

# Economic Review

1/2011



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

The *Economic Review, issue 1/2011* was presented to the BNB Governing Council at its 12 May 2011 meeting. It employs statistical data published up to 9 May 2011.

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
MFI	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 first quarter of 2011 global economic activity continued to recover at a moderate pace. The natural disaster in Japan which disrupted production capacities in the eastern part of the country increased the risk to global economic recovery in mid-March and this immediately affected economic agents' expectations. Leading global indicators of production, employment and new orders deteriorated. Greater uncertainty is expected to mitigate global growth in the second and third quarters of 2011. The continuous increase in energy product prices is another factor behind upside risks to global economy growth slowdown. The upsurge in food and energy product prices in international markets pushed up global inflation which reached 4.2 per cent on an annual basis. Inflation has accelerated in both developing and developed countries unlike inflation developments in 2010 which were more pronounced in developing and only in some developed countries.

Over the last quarter of 2010 real GDP growth accelerated on the previous quarter, domestic demand contributing most to this: on a chain basis, investment in fixed assets increased by 3.6 per cent and consumption by 0.7 per cent in real terms. Recovery was uneven across economic sectors. In industry, the sector affected by the global crisis back in 2008 due to the contraction in global trade, firms' policy to limit real production costs boosted efficiency which led to acceleration of real value added growth amid external demand recovery in 2010.

In early 2011 business climate and consumer confidence indicators retained their upward trend which gives grounds to expect that the economy will continue its gradual recovery in the second and third quarters, having a major contribution to domestic demand growth.

The balance of payments current account balance continued to improve between January and February 2011. Preliminary data show that the cumulative balance of the current and capital account for the first two months of 2011 was positive at EUR 313.5 million. The current account is expected to show an insignificant deficit of 0.1–0.3 per cent of GDP reflecting our expectations of a recovery in domestic demand and imports. The sustainability of Bulgaria's external position was retained largely based on the structure of capital inflows, mainly in the form of foreign direct investment and external intercompany loans.

Between January and February 2011 euro-denominated exports rose nominally by 58.9 per cent on the same period of 2010. Imports also reported a positive growth rate (36.3 per cent). Exports and imports are expected to grow in the second and third quarters of 2011.

By March broad money growth accelerated to 7.4 per cent on an annual basis *vis-à-vis* 6.4 per cent in December 2010. In the second and third quarters of 2011 the annual growth of broad money is expected to moderately increase to levels slightly above the current levels. Deposits with an agreed maturity of up to two years rose by 8.4 per cent on an annual basis, with household deposits contributing most significantly to this growth (8.1 percentage points). Reserves maintained by banks with the BNB reflect deposit base growth (14.3 per cent on an annual basis). Bank deposits with the BNB are expected to rise at a rate close to the current levels, following a downward trend.

The gradual recovery in economic activity and banks' cautious lending policy continued to add to low lending growth rates. The growth rate of claims on the non-government sector stayed at low levels reaching by end-March 1.9 per cent on an annual basis. Banks' credit standards are expected to be broadly eased, and claims on the non-government sector to gradually increase in the following two quarters of 2011. Interest rates on corporate and consumer loans have exhibited a slight decrease

since early year. Over the projection horizon, lending interest rates are expected to undergo no significant changes.

Final quarterly data for 2010 show that the cash balance on the consolidated fiscal programme ended in a deficit of BGN 2780.8 million (3.9 per cent of GDP). On an accrual basis (under ESA'95 methodology), the deficit came to BGN 2269.2 million (3.2 per cent of GDP). Government expenditure consolidation and retained low levels of the government debt *vis-à-vis* most EU countries led to decreases in interest rates on new domestic government securities issues in almost all segments of the maturity curve, contributing to the strengthening of confidence in the Bulgarian economy.

In the first quarter of 2011 the main factors behind inflation were the increase in international commodity and food prices and their relatively rapid transfer to final fuel and food prices through production costs. In March annual inflation accounted for 4.6 per cent (4.4 per cent in December 2010). We expect lower annual inflation in the second and third quarters of 2011 mainly as a result of the drop in tobacco product prices reflecting the unchanged excise duties in 2011. Major risks and the relevant uncertainty around the inflation forecast will continue to reflect external factors related to the international commodity market developments.

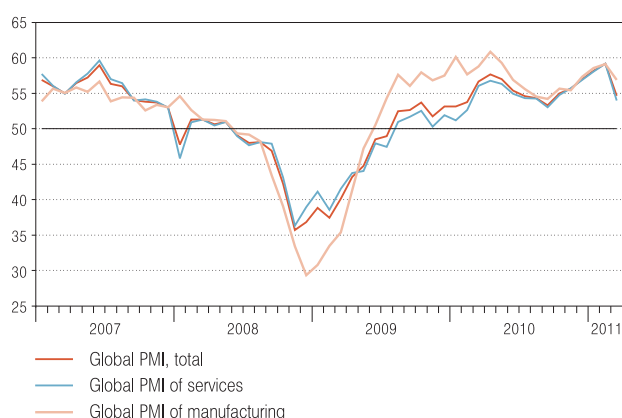
# 1. External Environment

In the first quarter of 2011 the process of global economic recovery continued at a moderate pace. The devastating consequences of the earthquake that hit Japan on 11 March 2011 dampened output. This might adversely affect the global economy and lower its growth in the second quarter of 2011. The increase in international fuel and food prices had a strong effect on the euro area Harmonized Index of Consumer Prices and in April inflation went up to 2.8 per cent on an annual basis. In response to accelerating inflation the Governing Council of the ECB at its meeting in April decided to increase the rate on the main refinancing operations by 25 basis points.

## Current Business Situation

In March 2011 global economic indicators decreased, but remained at a level pointing to a continuous solid expansion in economic activity. The natural disaster in Japan disrupted production capacities in the eastern part of the country, increased the risk to global economic recovery and this immediately affected expectations and leading output indicators for production, employment and new orders deteriorated. The continuous increase in the prices of energy products is another factor behind the upside risks to global economy growth. Greater uncertainty is expected to result in moderate global growth in the second and third quarters of 2011.

### Global PMI



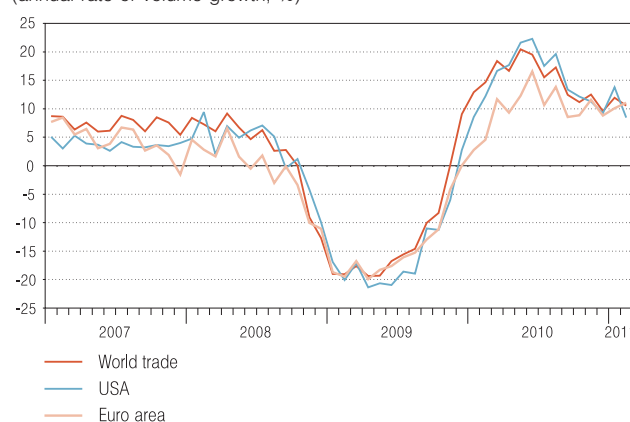
Source: JP Morgan.

Growth in the volume of world trade moderated to 10.6 per cent in February 2011. World industrial output remained stable and by February saw an increase of 7.4 per cent on an annual basis<sup>1</sup>.

<sup>1</sup> Based on the World Bank data by 27 April 2011.

### World Trade

(annual rate of volume growth, %)



Source: CPB Netherlands Bureau for Economic Policy Analysis.

The upsurge in food and energy product prices in international markets enhanced global inflation which reached 4.2 per cent on an annual basis<sup>2</sup>. Inflation in all countries – developing and developed – has accelerated unlike inflation developments in 2010 which were more pronounced in developing and only in some developed countries.

### Euro area

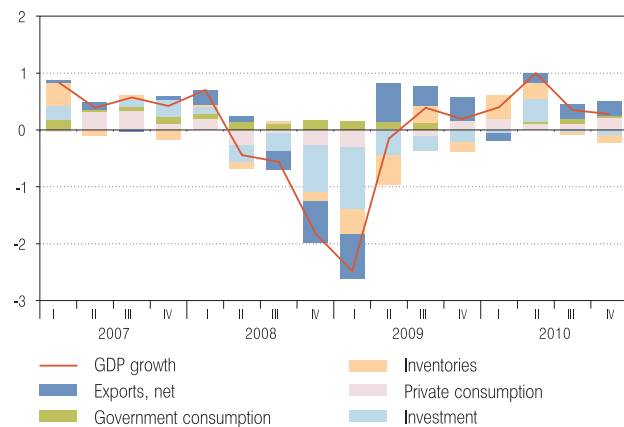
In the fourth quarter of 2010 euro area real GDP grew by 2.0 per cent on an annual basis against 1.9 per cent in the previous quarter. The quarterly GDP growth accounted for 0.3 per cent, keeping the same rate as in the third quarter. Final consumption of households (0.2 percentage points) and net exports (0.3 percentage points) contributed most significantly to quarterly GDP growth.

<sup>2</sup> Based on the IMF data by 27 April 2011.



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

(%, percentage points)

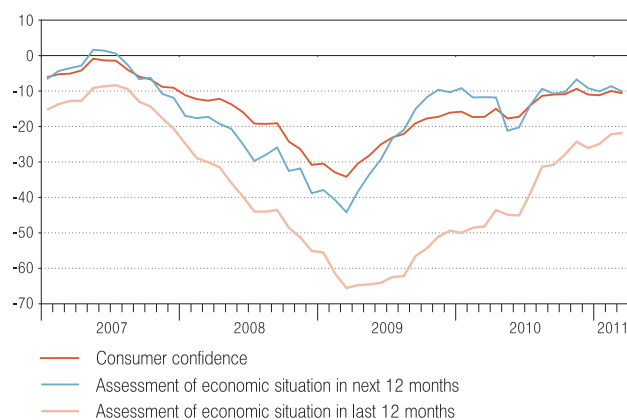


Source: Eurostat.

In the first quarter of 2011 average leading euro area indicators increased as compared to the fourth quarter of 2010. In the middle of the period under review these were higher than in March and April when a slight decrease was recorded. Leading indicator dynamics supported the expectations that economic growth in early 2011 will be close to that reported in the fourth quarter of 2010.

The EC euro area economic sentiment index reached 107.9 in February and started to decline thereafter to 107.3 and 106.2 in March and April respectively, while the business climate indicator fell to 1.28 in April against 1.41 in March and 1.46 in February. However, the average values of both indicators remained higher than the long-term average which means that economic activity is expected to boost in the following months.

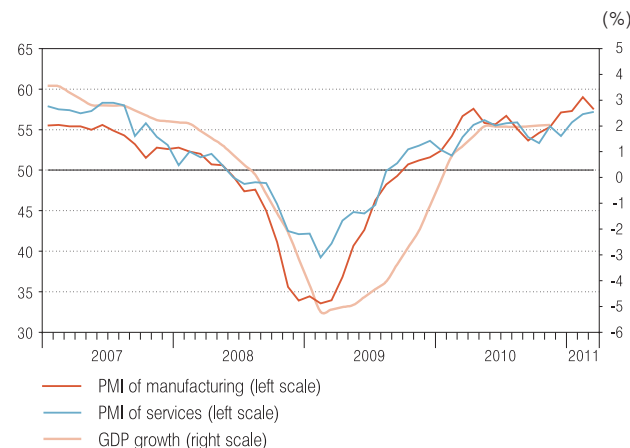
### Euro Area Consumer Confidence Indices



Source: EU Commission

The EC consumer confidence index for the euro area also declined in April to -11.4 (against -10.6 in March and -10 in February). Its average value remained almost unchanged compared with the fourth quarter of 2010.

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



Source: EU Commission

During the first quarter of 2011 the euro area PMI remained above the level of 50, indicating that the economy continued to grow. According to preliminary data, the overall index fell to 57.8, after reaching its four-and-a-half year high of 58.2 in February. In April industrial production and services sub-indices were 57.7 and 56.9 respectively compared with 57.5 and 57.2 in the previous review period.

The European Commission and the ECB revised upwards their euro area growth outlook. In its February 2011 projections the European Commission points to an increase in the euro area real GDP growth of 1.6 per cent: up 0.1 percentage points compared with November 2010 projections. On a quarterly basis real GDP growth is projected to reach 0.3 per cent and 0.4 per cent in the second and third quarters of 2011 respectively. According to the ECB staff projections of March 2011, annual real GDP growth is projected to range between 1.3 per cent and 2.1 per cent in 2011 and between 0.8 per cent and 2.8 per cent in 2012. Compared with December 2010 the projections for real GDP growth in 2011 and 2012 have been revised and the projection ranges have been narrowed. The lower ends of the projection ranges for 2011 and 2012 were revised upwards by 0.6 percentage points and 0.2 percentage points respectively, while the

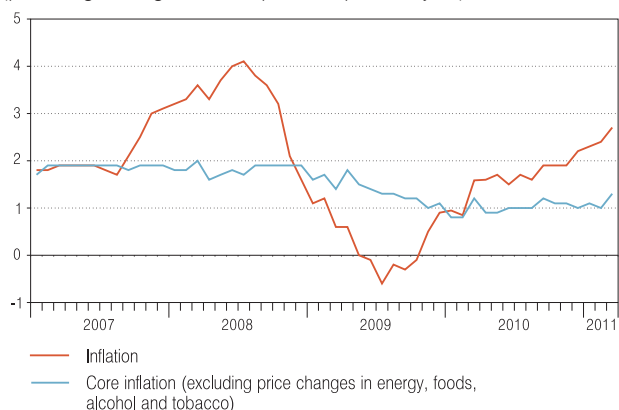
upper ends remained unchanged. The latest IMF projections of April 2011 point to euro area real GDP growth of 1.6 per cent on an annual basis for 2011 and 1.8 per cent growth for 2012.

In March 2011 euro area inflation went up to 2.7 per cent on an annual basis from 2.4 per cent in February 2011. On a monthly basis, inflation came to 0.2 per cent in March. The higher inflation rate was a result of accelerated price rise in energy products which was 13 per cent on an annual basis in March compared with 13.1 per cent in February 2011. The food component posted an increase of 2 per cent in February and March.

Euro area core inflation also accelerated, reaching 1.3 per cent on an annual basis in March compared with 1 per cent in February.

### Euro Area Inflation Rate

(percentage change on same period of previous year)

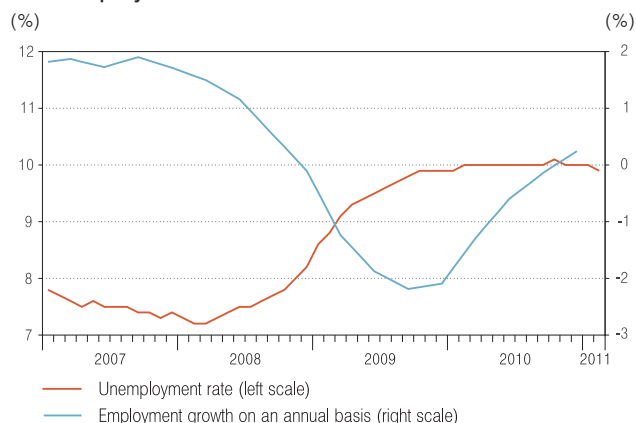


Source: Eurostat.

The European Commission revised upwards its euro area inflation projections for 2011 to 2.2 per cent (up 0.4 percentage points compared with the November 2010 projections). According to ECB projections of March 2011 the increase in euro area HICP will move between 2 per cent and 2.6 per cent in 2011 and between 1 per cent and 2.4 per cent in 2012 which is an upward shift compared to the autumn projections.

The latest Eurostat data on euro area unemployment in February 2011 show that it has fell to 9.9 per cent from 10 per cent in January. The indicator of the expected unemployment during the following twelve months included in the EC consumer confidence index for the euro area declined from 20.2 to 19 in March.

### Euro Area Unemployment Rate and Employment Growth

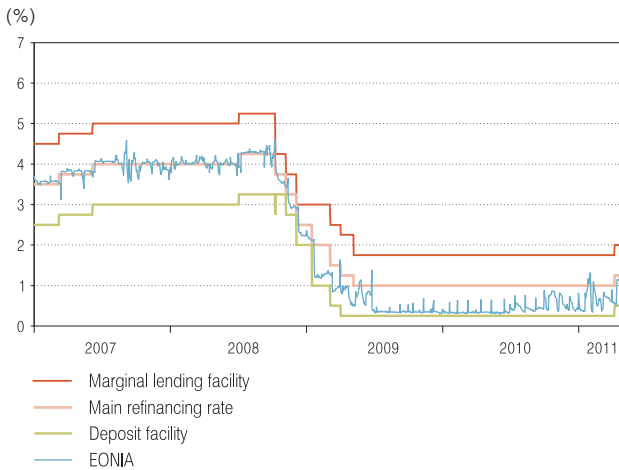


Source: Eurostat.

In the fourth quarter of 2010 the trend towards improving cost competitiveness was sustained. Compensation per employee picked up by 1.6 per cent on an annual basis (1.5 per cent in the previous period) and labour productivity by 1.8 per cent (2.1 per cent earlier). As a result of these developments unit labour costs decreased in the fourth quarter of 2010 by 0.2 per cent on an annual basis (0.6 per cent in the previous quarter).

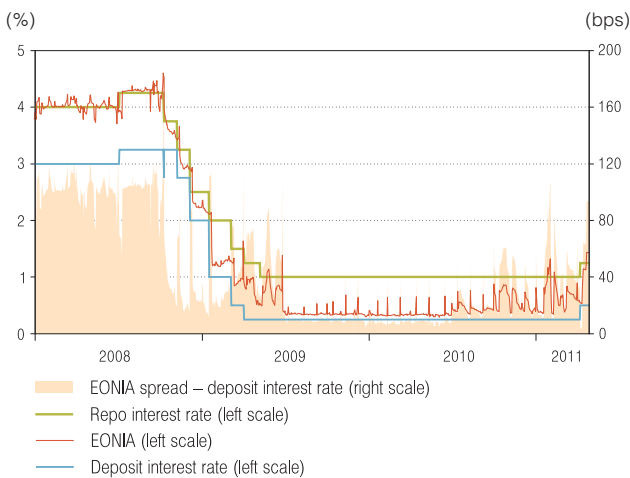
In April the Governing Council of the ECB decided to raise the interest rate on the main refinancing operations of the Eurosystem by 25 basis points up to 1.25 per cent, with effect from 13 April 2011. Moreover, the interest rates on the deposit facility and on the marginal lending facility were increased by 25 basis points to 0.50 per cent and 2 per cent respectively. This was the first change in ECB's interest rates since 13 May 2009 and the first increase since July 2008. ECB was the first of the four primary banks in the world to enter a new cycle of interest rate increases. The decision was made in the light of upside risks to price stability against the backdrop of sizeable liquidity in the economy, while risks to real growth remained balanced.

## ECB Interest Rates



Source: Bloomberg.

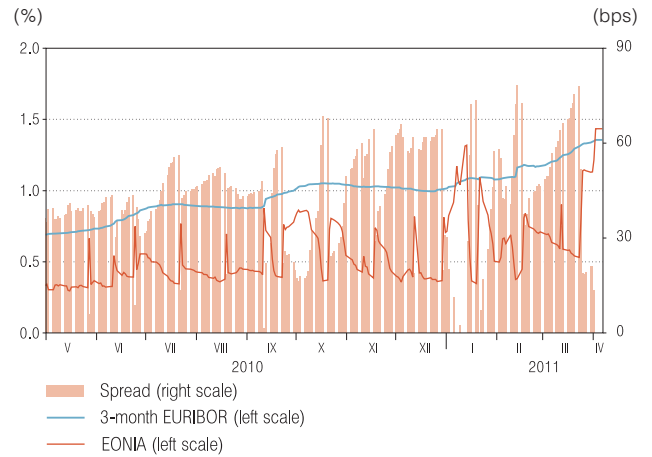
## Short-term Interest Rates



Source: Bloomberg.

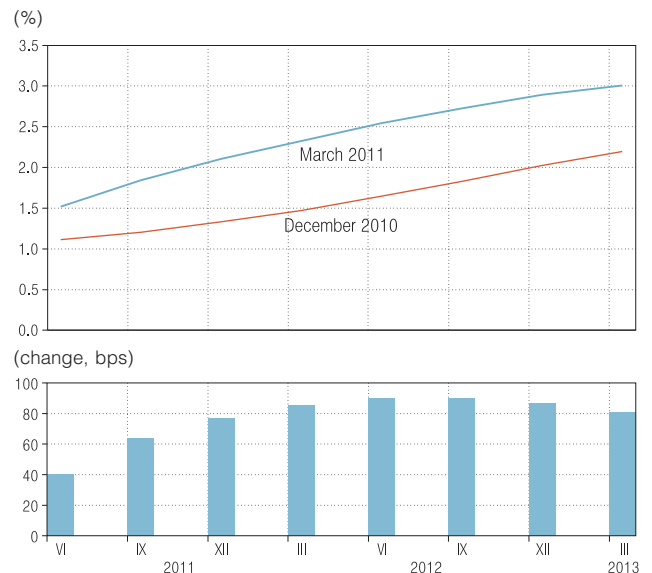
In March the ECB decided to continue to implement its policy of full allotment in the main and one-month long-term refinancing operations as long as needed, but at least until 12 July 2011. By the end of June 2011 three longer-term refinancing operations with a maturity of three months will be carried out on 27 April, 25 May and 29 June 2011 respectively. The average interest rate on the main refinancing operations for the review period will be applied to these operations. The size of the purchases under the Securities Markets Programme totalled EUR 77 billion by end-March compared with EUR 73.7 billion at the close of 2010.

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



Source: Bloomberg.

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



Source: Bloomberg.

According to market expectations, the interest rate on the main refinancing operations of the ECB will reach 1.75 per cent by the year-end after possible increases in September and December 2011.

## Instruments of Financial Support and Closer Coordination of the Economic Policy of the European Union *The European Stability Mechanism and Euro Plus Pact*

The Treaty on the Functioning of the European Union establishes general rules of implementation and coordination of national economic policies requiring from each Member State to conduct their economic policies with a view to contributing to the achievement of the objectives of the Union (Article 120 of the Treaty). The Treaty includes a mechanism for coordination of and monitoring over national fiscal policies. Detailed functioning of the mechanism is further developed in the Stability and Growth Pact. The ultimate objective of these rules is to enhance the sustainability of the EU economic growth and to protect the functioning of the single currency although it is still not a national currency of all Member States. In 2005 the Stability and Growth Pact was revised, which with hindsight, resulted in an ease of the fiscal discipline in some Member States: these states maintained a deficit on their consolidated state budgets even in the years of relatively high economic growth. Budget deficits resulted in accumulation of government debt which increased the vulnerability of the states in the context of significant tension and volatility of financial markets. The global economic crisis in the 2007–2009 period sharpened the fiscal problems in individual Member States due to a decline in tax income, an increase in costs and implementation of packages of measures in support of their financial systems. The crisis in international financial markets quickly transformed into public finance crisis. These countries started to experience serious difficulties in financing rapidly growing budget deficits and costs related to government debt service.

Within the EU, a mechanism was established to support non-euro area countries experiencing difficulties in financing their balance of payments. In May 2009 the maximum amount of funds under this mechanism was extended to EUR 50 billion. Funds under this mechanism were allocated for Latvia, Romania and Hungary. However, there was no support mechanism developed in the euro area countries, in some of which fiscal problems deepened in 2010 and threatened financial stability of the whole EU. This required prompt rescue measures for particular euro area countries with critical public finances. On 2 May 2010 euro area countries agreed together with the IMF to launch a three-year financial programme in support of Greece. The package of financial measures includes EUR 80 billion under bilateral agreements between Greece and other euro area countries (excluding Slovakia) and EUR 30 billion from the IMF. Disbursement of funds depends on compliance with particular criteria for adjustment of budget deficit and for structural reforms. However, these measures were insufficient to ease the financial market tension.

On 9 May the Member States agreed on the establishment of two financial instruments to be used for providing financial support to EU countries experiencing serious financial problems. First, the Council of EU Economics and Finance Ministers (ECOFIN) adopted Regulation on the Establishment of **European Financial Stabilisation Mechanism (EFSM)** which enables the European Commission to raise EUR 60 billion on behalf of EU for providing financial support to EU Member States experiencing or threatened by serious financial difficulties caused by factors beyond their control. This mechanism supplemented the existing mechanism for medium-term balance of payments support of non-euro area EU Member States. Second, based on intergovernmental agreements the euro area Member States established the **European Financial Stability Facility (EFSF)** which is a limited liability company authorized by the euro area Member States to issue debt securities of up to EUR 440 billion on a proportional principle with a view to providing loans to euro area countries. The EFSF is registered in Luxembourg for a term of up to 3 years.

Loans under both financial support instruments will be extended upon fulfilment of stringent criteria and together with funds provided by the IMF which are expected to comprise at least 50 per cent of the loans from the EU/ euro area under each financial support programme. On 28 November 2010 the amount of financial assistance for Ireland was specified (totalling EUR 85 billion) in support of its economic stabilisation programme which has been implemented with funds from both the European instruments (EFSM and EFSF), the IMF and possibly under bilateral agreements with EU Member States. Portugal will be extended financial assistance in the amount of EUR 78 billion under the same scheme.

On 16 and 17 December 2010 the EU Council principally approved the establishment of a permanent **European Stability Mechanism (ESM)**, reaching an agreement on a draft decision amending the Treaty. In accordance with this text the following paragraph shall be added to Article 136 of the Treaty: “The Member States whose currency is the euro may establish a stability mechanism to be activated if indispensable to safeguard the stability of the euro area as a whole. The granting of any required financial assistance under the mechanism will be made subject to strict conditionality.”

### The permanent European Stability Mechanism

On 24–25 March 2011 the Council of EU reached an agreement on the principles of the future permanent European Stability Mechanism (ESM) in the euro area.

After June 2013 it will replace the other two instruments – the European Financial Stabilisation Mechanism and the European Financial Stability Facility. The European Stability Mechanism will be established by an agreement between the euro area Member States as an intergovernmental organisation in accordance with the international public law and its head office will be in Luxembourg. The assistance from the European Stability Mechanism will be provided in the form of loans, but as an exception, the ESM will be authorised to purchase bonds in the primary market issued by the respective Member State.

The European Stability Mechanism's subscribed capital will total EUR 700 billion. Of this, the paid-up capital provided by the euro area Member States will amount to EUR 80 billion being phased in from July 2013 in five equal annual installments. Ratifying the agreement on establishing the European Stability Mechanism, the Member States shall be legally obliged to participate with a contribution in the common subscribed capital.

The role of the private sector is the major difference between the European Stability Mechanism and former mechanisms for providing support to EU Member States. If a country's public debt remained unstable after the rehabilitation programmes applied under the European Stability Mechanism, the private sector is expected to intervene, *i. e.* to assume part of the debt burden.

The legal form which will facilitate private sector involvement will be the so-called collective action clauses. As of July 2013 such clauses will be included for all newly issued government securities in the euro area with maturity of over one year intended to reach an agreement between the government and its private creditors. The main features of the collective action clauses will correspond to those commonly used in the US and UK markets.

With the accession to the euro area each country becomes a member in the European Stability Mechanism with all ensuing rights and responsibilities (including the contributions in the capital). The Member States with GDP *per capita* less than 75 per cent of the average GDP for the EU shall be allowed a temporary adjustment after the accession to the euro area. In principle, the contribution key in the European Stability Mechanism is analogous to the ECB contribution key. The temporary adjustment for states with lower GDP will be a decrease in their share in the European Stability Mechanism by three-fourth of the difference between the share of the state in the ECB capital and its share in the Gross National Income (GNI), *i. e.*:

$$share_{ESM} = share_{ECB's\ key} - 0.75.(share_{ECB's\ key} - share_{GNI}).$$

Formally, the accession of a non-euro area Member State to the Euro Plus Pact has no direct bearing on the participation in the ESM. However, the permanent stability mechanism becomes an integral institutional characteristic of the euro area, and for all newly acceded Member States to the EU (including Bulgaria) the membership in the euro area is a responsibility ensuing from treaties on accession.

At this stage, the direct effect for Bulgaria is limited to a financial burden from the participation in the ESM. It may be reviewed with regard to the paid-up or required capital (*i. e.* the total paid-up capital of EUR 80 billion or the subscribed capital of EUR 700 billion). Initially, Bulgaria's burden will be reduced by the adjustment mentioned above. Correspondingly, the reduction will be phased out after an increase in the GDP, or in accordance with the rules, at least 12 years after the accession to the euro area (irrespective of the amount of GDP). Precisely computed Bulgaria's burden will depend on the redistribution of existing compensations for countries with lower GDP among other euro area members, *i. e.* it should correspond both to the number of euro area Member States and GDP *per capita* in each individual country. Although this is a dynamic result, estimates suggest that Bulgaria's contribution to the ESM may appear to be the highest among other EU economies as a share of national GDP.

The ESM will become effective after the Treaty has been amended which requires an approval by all 27 Member States and ratification by the National Assembly of the Republic of Bulgaria.

The support for the amendment to the Treaty would be a political act through which Bulgaria will confirm its will to achieve sustainable growth preserving financial stability and deepening the financial integration in the EU after the future euro area expansion. To this end, there are reasons to expect that Bulgaria's efforts in fulfilling the commitment for acceding the euro area (and the membership in the ERM II) as provided for by the Treaty will be taken into account by the EU institutions and euro area Member States.

### The Euro Plus Pact

However, the establishment of a permanent European Stability Mechanism does not resolve the problems associated with the drawbacks in the EU economic governance. On 11 March 2011 in Brussels the leaders of the euro area Member States approved the Pact for the Euro, an agreement aimed at stronger economic policy coordination, fostering competitiveness and convergence of euro area economies. The document was based on the plan proposed by Germany and France known as the Competitiveness Pact where the proposals of the other euro area countries were also reflected. Subsequently, on 24–25 March the Pact for the Euro was presented to

the European Council and non-euro area Member States were invited to participate on a voluntary basis. Bulgaria, Denmark, Latvia, Lithuania, Poland and Romania joined the Pact and it was called the Euro Plus Pact. The UK, Hungary, the Czech Republic and Sweden did not join the Pact.

By the end of March at the same meeting the European Council approved the characteristics of the future stability mechanism intended to provide financial assistance to euro area Member States – the European Stability Mechanism.

The Euro Plus Pact is aimed at supplementing the existing instruments for economic governance and coordination of economic policies in the EU (Europe 2020 Strategy, the European semester, the Integrated Guidelines, Stability and Growth Pact and the new surveillance framework). The specific commitments of each country will be included in national reform, stability and convergence programs.

The Pact specifies the following four objectives and the Member States commit to undertake particular measures to pursue these objectives: fostering competitiveness and employment, supporting public finance sustainability and reinforcing financial stability.

The choice of specific policy actions necessary to achieve the common objectives remains the responsibility of any individual Member State but the Euro Plus Pact highlights some possible measures. Some of these measures became a subject of discussion in Bulgaria. The effects of Bulgaria's accession to the Pact were commented in several aspects:

- the ability to preserve the flexibility in implementing economic, financial and stabilisation policies consistent with the national goals;
- taking into account the process of catching up the average European indicators in countries like Bulgaria without halting economic growth;
- retaining Bulgaria's competitive advantages in terms of tax environment.

One of the issues of future implementation of the Pact is the extent to which the commitment of prior consultation with other Member States before the launch of a significant economic reform will also include all pending reforms in the field of Bulgarian tax or pension policies. In terms of public finance sustainability the Pact provides also for translating into national legislation by participating states the fiscal rules laid down in the Stability and Growth Pact leaving them room to choose specific national fiscal rules. However, the control mechanism laid down by the European Commission, which may be consulted on the precise fiscal rule before its adoption, should also be taken into account.

As regards financial stability the Euro Plus Pact provides for a commitment to put in place national legislation for banking resolution in full respect of the Community *acquis*. At the European level, the specific framework has been still discussed; therefore, Bulgaria will make efforts for the future provisions to comply with the specificity of the national banking system and the specificity of the currency board arrangements.

Some of the challenges related to Bulgaria's participation in the Pact include the following indicators and criteria:

- unit labour costs and their change;
- the need of comparison of trends in Bulgaria with those in other euro area countries and the major comparable trading partners;
- the level of banks' private debt, households and non-financial enterprises;
- the proposal for national commitments to be assessed by comparing them with the best practices within the EU (without criteria details).

The above indicators and criteria are still subject to discussions in the EU institutions and forums in which Bulgaria is a participant. Consensus has to be reached on the limits of haircut and their differentiation for the countries under convergence or between euro area and non-euro area countries. The convergence may lead to a deviation of particular indicators from the average values in the euro area advanced economies. To achieve sustainable long-term economic growth Bulgaria will rely on foreign and domestic investments which, as seen in recent years, may worsen the current account balance, the net investment position, the growth rate of lending or private debt without threatening overall macroeconomic stability in Bulgaria.

The Euro Plus Pact provides also for coordination of debt policies explicitly highlighting that direct taxation remains a national competence. This means that the existing tax rates in individual countries will be sustained. Concurrently, the Pact calls for development of a common corporate tax base and the respective draft directive has been already prepared by the EC. If in countries like Bulgaria, due to a possible sizable rise in costs which are recognised for tax purposes, the unification of the corporate tax base in the EU exerts pressure on budget revenue, the retention of low tax rates will be difficult. Moreover, Bulgaria is interested in preserving unchanged its tax regime

which is attractive for foreign investors, the computation of the tax base is simplified and exceptions for various corporations unified.

With regard to Bulgaria's accession to the Euro Plus Pact the BNB consistently safeguarded its position shared by the government, that Bulgaria would pursue its strategic goals and priorities and will continue to support the opportunity for more flexible economic governance. The goals of the Pact fully comply with the principles of maintaining economic growth under the conditions of tight macroeconomic, fiscal and financial discipline followed for years in Bulgaria. Compliance with particular economic indicators and criteria should be governed primarily by the ongoing convergence and expected economic growth.

(The full text in Bulgarian of the Conclusions of the European Council of 24–25 March 2011, including the Euro Plus Pact and the new European Stability Mechanism can be found on the following address:

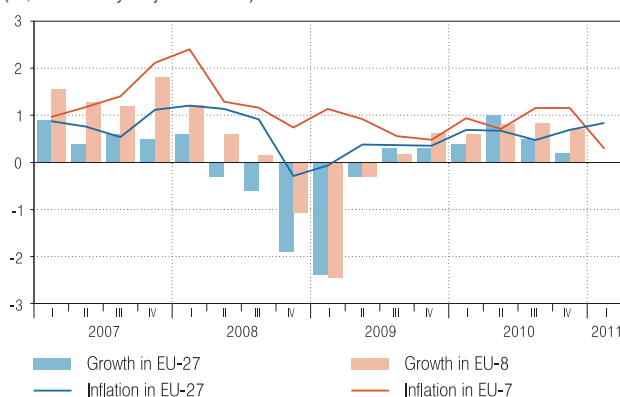
[http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/BG/ec/120301.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/BG/ec/120301.pdf))

## EC-8/EC-7<sup>3</sup>

During the fourth quarter of 2010 economic recovery continued in EU-8 countries. All countries reported economic growth and the total real GDP on quarterly basis went up by 0.7 per cent compared with 0.8 per cent in the previous quarter.

### Real GDP Growth Rate and Inflation in EU-27 and EU-8/EU-7 on a Quarterly Basis

(%; seasonally adjusted data)



Sources: Eurostat, own calculations.

For most EU countries exports remained a key factor behind growth. Gross capital formation growth by country pointed to divergent developments, but the group as a whole reported a decrease, reaching 0.1 per cent in the fourth quarter of 2010 from 1.1 per cent in the third quarter. Domestic consumption of EU-8 fell by 0.5 per cent (against 1.9 per cent in the previ-

<sup>3</sup> EU-8 includes Member States that have joined the EU since 2004, excluding those that are full-fledged members of the Economic and Monetary Union: Slovenia (since 1 January 2007), Malta and Cyprus (since 1 January 2008) and Slovakia (since 1 January 2009). EU-7 includes the same Member States, excluding Estonia which joined the euro area on 1 January 2011. EU-8/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.

### Real GDP Growth on a Quarterly Basis

(%; seasonally adjusted data)

	2009	2010			
	IV	I	II	III	IV
Estonia	1.0	1.1	2.1	1.1	2.3
Bulgaria	-0.2	-0.5	0.5	0.7	2.1
Lithuania	-1.1	1.4	1.0	0.3	1.8
Latvia	0.1	0.2	0.6	1.6	1.1
Poland	1.5	0.6	1.1	1.2	0.8
Czech Republic	0.4	0.7	0.7	0.9	0.3
Hungary	0.1	1.4	0.1	0.5	0.2
Romania	-1.4	-0.2	0.2	-0.7	0.1
EU-8	-0.5	0.6	0.8	0.8	0.7

Source: Eurostat.

### Real Export Growth on a Quarterly Basis

(%; seasonally adjusted data)

	2009	2010			
	IV	I	II	III	IV
Estonia	-2.2	6.7	8.2	10.3	7.4
Romania	0.5	7.6	3.4	0.2	5.8
Latvia	5.3	-0.3	1.8	8.0	3.8
Lithuania	4.5	1.6	9.9	4.2	3.3
Czech Republic	1.9	8.4	2.7	2.6	2.3
Hungary	4.1	4.6	2.3	2.3	2.0
Poland	3.8	3.7	3.9	-2.1	1.5
Bulgaria	2.9	1.7	3.9	8.9	0.8
EU-8	2.9	5.3	3.5	1.6	2.5

Sources: Eurostat, ECB.

ous period). Exports went up by 2.5 per cent on a quarterly basis (1.6 per cent earlier), while the rate of increase in imports moderated to 1.1 per cent (2.4 per cent in the third quarter of 2010).

In the first quarter of 2011 inflation in EU-7 countries measured by the average weighted HICP accelerated by 0.3 per cent on a quarterly basis compared to 1.2 per cent in the previous quarter. The main factors behind this were energy product and food price rises in international markets.

## Real GDP Growth and Inflation in the Balkan Countries

(%; non-seasonally adjusted data)

	2008	2009	2010					2011
	Total	Total	I	II	III	IV	Total	I
<b>Growth (on the corresponding period of previous year)</b>								
Bulgaria	6.2	-5.5	-4.8	1.0	0.3	3.1	0.2	
Greece	1.0	-2.0	-0.7	-5.0	-5.1	-6.6	-4.5	
Macedonia	4.8	-0.9	-1.7	0.2	1.6	2.3	0.7	
Romania	7.3	-7.1	-2.2	-0.4	-2.2	-0.6	-1.3	
Turkey	0.7	-4.8	12.0	10.3	5.2	9.2	8.9	
Croatia	2.4	-5.8	-2.5	-2.5	0.2	-0.6	-1.2	
Serbia	5.5	-3.1	-0.6	0.4	1.5	1.4	0.7	
<b>Inflation (average for the period)</b>								
Bulgaria	12.0	2.5	2.0	2.8	3.3	4.0	3.0	4.5
Greece	4.2	1.3	3.0	5.1	5.6	5.1	4.7	4.7
Macedonia	8.3	-0.8	0.5	1.1	1.8	2.9	1.6	4.1
Romania	7.9	5.6	4.6	4.3	7.5	7.8	6.1	7.5
Turkey	10.4	6.3	9.3	9.2	8.4	7.4	8.6	4.4
Croatia	5.8	2.2	1.1	0.8	1.0	1.4	1.1	2.2
Serbia	12.9	7.8	4.3	3.9	6.0	9.5	5.9	3.6

Sources: Statistical institutes and central banks of respective countries, Eurostat.

### The Balkan Region

In the fourth quarter of 2010 Balkan countries reported divergent GDP growth on an annual basis. In some countries it remained negative and in the others it saw hesitant improvement. One exception was Turkey where private consumption and investment continued to boost growth in the fourth quarter of 2010. In most countries exports continued growing at a robust pace. Domestic consumption decreased on an annual basis in all countries, apart from Bulgaria and Romania. Industrial production developments were divergent. In the first quarter of 2011 inflation in most countries continued to rise, driven by high international prices of food and energy products.

### United States

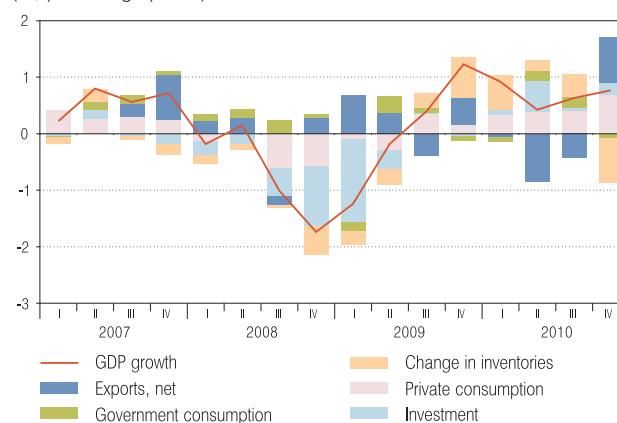
In the United States, real GDP growth came to 0.4 per cent in the first quarter of 2011 compared with 0.8 per cent in the previous quarter. The pace of economic activity moderated to 2.3 per cent on an annual basis (2.8 per cent in the previous period). Household consumption (1.91 percentage points), the increase in finished goods inventory (0.93 percentage points) and the growth in investment from the business sector (0.80 percentage points) contributed most to real GDP growth. The cut in government expenditure had a strongly negative contribution to

it (-1.09 percentage point). The negative contribution of net exports (-0.08 percentage point) to real GDP growth largely reflected the increase in oil prices in the first quarter of 2011.

In the review quarter consumer activity was underpinned by, on the one hand, the improved labour market situation and, on the other hand, by the tax reliefs laid down in the Barack Obama's fiscal programme which contributed to the rise in disposable income.

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

(%, percentage points)

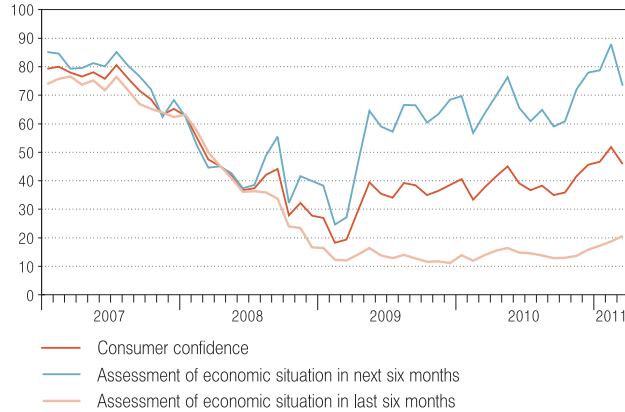


Source: Bureau of Economic Analysis.



## US Consumer Confidence Indices

(2000 = 100)

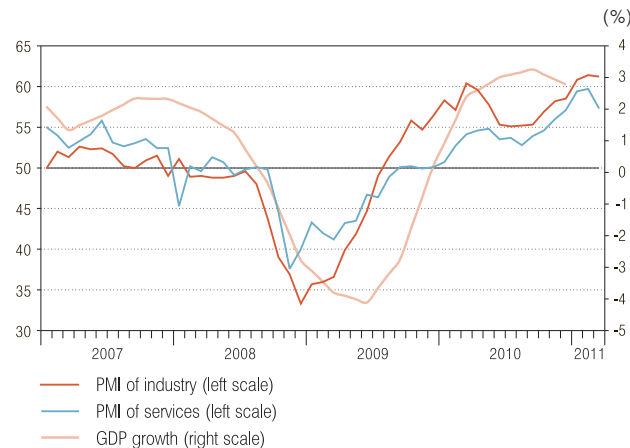


Source: The Conference Board.

Early 2011 saw improved consumer confidence, but the significant rise in fuel prices had a negative impact which was reflected in the decline in indices reported in March. High unemployment coupled with the negative effect of the rise in the prices of energy products on disposable income will probably result in a moderate domestic demand in the second quarter of 2011.

Industrial activity boosted in the first quarter of 2011. In March annual industrial production went up by 5.9 per cent from 5.6 per cent in February, while capacity utilisation in the manufacturing sector improved to reach 77.4 per cent (compared with 76.9 per cent earlier).

## PMI of Industry and Services and US GDP Growth



Source: The Conference Board.

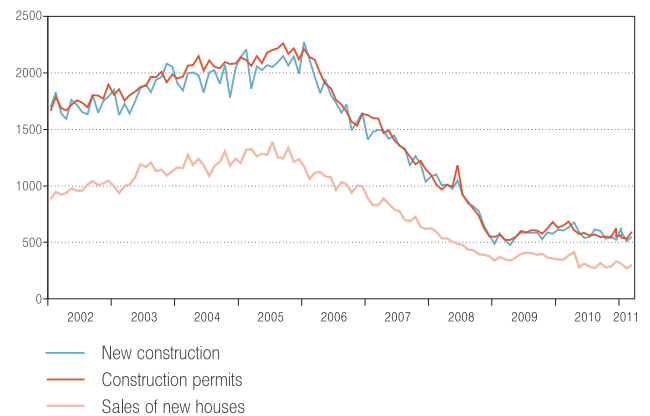
In the review quarter manufacturing economic indicators remained below their key levels, discerning the economic downturn cycle from economic growth, but by the end of the period PMI reported a slight decrease. This shows that the economic activity in the sector, albeit moderat-

ing, may continue to expand. The decline in indices reflected concerns regarding the adverse effects of the disastrous earthquake that hit Japan and caused temporary disruption in trade between the United States and Japan. The motor vehicle sector is likely to be most adversely affected by these negative consequences as it uses parts and components produced in Japan. The services index remained close to its reference value of 50, suggesting that economic activity in the sector will remain low.

The higher profit ratio in the corporate sector, as well as the easier access to market-based debt and equity financing will continue to boost business investment in the following months. However, economic activity slowdown in the housing sector will continue to subdue gross capital formation dynamics. This trend is confirmed by the latest housing market data, pointing to a decline in sales of 21.9 per cent in March.

## Sales of Houses in the USA

(number, in thousands)



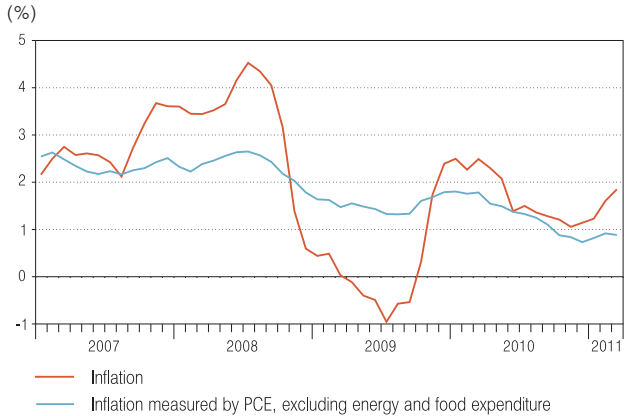
Source: Bloomberg.

Due to the still bleak outlook for the sector, construction entrepreneurs continued to refrain from investment in new construction. The number of building permits and new works – leading indicators of investment activity in the sector – fell by 13.4 per cent and 14.6 per cent respectively on an annual basis. The lack of interest by potential buyers and the increase in the number of estates offered for sale by banks (as the number of non-performing loans grew) continue to exert downward pressure on the prices in the sector.

By end-April expectations of slowing economic growth in the USA prevailed. In the April issue of IMF's "World Economic Outlook" the growth

outlook of the US economy for 2011 was revised to 2.75 per cent (from 3.0 per cent in October 2010 projections). The US Federal Reserve System also revised its projections for US economic growth in 2011 to 3.1–3.3 per cent compared with 3.4–3.9 in the January 2011 projections.

### Inflation in the United States Measured by PCE



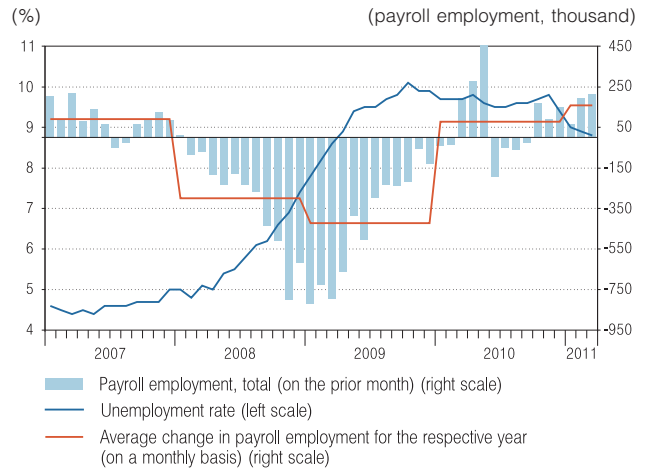
Source: Bureau of Labor Statistics.

In March 2011 inflation measured by the personal consumption expenditure deflator increased to 1.8 per cent from 1.6 in February and 1.2 per cent in January.

Consumer Price Index data point to an annual increase of 2.7 per cent in March compared with 2.2 per cent in February. The accelerated growth rate in major price indices reflected higher energy and food prices. As a result, expectations of consumer price inflation in the short term increased significantly while in the longer term they remain stable. Indices, excluding component fuels and foods, marked a slight increase and so far remain below the 1.7–2.0 per cent interval that is deemed to be compatible with price stability.

In 2011 the base index of consumer expenditure went up by 0.9 per cent on an annual basis from 0.8 per cent in January and that of consumer prices reached 1.2 per cent in March compared with 1.1 per cent in February. The high profit ratio in the corporate sector and the negative growth in unit labour costs will probably constrain potential second-round effects on final price-setting.

### US Unemployment Rate and Changes in Payroll Employment



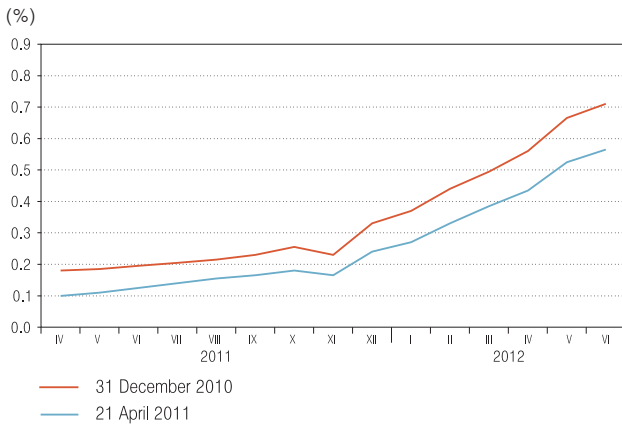
Source: Bureau of Labor Statistics.

Labour market saw a decrease in unemployment of 8.8 per cent in March. Employment outside the agricultural sector continued rising at a slow pace. Since October 2010 the number of newly employed picked up by 1.2 million. Given the huge contraction in the work force of around 8.7 million persons since the start of the crisis, unemployment among working-age population is likely to remain high for a long period of time. If this trend is sustained, wage pressures on inflation will remain low.

Since the process of economic recovery continues at a moderate pace and core inflation remains low, the Federal Reserve System does not indicate explicit intentions to change its monetary policy stance in the near future. The first press conference since the establishment of the US Federal Reserve System was a novelty in the disclosure of its policy. The decisions taken by the US Federal Open Market Committee (FOMC) were communicated and the Chairman of the Federal Reserve Board answered journalists' questions. The US Federal Reserve System will hold regular press conferences in the beginning of each quarter.

The interest rate on federal funds remained unchanged between 0.00–0.25 per cent and the intentions to keep it unchanged for a long period of time were confirmed. Market expectations remained centred around a possible increase in the interest rate on federal funds in early 2012.

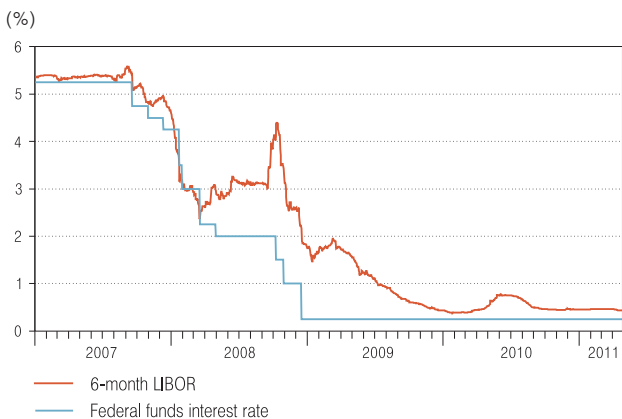
### Expected Reference Interest Rate on US Federal Funds Based on Futures Contracts



Source: Bloomberg.

Expectations of sustaining the reference interest rate on the money market, coupled with excess liquidity in the banking system, will continue to keep the cost of short-term financial resources at levels close to the current ones at least until the end of the first half of 2011.

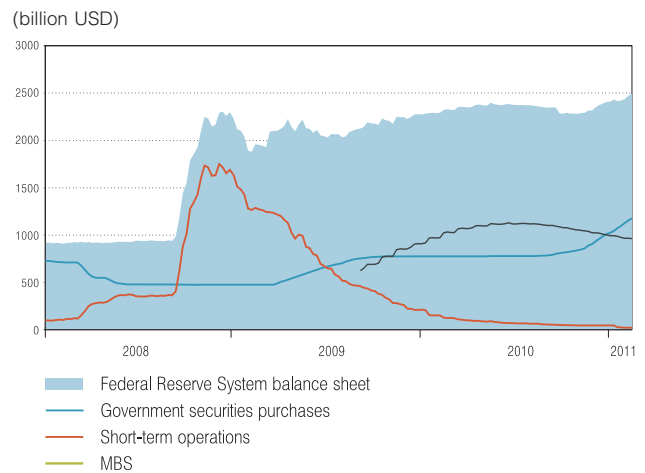
### US Federal Funds Interest Rates and Six-month LIBOR in US Dollars



Source: Bloomberg.

The Federal Open Market Committee confirmed that the 600-billion-dollar treasury bond-buying programme will be discontinued at the end of the second quarter of 2011. Most probably the reinvestment of principal payments from securities holdings will continue after that date. The cumulative amount of the purchases, including reinvestment of government bonds exceeded USD 630 billion for the August 2010–21 April 2011 period. By the same date the new purchases made since November 2010 reached nearly USD 450 billion. As a result, the balance sheet figure of the Federal Reserve reached a record high. Since early 2011 the book value of Federal Reserve assets went up by USD 230 billion and by 21 April reached USD 2.72 trillion.

### Federal Reserve Balance Sheet



Source: Bloomberg.

### Brazil, Russia, India and China (the BRIC countries)<sup>4</sup>

The so called BRIC countries are a key factor behind global economic development as they represent 1/5 of the global economy. Between 2008–2009 they are a major trading partner of the European Union. In 2009 almost 30 per cent of total EU imports and 17 per cent of its exports came from this group.

Despite the global economic crisis, China and India continued to report economic growth, with an average growth of 9.4 per cent and 8.1 per cent in 2008 and 2009 respectively. In 2010 all BRIC countries reported economic growth, with that of China coming to 10.3 per cent on an annual basis.

Inflationary tension in BRIC countries intensified considerably in the first quarter of 2011 which brought about a new interest rate rise cycle on the money market in all of them. Apart from higher reference interest rates, their central banks actively used the increase in minimum required reserves to counteract inflationary pressures.

Brazil and India were the first to increase their main interest rates in April and July 2010 due to the emergence of inflationary pressures. By end 2010 China also entered a cycle of upward adjustment of money and credit market rates, as well as of the minimum required reserve rate. In April 2011 the reference interest rates on one-year deposits and loans by the People's Bank of China were raised to 3.25 per cent and

<sup>4</sup> From this issue of the Economic Review we shall provide information on essential macroeconomic developments in Brazil, Russia, India and China.

## Real GDP Growth and Inflation in BRIC

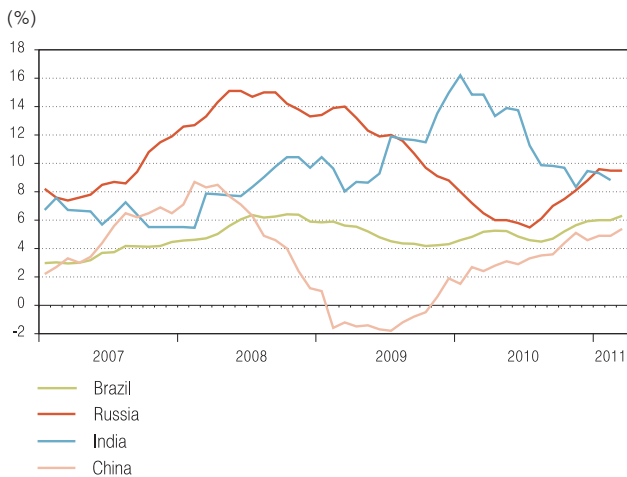
(%)

	2009					2010				
	I	II	III	IV	Total	I	II	III	IV	Total
<b>Growth (on previous year)</b>										
Brazil	-3.0	2.8	-1.8	5.0	-0.6	9.3	9.2	6.7	5.0	7.5
Russia	-9.3	-11.0	-8.6	-2.9	-7.8	3.1	5.2	3.1	4.5	4.0
India	5.8	6.3	8.6	7.3	6.8	8.6	8.9	8.9	8.2	8.8
China	6.5	7.9	9.1	10.7	9.2	11.9	10.3	9.6	9.8	10.3
<b>Inflation (annual base)</b>										
Brazil	5.6	4.8	4.3	4.3	4.9	5.2	4.0	4.7	5.9	5.0
Russia	14.0	1.9	10.7	8.8	10.7	6.5	5.8	7.0	8.8	6.9
India	8.0	9.3	11.6	15.0	10.9	14.9	13.0	9.8	9.5	13.2
China	-1.2	-1.7	-0.8	1.9	-0.7	2.4	2.9	3.6	4.6	3.3

Sources: IMF, Bloomberg.

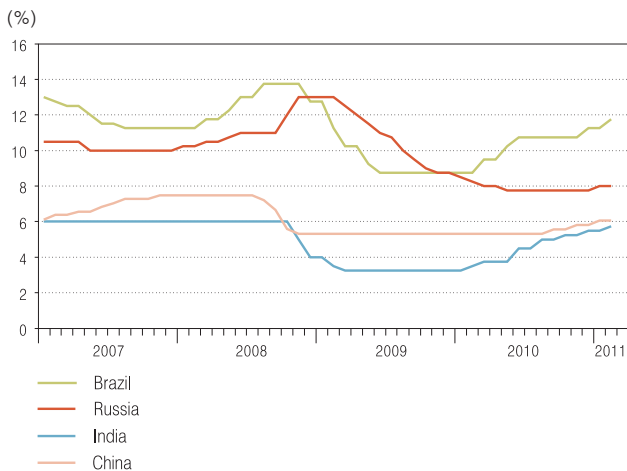
6.31 per cent, and the minimum required reserve rate reached 20.5 per cent.

### Inflation in BRIC



Source: Bloomberg.

### Central Bank Reference Interest Rates



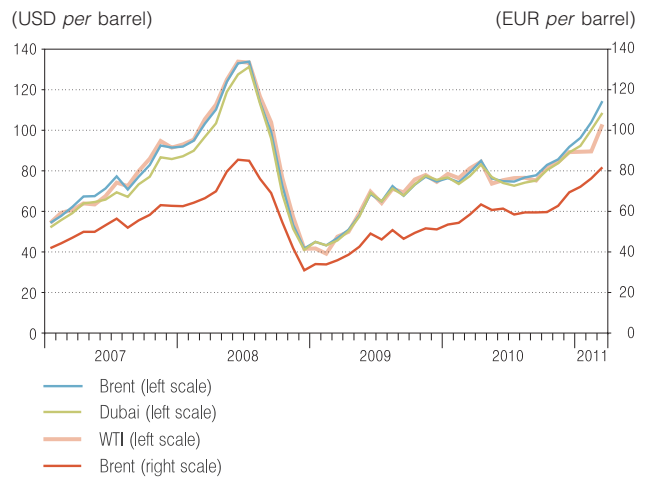
Source: Bloomberg.

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

### Crude Oil

In the first quarter of 2011 the price of Brent crude oil increased further, reaching USD 104.9 or EUR 77.1 *per barrel* on average. In addition to increasing oil demand, the uncertainty stemming from the war in Libya and the political tensions in the Middle East also contributed to the increase in petroleum prices.

### Crude Oil Benchmark Prices\*



\* Crude oil benchmarks are used as proxies for futures prices in world oil markets:

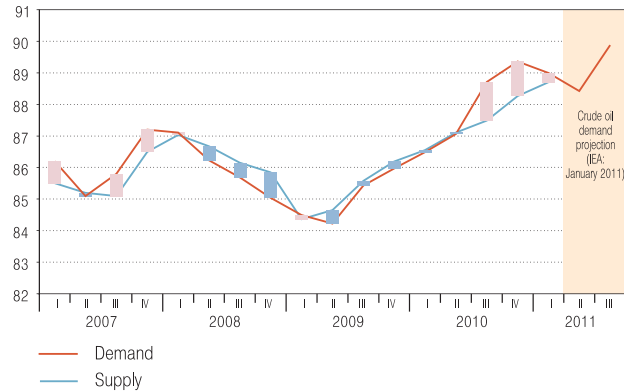
North Sea Brent – a key benchmark used in global oil futures trading and in particular to price European, African and Middle Eastern oil;  
 “Dubai” – this benchmark is used for pricing Persian Gulf crude oil exports to Asia.

WTI – also known as West Texas is used in oil futures trading at the New York Mercantile Exchange (NYMEX).

Source: World Bank.

## World Crude Oil Supply and Demand (Quarterly)

(million barrels per day)



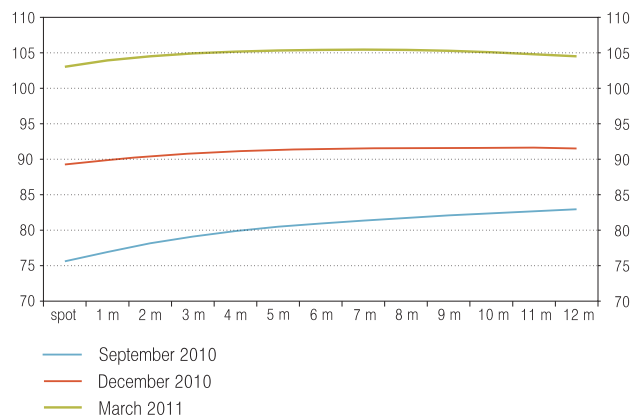
Source: IEA.

April 2011 IEA data on crude oil market reported increased supply and lower demand due to the high oil price. Weaker oil supply from Libya was partly offset by higher production in OPEC countries. Countries outside OPEC also increased their production and supply of crude oil on international markets. In the fourth quarter of 2010 oil products inventories in OECD countries went down by 13 per cent on an annual basis. March 2011 IEA projections for crude oil demand in 2011 remained unchanged and the latter is expected to increase by 1.6 per cent on 2010.

Uncertainty surrounding oil deliveries given the sustained sizeable consumption continued to put upward pressure on crude oil prices projected by market participants. The price of Brent crude oil is expected to move within the interval of USD 100-130 per barrel in the second and third quarters of 2011.

## 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 first quarter of 2011 the annual rate of growth in the steel industry saw an increase on an annual basis and came to 8.9 per cent against 5.1 per cent in the fourth quarter of 2010. Asia reported the most significant increase in production: up 9.2 per cent (4.2 per cent more than in the prior period) together with the EU: up 7.3 per cent (5.5 per cent more than in the prior period), while North America saw a decline of 6.3 per cent (compared to 12.0 in the prior period). In the first quarter of 2011 steel-product prices went up by 16.5 per cent on average. The overall metal price index picked up on an annual basis by 6.7 per cent mainly as a result of higher nickel, lead and aluminium prices (14.2 per cent, 9.0 per cent and 6.9 per cent respectively). Expectations of a decrease in metal prices in the second and third quarters of 2011 prevailed.

In the first quarter of 2011 the food price index continued to rise, with its growth rate reaching 15.9 per cent on a quarterly basis. Compared with the fourth quarter of 2010 price rises were mostly attributable to the higher prices of vegetable oils (37.5 per cent), meat (16.5 per cent) and cereals (14.3 per cent). According to the US Department of Agriculture and the International Grains Council data of April 2011, global wheat yields in the 2010 to 2011 period are expected to decline by approximately 4.3-5.4 per cent on an annual basis, while its consumption is expected to increase by around 1.5-2.2 per cent. Over this period wheat inventories are expected to drop by an average of 6.5-7.6 per cent. Food prices are expected to retain their upward dynamics in the second quarter and to moderate in the third quarter.

## Gold

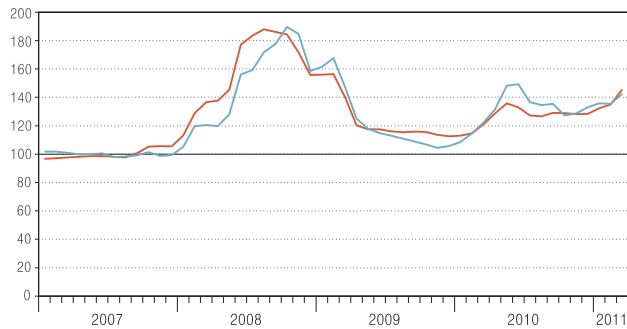
By the end of the first quarter of 2011 the gold price (one-month futures) went up to USD 1428.1 per troy ounce, or 0.4 per cent on a quarterly basis. Measured in euro, prices reported a decline of 5.6 per cent on a quarterly basis as a result of the euro appreciation.

The amplitude of the fluctuations in the price of gold contracted in the beginning of the first quarter of the current year. In February and March growing geopolitical tensions in the Mid-

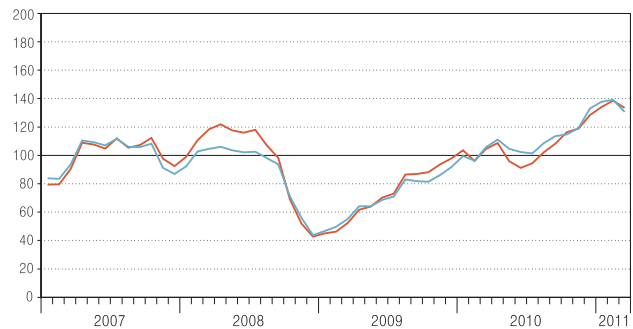
## Price Indices of Major Commodities and Commodity Groups

(2007 = 100)

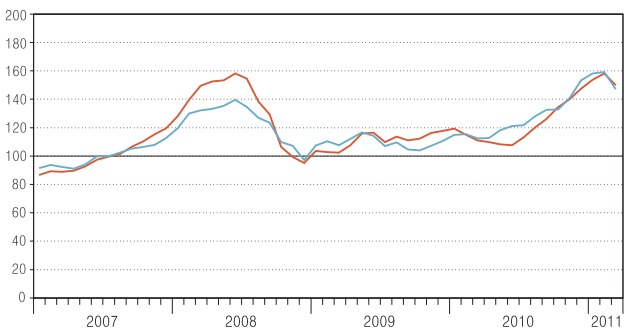
### Steel



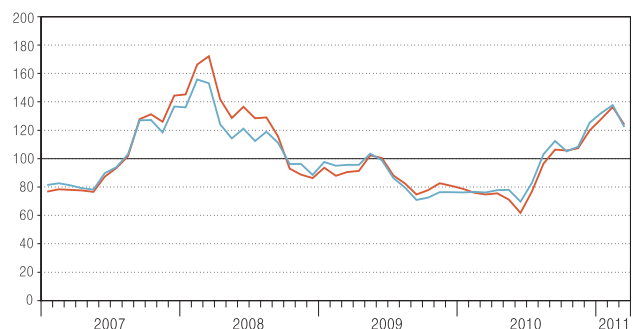
### Copper



### Food



### Wheat



— USD

— EUR

Sources: World Bank, ECB and BNB.

dle East and in North Africa reversed this trend and at the same time led to more pronounced movements in the price of gold. The geopolitical tensions in the Middle East and in North Africa and the developments in foreign exchange markets after the earthquake in Japan appeared to produce the strongest impact on the demand for gold and on its price over the review period. Investors' concerns about inflation caused by the high oil prices also enhanced the demand for gold held as an investment asset.

The first quarter saw a decline in the long speculative positions held by market participants. According to CFTC data<sup>5</sup> of end-March, net speculative positions in gold went down by 10.5 per cent from the levels at the beginning of the year.

In the first quarter of 2011 central banks worldwide continued to buy mainly gold. The Bank of Russia increased its gold reserves by 8 tonnes between December 2010 and February 2011. Over the same period gold reserves of the Central Bank of Bolivia went up from 28 to 37

tonnes. In March and April the Central Bank of Mexico bought a considerable quantity of gold (93.3 tonnes). Central banks in Europe slowed down gold sales and in the same period they came to only 200 kg.

In the first quarter of 2011 physical gold exchange-traded funds (ETFs) that followed gold price developments reported a decrease in physical gold inventories. SPDR GoldTrust, the largest such fund, cut its gold assets by 69.5 tonnes to 1211.2 tonnes.

### One-month Futures of Gold

(USD per troy ounce)



Source: The London Bullion Market Association.

<sup>5</sup> U.S. Commodity Futures Trading Commission (CFTC).

## The USD/EUR Exchange Rate

In the first quarter of 2011 the US dollar remained within the 1.30–1.42 corridor. Since the beginning of the review quarter the single currency appreciated by 6.6. per cent *vis-à-vis* the US dollar. Over the review period exchange rate developments were impacted by two major groups of factors. On the one hand, investors' risk aversion behaviour, the uncertainty and the geopolitical tensions in the Middle East and in North Africa, together with the widening of government securities spreads of peripheral euro area countries resulted in a depreciation of the euro and in an appreciation of the US dollar.

On the other hand, the accumulation of inflationary pressures and the anti-inflationary rhetoric of the Governing Council of the ECB gave rise to expectations of a possible increase in the key ECB money market interest rate in the euro area. These expectations added to the single currency's appreciation. As the two effects mutually offset one another, the increase in interest rates in April did not cause large fluctuations in the EUR/USD exchange rate.

### The USD/EUR Exchange Rate

(USD per EUR 1)



Source: ECB.

Futures markets saw an abrupt change in investors' perceptions concerning the euro. In December 2010 the crises in Ireland resulted in lower euro short-selling on futures markets compared with that observed after Greece requested financial assistance from the EU and the IMF.

The crisis in Portugal after the rejection of the fiscal consolidation measures and the resignation of the government of José Sócrates in April also has not seriously affected the foreign currency market and the exchange rate of the euro against the US dollar.

## Bulgarian External Debt Dynamics in International Financial Markets

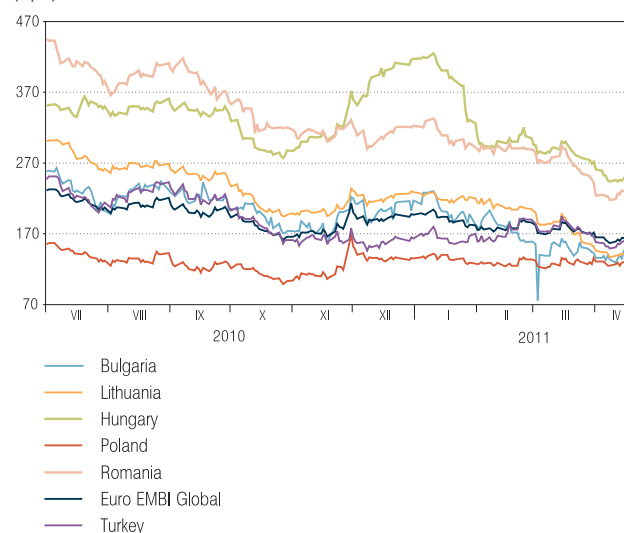
In the first quarter of 2011 the spreads of the yield on the Central and East European countries' government debt narrowed significantly. The JP Morgan Euro EMBI Global index declined by 27 basis points to 152 basis points at the end of the review quarter. The index fluctuated within a relatively wide range from 152 to 229 basis points.

Spreads tended to decline throughout the entire period. The macroeconomic data releases suggest somewhat favourable developments and investors deemed the pace of recovery in CEE countries sustainable. Government debt spreads in Hungary and Romania improved sizeably and due to the decline they moved closer to the spreads of the other countries in the region.

Bulgaria's government debt spread, measured by the JP Morgan index, followed the general market trend throughout the period, reporting a 69 basis point decrease to 143 basis points by the end of the review quarter.

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

(bps)



Source: Bloomberg.

## 2. Financial Flows, Money and Credit

The balance of payments current account balance continued to improve between January and February 2011. Preliminary data show that the overall balance of the balance of payments current and capital accounts for the first two months of 2011 was positive at EUR 313.5 million *vis-à-vis* a deficit of EUR 276 million for the corresponding period of 2010.

The Issue Department balance sheet figure came to BGN 23.88 billion (EUR 12.21 billion) by end-March 2011, with assets decreasing by BGN 1501.8 million (EUR 767.8 million) on end-December 2010. The decrease in government deposit by BGN 1323.7 million (EUR 676.8 million) contributed mostly to the net fall in international foreign currency reserves. The decline in banknotes and coins in circulation by BGN 654.8 million (BGN 334.8 million) posted in early 2011 reflected the effect of seasonal factors. Since early April banknotes and coins in circulation went up by BGN 236.8 million (EUR 121 million) on end-March. Reserves maintained with the BNB by banks rose by BGN 88 million (EUR 45 million) as compared to the end of March 2010. The Banking Department deposit, which is included in the liabilities of the Issue Department balance sheet, decreased by BGN 202.6 million (EUR 103.6 mil-

### Financial Flows and External Position Sustainability

Between January and February 2011 the balance of payments current account was positive amounting to EUR 305.4 million. On an annual basis the current account exhibited a surplus of EUR 224.2 million (0.6 per cent of GDP). During the second and third quarters the current account reported a deficit of about 0.1–0.3 per cent of GDP, with the positive inflow of foreign direct investments covering entirely this deficit.

Between January and December 2011 the balance of payments financial account recorded a deficit of EUR 1001.7 million. Transactions of domestic banks, which increased their foreign assets in the form of deposits abroad (worth EUR 377.9 million) and reduced their foreign

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

(million EUR)

External flows	January – March	
	2010	2011.
<b>Total for the period</b>	<b>-860</b>	<b>-672</b>
<b>Purchases and sales of euro</b>		
at tills	-6	-3
banks, incl.	-764	-704
banks' purchases	18 011	7902
banks' sales	-18 775	-8606
<b>Flows on accounts of banks, the MF, etc.</b>		
Minimum required reserves	-14	73
Government and other depositors	-75	-38

Source: BNB.

lion) in the first quarter, and deposit of other depositors rose by EUR 302 million.

Cash 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 in the first quarter of 2011 amounted to EUR 672 million. Banks' net purchases of euro from the BNB came to EUR 704 million and bank reserves denominated in euro increased by EUR 73 million.

By February 2011<sup>1</sup> the average monthly coverage of imported goods and services by BNB international reserves was 6.7 months.

liabilities due to the closure of non-residents' deposits in domestic banks (worth EUR 280.9 million), contributed most substantially to the reported financial account deficit.

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



Based on preliminary data between January and February 2011 foreign direct investment in Bulgaria amounted to EUR 53.4 million<sup>2</sup>. The bulk of this investment was comprised of equity capital in the amount of EUR 26.8 million and reinvested profit in the banking sector in the amount of EUR 32.2 million. The net amount of the *Other capital* item was EUR -5.6 million<sup>3</sup>. Between January and February 2011 non-residents' investment in real estate came to EUR 17.7 million against EUR 21.5 million in the corresponding period of 2010. Earnings from real estate acquired by non-residents in Bulgaria were close to the levels typical of the years prior to 2006 when the interest of non-residents in acquiring real estate in Bulgaria dramatically enhanced.

Trends in the structure of foreign direct investment were sustained in the fourth quarter of 2010, with flows directed mainly to *manufacturing* (41.2 per cent), *financial intermediation* (17.7 per cent), *transport* (20.2 per cent), *trade* (13.6 per cent), and *production and distribution of electricity and heating* (10.8 per cent). Consequently, *real estate operations and business services* (23.7 per cent), *financial intermediation* (17.7 per cent) and *manufacturing* (17.5 per cent) contributed most significantly to the total accumulated foreign direct investment by the fourth quarter of 2010.

The composition of FDI by country in the January–February 2011 suggests that foreign direct investment attracted from Austria (EUR 121.7 million), Switzerland (EUR 19.2 million) and Cyprus (EUR 17.4 million) accounted for the largest shares. Net payments related to revolving intercompany loans were made to Germany (EUR -74.3 million), Greece (EUR -61.2 million) and the UK (EUR -17.0 million).

By February 2011 net foreign direct investment accounted for 3.6 per cent of the annual GDP for the last four quarters. Positive net foreign direct investment inflows are expected to gradually increase in the second and third quarters of 2011. As a result, the foreign direct investment

<sup>2</sup> Preliminary data that are subject to revision upon receipt of additional information from direct investment enterprises.

<sup>3</sup> The Balance of Payments of Bulgaria (February 2011), a BNB publication, explains the reasons for the negative net amount of the *Other capital* item. Based on the preliminary data the difference in the flows over the review period and for the previous year was mainly attributable to payments on received intercompany loans according to the repayment plans of enterprises.

to GDP ratio will range between 4.0–5.0 per cent on an annual basis.

In the January–February 2011 period Bulgaria's gross foreign debt went down by EUR 616.3 million and by the end of February it amounted to EUR 36.1 billion or 99 per cent of GDP reported for the last four quarters. Net repayment of borrowed funds amounted to EUR 930.2 million (revaluations and changes in trade and revolving loans excluded). Between January and February 2011 loans and deposits came to EUR 360.4 million; of this, loans received from banks occupied 21 per cent and intercompany loans comprised 70 per cent. Principal payments amounted to EUR 821.2 million against EUR 1371 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 337.2 million and its share stabilised around 31 per cent compared to 31.3 per cent a year earlier. These developments in the first two months of 2011 were largely attributable to the closure of non-residents' deposits with banks (EUR -288.6 million).

The euro retained its leading position within the gross external debt currency structure: 88.7 per cent by December 2010. It occupied the largest share (92.6 per cent) in intercompany loans and the smallest share in the *general government* sector (73.2 per cent).

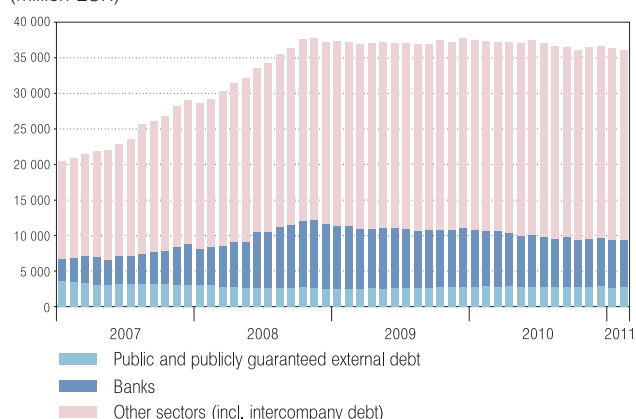
Between January and February 2011 private non-guaranteed external debt decreased by EUR 460.8 million, with closed non-residents' bank deposits contributing most significantly to this decline (by EUR 288.6 million). Banks' debt to foreign parent banks incurred in connection with their activity in Bulgaria occupied a large share in banks' external debt (75 per cent as of December 2010). Changes in banks' external debt between 2009 and the first two months of 2011 were due to the ample liquidity of local banks and their efforts to reduce their net external indebtedness. Non-bank sector enterprises reduced their external liabilities by EUR 191.5 million in the January–February 2011 period. Intercompany loans decreased by EUR 35.6 million in the same period of 2011. The share of intercompany loans in the total amount of external debt increased to 41 per cent by February 2011 against 39 per cent a year earlier. This dy-

namics is indicative of the long-term interest of foreign owners of local companies in Bulgaria's economy.

Between January and February 2011 *general government* sector external debt decreased by EUR 136.8 million. The total amount of public and publicly guaranteed external debt decreased by EUR 155.5 million and occupied 11.5 per cent of Bulgaria's total external debt. New loans and deposits disbursed to the *general government* sector amounted to EUR 11.7 million, down EUR 31 million on the previous year.

### Gross External Debt by Institutional Sector

(million EUR)



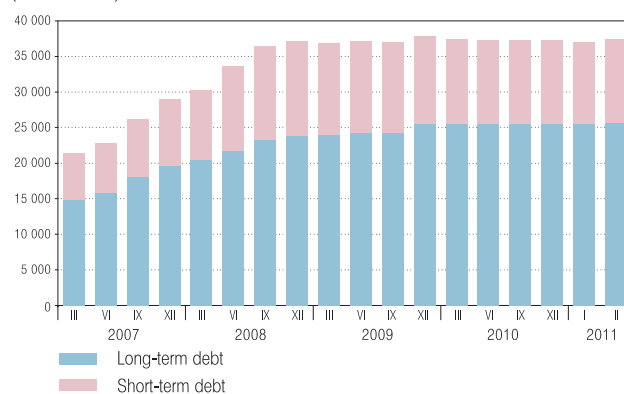
Source: BNB.

The average weighted interest rates on new loans declared between January and February 2011 suggest an appreciation (on an annual basis) in the cost of external attracted funds in euro by 1.3 percentage points to 4.2 per cent. New loans in US dollars also reported an insignificant cost increase: by 0.1 percentage points to 4.0 per cent.

By December 2010 there was no notable change in the structure of private non-bank external debt by industry. The largest share in the external debt of *other sectors* was occupied by *real estate operations and business services* (21.8 per cent), followed by *electricity, gas and water* (20.1 per cent) and *financial intermediation* (11.7 per cent). The largest share in intercompany loans was occupied by *telecommunications* (16.0 per cent), *real estate operations and business services* (14.5 per cent) and *financial intermediation* (13.7 per cent).

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

(million EUR)



Source: BNB.

Bulgaria's gross foreign assets decreased by EUR 251.8 million between January and February 2011, including a BNB international reserves fall of EUR 647.4 million and an increase in foreign assets of banks by EUR 395.5 million. As a result of Bulgaria's gross foreign assets and external debt dynamics, the net external debt decreased by EUR 364.5 million, reaching EUR 18 billion by end-February 2011, or 49.3 per cent of reported GDP for the last four quarters.

The interdependence between the capital inflows on the balance of payments financial account and the current account dynamics was retained in the January–February 2011 period. The improvement of the current and capital account balance continued, reporting a surplus of EUR 313.5 million against a deficit of EUR 276 million in the corresponding period of 2010. By February the balance of payments current and capital account balance ended in surplus on an annual basis accounting for 1.4 per cent of GDP for the last four quarters against a deficit of 5.8 per cent of GDP a year earlier.

Between January and February 2011 all current account components (except for net current transfers) improved compared with the corresponding period of 2010. Trade balance improved by EUR 338.9 million, services balance by EUR 77.1 million and income balance by 185.2 million, while net current transfers decreased by EUR 20.8 million. In the first two months of 2011 the capital account improved by EUR 9.1 million on the corresponding period of 2010.

The trade balance, reporting a surplus in the amount of EUR 69.7 million, improved most substantially. In nominal terms (in euro), exports increased by 58.9 per cent and imports by 36.3 per cent on an annual basis<sup>4</sup>. Exports and imports in the second and third quarters are expected to increase, with their rates gradually equalising.

The balance on services reported a surplus of EUR 83.6 million over the January–February 2011 period against a surplus of EUR 6.5 million in the corresponding period of the prior year. The improvement was mainly a result of increased transport and travel earnings and decreased external services costs (computer and information). Earnings on the credit side (assets) increased by EUR 60.5 million and earnings on the debit side (liabilities) increased by EUR 16.5 million.

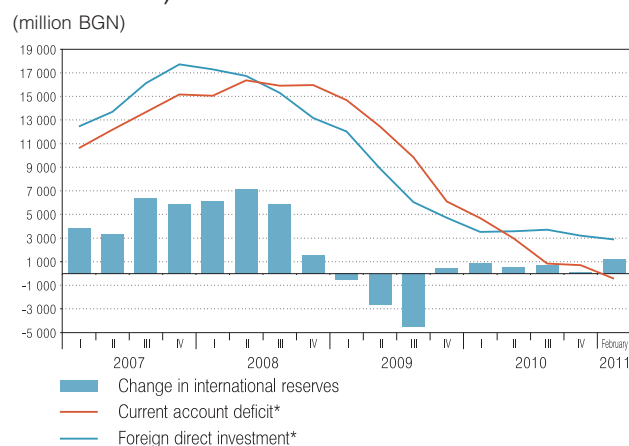
Between January and February 2011 the deficit on the *Income* account amounted to EUR 78.8 million and improved by EUR 185.2 million on the corresponding period of 2010. This reflects mainly the lower income paid on foreign direct investment (improvement by EUR 172.5 million).

Over the first two months of 2011 net current transfers amounted to EUR 231 million: down EUR 20.8 million on an annual basis, mainly due to a decline in transfers to the *general government* sector by EUR 33.8 million. The receipts in the form of private current transfers rose by EUR 19.2 million on an annual basis. Transfers abroad also increased by EUR 0.3 million. As a result, net transfers to the private sector rose by EUR 18.9 million on an annual basis.

<sup>4</sup> Section 3 contains more detailed analysis of exports and imports.

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 8.1 million.

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



\* Data as of February 2011.  
Source: BNB.

During the second and third quarters of 2011 the dynamics of balance of payments components are expected to post a current account deficit within the range of 0.1–0.3 per cent of GDP on an annual basis.

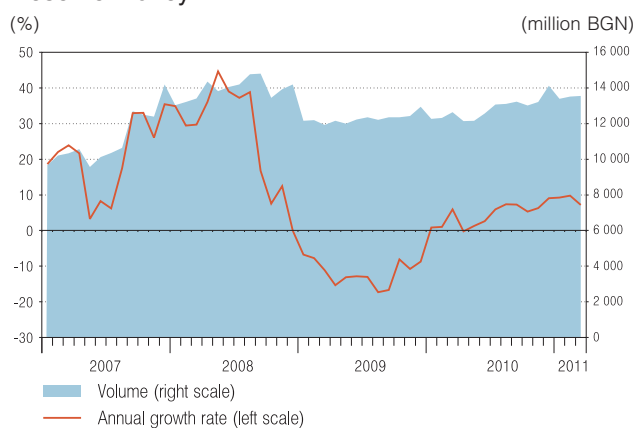
The sustainability of Bulgaria's external position was retained largely based on the structure of capital inflows, mainly in the form of foreign direct investment and external borrowing of inter-company or long-term nature.

## Monetary Aggregates

Over the first quarter of 2011 banks' deposits with the BNB rose by 14.3 per cent on an annual basis as a result of retained high growth of funds attracted from residents. Over the review period currency in circulation retained its positive trend and increased by 2.3 per cent. These rates are expected to be sustained in the following two quarters. Over the projection horizon interest rates on time deposits will experience no significant changes.

By the end of the first quarter of 2011 reserve money growth slowed down to 7.2 per cent. Banks' deposits with the BNB increased by 14.3 per cent on an annual basis and contributed by 5.8 percentage points to reserve money growth.

### Reserve Money

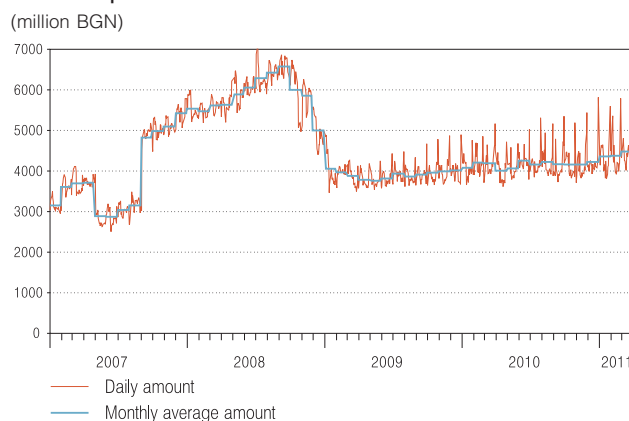


Source: BNB.

The average volume of funds attracted from residents continued to increase at relatively high rates: by approximately BGN 1.4 billion in March compared with December 2010. Over the same period the average volume of funds attracted from non-residents declined by about BGN 360 million. As a result of the dynamics and the structure of attracted funds the effective implicit rate of minimum required reserves maintained with the BNB<sup>5</sup>, continued to slightly grow. On the other hand, the share of excess reserves in total reserves maintained by banks reached 3.7 per cent reflecting banking system ample liquidity on a quarterly basis.

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

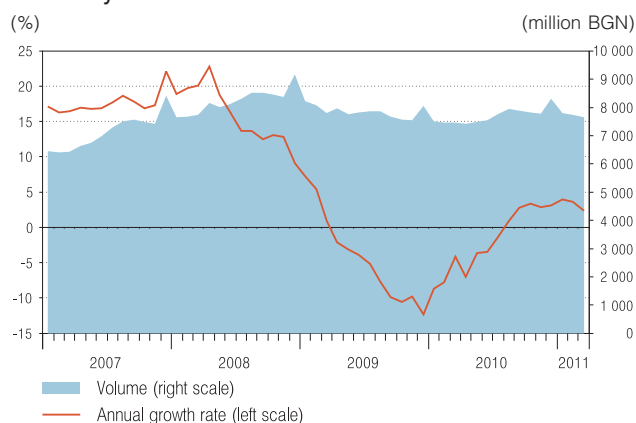
### Bank Deposits with the BNB



Source: BNB.

During the first quarter currency in circulation decreased compared with the previous quarter due to seasonal factors. By the end of March currency in circulation slightly decreased to 2.3 per cent on an annual basis. Determinants of cash in circulation dynamics relate to the gradual recovery of economic activity and inflation acceleration.

### Currency in Circulation



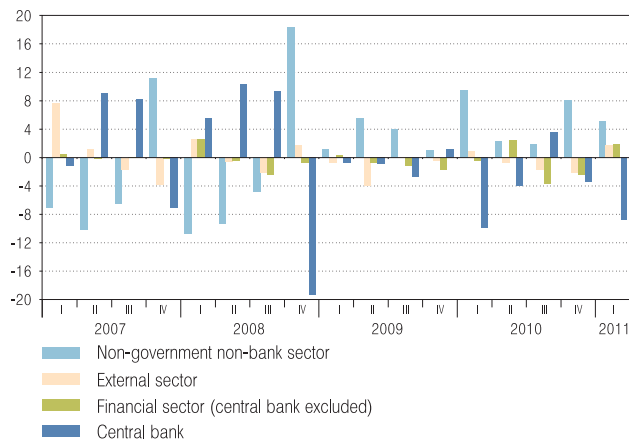
Source: BNB.

In the second and third quarters of 2011 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. Banks' deposits with the BNB are anticipated to further contribute to reserve money growth, posting growth rates close to the current values and tending to slow down.

Fiscal policy affects the allocation of liquidity among economic sectors. In the last quarter of 2010 the consolidated budget had a strong effect on liquidity of the non-government non-bank sector. Over the review period the government used liquid funds from its deposit with the BNB in the amount of approximately 3.4 per cent of GDP to finance the budget deficit for this period. A net provision of resources was also registered from the external sector, mostly as a result of positive net transfers from the EU and net debt financing in the amount of BGN 165.6 million. The positive net issue of government securities on the domestic market was the major factor behind the liquidity absorption from the financial sector (excluding the BNB).

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

(share of GDP, %)



Sources: MF, BNB.

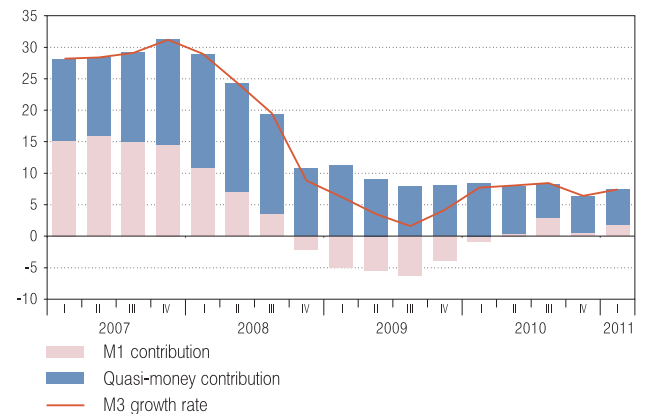
During the first quarter of 2011 the consolidated budget continued to withdraw a significant amount of liquid funds from the government deposit with the BNB which declined by BGN 1323.7 million over the review period. The bulk of these funds was again re-channelled to the non-government non-bank sector but in contrast to the previous quarter net flows from the budget to the external and financial sectors were also positive. This was attributable to the accumulation of significant payments on debt service in the beginning of the year: interest payment on government global bonds to the external sector and amortisation payments on maturing government securities earmarked for the domestic market. By the end of the quarter a portion of direct payments to farmers financed by the EU was transferred. These funds will be refunded by the EU in the following quarter which will result

in inflow of funds from the external sector to the budget. The financial sector will also be a net source of liquidity to the budget in the second quarter of 2011, provided the Ministry of Finance continues to implement an active government securities issuing policy in the domestic market.

By March broad money growth accelerated to 7.4 per cent on an annual basis *vis-à-vis* 6.4 per cent in December. The annual growth of broad money in the second and third quarters of 2011 is expected to moderately increase to levels slightly over the current levels.

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

(%; percentage points)



Source: BNB.

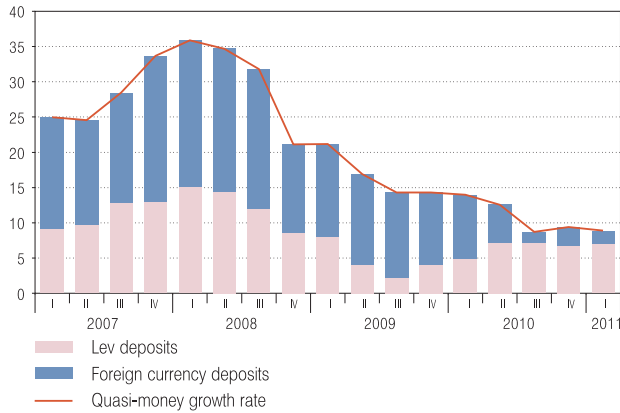
The narrow monetary aggregate, M1, contributed to acceleration in broad money growth in March. It posted an increase of 4.9 per cent against 1.4 per cent at the end of December. The upward dynamics of M1 was a result of overnight deposit growth by 6.4 per cent in March against 0.2 per cent by the end of December. This growth was mainly attributable to the annual increase in overnight deposits of non-financial enterprises from 5.7 per cent at the end of 2010 to 9.6 per cent by the end of March 2011. The local government overnight deposits increasing by 75.3 per cent and overnight deposits of financial enterprises rising by 0.9 on an annual basis by the end of the quarter (against a decline of 36.7 per cent in December) had a positive contribution. Household overnight deposits<sup>6</sup> continued to slow down posting a 6.6 per cent increase by March against 8.7 per cent in December. Overnight deposits of

<sup>6</sup> The data provided on household deposits and loans include also deposits and loans of non-profit institutions serving households in accordance with the classification used by the monetary statistics.

social security funds fell by 94.1 per cent on an annual basis and contributed negatively to total overnight deposits<sup>7</sup>.

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

(%; percentage points)



Source: BNB.

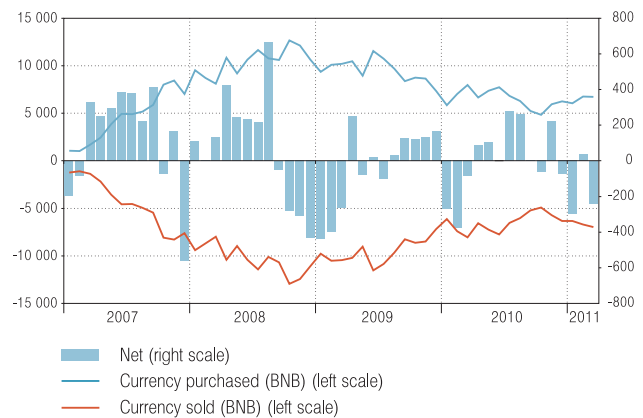
By March 2011 quasi-money grew by 8.9 per cent on an annual basis against 9.4 per cent by the end of 2010. Lev-denominated deposits, rising by 7.1 percentage points by the end of March, contributed most substantially to quasi-money growth. Concurrently, foreign currency deposits fell from 2.6 percentage points in December to 1.8 percentage points in March.

Deposits with agreed maturity of up to two years rose by 8.4 per cent on an annual basis, with household deposits contributing most significantly to this growth (8.1 percentage points). By end-March household deposits in levs increased by 25.8 per cent on an annual basis and those in foreign currencies by 4.7 per cent. Deposits of non-financial enterprises with agreed maturity of up to two years remained unchanged: by March lev deposits rose by 6.1 per cent and offset the fall of 5.2 per cent in foreign currency deposits.

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

(million EUR)

(million EUR)



Source: BNB.

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

In the first quarter of 2011 the average daily volume of currency trade of banks with the BNB came to EUR 628 million against EUR 524 million in the fourth quarter. Over the same period banks realised net sales of euro to the amount of about EUR 500 million (compared to net purchases of euro of about EUR 86.9 million in the fourth quarter of 2010).

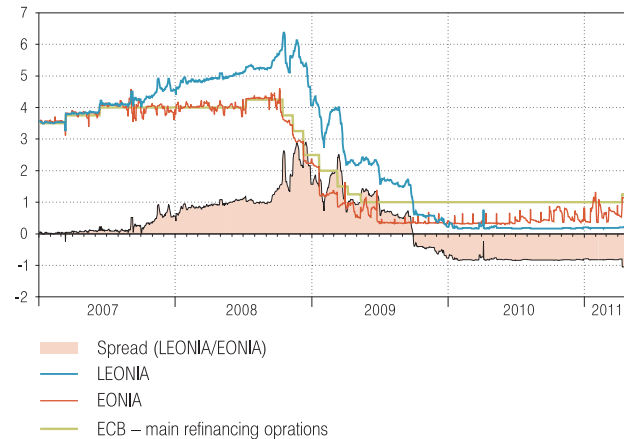
Between January and March interbank money market interest rates remained relatively close to the levels observed in the previous quarter. The average interest rate on transactions concluded in the interbank money market went down by 1 basis point to 0.24 per cent.

LEONIA index increased by 2 basis points to 0.19 per cent compared with the previous quarter. The negative spread between LEONIA and EONIA continued to widen, the average value being 49 basis points in the first quarter against a negative spread of 42 basis points in the fourth quarter of 2010. The widening of the spread was entirely due to the increase in European interest rates as a result of ECB liquidity absorption operations. In contrast to the euro area interest rates, in Bulgaria they were again characterised by very low volatility. The reason behind this dynamics was the banks' ample liquidity as a result of cautious lending policy.

<sup>7</sup> For further details see Economic Review, 2010, issue 4.

## LEONIA/EONIA

(%; percentage points)



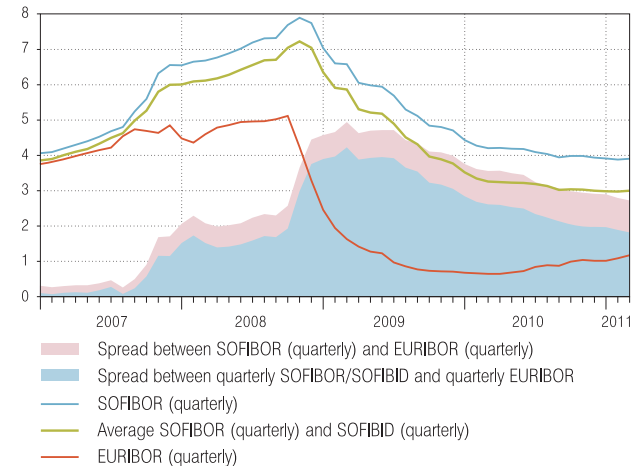
Source: BNB.

In the first quarter the SOFIBOR reference rate (quarterly), used as an indicator for short-term interest rates, went down by 7 basis points to 3.9 per cent on the previous quarter. The spread between SOFIBOR (quarterly) and EURIBOR (quarterly) continued to follow the downward momentum to come to 273 basis points by March (down 19 basis points compared to its December level). The narrower spread reflects a 15 basis point rise in the EURIBOR between January and March and a 3 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>8</sup> The average SOFIBOR/SOFIBID reference rate in the interbank market in Bulgaria over the quarterly horizon remained unchanged (at 3 per cent) compared with the previous quarter, and the spread between the average quotation and EURIBOR (quarterly) decreased to 182 basis points compared to 198 basis points in December 2010.

<sup>8</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*, 2010, issue 2.

## SOFIBOR, Average SOFIBOR/SOFIBID and EURIBOR (quarterly horizon)

(%; percentage points)

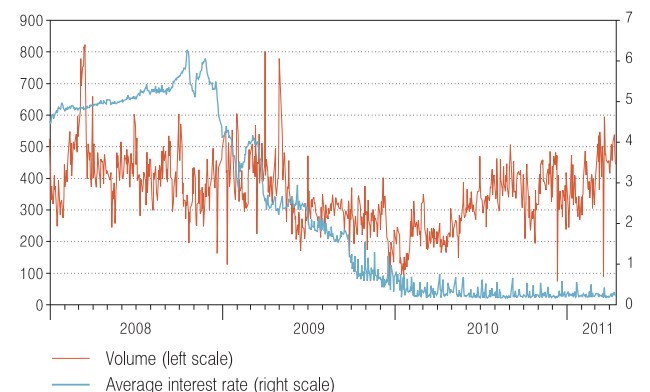


Source: BNB.

Between January and March the average daily volumes in the interbank market amounted to BGN 394 million, an increase by 9.1 per cent on the previous quarter. These trade levels were typical of the period prior to the onset of global economic crisis. Correspondingly, this is indicative of the improvement of the interbank market and the confidence among participants.

## Trade Volume and Interbank Money Market Interest Rates

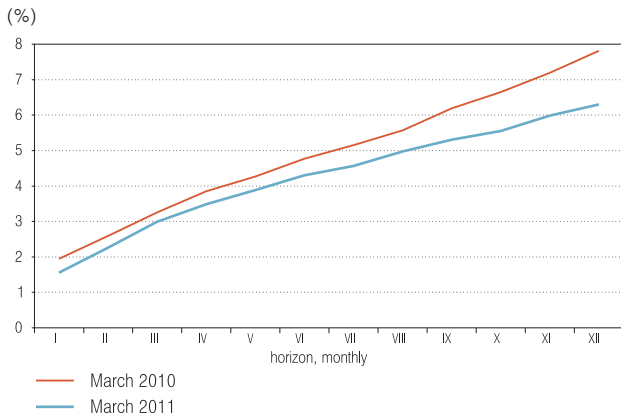
(million BGN)



Source: BNB.

The yield curve also gives a positive signal of the domestic interbank market development. Over the review quarter the downward trend in the long end of the yield curve continued. By March a fall of 151 basis points was reported in the 12-month horizon against 39 basis points in the one-month horizon.

### Interbank Money Market Yield Curve (based on average SOFIBOR/SOFIBID quotations)

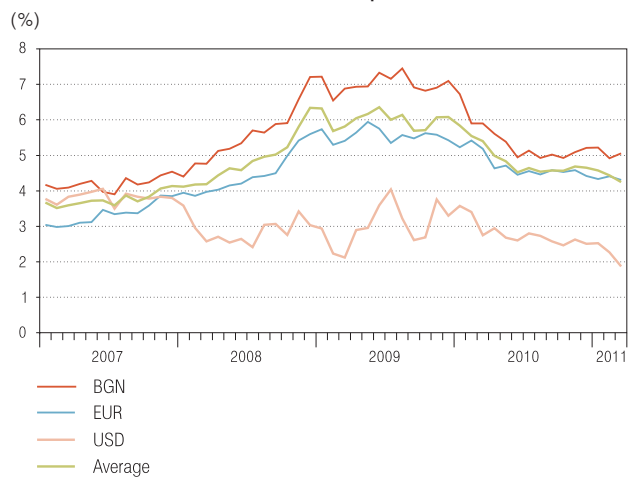


Source: BNB.

In the first quarter the average interest rate on new time deposits stabilised at the 2010 third quarter's level. By March the average interest rate on new time deposits denominated in levs reached 5.1 per cent (against 5.2 per cent in December) and the average interest rate on time deposits denominated in euro declined to 4.3 per cent. The average deposit rate declined by 115 basis points to 4.25 per cent on an annual basis.

Interest rates on time deposits are expected to remain broadly unchanged in the second and third quarters. These expectations are underpinned by the projections of high banking system liquidity (the liquid assets to total liabilities ratio remained high in February: 21.5 per cent) and the expected low lending activity.

### Interest Rates on New Time Deposits

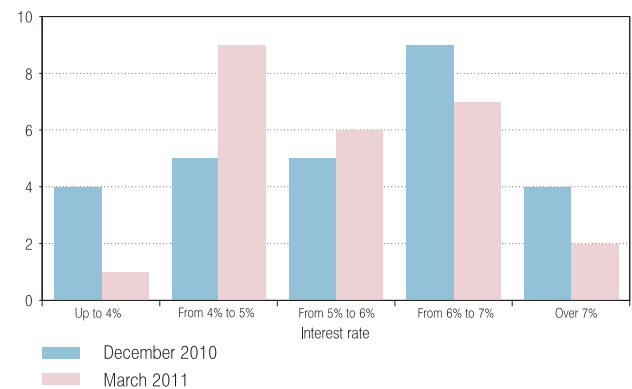


Source: BNB.

As regards the breakdown of interest rates on households time lev deposits by bank, the number of banks offering rates of up to 4 per cent, between 6 and 7 per cent and over 7 per cent decreased at the expense of those offering rates within the 4 to 5 per cent and 5 to 6 per cent band. The average interest rate level in March decreased by 6 basis points to 5.55 per cent on December and the dispersion coefficient declined by 38 basis points to 1.10 percentage points.

### Breakdown of Interest Rates on Household Time Lev Deposits

(frequency – number of banks)



Source: BNB.



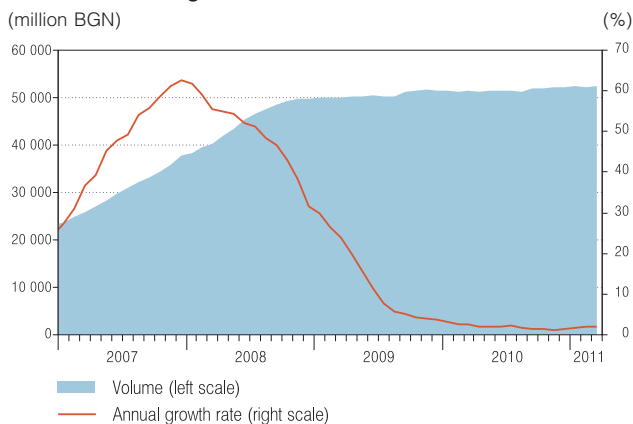
## Credit Aggregates

The gradual recovery of the economic activity and banks' cautious lending policy continued to add to low lending growth. Interest rates on corporate and consumer loans exhibited a slight decrease since early year. Lending rates are expected to remain broadly unchanged in the second and third quarters.

The gradual recovery of the economic activity, banks' cautiousness in extending loans and higher credit standards continued to have an adverse effect on lending in Bulgaria. As a result of still lower credit demand and retained tighter lending standards applied by banks, growth rates of claims from the non-government sector stayed at low levels in the first quarter of 2011 and by the end of March growth came to 1.9 per cent on an annual basis.

Between January and March 2011 claims on the non-government sector increased by BGN 44.1 million against a decrease of BGN 223.5 million in the same period of 2010. In the first quarter of 2011 banks reported minimum net sales of loans, worth BGN 6.4 million.

### Claims on Non-government Sector



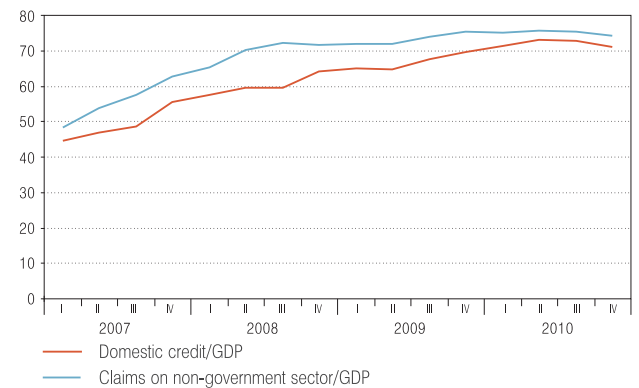
Source: BNB.

Banks' credit standards are expected to be broadly eased and claims on the non-government sector to gradually increase in the following two quarters of 2011.

The higher nominal GDP growth than that of claims observed in the previous quarter impacted the dynamics of the claims on the non-government sector to GDP ratio. By the end of December 2010 this ratio was 74.2 per cent: down 1.2 percentage points on the previous quarter.

### Domestic Credit

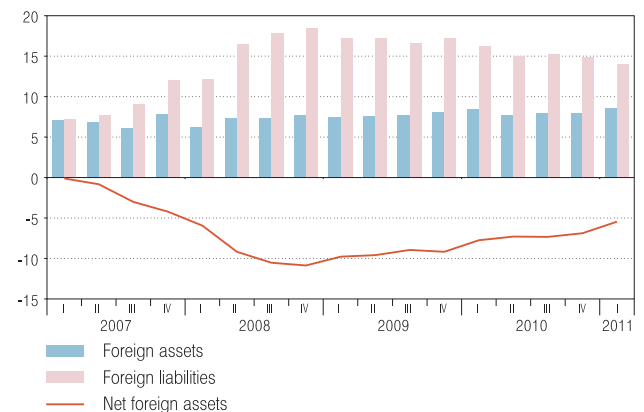
(share of GDP, %)



Source: BNB.

### Foreign Assets and Liabilities of Banks

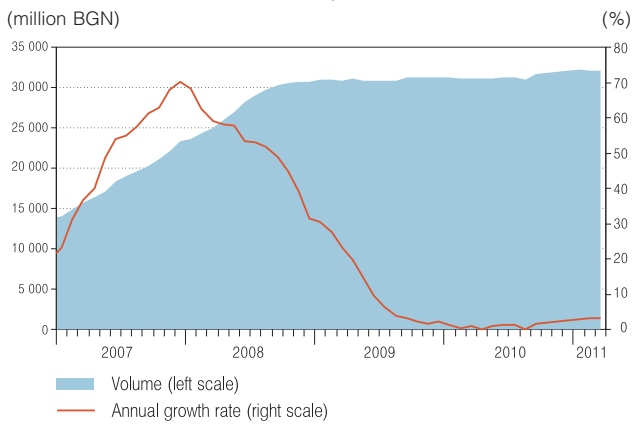
(billion BGN)



Source: BNB.

Between January and March 2011 banks' funds attracted from non-residents went down by BGN 808.7 million and their foreign assets increased by BGN 605.7 million. As a result, banks' net foreign liabilities declined by BGN 1.4 billion reflecting banks' preference of reducing their external obligations in the context of ample liquidity and still low domestic demand for loans. No significant change in the banks' policy is expected in respect of foreign assets and liabilities in the following two quarters of the year.

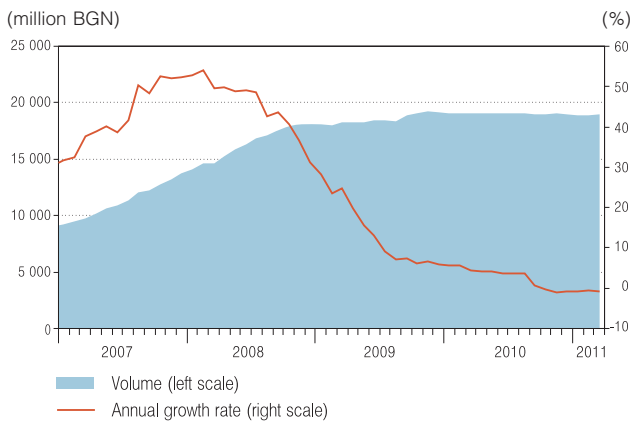
### Claims on Non-financial Corporations



Source: BNB.

As a result of improved external environment the annual growth rate of claims from non-financial enterprises started slightly to accelerate from the fourth quarter of 2010 to reach 3.2 per cent by the end of March 2011. Between January and March claims on the non-government sector increased by BGN 31.3 million against a decrease of BGN 188.3 million in the in the first quarter of 2010. In the first quarter of 2011 new loans extended to non-financial corporations went up by BGN 724 million, an increase by 35.1 per cent on the corresponding period of 2010.

### Claims on Households

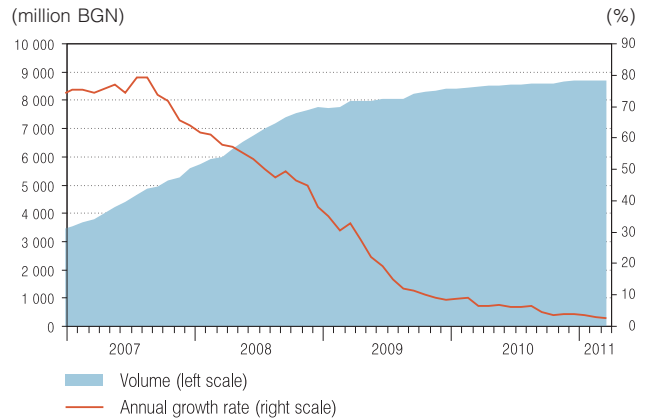


Source: BNB.

Lending to households remained relatively weak. Despite the signs of gradual economic recovery unemployment retained its level, a factor of uncertainty regarding the future income, which limits household consumption. Between January and March claims on households declined by BGN 59.4 million against a decrease of BGN 81.4 million in the corresponding period of 2010. Their annual growth rate remained negative, at -0.7 per cent by the end of March. Ex-

cept for housing loans, all other household loans reported declines on an annual basis (overdrafts: 9.6 per cent; consumer loans: 2.0 per cent; and other loans: 2.1 per cent). Though positive, annual growth in housing loans continued slowing down to reach 2.7 per cent in March.

### Housing Loans



Source: BNB.

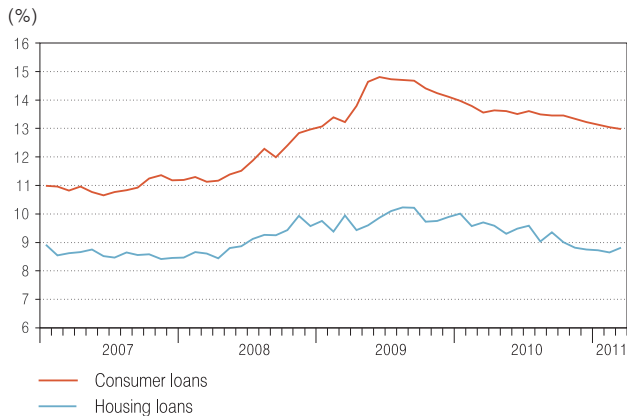
In the first quarter of 2011 interest rates on consumer loans declined compared with the previous quarter and interest rates on housing loans slightly increased.

The average annual percentage rate of charges (APRC) on new *consumer loans* amounted to 12.97 per cent in March (against 13.23 per cent in December) and the average interest rate on these loans fell by 38 basis points to 11.47 per cent on December<sup>9</sup>.

Between January and March 2011 new housing loans totalled BGN 291.4 million, up 1.04 per cent on the corresponding period of the prior year. The annual percentage rate of charges on housing loans increased by 6 basis points on December and reached 8.81 per cent in March. By end-March the interest rate on housing loans was 8.06 per cent, an increase of 9 basis points compared with December.

<sup>9</sup> The average annual percentage rate of charges is the total amount of credit to the credit borrower expressed as an annual percentage of the sum total of extended credit (Directive 87/102/EEC on Consumer Credit amended by Directive 90/88/EEC and Directive 98/7/EC).

### The Annual Percentage Rate of Charges on New Household Loans (average weighted by currency) (%)

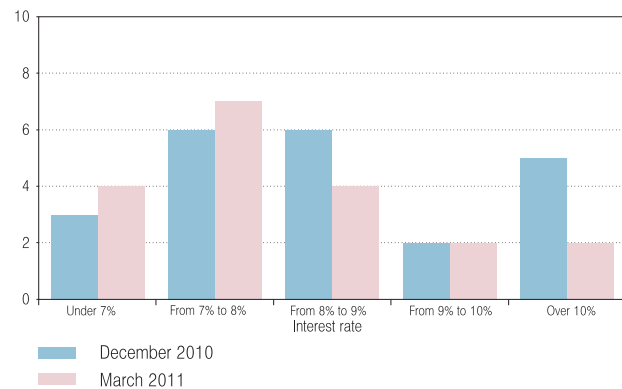


Source: BNB.

As regards the distribution of interest rates on housing loans by bank<sup>10</sup> in March the number of banks offering housing loans at rates under the 7 per cent and 7 to 8 per cent interval increased compared with December at the expense of those offering rates within the 8 to 9 per cent and over 10 per cent band. The average interest rate level in March decreased by 76 basis points on end-2010 and the dispersion coefficient declined by 9 basis points to 1.78.

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

(frequency – number of banks)

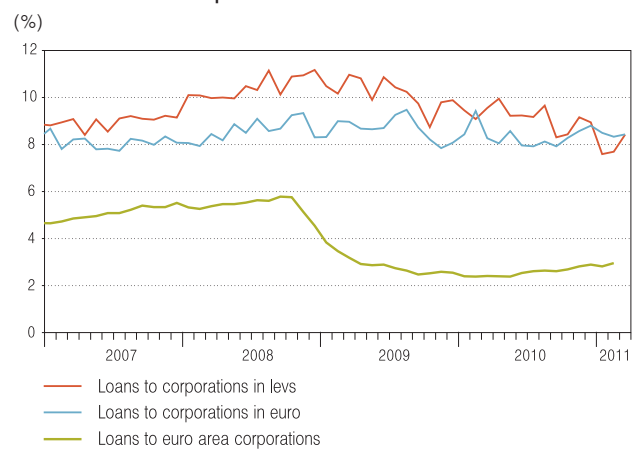


Source: BNB.

<sup>10</sup> Housing loans in euro which comprise the largest share in the new housing loans in the last three years.

In March the average interest rate on bank loans to non-financial enterprises decreased by 36 basis points to 8.42 per cent on December. Interest rates on lev loans went down by 52 basis points and those on loans in euro by 38 basis points. Lending rates are expected to fall insignificantly over the following two quarters. Ample liquidity in the interbank market may not be a decisive factor for the reduction of lending rates, since this market's role in bank liquidity management is just auxiliary. On the other hand, the expected stabilisation of deposit rates, which are main resources, will be a factor limiting the possible decrease in lending rates.

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



Sources: BNB and ECB.

# 3. Economic Activity

In the fourth quarter of 2010 the real GDP growth rate accelerated on the previous quarter, with domestic demand contributing most to this. We expect that production activity strengthening in the second and third quarters of 2011 will be driven by the recovery in domestic demand.

In 2010 real GDP started gradually increasing, its annual growth rate reaching 0.2 per cent against 1.3 per cent on a chain basis in the last quarter.<sup>1</sup> Goods and services exports which have started to increase since mid-2009 with the first positive signs of global economic recovery had the major contribution to economic activity strengthening. In 2010 exports rose by 16.2 per cent in real terms, retaining positive growth rates throughout most of the year and declining by 3.3 per cent on a chain basis in the fourth quarter. Exports also began to recover in 2010, posting 4.5 per cent growth on 2009. In the last quarter imports increased by 2 per cent on a chain basis, reflecting enhanced domestic demand.

Investment in fixed assets decreased by 16.5 per cent in 2010 due to uncertainty about the rate of global economic recovery, weak domestic demand, low foreign direct investment inflows and cautious bank policy in providing investment loans. However, over the fourth quarter real growth in investment accelerated to 3.6 per cent compared to the previous quarter. Capacity utilisation gradually recovered over the year in tandem with the improvement of Bulgaria's economic environment.

In 2010 final household consumption declined by 1.2 per cent. Despite the significant increase in the consumer confidence index over the year, uncertain outlooks for improving labour market conditions and increasing household income held back the recovery of consumer expenditure.

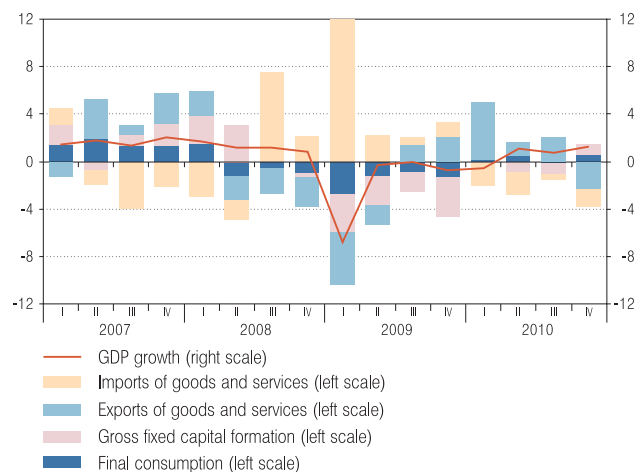
<sup>1</sup> The analysis in this section employs seasonally adjusted data, unless otherwise indicated.

Due to scheduled delay in publication of revised seasonally adjusted data, adjustment of GDP and its components data is made via the TRAMO SEATS programme by using automated set up for diagnostics and optimization of adjustment parameters. The same approach is used for adjustment of indicators for which seasonally adjusted data are not published by the NSI.

In the fourth quarter household expenses rose by 0.1 per cent on a chain basis.

## Contribution to GDP Growth by Component of Final Consumption

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



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

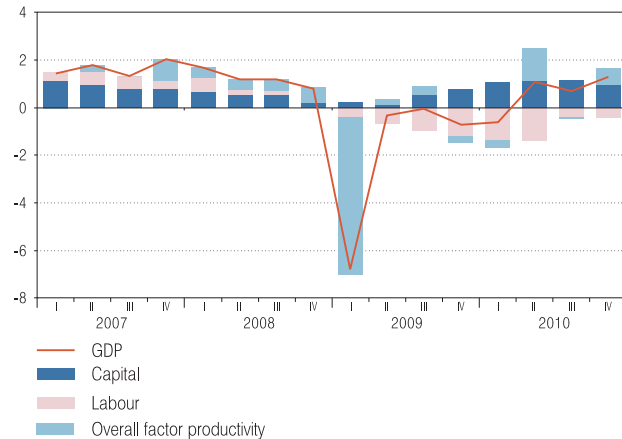
Sources: NSI, seasonal adjustment: BNB.

The analysis of input costs growth shows a recovering contribution of the capital<sup>2</sup> used in GDP growth over 2010, reflecting both higher capacity utilisation and recovered net investments. Labour as measured by hours worked *per* person in the economy decreased gradually its negative contribution to output growth to 0.4 percentage points in the second half of 2010. The lagged effect of the labour factor to GDP growth over the year was offset by higher factor productivity which had a positive contribution of 0.7 percentage points in the fourth quarter.

<sup>2</sup> Calculations are based on the amount of capital estimated through seasonally adjusted accumulated capital corrected for the capacity utilisation rate in manufacturing according to the Industry Trend Survey. The HP bandpass filter (parameter  $\lambda = 10$ ) is also applied to the capacity utilisation indicator.

## Contribution of Changes in Input Costs to GDP Growth

(quarter-on-quarter percentage points)



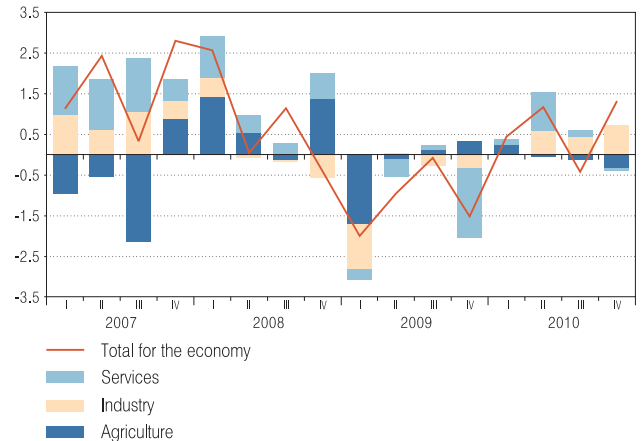
Sources: NSI, BNB.

Gross value added in 2010 rose by 0.2 per cent after a 3.3 per cent decline in 2009. Economic recovery was uneven across sectors. On the one hand, industry, the most affected sector of external demand declines in 2008, succeeded to optimize significantly its expenditure policy and to boost efficiency<sup>3</sup> in 2009. Thus, following the recovery in external demand, real value added growth in industry reached 2.3 per cent in 2010 and 2.9 per cent on a chain basis in the last quarter. On the other hand, services were impacted by lower domestic demand, and some subsectors continued to experience difficulties in 2010 as well. Overall, gross value added in services fell by 0.9 per cent against a decline of 0.8 per cent in 2009. Gross value added in trade fell by 3.5 per cent in 2010, while transport reported 0.7 per cent growth, with positive effects resulting from foreign trade and industrial turnover increases. In the last quarter the services sector declined by 0.3 per cent on a chain basis, with financial intermediation and real estate operations being the main contributors.

<sup>3</sup> Measured by the gross value added to gross output ratio.

## Value Added Growth and Contribution by Sector

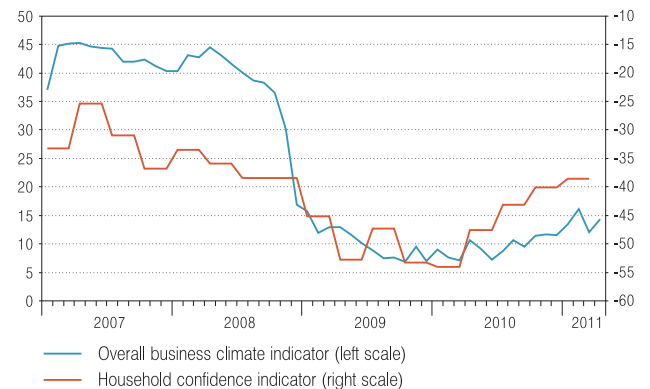
(%; quarter-on-quarter percentage points)



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

Sources: NSI, seasonal adjustment: BNB.

## Business Climate and Household Confidence Indicator



Sources: NSI, BNB.

In the first quarter of 2011 the overall business climate remained at levels above the end-2010 levels, while in February industrial turnover retained its high growth rate in the domestic and world markets. Expectations show that the economy will continue to recover gradually in the second and third quarters of 2011 given the increasing domestic demand contribution. The contribution of net exports is likely to be negative due to the increased imports of goods and services. Capacity utilisation recovery and better financial performance of firms will maintain a positive rate of change in investment expenditure. More optimistic household expectations along with an improvement in the labour market situation are expected to gradually boost consumer expenditure.

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

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

	2008				2009				2010			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Consumption incl.	1.7	-1.4	-0.6	-1.2	-3.4	-1.4	-1.1	-1.6	0.2	0.6	-0.2	0.7
Household consumption	2.1	-1.6	-0.7	-1.8	-3.0	-1.7	-1.2	-1.1	-0.1	0.6	-0.5	0.1
Final government consumption expenditure	-2.5	1.4	-2.9	4.8	-10.8	1.7	1.2	-2.4	4.1	1.1	-0.4	-0.8
Collective consumption	-1.7	0.3	-0.1	1.9	-3.5	-0.9	-2.0	-4.8	2.1	-1.9	-1.2	-0.6
Gross capital formation	-0.7	29.8	-9.5	-8.1	-11.5	-4.5	-7.3	-10.8	1.4	-3.1	-5.7	2.3
Gross fixed capital formation	7.7	9.7	-0.1	-1.0	-9.1	-7.5	-5.5	-11.3	-0.1	-3.6	-3.6	3.6
Exports of goods and non-factor services	3.2	-2.9	-3.3	-4.0	-7.5	-2.7	2.3	3.4	7.9	1.7	3.1	-3.3
Imports of goods and non-factor services	3.2	1.7	-7.9	-2.5	-14.3	-2.8	-0.9	-1.8	2.7	2.5	0.6	2.0
<b>Real GDP growth</b>	<b>1.7</b>	<b>1.2</b>	<b>1.2</b>	<b>0.8</b>	<b>-6.8</b>	<b>-0.3</b>	<b>-0.1</b>	<b>-0.7</b>	<b>-0.6</b>	<b>1.1</b>	<b>0.7</b>	<b>1.3</b>

Sources: NSI, BNB.

## Gross Value Added Growth

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

	2008				2009				2010			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Agriculture and forestry, hunting and fishing	23.0	7.3	-1.7	17.8	-18.6	-1.6	1.5	4.4	2.9	-0.8	-1.7	-4.0
Mining and quarrying, production and distribution of electricity, gas and water	1.6	-0.7	-1.1	-3.1	-1.4	-0.3	-1.4	0.1	-0.3	2.1	1.5	2.9
Construction	2.3	1.4	3.6	2.1	-14.4	1.6	0.7	-6.9	1.6	2.6	2.2	2.0
Trade, repair; hotels and restaurants; transport and communications	1.9	0.0	-0.1	-0.4	-0.8	-1.8	-0.3	0.4	-1.3	0.7	-0.7	-1.1
Finance, credit, insurance; operations in real estate and business services	2.7	1.7	1.6	1.7	1.2	0.3	1.1	-6.7	2.9	3.0	1.9	1.1
General government; education; healthcare; other services	-0.6	0.3	-0.5	2.4	-2.3	-0.2	-0.6	-1.1	-1.2	0.2	-0.9	-0.2
<b>Total for the economy</b>	<b>2.6</b>	<b>0.0</b>	<b>1.1</b>	<b>-0.4</b>	<b>-2.0</b>	<b>-1.0</b>	<b>-0.1</b>	<b>-1.5</b>	<b>0.4</b>	<b>1.2</b>	<b>-0.4</b>	<b>1.3</b>

Sources: NSI, BNB.

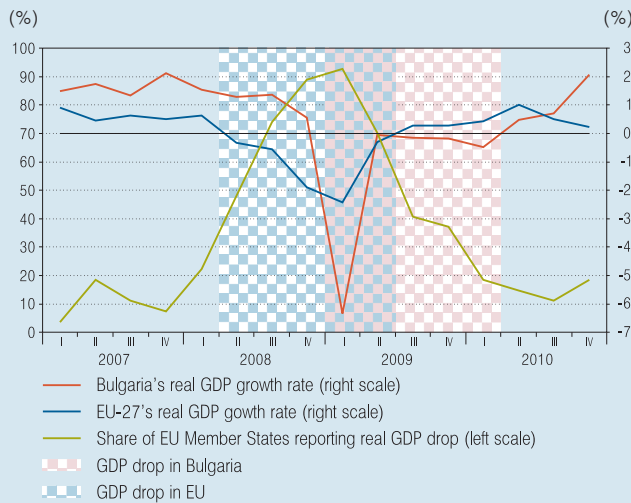
## Dynamics of Bulgaria's Economic Recovery: Comparative Analysis

In 2010 the world economy started recovering from the global economic crisis. The average growth rate for the EU and the euro area was 1.8 per cent and for Bulgaria 0.2 per cent. Comparing these data, it seems that the Bulgarian economy has been recovering at slower rates lagging behind its major trading partners. This conclusion is incorrect as the initial period, when the GDP of the respective country started to decline impacted by the global economic crisis, has not been taken into account. This period is different for individual Member States. GDP in the EU started to decrease in the second quarter of 2008, while GDP in Bulgaria started to decline in the first quarter of 2009, *i. e.* three quarters later.

Data suggest that the duration of the crisis and its impact on Bulgaria's economy are comparable to those in the EU as a whole. The duration of the crisis is similar for the EU and Bulgaria and in both cases the GDP decreased during five quarters. In the course of the crisis the EU lost cumulatively 5 per cent of its real GDP against the pre-crisis maximum value of the first quarter of 2008, and Bulgaria lost 7 per cent from the maximum value reported in the fourth quarter of 2008. By the fourth quarter of 2010 the EU and Bulgaria compensated approximately the half of the accumulated fall in the GDP for six quarters and three quarters respectively. Based on these data the pace of real GDP recovery indicator has been computed which is the ratio of the degree of GDP recovery to pre-crisis levels (or also the percentage of compensation of the accumulated GDP decline) and the number of quarters posting positive GDP growth. By the fourth quarter of 2010 the pace of real GDP recovery indicator is higher for Bulgaria than the EU average.

The relation between the loss of real GDP accumulated during the crisis and the average pace of real GDP recovery diverges in individual countries. The countries most severely affected by the crisis have recovered at a relatively slower pace. This may reflect the ensuing structural changes in the economy which require more time and now still impede quick economic recovery. On the other hand, the economies that responded more flexibly to the negative effects of the crisis and preserved their competitiveness can benefit to the maximum degree from the recovery of the world economy.

### Dynamics of the Real GDP of Bulgaria and EU on the Previous Quarter



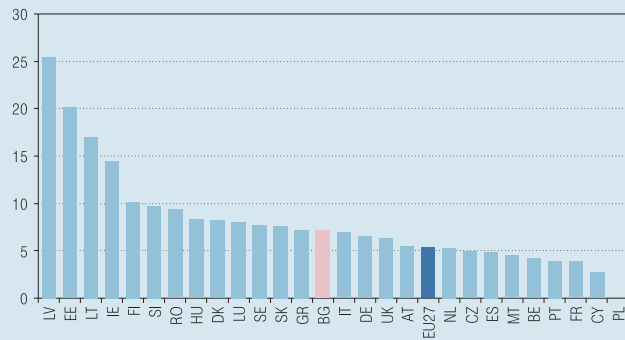
Sources: NSI, BNB..

For instance, some of the industries in Bulgaria which sold their produce mostly on the domestic market prior to the crisis, started to export a significant portion of their output which helped them accelerate the recovery.

Finally, based on data analysis Bulgaria is among the countries moderately affected by the slowdown in global economic activity and by the end of 2010 the country recovered at a pace close to that of most EU Member States as measured by the loss of real GDP accumulated during the crisis.

### Accumulated Real GDP Drop to the Pre-crisis Maximum

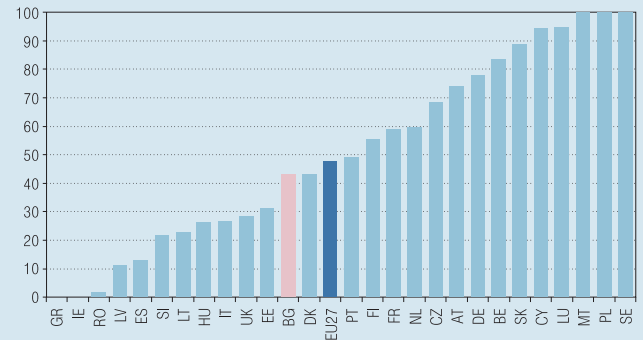
(by the fourth quarter of 2010, per cent)



Sources: Eurostat, BNB.

### The Degree of Recovery of the Real GDP to the Pre-crisis Levels

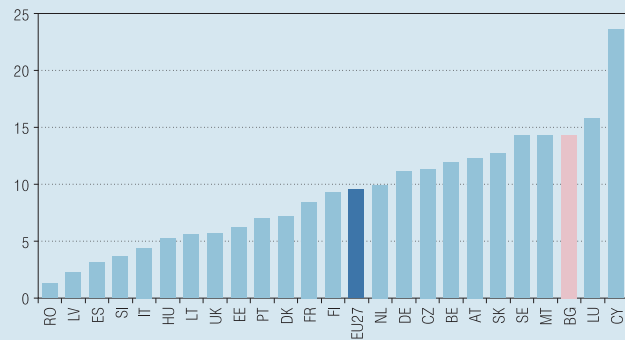
(by the fourth quarter of 2010, per cent)



Sources: Eurostat, BNB.

### The Average Pace of Real GDP Recovery Indicator

(by the fourth quarter of 2010, per cent)

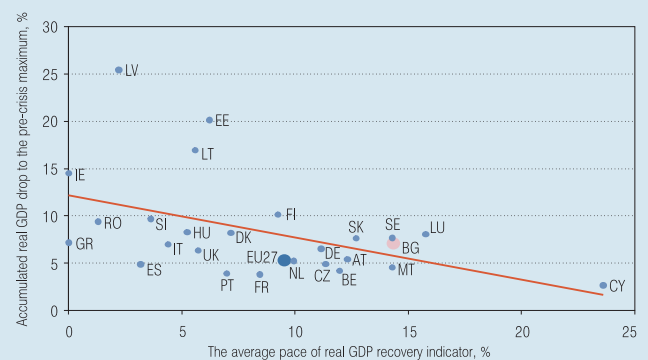


Note: Poland, Greece and Ireland are not included in the chart as GDP of Poland during the crises posted positive growth rates, while no recovery has been reported yet in Greece and Ireland.

Sources: Eurostat, BNB.

### Relation between the Accumulated GDP Drop and the Average Pace of Recovery

(by the fourth quarter of 2010, per cent)



Sources: NSI, BNB.

## Household Behaviour

In the fourth quarter of 2010 household consumption posted slight growth. Consumer demand is likely to continue recovering in 2011 in line with the gradual improvement in the labour market situation.

In the fourth quarter household consumption posted a slight rise of 0.1 per cent on a chain basis. Meanwhile, precautionary household savings, measured by the share of savings in disposable income and by the ratio between net lending and net borrowing,<sup>4</sup> declined in the fourth quarter of 2010 *vis-à-vis* the relatively high level in previous quarters. In January and February household net assets in the banking system also declined on the end of 2010. The savings rate was affected by the comparatively high real interest rate on deposits which started to decline only at the end of 2010 due mainly to inflation acceleration.

According to national accounts data, household expenditure on food products increased, while that on public catering, communications and some essential commodities such as water and electricity declined. In January and February 2011 moderate recovery was observed in retail trade volumes and particularly in unspecialized shops with different kinds of goods and automobile fuels and lubricants. On the other hand, no sales growth was reported in the *household appliances, furniture and other household goods* group. The relatively high real interest rate on consumer loans in 2010 also contributed to the weak demand for loans, limiting consumption.

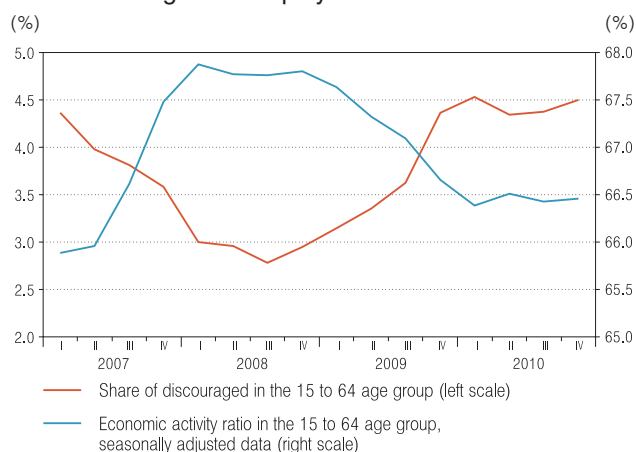
Household investment demand remained subdued. This assessment was based on house supply indicator dynamics. The decline in the number of building permits slowed down in the course of 2010, and especially over the fourth quarter. However, by number of residential buildings, this indicator still remained at low levels, exhibiting no upward trend. On the other hand, the number of newly launched houses continued to decrease at high rates on an annual basis (almost 30 per cent in the fourth quarter of 2010) possibly linked to the existing unsold houses. The rate of decline of the average market housing prices in 2010 was slower than in

<sup>4</sup> This indicator is based on household budget survey data as a difference between deposit amounts, foreign currency and bond purchases, on the one hand, and the amount of withdrawn savings, loans and credits.

2009 but remained comparatively constant in the first quarter of 2011 as well.

Based on national accounts employment data, the downward trend in the number of employed continued in the fourth quarter of 2010, albeit at a slower pace. On a chain basis, the decrease was 0.7 per cent. In 2009 people who lost their jobs in the last 12 months had a major contribution to unemployment growth, while in 2010 and especially in the fourth quarter the number of long-term unemployed (over 12 months) increased most significantly. The number of discouraged people remained comparatively high. Over the fourth quarter no significant change was observed in the economic activity rate of persons between 15 and 64 years, its level remaining at 66.5 per cent (seasonally adjusted data).

### Economically Active Persons and Discouraged Unemployed



Sources: NSI, BNB.

Total for the economy, the nominal compensation *per* employee increased on a chain basis in the fourth quarter of 2010. This fact may reflect various reasons, one of them involving the change in the structure of employed by criteria such as age and level of education. While people aged 45 years and above had a major share in dismissed persons over the third quarter, persons aged up to 34 (probably lower-paid employees) occupied the most significant share in employment declines over the fourth quarter. On the other hand, employment increased on a chain basis only in the group of higher-paid



university graduates. Agriculture and forestry, manufacturing, construction, real estate operations and general government reported negative growth in the nominal compensation *per* employee.

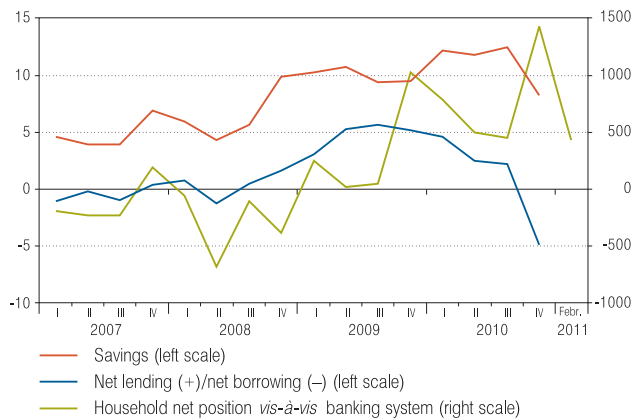
In the fourth quarter of 2010 the decline in the average household income from wages also moderated, its rate reaching 1.4 per cent nominally compared to 4.3 per cent on an annual basis in the third quarter (based on NSI household budget survey data).

Expectations for 2011 show a moderate nominal increase in wages consistent with the gradual recovery in employment.

Real income in total economy, measured by the compensations *per* employee deflated by the HICP, saw positive chain growth in the fourth quarter of 2010 after the declines observed in the second and third quarters. Taking a sectoral perspective, remunerations still declined in agriculture and forestry, manufacturing, construction and transport, storage and communications. In the fourth quarter, however, the wage fund in economy decreased on a chain basis both in real and nominal terms due to the continuing decline in the number of employed persons.

### Households Savings Propensity

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



Sources: NSI: Household Budget Survey, BNB.

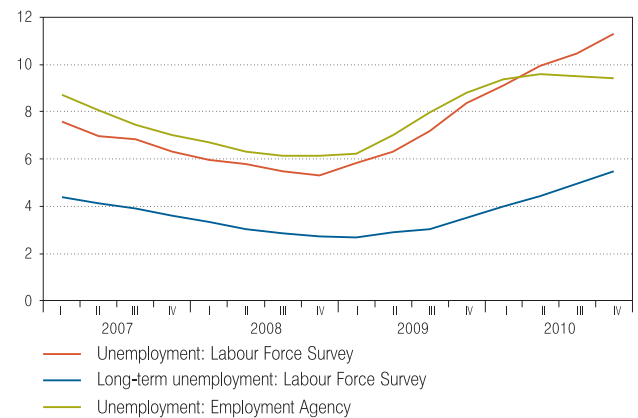
According to the Labour Force Survey data, unemployment of individuals at and above the age of 15 reached 11.2 per cent in the fourth quarter of 2010, matching non-seasonally adjusted data. Registered unemployment measured by the Employment Agency and corrected for seasonal effects also remained comparatively high,

reaching 9 per cent in March 2011 (9.5 per cent according to non-seasonally adjusted data).

Employment Agency data show that competition for occupying vacancies in the first quarter of 2011 remained at the level observed in the second half of 2010, with the number of unemployed applying for a vacant position averaging 15 persons against 16 on average in the second half of 2010. No greater labour supply was observed over the review period. The vacancy ratio<sup>5</sup> indicates no signs of deepening in inconsistencies of the structure of demand for and supply of labour resources.

### Unemployment

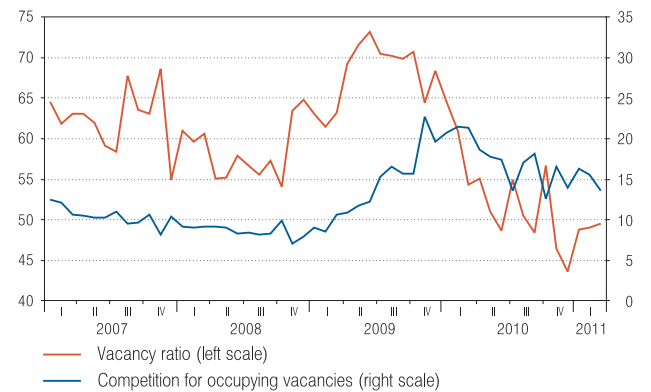
(% of labour force; seasonally adjusted data)



Sources: NSI, Employment Agency, BNB.

### Competition and Vacancy Rates

(%, seasonally adjusted data) (number)



Sources: Employment Agency, BNB.

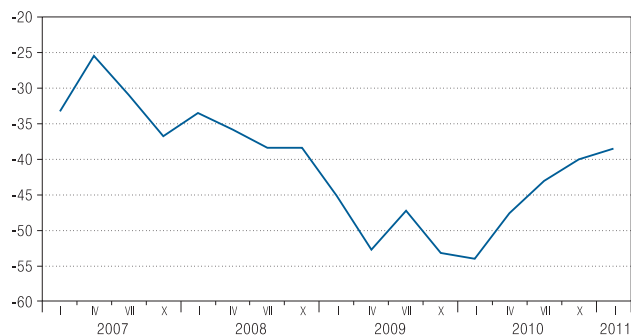
Positive trends in the Consumer Confidence Survey over 2010 show an increasing household consumption in 2011. More optimistic expectations concern households' financial performance and the overall situation in economy and unemployment. According to the Business Trend Sur-

<sup>5</sup> A ratio between the number of vacancies which were occupied in a given quarter and the number of offered job vacancies in the same quarter.

vey data in construction and trade, in April 2011 the share of managers expecting staff reductions in the following months continued to gradually decline signalling forthcoming revival in labour force demand.

### Household Confidence Indicator

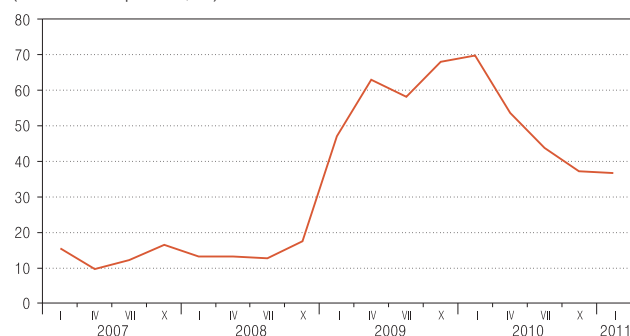
(balance of opinions; %)



Source: NSI Consumer Survey.

### Unemployment Expectations in the Next Twelve Months

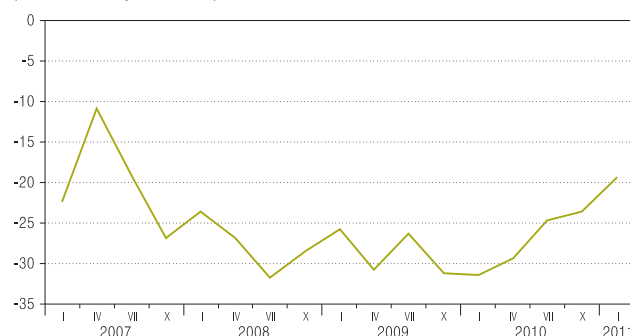
(balance of opinions; %)



Source: NSI Consumer Survey.

### Expectations of Households' Financial Performance in the Next Twelve 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	January-February
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	2.2
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	-0.1
Textile, clothing, footwear and leather	9.0	0.0	0.3	0.8	-4.2	-4.0	-5.1	0.9	-1.8	-2.3	-1.2	-0.9	1.5
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	-1.2
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	0.3
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	-5.0
Unspecialized 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	15.2
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	4.1

Source: NSI Domestic Trade Survey.

### Employment and Income Dynamics

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

	2008				2009				2010			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Employed	1.0	0.3	0.4	-0.2	-0.6	-1.3	-1.6	-1.8	-2.0	-1.6	-0.7	-0.7
Real wage*	1.3	1.4	0.3	5.5	-0.8	3.3	2.5	-1.6	3.3	-0.6	-0.1	0.9
Wage bill in real terms	-0.5	2.5	0.7	4.4	1.8	0.9	0.1	-2.1	-0.7	-1.5	-0.4	-0.7
Unemployment, average for the period, % of the labour force	5.9	5.8	5.5	5.3	5.8	6.3	7.2	8.3	9.1	9.9	10.4	11.3

\* Real wage dynamics is approximated by compensation of employees under the System of National Accounts, deflated by HICP.

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

## Government Finance and Consumption

Final quarterly data for 2010 show that the cash balance on the consolidated fiscal programme ended in a deficit of BGN 2780.8 million (3.9 per cent of GDP). On an accrual basis (under ESA'95 methodology), the deficit came to BGN 2269.2 million (3.2 per cent of GDP). In the first quarter of 2011 a cash deficit of BGN 741.9 million was reported.

On a chain basis and given the real change in individual and collective consumption of -0.8 per cent and -0.6 per cent respectively, government consumption in the fourth quarter of 2010 had a negative contribution to GDP growth. Declines in the wage and operational expenditure reported in the first quarter of 2011 confirm our expectations of negative real growth in government consumption in the first quarter and close to zero real growth in the following two quarters.

Final quarterly reports on consolidated fiscal programme performance show that the cash-based budget balance for 2010 ended in a deficit of BGN 2780.8 million (3.9 per cent of GDP). On an accrual basis (under ESA'95 methodology), the deficit came to BGN 2269.2 million (3.2 per cent of GDP).<sup>6</sup> The deviation between these indicators was mainly due to somewhat different dynamics in the budget expenditure side. On a cash basis, total expenditure increased by 4.1 per cent including repayment of obligations accumulated in previous years, while on an accrual basis, it decreased by 4.5 per cent in 2010.

The total revenue under the consolidated fiscal programme came to BGN 23,932.6 million in 2010, 2.5 per cent less than the targeted level in the Amendment to the State Budget Law: a decrease of 4.4 per cent on 2009. Budget revenue dynamics in 2010 was driven by shifts to more unfavourable tax revenue growth structure and slower-than-expected rate of recovery in economic activity. The actual 4.3 per cent decline in indirect taxes was mainly due to the continued nominal decrease in household consumption. The weaker cigarette market which led to a 15 per cent decrease in excise revenue despite the increased excise rates had a negative effect on these receipts. Cash VAT receipts in 2010 were also negatively impacted by delayed repayment of VAT for recovery since end-2009. However, their overall dynamics followed consumption dynamics with a clearly pronounced trend to recovery in the last months of the year.

Implementation of revenue from income tax for individuals (down 1 per cent on an annual basis) reflected to a great extent the retention of overall compensation *per* employee at the 2009 levels. With the same macroeconomic basis

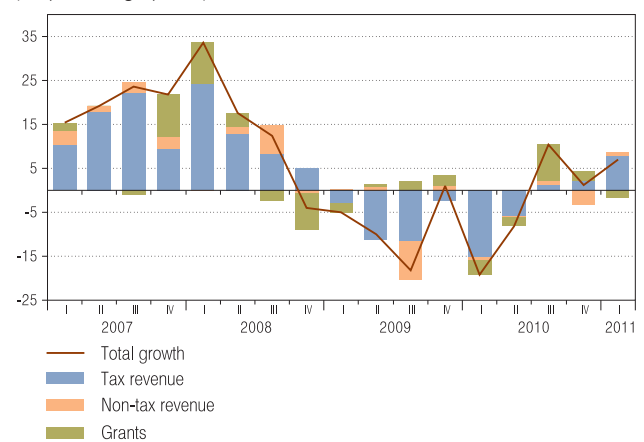
<sup>6</sup> According to preliminary NSI data which were confirmed without reservation by Eurostat and published on 26 April 2011.

and similar elasticity, social contribution receipts declined by 5.8 per cent on 2009 mainly due to the 2 percentage point decrease in pension contributions. Profit taxes registered the largest decline (23.2 per cent) despite the 6.5 per cent nominal increase in gross operating surplus and mixed income. The significant mismatch between the macroeconomic basis and the corresponding tax dynamics was primarily due to delays in depositing current profit tax.<sup>7</sup>

Declines in tax revenue over 2010 are a result mainly of the operation of automatic stabilisers which are supposed to mitigate the effects of weakening economic activity. Effects of changes in tax and social security laws were comparatively smaller. Reduced social security contributions pushed up consumption, though this effect was largely neutralized by the increase in some excise rates and higher savings rate in 2010. Better utilization of funds under EU programmes was also important for the recovery of investment and consumption.

### Contribution of Major Groups of Revenue to the Growth in Total Revenue and Grants (quarterly on an annual basis)

(%, percentage points)



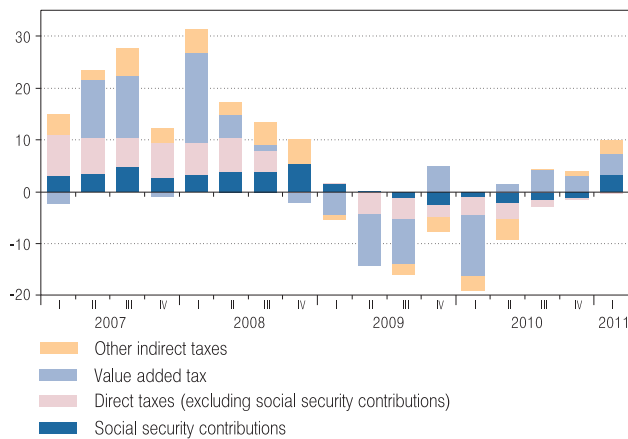
Sources: MF, BNB.

<sup>7</sup> For more details, see the *Economic Review*, 2010/4.

In 2010 total budget expenditure on an annual basis (including also Bulgaria's contribution to EU budget) rose by 4.1 per cent. Yet, budget expenditure for 2010 was 3.9 per cent lower than the target in the Amendment to the State Budget Law, contributing to the lower than envisaged cash deficit. Social expenditure (up 8.7 per cent on an annual basis) had the most significant contribution to the growth. The decline in capital expenditure (down 3.2 per cent) had just the opposite effect.

### Contribution of Major Tax Groups to Tax Revenue Growth under the Consolidated Fiscal Programme (quarterly on an annual basis)

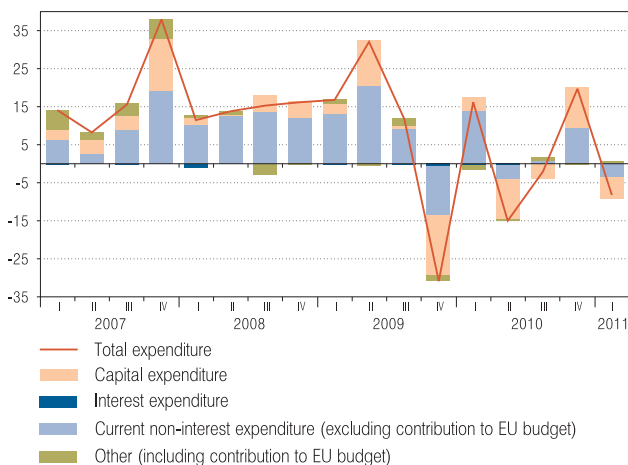
(%, percentage points)



Sources: MF, BNB.

### Contribution of Major Groups of Expenditure to Total Expenditure Growth (quarterly, on an annual basis)

(%, percentage points)



Sources: MF, BNB.

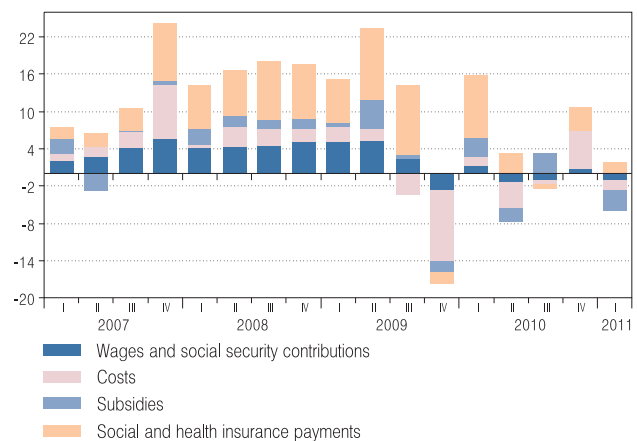
The increase in cash-based expenditure was associated with payments to cover previous years' obligations which had no direct effect on consumption and investment but contributed to the improvement of firms' liquidity and better

planning of their production and investment. NSI data show that in accordance with the ESA'95 methodology, expenditure declined by 4.5 per cent on an accrual basis. Its dynamics is indicative of the effect of government expenditure on economic activity. On the one hand, the 1.3 per cent decline in expenditure on compensation *per* employee and the minimal 0.1 per cent growth in intermediate consumption expenditure were the major factors behind the retention of the nominal government consumption at the 2009 levels and its negative contribution to GDP growth. Government consumption and investment consolidation is likely to have second-round effects on employment and incomes in the private sector and, hence, on household consumption and private investment.

On the other hand, larger transfers to households in the form of higher pensions and other social payments mitigated the effects of slowing economic activity on disposable income. However, the corresponding effect on consumption may have been weaker due to the higher savings rate in the previous year.

### Contribution of Major Groups of Current Non-interest Expenditure to Total Expenditure Growth (quarterly, on an annual basis)

(%, percentage points)



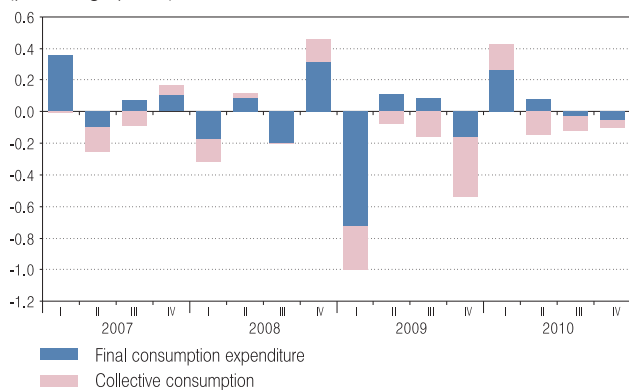
Sources: MF, BNB.

In the fourth quarter of 2010, despite the significant nominal growth of the current non-interest expenditure on an annual basis (17.8 per cent), government consumption had again a negative, albeit close to zero, contribution to GDP growth compared to the previous quarter. The real change in individual and collective consumption came to -0.8 per cent and -0.6 per cent respectively.

Government expenditure consolidation and retained low levels of the government debt *vis-à-vis* most EU countries led to decreases in interest rates on government securities in almost all segments of the maturity curve, contributing to the strengthening of the confidence in Bulgarian economy.

### Contribution of Government Consumption to Economic Growth

(percentage points)



Note: Quarter-on-quarter contribution to seasonally adjusted GDP growth.

Sources: NSI, BNB.

Data on revenue implementation in the first three months of 2011 confirm the expectations about a more marked recovery of indirect tax collectability and VAT revenue, in particular. Between January and March 2011 indirect tax revenue increased by 16.4 per cent. The one-off factors<sup>8</sup> as those in the start of 2010 and 2011 did not allow this growth to be interpreted as an indication of this revenue's dynamics in the following months. The indirect tax collection rate in the next two quarters is expected to be similar to the household consumption rate after neutralizing the one-off effects.

Data on direct tax receipts and social and health insurance contributions in the first three months of 2011 confirm our expectations of existing risks to the implementation of budgeted revenue. Corporate tax income fell by 1.5 per cent compared to the 17.3 per cent growth planned by the Ministry of Finance. Our expectations show that the corporate tax increase will be lower than the operating surplus for 2010 due to the legal

<sup>8</sup> On the one hand, a greater volume of VAT for recovery was held in the beginning of 2010. On the other hand, revenue from excise tax on cigarettes rose due to unsold cigarettes with old bundles. The one-off rise of government expenditure at the end of 2010 and higher fuel prices in the beginning of 2011 were another factors temporarily boosting indirect tax growth.

ability of the firms to deduct previous periods' losses from the current profit.

There was a significant deviation between the minimal growth in social and health insurance contributions generated in the first three months of 2011 (2.3 per cent on the same period of 2010, taking into account the one-off amount of BGN 109.6 million transferred by the Professional Pension Funds in March<sup>9</sup>) and the two-digit growth rate of this revenue set in the National Social Security budget. Given the risks of concomitant worsening in collectability in case of a 1.8 percentage point increase in pension contributions and still slight employment recovery, the growth rate of social and health insurance contributions is expected to match the change in compensation *per* employee in economy in the next two quarters.

In the first quarter of 2011 consolidated expenditure went down 8.3 per cent on an annual basis. This decrease is a result of government expenditure consolidation, including both public investment and most of the current non-interest expenditure. At the same time, one-off factors which pushed up the expenditure in the beginning of 2010<sup>10</sup> may also be relevant. Only social payments posted an increase of 3.8 per cent despite the measures for limiting social fund abuses in force since early 2010. Budget expenditure is expected to retain its previous years' levels. The expenditure side of the budget may be reduced more significantly in case of weaker-than-planned revenue performance.

According to Ministry of Finance's preliminary information, declines in wage and operational expenditure reported in the first quarter of 2011 confirm our expectations of negative real growth in government consumption in the first quarter and close to zero real growth in the following two quarters.

Given the negative net issuance of domestic market government securities to the amount of approximately BGN 125.7 million, the negative budget balance of BGN 741.9 million by end-March was financed by the funds accumulated

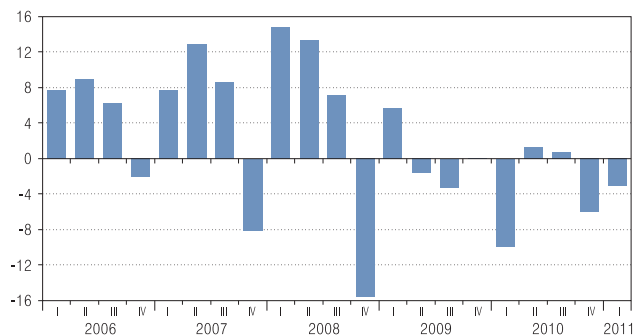
<sup>9</sup> For further information on funds transfer from the Professional Pension Funds to the National Insurance Institute, according to the changes in the Social Security Code, see *Economic Review*, 2010/4.

<sup>10</sup> For more details, see also *Economic Review*, 2010, issue 1.

in the fiscal reserve. In the first three months of 2011 the fiscal reserve level fell by BGN 4699.3 million, down BGN 1312.5 million on 2010. Some one-fifth of this decrease is due to direct payments for farmers made in March (BGN 356.2 million at the expense of the EU). These funds are expected to be reimbursed to Bulgaria in the second quarter.

### Primary Balance (Quarterly)

(% of GDP)



Note: Data for the first quarter of 2011 are based on GDP projections for this period.

Sources: MF, BNB.

### Government Securities Market between January and March 2011

In the first three months of 2011 investors still preserved their interest in government securities market. The bid-to-cover ratio (the average ratio between the total nominal value of the bids admitted to the auction and the total nominal value of the government securities offered) for the review period reached 2.8 against 2.6 for the first quarter of 2010. The 5-year euro-denominated government securities auction of 28 March 2011<sup>11</sup> was most sought by investors whose bids exceeded 4.75 times the quantity offered by the Ministry of Finance. In line with buoyant investors' demand, the downward trend in the average annual yield of government securities issued in the primary market was sustained in the first quarter of 2011.

By convention, the MF sold a new benchmark issue of tap government securities with an original maturity of ten years and six months used as a basis for calculating the long-term interest rate for assessing the degree of convergence. In

<sup>11</sup> At the primary auction of 28 March 2011, the Ministry of Finance offered for sale treasury bonds denominated and payable in euro with a maturity of five years and an annual coupon interest of 4.0 per cent. The nominal value of offered government securities was EUR 25 million and primary dealers' bids came to EUR 119 million. The average-weighted annual yield reached 4.16 per cent.

January the average annual yield in the primary auction reached 5.49 per cent: 88 basis points less than that on the similar government securities issue placed in January 2010. On 7 March the MF reopened the January 2011 ten-year-and-six-month issue, with the average annual yield attained at the auction declining to 5.40 per cent.

### Ten-year-and-six-month Government Bond Primary Market Dynamics\*

(%)



\* This chart does not include data on the average annual yield and bid-to-cover ratio attained at the auction held on 25 May 2010 when the MF rejected all investor bids.

Source: MF.

As regards the three-year-and-six-month bond issue opened for the first time in 2010, a gradual decrease in the annual yield attained at primary auctions was reported: from 3.69 per cent in December 2010 to 3.63 per cent in February 2011 and 3.51 per cent at the last primary auction in early April. Only at the 18 April 2011 auction for sale of three-month government securities with a nominal value of BGN 15 million, the MF did not approve primary dealers and their customers' bids since the average annual yield (1.27 per cent) sought by the auction participants did not correspond to the issue policy objectives<sup>12</sup>. By comparison, the average annual yield at the previous three-month discount bills auction of 7 February 2011 was 0.85 per cent.

<sup>12</sup> In the first two months of 2011 the MF cancelled two of the pre-scheduled six government securities auctions. In January the five-year euro-denominated government securities auction was called off, and subsequently the MF rejected the 15-year euro-denominated government securities auction scheduled for 14 February. In January the five-year euro-denominated government securities auction was called off, and subsequently the MF rejected the 15-year euro-denominated government securities auction scheduled for 14 February. Despite issuer's reasons and right to change its pre-announced issuing policy, frequent changes in the issue calendar cause difficulties to government bond market participants in preparing their investment programmes.

For the first time since 2003, in February and March the Ministry of Finance initiated advance purchases of domestic government debt. To this end, three reverse repurchase auctions were organized for government securities not included in published monthly issue calendars. Three ten-year lev-denominated issues maturing in April 2012, January 2013 and July 2013 were offered at these auctions. The annual interest coupon of the first two issues was 7.5 per cent: the highest rate in all circulating issues, while the annual interest coupon of the issue maturing in July was 5.75 per cent. By comparison, the annual interest coupon of the 2010 and 2011 issues with an original maturity of ten years and six months was 5 per cent. At the auctions, the MF offered for reverse repurchase government securities to the amount of circulating quantity of each issue: BGN 84.92 million in the issue maturing in 2012 and BGN 50 million in each issue maturing in 2013. In the MF's view, auctions were intended to partially adjust the repayment profile of the outstanding debt and to reduce interest expenditure in the 2011 to 2013 period. Unlike the auctions for sale of government securities, interest in bond reverse repurchase auctions was very low. At the first reverse repurchase auction for ten-year government bonds of 2003 with an interest coupon of 7.5 per cent, bids approved by the MF totalled BGN 527.7 thousand. At the second auction for sale of ten-year bonds of 2002, bids, worth BGN 1.70 million, were approved and at the last auction of 21 March, all market participants' bids were rejected by the MF. Summarized data show that government bond holders have preferred to hold them to maturity due to the high interest coupon thereon.

The mid-2010 upward trend in secondary market activity continued in the first three months of 2011. The overall volume sold in the secondary market in the first quarter increased on the same

period of 2010. Following the rise in the volume of traded interbank secondary market bonds, the liquidity ratio continued to grow: from 1.10 in January and 1.35 in February to 1.58 at the end of March.

In April the Council of Ministers approved the MF-offered amendment to the Government Debt Management Strategy for the 2009 to 2011 Period. Under this strategy, the MF intends to continue its active issuing policy in the domestic bond market, with the planned domestic bond financing in 2011 remaining unchanged *vis-à-vis* the current strategy at some BGN 430 million. The option for issuing government bonds in international capital markets under the amended 2011 State Budget Law also remained unchanged over the review period. In line with the updated strategy, the MF will explore the possibility of applying a special mechanism for purchasing government bonds from the European Investment Bank (EIB) to finance investment projects. The available information shows that this financial instrument is different from standard government loans extended to EIB member states but contains all elements and conditions for avoiding the risk of the EIB standard framework agreement on extending loans to EU Member States. The EIB requirement is for all mutual actions to be bound by specific preliminary agreements and investment projects.

According to the preliminary MF calendar, in May issues of six-month government bills and five-year bonds are expected to be reopened, while in June lev-denominated three-year-and-six-month and ten-year-and-six-month bonds will be offered in the market. The indicative total nominal value of government debt instruments to be issued in the first half of 2011 approximates BGN 511.1 million, down BGN 31 million on the same period of the previous year.

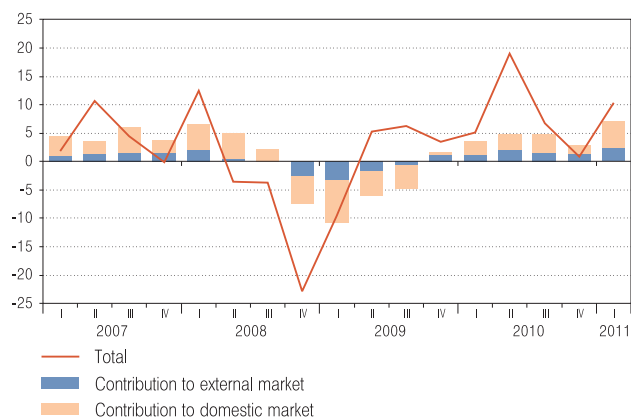
## Behaviour of Firms and Competitiveness

The positive value added change in the fourth quarter of 2010 is mainly due to firms' intermediate consumption cost reduction to retain competitiveness. As a result of the effective policy of inventory and labour expenditure management, the financial performance of the firms remained unchanged compared to the previous quarters of 2010.

Value added generated in the fourth quarter of 2010 rose on a chain basis by 1.3 per cent, after a 0.4 per cent decline in the third quarter. The positive change in the value added is due to adjustments in intermediate consumption of enterprises to retain their competitiveness amid a decreasing gross output in the economy.

### Industry Turnover Dynamics

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

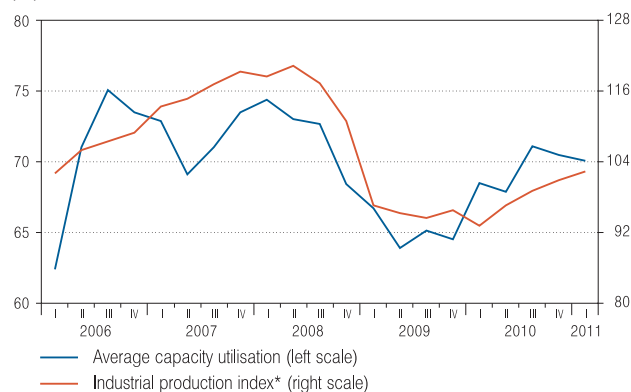


Note: Non-additive contributions due to direct chain-linked volumes and seasonal adjustment of gross value added and its components. Sources: NSI, BNB.

Value added growth in industry remained stable as the nominal domestic market turnover continued to recover and contribute further to the increase in the total industrial turnover. In addition, intermediate consumption in this sector stayed unchanged on the third quarter of 2010, which indicates an ongoing optimisation of costs intended to improve competitiveness.

### Production Capacity Utilisation in Industry

(%)



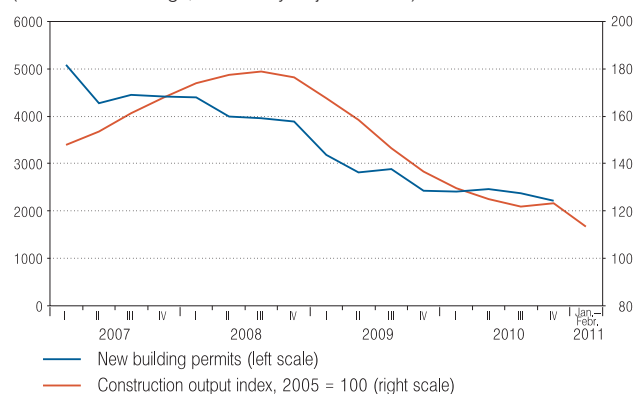
\* For 2011, the industrial production index refers to January – February. Source: NSI, Industry Trend Survey.

Despite the overall negative dynamics in construction output, the growth rate of construction value added rose in the review period. The production volumes of various sector activities continued to contract, with the most significant decline observed in the civil and engineering construction. The number of newly launched houses and that of building permits continued to fall in the fourth quarter of 2010 and early 2011. Given the negative dynamics in this sector, firms cut their spending on intermediate consumption which had a favourable effect on value added. In the second and third quarters of 2011 no revival in the economic activity of construction is expected due to the continued downward trend.

The slow recovery in domestic demand continued to adversely affect *trade, hotels and restaurants, transport and communications*. Their value added declined insignificantly on a quarterly basis despite the positive data of short-term business statistics. The economic situation in transport and communications remained favourable and that in domestic trade began slightly to improve.

### Construction Output Dynamics, Buildings Permits Issued and Construction of New Buildings

(number of buildings; seasonally adjusted data)



Sources: NSI, BNB.

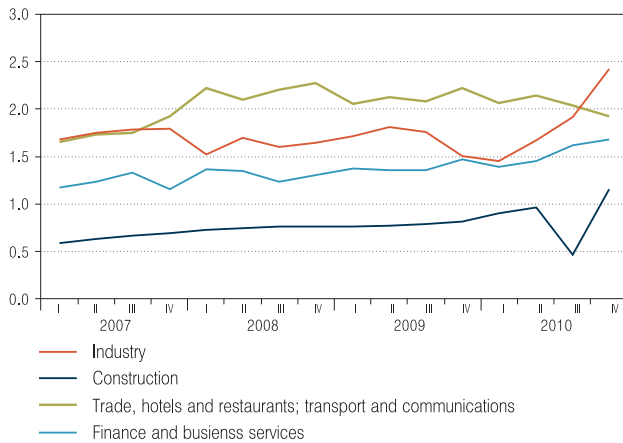
In the fourth quarter of 2010 corporations' financial performance remained unchanged on the previous quarter, with gross operating surplus in most sectors slightly improving in nominal terms due to reduced expenditure on commodities, materials and labour. Output profitability, as measured by the gross operating surplus to



output ratio, remained close to previous quarters' levels observed in all sectors.

### Gross Operating Surplus at Current Prices

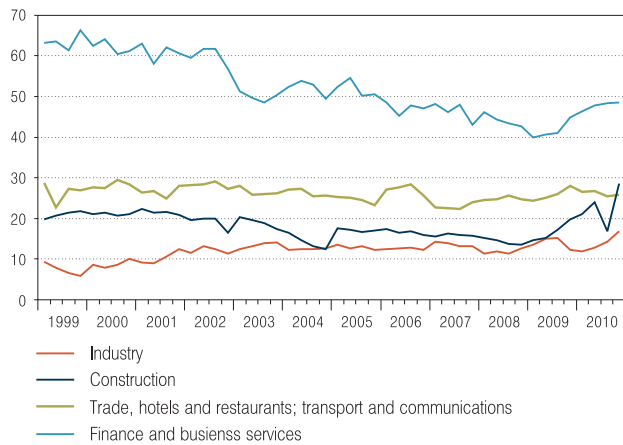
(billion BGN, seasonally adjusted data)



Sources: NSI, BNB.

### Operating Surplus to Gross Output

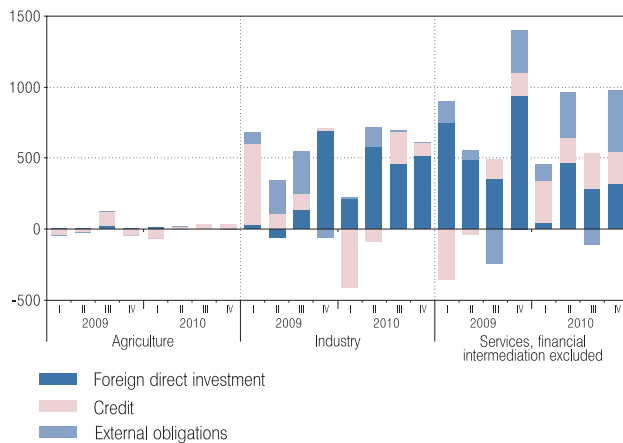
(%, seasonally adjusted data)



Sources: NSI, BNB.

### Financing Sources

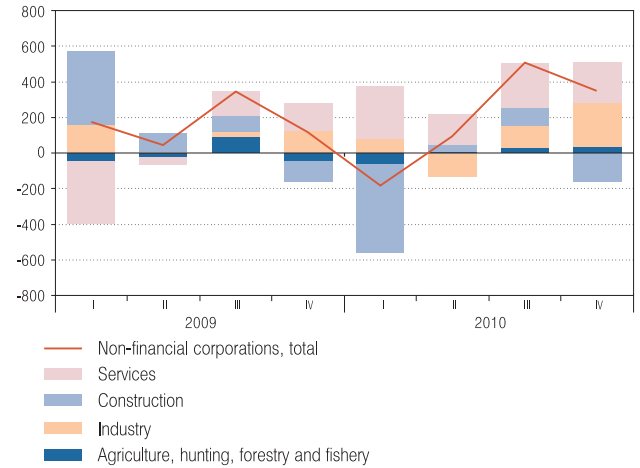
(million BGN, quarter-on-quarter volume change)



Sources: NSI, BNB.

### Loans to Non-financial Corporations

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



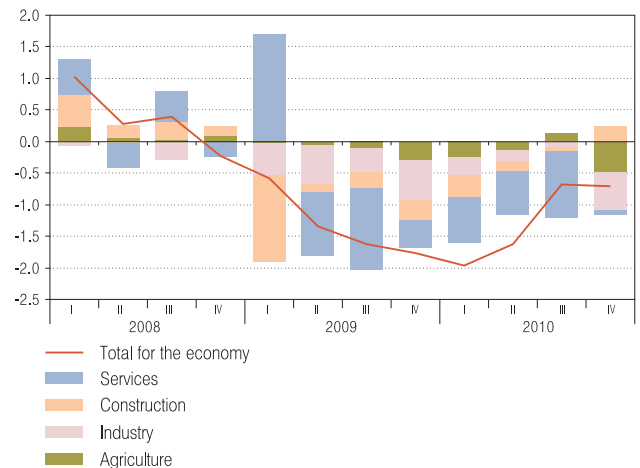
Source: BNB.

Corporations' financing sources in the fourth quarter of 2010, other than the net operating surplus, include foreign direct investments directed mainly to the industrial sector and services with their credit financing remaining moderate.

Overall, in the fourth quarter firms retained the rate of reducing their staff compared to the third quarter. The financial and business services sector and construction which reported an increasing employment on a quarterly basis were an exception.

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

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



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

Sources: NSI, BNB.

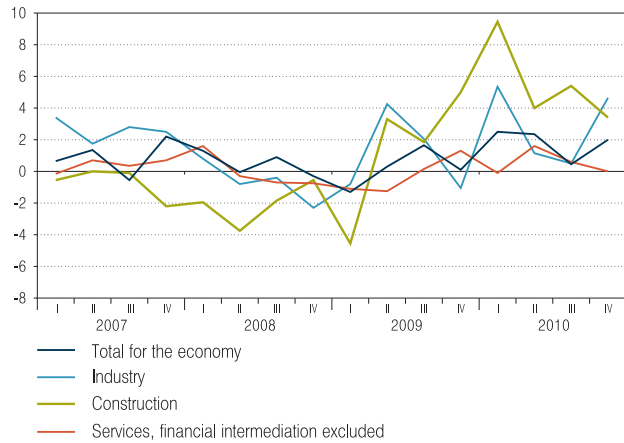
Over the third and fourth quarters of 2010 staff redundancies were concentrated on lower-paid workers dismissal to optimise unit labour costs.

As a result, productivity measured *per* employee improved most significantly in industry, while in construction the upward trend remained steady.

Although the average wage continued to rise smoothly according to the short-term statistics on employment and labour costs, firms managed to improve their cost competitiveness. The reduced compensation *per* employee in construction and industry allowed corporations to cut their nominal and real unit labour costs.

### Labour Productivity Developments (value added *per* employee)

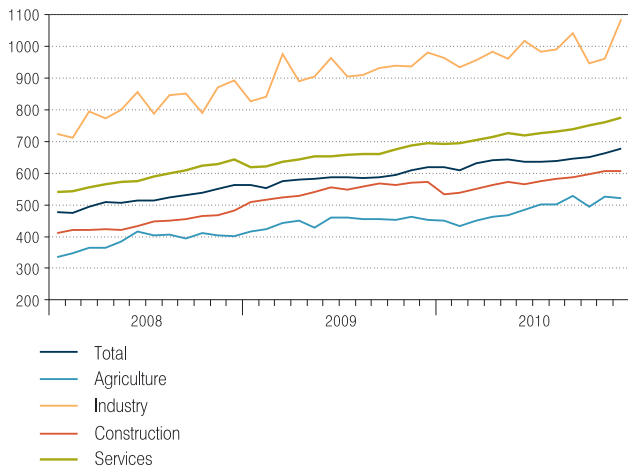
(%; quarter-on-quarter; seasonally adjusted data)



Sources: NSI, BNB.

### Average Nominal Wage by Economic Employment Sector

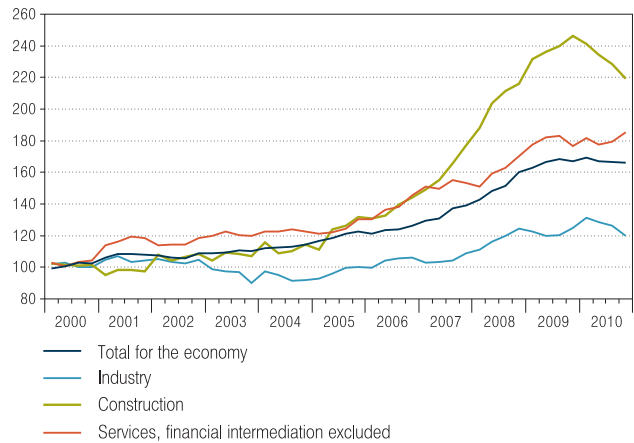
(BGN; seasonally adjusted data)



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

### Nominal Unit Labour Costs

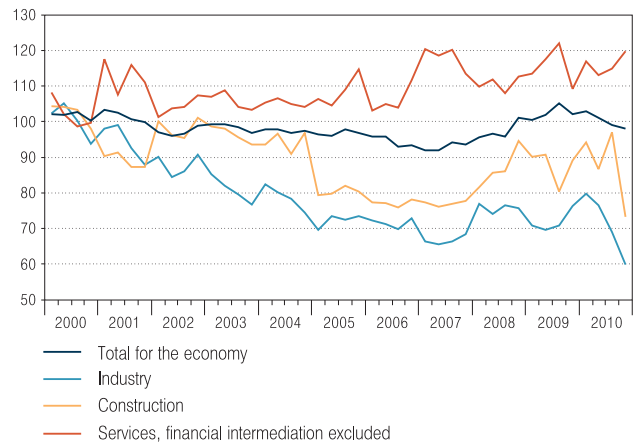
(2000 = 100; seasonally adjusted data)



Sources: NSI, BNB.

### Real Unit Labour Costs

(2000 = 100; seasonally adjusted data)



Sources: NSI, BNB.

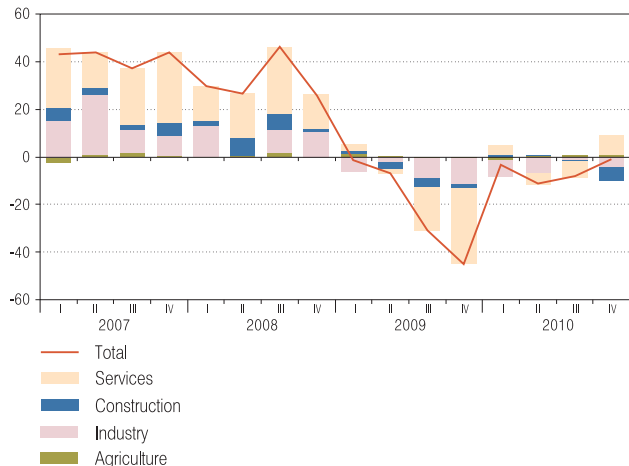
In the fourth quarter of 2010 the increased industrial production and improved expectations of economic activity dynamics boosted real term investment by 3.6 per cent on chain basis.

According to NSI preliminary data for 2010, the nominal expenditure on acquiring fixed assets slowed down to 6.4 per cent in 2010, from 27.7 per cent in 2009, while its decline in industry continued to reach 19.9 per cent. On the other hand, expenditure on acquiring fixed assets in services increased by 4.7 per cent as public services, trade, transport, hotels, restaurants and information technologies posted the highest growth. The *ex ante* real interest rate<sup>13</sup> remained almost unchanged in 2010, having negative influence on the investment activity. Investments are expected to continue growing at a moderate pace in the second and third quarters of 2011.

<sup>13</sup> Based on enterprises' expectations of inflation derived from the Business Situation Survey.

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

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

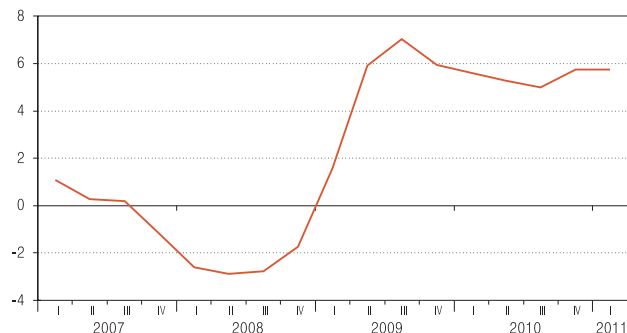


Note: Preliminary quarterly data due to the lack of final data.

Sources: NSI, BNB.

### Ex ante Real Interest Rate

(%)



Sources: NSI, BNB.

Trends derived from the available information for January and February 2011 remained divergent, showing no clear signs of a dramatic improvement in firms' economic activity. The up-

## Exports and Imports of Goods

Exports and imports are expected to grow further at lower rates in the second and third quarters of 2011, with the export rate outstripping the import rate and the mismatch gradually diminishing. This dynamics will be a consequence of a slowdown in external demand and an improvement in domestic demand. The trade deficit will remain close to nil.

In 2010 exports grew at high rates (33.2 per cent) due to the external demand improvement and higher international prices. Imports (CIF) also posted a positive growth rate, albeit much lower (13.5 per cent), with high international prices of major commodity groups being the major factor for this<sup>14</sup>.

<sup>14</sup> The analysis presented in this section is based on nominal exports and imports data in euro.

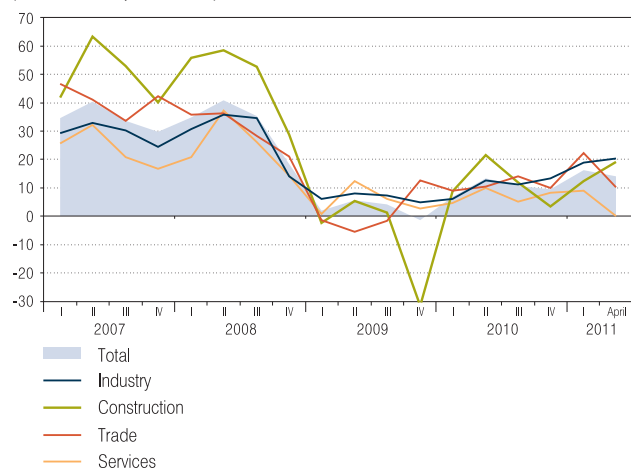
ward trend in industrial output was sustained as domestic demand increased its importance. This trend was confirmed by the new orders index which increased more significantly in the domestic rather than external market. The downward trend in the turnover index of retail trade was reversed and it began to gradually rise. The total output index in construction continued to decrease.

Survey data from the first quarter and April 2011 show that firms' expectations of future economic activity dynamics remained divergent by industry.

The economic situation in industry and construction improved, unlike the services sector, including trade, where it worsened. Therefore, the supply side of economic activity is expected to gradually recover.

### Expectations about Future Economic Activity

(balance of opinions, %)



Sources: NSI, BNB.

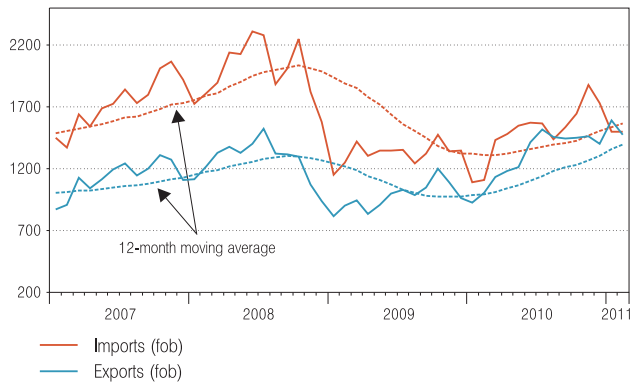
Between January and February 2011 exports increased by 58.9 per cent on the same period of the previous year. Imports also reported positive growth at 36.3 per cent.

In the second and third quarters of 2011 exports are expected to sustain its positive growth on an annual basis, which will moderate primarily due to weaker external demand. The import

growth rate is also expected to moderate, but much less than that of exports, with their difference gradually diminishing. This dynamics will be mainly a result of the positive growth rates of domestic demand and slowing export rates.

### Dynamics of Exports and Imports

(million EUR)



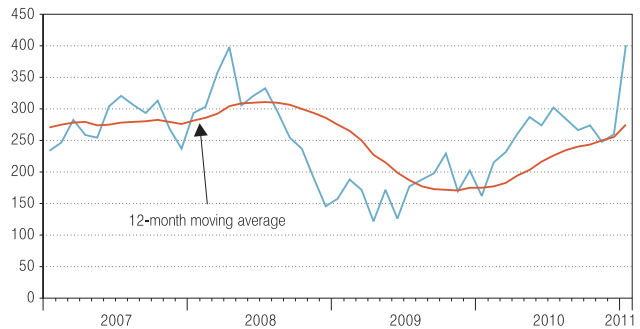
Source: BNB.

In 2010 all commodity groups contributed to the positive growth rate of exports, with *base metals and their products* (8.3 percentage points), *machines, transport facilities, appliances, instruments, weapons* (6.7 percentage points), *mineral products and fuels* (5.4 percentage points), *animal and vegetable products, foods, drink and tobacco* (5.2 percentage points) and *chemicals, plastics and rubber* (3.5 percentage points) contributing most significantly to this.

In 2010 exports of precious metals and their products were EUR 3066.1 million, up 46.0 per cent on 2009. The items contributing most significantly to this increase were: *copper and copper products* (24.8 percentage points), *cast iron, iron and steel* (10.7 percentage points) and their products (2.5 percentage points) and *aluminium and aluminium products* (3.7 percentage points). The high growth rate slowed down by the end of the year, which corresponded to the international price dynamics of metals. In January 2011 this group posted 149.0 per cent nominal growth on an annual basis (up BGN 240.5 million) despite the lower growth rate of the metal prices a year earlier. In the second and third quarters of 2011 the export growth rate is expected to moderate due to the slowing growth rate of metal prices and weaker external demand.

### Exports of Base Metals

(million EUR)

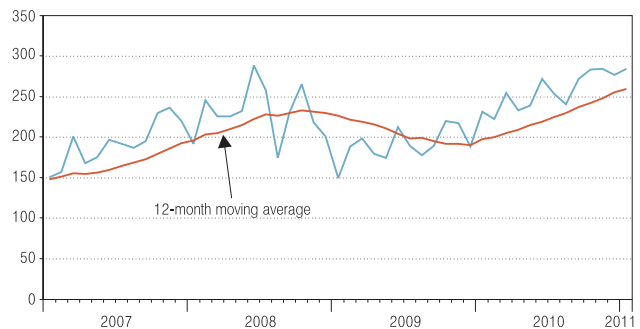


Source: BNB.

In 2010 exports of machines, transport facilities, appliances, instruments and weapons increased by 34.3 per cent on the corresponding period of the previous year, reaching EUR 3074.2 million. *Electrical machines and appliances* (10.6 percentage points), *nuclear reactors, boilers, machines, appliances and machinery* (10.5 percentage points), *automobiles and spare parts* (6.0 percentage points) contributed to the growth in this group. In January 2011 this group reported 22.9 per cent growth on an annual basis. Over the projection horizon, export growth rates are expected to moderate due to declined external demand.

### Exports of Machines, Transport Facilities, Appliances, Instruments and Weapons

(million EUR)



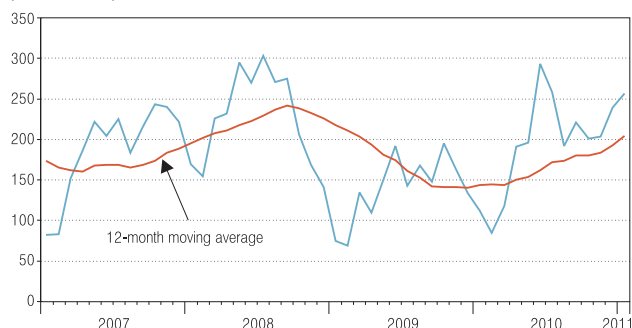
Source: BNB.

In 2010 exports of mineral products and fuels reached EUR 2309.1 million, up EUR 629.1 million on 2009. *Mineral fuels, mineral oils and distilled products* contributed most significantly to this increase (35.3 percentage points). This dynamics was largely due to the high fuel prices, their effect most pronounced over the last quarter of 2010. In January 2011 this group's exports continued to rise at high rates: 128.5 per cent compared to January 2010. Prices were the main driving factor again. Their growth rate accelerat-

ed further in December 2010 and January 2011. Over the projected horizon, the export growth in this group will remain comparatively high as high fuel prices will counteract the external demand slowdown.

### Exports of Mineral Products and Fuels

(million EUR)

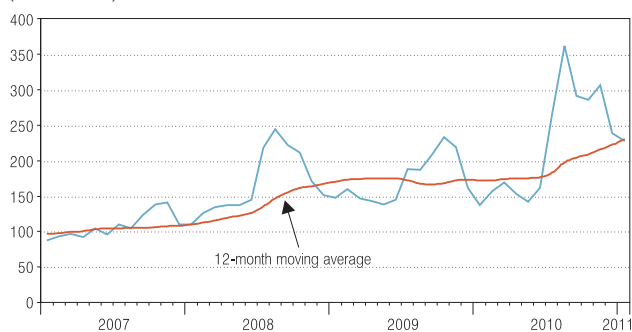


Source: BNB.

In 2010 exports of animal and plant products, foods, drink and tobacco rose by 30.4 per cent compared to 2009, reaching BGN 2616.1 million. The items contributing most significantly to the export growth were: *cereals* (9.9 percentage points), *oil seeds and fruit, miscellaneous seeds* (6.0 percentage points), *sugar and sugar confectionary* (2.3 percentage points) and *cocoa and products thereof* (1.9 percentage points). Determinants of exports by individual item varied, but the increase of cereals and oil seeds and fruit prices had a significant effect by the end of the year. In January 2011 this group's exports grew by 71.6 per cent on January 2010. Oil seeds and fruit and cereals contributed most to this. Over the projected period, the growth rate of this group's goods is expected to be moderate due to weaker external demand, which will slow down more substantially in the third quarter, reflecting the lower growth rate of international food prices.

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

(million EUR)

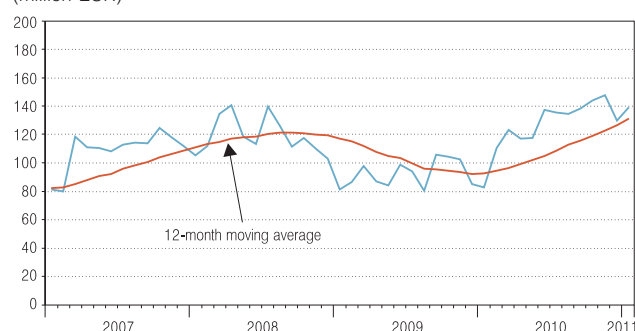


Source: BNB.

Exports of chemicals, plastics and rubber came to EUR 1513.9 million in 2010, posting an increase of 36.9 per cent on 2009. At the end of the year and in January 2011 acceleration continued and exports posted a 67.6 per cent annual growth rate over that month. *Pharmaceutical products* (11.4 percentage points), *fertilizers* (7.1 percentage points), *plastics and plastic products* (5.7 percentage points) and *inorganic products* (4.9 percentage points) contributed most to this growth in 2010. The export growth rate is expected to slow down in the second and third quarters of 2011 due to weaker external demand.

### Exports of Chemical Products, Plastics and Rubber

(million EUR)



Source: BNB.

### Contribution of Commodity Groups to Trade Growth in 2010

	Exports		Imports	
	growth, %	contribution, p.p.	growth, %	contribution, p.p.
Consumer goods	20.3	5.7	10.0	2.1
Raw materials	36.6	15.6	18.3	6.3
Investment goods	40.9	6.6	-0.2	0.0
Energy resources	40.7	5.3	25.8	5.1
<b>Growth, total</b>	<b>33.2</b>		<b>13.5</b>	

Source: BNB.

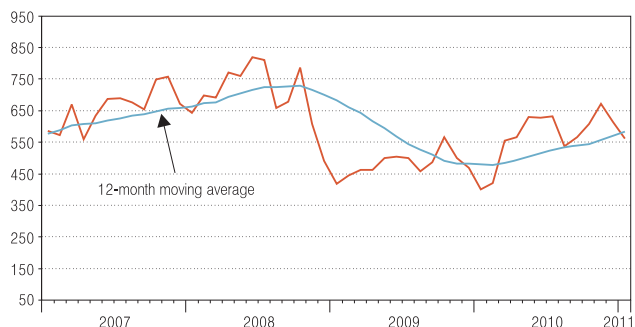
Imports (CIF) reached EUR 19,161.4 million in 2010: up 13.5 per cent (EUR 2285.7 million) on 2009. By end use, *raw materials* (6.3 percentage points), *energy resources* (5.1 percentage points) and *consumer goods* (2.1 percentage points) contributed most to this increase. By the end of the year imports of investment goods offset the decline reported in the first half of the year, their annual value staying much closer to that registered in the previous year.

In 2010 imports of raw materials rose by 18.3 per cent on 2009, reaching EUR 6827.3 million, mainly due to metal price growth. *Ores* (4.2 percentage points), *non-ferrous metals* (3.6 percent-

age points), *plastics and rubber* (3.1 percentage points), *cast iron, iron and steel* (2.3 percentage points) had the major contribution to this growth. In January 2011 this group's imports continued to grow at 39.9 per cent on an annual basis. In the second and third quarters of 2011 the import rate is expected to stay positive due to domestic demand recovery, albeit at slower rates owing to the decreased growth rate of the metal prices and slowing exports.

### Imports of Raw Materials

(million EUR)

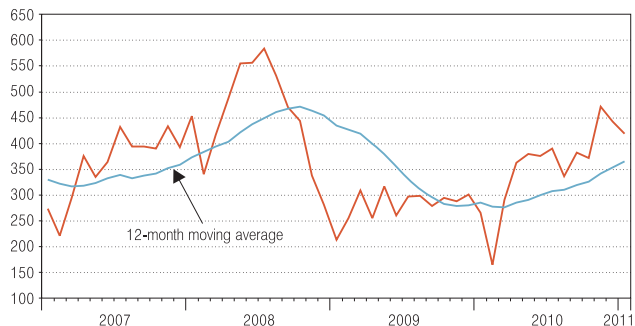


Source: BNB.

In 2010 imports of energy resources rose by 25.8 per cent on the previous year, reaching EUR 4234.3 million mainly due to the high growth rate of oil prices. *Crude oil and natural gas* (14.7 percentage points) and *oils* (10.3 percentage points) contributed most to this increase. The growth rate of fuel prices rose in December 2010. It continued accelerating in January 2011 when 57.4 per cent growth was reported on an annual basis. Over the projected horizon, oil price growth rates are expected to remain high due to positive domestic demand growth, but slower export rates will have a dampening effect on them in real terms.

### Imports of Energy Resources

(million EUR)

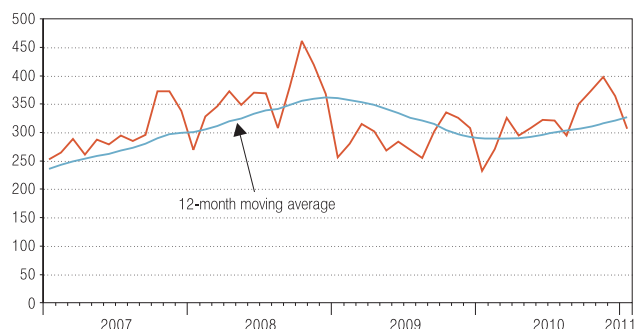


Source: BNB.

In 2010 imports of consumer goods recorded a nominal growth rate of 10.0 per cent, reaching EUR 3843.8 million. This rate gradually increased throughout the year. *Clothing and footwear* (5.1 percentage points), *medicines and cosmetics* (1.9 percentage points), *other* (1.9 percentage points), *food, drink and tobacco* (1.8 percentage points) contributed most to this dynamics. In January 2011 this group's imports reached 32.4 per cent compared to January 2010. Growth in consumer goods imports is expected to report again positive values in the second and third quarters of 2011 due to the rise in domestic demand.

### Imports of Consumer Goods

(million EUR)

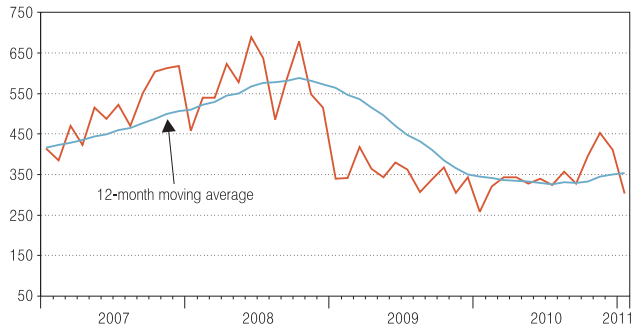


Source: BNB.

In 2010 imports of investment goods came to EUR 4198.5 million: EUR 7.3 million less than the value reported a year earlier. In the first half of 2010 this group's imports decreased on the corresponding period of the previous year, but in the fourth quarter it grew by approximately the same value (23.9 per cent on an annual basis). This trend continued during the first month of 2011: 17.1 per cent growth on an annual basis. *Spare parts and equipment* (4.7 percentage points) had the largest positive contribution in 2010. *Machines, vehicles and appliances* had a negative contribution (-3.8 percentage points) followed by *other* (-2.7 percentage points). Over the projected horizon, this group's imports are expected to continue increasing due to the improving investment activity in Bulgaria.

## Imports of Investment Goods

(million EUR)



Source: BNB.

In 2010 Bulgarian exports to other EU Member States picked up by 25.1 per cent on an annual basis, while exports to non-EU countries increased by 53.1 per cent. Imports from EU Member States rose by 9.3 per cent, while imports from non-EU countries grew by 10.4 per cent.

In 2010 the market share of Bulgarian goods in total EU imports came to 0.63 per cent *vis-à-vis* 0.68 per cent in 2009.

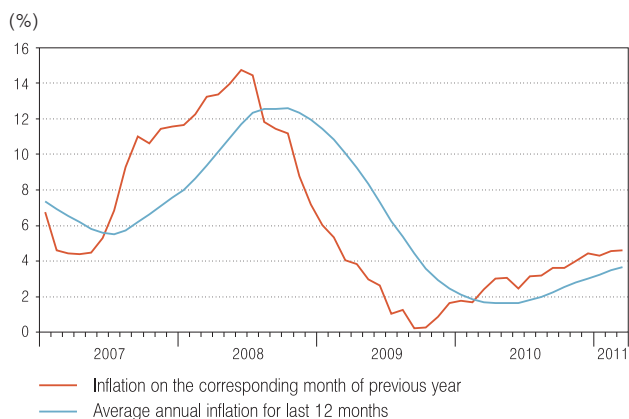
# 4. Inflation

The increase in international commodity and food prices and the fact that it was relatively quickly reflected in end-use fuel and food prices, as this upward pressure affected production costs, were the main drivers behind inflation in the first quarter of 2011. By March annual inflation accounted for 4.6 per cent (4.4 per cent in December 2010).

We expect lower annual inflation in the second and third quarters of 2011 mainly as a result of the drop in tobacco product inflation reflecting unchanged excise duties in the current year. Major risks and uncertainty in inflation forecasts will continue stemming from external factors related to the international commodity market developments.

The rise in international prices and the fact that it was relatively quickly reflected in end-use fuel and food prices, as this upward pressure affected production costs, were the main drivers behind inflation in the first quarter of 2011.<sup>1</sup> Inflation came to 4.6 per cent in March (4.4 per cent in December 2010), and the average annual inflation for the last 12 months reached 3.7 per cent. International price increases were beyond the foreseen ones. Therefore, the more moderate inflation outlook did not materialise.

## Inflation



Source: NSI.

By the end of the first quarter of 2011 energy and food prices contributed most to annual inflation by 1.5 and 1.4 percentage points respectively. The surge in food prices determined the increase in overall inflation from its end-2010 level. Tobacco product prices, with excise duties picking up in 2010 and increasing by 33.9 per cent, still contribute strongly to inflation (1.1 per-

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

centage points by March), but from the second quarter of 2011 they will not add to the overall rate of increase in consumer prices. Inflation in administratively controlled prices decelerated somewhat in early 2011 and by March contributed by 0.6 percentage point to inflation.

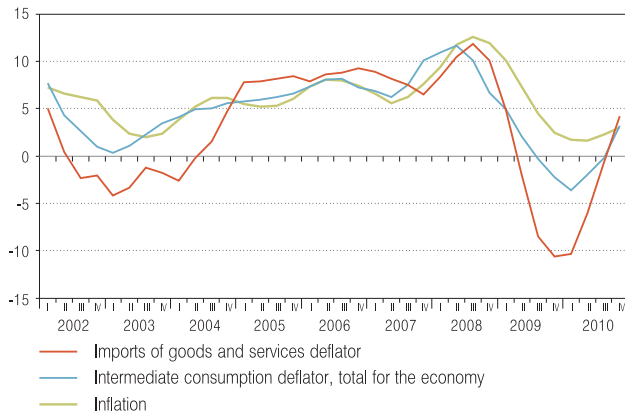
Consumer price dynamics appears to exhibit a strong correlation with the trends in the movements in international prices. The 2009 sample survey of wage and price setting mechanisms in non-financial corporations in Bulgaria also reveals that expenditure on raw materials contributed most significantly to the price rise<sup>2</sup>. As the share of imported raw materials and energy resources in intermediate consumption (total for the economy) was 50 per cent, expenditure on raw materials reflected largely international price dynamics. According to the survey, improved quality of offered goods and services ranked second among the factors behind the increase in prices. Non-financial sector corporations pointed that labour costs exert less pressure on prices. In the second quarter of 2010 these costs declined on an annual basis and therefore can be defined as a factor countering upside inflation dynamics during the previous year.

<sup>2</sup> The survey was ordered by the Bulgarian National Bank and was carried out within the Wage Dynamics Network – an ESCB research network. For aggregated survey results see Economic Review, 2010, issue 1.



## Import Deflator Dynamics, Intermediate Consumption Deflator and Inflation

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

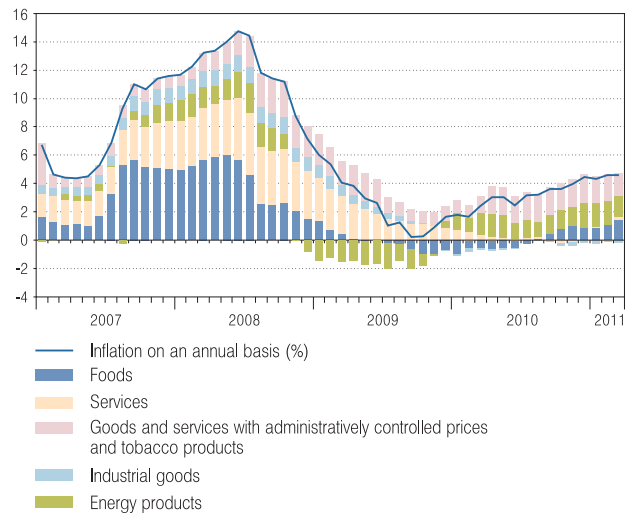


Sources: NSI, BNB.

Companies' pricing policy that takes into account the specific conditions in different goods and services markets proved to be an important factor in consumer price developments. In 2010 the value added deflator rose faster than that of nominal unit labour costs which is a sign that companies succeed to pass these costs through to the consumers of their production and to increase their profit margins for the year.

## 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 on the basis of elementary aggregates in the consumer basket.

Sources: NSI, BNB.

The value added deflator in the *trade, repair of motor vehicles and motorcycles, personal belongings and household goods* declined faster than labour costs which resulted in contracted

profit margins in the sector. Reduced domestic demand is a possible explanation of this type of pricing. Trade developments were among the factors behind the relatively low core inflation excluding the prices of foods and energy products, administratively controlled prices and tobacco products by end-2010, reporting a minimum decline on an annual basis.

In early 2011 core inflation tended to increase. This trend may be explained by the inflationary pressures that higher transport fuel and food prices exert on other goods and services (indirect effect of the increase in international prices). The signs of enhanced consumer demand suggested by the current economic data on retail sales revenues are likely to gradually affect core inflation.

Consumer price inflation in the first quarter of 2011 was impacted by the ongoing increase in the producer price index in manufacturing for the domestic market, which went up by 12.1 per cent by March. The PPI in consumer product output also rose by 3.9 per cent. Since early 2011 selling price expectations in the economy enhanced. While at the end of 2010 and in the beginning of 2011 expectations of higher prices in industry prevailed, over the recent months trade, services and construction also reported such sentiments. Since end-2010 trade also saw an increase in the share of firms expecting a stronger selling-price rise compared with the current levels.

The weights in the consumer basket are updated by the NSI each year, influence inflation measurement<sup>3</sup>. In 2011 the most notable change in the structure of the consumer basket compared with 2010 relates to the higher weight of tobacco products (7.4 per cent from 3.9 per cent) and the lower weight of energy products (7.3 per cent from 9.3 per cent). These changes prompted lower inflation due to the fact that excise duties on tobacco products (and their prices respectively) remained unchanged in the review year and to the relatively low impact of oil price volatility reflected in transport fuel prices. At the same time, the weight of processed foods (15.6 per cent from 13 per cent) is higher than

<sup>3</sup> The main source for deriving HICP weights in 2011 is the national accounts data on final consumption expenditure of households – NSI concept for 2008.

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

	Accumulated inflation as of March 2010 (December 2009 = 100)		Accumulated inflation as of March 2011 (December 2010 = 100)		Annual inflation as of March 2011 (March 2010 = 100)	
Inflation (%)	1.3		1.4		4.6	
	Inflation rate by group, %	Contribution, p.p.	Inflation rate by group, %	Contribution, p.p.	Inflation rate by group, %	Contribution, p.p.
<b>Foods</b>	1.9	0.42	4.1	0.98	6.1	1.41
Processed foods	0.2	0.03	3.8	0.59	9.5	1.31
Unprocessed foods	4.6	0.39	4.7	0.39	1.2	0.10
<b>Services</b>	-0.4	-0.12	0.1	0.03	0.7	0.22
Catering services	0.6	0.07	0.8	0.04	2.4	0.24
Transport services	-2.0	-0.10	2.0	0.07	3.3	0.13
Telecommunication services	0.1	0.00	-0.3	-0.01	-1.6	-0.07
Other services	-1.0	-0.09	-0.6	-0.07	-0.8	-0.09
<b>Energy products</b>	7.7	0.72	6.0	0.43	16.8	1.46
Transport fuels	8.5	0.71	6.3	0.44	17.8	1.23
<b>Industrial goods</b>	-0.8	-0.14	-0.6	-0.12	-0.8	-0.17
Goods and services with administratively controlled prices	1.1	0.17	0.6	0.10	3.8	0.58
Tobacco products	5.3	0.21	0.0	0.00	27.1	1.12

Sources: BNB, NSI.

that of catering (5 per cent form 12.4 per cent) which has declined substantially<sup>4</sup>.

Unlike the Harmonised Index of Consumer Prices (HICP), there were no notable changes in the consumer basket according to the national CPI<sup>5</sup>. In 2011 food still has the highest weight in the consumer basket of around 40 per cent. It contributes more strongly to the increase in food prices and thus to a higher inflation rate than that measured by the HICP. By March 2011 annual CPI inflation accounted for 5.6 per cent.

In the second and third quarters of 2011 we expect lower HICP inflation compared with that reported in the first quarter mainly as a result of the decrease in inflation of tobacco products prices. Assuming that international prices will gradually stabilise by the end of the period, we can expect lower energy and food price inflation. Core inflation will probably continue to increase at a slow pace.

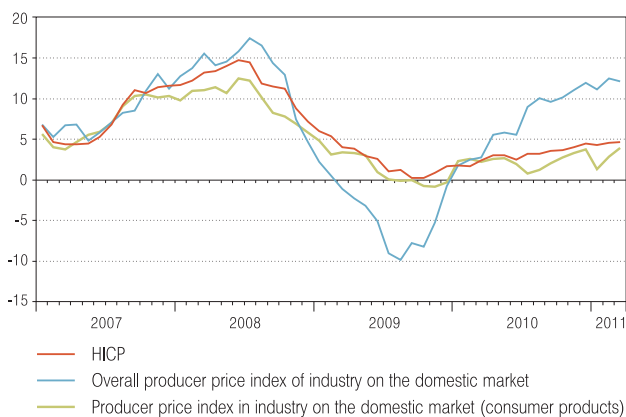
Major risks and uncertainty in inflation forecasts will continue stemming from external factors related to international commodity market developments.

<sup>4</sup> In the group of processed foods the main changes relate to the lower relative share of food products and the higher share of beverages.

<sup>5</sup> The household budgets survey is the primary source for deriving the weights of goods and services in the CPI.

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

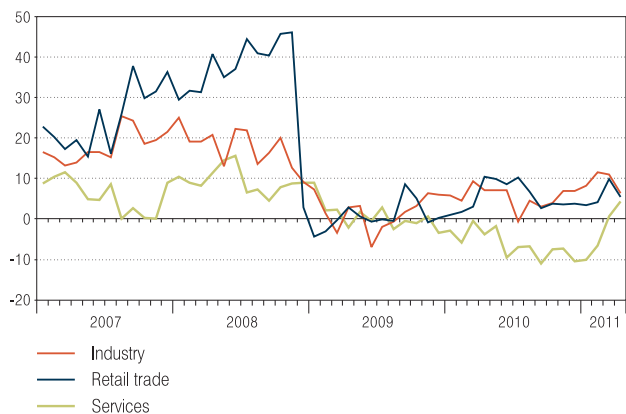
(on corresponding month of previous year, %)



Source: NSI.

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

(balance of opinions)



Source: NSI.

## Food Prices

In the first quarter of 2011 the upsurge in annual food price inflation rate continued, reaching 6.1 per cent by March.

Processed food inflation increased substantially to 9.5 per cent (5.7 per cent as of December 2010) and played a key role for the upsurge in food prices, while unprocessed food (meat and meat products, fruit and vegetables, and fish) inflation remained at a lower level (1.2 per cent). Flour, bread, vegetable oils and sugar prices exhibited the most pronounced increase in the group of processed foods, with bread and sugar contributing most significantly to the rise in overall inflation. As of March the contribution of unprocessed foods to the annual overall inflation rate was 1.3 percentage points (bread and cereals – 0.5 percentage point, animal and vegetable oils – 0.3 percentage points, milk, dairy products and eggs – 0.2 percentage points, other foods – 0.4 percentage points).

The rise in agricultural product prices on international markets remained the main driver behind higher food inflation. Agricultural product prices also surged, with the prices of sunflower (80 per cent), maize (50 per cent), cereals (43 per cent) and milk (27 per cent) increasing most substantially on an annual basis.

### Weights of Major Goods and Services Groups in HICP in 2010 and 2011

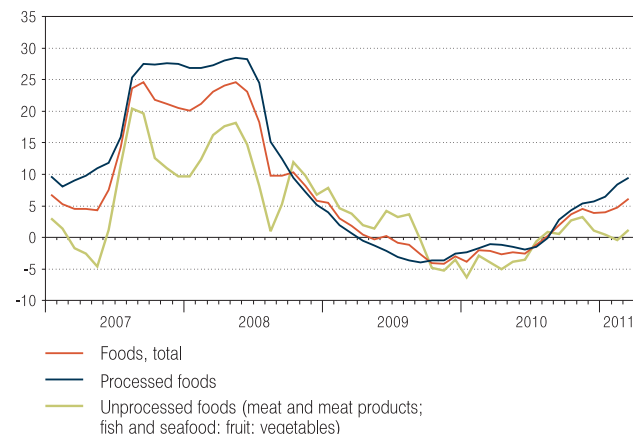
	2010	2011
<b>Foods</b>	<b>0.22</b>	<b>0.24</b>
Processed foods	0.13	0.16
Unprocessed foods	0.08	0.08
<b>Services</b>	<b>0.31</b>	<b>0.25</b>
Catering services	0.12	0.05
Transport services	0.05	0.04
Telecommunication services	0.04	0.05
Other services	0.10	0.12
<b>Energy products</b>	<b>0.09</b>	<b>0.07</b>
Transport fuels	0.08	0.07
<b>Industrial goods</b>	<b>0.19</b>	<b>0.21</b>
<b>Goods and services with administratively controlled prices</b>	<b>0.15</b>	<b>0.15</b>
<b>Tobacco products</b>	<b>0.04</b>	<b>0.07</b>

Note: Weights are updated by the price changes as of December 2010. Administratively controlled prices are calculated on the basis of elementary aggregates in the consumer basket.

Sources: NSI, BNB.

## Rate of Change of Food Price Index

(on corresponding month of previous year, %)



Sources: NSI, BNB.

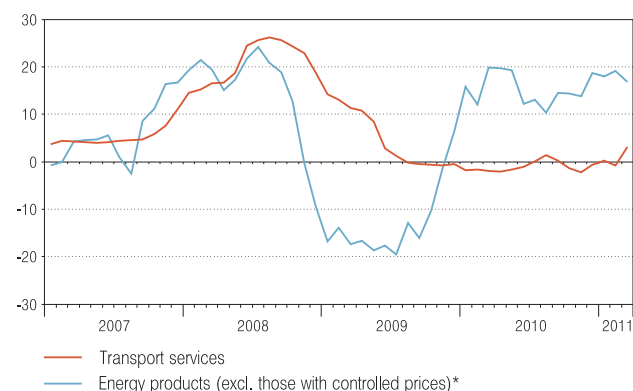
In the second and third quarters of 2011 food inflation will still be affected by international market developments, but also weather conditions will play a key role for the harvest in Bulgaria. Expectations are for the international food prices to stabilise at their current levels. Thereby, annual food inflation is projected to decline somewhat in the second half of the year.

## Energy Products Prices

Over the first three months of 2011 the annual inflation rate in transport fuels enhanced further on the last quarter of 2010.<sup>6</sup> By March transport fuel prices were 17.8 per cent higher than in the corresponding month of the previous year contributing most significantly to the overall consumer price inflation.

### Rate of Change of Energy Product Price Index in Industry and of Harmonised Index of Consumer Prices

(on corresponding month of previous year, %)



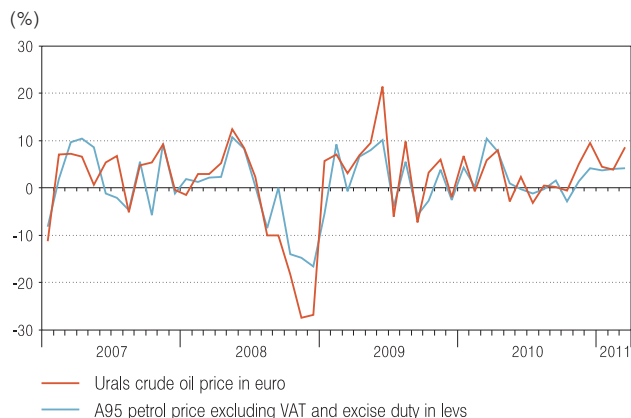
\* Energy products excluding those with controlled prices include fuels and lubricants for personal transportation vehicles, and solid, fluid and gaseous fuels for households.

Sources: NSI, BNB.

<sup>6</sup> In the group of energy products transport fuels occupy the largest relative share; hence, their price developments determine the price dynamics of energy products in general.

The strong rebound in oil prices and the fact that it was quickly reflected in end-use fuel prices through production costs remained the key factors behind the increase in oil prices in Bulgaria. According to the estimates, the increase in excise duties on diesel and unleaded petrol in early 2011 has a relatively low impact on prices and on overall inflation.

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



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

If assumed that oil prices will gradually stabilize in the second and third quarters of 2011, a deceleration of annual inflation in transportation fuels may be expected.

#### Administratively Controlled Prices and Tobacco Products Prices

By the end of the first quarter of 2011 annual inflation in administratively controlled prices was somewhat lower than in December 2010 (3.8 per cent by March, contributing 0.6 percentage points to inflation).

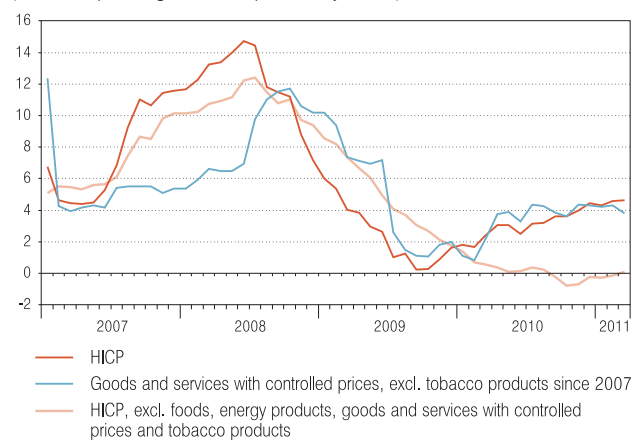
Since the year start of 2011 the main adjustments in administratively controlled prices included higher user charges for primary dental care (up 19.4 per cent), higher urban transport fares (up 3.6 per cent) and lower heating prices (down 4.8 per cent).

Inflation in administratively controlled prices is expected to decline in the following two quarters. In 2010 higher fees for issuing identity documents had a large contribution to inflation. We expect that inflation in administratively controlled prices will reflect the announced rise in the price of natural gas by 4.5 per cent from April 2011 (which will be reflected in the price of central gas supply) and the discussed increase in the prices of electricity for households of up

to 5 per cent from July. The rise in transport fuel prices creates a risk of a further surge in public transport fares.

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

(on corresponding month of previous year, %)



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

Sources: NSI, BNB.

Tobacco product prices marked an increase of 33.9 per cent by end-2010 due to the higher excise duties and added 1.3 percentage points to inflation. In the first quarter of the current year the contribution of this group gradually decreased as a result of the change in excise duties made in 2011. In 2010 tobacco prices reported the most sizeable increase in April and at the close of the year they underwent no significant changes. Therefore, base effects are going to be observed during the current year and overall inflation is expected to decline in the following two quarters.

#### Industrial Goods Prices

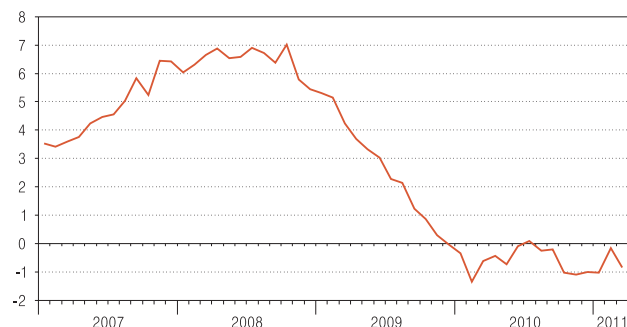
In the first quarter of 2011 the index of administratively controlled prices retained its negative growth rate on an annual basis (-0.8 per cent by March, contributing -0.2 percentage points to inflation).

The unfavourable developments in industrial goods prices continues to be driven mainly by the decrease in durables prices. Motor vehicles still have the highest negative contribution, although their prices gradually moderate. Other groups with negative contribution in the first quarter of 2011 were personal computers, furniture and footwear. Meanwhile inflation in most

non-durable consumer goods has remained marginally positive, tending to increase gradually.

### 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.

Current economic data in trade show signs of a gradual increase in consumer demand, although uneven in individual groups of goods and at relatively low levels – a trend that can also be discerned in non-food price developments at the moment.

As labour market situation continued to improve, the degree of recovery in consumer demand will be one of the main factors behind non-food price dynamics and inflation in this component is expected to be low by the end of the third quarter.

### Services Prices

In the first quarter of 2011 services price index (excluding administratively controlled prices) retained its moderate annual growth rate, tending to increase by the end of the review period. In March annual services inflation reached 0.7 per cent, contributing 0.2 percentage points to overall consumer price inflation.

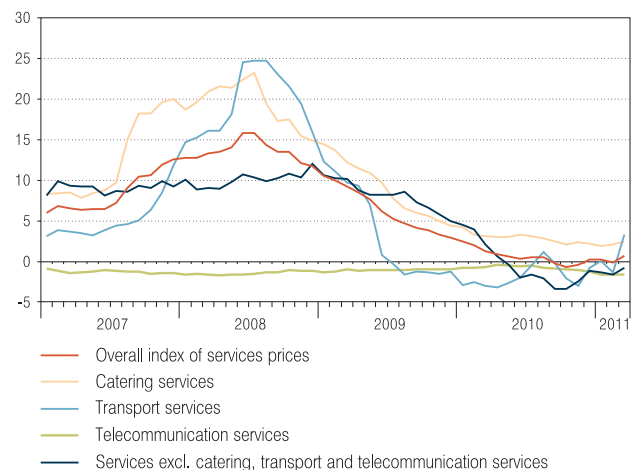
The observed increase in services price inflation reflected mainly the upsurge in the prices of transport underpinned indirectly by the pass-through of higher oil prices on fuel prices. The catering price index has also trended upwards, although this development was less pronounced

than that in transport services<sup>7</sup>. In the bulk of other services inflation remained relatively low and in some services (such as holiday and rental services) it was even negative. Transport insurance posted a significant increase on an annual basis.

In the second and third quarters of 2011 services inflation is expected to continue rising gradually. The risks to the projection relate mainly to the ascending dynamics of international food and fuel prices which might result in enhanced expectations of price increases in the economy. In such a case, the higher fuel and food prices are likely to affect more strongly transport services and catering prices.

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

(on corresponding month of previous year, %)



Sources: NSI, BNB.

<sup>7</sup> It should be noted that catering has a relatively low impact on overall inflation in 2011 due to the considerably lower weight of this group in the consumer basket compared with the previous year.