 2.3 per cent compared to 2.4 per cent in the second quarter. The inflationary pressures on economy were significant throughout most of the year.

### GDP and PMI in Industry

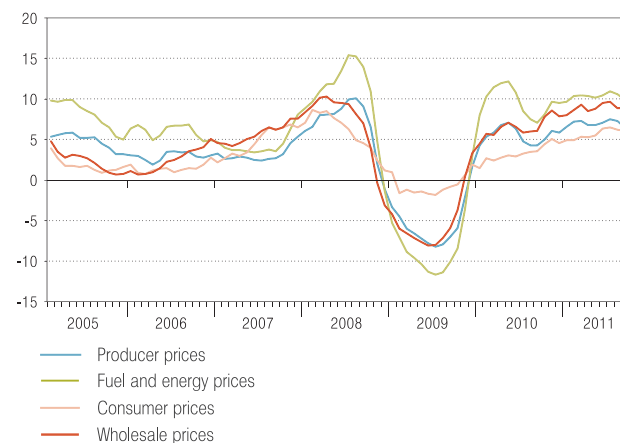


Source: Bloomberg.

Inflation started to fall by the end of the third quarter, reaching 6.1 per cent in September, from 6.2 per cent in August and 6.5 per cent in July.

### Inflation

(on corresponding month of previous year, %)

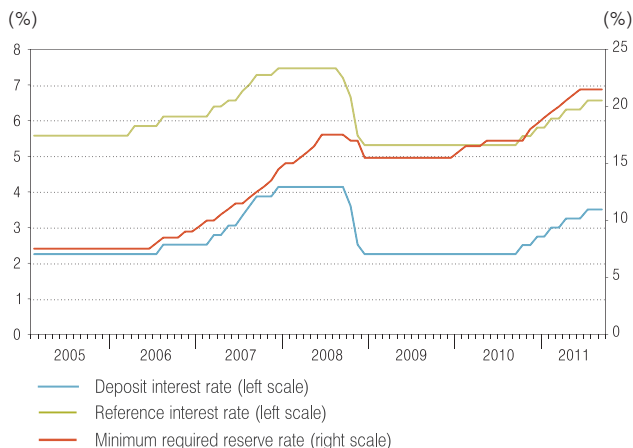


Source: Bloomberg.

The People's Bank of China undertook measures aimed at cooling down the economy and decreasing inflation. These measures include an increase in the key interest rate and the banks' minimum required reserve rate along with im-

plementation of administrative measures to limit credit growth in the banking system.

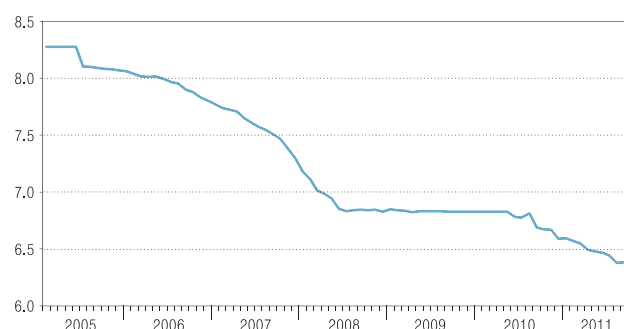
#### Monetary Policy of the Central Bank of China



From October 2010 to the review period, the People's Bank of China reference interest rate on one-year loans was increased by 125 basis points (to 6.6 per cent) and the rate of minimum required reserves by 450 basis points (to 21.5 per cent).

The exchange rate dynamics was also an element of the instruments driving growth and inflation. In the first nine months of 2011 the Chinese currency (renminbi) appreciated *vis-à-vis* the US dollar by 3.1 per cent and by 1.3 per cent in the third quarter.

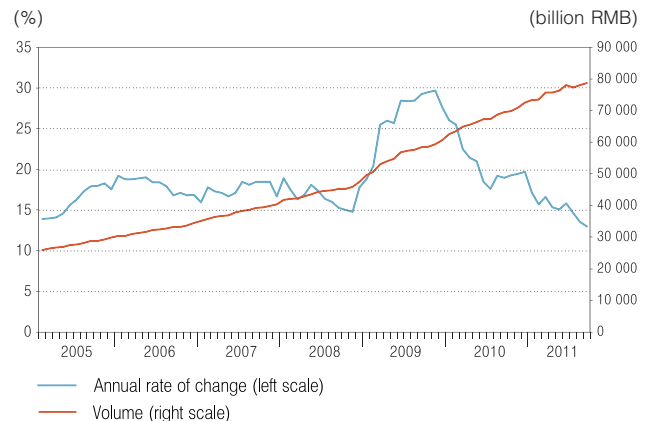
#### RMB/USD Exchange Rate



As regards credit, a deceleration in its growth was observed in the third quarter. In September the annual growth of the new loans in domestic currency moderated to 13.8 per cent, which was the lowest level for the last six years. Monetary aggregate M2 growth slowed down to 13 per cent on an annual basis against 16.3 per cent over the last 12 months. The main reason behind

this moderation was the government's policy to restrict bank access to liquidity.

#### Monetary Agregate M2

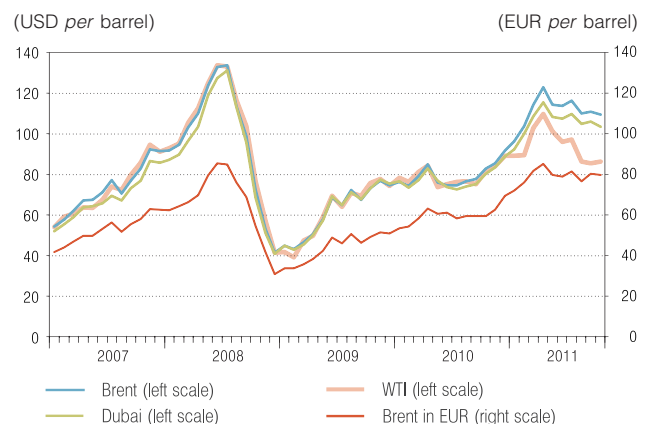


### International Prices (Crude Oil, Major Raw Materials, and Gold) and the EUR/USD Exchange Rate

#### Crude Oil Prices

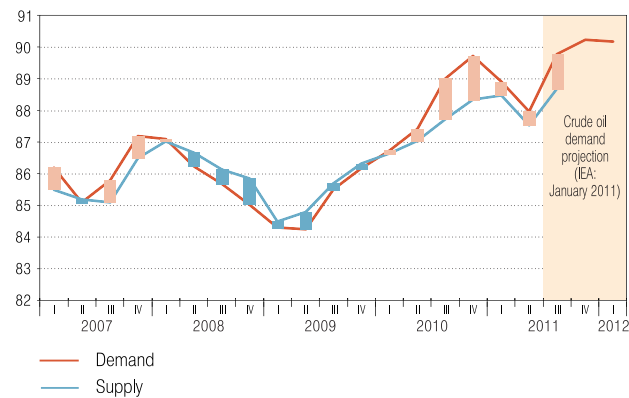
In the third quarter of 2011 the price of Brent crude oil decreased to USD 112.5 *per barrel* on average (EUR 79.6 *per barrel*). At the end of June the International Energy Agency provided additional 60 million barrels in international markets, trying to support the reduced supply as a result of the complicated political situation in Libya. In July and August the OPEC countries continued increasing their oil production. Due to the slowing economic growth, the lower price of energy resources in the third quarter compared to the previous one reflected the increased supply and decreased demand.

#### Crude Oil Prices



## World Crude Oil Supply and Demand (Quarterly)

(million barrels per day)

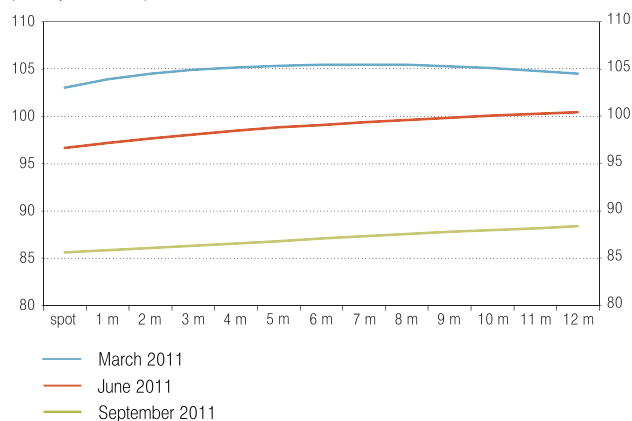


Source: IEA.

In September the International Energy Agency announced the successful completion of its programme on supplementary crude oil provision, and Libya began to recover its production which further calmed the markets. On the basis of futures contracts in September, over the next twelve months the WTI crude oil is assumed to be traded in the range of USD 85–90 per barrel.

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

(USD per barrel)



Source: JP Morgan.

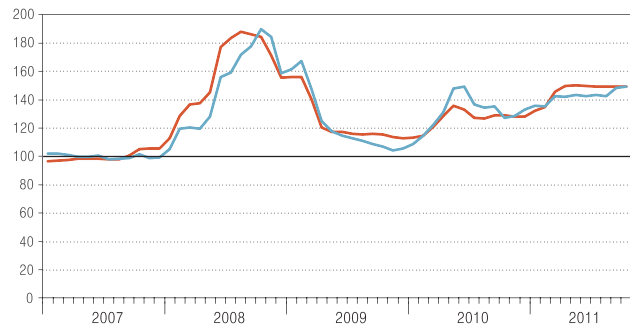
## Major Raw Material and Commodity Prices

In the third quarter steel product prices grew by 16.8 per cent on average compared with the third quarter of 2010. The general metal price index fell by 2.9 per cent on the second quarter. Non-ferrous metal prices also decreased, tin (-14.3 per cent) and nickel (-9.6 per cent) posting the most significant decline. The expectations of slower economic growth could have an impact on metal prices which will continue to fall moderately until the end of 2011 and in the first quarter of 2012.

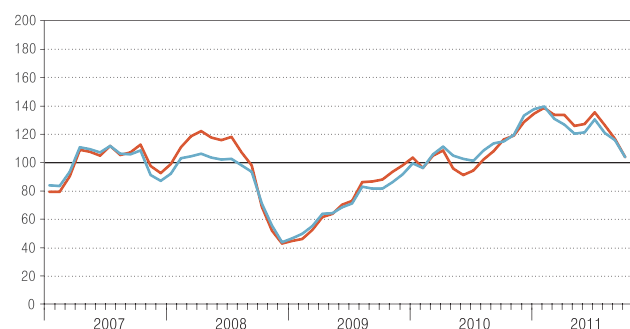
## Price Indices of Major Raw Material and Commodity Groups

(2007 = 100)

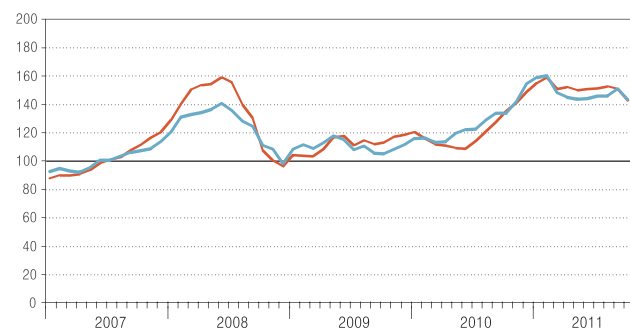
### Steel



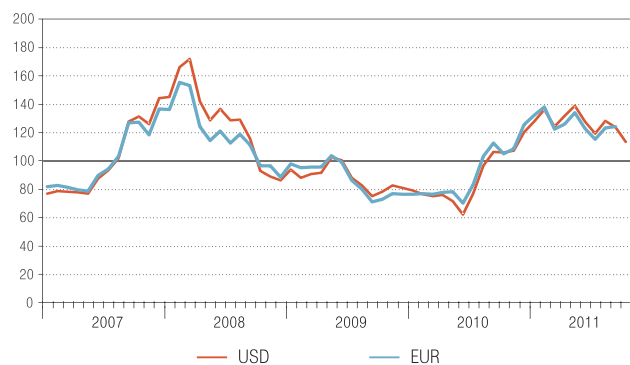
### Copper



### Food



### Wheat



Sources: World Bank, ECB and BNB.



The index recording the global food price level remained almost unchanged over the third quarter, rising by 0.4 per cent on average compared to the second quarter. Some foods posted significant increases: rice and sugar prices rose by 13.6 per cent and 15.5 per cent respectively, while the price of wheat fell by 10.4 per cent and that of maize by 3.4 per cent. In September the International Grains Council revised upwards its forecast of the global cereal production in 2012. The cereals produced in 2012 are expected to increase by 3.2 per cent on 2011 and consumption to grow by 1.6 per cent. Given the favourable forecasts of the yields in 2012, until the end of 2011 and at the beginning of 2012 no rise in cereal prices is anticipated in international commodity markets.

### Gold Prices

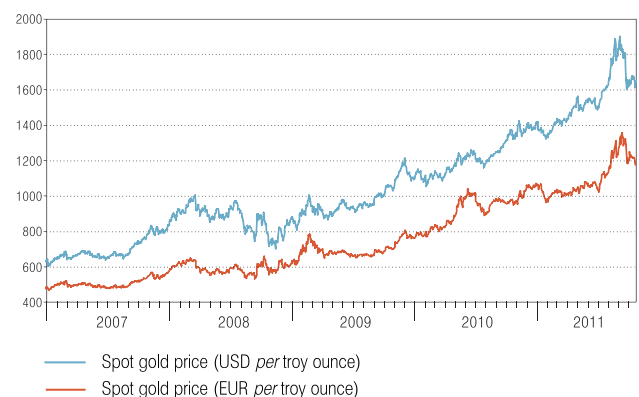
Over the third quarter of 2011 the average spot price of gold went up to USD 1704.6 *per* troy ounce (by 11.9 per cent on a quarterly basis). In euro terms, the price of gold posted stronger growth (13.7 per cent) due to euro depreciation over the review period against the US dollar.

The gold price in the third quarter reflected mainly investor concerns about slowdown in global economic recovery and demand for gold as an investment haven. The debt crisis in some euro area countries, problems around the US statutory debt limit increase and the US credit rating downgrading by S&P led to an appreciation of gold to USD 1920.7 *per* troy ounce on 6 September. The gold price reflected also the CME Group decision to increase the gold futures margin in two steps (on 11 August by 22 per cent and on 24 August by 27 per cent), which led to liquidation of positions and adjustments in the gold price. At the end of the review quarter it fell significantly for three days, reaching USD 1532 *per* troy ounce on 26 September 2011. The reason was closure of gold positions to cover equity losses. An increase in the gold futures sales was reported, with demand for gold as safe haven falling due to the higher volatility of its price. The investors seeking safe haven focused on the US government securities. The fall in gold prices was pushed by the appreciation of the US dollar. The higher volatility in the gold price resulted in the decision of the CME Group taken on 23 September to increase again (by 21 per cent) the margin requirements for gold

futures trading which put additional pressure on the gold price.

Demand for physical gold by exchange-traded funds (ETF), collateralized by gold, picked up at the beginning and in the middle of the third quarter, remaining higher than the levels of early July. However, at the end of August closures of gold positions reversed this trend, resulting in a sharp fall in prices of these funds' assets. The gold assets of *SPDR Gold Trust*, the largest gold-backed exchange-traded fund, rose by 2.0 per cent over the review period, whereby the fund managed 1231.9 tonnes of gold as of 30 September.

### One-month Futures of Gold



Source: The London Bullion Market Association.

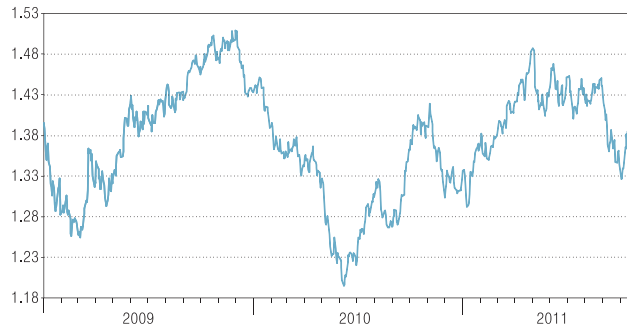
### The EUR/USD Exchange Rate

Over the third quarter of 2011 the average value of the US dollar increased by 1.9 per cent against the euro and by 0.7 per cent against the basket of six currencies. Over the period the US currency traded within a range of 1.34–1.45 *per* euro. The main factor behind its rise was the intensification of the debt crisis in the euro area. On 21 July the European leaders showed political will to cope with the growing uncertainties. A new plan for Greece worth EUR 109 billion was announced. The funds will be provided by the euro area (EU), the IMF and private investors.

In August the investor attention was focused on the USA. After intense negotiations between Democrats and Republicans, the government debt limit was raised in the last possible moment. Later, in August S&P downgraded the US credit rating.

## The EUR/USD Rate

(USD per EUR 1)



Source: ECB.

With regard to other currencies, the Swiss National Bank's communication on providing a ceiling for the appreciation of the Swiss franc *vis-à-vis* the euro to the amount of CHF 1.20 *per* euro was the milestone at the beginning of September. Moreover, the Bank expressed its determination to pursue this target and not to allow another appreciation of the local currency that could result in economic slowdown and deflationary pressures.

## Bulgarian External Debt Dynamics in International Financial Markets

In the third quarter of 2011 the spreads on yields of the Central and East European countries' government debts continued to widen steadily. The JP Morgan Euro EMBI Global index increased by 176 basis points to 360 basis points at the end of the review quarter. The index fluctuated within a wide range of 185 to 360 basis points.

This was attributable to the investors' concerns about the lack of solutions for the euro area debt crisis and the inability of some of the coun-

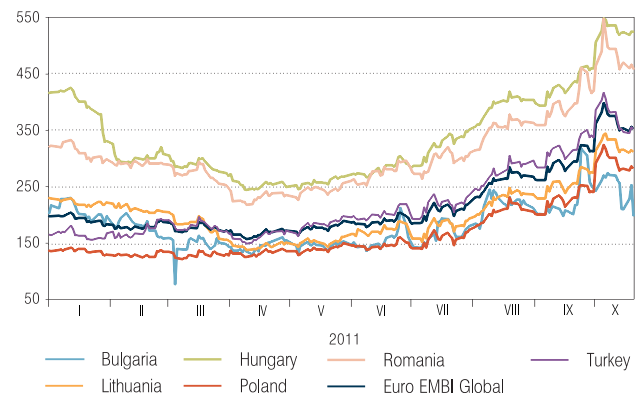
tries to comply with the initial fiscal consolidation plans in 2011. Credit spreads in the euro area and heightened risk aversion also contributed to the widening of the credit spreads in Central and Eastern European (CEE) countries.

The rate of recovery of the CEE countries proved stable over the first and second quarters. However, expectations of a slowdown in global recovery increased in the third quarter. The concerns that possible moderation in the euro area growth may have a negative effect on economic developments of the CEE countries dominated investor sentiment. The Greek debt crisis development had the strongest impact on spreads.

Bulgaria's external government debt spreads, measured by the JP Morgan index, followed the general market trend throughout the whole period, reporting a 99 basis point cumulative increase to 242 basis points by the end of the review quarter.

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

(basis points)



Source: Bloomberg.

## 2. Financial Flows, Money and Credit

Between January and September 2011 the balance of payments current account surplus increased to reach EUR 1499.4 million. For the same period the balance of payments current and capital account balance amounted to EUR 1680.6 million. The financial account balance was negative and reflects the increase in foreign assets and decrease in foreign liabilities of residents, mostly banks. Based on balance of payments data, between January and September international reserves went down by EUR 102.5 million, excluding foreign exchange revaluations and disregarding gold price risks.

By the end of September 2011 the Issue Department balance sheet figure amounted to BGN 25.53 billion at market value (EUR 13.05 billion), with assets growing by BGN 146.13 million (EUR 74.71 million) compared with December 2010. The dynamics of international reserves market value was impacted by the gold price rise over the period. As a result, its market value in the Issue Department balance sheet grew by BGN 351.6 million (EUR 179.8) and contributed to an increase in the Banking Department deposit by BGN 343.02 million (EUR 175.38 million). The increase in other depositors' deposit by BGN 604.18 million (EUR 308.91 million) contributed to international reserves growth. Over the same period the government and budget deposit went down by BGN 811.6 million (EUR 415 million).

By September 2011 the average monthly coverage of imported goods and services by BNB international reserves was 6.5 months<sup>1</sup>.

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

### Monetary Flows Which Prompted Significant Changes in Gross International Reserves

(million EUR)

External Flows	January – September 2011	January – September 2010
<b>Total for the period</b>	-225	-542
<b>Purchases and sales of euro</b>	-512	-365
at tills	-9	-13
banks, incl.	-504	-352
banks' purchases	24103	47711
banks' sales	-24607	-48064
<b>Flows on accounts of banks, the MF, etc.</b>	288	-177
Minimum required reserves	-31	-366
Government and other depositors	319	189

Source: BNB.

Monetary flows, which prompted stronger changes in gross international reserves, provided additional information about the major operations of the central bank. On a cash basis, the decrease in gross international reserves between January and September 2011 amounted to EUR 225 million disregarding foreign exchange revaluations and gold price risks. Banks' net purchases of euro from the BNB came to EUR 503 million and bank reserves denominated in euro decreased by EUR 31 million. These operations of banks were associated with the increase in their foreign assets and decrease in foreign liabilities based on balance of payments data.

## Financial Flows and External Position Sustainability

Between January and September 2011 the balance of payments current account was positive amounting to EUR 1499.4 million. On an annual basis, the current account recorded a surplus of EUR 628.5 million (1.6 per cent of GDP). In the fourth quarter of 2011 and in the first quarter of 2012 the current account surplus is expected to range between 0.5 and 1.5 per cent on an annual basis.

The foreign currency inflow in Bulgaria – a result of the balance of payments current account surplus worth EUR 1499.4 million, allowed residents to use these funds for increasing their foreign assets and decreasing liabilities. As a result of these transactions, the balance of payments financial account for the January – September 2011 period recorded a deficit of EUR 1667.6 million. Transactions of domestic banks, which increased their foreign assets in the review period by EUR 1106.5 million and reduced their foreign liabilities by EUR 669.3 million, contributed most substantially to the financial account deficit.

The inflow of foreign direct investment in Bulgaria was positive. Based on preliminary data, between January and September 2011 foreign direct investment in Bulgaria amounted to EUR 534.5 million. The bulk of this investment was in the form of equity capital in the amount of EUR 535.7 million and reinvested profit in the banking sector in the amount of EUR 68.9 million. Other net capital was negative in the amount of EUR 70.1 million<sup>2</sup>. Between January and September 2011 non-residents' investment in real estate came to EUR 184 million against EUR 176.1 million in the corresponding period of 2010 returning to a level close to that typical of pre-2006 years.

Between January and September 2011 foreign direct investment flow was directed mainly to transport (EUR 319.2 million). By June 2011 real estate operations and business services (23.6 per cent), financial intermediation (17.5 per cent) and manufacturing (16.6 per cent) were the industries with significant shares in the total accumulated foreign direct investment.

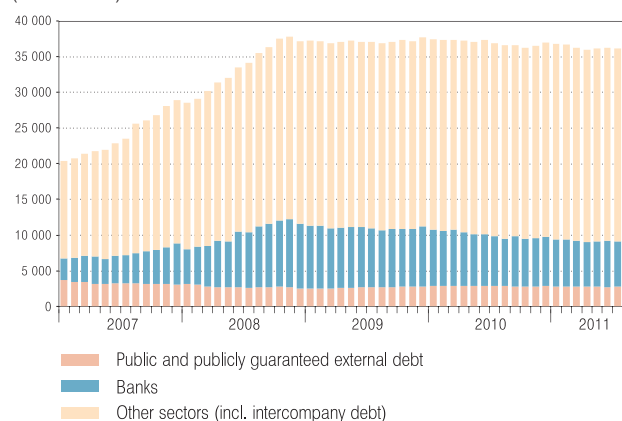
<sup>2</sup> An explanation for the negative net value of the other capital item is provided in the BNB November 2011 Balance of Payments Monthly Bulletin. Matching the preliminary data, the difference between the flows for the reporting period and for the previous year resulted mainly from intercompany loans and the repayments thereon in accordance with the repayment schedules of corporations.

The composition of FDI by country in the January–September 2011 suggests that foreign direct investment attracted from the Netherlands (EUR 326.1 million) and Russia (EUR 148.5 million) accounted for the largest shares. Net payments related to revolving intercompany loans were made to the UK (EUR 139.8 million).<sup>3</sup>

By September 2011 net foreign direct investment accounted for 3.0 per cent of the annual GDP for the last four quarters. In the fourth quarter of 2011 and in the first quarter of 2012 the inflow of foreign direct investment is expected to remain positive within 1.5–2.0 per cent of GDP on an annual basis.

### Gross External Debt by Institutional Sector

(million EUR)



Source: BNB.

Repayments on foreign liabilities of the bank and non-bank private sector contributed to the gradual decrease in Bulgaria's gross external debt. In the January–August 2011 period Bulgaria's gross external debt went down by EUR 1004.4 million and by the end of August amounted to EUR 36.04 billion or 93 per cent of GDP reported for the last four quarters. Net repayment of borrowed funds amounted to EUR 4241.8 million (revaluations and changes in trade and revolving credits excluded) between January and August 2011. In the first eight months of the year dis-

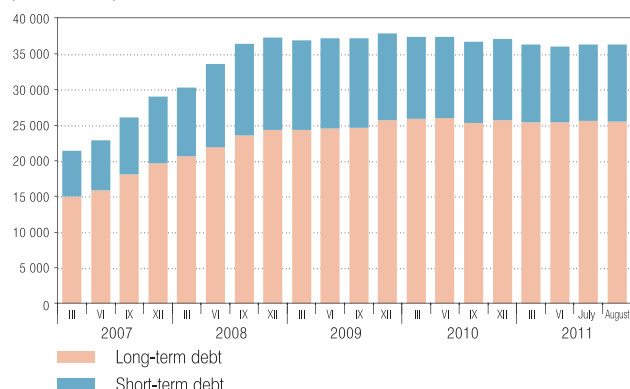
<sup>3</sup> See footnote 2.

bursments totalled EUR 2874.1 million, including 34 per cent from banks and 36 per cent intercompany loans. Principal payments amounted to EUR 3843.1 million against EUR 5243.5 million for the respective period of the previous year.

In the maturity structure of gross external debt, short-term external debt trended downwards. It decreased by EUR 609.2 million and its share fell to 30 per cent compared to 31 per cent a year earlier.

#### Short-term Gross External Debt Dynamics

(million EUR)



Source: BNB.

In the currency structure of gross external debt, the euro retained its high relative share which by end-June 2011 reached 87.4 per cent. The euro accounted for the largest share in intercompany loans (92.4 per cent), and the smallest share in the general government sector (74.9 per cent).

Private non-guaranteed external debt declined by EUR 813.6 million between January and August 2011, with the decrease in banks' foreign liabilities contributing most significantly (EUR 590.8 million). Banks' debt to foreign parent banks incurred in connection with their activity in Bulgaria occupied a large share in banks' external debt (74 per cent as of June 2011). Relatively high liquidity of banks allowed them to reduce their dependence on external financing, repaying their external obligations.<sup>4</sup>

Non-bank sector enterprises increased their external liabilities by EUR 33.6 million in the January – August 2011 period. Over the same period the intercompany loans went down by BGN 291 million. By August their share in the total amount of external debt was 41 per cent.

<sup>4</sup> For further details on the banking system, see the Monetary Aggregates and Credit Aggregates.

Between January and August 2011 the general government external debt decreased by EUR 155.7 million. The total amount of public and publicly guaranteed external debt went down by EUR 190.8 million and reached 11.5 per cent of Bulgaria's total external debt. New loans and deposits disbursed to the general government sector amounted to EUR 121.8 million, down EUR 0.5 million on the previous year. New loans were mainly government investment loans from the European Investment Bank (EIB) provided to finance infrastructure projects.

The average weighted interest rates on new loans declared between January and August 2011 showed an appreciation (on an annual basis) in the cost of external attracted funds in euro by 0.7 percentage points to 4.1 per cent. The cost of new loans in US dollars reported a decrease of 1.6 percentage points to 3.5 per cent.

By June 2011 there was no notable change in the structure of private non-bank external debt by industry. The largest share in the external debt of other sectors was occupied by real estate operations and business services (23.1 per cent), followed by electricity, gas and water (20.9 per cent) and financial intermediation (10.8 per cent). The largest share in intercompany loans was occupied by telecommunications (17.3 per cent), real estate operations and business services (15.2 per cent) and financial intermediation (13.3 per cent).

Bulgaria's gross foreign assets increased by EUR 1158.3 million between January and August 2011, with BNB international reserves growing by EUR 102.2 million and foreign assets of domestic banks by EUR 1247.9 million. As a result of Bulgaria's gross foreign assets and external debt dynamics, the net external debt decreased by EUR 2162.7 million to EUR 16 billion by end-August 2011, or 41 per cent of reported GDP for the last four quarters.

Between January and September 2011 the total balance of payments current and capital account reported a surplus of EUR 1680.6 million compared with EUR 546.4 million for the corresponding period of 2010. By September the surplus (on an annual basis) amounted to 2.4 per cent of GDP for the last four quarters and the balance a year earlier recorded a deficit of 0.7 per cent of GDP.



Between January and September 2011 all current account components (except for the income account) improved compared with the corresponding period of 2010. Trade balance improved by EUR 943.9 million, services balance by EUR 181.7 million, net current transfers by EUR 115.7, while income balance deteriorated by 137.2 million.

In the first nine months of 2011 the net inflow of resources on the capital account increased by EUR 30.1 million on the corresponding period of 2010.

The trade balance, reporting a deficit in the amount of EUR 780.2 million, improved substantially. In nominal terms (in euro), exports increased by 32.0 per cent and imports by 20.5 per cent on an annual basis.<sup>5</sup> Imports and exports are expected to increase on an annual basis in the third and fourth quarters and in the first quarter of 2012, with the nominal import growth rate exceeding that of exports.

The balance on services reported a surplus of EUR 2087.3 million over the January–September 2011 period against a surplus of EUR 1905.6 million in the corresponding period of the prior year. The improvement was mainly a result of increased transport earnings and decreased external services payments (other business services). Earnings on the credit side (assets) increased by EUR 50.2 million and earnings on the debit side (liabilities) improved by EUR 131.5 million.

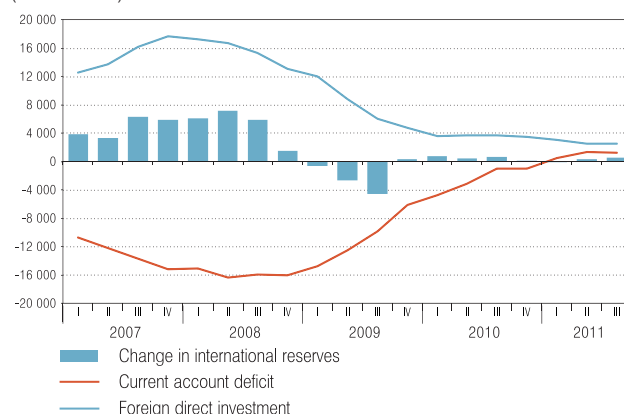
Over the first nine months of 2011 net current transfers amounted to EUR 1358.4 million: up EUR 115.7 million on an annual basis, mainly due to the increase in transfers to the general government sector (up EUR 63.2 million). The receipts in the form of private current transfers increased by EUR 14.4 million on an annual basis. Transfers abroad posted a decline of EUR 8.1 million. As a result, net transfers to the private sector increased by EUR 22.5 million on an annual basis.

Between January and September 2011 the deficit on the income account amounted to EUR 1166.1 million, deteriorating by EUR 137.2 million on the corresponding period of 2010. This reflects mainly the larger related payments on foreign direct investment (a deterioration by EUR 125 million). A portion of this amount was a reinvested profit and was reported under the balance of payments financial account as foreign direct investment.

The increase in capital transfers on the corresponding period of the previous year reflects higher net receipts from EU funds. Capital transfers from the EU to the general government sector amounted to EUR 157 million.

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

(million BGN)



Source: BNB.

In the fourth quarter of 2011 and in the first quarter of 2012 the current account surplus is expected to vary between 0.5 and 1.5 per cent of GDP on an annual basis.

The sustainability of Bulgaria's external position was retained, the current account balance reporting a surplus as a result of the improvement of all its components, which allowed to smoothly service the country's external obligations and gradually reduce the gross external debt.

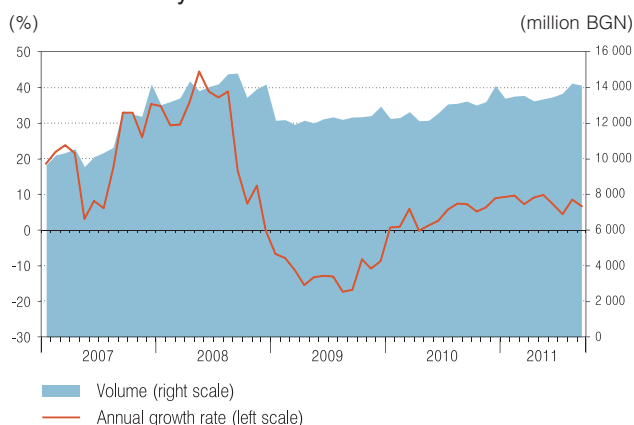
<sup>5</sup> A more detailed analysis of exports and imports is provided in Section 3.

## Monetary Aggregates

Over the third quarter the high savings rate in the economy was sustained, with residents' funds attracted in the banking system posing further growth. By September 2011 higher deposit base led to a 9.9 per cent increase in banks' reserves with the BNB. Currency in circulation gradually went up (by 4.6 per cent), reflecting the gradual consumption recovery. In the next two quarters the growth rate of banks' deposits with the BNB are expected to moderate their pace and currency in circulation to gradually increase. In the fourth quarter of 2011 and the first quarter of 2012 interest rates on time deposits are expected to stay close to their current levels.

By the end of September 2011 reserve money went up by 6.7 per cent and banks deposits with the BNB by 9.9 per cent on an annual basis contributing by 4.0 percentage points to reserve money growth. The increase in banks' reserves with the BNB reflected the increased deposits, consistent with the steadily high saving rate of households in the recent two years.

### Reserve Money



Source: BNB.

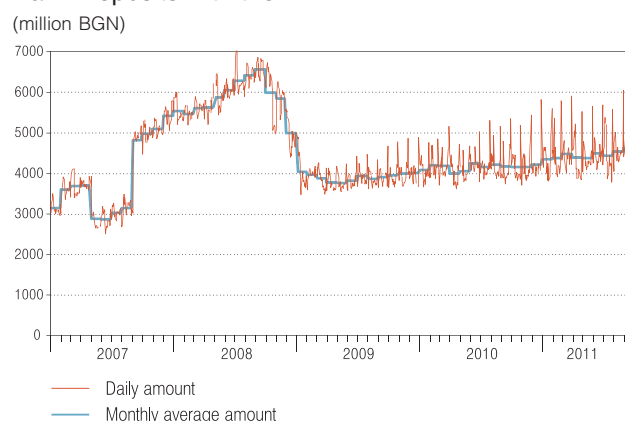
The average daily volume of funds attracted from residents<sup>6</sup> continued to increase at high rates: by BGN 2460 million in the third quarter against BGN 960 million in the second quarter. Over the same period the average daily volume of funds attracted from non-residents went down by about BGN 260 million. As a result of the dynamics and structure of attracted funds, the effective implicit rate of minimum required reserves continued to increase reaching 8.90 per cent<sup>7</sup>; of this, banks maintained 7.69 percentage points as reserves with the BNB and the remaining 1.21 percentage points were in the form of cash balances and funds on settlement accounts of banks in the TARGET2 national system compo-

<sup>6</sup> Residents other than state and local government budgets.

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

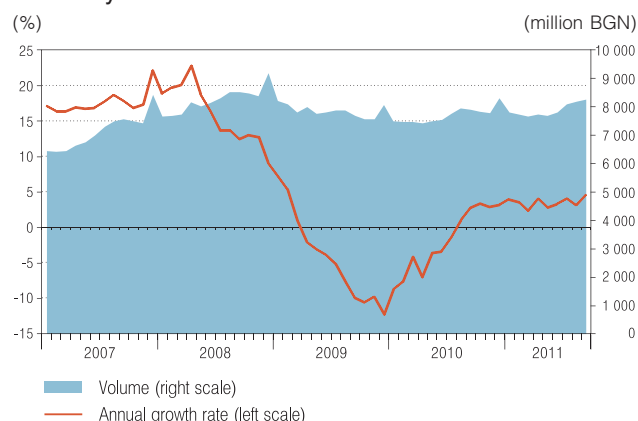
ment.<sup>8</sup> Over the third quarter of 2011 banks continued to reduce their excess reserves and their share in the total reserves maintained by banks declined to 1.8 per cent, from 2.1 per cent on average in the second quarter.

### Bank Deposits with the BNB



Source: BNB.

### Currency in Circulation



Source: BNB.

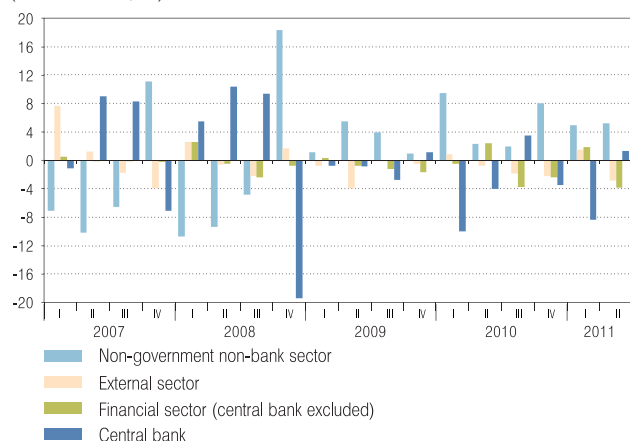
Currency in circulation growth remained moderate and reflected the gradual recovery of economic activity. By the end of September it reached 4.6 per cent on an annual basis.

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

In the fourth quarter of 2011 and the first quarter of 2012 currency in circulation is expected to further increase at a moderate rate on an annual basis, which will reflect the gradual recovery of household consumption. The increase in banks' deposits with the BNB is anticipated to further contribute to reserve money growth, but at moderating growth rates.

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

(share of GDP, %)



Sources: MF, BNB.

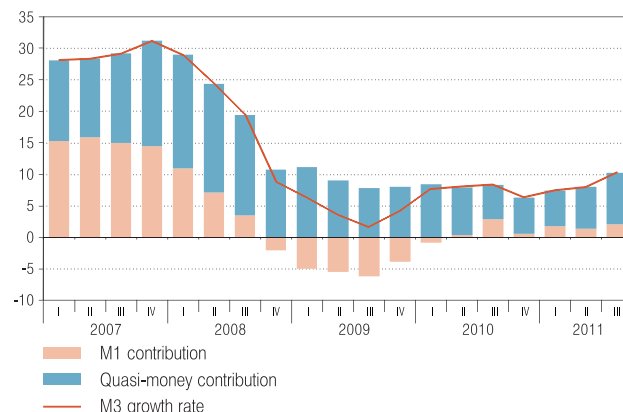
Fiscal policy affects the allocation of liquidity among economic sectors. Refunds from the EU for direct payments to agricultural producers resulted in a reallocation of liquid resources from the external sector to the accounts of the government and government budget institutions with the BNB. Between April and June the central bank was a net beneficiary of liquidity accounting for about 1.4 per cent of GDP for the review quarter, which to some extent was also a result of the reported budget surplus of BGN 91.7 million. The government withdrew liquidity from the financial sector through a net government bonds issue in the amount of BGN 105.3 million and through collecting corporate tax from financial institutions (42.6 million). Concurrently, domestic and external interest payments, which also influence the allocation of liquidity from the government to the financial and external sector, amounted to BGN 17.2 million and BGN 31.9 million. As a result, the deposits of the government and government institutions with the BNB went up by BGN 458.2 million. In the second half of 2011 the government will continue to withdraw liquidity from the financial sector due to the large amount of the expected new government bonds issue (BGN 674.3 million), which exceeds the sum of interest and amortisation

payments on domestic bonds (BGN 264.3 million). Over the same period receipts from the privatisation of Bulgartabak Holding Company (BGN 195.8 million) and newly disbursed external loans and grants are expected to exceed the government contribution to the EU budget and external debt service payments (BGN 256 million). As a result, the external sector will be a net source of liquid resources. The anticipated primary budget deficit in the second half will lead to withdrawal of liquidity from the central bank which will be subsequently transferred to the non-government non-bank sector.

By the end of September broad money growth accelerated to 10.3 per cent on an annual basis compared to 8.0 per cent in June. The annual growth of broad money is expected to stay close to its current levels in the last quarter of 2011 and the first quarter of 2012.

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

(%, percentage points)



Source: BNB.

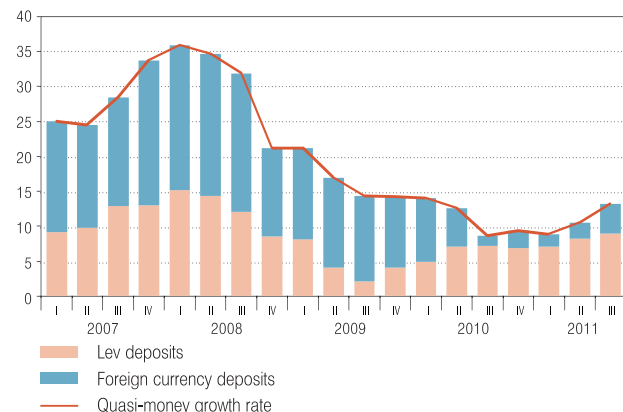
The accelerated broad money growth continued to be supported mainly by quasi-money. The contribution of the narrow monetary aggregate M1 also increased, with M1 growth accelerating to 5.5 per cent. This dynamics resulted from overnight deposits which grew by 6.2 per cent by September compared with 4.0 per cent at the end of the second quarter. The accelerated growth pertained mainly to the higher overnight deposits of non-financial corporations and households<sup>9</sup>, which rose by 14.1 per cent and 9.9 per cent on an annual basis respectively.

<sup>9</sup> The cited data on deposits and loans of households include also deposits and loans of NPISHs under the classification used in monetary statistics.

Growth in money outside banks retained the trend observed in the last quarter of 2010 towards moderate and sustainable positive annual growth (by 4.3 per cent by the end of the third quarter).

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

(%, percentage points)



Source: BNB.

By end-September 2011 quasi-money grew by 13.2 per cent on an annual basis against 10.5 per cent by the end of the second quarter, with lev-denominated deposits contributing most significantly to this rate (by 8.9 percentage points). Concurrently, the contribution of foreign currency deposits went up from 2.3 percentage points in June to 4.3 percentage points in September. By the end of September the share of lev deposits in quasi-money rose to 46.6 per cent against 43.9 per cent a year earlier.

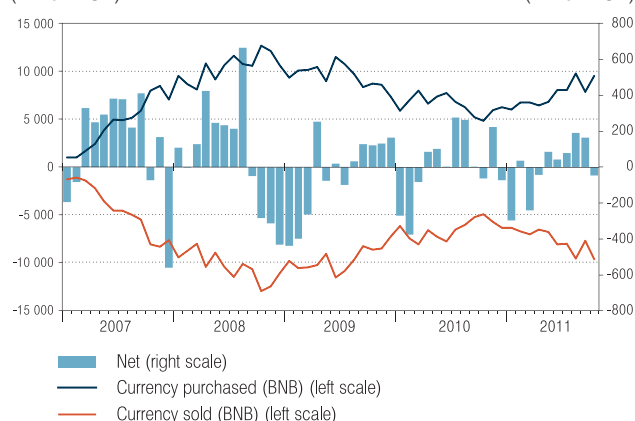
Deposits with agreed maturity of up to two years went up by 12.6 per cent on an annual basis, mainly due to household deposits (8.9 percentage points) reflecting the comparatively high savings rate. By end-September household deposits in levs increased by 23.1 per cent on an annual basis and those in foreign currency by 7.0 per cent. Non-financial corporations also increased their deposits with agreed maturity of up to two years with lev-denominated deposits going up by 27.4 per cent and foreign currency deposits by 6.7 per cent by September.

Foreign exchange transactions with the BNB was 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.

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

(million EUR)

(million EUR)



Source: BNB.

Between July and September 2011 the average daily volume of currency trade of banks with the BNB came to around EUR 800 million against almost EUR 700 million in the second quarter. Over the same period banks realised net sales of euro to the amount of EUR 440 million (compared to net sales of EUR 90 million in the second quarter of 2011). In October banks' net purchases from the BNB amounted to EUR 46 million.

As a result of the sustained ample liquidity in the Bulgarian banking system in the third quarter interbank money market interest rates slightly decreased compared with the previous quarter and the average interest rate on concluded transactions declined to 0.22 per cent.

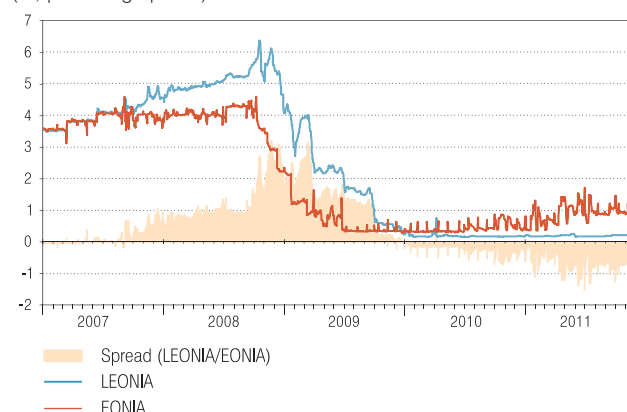
LEONIA index went down by 2 basis points to 0.18 per cent compared with the previous quarter. The average value of the negative spread between LEONIA and EONIA narrowed to 78 basis points against the negative spread of 85 basis points in the second quarter. The narrowing of the spread was entirely due to the decrease in European interest rates as a result of changed expectations about ECB policy.<sup>10</sup> In contrast to the euro area, interest rates in Bulgaria were again characterised by very low volatility. The ample liquidity of banks resulting from the higher savings rate of households and the cautious lending policy were the factors behind this dynamics. By mid-November the negative value of the spread between LEONIA and EONIA narrowed to about 50 basis points as a result of

<sup>10</sup> See Euro Area, Section 1.

the decrease in the interest rates on ECB main operations.

### LEONIA/EONIA

(%, percentage points)



Source: BNB.

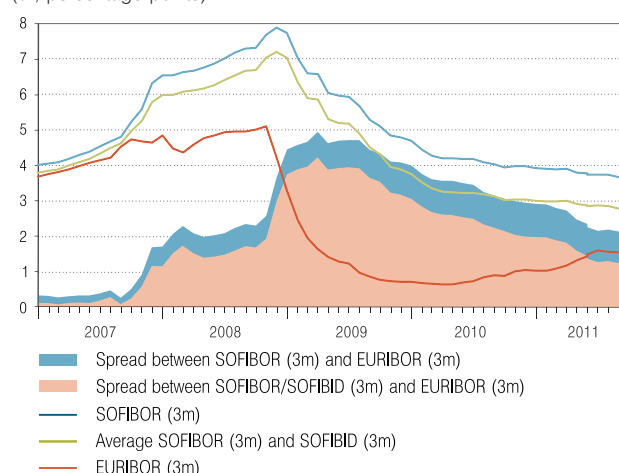
The SOFIBOR reference rate (3m), used as an indicator of short-term interest rate dynamics, fell insignificantly in the third quarter to 3.67 per cent against 3.74 per cent by end-June.

The spread between the three-month SOFIBOR and three-month EURIBOR continued to follow the downward momentum to come to 213 basis points by September (down by 12 basis points compared to its June level). The narrowed spread reflects a 5 basis point rise in the EURIBOR between July and September and a 7 basis point fall in SOFIBOR over the same period. The average value between SOFIBOR and SOFIBID gives a better picture of the market interest rate level in Bulgaria. Correspondingly, it is more correctly to compare this value with EURIBOR which is the closest rate to the actual market price at which transactions are concluded.<sup>11</sup> The average SOFIBOR/SOFIBID reference rate in the interbank market over the quarterly horizon declined by 8 basis points by end-September 2011 to 2.8 per cent compared with June and the spread between the average quotation and EURIBOR (3m) decreased to 124 basis points compared to 137 basis points in June 2011. In October and in early November the spread remained broadly unchanged indicating a decline by about 10 basis points on September both in the Bulgarian and euro area interest rates.

<sup>11</sup> For further methodological notes, see the box *Differences between the Methodology for Calculating Money Market Indices in the Euro Area and in the New EU Member States*, Economic Review, 2/2010.

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

(%, percentage points)

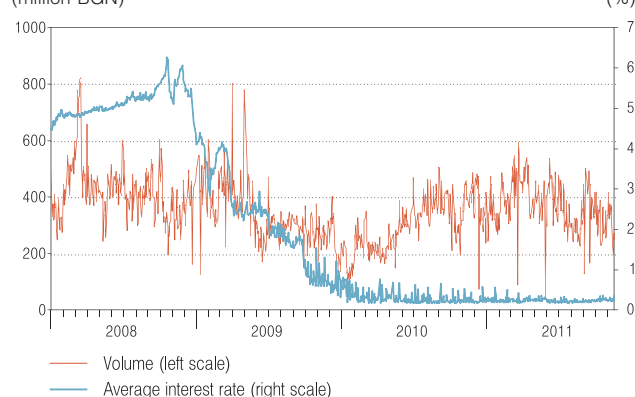


Source: BNB.

Between July and September the average daily volumes traded in the interbank market amounted to BGN 342 million, a decrease of 15 per cent on the previous quarter. By October the traded volumes went down to BGN 305 million on an average daily basis.

### Trade Volume and Interbank Money Market Interest Rates

(million BGN)

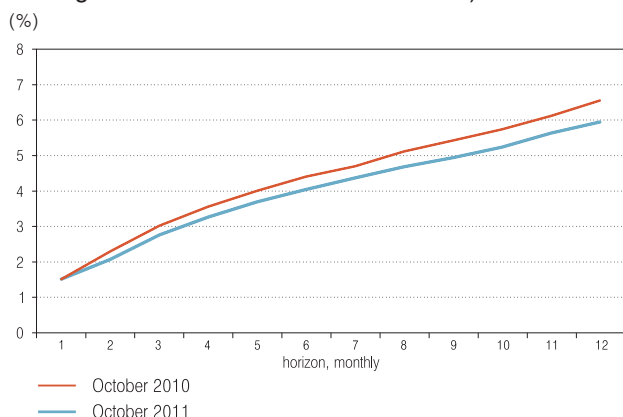


Source: BNB.

The downward trend at the long end of the yield curve in the money market was sustained in the third quarter. By October a fall of 61 basis points on an annual basis was reported in the 12-month horizon, while no changes were recorded in the one-month horizon.



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

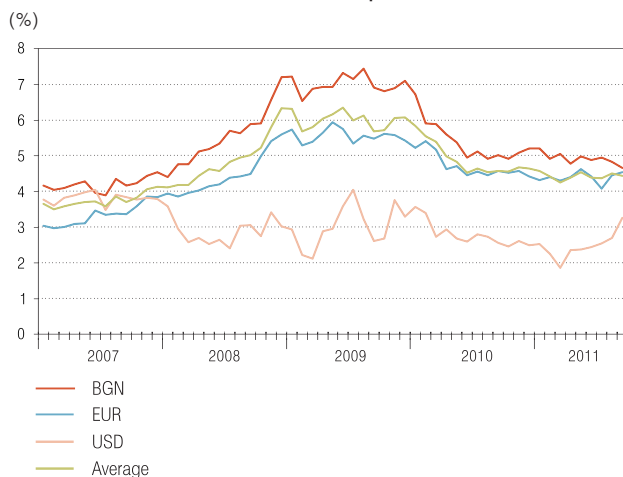


Source: BNB.

Between July and September 2011 the average-weighted interest rate on new deposit agreements<sup>12</sup> remained at the second quarter level (4.4 per cent).

By currency, lev-denominated and EUR-denominated deposits posted a fall by 0.1 percentage points each over the review period to 4.8 per cent and 4.4 per cent respectively. Interest rates on USD-denominated deposits increased to 2.9 per cent. By September the average-weighted deposit rate declined by 15 basis points to 4.44 per cent on an annual basis.

### Interest Rates on New Time Deposits



Note: The average interest rate is computed by weighting interest rates of all sectors, maturities and currencies to the respective volumes of new deposits.

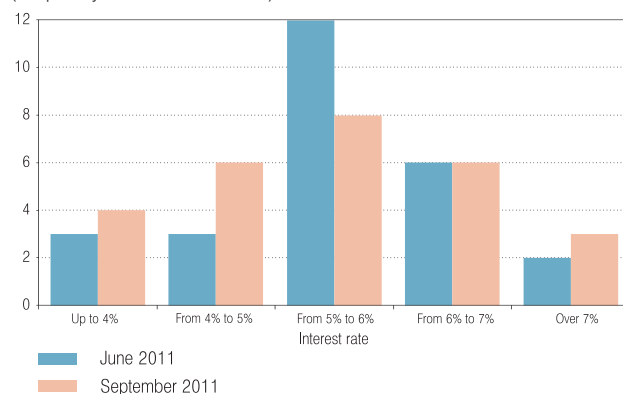
Source: BNB (interest rate statistics: interest rates and volumes of new business on time deposits of non-financial corporations and households sectors).

<sup>12</sup> The term new agreement on loans and deposits refer to the statistical category new business.

The breakdown of interest rates on time lev deposits of households by bank shows that the number of banks offering rates between 5 and 6 per cent decreased and banks offering interest rates in the bands up to 4 per cent, from 4 to 5 per cent and over 7 per cent increased. The average interest rate level<sup>13</sup> in September decreased by 6 basis points to 5.45 per cent on June, while the dispersion ratio increased by 17 basis points to 1.33 percentage points.

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

(frequency – number of banks)



Source: BNB.

In the last quarter of 2011 and the first quarter of 2012 interest rates on time deposits are expected to stay broadly unchanged tending to slightly decline. Factors underlying these expectations include forecasts of high liquidity of the banking system,<sup>14</sup> projected low lending activity of banks and the sustained high savings rate of households.

<sup>13</sup> The average interest rate level is an arithmetic mean.

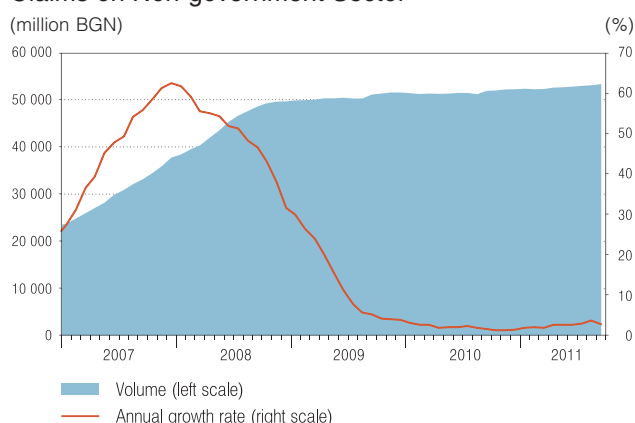
<sup>14</sup> The liquid assets to total liabilities ratio continued to increase in the third quarter and in September it was 25.92 per cent.

## Credit Aggregates

Banks' claims on the non-financial corporations steadily grew, while claims on households continued to decrease due to uncertainty surrounding their future income and the related thereto high savings rate. On average, lending rates in the third quarter slightly went down both for the non-financial corporations and households. Lending rates are expected to insignificantly fall in the fourth quarter of 2011 and the first quarter of 2012.

In the third quarter of 2011 claims on the non-government sector rose by BGN 535.1 million (an increase by BGN 439.1 million was reported in the same period in 2010), and by September 2011 the annual growth rate accounted for 2.8 per cent (against 2.6 per cent in June). An important factor which continued to impact credit growth was the banks' prudent lending policy. On the other hand, the recovery of economic growth contributed to the sustainable growth rate of banks' claims on non-financial corporations. Concurrently, claims on households continued to decrease as a result of uncertainty as to their future income and the related thereto high savings rate.

### Claims on Non-government Sector



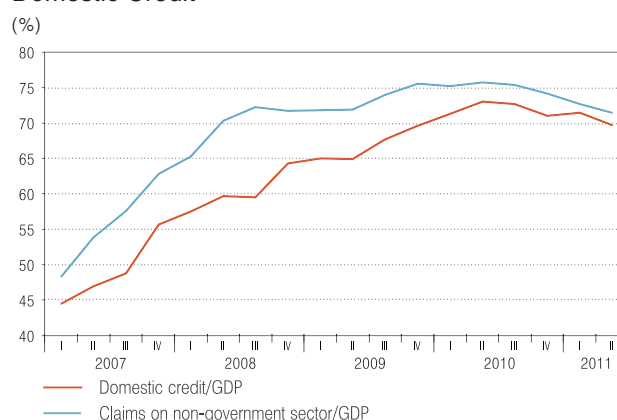
Source: BNB.

Based on summarised results of the survey on lending activity conducted by the BNB quarterly, credit demand growth in the third quarter was moderate by both corporations and households. Corporate demand for loans shifted from short-term (to cover the needs of working capital and inventories) to long-term horizons (with investment purposes). Over the review period banks tightened their credit standards for lending both to corporations and households. The main factors behind this, as specified by banks, include: collateral risk, credit risk and the state of macro-economic environment. The growth of bank loans was also determined by the availability of quali-

tative projects to be financed. The small number of prospective projects offered by firms which meet the banks' lending standards diminished the dynamics of lending.

Banks are less optimistic in their expectations about credit demand in the fourth quarter of 2011. Consequently, standards for lending to households are expected to be eased, while those for corporations to remain unchanged.

### Domestic Credit



Source: BNB.

The nominal GDP continued to increase at rates outstripping the growth of claims, thus pushing down the claims on non-government sector to GDP ratio. By mid-2011 this ratio was 71.4 per cent: down 1.2 percentage points on the end of the first quarter.<sup>15</sup>

Between July and September 2011 given the sizeable inflow of funds attracted from residents (by about BGN 2089 million<sup>16</sup>) bank liquidity increased and banks had enough funding to finance their domestic credit activities and to continue the orderly adjustment of their net foreign assets. Over the review period banks' funds attracted from non-residents decreased by BGN 572.5 million, while their foreign assets grew by BGN 673.5 million. As a result, net foreign liabilities of banks declined by BGN 1246.0

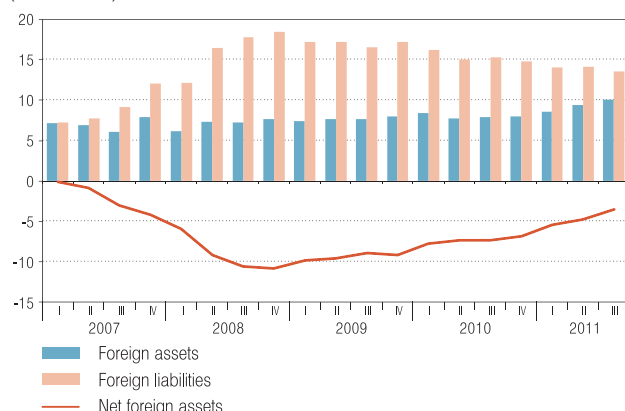
<sup>15</sup> The ratio is calculated using the annual GDP.

<sup>16</sup> See Monetary Aggregates, Section 2.

million. In the following two quarters banks are expected to further reduce their net foreign liabilities.

### Foreign Assets and Liabilities of Banks

(billion BGN)

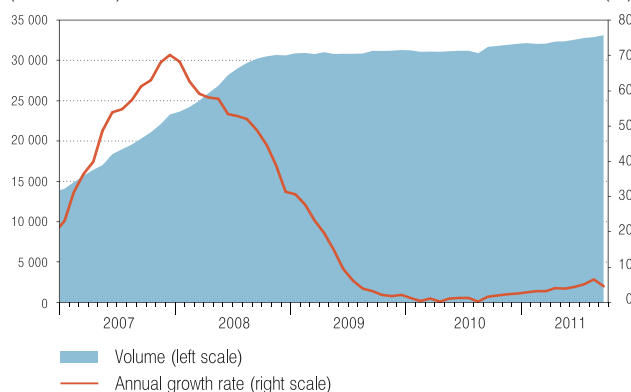


Source: BNB.

Claims on non-financial corporations continued gradually recovering and by the end of September 2011 their annual growth reached 4.5 per cent. The improvement of economic environment with the leading role of export-oriented industries had a positive effect on this gradual recovering.

### Claims on Non-financial Corporations

(million BGN)



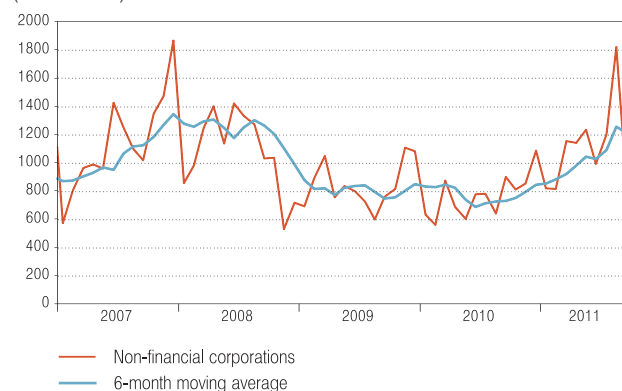
Source: BNB.

Between July and September 2011 new loans to non-financial corporations amounted to BGN 3901.5 million against BGN 2320.9 million in the corresponding period of 2010. These levels approached the volume of new loans extended prior to the global economic crisis and are indicative of the smooth performance of the banking system. A portion of the new loans were used to refinance old obligations and another portion to finance new investment projects complying with the banks' high standards. Claims on non-financial corporations for the review period

increased by BGN 553.5 million (against an increase of BGN 490.6 million in the previous year).

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

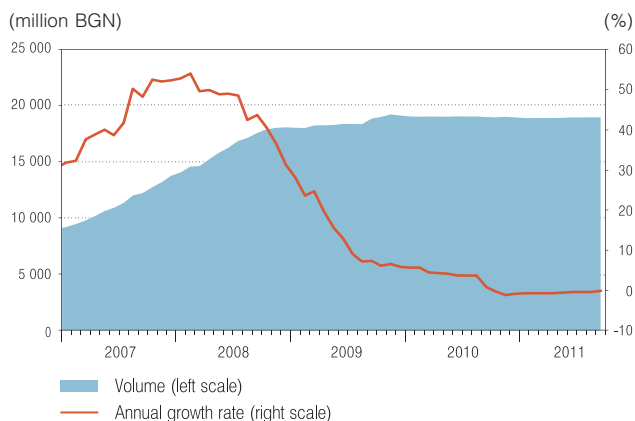
(million BGN)



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

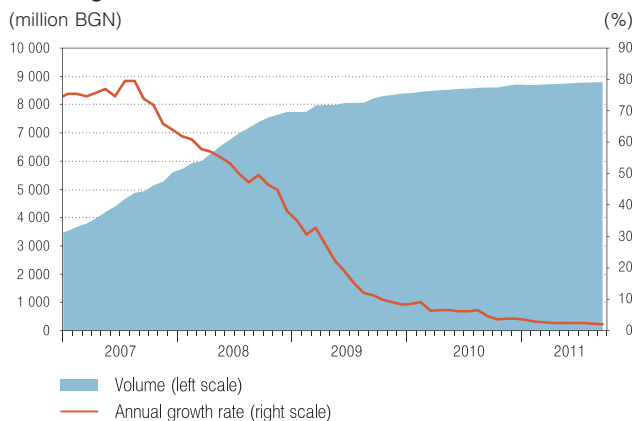
The low lending to households continued in the third quarter. Despite the signs of slow recovery of private consumption, the uncertainty as to future income continued to impede household consumption. The high unemployment level and the fall in employment limited financial opportunities of households and made them more cautious in undertaking new obligations. In the July–September 2011 period claims on households rose by BGN 5.1 million against a fall of BGN 62.6 million in the same period of 2010. The annual growth rate remained negative and by the end of September 2011 accounted for -0.2 per cent. Except for housing loans, all other household loans reported declines on an annual basis (overdrafts: 9.6 per cent; consumer loans: 0.4 per cent; and other loans: 2.2 per cent). Though positive, annual growth in housing loans continued to moderate and reached 2.2 per cent by the end of September 2011.

## Claims on Households



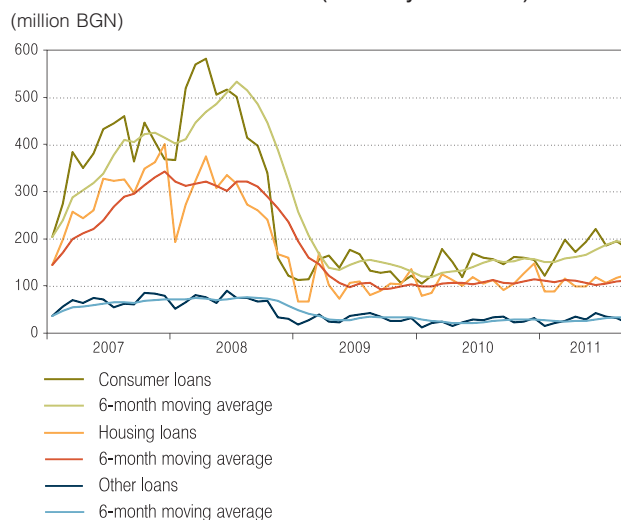
The statistics of new loans suggests a faster increase in consumer loans than in those for house purchase. Over the third quarter the volume of new consumer loans amounted to BGN 561.8 million, up 21.2 per cent compared with the corresponding period of the previous year, while the volume of new housing loans amounted to BGN 347.1 million (up 12.8 per cent on an annual basis).

## Housing Loans



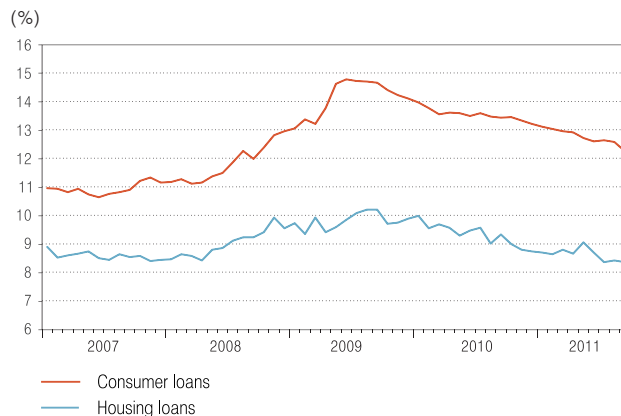
Between July and September 2011 interest rates on consumer and housing loans declined compared with the previous quarter.

## New Loans to Households (Monthly Volumes)



The average annual percentage rate of charges (APRC) on new consumer loans amounted to 12.5 per cent over the review period (against 12.8 per cent in the second quarter) and the average interest rate on these loans fell by 20 basis points to 11.02 per cent on the previous quarter.<sup>17</sup>

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



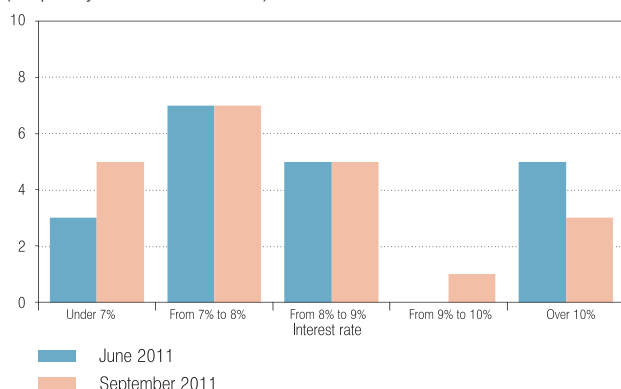
The average annual percentage rate of charges on housing loans decreased by 42 basis points on the second quarter and reached 8.41 per cent over the period July–September. The average interest rates on housing loans over the

<sup>17</sup> The average annual percentage rate of charges is the total amount of a loan to the credit borrower expressed as an annual per cent of the total sum of extended credit (Directive 87/102/EEC on Consumer Credit amended by Directive 90/88/EEC and Directive 98/7/EC).

same period fell to 7.73 per cent and were under the pre-crisis levels.

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

(frequency – number of banks)

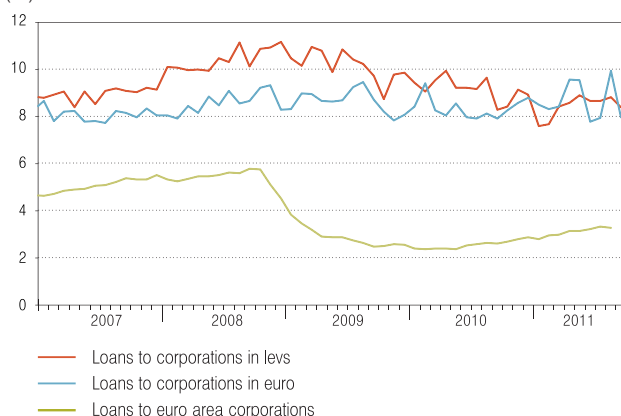


Source: BNB.

As regards the distribution of interest rates on housing loans in euro<sup>18</sup> by bank, in September compared with June a larger number of banks offered rates of up to 7 and 9–10 per cent band at the expense of those offering rates over the 10 per cent band. Over the same period the average interest rate level decreased by 40 basis points and the dispersion ratio went down by 4 basis points to 1.88.

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

(%)



Sources: BNB and ECB.

Between July and September the average interest rate on bank loans to non-financial corporations decreased by 35 basis points to 8.61 per cent on the second quarter. Interest rates on lev loans went down insignificantly, by 9 basis points, and those on loans in euro decreased by 35 basis points.

Lending rates are expected to insignificantly fall in the fourth quarter of 2011 and the first quarter of 2012. Ample liquidity in the interbank money market was not a decisive factor for the reduction of lending rates, since this market's role in bank liquidity management is just auxiliary. An important factor affecting lending rates was the cost of attracted financial resources, with deposit rates expected to stabilise at current levels until year-end and in early 2012. The instability and strains in international financial markets may become a factor limiting the possible decrease in lending interest rates.

<sup>18</sup> Housing loans in euro comprise the largest share in the new housing loans in the last three years (about 75 per cent).



# 3. Economic Activity

In the second quarter of 2011 the real GDP growth rate was 0.3 per cent on the previous quarter, domestic demand increasingly contributing to this since early 2011. In the last quarter of 2011 and the first quarter of 2012 domestic demand is expected to add further to strengthening production activity.

Over the first half of 2011 real GDP continued to gradually recover, rising on a chain basis by 0.5 and 0.3 per cent in the first and second quarters respectively.<sup>1, 2</sup> Total economic growth in the first half-year was 2.7 per cent compared with the same period of the previous year. Net exports and domestic demand had a positive contribution to this. The real growth rate of goods and services exports remained high over the half-year (16.7 per cent on an annual basis) though declining on a chain basis by 1.3 per cent in the second quarter in line with the worsened economic conditions. In the first and second quarters of 2011 imports of goods and services continued to increase gradually in real terms (by 0.1 and 0.8 per cent on a chain basis).

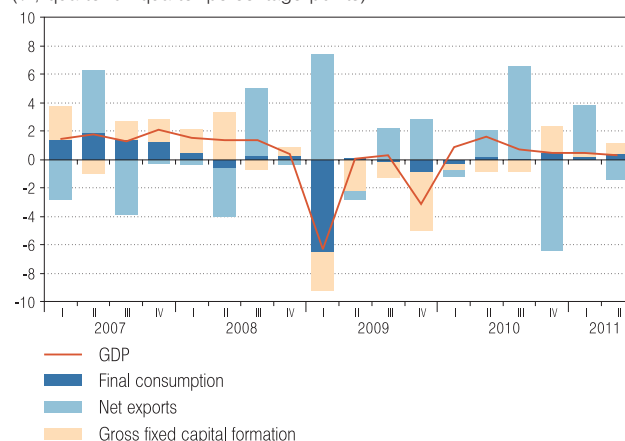
The increase in production capacity utilisation and the stable financial performance of firms have fostered recovery in investment activity since the last quarter of 2010. In the second quarter of 2011 real growth in gross fixed capital formation reached 3 per cent on the previous quarter.

Final household consumption also contributed positively to GDP growth in the first half year (0.8 percentage points on an annual basis), its growth rate reaching on a chain basis 0.4 per

cent in the first quarter and 0.6 per cent in the second quarter of the year. The improved labour market situation in some sectors and increased household income from remuneration contributed positively to the growth in consumer expenditure.

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

(%, quarter-on-quarter percentage points)



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

Sources: NSI, BNB.

Based on the structure of growth by production factor, moderation in GDP growth over the second quarter of 2011 was mainly due to the increased negative contribution of the labour factor measured by hours worked in economy: from -0.4 percentage points in the first quarter to -0.6 percentage points in the second quarter. The contribution of the used capital<sup>3</sup> in GDP growth has remained at a level of around 1 percentage point since early 2010, and the total factor productivity has continued to show an almost neutral contribution.

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

<sup>2</sup> The first official GDP estimates for the third quarter of 2011 became available after the cut off date of the present issue. In line with our expectations, the growth rate of seasonally adjusted real GDP was 0.3 per cent on the previous quarter, private consumption (up 0.6 per cent) contributing most to it. Investment declined by 13.5 per cent, and net exports contributed positively to growth, with exports and imports increasing by 1.7 and 1.1 per cent respectively on the previous quarter.

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

## Contribution of Changes in Production Factors to GDP Growth

(%, quarter-on-quarter percentage points)



Sources: NSI, BNB.

In the first and second quarters of 2011 gross value added continued to increase at a rate of 0.2 and 0.6 per cent on a chain basis.<sup>4</sup> The continued recovery in industry had a major positive contribution to this growth. On a chain basis, real value added in this sector increased by 1.5 per cent in the first quarter and 1.4 per cent in the second quarter. No trends to recovery were observed in value added of construction. Dynamics in most sectors of services was also divergent.

In the first half-year total value added rose by 0.1 per cent on the first half of 2010, with *financial and insurance activities* and *real estate operations* contributing negatively to it. *Trade, repair of motor vehicles and motorcycles, transport, storage and mail services, hotels and restaurants* had the largest positive contribution to the growth, though it slowed down on a chain basis in the second quarter.

<sup>4</sup> With the publication of second quarter's data, the NSI switched to chain-linked volumes with a reference year 2005. Correspondingly, new seasonally adjusted data on GDP and its components were published. In addition, the production account under NACE rev. 2 classification was presented.

## Value Added Growth and Contribution by Sector

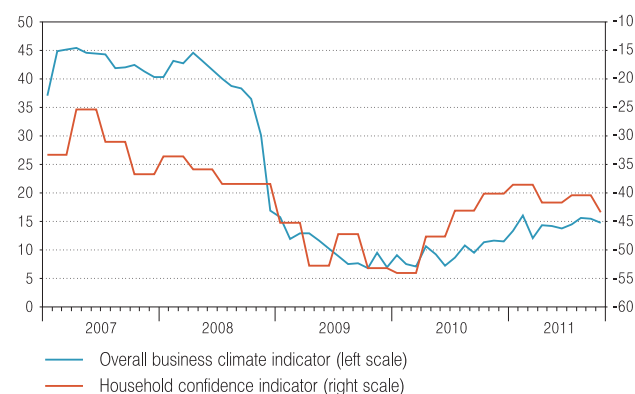
(%, quarter-on-quarter percentage points)



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

Sources: NSI, BNB.

## Business Climate and Household Confidence Indicator



Sources: NSI, BNB.

By October the total business climate indicator slightly worsened due to more negative situation in all sectors, with the exception of trade. In September the industrial turnover index on non-domestic market declined, while the growth rate of the domestic market turnover remained high. In the last quarter of 2011 and first quarter of 2012 economy is expected to continue recovering slowly amid an increasing contribution of domestic demand. The contribution of net exports is likely to remain negative due to the increased imports of goods and services and slowing external demand. Higher capacity utilisation rates and retained financial performance of firms will boost investment expenditure. However, instability and uncertainty in global financial markets is expected to depress investment demand. Consumer demand will grow further at slow rates consistent with the slow improvement in the labour market situation.

## GDP Growth by Component of Final Use

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

	2008				2009				2010				2011	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
Consumption incl.	0.6	-0.6	0.4	0.4	-7.7	0.1	-0.2	-1.1	-0.4	0.3	0.1	0.6	0.2	0.5
Household consumption	1.9	-1.6	-0.6	-1.6	-3.3	-1.6	-1.2	-1.2	0.1	0.7	-0.2	0.4	0.4	0.6
Final government consumption expenditure	-4.9	2.0	-1.5	7.1	-14.2	1.8	2.9	-2.8	2.7	0.5	1.9	0.1	0.9	2.6
Collective consumption	-1.5	0.6	0.3	1.4	-1.1	0.0	-1.4	-15.6	12.7	-3.0	-0.6	-1.5	0.8	0.0
Gross capital formation	5.5	10.6	-2.0	1.6	-8.2	-6.9	-3.5	-14.1	-1.6	-3.4	-3.5	8.1	0.8	3.0
Exports of goods and non-factor services	2.6	-0.3	-3.1	-4.9	-6.7	-2.7	2.0	6.6	0.0	7.0	11.8	-3.8	5.6	-1.3
Imports of goods and non-factor services	2.3	4.1	-7.9	-3.1	-15.1	-1.3	-1.8	0.8	0.7	3.1	0.6	5.9	0.1	0.8
<b>Real GDP growth</b>	<b>1.5</b>	<b>1.4</b>	<b>1.4</b>	<b>0.4</b>	<b>-6.3</b>	<b>0.0</b>	<b>0.3</b>	<b>-3.1</b>	<b>0.9</b>	<b>1.6</b>	<b>0.7</b>	<b>0.5</b>	<b>0.5</b>	<b>0.3</b>

Sources: NSI, BNB.

## Gross Value Added Growth

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

	2008				2009				2010				2011	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
Agriculture and forestry, hunting and fishing	45.8	2.9	-6.2	2.8	-6.0	-3.2	1.0	0.2	2.5	1.1	-1.5	-3.6	2.7	0.0
Mining and quarrying, manufacturing production and distribution of electricity, gas and water	1.5	-1.4	-3.0	-3.5	-4.2	-3.2	13.8	-13.5	1.1	5.1	1.8	2.8	1.5	1.4
Construction	5.7	3.3	4.3	6.2	-0.6	-1.8	-8.4	-8.1	-5.5	-9.5	-1.0	28.4	-24.9	4.4
Trade, cars and motorcycles repair; transport, storage and mail services; hotels and restaurants	-5.2	0.3	3.0	-0.4	7.2	-26.8	9.5	9.9	-2.2	8.9	-4.3	3.2	2.0	-3.5
Creation and dissemination of information and author products; communications	69.2	1.0	2.3	-1.0	-0.8	1.9	-2.7	-0.1	1.0	-0.8	2.3	-0.5	-1.5	0.4
Finance and insurance activity	-10.5	11.2	2.3	5.2	7.2	-3.2	-0.8	4.9	3.4	-5.5	0.7	-2.8	-0.5	4.5
Real estate activities	-0.1	-5.7	4.4	-7.5	4.4	-2.2	-6.9	0.2	3.1	0.7	1.0	0.4	-4.7	3.3
Professional activities and scientific research; administrative and ancillary activities	-2.5	-12.5	2.2	-8.1	-6.0	29.0	0.3	-6.1	3.9	-10.4	1.2	9.9	1.2	-3.5
General government; education; healthcare and social services	-1.4	-2.1	0.6	1.8	-2.1	4.0	1.0	0.3	1.3	-2.2	-1.7	-1.5	0.3	0.6
Culture, sport and entertainment; other activity; activities of households as employers; non-identified activities of households producing goods and services for own use; activities of extraterritorial organisations and bodies	20.9	0.6	3.8	2.1	-5.2	18.3	-9.5	6.6	-3.2	-12.0	8.1	-5.5	5.1	5.4
<b>Gross value added, total for the economy</b>	<b>1.4</b>	<b>1.2</b>	<b>1.7</b>	<b>0.6</b>	<b>-4.9</b>	<b>0.0</b>	<b>0.2</b>	<b>-0.7</b>	<b>0.0</b>	<b>0.5</b>	<b>0.0</b>	<b>0.7</b>	<b>0.2</b>	<b>0.6</b>

Sources: NSI, BNB.

## Household Behaviour

In the second quarter of 2011 household consumption continued to record growth. Consumer demand is expected to recover slowly, with the growth rate of household final consumption expenditure reflecting the pace of improvement in labour market conditions and expected income dynamics.

In the second quarter of 2011 household consumption posted an increase of 0.6 per cent on a chain basis, following the 0.4 per cent rise in the first quarter of 2011. The improved labour market situation in some sectors and increased

household income from remuneration affected household propensity to consume.

According to the national system of accounts data, the structure of household expenditure over the second quarter was marked by the

increased household expenditure on public catering, purchased food products and non-production services.<sup>5</sup> In the second and third quarters retail trade volumes showed revival in *pharmaceutical and medical goods, and cosmetics*. On the other hand, the review period saw decreased volumes of retail trade in automobile fuels and lubricants following the rise exhibited in the first quarter.

Relatively low household investment demand is evidenced by available statistics of the housing market. The decline rate in the number of building permits was lower than that in 2010, though showing still negative dynamics. The number of residential buildings showed still low levels, exhibiting no upward trend. The annual rate of decline in the average market prices of houses stayed constant from mid-2010 to the third quarter of 2011 at an average level of -5.9 per cent.

The continued reductions in employment had a negative effect on household behaviour in terms of labour supply. Based on national accounts employment data, the downward trend in the number of employed continued in the second quarter of 2011. The decrease in employment accelerated to 1.2 per cent quarter on quarter (down 0.7 per cent in the first quarter of 2011). Unlike the first three months of the year when the decrease in employees had a major contribution to the overall employment drop, over the second quarter it reflected mainly self-employed decreases (primarily in *agriculture, forestry and fishery*). According to seasonally adjusted data of the Labour Force survey, unemployment of individuals at and above the age of 15 reached 11.4 per cent in the second quarter of 2011. Based on non-seasonally adjusted data, employment decreased to 11.2 per cent, from 12 per cent in the first quarter. Unemployment measured by the Employment Agency, corrected for seasonal factors, continued to fall reaching 9.9 per cent in September 2011 (9.4 per cent<sup>6</sup> based on non-seasonally adjusted monthly data). In early 2011 shorter-term unemployed (up to five months) had a major contribution to the

<sup>5</sup> Purchased non-production services include services other than catering services, water supply, heat energy and electricity, transport and communications.

<sup>6</sup> Unemployment was based on the economically active population aged 15-24 under the February 2011 census survey.

decrease in unemployment, while in the second quarter those from six to twelve months also contributed significantly to it. Unemployed of over two years continued to boost this indicator. In the second quarter persons aged up to 44 occupied the largest share in total dismissed employees unlike the previous two quarters when those aged up to 34 prevailed. The share of long-term unemployed continued to rise over the review period.

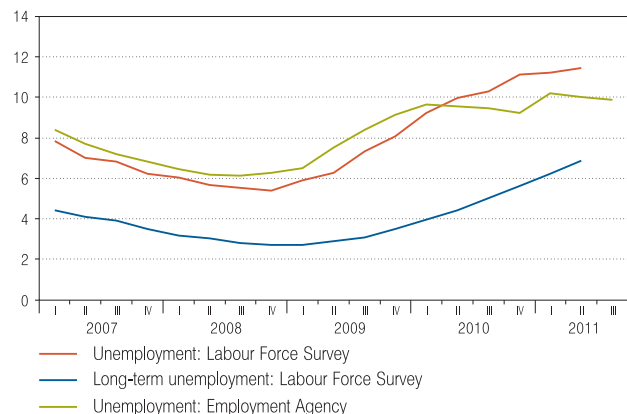
The increasing number of discouraged, housewives and students is an indicator for problems in labour supply. Though the number of discouraged persons declined on the first quarter of 2011, it remained at comparatively high levels of 2010. In the second quarter of 2011 the seasonally adjusted economic activity rate of persons between 15 and 64 decreased to 65.6 per cent against an average of 66 per cent in the first quarter. More detailed breakdown of the persons outside the labour force shows that their increase reflects the chain rise in housewives and students rather than the increased number of discouraged and disabled persons.

Labour supply may be also estimated on the basis of the competition for occupying vacancies indicator. Employment Agency data for the second and third quarters show that competition decreased on the end of 2010 and the first quarter of 2011, though still remaining at higher than pre-crisis levels. The number of unemployed applying for a vacant job averaged 13 persons, suggesting a downward trend since early 2010. Between January and September the job vacancy absorption ratio<sup>7</sup> which signals labour demand-supply imbalances remained at its comparatively low but constant level observed in the second half of 2010.

<sup>7</sup> A ratio between the number of vacant positions in a month which were occupied in a given month and total labour demand in the same month.

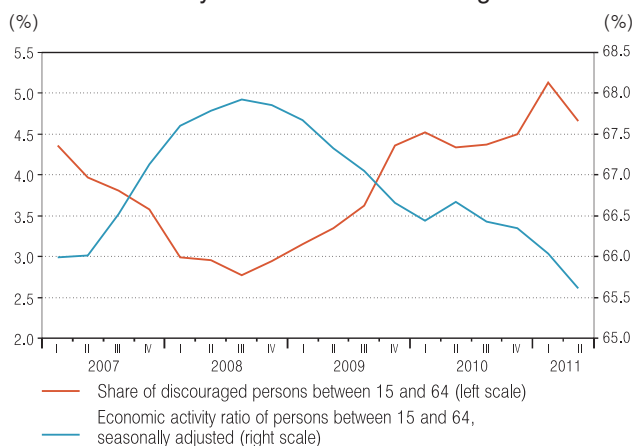
## Unemployment

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



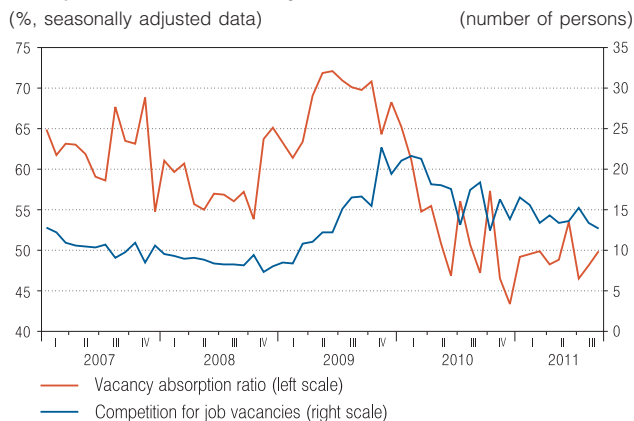
Sources: NSI, Employment Agency, BNB.

## Economic Activity and Share of Discouraged Persons



Sources: NSI, BNB.

## Competition and Vacancy Rate



Sources: Employment Agency, BNB.

Both labour supply and household consumption reflect income dynamics. In the second quarter of 2011 nominal compensation *per* employee posted an increase of 3.8 per cent quarter on quarter, following the 3.1 per cent rise in the first quarter of 2011.

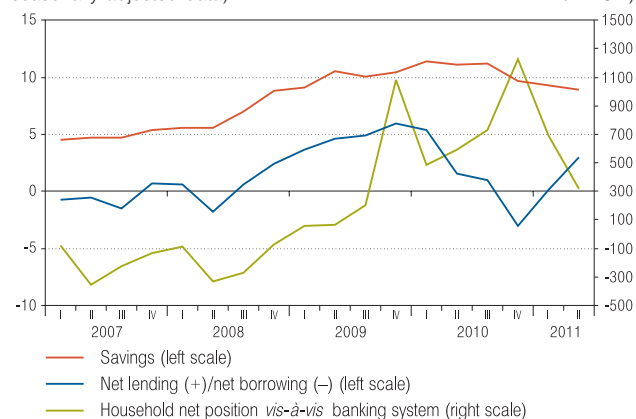
In the second quarter of 2011 the average household income from wages *per* household member increased by 8.4 per cent nominally on an annual basis following the slight growth reported in the first quarter.

Real income in total economy, measured by the compensation *per* employee deflated by the HICP, rose quarter on quarter by 2.9 per cent in the second quarter. Over this period, compensation *per* employee in total economy increased quarter on quarter both in real and nominal terms, irrespective of the continued decline in the number of employees.

Savings measured by the net assets of households in the banking system continued to increase in the second quarter, albeit at a slower rate on 2010. The share of savings in household disposable income gradually declined, still remaining at a relatively robust level. The ratio between net lending and net borrowing<sup>8</sup> continued to indicate cautious household spending behaviour.

## Household Savings Propensity

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



Sources: NSI Household Budget Survey, BNB.

The NSI consumer survey shows that after the temporary improvement in July as a result mainly of more optimistic expectations about the level of unemployment, the total household confidence indicator worsened again in October, showing more pessimistic expectations of all its components. Based on the NSI business situation survey, firms' expectations about the personnel in the second quarter of 2011 suggest that the

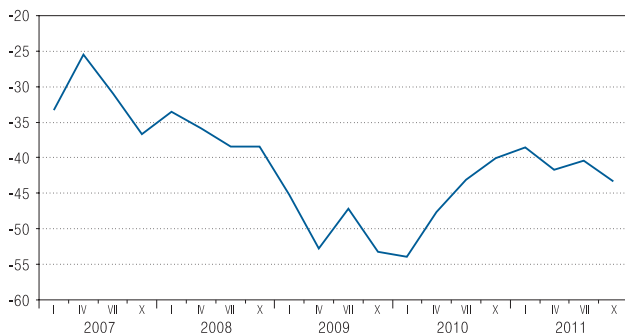
<sup>8</sup> This indicator is based on NSI household budget survey data as a difference between the amount of deposits, foreign currency and bond purchases, on the one hand, and the amount of withdrawn savings, loans and credits.



labour market is likely to recover slowly. Certain worsening in this indicator over the third and in the beginning of the fourth quarter was reported by construction enterprises.

### Households Confidence Indicator

(balance of opinions; %)



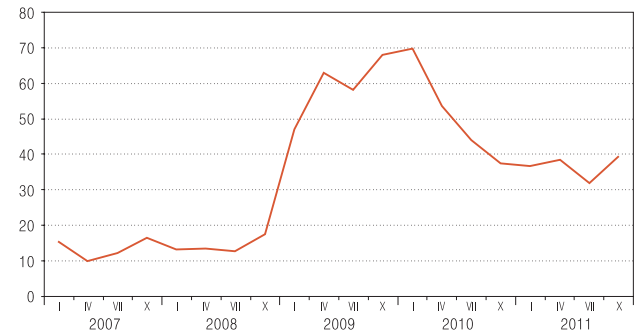
Source: NSI Consumer Survey.

The survey reported also a deterioration in the assessment of the current household budget situation and lower inflation assessment.

Our expectations for 2012 are for a moderate nominal increase in wages consistent with the slow recovery in employment. In line with these developments, consumer and investment demand of households along with labour supply are likely to continue recovering at moderate rates.

### Unemployment Expectations in the Next 12 Months

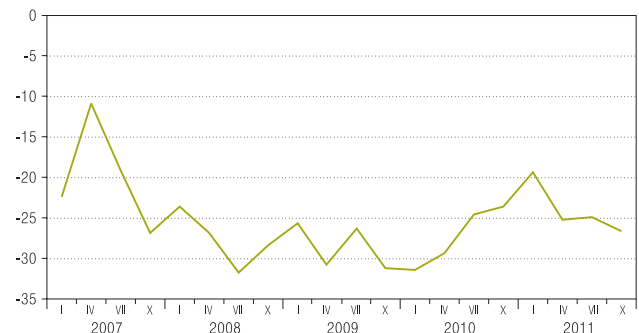
(balance of opinions; %)



Source: NSI Consumer Survey.

### Expectations of Households' Financial Performance in the Next 12 Months

(balance of opinions; %)



Source: NSI Consumer Survey.

### Retail Trade Turnover

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

	2008				2009				2010				2011		
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III
Retail trade turnover (excluding cars and motorcycles) incl.	2.8	1.9	-0.8	-0.9	-2.3	-3.5	-2.6	-2.1	-2.4	-0.9	-0.4	-1.2	2.4	-0.9	-2.1
Foods, drinks and tobacco	0.2	0.0	1.0	1.4	7.5	-0.8	0.6	0.0	-0.2	0.5	0.1	0.2	-0.4	-0.7	-0.2
Textile, clothing, footwear and leather	9.0	0.0	0.3	0.8	-4.2	-4.0	-5.1	0.9	-1.8	-2.3	-1.2	-0.9	2.0	-2.5	-3.7
Household goods and home appliances	2.0	1.2	-0.6	-2.0	-15.6	-5.0	-5.0	-2.9	-2.8	-1.6	-0.7	-2.2	-1.4	-0.3	-3.9
Computers and communication equipment, etc.	5.5	2.6	-0.2	-1.5	-18.7	-3.9	-5.9	-5.0	-4.6	-2.6	0.1	0.2	1.2	0.4	-2.7
Pharmaceutical and medical goods, cosmetics and toiletries	6.3	7.0	4.3	3.3	4.6	0.1	2.8	2.7	-15.1	3.4	2.6	3.5	-4.6	3.5	2.2
Unspecialised shops with different kinds of goods	8.9	5.7	2.4	0.2	65.9	-3.6	-4.2	-3.7	-4.1	-2.4	-1.7	-2.3	11.9	-1.4	-2.3
Automobile fuels and lubricants	4.1	1.3	-4.0	-2.7	-1.3	-4.3	-0.5	-1.6	-4.2	-0.2	0.5	-1.8	4.9	-0.5	-2.2

Source: NSI Domestic Trade Survey.

### Employment and Income Dynamics

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

	2008				2009				2010				2011	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
Employed	1.0	0.2	0.4	-0.3	-0.6	-1.2	-1.8	-1.8	-1.8	-1.2	-0.9	-0.8	-0.7	-1.2
Compensation <i>per</i> employee	0.1	1.5	0.7	5.9	-1.2	3.1	2.5	-1.4	3.8	-1.6	0.2	0.9	2.7	2.9
Compensation of employees	1.7	1.6	0.8	5.4	-1.2	1.3	0.3	-4.0	1.6	-3.0	-0.7	0.6	1.2	2.4
Unemployment (15+), average for the period, % of the labour force	6.0	5.7	5.5	5.4	5.9	6.3	7.3	8.1	9.2	10.0	10.3	11.1	11.2	11.4

\* Data deflated by HICP.

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

## Structural Changes in Bulgaria's Labour Market after 2009

The speed at which the labour market responds to economic activity fluctuations impacts private consumption dynamics, on the one hand, and firms' competitiveness, on the other. Therefore, the structural changes in the labour market since the onset of the 2009 crisis are crucial in assessing the flexibility of the economy and its ability to respond to adverse external shocks.

Data suggest that the number of employed and hours worked *per person* react with a lag both in case of a slowdown and recovery of economic activity. However, the speed of the response in the recovery phase is slower than in a slowdown phase. This is attributable to enterprises' behaviour in most sectors of the economy which continue to improve their cost competitiveness by reducing staff and hours worked *per person* (Chart 1) even amid growth recovery. Uncertainty as to the recovery in the economies of Bulgaria's major trading partners, particularly in the EU Member States, contributed to a great extent to this effect.

The reduction of labour costs by contracting both employees and hours worked is not an exception for Bulgaria. The size of these contractions globally reflects the degree of economic activity decline in the most strongly affected sectors. In Bulgaria, the divergent response of employment to hours worked by sector (Chart 2) was likely to reflect some specificities in contractual relations between employees and employers (as a share of employees receiving hourly compensation in the enterprise, the share of bonuses in the salary, collective labour contracts). For instance, a stronger reduction in hours worked was initiated in industry, construction, real estate operations, information and communication, telecommunications, while the measure of employment reduction was more common than the decrease in working hours in trade, transportation, hotel and restaurant services, professional activities both in finance and insurance.

**Chart 1: Economic Activity and Hours Worked *per Person***

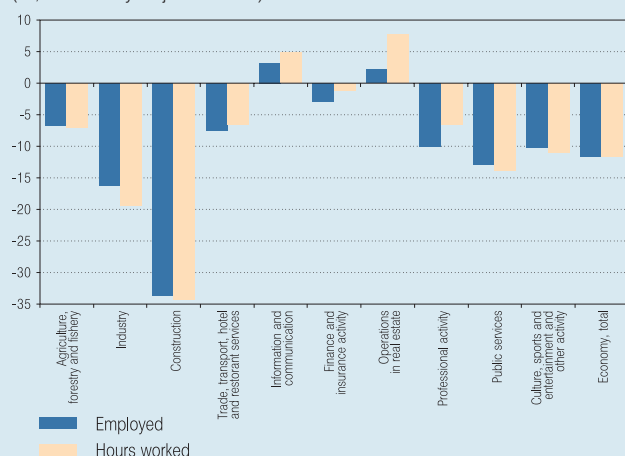
(percentage change on the corresponding period of previous year, seasonally adjusted data)



Sources: NSI, Eurostat, BNB.

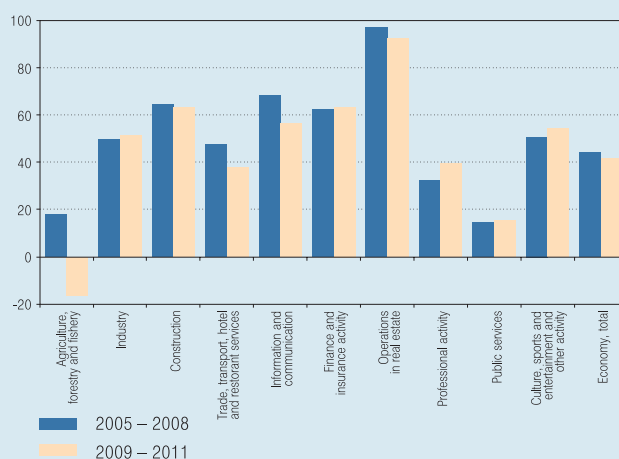
**Chart 2: Changes in Employment and Hours Worked *per Person* in the Second Quarter of 2011 Compared with the Peak in the 2008 – 2010 Period**

(%; seasonally adjusted data)



Sources: NSI, BNB.

**Chart 3: Profit Margin**



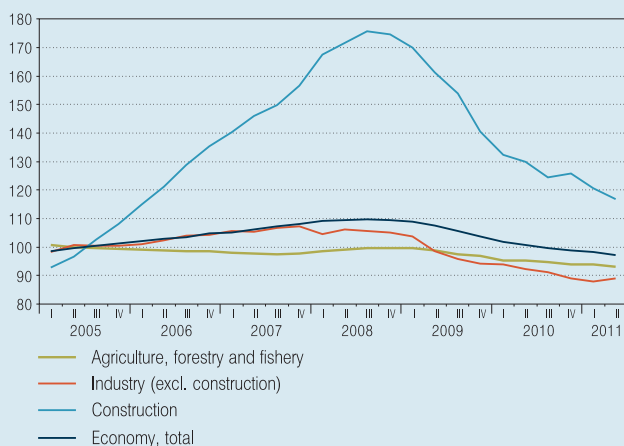
**Note:** The share of gross operating surplus in gross value added (adjusted with a proxy for compensation of self-employed) is used as a proxy for profitability.

Sources: NSI, BNB.

The size of the fall in employment and hours worked by sector was also determined by pre-crisis employment developments. Until 2008 employment in construction and some other subsectors of services (financial and insurance activities, real estate transactions and professional activities) had grown at a pace higher than the average for the economy (Charts 4 and 5). As a result of the slowdown in the economic activity, employment declined most substantially in the industry sector (incl. construction).

**Chart 4: Employment Index by Sector (1)**

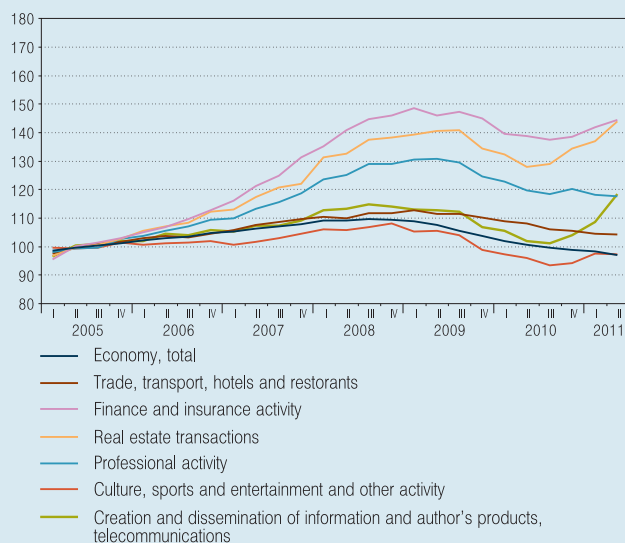
(2005 = 100; seasonally adjusted data)



Sources: NSI, Eurostat, BNB.

**Chart 5: Employment Index by Sector (2)**

(2005 = 100; seasonally adjusted data)

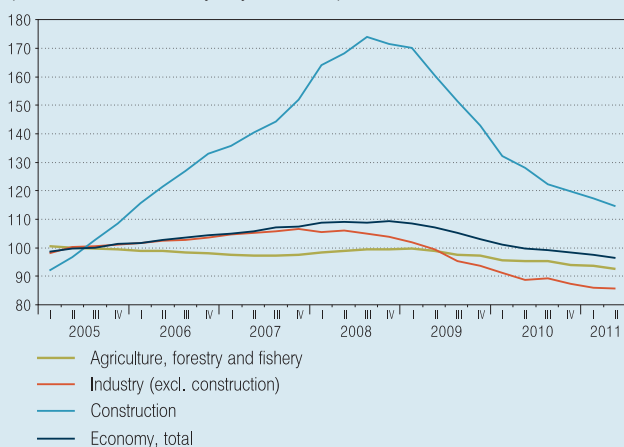


Sources: NSI, Eurostat, BNB

Given the pre-crisis intensity of construction activity, the share of employed in construction between 2005 and 2010 was higher than the average value for the 1996–2004 period (4.2 per cent, see Chart 8). The persistence in the increased share of employed in construction will depend on the recovery degree of investment in construction projects.

**Chart 6: Index of Hours Worked by Sector (1)**

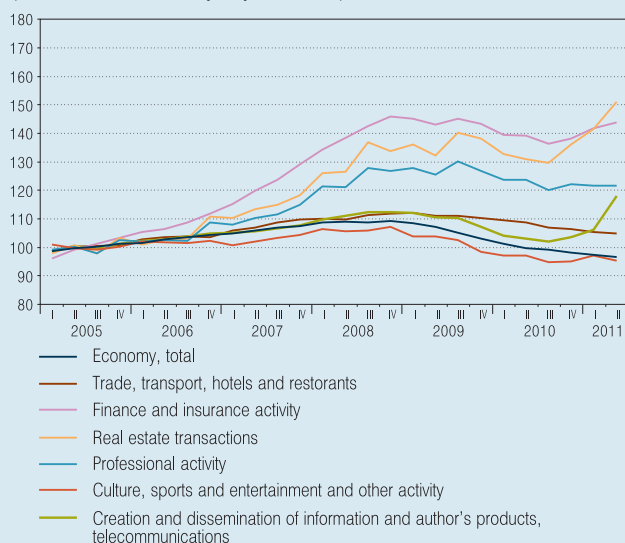
(2005 = 100; seasonally adjusted data)



Sources: NSI, BNB.

**Chart 7: Index of Hours Worked by Sector (2)**

(2005 = 100; seasonally adjusted data)



Sources: NSI, BNB.

On the other hand, the share of employed in industry (excl. construction) (Chart 8) was sustained at relatively steady levels at 22.9 per cent on average between 1999 and 2007. The substitution of labour by other production factors such as new equipment probably contributed to some extent to the downward trend in the share of employed in his sector. Notwithstanding, the contraction of employed since the onset of the crisis reflects the reduction of labour costs during a phase of subdued domestic and external economic activity. Upon normalisation of the activity, the share of employed in industry will probably return, at least partly, to its pre-crisis levels. This is evidenced by the increased employment in industry since the second quarter of 2011.

On the other hand, the share of employed in services (Chart 8) continues to increase and approaches the average value for the EU (68 per cent on average between 2000 and 2010) despite the lay-offs during the crisis. It is indicative that from end-2010, following the temporary fall started in 2009, employment in some subsectors

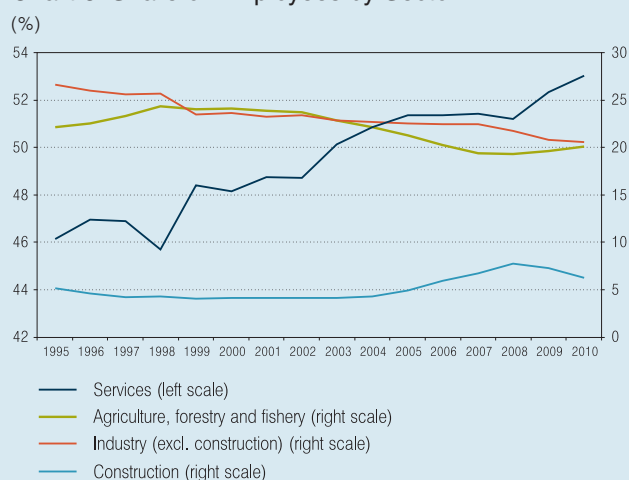
with higher profit margins<sup>1</sup> exceeded its pre-crisis maximum (Chart 3): information and communication, real estate activities; in other sectors, employment recovered only partially: financial and insurance activities, culture, sports and entertainment and other activities (Chart 5).

The average labour remuneration in the economy also responded to the subdued economic activity with its growth rate gradually moderating both in nominal and real terms, and some sectors reported even a remuneration fall.<sup>2</sup> Since the onset of the crisis in 2009 accumulated labour productivity growth in most economic sectors has exceeded accumulated growth of real compensation *per* employee. In the sectors where the compensation of employees increased at a rate higher than the average for the economy, the profit margin (Chart 3) of the respective sector remained relatively unchanged.

Additional factors pushing the average level of remuneration up, especially during a slowdown in economic activity, are the temporary changes that occurred in the structure of employment as a result of the differentiated dismissal of lower paid employees. On the one hand, this is evidenced by a more significant decrease in the employment rate<sup>3</sup> in less experienced (persons between 15 and 24, Chart 10) and low educated employees (with primary and basic education, Chart 9) during the crisis. On the other hand, the dynamics of salaries is impacted by two factors that occurred as a result of the structural changes by sector. One of them had a positive effect and was due to the more substantial dismissal of employees in the sectors with a salary lower than the average (industry and construction) and recruitment or slower dismissal of staff in the sectors with a salary higher than the average for total economy (information and communication, financial and insurance activities, real estate activities). The other factor had an opposite effect due to analogous reasons (*e.g.* an increase of the staff in sectors with a salary lower than the average). Since early 2009 until the second quarter of 2011 a quarter of the increase in compensation was due to the total contribution of the two effects.

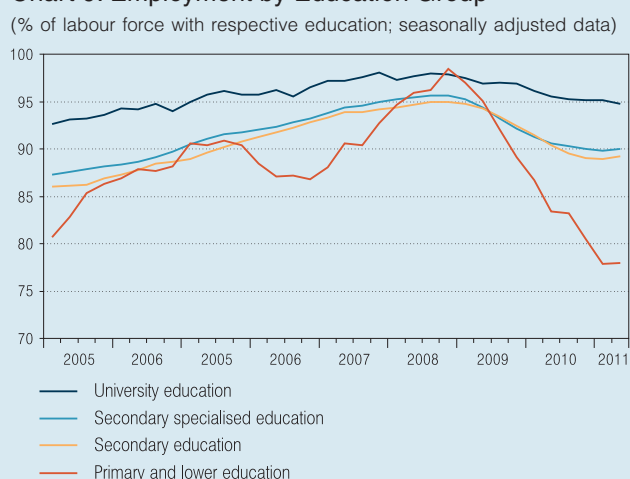
In conclusion, enterprises managed to flexibly respond to the conditions of subdued economic activity during the crisis by reducing both employment and hours worked. Remunerations *per* employee also reacted adequately by moderating the rate of growth and following to a greater extent the changes in productivity.

Chart 8: Share of Employees by Sector



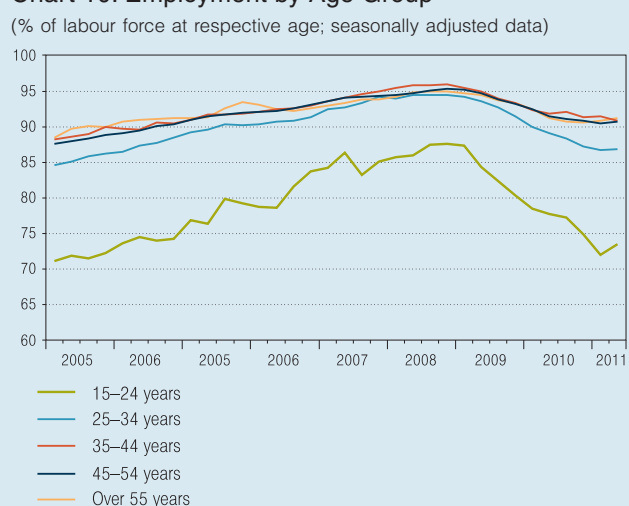
Sources: NSI, BNB.

Chart 9: Employment by Education Group



Sources: NSI, BNB.

Chart 10: Employment by Age Group



Sources: NSI, BNB.

<sup>1</sup> The share of gross operating surplus in value added (adjusted with a proxy for compensation of self-employed) is used as a proxy for a profit margin.

<sup>2</sup> Labour remuneration is evaluated through the compensation *per* employee based on national accounts data.

<sup>3</sup> The employment rate here is defined as a ratio of employed (at the respective age or having the respective education) to the labour force in the same group.

## Government Finance and Consumption

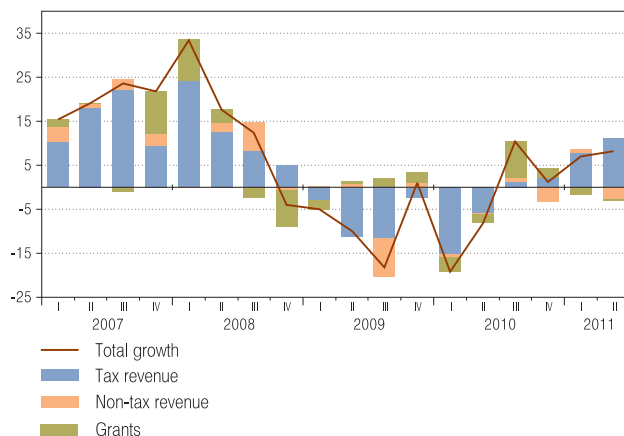
Over the first nine months of 2011 the consolidated fiscal programme deficit came to BGN 826.0 million (1.1 per cent of GDP projections for the year). In the last quarter of 2011 budget deficit is expected to increase without, however, exceeding the 2.5 per cent of GDP deficit target set by the government.

Government consumption over the second quarter of 2011 had a minimal positive contribution of 0.2 percentage points to quarter-on-quarter GDP growth. In the last two quarters the growth rate of government consumption will slightly accelerate, though the annual contribution of government consumption to GDP growth is expected to remain minor. In the first quarter of 2012 its contribution to GDP growth is expected to increase without exceeding 1 percentage point.

Over the second quarter of 2011 total budget revenue on consolidated fiscal programme accounted for BGN 6511.9 million, its annual growth accelerating to 8.2 per cent. It was again due to the good tax revenue performance, while non-tax revenue and grants reported declines on an annual basis.

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

(%, percentage points)

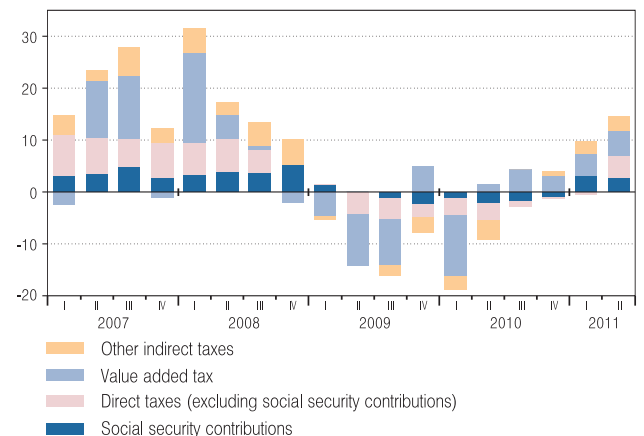


Sources: MF, BNB.

Unlike the first quarter when indirect taxes were the main factor behind the increase in tax revenue, over the second quarter direct (including social contributions) and indirect taxes had approximately equal contributions to the tax revenue growth.

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

(%, percentage points)



Sources: MF, BNB.

All major components in the structure of indirect taxes registered good performance. The continued robust growth of VAT revenue was due to the nominal increase in household consumption by over 9 per cent on an annual basis. Fuel excise increased as a result of the recovering economic activity, while the growth of tobacco excise receivables exceeded 50 per cent per annum mainly due to high one-off excise refunds over the same period of the previous year.

The growth of direct taxes also accelerated in line with the significant nominal increase in compensation of employees in economy (8.7 per cent) and in gross operating surplus (13.3 per cent). Better corporate tax revenue in the second quarter (growth of 29.2 per cent) broadly offset first quarter's declines. The higher monthly advance payments ratio (1.1 against 1.0 in the first seven months of 2011) was an additional factor for the increase in corporate tax revenue. Receipts from non-financial corporations had a major contribution to this increase. Growth in revenue from personal income tax (9.2 per cent)



also accelerated significantly as compared to the previous quarter, matching the dynamics of compensations of employees. Revenue from the social insurance contributions rose by 10.3 per cent on an annual basis, reflecting the wage fund growth and the 1.8 percentage point increase in pension contributions as of the beginning of 2011. Despite the significant acceleration in the growth of these revenues on the previous quarter, it still seems unlikely that the annual target set in the National Social Security budget will be met.

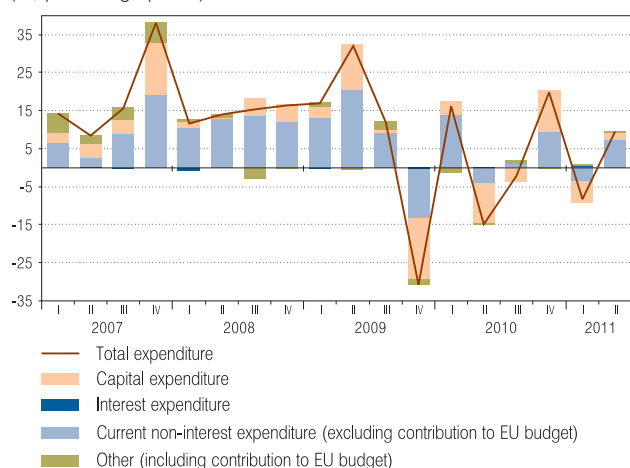
Revenue from grants declined mainly due to the lower expenses on EU programmes in the first six months of the year (down 21.1 per cent as compared to the same period of 2010) most of which were refunded within two to three months.

In the second quarter of 2011 total budget expenditure (including also Bulgaria's contribution to EU budget) amounted to BGN 6420.2 million, corresponding to 22.8 per cent of the annual projections in the Republic of Bulgaria State Budget Law.

The 9.5 per cent growth in consolidated government expenditure between April and June broadly offset the first quarter's decline, with half year budget expenditure matching 2010 nominal values. The uneven quarterly profile of expenditure in 2010 (more expenses concentrated in the first quarter and a large decline in the second quarter) and in 2011 (a gradual acceleration in the second quarter) was most pronounced in capital expenditure, subsidies and operating expenditure.

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

(%, percentage points)



Sources: MF, BNB.

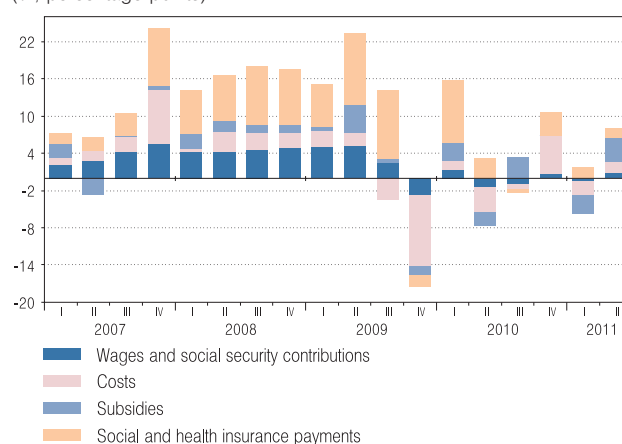
Over the second quarter current non-interest expenditure had the largest contribution of 7.4 percentage points to the increase in total expenditure *vis-à-vis* the first quarter. Capital expenditure growth also accelerated, contributing 1.7 percentage points to the total expenditure increase over the second quarter. In the half year capital expenses continued to be significantly lower than in the same period of the prior year (-21.1 per cent).

Subsidies had the major contribution (4.0 percentage points) to the growth of current non-interest expenditure over the second quarter. Their growth stemmed almost entirely from shifts of co-financing on direct payments to farmers to the second quarter of the year.<sup>9</sup> In the half year expenses on subsidies to non-financial corporations (excluding hospitals) rose by more than 5 per cent.

After the first quarter's negative growth in operating expenditure and compensation of employees in the General Government sector, in the second quarter these expenses had small positive contributions (1.7 and 0.9 percentage points respectively) to non-interest expenditure growth. At the same time, social expenditure continued to register positive growth on an annual basis (2.9 per cent) mainly due to higher health insurance payments. Pension expenditure remained close to the 2010 first half's level, indicating an insignificant annual increase of 1.0 per cent, consistent with the fiscal consolidation measures announced by the government.

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

(%, percentage points)



Sources: MF, BNB.

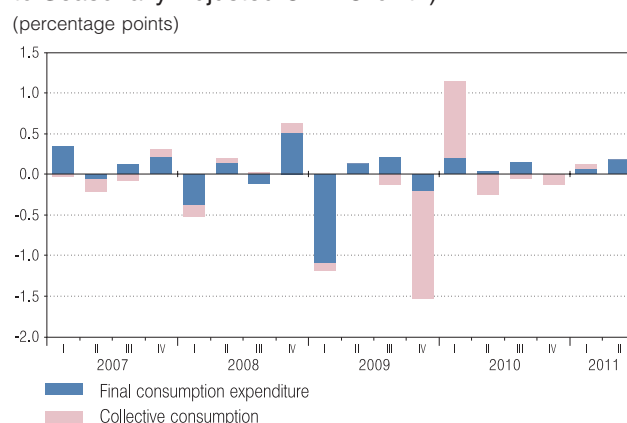
<sup>9</sup> In 2010 the bulk of these payments was made in February.

Based on Ministry of Finance preliminary monthly data, by the end of September total revenue and grants under the consolidated fiscal programme rose by 5.7 per cent, reflecting the continued recovery in tax revenue. In the first nine months revenues from VAT, excise duties and social security contributions continued to increase at two-digit rates. Growth in receipts from personal income tax also accelerated over the review period. The increase in major tax revenue items is expected to slow down until the end of 2011 in line with projected nominal dynamics in the respective tax bases. Another factor behind slowing growth in indirect taxes will be the higher base of the previous year's end when these receipts recovered rapidly. The increased minimum wage in September 2011 is expected to have a small positive effect on personal income tax receipts. Some growth can be expected in EU funding grants as a result of the accelerated implementation of EU programmes over the recent months. Between January and September 2011 grants reported a 38.3 per cent decline due to the one-off base effect of July 2010.

In the first nine months government expenditure (including Bulgaria's contribution to the EU budget) had minimum positive growth of 1.6 per cent. Over the same period social payments continued to have the largest contribution to budget expenditure growth (1.7 percentage points). With the September increase in survivor pensions, growth in pension expenditure is expected to accelerate. Capital expenditure and operating expenditure are also projected to increase. In the first nine months of 2011 capital expenses<sup>10</sup> contributed most significantly to retention of total expenditure at its 2010 level, though already gradually accelerating, with their annual rate of decline slowing from about 20 per cent in June to 6.6 per cent in September.

<sup>10</sup> Including growth in government reserve.

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



Sources: NSI, BNB.

Wage and operating expenditure dynamics between July and September confirmed our expectations of positive and slightly accelerating real growth in government consumption over the third quarter. Until the end of 2011 the growth rate of government consumption will tend to slightly accelerate but its annual contribution to GDP growth is expected to be close to zero. In the first quarter of 2012 this indicator is expected to increase on an annual basis without exceeding 1 percentage point.

In the first nine months of 2011 the negative budget balance came to BGN 826.0 million and was financed mainly by the funds accumulated in the fiscal reserve (BGN 940.9 million). Net domestic government securities financing was BGN 288.9 million and privatisation financing came to BGN 37.4 million. Net foreign financing remained negative at BGN 53 million.

### Government Securities Market

In the third quarter of 2011 demand for government securities in the domestic primary market remained high, with the average bid-to-cover ratio between the bids admitted to auctions and total government securities offered reaching 2.18. The intensified debt crisis in some euro area countries and the concomitant turmoil in international financial markets were among the factors driving local investors' decision to continue investing their free financial resources in Bulgarian domestic government securities.

By end-October the total nominal value of purchased government securities on the primary market was BGN 869.4 million (including the lev equivalent of EUR 109.0 million), with bonds of BGN 322.3 million issued only in the third quarter. In the same period the September opening of the government bond issue with an initial maturity of three years and six months enjoyed the strongest demand as investors bids exceeded almost 3.15 times the amount offered by the MF. After the changes in the MF issue calendar,<sup>11</sup> the total nominal value of government securities offered for sale was BGN 158.5 million in September (including the lev equivalent of EUR 35 million). On 24 October the MF conducted an auction for repurchase of government securities with an initial maturity of five years and a residual maturity of three months, whereon a seven-year issue with a residual maturity of five years and four months was offered in exchange. The auction was intended to adjust the repayment profile of the outstanding debt payments in early 2012, and approved bids came to BGN 25.2 million.

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



Source: BNB.

The review period saw declines in the average annual yields attained in the primary market across all maturity segments compared with the previous openings of above issues.

<sup>11</sup> The initially announced issue calendar for September was changed to increase the volume for sale of the seven-year lev issue by BGN 15 million. Upon conducting the action for the second lev issue, the Minister of Finance approved an amount exceeding almost 1.5 times the preliminary announced amount. A change was also made to the third issue placed in September: the offered amount was EUR 5 million higher than the projection in the updated issue calendar for September.

The yield of the bids approved at the 7 November auction for sale of bonds with a three-year-and-six-month maturity was 3.14 per cent against 3.29 per cent in the September opening, 3.53 per cent in July and 3.54 per cent in June. The yield of the ten-year-and-six-month benchmark issue posted a steady decline in the primary market: from 5.42 per cent in June to 5.31 per cent in September and 5.28 per cent in October. The yield attained in the first 2011 opening of the seven-year issue<sup>12</sup> was 4.53 per cent in August, decreasing to 4.40 per cent in the September opening. The primary market yield of euro-denominated five-year bonds also dropped over the third quarter. At the May auction, it was 4.10 per cent, declining to 3.90 per cent and 3.93 per cent in September and October respectively.<sup>13</sup>

In the third quarter secondary bond market activity remained high, despite the moderate decline in the volume and number of transactions *vis-à-vis* the same period of 2010. As a result, the liquidity ratio decreased to 1.1 on average against 1.3 and 1.5 in the first and second quarters of 2011.

The downward secondary market trend in the average annual yield of the benchmark ten-year-and-six-month issue was sustained to reach its lowest value since the beginning of the year (in September: 5.30 per cent against 5.32 per cent in August).

The total nominal value of government securities sold in the domestic market in 2011 is expected to reach BGN 1131.3 million, down BGN 377 million *vis-à-vis* their value in 2010.

<sup>12</sup> As of the settlement date, the residual term to maturity of this issue was five years and six months.

<sup>13</sup> The MF set a minimum price at the July auction for sale of five-year bonds. Only 28 per cent of the offered amount was sold. The average annual yield formed on the basis of this volume was 4.16 per cent, almost equal to the yield attained during the previous opening in May. The average annual yield of the amount offered by the MF was 4.22 per cent.

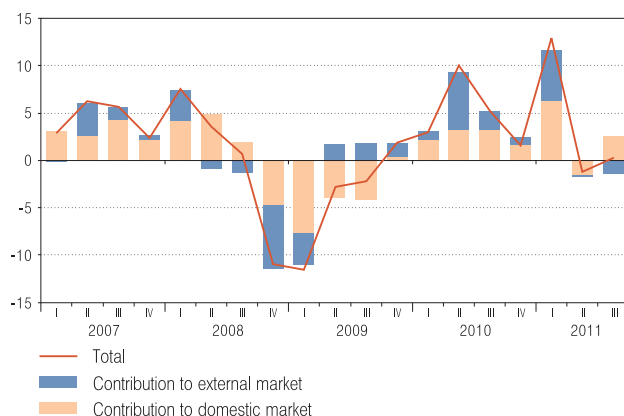
## Behaviour of Firms and Competitiveness

In the second quarter gross value added rose by 0.6 per cent on the previous quarter, reflecting the enhanced domestic demand, while external demand moderated due to international environment deterioration.

Gross value added generated in the second quarter rose by 0.6 per cent on the previous quarter. This was attributable mostly to the enhanced domestic demand. External demand slowed down due to the worsened external situation, though remaining at relatively high levels. All economic sectors had positive contributions to the value added growth, excluding trade and the professional and scientific activities and administrative and ancillary activities sector. Industry had a positive contribution to value added growth in the economy. This was due mainly to domestic demand reflecting the recovery of household consumption and higher demand for energy and food products.

### Industry Turnover Dynamics

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



Note: Non-additive data due to direct chain-linked volumes and seasonal adjustment of gross value added and its components.

Sources: NSI, BNB.

Based on industrial turnover data, energy and food products had the largest contribution to the increased domestic market turnover.

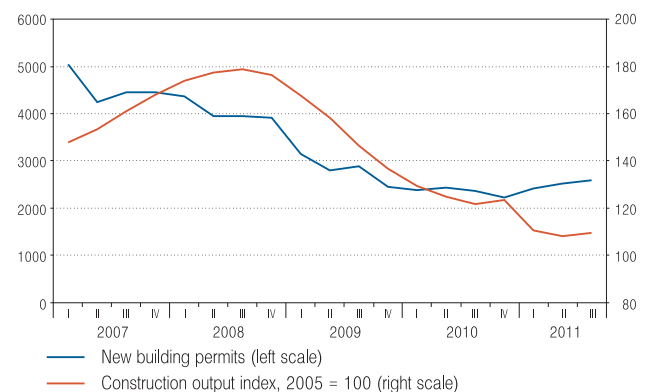
External demand, however, slowed down. It had a negative effect on industrial output due to its export oriented structure. Economic activity in this sector is expected to moderate over the fourth quarter of 2011 and the first quarter of 2012 as a result of the worsening external economic conditions.

Value added in construction increased on a quarter-on-quarter basis, reflecting the enhanced construction activity in Bulgaria. This observation is confirmed by the civil and engineering con-

struction index. An additional positive signal of a possible start in this sector's recovery came from the increasing number of non-residential building permits and new construction launched. Negative developments in building construction were retained due to still weak investment demand of households. The index measuring production volumes in building construction continued to fall along with the number of new residential buildings launched.

### Construction Output Dynamics and New Buildings Permits Issued

(number of buildings; seasonally adjusted data)



Sources: NSI, BNB.

Our projections show that economic activity recovery in this sector will be gradual due to still contracting, though moderately, volumes of output in building construction and the declining number of newly launched residential buildings.

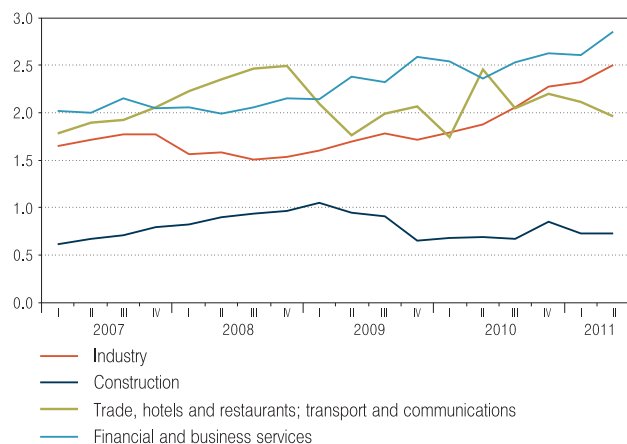
Gross value added in the services sector remained almost unchanged on the previous quarter. This was mainly due to decreases in gross value added in trade. A negative trend was also seen in retail trade volumes which declined in the second quarter of 2011. Solely trade in foods and pharmaceutical goods continued to rise as a result of the recovering household consumption. Turnover in transport, hotels and restaurants continued to grow, and this trend is expected to continue with the revival of domestic demand.

Corporations' financial performance measured by the gross operating surplus in nominal terms remained broadly unchanged in the second quarter of 2011 compared to the previous quarters.

Slight improvements were reported in the industrial and the financial and business services sectors. Gross operating surplus in trade fell slightly, while remaining unchanged in the construction sector.

### Gross Operating Surplus at Current Prices

(billion BGN; seasonally adjusted data)

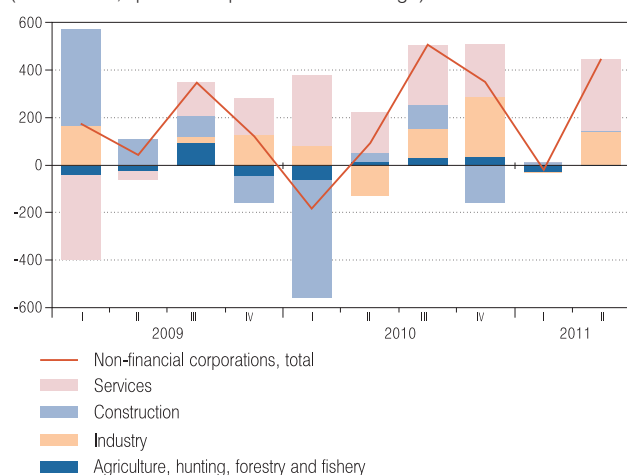


Sources: NSI, BNB.

In addition to the gross operating surplus, bank credit was the other important source of financing for corporations over the second quarter of 2011. Following the first quarter's decrease, lending recovered both in services and industry due to the improved expectations of future economic activity. Changes in the volumes of foreign direct investment were positive in all sectors, except for agriculture, where they were virtually nil.

### Loans to Non-financial Corporations

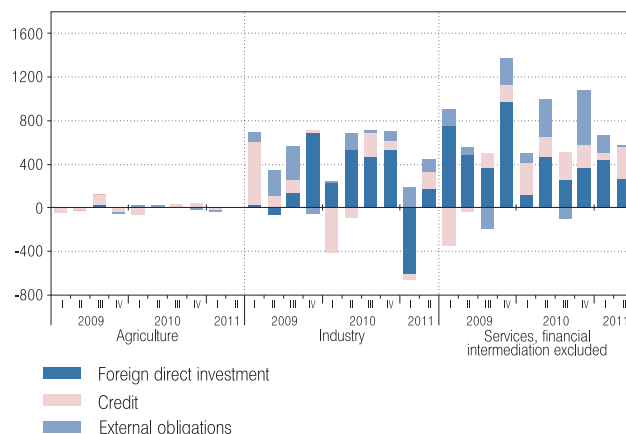
(million BGN, quarter-on-quarter volume change)



Source: BNB.

### Financing Sources

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

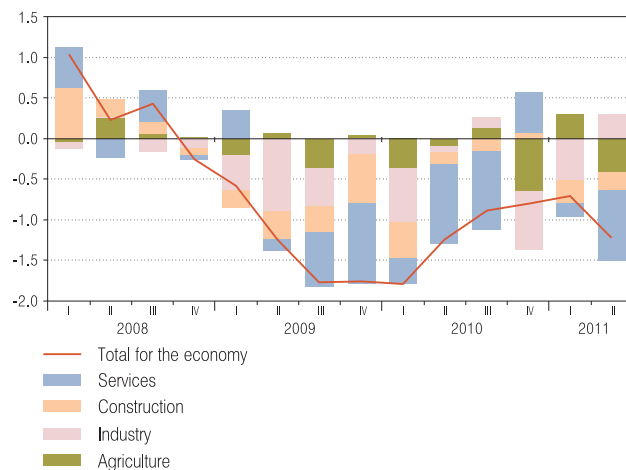


Sources: NSI, BNB.

Compared with the previous quarter, firms continued to optimise their labour costs through staff reductions. The services sector had the most significant contribution to the employment decrease, while employment in industry increased as a result of the improved financial performance of firms in this sector expressed in rising volumes and a gross operating surplus, as well as higher level of production.

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

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



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

Sources: NSI, BNB.

Labour productivity increased in all economic sectors due to the continued optimisation of labour costs by firms.

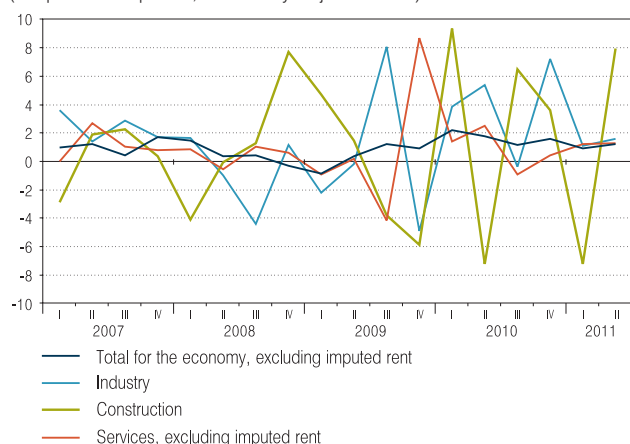
Despite the fact that wages in economy continued to rise smoothly, firms managed to improve their cost competitiveness. The decrease in employment enabled them to reduce the nominal



unit labour costs. However, these costs remained at the levels close to those in the previous quarter.

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

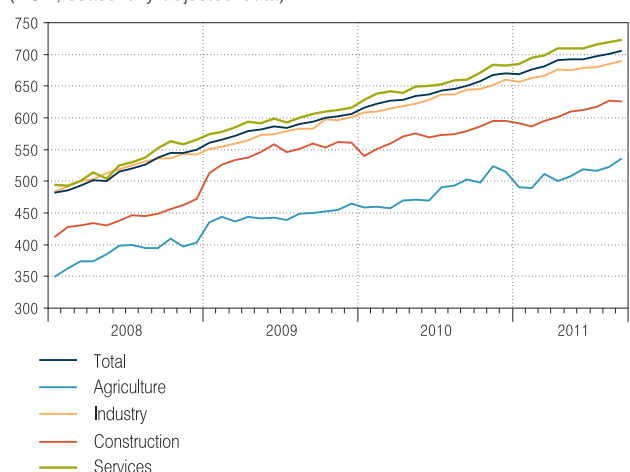
(% quarter-on-quarter; seasonally adjusted data)



Sources: NSI, BNB.

### Average Nominal Wage by Economic Sector

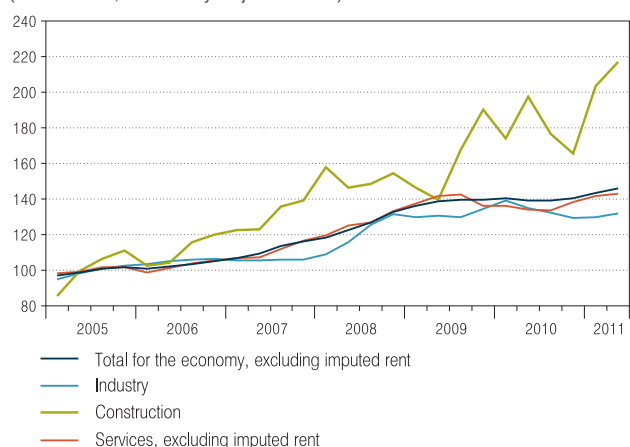
(BGN; seasonally adjusted data)



Sources: Short-term statistics of employment and labour costs, NSI.

### Nominal Unit Labour Costs

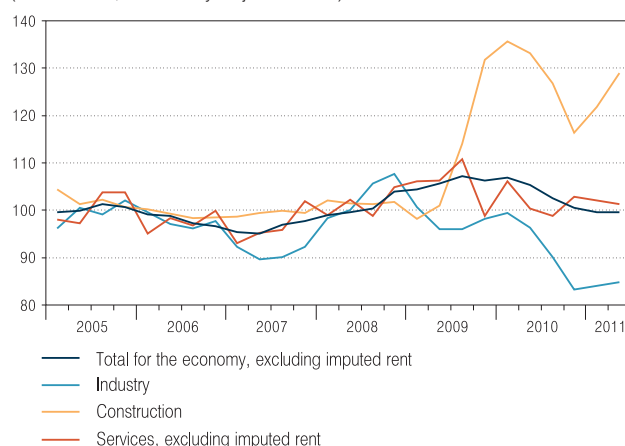
(2005 = 100; seasonally adjusted data)



Sources: NSI, BNB.

### Real Unit Labour Costs

(2005 = 100; seasonally adjusted data)

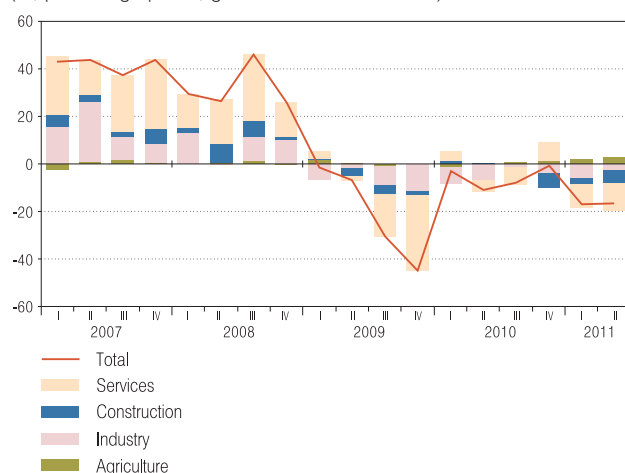


Sources: NSI, BNB.

Based on the NSI preliminary data for the second quarter of 2011, nominal expenditure on acquiring fixed assets fell by 16.8 per cent on the corresponding quarter of the previous year. Similar dynamics was observed in national accounts data which show that gross fixed capital formation contracted nominally by 3.3 per cent on an annual basis. In the services and construction sectors, decreases in expenditure on acquisition of fixed assets continued in the second quarter: by 19.7 and 49.6 per cent on the same quarter of the previous year. Expenditure on acquisition of fixed assets in industry also contracted, though at a moderating rate of 9.7 per cent *vis-à-vis* 22.5 per cent in the first quarter. As regards services, real estate operations and trade – sectors still suffering from weak demand – experienced the most pronounced decline.

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

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



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

Sources: NSI, BNB.

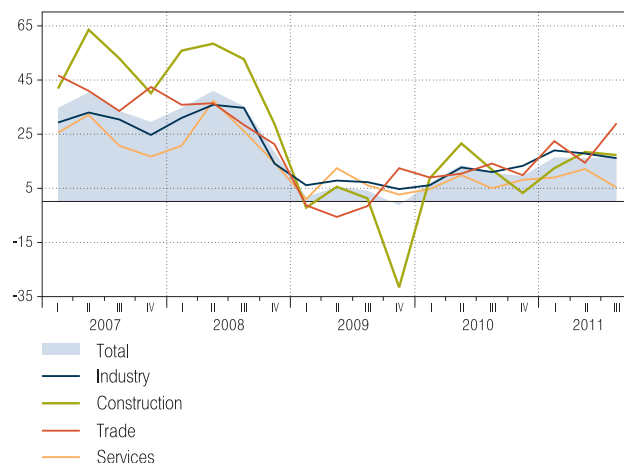
Seasonally adjusted estimates show that investment growth rate accelerated in real terms from 0.8 per cent in the first quarter to 3 per cent in the second quarter of 2011.

Economic trends remained divergent in the third quarter, showing no clear signs of a strong enhancement in economic activity. Industrial production decreased slightly due to the slowing external demand. The annual growth rate in new industrial orders remained stable thanks to the increased orders in the domestic market. The trade volume index continued to fall in the third quarter. The total output index in construction began to stabilise.

In October survey data show persistent trends to more positive sentiment in trade and more unfavourable situation in services and construction. Although the business climate indicator in industry remained at high early 2011 levels, the estimated current business situation worsened in October. Firms' expectations about future dynamics in economic activity were divergent. Optimism increased most significantly in trade, unlike services and construction where growth expectations deteriorated.

## Expectations about Future Economic Activity

(balance of opinions)



Sources: NSI, BNB.

Our expectations of corporations' economic activity are based on two opposite trends. On the one hand, recovery in domestic demand will improve the situation in the domestic market, while on the other hand, the worsening external environment is expected to have a negative effect on firms' economic activity.

## Exports and Imports of Goods

Between January and September 2011 trade deficit continued to contract on the corresponding period of 2010, with export growth rates further outstripping import rates both in real and nominal terms.

In the fourth quarter of 2011 and first quarter of 2012 import growth rates are expected to outpace those of exports. This trend will reflect a slowdown in external demand and strongly moderating growth in global prices over the projected horizon.

Between January and September 2011 the nominal growth rate of exports remained high at 32.0 per cent, while the growth rate of imports was lower at 20.5 per cent. As a result, over the same period trade deficit balance decreased to EUR 780.2 million, from EUR 1724.2 million between January and September 2010.<sup>14</sup>

In the fourth quarter of 2011 and first quarter of 2012 exports are expected to slow down nominally due to lower external demand on an annual basis, reflecting expectations of recession and strongly moderating growth rates of global prices

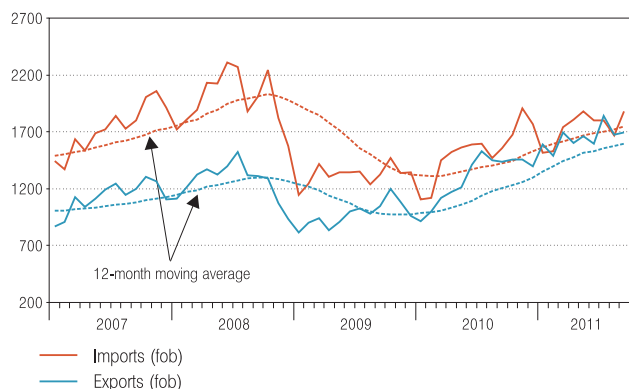
over the projected horizon. Imports are expected to continue increasing as a result of the increase in domestic demand. Growth rates of exports and imports will be similar, with imports rates exceeding nominally those of exports.

The decrease in trade deficit between January and August 2011 was mainly a result of the improved positive balance in *raw materials* (EUR 968.0 million) and *consumer goods* (EUR 94.7 million) along with the improved negative balance in *investment goods* (BGN 101.0 million). The negative balance of *energy resources* worsened by EUR 274.5 million. Imports and exports of all commodity groups posted positive growth, with rates of exports outstripping those of imports.

<sup>14</sup> The analysis presented in this section is based on nominal export and import data in euro. Data in real terms by commodity group are derived from deflators published by the NSI under the Standard International Trade Classification (SITC).

## Dynamics of Exports and Imports

(million EUR)



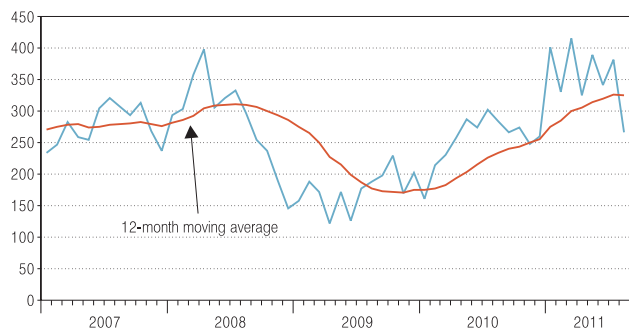
Source: BNB.

Between January and August 2011 exports of all commodity groups contributed to the overall growth. *Base metals and their products* (8.6 percentage points) followed by *mineral products and fuels* (5.9 percentage points), *machines, transportation vehicles, appliances, instruments and weapons* (5.7 percentage points), *animal and plant products, foods, drinks and tobacco* (5.1 percentage points) had the major contribution to this growth.

Over the January to August 2011 period exports of *base metals and their products* rose by 41.9 per cent on the respective period of 2010 to reach EUR 2852.9 million. *Copper and copper products* (26.1 percentage points) contributed most significantly, reflecting the real increase and price effects.<sup>15</sup> In the fourth quarter of 2011 and first quarter of 2012 the export growth rate in this group is expected to moderate due to the slowdown in external demand on an annual basis and lower growth rate of metal prices reaching negative values in the first quarter of 2012.

## Exports of Base Metals and Base Metal Products

(million EUR)



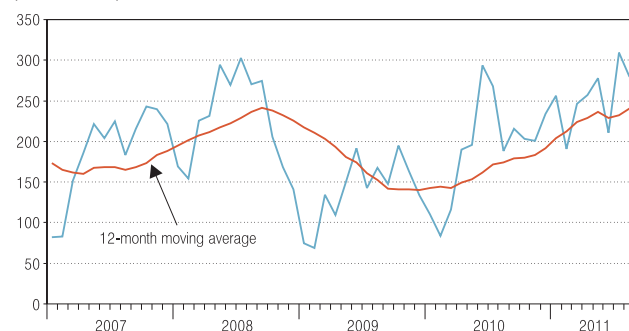
Source: BNB.

<sup>15</sup> The export deflator for the *base metals and other non-ferrous metals* division under SITC was used to estimate the price effect in the first two quarters of 2011.

Exports of *mineral products and fuels* between January and August 2011 amounted to EUR 2028.6 million, up 40.2 per cent on the corresponding period of 2010. *Mineral fuels, mineral oils and distilled products* (32.6 percentage points) contributed most significantly to this growth, reflecting real growth in conjunction with rises in international oil prices.<sup>16</sup> In the fourth quarter of 2011 and first quarter of 2012 the export growth rate in this group is expected to moderate due to the slowing external demand and a slight increase in fuel prices.

## Exports of Mineral Products and Fuels

(million EUR)



Source: BNB.

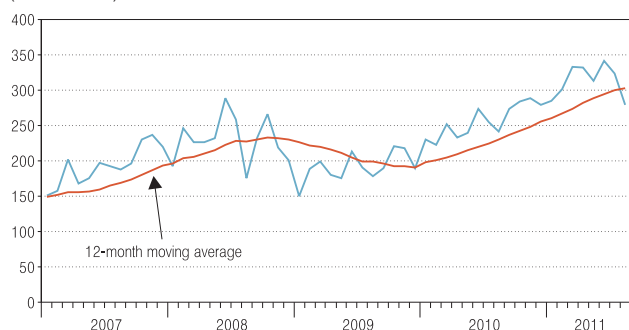
Over the review period exports of *machines, transportation vehicles, appliances, instruments and weapons* amounted to EUR 2506.6 million: an increase of 29 per cent on the corresponding period of the previous year. Measured in real terms, the contribution of this group to export growth was the most significant, with certain moderation observed in the second quarter in line with the slowing growth of external demand. The price effect was weak.<sup>17</sup> *Nuclear reactors, boilers, machines, appliances and machinery* (up 12.0 percentage points), *electrical machines and appliances* (up 10.8 percentage points) and *automobiles* (up 6.0 percentage points) contributed most substantially to the nominal increase. In the fourth quarter of 2011 and first quarter of 2012 the export growth rate in this group is expected to decrease due to the moderation in external demand on an annual basis.

<sup>16</sup> The export deflator for the *mineral fuels, oils and related products* division under SITC was used to estimate the price effect in the first two quarters of 2011.

<sup>17</sup> The export deflator for the *machines, equipment and transportation vehicles* division under SITC was used to estimate the price effect in the first two quarters of 2011.

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

(million EUR)

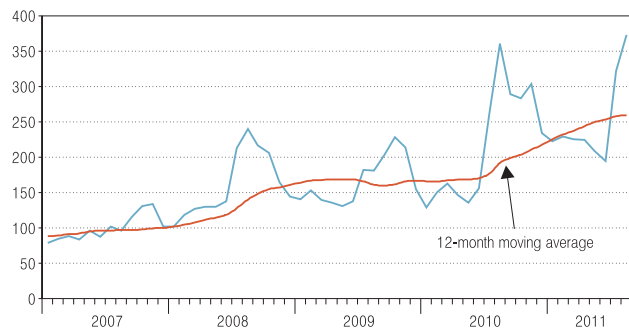


Source: BNB.

Over the review period exports of *animal and vegetable products, foods, drink and tobacco* came to EUR 2022.7 million, up EUR 498.0 million on the January to August 2010 period. *Oil seeds and fruit, different types of seeds* (up 14.6 percentage points) had the major contribution to this growth due to the high real growth in the first half of the year.<sup>18</sup> In the fourth quarter of 2011 and first quarter of 2012 exports of this group's goods are expected to moderate reflecting both the external demand slowdown and the lower growth rate of international food prices.

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

(million EUR)



Source: BNB.

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

	Exports		Imports (CIF)	
	growth, %	contribution, p.p.	growth, %	contribution, p.p.
Consumer goods	15.5	3.9	12.3	2.4
Raw materials	43.0	18.9	20.1	7.4
Investment goods	33.7	5.7	17.7	3.9
Energy resources	40.2	5.5	31.2	6.8
<b>Growth, total</b>	<b>34.0</b>		<b>20.4</b>	

Source: BNB.

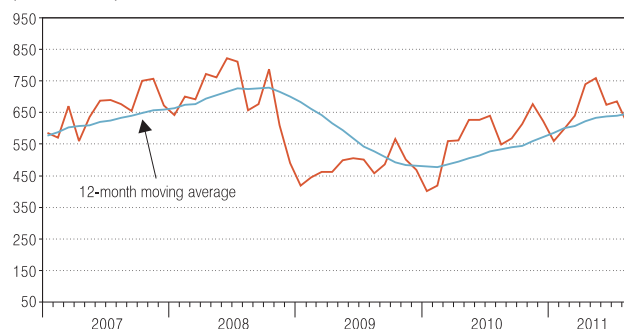
<sup>18</sup> The export deflator for the *oil seeds and fruit* division under SITC was used to estimate the price effect in the first two quarters of 2011.

Between January and August 2011 imports (CIF) reached EUR 14,441.1 million: an increase of 20.4 per cent (EUR 2451.3 million) on an annual basis. All commodity groups contributed to this growth. The groups of *raw materials* (by 7.4 percentage points) and *energy resources* (by 6.8 percentage points) had the most significant contributions, followed by *investment goods* (3.9 percentage points) and *consumer goods* (2.4 percentage points).

Between January and August 2011 imports of *raw materials* amounted to EUR 5267.4 million: an increase of 20.1 per cent on the corresponding period of the previous year. The *Other* item (6.5 percentage points), *cast iron, iron and steel* (5.6 percentage points), *non-ferrous metals* (3.3 percentage points), and *textile* (3.1 percentage points) contributed mainly to the increase. The increased imports of *non-ferrous metals* reflected mainly growth in volumes, while rises in imports of *cast iron, iron and steel*, and *textile* resulted from both increases in their prices in international markets and higher volumes.<sup>19</sup> In the last quarter of 2011 and first quarter of 2012 the import growth rates in this group are expected to remain broadly unchanged due to the improving domestic demand and a slight or negative price effect.

## Imports of Raw Materials

(million EUR)



Source: BNB.

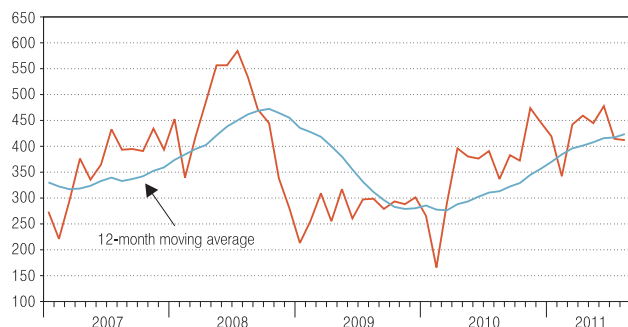
Over the review period imports of *energy resources* amounted to EUR 3409.2 million, an increase of 31.2 per cent on the corresponding period of 2010. The groups of *crude oil and natural gas* (up 17.5 percentage points) and *oils* (up 10.9 percentage points) contributed most significantly to this growth. The increase was due

<sup>19</sup> The import deflators for the *base and non-ferrous metals, cast iron and steel*, and *textile and related products* divisions under SITC were used to estimate the price effect.

to the high international oil prices.<sup>20</sup> In the fourth quarter of 2011 and first quarter of 2012 imports of this group's goods are expected to remain positive thanks to domestic demand recovery and a positive, though low, growth rate of international fuel prices.

### Imports of Energy Resources

(million EUR)

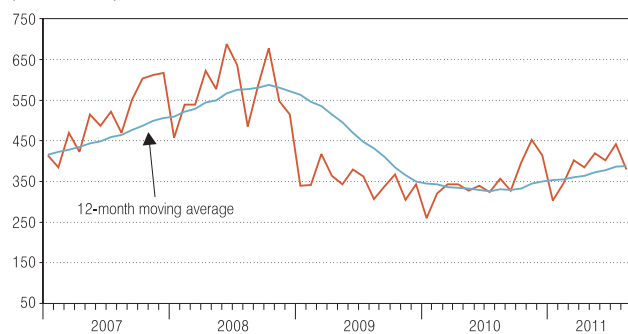


Source: BNB.

Between January and August 2011 imports of *investment goods* came to EUR 3075.6 million: 17.7 per cent more than the value reported a year earlier. *Spare parts and equipment* (7.5 percentage points), *transportation vehicles* (7.0 percentage points) and *machines, equipment and appliances* (6.4 percentage points) reported the largest contributions to this rise. The increase in values was mainly due to the growth in physical volumes.<sup>21</sup> Over the projection horizon their growth rate is expected to remain positive, consistent with the moderate recovery of investment activity in Bulgaria.

### Imports of Investment Goods

(million EUR)



Source: BNB.

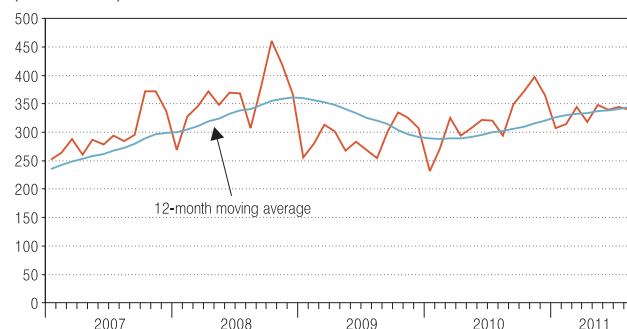
<sup>20</sup> The import deflator for the *mineral fuels, oils and related products* section under SITC was used to estimate the price effect in the first two quarters of 2011.

<sup>21</sup> The import deflator for the *machines, equipment and transportation vehicles* section under SITC was used to estimate the price effect in the first two quarters of 2011.

In the review period imports of *consumer goods* recorded a nominal growth rate of 12.3 per cent, reaching EUR 2654.8 million. This dynamics reflects mainly the contributions of *food, drink and tobacco* (5.9 percentage points), *medicines and cosmetics* (3.4 percentage points), *automobiles* (1.7 percentage points) and *other* (by 1.4 percentage points). Growth in the first two items was due to a price effect coupled with real volume increases, while the increase in *automobiles* resulted primarily from real growth.<sup>22</sup> In the last quarter of 2011 and first quarter of 2012 imports of *consumer goods* are expected to continue increasing due to expanding domestic demand.

### Imports of Consumer Goods

(million EUR)



Source: BNB.

Over the January to August 2011 period Bulgarian exports to other EU Member States rose by 34.8 per cent on an annual basis, while exports to non-EU countries increased by 32.8 per cent. Imports from EU Member States grew by 17.6 per cent, and from non-EU countries 23.4 per cent.

The market share of Bulgarian goods in total EU imports picked up to 0.70 per cent in August 2011 *vis-à-vis* 0.64 per cent in August 2010.

<sup>22</sup> To estimate price effects in the first two quarters of 2011, the following deflators were used: for *food, drink and tobacco* – the weighed import deflator of the *foods and live animals, soft and alcohol beverages*, and *tobacco* sections; for *medicines and cosmetics* – the deflator of the *medicinal and pharmaceutical products* division; for *automobiles* – the deflator of the *motor vehicles, motorcycles, bicycles, trailers and semi-trailers* division under SITC.



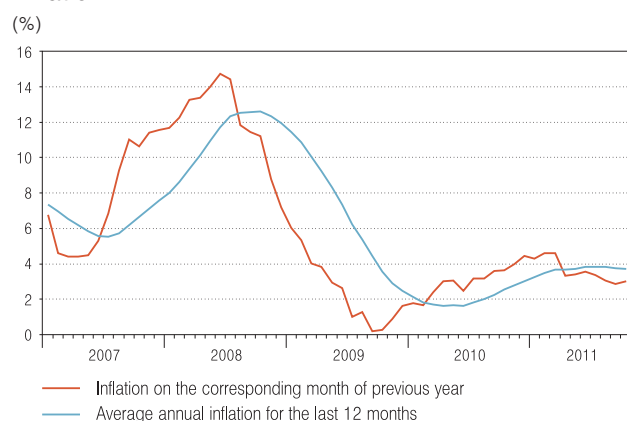
# 4. Inflation

International energy and food price dynamics which had a sizeable effect on inflation in 2010 continued to play a key role for the increase in consumer prices in 2011. By October annual inflation came to 3.0 per cent, with food and transport fuel prices contributing most to this.

If the current trend toward stabilisation and slight decreases in international prices remains sustained, annual food and fuel inflation will continue to decline. Core inflation dynamics will reflect the overall recovery of economic activity in Bulgaria against the background of global developments. In the fourth quarter of 2011 and in the first quarter of 2012 annual inflation is expected to remain relatively low, close to its current levels.

International energy and food price dynamics which had a sizeable effect on inflation in 2010 continued to play a key role for the increase in consumer prices in the first nine months of 2011.<sup>1</sup> In the first quarter inflation accelerated to 4.5 per cent (4.0 per cent in the fourth quarter of 2010), while in the second quarter it declined to 3.4 per cent on average reflecting the base effect of the unchanged tobacco products excise duties.<sup>2</sup> In the following months the annual rate of inflation continued to moderate coming to 3.0 per cent in October and average annual inflation for the last 12 months was 3.7 per cent in that month.

## Inflation



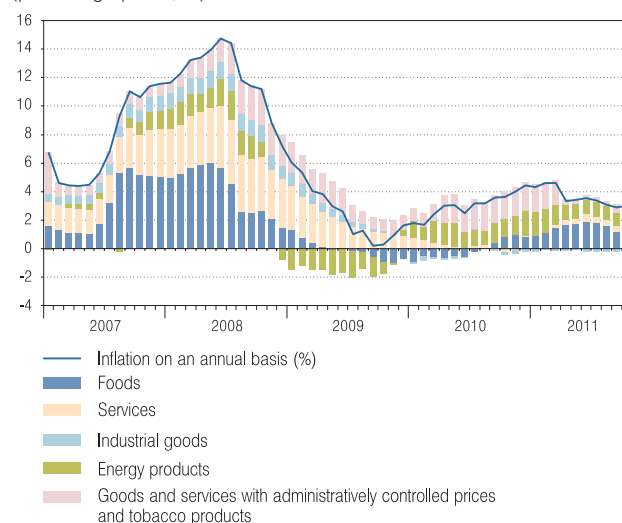
Source: NSI.

In October food and energy prices contributed most to annual inflation by 1.1 and 0.9 percentage points respectively. Inflation of goods and services with administratively controlled prices

contributed 0.7 percentage points to annual inflation, while tobacco prices had a zero contribution. Core inflation comprising non-energy industrial goods prices (excluding fuels) and services prices had a low contribution to the annual inflation rate in October 2011 (0.4 percentage points).

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

(percentage points; %)



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 at elementary aggregates level in the consumer basket. Sources: NSI, BNB.

The sizeable increase in international energy and food prices at the end 2010 and in early 2011 was the key pro-inflationary factor in Bulgaria over the review year. The stabilisation of prices in international commodity markets over the recent months, including the fall in prices of certain commodity groups allowed for the gradual

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

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

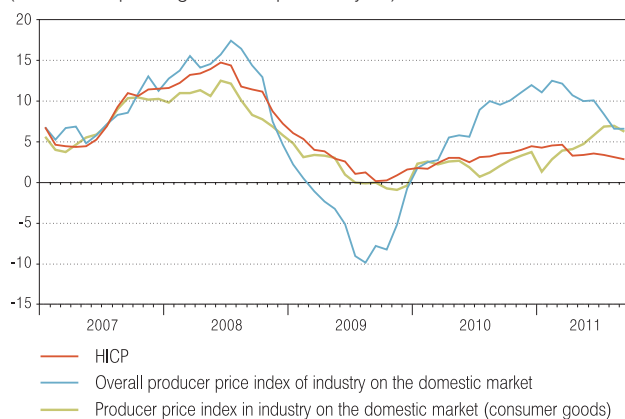
moderation in annual consumer price inflation, in particular in food and fuel prices: two components largely dependant on international market developments. The more pronounced fall in food product inflation observed in the second half-year contributed most to the decline in overall consumer price inflation to 3.0 per cent as of October (3.5 per cent in June 2011).

Domestic price dynamics along the supply chain shows dependence on the trends in the movements in international prices. The increase in prices of import commodities measured by the import deflator of goods was 16.0 per cent on an annual basis in the first quarter of 2011, while in the second quarter the growth rate moderated to 8.2 per cent in line with international prices dynamics. The overall producer price index (PPI) in industry for the domestic market went up by 11.9 per cent and 10.3 per cent on an annual basis in the first and second quarters of 2011 respectively, and by September producer price inflation declined to 6.6. per cent.

Producer price index in consumer goods production followed an upward trend since the start of the review year posting an increase of 7.0 per cent on an annual basis in August, with non-durable consumer goods and food products in particular contributing most to this.<sup>3</sup> As a result of the moderation in producer price rises in most food groups, including intermediate consumption goods, the overall PPI of consumer goods saw an increase of 6.3 per cent in September.

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

(% on corresponding month of previous year)



Source: NSI.

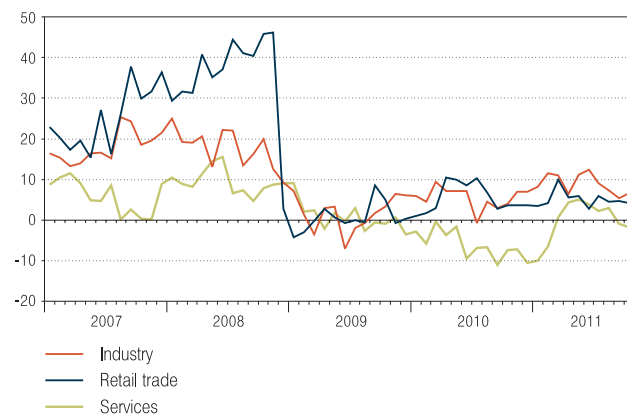
<sup>3</sup> The Major Industrial Groupings classification was used to cover the following sectors: intermediate consumption goods, energy product production and water related activities, investment product manufacturing and consumer product manufacturing.

Core inflation (excluding food and energy product prices, administratively controlled prices and tobacco products prices) increased slightly in the first half of 2011, reaching 0.7 per cent in June compared to the respective period of the prior year (-0.2 per cent by end 2010). In the second half of 2011 core inflation relatively stabilised and as of October remained at its level of 0.7 per cent on an annual basis. The decline in the prices of durables and the slow increase in services inflation were the key factors behind the relatively low core inflation in 2011.

Firms' pricing decisions that are dependent on the specific conditions in different goods and services markets are an important factor in consumer price developments. The higher rate of growth in the value added deflator *vis-à-vis* the rate of change in nominal unit labour costs shows that firms succeeded in transferring these costs on consumers and in increasing their profit margins. The increased share of gross operating surplus in gross value added indicates the improved profitability in the economy that has been coming close to its pre-crisis level since end-2010.

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

(balance of opinions)



Source: NSI.

In the first half of the review year the business situation survey showed that selling prices expectations in the economy enhanced. They were more pronounced in the industrial sector where the impact of the sizeable rise in food and energy product prices on international markets was more marked, while the expectations of retail trade selling prices remained more moderate. In construction and services, the prevailing expectations of a decrease in prices were replaced by expectations of an increase. From the start of

the second half-year, expectations of an increase in prices in the economy in the following months were weaker mainly due to the change in managers' sentiments in the manufacturing and services sectors.

International commodity market developments will remain the most important factor for inflation dynamics over the next two quarters. If the current trend towards stabilisation and a slight fall in international prices remains sustained, annual food and fuel inflation will continue to moderate. A base effect of the 2010 price rise will also contribute to the decline in food and fuel inflation. Core inflation dynamics will reflect the overall recovery of economic activity in Bulgaria against the background of global developments. Heightened uncertainty about the world economic outlook brings about uncertainty with a view to the strength of recovery in the economic activity in Bulgaria, creating conditions for a gradual increase in core inflation. In the fourth quarter of 2011 and in the first quarter of 2012 annual inflation is expected to remain relatively low, close to its current levels. The worsening world economic development perspectives pose risks of lower-than-expected consumer price inflation in Bulgaria.

## Food Prices

The upward trend in annual food inflation which started in the second half of 2010 continued in the first half of 2011 in line with the upward dynamics in international prices. As of June the annual rate of food inflation reached 8.9 per cent contributing 1.9 percentage points to overall inflation.

Over the same period processed food inflation rose to 11.8 per cent (5.7 per cent as of December 2010) and played a key role for food price dynamics, while unprocessed food (meat and meat products, fruit, vegetables, and fish) inflation remained at a lower level (3.9 per cent). In the group of processed food, bread and sugar had the most significant contribution to the overall inflation acceleration. Since the start of the second quarter inflation in vegetable oils started to moderate, after the sizeable increase in March when it reached 40 per cent. In unprocessed food, there was an upward trend in meat product inflation. Nevertheless, by mid-year meat products' prices increased at a relatively lower pace of 2.2 per cent compared to the corresponding period of the previous year (-1.4 per cent by end-2010).

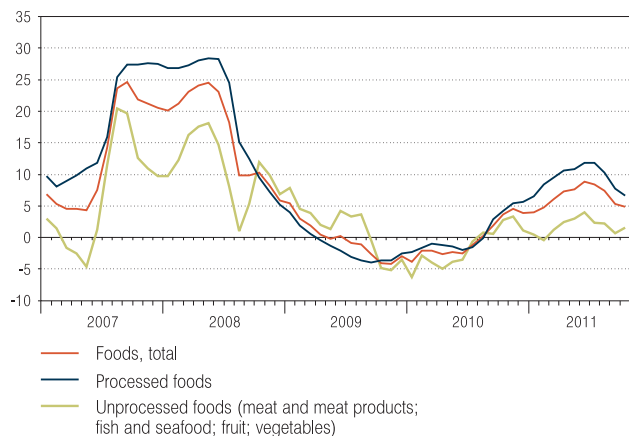
## Growth Rate of Major Goods and Services Groups Prices and Their Contribution to Accumulated Inflation

	Accumulated inflation as of October 2010 (December 2009 = 100)		Accumulated inflation as of October 2011 (December 2010 = 100)		Annual inflation as of October 2011 (October 2010 = 100)	
Inflation (%)	3.1		1.7		3.0	
	Inflation rate by group, %	Contribution, p.p.	Inflation rate by group, %	Contribution, p.p.	Inflation rate by group, %	Contribution, p.p.
<b>Foods</b>	2.3	0.51	3.3	0.78	4.8	1.12
Processed foods	3.9	0.51	4.9	0.76	6.6	0.99
Unprocessed foods	-0.1	-0.01	0.3	0.02	1.5	0.13
<b>Services</b>	-1.4	-0.42	-0.1	-0.03	1.5	0.46
Catering services	1.9	0.23	3.0	0.15	3.4	0.19
Transport services	-2.2	-0.10	3.6	0.13	5.0	0.19
Telecommunication services	-0.8	-0.03	-1.3	-0.06	-1.7	-0.08
Other services	-5.4	-0.52	-2.0	-0.25	2.3	0.15
<b>Energy products</b>	13.7	1.27	6.1	0.44	10.8	0.91
Transport fuels	15.1	1.26	6.3	0.44	11.1	0.77
<b>Industrial goods</b>	-0.8	-0.15	-0.2	-0.05	-0.5	-0.09
<b>Goods and services with administratively controlled prices</b>	3.7	0.56	3.7	0.57	4.3	0.66
<b>Tobacco products</b>	33.9	1.33	-0.3	-0.02	-0.3	-0.02

Sources: NSI, BNB.

## Rate of Change of Food Price Index

(% on corresponding month of previous year)



Sources: NSI, BNB.

Since the beginning of the second half of 2011 overall food inflation started to moderate reaching 4.8 per cent in October, with processed and unprocessed food inflation falling to 6.6. per cent and 1.5 per cent respectively. There are several key factors behind this trend. On the one hand, the stabilisation of international prices contributed to the stabilisation of food prices in Bulgaria. A base effect triggered by the marked increase in prices over the same period of the prior year and the fall in fruit and vegetable prices in 2011 also contributed to the decline in overall food inflation. We expect that this trend will remain sustained over the next two quarters.

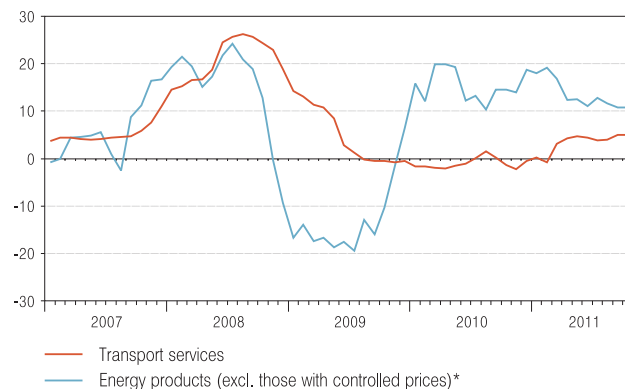
## Energy Product Prices

Since the beginning of the year transport fuel prices reported relatively high inflation rates.<sup>4</sup> In the first quarter the annual rate of change of fuel prices accelerated to 19.2 per cent on average and in the second and third quarters it moderated to 12.5 per cent and 12.1 per cent respectively. As of October inflation in this group decreased to 11.1 per cent. Transport fuels contribution to overall inflation came to 0.8 percentage points and that of energy products (including fuels for household consumption) reached 0.9 percentage points in October.

<sup>4</sup> Transport fuels have the largest relative share in the group of energy products; hence, their price developments determine the overall prices of energy products.

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

(% on corresponding month of previous year)



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

Sources: NSI, BNB.

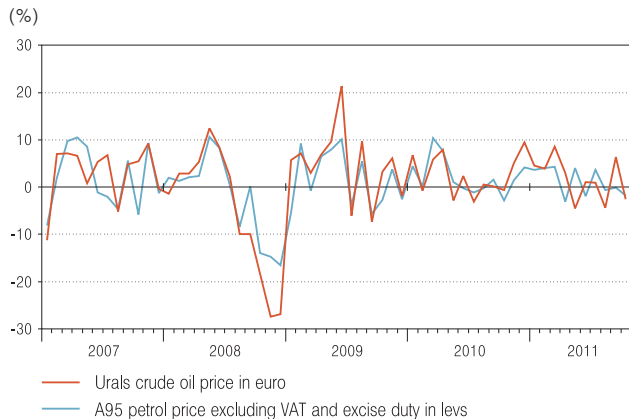
The strong rebound in oil prices in early 2011 and its comparatively rapid pass-through in end-use fuel prices through production costs remained the key factors behind the increased transport fuel prices in Bulgaria.<sup>5</sup> Between April and May fuel prices exhibited a more divergent dynamics compared to petrol prices (taking also into account the appreciation of the euro against the US dollar). This may be explained by the agreement achieved between the government and LUKOIL Bulgaria on freezing retail fuel prices. Between July and October fuel prices remained relatively stable, which may be explained with the stabilisation in petrol prices in euro.

If assumed that the current stabilisation trend in the price of petrol will remain sustained in the next two quarters, a further deceleration of annual inflation in transport fuels may be expected.<sup>6</sup>

<sup>5</sup> Between December 2010 and October 2011 price declines were observed only in propane-butane.

<sup>6</sup> The increase in excise duties on diesel from BGN 615 to BGN 630 per tonne projected for 2012 is expected to have an insignificant effect on fuel price inflation.

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



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

### Administratively Controlled Prices and Tobacco Product Prices

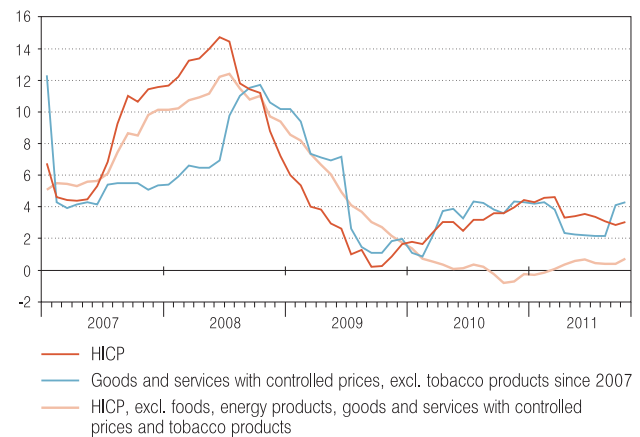
In the first quarter of 2011 inflation in administratively controlled prices remained stable at around 4 per cent, close to its end-2010 level. Between April and August it fell to 2.2 per cent mainly as a result of the base effect from higher fees for issuing identity documents imposed in 2010. In September inflation in this group accelerated to 4.1 per cent broadly reflecting higher hospital services and higher GP fees (changes in the latter related directly to changes in the minimum wage). As of October annual inflation in administratively controlled prices came to 4.3 per cent with a 0.7 percentage point contribution to overall inflation.

The main adjustments in administratively controlled prices (apart from the higher hospital services and higher GP fees) included also an increase in electricity for households and urban public transport of 2.1 per cent and 7.6 per cent respectively.

In the fourth quarter of 2011 administered price inflation is expected to remain close to its current levels. The projection reflects the decision taken by the State Energy and Water Regulatory Commission to increase the price of natural gas and the related rise in the prices of heating and central gas supply. So far, increases in administratively controlled prices have not been announced for the first quarter of 2012 excluding those in passenger railway transport. As a result, we expect inflation in administratively controlled prices to decline over this period.

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

(% on corresponding month of previous year)



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

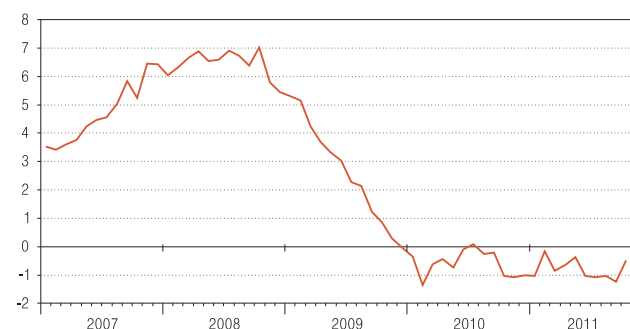
Tobacco product prices reported an annual increase of 29.8 per cent in the first quarter of 2011 contributing 1.2 percentage points to inflation as a result of the higher excise duties introduced in 2010. In line with our expectations, this group of goods contributed most to the decline in overall inflation in the second quarter due to the base effect of the increase in prices in 2010 and the unchanged excise duties in 2011. As of October tobacco products contributed -0.02 percentage points to annual inflation.

### Non-energy Industrial Goods Prices

In the first nine months of 2011 the index of the prices of non-energy industrial goods retained a negative year-on-year rate of change (-0.5 per cent as of October, contributing -0.1 percentage point to overall inflation).

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

(% on corresponding month of previous year)



Sources: NSI, BNB.



The overall decline in industrial goods prices was driven mainly by the decrease in durables prices. Between January and October 2011 car prices, that started to fall in 2009, retained their high negative contribution. Other groups of durable goods with a relatively high negative contribution to overall consumer price inflation were personal computers, furniture and televisions.

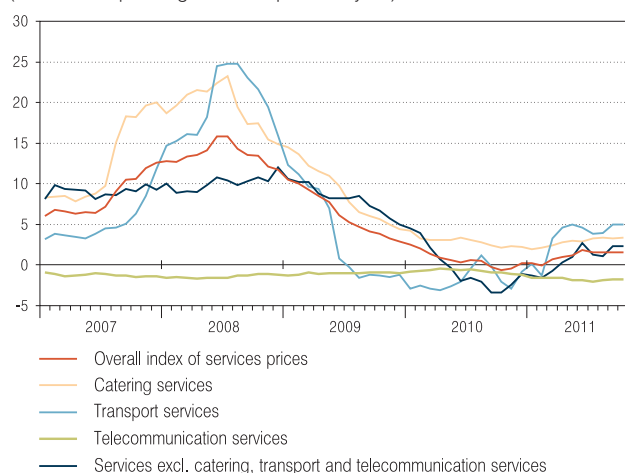
Inflation developments observed in most of the other non-food goods varied and this can be accounted for by the specific market characteristics. However, in general, slight upward price dynamics was observed in most groups. Our expectations for a low positive inflation in non-food goods so far have not materialised. This may be explained by the low consumer demand especially with regard to household appliances and computer equipment as suggested by the recent data on retail trade. In the next two quarters industrial goods' price developments will depend on the recovery in domestic demand.

### Services Prices

Since early 2011 annual inflation in services (excluding administratively controlled prices) followed a trend toward a gradual increase reaching 1.8 per cent in June, from 0.2 per cent in January. In the third and the beginning of the fourth quarter of 2011 inflation in this group stabilised at 1.5 per cent (contributing 0.5 per cent to overall consumer price inflation).

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

(% on corresponding month of previous year)



Sources: NSI, BNB.

The reported increase in overall inflation in services was underpinned by the more sizeable change in the annual rate of change in the prices of two types of services: transport and accommodation services. Higher inflation in transport services was reported in both automobile and air transport. As of October the annual rate of increase in automobile and air transport prices reached 4.7 per cent and 8.2 per cent respectively compared to 0.4 per cent and 0.4 per cent in January. This reflected mainly the impact of higher fuel prices on end-use transport services prices. Accommodation services inflation has shown an apparent upward trend, reaching 3.6 per cent in October from -8.4 per cent in January.

The catering price index also trended upwards since the start of 2011, although in a less clearly pronounced manner than in transport and accommodation services prices. These developments can be attributed to the inflationary pressure stemming from the increase in food prices over the last year. However, the contribution of catering services prices to overall annual inflation started to decline since the beginning of 2011 due to the relatively lower weight of this group in the consumer basket over 2010.<sup>7</sup>

Since the start of 2011 inflation in most other services remained low tending slightly upwards. These developments show that currently the impact of possible second-round effects of the increase in the prices of raw materials and intermediate inputs on end-use prices of these services is limited. The low inflation in some services is likely to reflect the slow recovery in consumer demand.

In the last quarter of 2011 and in the first quarter of 2012 service price inflation is projected to continue to rise gradually. Firms' pricing policy in the services sector is expected to reflect the ongoing gradual recovery in consumer demand in the coming months.

<sup>7</sup> See Economic Review, 1/2011, Chapter 4.