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

The Economic Review, issue 4/2008 was presented to the BNB Governing Council at its 27 January 2009 meeting. It employs statistical data published up to 27 January 2009.

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

The Economic Review is available at the BNB website, Periodical Publications sub-menu. Please address notes, comments and suggestions to the BNB Economic Research and Projections Directorate at 1000 Sofia, 1, Knyaz Alexander I Square, or to econreview@bnbank.org.
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<th>Abbreviation</th>
<th>Meaning</th>
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<tbody>
<tr>
<td>BIR</td>
<td>Base interest rate</td>
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<tr>
<td>BOP</td>
<td>balance of payments</td>
</tr>
<tr>
<td>BTC</td>
<td>Bulgarian Telecommunications Company</td>
</tr>
<tr>
<td>b.p.</td>
<td>basis points</td>
</tr>
<tr>
<td>CEFTA</td>
<td>Central European Free Trade Association</td>
</tr>
<tr>
<td>CIF</td>
<td>Cost, insurance, freight</td>
</tr>
<tr>
<td>CIS</td>
<td>Commonwealth of Independent States</td>
</tr>
<tr>
<td>EA</td>
<td>Employment Agency</td>
</tr>
<tr>
<td>EC</td>
<td>European Commission</td>
</tr>
<tr>
<td>ECB</td>
<td>European Central Bank</td>
</tr>
<tr>
<td>EIB</td>
<td>European Investment Bank</td>
</tr>
<tr>
<td>EMBI</td>
<td>Emerging Markets Bond Index</td>
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<tr>
<td>EONIA</td>
<td>Euro Overnight Index Average</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EURIBOR</td>
<td>Euro Interbank Offered Rate</td>
</tr>
<tr>
<td>FDI</td>
<td>foreign direct investment</td>
</tr>
<tr>
<td>FOB</td>
<td>Free on board</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>HICP</td>
<td>Harmonized Index of Consumer Prices</td>
</tr>
<tr>
<td>HRW</td>
<td>hard red wheat</td>
</tr>
<tr>
<td>IEA</td>
<td>International Energy Agency</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>ISM</td>
<td>Institute for Supply Management</td>
</tr>
<tr>
<td>LEONIA</td>
<td>LEv Overnight Index Average</td>
</tr>
<tr>
<td>LIBOR</td>
<td>London Interbank Offered Rate</td>
</tr>
<tr>
<td>M1</td>
<td>narrow money</td>
</tr>
<tr>
<td>M2</td>
<td>M1 and quasi-money</td>
</tr>
<tr>
<td>M3</td>
<td>broad money</td>
</tr>
<tr>
<td>MF</td>
<td>Ministry of Finance</td>
</tr>
<tr>
<td>mt</td>
<td>metric tons</td>
</tr>
<tr>
<td>NPIHSs</td>
<td>Non-profit institutions serving households</td>
</tr>
<tr>
<td>NSI</td>
<td>National Statistical Institute</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>OPEC</td>
<td>Organization of Petroleum Exporting Countries</td>
</tr>
<tr>
<td>PMI</td>
<td>Purchasing Managers’ Index</td>
</tr>
<tr>
<td>p.p.</td>
<td>percentage points</td>
</tr>
<tr>
<td>PPP</td>
<td>Purchasing Power Parity</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
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<tr>
<td>WTI</td>
<td>West Texas Intermediate</td>
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</table>
Following the Lehman Brothers bankruptcy in mid-September, the international financial markets turmoil deepened in the fourth quarter of 2008 to transform into a global economic crisis. Real economic growth in industrialised countries significantly slowed down and some of them experienced a recession. Reduced global demand reflected on the prices of raw materials and fuels which fell sharply. Inflation and inflationary expectations substantially decreased.

Central banks responded aggressively to the rapid slowdown (even recession in some countries) in economic growth and lower inflation by decreasing significantly their reference interest rates. Expansion of the global financial crisis entailed new forms of intervention both by the central banks providing liquidity on money markets through standard operations and new refinancing programmes intended to stop the fall in financial asset prices, and by governments urgently adopting packages of fiscal measures in support of the banking system and encouraging economic growth. The initiated measures helped partially stabilise financial markets but distrust among market participants continued hindering their normal operation. The significant slowdown in economic growth additionally impacted banks’ behaviour resulting in credit risk aversion which made the policy of sharp interest rate cuts pursued by the leading central banks ineffective to a certain extent. As a result, financial markets showed only vague signs of stabilisation with low risk appetite, lack of confidence, high volatility and impeded transmission of liquidity injections to the real economy.

Between January and September 2008 the real GDP growth rate was relatively high (7 per cent) compared with the corresponding quarter of 2007. Investments in fixed assets contributed significantly to the growth, increasing by 22.3 per cent in the third quarter of the year. On the other hand, over the same period the effects of the global economic crisis started impacting the real economy indicators. The real growth rate in the industrial sector started moderating from 7.4 per cent in the first half of the year to 2 per cent in the third quarter of 2008, reflecting probably the slowdown in industrial sales earmarked for exports. Based on industrial sales data for October and November, this process intensified and spilled over in most industrial sectors.

Over the last months of 2008 business indicators dramatically decreased, reflecting the growing pessimism in assessments of the current and especially of the future situation in all sectors of the economy. Based on this information, it may be expected that in the first half of 2009 corporations will experience stronger difficulties in selling their output. Global economic crisis will reduce the external demand for Bulgarian goods during the current year. The worsened international situation will adversely affect investment plans of Bulgarian corporations and moderated income growth will slow household consumption growth. As a result of weaker external and internal demand, the real GDP growth rate is expected to slowdown significantly compared to the growth rate in 2008.

The flow of foreign capital in Bulgaria remained high between January and November 2008. The balance of payments financial account surplus of EUR 10.9 billion reflected mainly attracted foreign direct investment worth EUR 5.27 billion, non-resident deposits with domestic banks worth EUR 2.48 billion and an increase by EUR 2.3 billion in net external obligations of the private non-bank sector. International foreign currency reserves of the BNB reached BGN 24,864.8 million (EUR 12,713.1 million) by the end of 2008. The average monthly coverage of imported goods and services by BNB international reserves remained six months.

The continued capital inflow in Bulgaria even after the significant worsening and destabilisation of international financial markets as from mid-September 2008 was indicative of sustained investment interest in Bulgaria but uncertainty regarding future developments of external current, capital and financial flows to
Bulgaria’s economy remained extremely high. This pertains to the tensions in international financial markets rather than to changes in the internal policy. Given the high degree of the Bulgarian economy openness, this uncertainty spills over into the expected developments of all major macroeconomic indicators. The net inflow of external financial resources into Bulgaria is expected to remain positive in the first half of 2009 but it will be probably weaker in the first two quarters compared with the same period of 2008.

In 2008 inflation reflected the strong fluctuations in international and domestic food and fuel prices. At the close of the year it slowed down significantly owing to the sharp fall in oil prices in the fourth quarter. Inflation is expected to continue slowing down in the first half of 2009 impacted by lower international fuel and raw material prices compared with those in 2008.

In the context of rapidly intensifying global economic crisis which enhances risks of an economic growth slowdown in Bulgaria and impedes economic agents’ access to financing, and given the expected decrease in inflation, the BNB has initiated measures using the disposable tools to support the banking system and to protect it against the negative effects of the global crisis. Amendments to BNB Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks adopted in the fourth quarter of 2008 are aimed at ensuring more flexible bank liquidity management, thereby limiting interbank money market fluctuations and supporting banks’ operations (see the Amendments to Ordinance No 21 box in this issue, p. 26). These measures are continuation of the BNB anticyclical policy.

As a result of the amendments to Ordinance No 21, a total of approximately BGN 1.8 billion of bank funds previously maintained as reserves with the BNB were released. Following the changes of 1 January 2009, the average effective percentage of minimum required reserves for the entire banking system went down to about 7 per cent, with the total effect of BNB measures implying a release of liquidity of about BGN 3 billion. However, it is unlikely to expect that the released liquidity will automatically boost the level of lending since the ongoing uncertainty strongly increases the risk aversion behaviour of banks.
1. External Environment

International financial market turmoil intensified further in the fourth quarter of 2008 and affected the real economy development. Economic growth in industrialised countries dramatically slowed down and some of them fell into recession. Globalisation of the crisis affected also emerging economics. By the end of 2008 the financial turmoil grew into a global economic crisis.

Reduced global demand impacted prices of raw materials and fuels which significantly went down. Inflation and inflation expectations subdued.

Central banks reacted aggressively to the dramatic slowdown (even recession in some countries) in economic growth and lower inflation by decreasing significantly their reference interest rates. Intensification of the global financial turmoil entails new forms of intervention both by the central banks providing liquidity through standard operations and various intervention facilities intended to stop the price fall of financial assets, and by governments initiating packages of fiscal measures in support of the banking system and encouraging economic growth.

The global financial crisis which broke out in the US sub-prime mortgage loan market grew into a global economic crisis. Joint efforts of the US Federal Reserve System and other central banks to limit the effect of the crisis by providing liquidity and decreasing interest rates failed and industrialised economies fell into recession. Financial markets signal just partial stabilisation with risk aversion and high volatility yet sustained. The banking crisis in leading economies further intensified requiring increased resources by central banks and governments to support the banking system. The confidence in the interbank market has not recovered yet and the funds received by banks could not reach households and firms.

Global PMI

Business expectations reflected in global economic activity indicators worsened further. PMI reached record lows. The downward trend in expectations of new orders, output and employment was sustained. Global industrial output went down by approximately 6 per cent. The world trade growth moderated in the second half of 2008, with the growth between July and November 2008 falling to 2 per cent on an annual basis (4.7 per cent in the first half of the year) compared with the corresponding period of 2007. Lower trade volume impacted the price of sea transportation which fell by 90 per cent in the last months of 2008.1

World Trade

Indications of negative effects of the crisis have been also observed in macrodata of emerging economies. Economic indicators for China continued to suggest worsening of economic conditions. Between January and September 2008 China’s economic growth was 9.9 per cent, a decrease by 2.3 percentage points on the corresponding period of 2007.1

Sources: NTC Research, JP Morgan.

1 See the dynamics of the sea freight price index (Baltic Exchange Dry Index) on p. 15 of this issue.
Commodity markets also experienced serious turbulence. Lower demand contributed to a significant price falls of energy resources, metals and food.

In early 2009 the European Commission and the IMF significantly revised their growth expectations of the leading economies downwards pointing to further deepening of the economic crisis in 2009 and slower recovery in the following years.

**Major Trends in Revised EC and IMF Forecasts**

(Real percentage change)

<table>
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<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2009*</th>
<th>2010*</th>
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<tr>
<td><strong>EU</strong></td>
<td>2.9</td>
<td>1.0</td>
<td>-1.8</td>
<td>0.5</td>
<td>-2.0</td>
<td>-0.6</td>
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<tr>
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<td>-1.9</td>
<td>0.4</td>
<td>-2.0</td>
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<td>10.2</td>
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<tr>
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<td>1.0</td>
<td>1.8</td>
<td>-1.2</td>
<td>-0.3</td>
</tr>
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<td><strong>USA</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>GDP growth</td>
<td>2.0</td>
<td>1.2</td>
<td>-1.6</td>
<td>1.7</td>
<td>-1.1</td>
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<tr>
<td>Inflation</td>
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<td>3.4</td>
<td>0.4</td>
<td>0.7</td>
<td>-1.1</td>
<td>-0.1</td>
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<td></td>
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<tr>
<td>GDP growth</td>
<td>-0.1</td>
<td>-2.4</td>
<td>-0.2</td>
<td>-2.0</td>
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<tr>
<td>Inflation</td>
<td>-1.6</td>
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<tr>
<td><strong>China</strong></td>
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<tr>
<td>GDP growth</td>
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<td>8.0</td>
<td>-1.1</td>
<td>-0.8</td>
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</tr>
<tr>
<td>Inflation</td>
<td>3.3</td>
<td>0.5</td>
<td>2.8</td>
<td>-2.0</td>
<td>-0.5</td>
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**IMF forecast (as of 28 January 2009)**

<table>
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<th>2009</th>
<th>2010</th>
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<tr>
<td><strong>EU</strong></td>
<td>3.1</td>
<td>1.3</td>
<td>-1.8</td>
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<td>-1.6</td>
<td>-0.8</td>
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<tr>
<td><strong>Euro Area</strong></td>
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<td></td>
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<tr>
<td>GDP growth</td>
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<td>1.0</td>
<td>-2.0</td>
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<td>-0.7</td>
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<tr>
<td><strong>USA</strong></td>
<td></td>
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<tr>
<td>GDP growth</td>
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<td>-1.8</td>
<td>1.8</td>
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<tr>
<td><strong>Japan</strong></td>
<td></td>
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<tr>
<td>GDP growth</td>
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<td>-0.3</td>
<td>-2.6</td>
<td>0.6</td>
<td>-2.4</td>
<td>-0.5</td>
</tr>
<tr>
<td><strong>China</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP growth</td>
<td>13.0</td>
<td>9.0</td>
<td>6.7</td>
<td>8.0</td>
<td>-1.8</td>
<td>-1.5</td>
</tr>
<tr>
<td><strong>World growth</strong></td>
<td>5.2</td>
<td>3.4</td>
<td>0.5</td>
<td>3.0</td>
<td>-1.7</td>
<td>-0.8</td>
</tr>
</tbody>
</table>

* A difference in percentage points vis-à-vis the autumn 2008 forecast.
Sources: The EC and IMF.

**Euro Area**

The euro area reported a 0.2 per cent decline in GDP in the third quarter compared with the previous one which pointed to a recession. The annual rate of economic growth went down to 0.6 per cent (against 1.4 per cent in the previous quarter). Lower growth rates of investment, consumption and net exports contributed most substantially to this negative trend.
The strong adjustment of petroleum and raw material prices in recent months prompted a rapid decline in the euro area inflation rate. In December the harmonised index of consumer prices (HICP) reported a moderation in annual growth to 1.6 per cent, exhibiting a level lower than the average for the previous eleven months of the year (3.4 per cent) and core inflation stood steadily at 1.8 per cent (on an annual basis) almost matching the average value for 2008.

Outlooks for the first half of 2009 point to further inflation rate declines in the euro area. These expectations are based on the assumption for stabilisation of petroleum and raw material prices, a decrease in unit labour costs in the context of the worsening labour market and lower consumer demand. The base effect of the dramatic price hikes in petroleum and food prices in 2008 will be most strongly pronounced in mid-2009. In the short run risks of lower inflation prevail. They are associated with the probability of a stronger and longer than expected recession, which may push the inflation rate down to less than 1 per cent prompting a serious decline in medium-term inflationary expectations.

The EC forecasts published on 19 January 2009 suggest a significant downward revision of GDP growth and inflation in the euro area. In 2009 GDP is expected to decline by 1.9 per cent (a fall by 2 percentage points on November forecast) and harmonised inflation to reach 1.0 per cent by the end of the period (a decrease by 1.2 percentage points on November forecast). A slight recovery in euro area economic growth is expected in 2010, with GDP growing by 0.4 per cent and inflation by 1.8 per cent.

The governments of Member States whose banking systems were severely affected by the financial turmoil enforced various fiscal and regulatory measures to guarantee banks’ solvency and liquidity. A package of measures in support of the banking sector was adopted in coordination with the European Commission. These measures include provision of government guarantees, purchase of equity stakes and recapitalisation of systemically important banks by the respective governments. The extraordinary measures initiated by the governments to support the financial sector helped partially restore the confidence in financial institutions.

At a later stage, the government measures were extended and they were intended to support not only the financial system but also to encourage economic growth. As the crisis continues, the complete fiscal cost of the government measures enforced is still unknown. Market risk premia incorporated in government securities issued by euro area Member States have been currently revised upward. Rating agencies also reacted and decreased the ratings of Spain and Greece. Similar measures are expected to be launched in respect of other states.

Under the conditions of descending inflation and moderating economic activity in the fourth quarter of 2008, the ECB initiated an unprecedentedly rapid and sizable cycle of decreasing repo interest rates. For about three months the ECB Governing Council lowered the reference rate by 225 basis points on a cumulative basis. The first step in cutting the reference rate was in October coordinated with the US Federal Reserve System and other major central banks which simultaneously reduced their reference rates by 50 basis points. This step was in response of increased financial market tensions following Lehman Brothers bankruptcy.
The euro area interbank market did not restore its normal state and liquidity risk premia remained high. To relieve money market tensions, the ECB had recourse to extraordinary measures related to liquidity management in the euro area. In mid-October the Bank temporarily expanded the collateral framework which increased the opportunities of banks to participate in refinancing operations. Moreover, the ECB started providing unlimited refinancing on operations in euro and US dollars at a fixed exchange rate across the entire maturity spectrum. This was intended to simultaneously improve the liquidity of euro area banks and to subdue interest rate volatility in the respective market segments. Between October and January the corridor of standing facilities for financial institutions was temporarily narrowed which facilitated the access to these facilities and influenced the dynamics of interbank market overnight interest rate (EONIA).

Euro Area Interest Rates

![Graph showing Euro Area Interest Rates](image)

Source: Bloomberg.

ECB Main Refinancing Rate and Six-month EURIBOR

![Graph showing ECB Main Refinancing Rate and Six-month EURIBOR](image)

Source: Bloomberg.

Forward Rates Based on the Fixed Swap Yield on Overnight Interest Rate (OIS)

![Graph showing Forward Rates Based on the Fixed Swap Yield on Overnight Interest Rate (OIS)](image)

Source: Bloomberg.

Liquidity Risk Premium

(3-month spread between EURIBOR and EONIA)

![Graph showing Liquidity Risk Premium](image)

Source: Bloomberg.

Interbank market reference rates went down significantly over the review period consistent with the ECB reference rate and the downward trend is likely to be sustained. The differential between interbank market short-term rates within 3 and 6-month horizons and expected ECB reference rates over the same periods narrowed remaining however well above the average levels. The spread between EURIBOR-rate of over one month and the Fixed Swap Yield on Overnight Interest Rate remained more than 100 basis points indicating that the confidence between money market participants has not been restored.
EU-9*

The global financial crisis affected also non-euro area EU countries. In the third quarter of 2008 their economic growth started to moderate and came to 4.7 per cent on an annual basis (5.4 per cent in the second quarter). The highest growth rates were reported by Romania, Slovakia and Bulgaria (9.1, 8.6 and 6.8 per cent respectively). Over the third quarter the economic slowdown in Latvia and Estonia significantly deepened, their growth reaching -4.6 per cent and -3.8 per cent respectively. Private consumption and export declines were the main factors behind this. Inflation in non-euro area countries fell by 1.7 percentage points over the fourth quarter of 2008 to 4.6 per cent on an annual basis, fuel price falls driving this trend.

* EU-9 includes the countries which have acceded the EU since 2004, excluding Slovenia, Malta and Cyprus. As from 1 January 2007 Slovenia and as from 1 January 2008 Malta and Cyprus became full-fledged members of the Economic and Monetary Union.

The USA

Contribution to US Growth by GDP Component (Quarterly)

Financial market turmoil has permanently spilled over into US economy by the end of 2008. During the third quarter of 2008 GDP exhibited a 0.1 per cent fall on a quarterly basis (against a 0.7 increase in the previous quarter) with all components contributing negatively to this decrease: consumption, investments (except for inventories) and net exports.

Labour market dramatically contracted: employment went down by approximately 1.5 million employees (on a cumulative basis) in the last three months of 2008 (against 2.6 million for the whole year) and unemployment reached 7.2 per cent in December against 6.2 per cent by the end of the previous quarter. Labour market contraction will probably continue in the following months given the expected sluggish economic activity and lower labour demand. This trend is anticipated to adversely affect household real disposable income and consumer demand.

US Unemployment Rate and Changes in Payroll Employment

The continuous decline in residential property prices increased further the negative effect on household wealth. The high level of inventories associated with the properties offered for sale created prerequisites for further price falls. Congressional Budget Office forecasts indicate another 14 per cent decline until the end of the year. Despite the programme for financial sector stabilisation, economic agents’ access to loans remained limited. The increase in bad loans contributed to further tightening of bank lending standards. Limited financing sources and worsened economic situation resulted in a decline in corporate earnings.

* The National Bureau of Economic Research (NBER) officially announced that the recession in the USA started in December 2007.
The negative expectations of the US economy increased after the economic indicators had dramatically deteriorated in the fourth quarter. All regional indices reporting production activity (Empire Manufacturing, Philly Fed, Richmond Manufacturing) steadily decreased below the respective reference levels signalling a significant activity contraction in the sector.

**US Consumer Confidence Indices**

![Image of US Consumer Confidence Indices](image)

Source: The Conference Board.

**US PMI of Manufacturing and Services and GDP Growth**

![Image of US PMI of Manufacturing and Services and GDP Growth](image)


Inflation moderated significantly by the end of 2008 reflecting the dramatic price falls in petroleum and raw materials and low consumer demand. In the short run the risk of substantial price declines remains high stemming mainly from the probability of further contraction in consumer and investment demand.

**Inflation moderated significantly by the end of 2008 reflecting the dramatic price falls in petroleum and raw materials and low consumer demand. In the short run the risk of substantial price declines remains high stemming mainly from the probability of further contraction in consumer and investment demand.**

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

![Image of US Federal Funds Interest Rates and Six-month LIBOR in US Dollars](image)

Source: Bloomberg.
All these interventions led to an unprecedented increase of almost USD 2.3 trillion in the US Federal Reserve System balance sheet and correspondingly to a rise in reserve money in the economy. In the short run no acceleration in the inflation rate is expected due to the fact that banks strongly prefer to keep their reserves on their accounts with the US Federal Reserve System in order to maintain adequate liquidity.

**Expected Interest Rate on US Federal Funds Based on Futures Contracts**

Based on Futures Contracts (%)

In October a risk aversion was observed in the foreign exchange market which led to capital outflows from emerging markets, thus supporting demand for US dollars as safe haven. In the middle of the review quarter this factor had lower effect due to the gradual stabilisation of the banking sector, normalization of money market conditions and monetary and fiscal stimulus packages.

As the global crisis spilled over into the real sector, with major economies entering a recession, the role of fundamental factors increased in the foreign exchange market. On the one hand, unfavourable US macroeconomic data pushed the US dollar down and on the other hand, the euro area economy moderated faster, underpinning the euro depreciation. This pressure increased on the account of enhanced expectations of ECB reference rate cuts to 1 per cent throughout 2009 which will eliminate the effect of the positive interest differential on dollar assets.

Due to exhaustion of the monetary measures and cuts in central banks’ reference rates to levels close to minimum ones, the investor attention was focused on fiscal measures and the level of government debts in individual countries. The US fiscal position was unfavourable in terms of the US dollar rate but it should be taken into account that the considerable government expenditure improved the outlook for boosting the economy out of the slump. At the same time, European governments’ fiscal measures appeared to be insufficient to stimulate the economy and support the single currency.

Given the contradictory effects of a variety of factors, a comparatively slight appreciation of the US dollar against the euro is expected in the first quarter of 2009.

**USD/EUR Exchange Rate**

The US dollar appreciated by 1 per cent against the euro in the fourth quarter of 2008, with record high fluctuations reported in October and December (an appreciation by 10.8 per cent and a depreciation by 9.2 per cent). The EUR/USD (1.25–1.44) moved within a wide range over the quarter. A key factor behind this high volatility was the uncertainty around financial crisis implications, rapidly changing economic outlooks and withdrawals of USD-based investors from emerging markets. Over the whole period the EUR/USD speculative positions were in favour of the US dollar. However, the domination of short over long positions posted a strong decrease in the last three weeks of the fourth quarter of 2008.
Over the second half of 2008 some signs of slowing growth were reported by the Balkan countries, reflecting the worsening global situation.

Private consumption and investment moderated over the third quarter. Particularly large slowdown was registered in Turkey, with fixed asset investment decreasing 5.4 per cent, exports 4.2 per cent and private consumption increasing merely 0.3 per cent. High rates in Bulgaria and Romania reflect partly the base effect of 2007 when yields in agriculture were significantly lower due to poor weather conditions. The contribution of agriculture to value added growth in Bulgaria and Romania was 4 percentage points (value added growth at 8.2 per cent) and 4.4 percentage points (value added growth at 9.3 per cent) respectively. Industrial production in most Balkan countries moderated in the last quarter of 2008. Inflation also slowed down, reflecting largely fuel price declines.

Worsening economic conditions are expected to exert a significant downward pressure on external demand and foreign investment flows in the region. Private consumption also indicated a decrease over the coming quarters. Expectations point to a slowdown in economic growth rates in the first half of 2009, with a negative rate likely to expect in Turkey.

### Real Growth and Inflation in Balkan Countries (Quarterly)

<table>
<thead>
<tr>
<th>Country</th>
<th>2007 Growth (%)</th>
<th>2008 Growth (%)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>5.5</td>
<td>7.3</td>
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<tr>
<td>Greece</td>
<td>4.6</td>
<td>4.0</td>
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<tr>
<td>Macedonia</td>
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<tr>
<td>Romania</td>
<td>6.1</td>
<td>5.7</td>
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<td>Turkey</td>
<td>8.1</td>
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<tr>
<td>Croatia</td>
<td>7.0</td>
<td>6.6</td>
</tr>
<tr>
<td>Serbia</td>
<td>7.8</td>
<td>7.7</td>
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<table>
<thead>
<tr>
<th>Country</th>
<th>2007 Inflation (%)</th>
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<tr>
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<td>I</td>
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<tr>
<td>Bulgaria</td>
<td>5.3</td>
<td>4.7</td>
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<td>Greece</td>
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<td>2.6</td>
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<tr>
<td>Macedonia</td>
<td>0.7</td>
<td>1.1</td>
</tr>
<tr>
<td>Romania</td>
<td>3.9</td>
<td>3.9</td>
</tr>
<tr>
<td>Turkey</td>
<td>10.3</td>
<td>9.5</td>
</tr>
<tr>
<td>Croatia</td>
<td>1.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Serbia</td>
<td>4.8</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Sources: Statistical institutes and central banks of respective countries.

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

#### Crude Oil

Over the fourth quarter crude oil demand decreased, reflecting economic activity slowdown, which pushed crude oil prices down to around USD 41 per barrel in December. This dramatic decline forced OPEC countries to cut supply in November and December by almost 15 per cent compared to September. As a result, oil prices stabilized around USD 40–50 per barrel in early 2009. The reduced demand by industry and introduction of new oil production capacities in non-OPEC countries will constrain the pressure on prices until the end of 2009.

Due to the global economic crisis, the International Energy Agency revised its forecasts of crude oil demand. Unlike the projections made at the end of the third quarter of 2008 which point to a moderate demand growth in 2008 and 2009, current expectations are for cuts in demand by 0.3 per cent in 2008 and -0.6 per cent in 2009. If they materialize, such a protracted global slump will happen for the first time since 1982–1983.

Over the first half of 2009 oil prices are projected to remain volatile, with market expectations showing an average price at USD 30–60 per barrel.
Crude Oil Prices

(USD per barrel)


World Crude Oil Demand and Supply (Quarterly)

(million barrels per day)

Source: IEA.

Major Raw Material and Commodity Prices

Over the fourth quarter of 2008 metal prices declined significantly due to the global industry slowdown. The metal price index shows a decrease of about 33 per cent on the previous quarter. Copper prices posted the most significant decrease at 49 per cent and nickel prices at 42 per cent. Steel prices also fell (around 8 per cent) on the previous quarter. Expectations point to declines in metal prices over the first half of 2009.

Over the third quarter food prices also posted a significant drop, with the food price index falling by 28 per cent compared to the previous period. Corn and rice prices fell by about 30 per cent and vegetable oils by approximately 10 per cent. Wheat prices decreased by 33 per cent as a result of higher world yields by 12 per cent, entirely covering enhanced demand. Good harvest is expected to boost world inventories by almost 23 per cent. Downward trends in food prices are projected to continue in the first two quarters of 2009 due to higher yields and slowing demand growth.

The significant fall in sea freight prices also had an essential effect on prices of raw materials and commodities in the last quarter of 2008. The indices reflecting changes in these prices fell by around 90 per cent on an annual basis, reaching the lowest level since 2002.

Sea Freight Price Index (Baltic Exchange Dry Index)

(thousand)

Source: Capital Link Shipping.

Gold

Over the fourth quarter of 2008 gold prices fell to USD 782 per troy ounce, down 10.2 per cent on a quarterly basis and up 3.9 per cent in euro. Divergent developments reflected the US dollar appreciation over the review period. The magnitude of fluctuations decreased in October and November after the historical peaks reached in the previous quarter but it enhanced further in December.

The USD/EUR rate was the major factor behind gold price developments, with oil and other commodity prices also contributing significantly to these developments during most of the time. The US dollar appreciation and falls in commodity prices contributed significantly to the rapid decrease in inflationary expectations which triggered active investor sales and closure of gold positions. Investment in index products, in gold exchange-traded funds (ETFs) posted a sustainable decline over the review period, with investment in precious metals also reporting net outflows in the last months.

Demand for physical gold in the third quarter rose on an annual basis due to the strong investor interest in buying assets in ETFs covered by physical gold. Based on recent GFMS data, demand for physical gold in the third quarter increased by 18 per cent on the same period of 2007 and reached 1133 tons (an increase of 51 per cent in value to USD 31.8 billion).
Physical gold supply posted a decline of 10 per cent on an annual basis over the third quarter of 2008, with small volumes of central bank sales contributing also to the low supply. The second Central Bank Gold Agreement II (CBGA II) regulating gold sales expired on 26 September 2008. Since early 2008 banks have sold 357.2 tons of physical gold vis-à-vis 475.8 tons in 2007. Most central banks have already announced their intentions to stop selling gold.

Spot Price of Gold

(USD per troy ounce)

Over the fourth quarter of 2008 spreads of emerging market bond issues widened significantly. The Lehman Brothers failure resulting in global risk aversion was the major factor behind this. Concerns about financial corporations’ performance had an adverse effect on the real sector outlook in Europe. Following these developments, sovereign credit risk premia increased. This dynamics was further driven by investor interest withdrawal from emerging markets. Several countries reporting poor economic fundamentals, such as Hungary, Latvia, Ukraine and Serbia, sought financial support from the IMF. The ECB provided Hungary with a loan and the central bank of Poland established a swap arrangement with the central bank of Switzerland.
In early December government bond spreads reached historical peaks and though stabilizing later, they remained at high levels. In the fourth quarter of 2008 emerging market spreads, measured by JP Morgan Euro EMBI Global index, rose by 208 basis points to 387 basis points at the end of 2008.

Bulgaria’s government debt spreads, measured by the JP Morgan index, exhibited an upward trend almost until the end of the review period. On 19 December 2008 it widened to a maximum of 486 basis points and then narrowed to 463 basis points by the end of the year.

In the first half of 2009 sovereign risk spreads of emerging markets will see high volatility. The worsened economic outlook and easing fiscal policies along with heightened risk aversion are unlikely to allow a downward adjustment in government bond spreads in the following two quarters.
Confidence in the Bulgarian economy was sustained in the last months of 2008 as capital inflow remained at a high level. According to preliminary data, by the third quarter of 2008 foreign direct investment inflow accounted for 19.5 per cent of GDP on an annual basis. The cumulative balance of the current and capital accounts fell by EUR 2.1 billion to EUR 7.2 billion in the January to November period, reflecting mainly higher trade deficit (by EUR 1.7 billion). The balance of payments reported a surplus of EUR 2.2 billion over the same period, with BNB reserves increasing by an equivalent amount (excluding changes due to valuation adjustments).

The Issue Department balance sheet figure reached BGN 24,864.8 million (EUR 12,713.1 million) by end-2008: up BGN 1.5 billion (EUR 776.5 million) on 2007. Net euro purchases by banks reflected mostly changes in minimum required reserves which rose in 2007 (following their rate increase) and decreased at the end of 2008. The average monthly coverage of imported goods and services by BNB international reserves reached six months between January and November 2008 as it was a year earlier.

The net external funds inflow into Bulgaria is expected to remain positive also in the first half of 2009. The high degree of uncertainty and the more difficult conditions observed in international financial markets are likely to affect the access of domestic economic agents to external financing. As a result, the inflow of financial resources into the Bulgarian economy is expected to subside in the first two quarters of 2009 compared to the first half of 2008.

Foreign capital inflows into Bulgaria stayed high between January and November 2008. The balance of payments financial account surplus of EUR 10.9 billion reflected mainly the following factors: (1) attracted foreign direct investment worth EUR 5.27 billion; 3 (2) non-residents’ deposits with domestic banks at EUR 2.48 billion; (3) an increase by EUR 2.3 billion in net external obligations of the private non-bank sector. The continued capital inflow, even after the significant worsening and destabilising of global financial markets since mid-September 2008, indicates the sustained interest in Bulgaria. However, the uncertainty around the future dynamics of foreign current, capital and financial flows into the Bulgarian economy over the first half of 2009 remains extremely high. It reflects mainly still high tensions on world capital markets, rather than internal policy changes. This uncertainty spills over into major macroeconomic indicators due to the high degree of Bulgaria’s economic openness. ⁴

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Cash Flows Which Prompted Significant Changes in Gross International Reserves

<table>
<thead>
<tr>
<th>(million EUR)</th>
<th>2007, total</th>
<th>2008, total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total for the period</td>
<td>2 545</td>
<td>66</td>
</tr>
<tr>
<td>Purchases and sales of euro</td>
<td>2 410</td>
<td>1 222</td>
</tr>
<tr>
<td>at tilts</td>
<td>-60</td>
<td>-54</td>
</tr>
<tr>
<td>banks, incl.</td>
<td>2 458</td>
<td>1 275</td>
</tr>
<tr>
<td>bank’s purchases</td>
<td>54 467</td>
<td>125 543</td>
</tr>
<tr>
<td>bank’s sales</td>
<td>-52 008</td>
<td>-124 268</td>
</tr>
<tr>
<td>Flows on accounts of banks, the MF, etc.</td>
<td>135</td>
<td>-1 158</td>
</tr>
<tr>
<td>Minimum required reserves</td>
<td>827</td>
<td>-657</td>
</tr>
<tr>
<td>Government and other depositors</td>
<td>-891</td>
<td>-499</td>
</tr>
</tbody>
</table>

Source: BNB.

³ Data are subject to regular revisions upon receiving additional information from corporations. Recent years have witnessed systematic upward revisions of first-release data on foreign direct investment flows; therefore, the mechanical comparison of initial 2008 data with the 2007 data that have been revised several times is incorrect. This also applies to data on intercompany loans and reinvested earnings.

⁴ See the Economic Activity section in this issue.
International reserve dynamics over the last months of 2008 was relatively stable given the effects of BNB regulatory changes and fiscal policy measures. Bulgaria has sustained a relatively low degree of vulnerability as to the potentially speculative capital withdrawal. Portfolio investment continued to decrease as a share of Bulgaria’s gross liabilities under the international investment position (4 per cent as of the third quarter of 2008). Gross short-term external debt, though picking up to 38.1 per cent of total external debt as of October 2008, remained entirely covered by BNB international foreign currency reserves.

According to preliminary data, foreign direct investment in Bulgaria came to EUR 5274.6 million between January and November 2008. Over the same period of 2007 foreign direct investment data were revised upwards several times and currently their amount is EUR 5963.3 million. The comparison between the data for January – November 2008 and initially reported data for the corresponding period of 2007 points to an increase in foreign direct investment inflow by 4.4 per cent. By the third quarter of 2008 foreign direct investment inflow accounted for 19.5 per cent of GDP on an annual basis. The reported inflow is expected to be revised upwards due to the additional information provided by corporations.

Attracted investment between January and November was primarily in the form of equity (53.3 per cent). No funds were received from privatization transactions and foreign persons’ investment in real property came to EUR 1.28 billion (EUR 1.67 billion in the same period of 2007). Overall, the foreign investor’s interest in acquiring real estate in Bulgaria remained high in 2008.

The other capital item under foreign direct investment reached EUR 1.97 billion between January and November 2008. The reported inflow is likely to be revised upwards in the following revisions. Data on reinvested earnings show an increase of EUR 120.3 million on an annual basis coming to EUR 491.3 million between January and November 2008.

By end-2007 real estate operations and business services (20 per cent), manufacturing (17.7 per cent), financial intermediation (17.6 per cent), and transport and communications (17.5 per cent) occupied the largest shares in the structure of cumulative foreign direct investment by industry. In the first three quarters of 2008 these sectors retained their key role, with the shares of real estate operations and business services, financial intermediation and manufacturing accounting for 25.8 per cent, 24.5 per cent and 14.5 per cent respectively. Trends in the investment inflow by economic sector show moderation in FDI to real estate and business services on an annual basis, while other sectors (e.g. manufacturing and trade and repairs) had large positive contributions to overall investment dynamics. The composition of FDI by country in the January to November 2008 period suggests that the foreign direct investments attracted from Austria (17.9 per cent), the Netherlands (15.7 per cent), and Germany (11.2 per cent) accounted for the largest shares.

Gross external debt dynamics between January and October 2008 shows that local business access to world financial markets was not hindered. Between January and October 2008 the net inflow of borrowed funds from other countries was positive, worth EUR 5.6 billion, reflecting the excess of received loans over the total amount of principal payments. As a result, Bulgaria’s gross external debt reached EUR 36.4 billion by end-October.

Between January and October 2008 the external debt of the general government sector declined by EUR 253.8 million (mainly due to an advance loan repayment to the World Bank in March), coming to 7.8 per cent of Bulgaria’s total debt. The total amount of public and publicly guaranteed debt rose by EUR 117.9 million.

Private non-guaranteed external debt rose by EUR 7.45 billion over the period, boosted mostly by deposits and loans attracted by banks (up EUR 3.5 billion), attracted intercompany loans (up EUR 2.18 billion), and growth in other sector liabilities (EUR 1.8 billion). Domestic banks’ external debt increased mainly in the form of deposits (EUR 2.28 billion) and other short-term loans (EUR 733.1 million). The bulk of this debt (75 per cent) is provided by the foreign parent banks aimed at broadening their scope of operations in Bulgaria. The share of intercompany loans in total external

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5 See footnote 3.

6 Upon receiving additional information on non-financial corporations, revisions of foreign direct investment data will affect not only the total amount of inflows, but also their sectoral structure.

7 Growth on December 2007 comprised EUR 7.6 billion, including net transfer of borrowed funds of EUR 5.6 billion, as well as revaluations and net changes in trade and revolving loans.

8 Excluding changes in government guaranteed private debt.
debt fell to 33.8 per cent due to the dynamic increase in banks’ external obligations for the first ten months of 2008. As a result of BNB measures intended to reduce minimum required reserves of banks, they will probably decrease the amount of their gross external debt in early 2009 by repaying a portion of short-term obligations. The volume of intercompany loans will be revised upwards in the following revisions due to quarterly reporting of non-financial corporations.

Gross External Debt
(million EUR)

Gross external debt service payments came to EUR 5.66 billion between January and October 2008 (42.7 per cent of receipts from commodity exports over this period) against EUR 5.55 billion in the corresponding period of the prior year (49.8 per cent of exports). Borrowings and deposits amounted to EUR 10.7 billion, up EUR 973.5 million as compared to the corresponding period of 2007. Banks and other sectors contributed most substantially to the total volume of borrowings and deposits: by EUR 5.4 billion and EUR 3.1 billion respectively.

The average weighted interest rate levels on new loans declared between January and October 2008 suggest an increase in the cost of external borrowed funds in US dollars (by 3.5 percentage points on an annual basis to 6.2 per cent), whereas it is minimal in euro (by 0.1 percentage points to 5.2 per cent). As regards long-term euro-denominated loans, the interest rate differential between corporate loans extended by domestic banks (at the average-weighted interest rate of 8.6 per cent) and external loans (5.9 per cent) remained positive. Long-term USD-denominated loans exhibited an opposite trend. As a result of the rise in the cost of new loans extended from other countries, their average-weighted interest rate exceeded that on the corresponding domestic loans by 0.8 percentage points. It should be noted that interest rate levels on domestic and external loans are not directly comparable due to different characteristics of corporations with access to both markets. Nevertheless, lower interest rates on euro-denominated external loans supports the incentives for direct external borrowing in the future.

As of September 2008 no notable changes occurred in the structure of private non-bank external debt by industry,9 with real estate operations, lessors activities and business services retaining their relatively large shares in the external debt of other sectors (26.6 per cent) and in intercompany loans (19.3 per cent). The bulk of intercompany funds in this sector went to companies providing legal, accounting, audit and other business services. Within the structure of other sectors’ debt, the electricity, gas and water supply (15.8 per cent) and trade and repairs (10.8 per cent) had more significant shares, while in intercompany loans, financial intermediation (19.4 per cent) occupied a significant share.

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

The maturity structure of gross external debt remained relatively steady, with short-term external debt increasing gradually to 38.1 per cent in October, from 33.7 per cent by end-2007. The increase in short-term debt of EUR 4.1 billion in the January to October 2008 period was primarily attributable to the newly opened non-residents’ deposits with domestic banks.

By the end of the third quarter of 2008 the euro retained its leading position (86.2 per cent) in the gross external debt currency structure. The euro occupied the largest share (91.9 per cent) in intercompany loans and the smallest share in the General government sector (68.4 per cent). This foreign currency structure significantly reduces

9 Excluding trade and bond loan liabilities.
risks associated with exchange rate fluctuations in the international markets.

Bulgaria’s gross foreign assets rose by EUR 1.7 billion between January and November 2008, with BNB international reserves growth of EUR 2.4 billion partially offset by the fall in foreign assets of banks (EUR 408.6 million) and the non-financial sector (EUR 241 million). As a result of Bulgaria’s gross foreign assets and external debt dynamics, the net external debt increased by EUR 5.7 billion in the first ten months of 2008, reaching EUR 51.5 per cent of the projected GDP for 2008.

External current and capital transactions reflect to a great extent the inflow of financial resources into the Bulgarian economy. The current and capital account deficit between January and November 2008 comprised EUR 7.2 billion against EUR 5.1 billion in the corresponding period of the prior year.

The trade balance contributed most substantially to the increased net external borrowing by the Bulgarian economy, with trade deficit rising by EUR 1.7 billion to reach EUR 8.2 billion over the review period. The continued high growth of goods imports (nominal growth of 19.1 per cent between January and November 2008 on an annual basis) reflects mainly still strong investment activity in Bulgaria and related imports of investment goods. High international prices of energy resources and raw materials in the first half of 2008 also contributed to maintaining high import dynamics. Over the period exports rose by 15.5 per cent.

Net current transfers reported for the January – November 2008 period amounted to EUR 503.7 million (up EUR 205.3 million). The improvement was entirely attributable to the EU funds inflow. A portion of the EU funds is reported under the balance of payments capital account, its amount coming to EUR 250.4 million. The transfers received from EU funds exceeded the payments on Bulgaria’s contribution to the EU budget and contributed to the positive net transfers of EUR 377.5 million to the General government sector. The receipts in the form of private current transfers rose by EUR 52 million on an annual basis, while transfers abroad increased by EUR 76.5 million. As a result, net transfers to the private sector fell by EUR 24.5 million.

The income and services balance exhibited a decline on the corresponding period of 2007 by EUR 610.1 million and EUR 9.5 million respectively. The income balance for the first eleven months of 2008 was negative (EUR 939.3 million). The reported fall of EUR 685.1 million on the corresponding period of 2007 was mostly attributable to larger payments on income from foreign direct investments. Growth was reported in all components of income from direct investments, with dividends paid accounting for the largest amount (EUR 375.2 million). As regards the income received from residents over the review period, income on compensations to employees posted an increase by EUR 171 million.

The balance on services in the first eleven months of 2008 was positive, comprising EUR 1.15 billion, with higher payments on travel of residents abroad (up EUR 267.9 million) and higher transportation expenditure on imports (up EUR 248.3 million) contributing most significantly to its insignificant deterioration on an annual basis. Improvements were recorded under all items of the earnings from exported services, the most sizable one being that of tourist services (up EUR 251.2 million), as well as other business services (up EUR 189.1 million) and transportation services (up EUR 161.5 million). Our expectations for the development of international trade in services point to retention of positive growth trends in the income from tourist and other business services over the first half of 2009.

Taking into account the available balance of payments and external debt data, we may conclude that there are no signs of serious risks to the sustainability of Bulgaria’s external position amid the worsening external environment. The analysis of major factors contributing to the changes in the external position of the Bulgarian economy reveals the retained significance of high investment activity and of the process of restructuring and integration into the Single European Market. Available data on December 2008 and early 2009 will reflect the effect of both BNB measures to reduce minimum required reserves maintained by banks with the central bank and government measures on Bulgaria’s external balance dynamics.

10 For a detailed analysis of exports and imports dynamics, see the Economic Activity section in this issue.
Amendments to Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks adopted by end-2008 aim at limiting interbank money market fluctuations and facilitating banks’ liquidity management. Dynamics of interest rates on time deposits, which started to increase in 2008, will depend on banks’ needs of attracted resources to finance their lending activity and will continue to be driven by the situation on the international financial markets.

In the last quarter of 2008 reserve money declined by 3.9 per cent, their level at the end of December matching that in December 2007. Amendments to Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks as adopted in October and November 2008 contributed most significantly to the decline in the fourth quarter of 2008. These amendments include: recognizing 50 per cent of cash in vaults as reserve assets, giving banks easier access to their reserves with the BNB (effective as of early October 2008) and reducing the minimum required reserve rate from 12 per cent to 10 per cent as of 1 December 2008. Consequently, bank deposits with the BNB decreased by 13.4 per cent on an annual basis at the end of the fourth quarter after the increase reported in previous quarters.

Moderation in the annual growth rate of cash in circulation also affected the level of reserve money. Cash in circulation growth rate fell to 9.1 per cent at the end of December from 13.7 per cent at the end of August. The slower annual growth in cash in circulation was attributable both to the high base and the increased interest rates on deposits. No sizable changes in the dynamics of cash in circulation are expected in the first half of 2009. However, bank reserves will continue to decline due to the reduced minimum required reserve rate on government deposits (from 10 to 0 per cent) and on funds attracted by banks from abroad (from 10 to 5 per cent) as of 1 January 2009.\(^{11}\)

Expectations for the first half of 2009 are characterized by a great uncertainty associated with still high non-confidence among major participants in international financial markets. Taking into account possible effects of the global financial crisis on the Bulgarian economy, a gradual slowdown in capital and financial inflows is projected in terms of both foreign direct investment and debt financing. It is expected that local economic agents will continue to have access to external financial resources, driven by the prevailing long-term interest of foreign investors and by the prudent macroeconomic policy pursued. The balance of payments current and capital account deficit to GDP ratio is anticipated to start decreasing in the first two quarters of 2009 and to be below 20 per cent of GDP by the middle of 2009.

**Monetary Aggregates**

Amendments to Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks adopted by end-2008 aim at limiting interbank money market fluctuations and facilitating banks’ liquidity management. Dynamics of interest rates on time deposits, which started to increase in 2008, will depend on banks’ needs of attracted resources to finance their lending activity and will continue to be driven by the situation on the international financial markets.
In the third quarter of 2008 the good tax revenue implementation led to a significant amount of liquidity being withdrawn from the non-government sector in favour of the budget. Although the aid received from other countries amounted to BGN 69.7 million and the contribution to the EU budget totaled BGN 119.6 million, the external sector was also a source of liquidity to the budget due to receipts from privatization of BGN 397.8 million. Government deposit with the BNB rose by BGN 1834.6 million over the third quarter of 2008 to BGN 11,026.9 million at the end of September.

As a result of extra expenditure on government investment, social programmes, and capital increases in state-owned companies at the end of the year, the government deposit with the BNB fell to BGN 7291.6 million.

At the end of 2008 the M3 monetary aggregate rose 0.2 per cent on September and 8.8 per cent on an annual basis (on December 2007), i.e. the last quarter of 2008 saw no change in the level of broad money compared with the end of September (for comparison purposes, in September M3 grew 3.93 per cent on June or 19.5 per cent on an annual basis). The downward trend in broad money growth started in early 2008 and largely reflected the high base of 2007 and the slowing in credit growth rates which also started in early 2008. Over the fourth quarter of 2008 overnight deposits posted a fall on the end of 2007, which was offset by an increase in time deposits included in quasi-money.

M1 posted a decline of 4.1 per cent on an annual basis as of end-December compared to growth of 10.2 per cent in September, with an 11 per cent decline in overnight deposits being the main driver for this (4.4 per cent growth in September). By the end of December overnight deposits of non-financial corporations in levs and foreign currency decreased by 9.6 per cent and 20.1 per cent (on an annual basis) respectively, while overnight deposits of households in levs increased by 2.9 per cent and those denominated in foreign currency declined by 32 per cent on an annual basis. The major factors that pushed down the amount of overnight deposits were the slowing of banks’ credit operations, debt repayment, and shifts from overnight to time deposits driven by interest rate increases.
Quasi-money continued to grow despite the moderation in its growth rate to 21.1 per cent on an annual basis as of end-December, down from 31.8 per cent as of end-September. Household deposits in levs with agreed maturity of up to two years rose by 26.7 per cent on an annual basis by the end of December and those in foreign currency by 20.4 per cent. The annual growth rate of non-financial corporations’ lev deposits with agreed maturity of up to two years amounted to 26.8 per cent while the growth of these deposits in foreign currencies came to 18.7 per cent.

**Contribution of Quasi-money and Their Components to M3 Growth (Quarterly)**

Between September and December 2008 interest rates in the interbank money market posted strong growth followed by a marked fall. The strong growth reflected the worsened conditions in global money markets and heightened uncertainty worldwide which impacted the domestic money market. ECB subsequent cuts in main interest rates and unprecedented measures for providing liquidity, the amendments to BNB Ordinance No 21, and the extra government expenditure at the end of the year led to a decline in money market interest rates. The average interest rate on transactions concluded in the interbank money market fell to 4.11 per cent on the last trading day, from a peak of 6.27 per cent on 17 October. Following a similar trend, LEONIA reached 6.37 per cent on 17 October and then fell to 4.07 per cent at the end of the year. The spread vis-à-vis EONIA widened to 172 basis points at the end of December, from 93 basis points at the end of August.

Interbank money market trading remained active as opposed to the interbank market in Europe where banks limited their trading due to the heightened uncertainty. The average daily volume of transactions between September and December 2008 increased to BGN 378.9 million, from BGN 253 million over the same period of 2007. In addition to money market transactions, banks used foreign exchange transactions with the BNB as a tool to manage their liquidity. Trade volumes remained high, with the value of foreign currency bought exceeding the one sold by BGN 1.13 billion over the last quarter of 2008.
Tightened conditions in the euro area money market following the higher uncertainty globally pushed up deposit interest rates in Bulgaria. Over the last quarter bank strategies were changed towards closer correlation between lending and attracted domestic resources. As a result, the competition on the domestic deposits market increased and interest rates on time deposits in levs and euro rose considerably.

Over the third quarter of 2008 average interest rates on lev time deposits rose by 52 basis points to 5.74 per cent, while euro time deposits registered growth of 29 basis points to 4.43 per cent. In the last three months of 2008 interest rates on time deposits denominated in levs and euro picked up to reach 6.57 per cent and 5.33 per cent on average. In December 2008 their levels reached an average of 7.21 per cent on time deposits in levs and 5.60 per cent on time deposits in euro. Expectations point to moderation in interest rates growth in the coming months. Their change will be mainly influenced by banks’ needs of domestic resources, ECB and BNB measures and the situation in global financial markets.

The distribution of interest rates on household deposits with maturity of up to one month by bank shows that the number of banks offering rates within the 4 to 5 per cent band increased at the expense of those offering rates within the 3–4 per cent band. In addition to the increased average interest level, more dispersion was observed in November vis-à-vis September along with interest rate levels exceeding 6 per cent.
Amendments to Ordinance No 21 on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks

Amendments to BNB Ordinance No 21 adopted in the fourth quarter of 2008 aimed to make bank liquidity management more flexible. These measures came as a follow-up of the BNB anti-cyclical policy with a view to banks’ minimum required reserves, capital adequacy regulation and provisioning rules.

In July 2007 the minimum required reserves maintained with the BNB by banks were raised from 8 to 12 per cent with effect as from early September 2007. The amendment aimed to influence strong lending in order to moderate private sector credit growth and came as a follow-up of the anti-cyclical policy conducted by the BNB since 2003. From the fourth quarter of 2008 the unfavourable effects of the global financial crisis which transformed into a global economic crisis, were felt more strongly in Bulgaria. Within the context of its anti-cyclical policy, by end-2008 the BNB took measures to facilitate banks’ liquidity management using liquidity buffers created in previous years.

The amendments to Ordinance No 21 were as follows:
1. Recognizing 50 per cent of cash in vaults as reserve assets, which gave banks easier access to their reserves with the BNB (with effect as of 1 October 2008).
2. Reducing the minimum required reserves on all funds attracted by the banks from 12 per cent to 10 per cent as of 1 December 2008.
3. Reducing the minimum required reserves on funds attracted by banks from abroad from 10 per cent to 5 per cent and removal of the reserve requirements on funds attracted from state and local government budgets as of 1 January 2009.

As a result of the amendments to Ordinance No 21, a total of around BGN 1.8 billion of bank funds maintained as reserves with the BNB were released. The effect of recognizing 50 per cent of the cash in vaults as reserve assets totaled BGN 710 million. The reduction of the reserve requirements as of 1 December 2008 resulted in a further release of BGN 1.1 billion. The additional decrease in the reserve requirements on funds from abroad as of 1 January 2009 should help to attract foreign capital at a lower cost. Reflecting the amendments of 1 January 2009, the average effective minimum reserve requirements for the whole banking system fell to 7 per cent and the overall effect of the BNB measures was a release of funds to the amount of BGN 3 billion. It should be noted, however, that the release of funds would not automatically result in higher lending. On the one hand, lending depends on demand for bank loans from households and firms and on banks’ risk assessment of these loans. To this end, Bulgarian banks’ behaviour does not appear to differ significantly from that of euro area banks which reduced lending irrespective of the decline in ECB interest rates and of the eased liquidity.

Factors Underlying Changes in Bank Deposits with the BNB

<table>
<thead>
<tr>
<th>Month</th>
<th>Overall changes</th>
<th>Deposit base changes</th>
<th>Cash in vaults changes</th>
<th>Minimum reserve requirement changes</th>
<th>Source: BNB.</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 2018</td>
<td>-916.5 BGN</td>
<td>43.1 BGN</td>
<td>-343.3 BGN</td>
<td>220.2 BGN</td>
<td></td>
</tr>
<tr>
<td>December 2018</td>
<td>-1677.4 BGN</td>
<td>253.9 BGN</td>
<td>-102.4 BGN</td>
<td>166.5 BGN</td>
<td></td>
</tr>
</tbody>
</table>

Credit Aggregates

The increased price of borrowed funds and tightened bank credit policy reflected on the continued downward trend in credit growth. Increases in deposit interest rates and in the cost of financing on the interbank money market continued to spill over into lending interest rates.

In the last months the macroeconomic uncertainty resulting from the negative external trends affected the rate of credit growth. This effect was seen in the moderate rise in credit demand and credit policy tightening pursued by banks. In the fourth quarter of 2008 claims on the non-government sector rose by BGN 1102.4 million (up BGN 4619 million in the same period of 2007). The increased
price of borrowed funds and tightened require-
ments for approving loans reflected on the contin-
ued downward trend in the credit growth rate of
loans, with the annual growth in claims on the non-
government sector falling to 31.6 per cent by end-
December. Over the following months the annual
growth rate of claims on the non-government sec-
tor will continue to moderate and by the middle of
2009 its rate is expected to be around 15 per
cent.

Despite the slowing growth rate of credit, the
claims on the non-government sector to GDP ratio
continued to exhibit an upward trend. By the end
of September 2008 this ratio reached 75.5 per
cent, up 1.7 percentage points on the end of the
previous quarter and 14.3 percentage points on
September 2007.

Claims on Non-government Sector
(million BGN) (%)

Source: BNB.

Domestic Credit
(share of GDP, %)

Source: BNB.

The reduction in net foreign assets of banks
contributed to some extent to expanding credit
operations in the fourth quarter of 2008. Over the
same period banks’ funds borrowed from non-
residents grew by BGN 680.6 million, which along
with the increased foreign assets by BGN 361.6
million, resulted in a decline in banks’ net foreign
assets to BGN -10,851.7 million by end-Decem-
ber.

As regards claims on households, credit opera-
tions were also limited. Between October and
December 2008 bank claims on households rose
by BGN 505.7 million (up BGN 1,543.9 million in
the same period of 2007). Their annual growth
rate continued to moderate reaching 31.3 per
cent by the end of December. Housing loans
posted comparatively high growth rates, though
their annual growth rate fell to 38 per cent at the
end of December.
Increases in deposit interest rates and cost of financing on the interbank money market until December continued to spill over into lending interest rates. Currently, a significant uncertainty exists around lending interest rate dynamics in the following months. Cuts in ECB interest rates on main refinancing operations by 50 basis points in October and November and by further 75 basis points in December may have a limiting effect on lending interest rates, with the intensity of this effect being determined by the degree to which market interest rates will react to changes in ECB monetary policy.
Monetary Policy Transmission in the Euro Area and in Bulgaria

The progress in financial integration achieved in the euro area over the past ten years is irrefutable. It was attained against the background of global economic growth supported by the free movement of capital, the normal functioning of financial markets and the lack of major crisis events.

Currently, the financial system is functioning in an environment of deepening financial and economic crisis which changed commercial banks’ behaviour drastically as compared to that observed until 2007. Hence, changes in monetary policy transmission occurred, limiting ECB’s influence on euro area commercial banks’ behaviour. Concurrently, changes in ECB reference rate were reflected in banks’ interest rates on various credit products.

An ECB survey suggests that under normal circumstances (which is currently not the case) the fastest possible adjustments to the changes in the reference rate, as well as the most efficient ones, is that of interest rates on credit products to non-financial corporations, followed by the rates on mortgage loans and the rates on time deposits. The adjustment of rates on consumer loans and on current account deposits to the ECB interest rate seems to be the least efficient.

The three-month interbank deposits rate (three-month EURIBOR) appears to be the main pass-through channel for the changes in the ECB reference rate. Interest rates on most bank loans to euro area firms are formed on the basis of this indicator together with a specific risk mark-up. The widening of the spread between the ECB reference rate and the three-month EURIBOR (see the charts) observed since August 2008 impeded the transmission of monetary policy changes to the real sector. To support this, it was only by late November when interest rates on bank loans to the corporate sector started to moderate somewhat, although the first change in the reference rate was made by the ECB in the beginning of October.

Lending rates in Bulgaria are usually formed by adding a mark-up over a set market index (such as EURIBOR/SOFIBOR) or over the cost of borrowed funds. Owing to both external and domestic factors, by November 2008 interest rates on loans in Bulgaria continued to increase regardless of the cut in ECB interest rates on refinancing operations. On the one hand, against the background of lack of confidence on the money markets, current market interest rates in the euro area do not correspond completely to the monetary policy changes. On the other hand, the increases in lending rates resulted in higher costs of borrowed funds and in a higher risk premia calculated by banks reflecting the growing economic uncertainty.

* Sorensen, Werner (2006), Bank interest rate pass-through in the euro area: a cross country comparison, ECB Working paper No 580.

(continued)
Interest Rates on Household Loans in Euro Area

Interest Rates on Long-term Loans to Euro Area Corporations

Interest Rates on Loans in Euro in Bulgaria

Interest Rates on Loans in Levs in Bulgaria

Source: ECB.

Source: BNB.
3. Economic Activity

In the first nine months of 2008 the real GDP growth rate accelerated to 7 per cent on the corresponding quarter of 2007. Value added growth in the fourth quarter of 2008 was underpinned by the recovery of agriculture.

Global economic crisis will weaken the external demand for Bulgarian goods in 2009. Worsened international economic situation will affect investment plans of Bulgarian corporations and the moderation in income growth will result in a slowing household consumption. As a result of weaker external and internal demand, real GDP growth rate is expected to slow down sizably as compared to that in 2008.

Over the first nine months of 2008 real GDP growth remained high: 7 per cent on average for the period. The trend of investment in fixed capital seen over the recent years contributed most to growth (by 6.3 percentage points). The intensive gross fixed capital formation observed in the recent years resulted in an expansion and modernisation of production capacities and supported the maintenance of high potential economic growth.

Over the first nine months of 2008 the growth rate of final consumption was close to the average for the recent years (around 5 per cent). Private consumption was the main factor behind high consumption, while the contribution of government expenditure to economic growth was low, broadly in line with their usual seasonal nature.

The contribution of foreign trade balance to real GDP growth remained negative with divergent dynamics. In early 2008 the contribution of the external sector was positive due to the increase in exports (9.2 per cent). The second quarter saw enhanced imports of goods and services (real growth rate at 13.7 per cent), while over the third quarter both imports and exports growth moderated. A reduction in imports and exports volumes in real terms is expected over the fourth quarter against the same period in 2007. Greater uncertainty is expected in 2009 with a view to Bulgaria’s external position and the effects of lower domestic demand on the economy as a whole.

The real growth rate in the industrial sector moderated from 7.4 per cent in the first half year to 2 per cent in the third quarter. Preliminary data on sales and industrial output show that in the fourth quarter of 2008 this process intensified and spilled over in most industrial sectors.

Global economic crisis will weaken the external demand for Bulgarian goods during the current year. Worsened international situation will affect investment plans of Bulgarian corporations and the moderation in income growth will result in lower domestic consumption. Production capacity utilization will drop and the expected economic growth rate will be lower than the potential one as a result of weakened external and domestic demand.

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Final Consumption</th>
<th>Fixed Capital Formation</th>
<th>Foreign Trade Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1.0</td>
<td>-0.2</td>
<td>0.5</td>
</tr>
<tr>
<td>2006</td>
<td>1.5</td>
<td>0.3</td>
<td>-0.8</td>
</tr>
<tr>
<td>2007</td>
<td>2.0</td>
<td>0.5</td>
<td>0.1</td>
</tr>
<tr>
<td>2008</td>
<td>1.3</td>
<td>0.2</td>
<td>-0.6</td>
</tr>
</tbody>
</table>

Source: NSI.

Over the first three quarters of 2008 value added picked up by 7.5 per cent on the corresponding period of the previous year. The value added in services increased rapidly (by 6.8 per cent) with financial intermediaries, real estates and business services having the most sizable contribution. Agriculture also added sizably to value added dynamics. Following the reduction in agricultural production in 2007 and under favourable climate conditions, the sector reported a recovery of production volumes. Over the first nine months value added growth was 24 per cent, and according to the first estimation of the final production for 2008, total annual value added increased by 66 per cent at constant prices on 2007.
Household Behaviour

Final consumer expenditure increased by 6.2 per cent in real terms during the first nine months of 2008. The increase in total consumption was mainly driven by the ongoing trend of growing employment and household income for the period over review. According to national accounts data, during the first nine months of 2008 nominal wage income went up by some 28 per cent on an annual basis compared to the first nine months of 2007, allowing for the households to sustain their real expenditure growth regardless of the relatively high inflation.

In the structure of growth, the trend toward moderate spending on food observed in the second half of 2007 was sustained due to the sizable rise in food prices over the period. Non-foods contributed sizably to the increase in total consumption (2.2 percentage points) over the first three quarters of 2008, but quarterly developments point to moderation. Consumer loans played a key role for financing part of consumer expenditure related to the purchase of durable goods, but their growth rate also slowed down.

Retail statistics reports a gradual slowdown in revenues from sales in the second half of 2008 which was most pronounced after September. This was also a clearly pronounced trend in groups such as textile and clothing and household goods and home appliances.

Household budget survey data on household expenditure confirm the trends in the structure of consumption as reflected in the national accounts and retail data. Expenditure on home furnishing, communications and leisure activities had a significant contribution to total consumer expenditure growth, while that of food expenditure was insignificant.

According to the household budget survey data higher incomes in 2008 were supported by the increase in wage income. In the second half of 2008 self-employment income remained at a level close to that observed in the corresponding period of 2007 in nominal terms, which was reflected in the negative contribution of real household income growth.

Data on the situation in labour markets, which continued to improve in 2008, provide information on the sources boosting household income.

Sources of Employment Growth

According to the labour force survey data, the number of employed increased by 3.9 per cent on an annual basis in the first nine months of 2008. Labour supply continued to improve, with economic activity rate for the population aged 15–64 reaching 68.5 per cent during the third quarter of 2008 (against 67.2 per cent during the corresponding period of 2007). Unemployment rate fell to 5.1 per cent in the third quarter. The trend toward a decrease in the number of long-term unemployed was also positive. According to
Employment Agency data, the number of registered unemployed in October and November remained lower than in previous periods which showed that by end-2008 no negative effects on the Bulgarian labour market were registered as a result of the slowing economic activity.

Favourable labour market developments were not sufficient to improve consumer perceptions and expectations after the weakening in consumer confidence in the second quarter of 2007. Accelerating inflation, especially that of foods, observed since mid-2007, had a strong impact on consumer perceptions. As regards current and expected inflation, estimations of higher inflationary dynamics still prevail. During November – December 2008 period unemployment expectations deteriorated and together with the less favourable assessments and outlooks for the overall economic situation resulted in pessimistic expectations of households’ financial performance. The balance indicator of consumer intentions to purchase durable goods also decreased by the end of the year under review.

Given the developments seen over the year and the weakening of consumer confidence by end-2008, consumer expenditure is expected to increase at moderate rates. Reduced lending will also contribute to curbing consumer expenditure growth in early 2009.

Employment and Income Dynamics (Quarterly)
(% on corresponding period of previous year, unless otherwise indicated)

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th></th>
<th></th>
<th>2007</th>
<th></th>
<th></th>
<th>2008</th>
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<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
<td>III</td>
<td>IV</td>
<td>I</td>
<td>II</td>
<td>III</td>
<td>IV</td>
<td>I</td>
</tr>
<tr>
<td>Employed</td>
<td>2.4</td>
<td>3.6</td>
<td>2.2</td>
<td>2.9</td>
<td>4.9</td>
<td>3</td>
<td>2.1</td>
<td>1.6</td>
<td>3.3</td>
</tr>
<tr>
<td>Real wage</td>
<td>0.5</td>
<td>-0.4</td>
<td>2.1</td>
<td>5.5</td>
<td>11.8</td>
<td>14.2</td>
<td>11.6</td>
<td>10.8</td>
<td>10.7</td>
</tr>
<tr>
<td>Wage fund</td>
<td>2.5</td>
<td>2.8</td>
<td>4.1</td>
<td>8.2</td>
<td>17.2</td>
<td>17.2</td>
<td>13.7</td>
<td>12.1</td>
<td>14.1</td>
</tr>
<tr>
<td>Unemployment at the end of the period, % of the labour force</td>
<td>10.8</td>
<td>9.2</td>
<td>8.4</td>
<td>9.1</td>
<td>8.9</td>
<td>7.4</td>
<td>6.8</td>
<td>6.9</td>
<td>6.8</td>
</tr>
</tbody>
</table>


Real Consumer Demand Dynamics (Quarterly)
(on corresponding period of previous year, percentage growth in real terms)

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer spending per household member</td>
<td>10.6</td>
<td></td>
<td></td>
<td>6.5</td>
<td></td>
<td></td>
<td>1.8</td>
<td></td>
<td></td>
<td>1.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Retail sales</td>
<td>13.8</td>
<td></td>
<td></td>
<td>11.3</td>
<td></td>
<td></td>
<td>7.7</td>
<td></td>
<td></td>
<td>4.4</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Income from retail trade, incl.</td>
<td>15.3</td>
<td></td>
<td></td>
<td>10.4</td>
<td></td>
<td></td>
<td>7.0</td>
<td></td>
<td></td>
<td>3.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food, drinks, tobacco</td>
<td>7.6</td>
<td></td>
<td></td>
<td>4.7</td>
<td></td>
<td></td>
<td>0.0</td>
<td></td>
<td></td>
<td>2.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmaceutical and medical goods, cosmetics and toiletries</td>
<td>7.8</td>
<td></td>
<td></td>
<td>12.2</td>
<td></td>
<td></td>
<td>8.5</td>
<td></td>
<td></td>
<td>5.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textile, clothing, footwear and leather</td>
<td>18.3</td>
<td></td>
<td></td>
<td>25.5</td>
<td></td>
<td></td>
<td>14.7</td>
<td></td>
<td></td>
<td>2.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household goods and home appliances</td>
<td>27.7</td>
<td></td>
<td></td>
<td>12.1</td>
<td></td>
<td></td>
<td>8.9</td>
<td></td>
<td></td>
<td>4.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Source: NSI Household Budgets and Domestic Trade Survey.
Government Finance and Consumption

Economic activity moderation during the first half of 2009 will result in a slowdown in budget revenue growth, with a relatively sustained growth of consolidated budget expenditure. During the first two quarters government consumption contribution to GDP growth is anticipated to stay below 0.4 percentage points, while budget surplus is expected to reach a level of over 5 per cent of the projected GDP for the year.

Between January and November 2008 the consolidated fiscal programme balance was positive and reached BGN 4598.5 million or 6.9 per cent of the year’s projected GDP. Compared to the corresponding period of 2007 accumulated surplus has increased by BGN 639.5 million with the income and expenditure showing similar growth rates. Government revenues picked up by 16.1 per cent on an annual basis as of November 2008. Grants received during the period under review came to BGN 1074.6 million and comprised mainly of advance payments from EU funds received by the end of the third quarter. As of November 2008 consolidated budget expenditure increased by 16.1 per cent on an annual basis and together with the contribution to the EU budget comprised 81.2 per cent of annual projections.

There was a certain slowdown in the consolidated budget revenue growth due to the higher base and the decline in inflation seen during the second half of 2008. In the third quarter of 2008 expenditure increased as expected, but overall the government continued to conduct its anti-cyclical policy and government consumption growth stayed close to zero in real terms, as well as its contribution to real GDP growth.

As a result of the further increase in fuel and tobacco excise rates in 2008, excise receipts saw the highest growth rate (23.8 per cent on an annual basis) in the group of indirect taxes. Higher tax credit refund and reduced receipts from import VAT resulted in a slowdown in VAT revenue growth in the third quarter of 2008, which came to only 2.5 per cent on an annual basis. Between July and September a certain reduction in the amount of receipts from direct taxes was observed. Receipts from income tax for individuals posted an annual increase of 7.4 per cent as a result of the moderate income growth in the economy as a whole. Non-tax revenue growth accelerated and by the end of the third quarter reached 48.9 per cent on an annual basis mostly as a result of the receipts from the recovery of claims by Iraq.

By the end of the third quarter due to indexations made in mid-2008, expenditure on wages and pensions saw a sizable increase of 19.7 per cent and 19.1 per cent on an annual basis respectively. Social security contributions are expected to increase markedly in the fourth quarter of 2008 due to the recalculation of pensions and additional funds for Christmas bonuses (a part of the social security package to the 2008 budget, approved by the National Assembly in October 2008). Subsidy payments also increased sizably by 58.2 per cent on an annual basis.

Capital expenditure picked up by 22.5 per cent on an annual basis which is an increase as compared to that in the first half year. Investment expenditure made in the third quarter, together with the funds extended by the end of the year under the additional investment package were the driving factors behind this.

As of November 2008 Bulgaria’s contribution to the EU budget came to BGN 641.3 million.

The 2009 budget provided for an accumulation of budget surplus to the amount of 3 per cent of GDP, and in case of economic slowdown, balance of payments current account deficit deterioration and underperformance of the consolidated fiscal programme revenue non-interest expenditure (investment expenditure excluded) shall be to 90 per cent of the budgeted amounts.

In the first two quarters of 2009 a decrease in income revenues is expected with a view to the somewhat slowing economic activity and the decline in inflation against the background of a relatively stable annual growth rate of consolidated budget expenditure. During the first two quarters government consumption contribution to GDP growth is anticipated not to exceed 0.4 percentage points, while budget surplus is expected to reach a level of over 5 per cent of the projected GDP for the year.

12 The analysis of revenue and expenditure in individual categories is based on quarterly data about the consolidated fiscal programme implementation.
Contribution of Government Final Consumption Expenditure and Collective Consumption to Economic Growth (Quarterly)

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

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

Sources: NSI, BNB.

Primary Balance (Quarterly)

Sources: MF, BNB.

Behaviour of Firms and Competitiveness

Unfavourable international economic development affected export capacities of Bulgarian corporations in the second half of 2008. Due to the significant share of exported manufacturing products, this sector started to feel the negative impact of the global economic crisis already in the third quarter of 2008 when the value added of the sector was by 0.9 per cent lower than that in the corresponding quarter of 2007.

Metallurgy marked the most sizable fall in real terms of 34.7 per cent below that reported in the previous year against the background of a simultaneous price reduction of 50.8 per cent over the same period. This resulted in a negative gross operating surplus of the sector which pointed to corporate losses.

Other manufacturing sectors continued to report a positive value added increase in the third quarter of 2008. Hence, over the same period their operating surplus (that of metallurgy excluded) rose by almost 20 per cent in nominal terms compared to the corresponding quarter of the prior year, which was a sign of the good financial performance of these sectors.

Monthly data on industrial sales earmarked for exports confirm that the slowdown in industrial production growth reflected the unfavourable ex-
Economic Activity

The real growth rate of sales earmarked for exports slowed down by 2.3 per cent on an annual basis in July 2008, and by 16 per cent in real terms in November. In October and November less than one-third of the industrial sectors reported an increase in sales earmarked for exports.

Industrial Sales Growth (% on corresponding quarter of previous year)

These data are broadly in line with the assessments of the industrial sector's business situation. The assessments of the overall business situation and of production activity worsened and the number of new orders from Bulgaria and from abroad is expected to decrease. Economic managers’ expectations for the business situation in the following months are more pessimistic than those for the current situation. As a result, industrial sectors are expected to have difficulties in realising their production during the first half of 2009.

Business Climate in Industry (balance of assessments)

Due to the global financial crisis, opportunities for corporations to shift their sales to alternative markets and to sustain their development remained limited. As a result of weaker external demand, Bulgarian firms have to undertake measures for limiting the negative impact of lower sales on their financial performance. The main tool for limiting the negative effects of the worsened external environment is to cut expenses. The tendency toward a reduction of major commodity and energy resource prices will allow for limiting intermediate consumption expenditure, especially in high-tech sectors. The trend of the last two years towards an increase in unit labour costs is expected to be reversed which will help enterprises counteract the unfavourable effects of the worsening international environment on their financial performance.

During the third quarter of 2008 nominal wages in the industrial sector continued to grow at high rates: up by 23 per cent on an annual basis. In the third quarter of 2008, however, the rapid employment growth trend in manufacturing was interrupted, with the number of employed going up by only 0.8 per cent. Expectations of managers in the industrial sector also confirmed the changes in their additional staff hiring plans. Furthermore, in the third quarter of 2008 more than half of the sectors reported a decrease in unit labour costs compared with the corresponding period of 2007 which can be considered as a positive trend against the background of slowing actual realised output growth rates. For this reason, wages are expected to increase in nominal terms at more moderate or even low rates by end-2008 and in early 2009. Opting for reduced working hours also provides affected producers with the opportunity to limit labour costs and at the same time keep human capital, as well as to restore their full production capacity in good times.

Average production capacity utilization in the industrial sector remained relatively high at around 75 per cent in October 2008. The sustained high levels of this indicator confirm that during the third quarter of 2008 problems in the industrial sectors were limited mostly to the lower production activity in metallurgy. Owing to the continuous worsening of external demand, the indicator is expected to fall in the fourth quarter of 2008.

Against the backdrop of global construction activity slowdown, the value added of construction in Bulgaria picked up by 10 per cent in real terms during the first nine months of 2008. Current economic data show that in the fourth quarter of 2008 annual construction output growth will also remain positive. December saw a sharp worsening in business managers’ expectations suggesting a slowdown of the sector’s development.

Economic Activity
number of issued construction permits continued to follow its descending trend of end-2007, suggesting a more moderate development of the sector in the future.

Annual Growth of Permits Issued for Construction of New Buildings

<table>
<thead>
<tr>
<th>Year</th>
<th>Office buildings</th>
<th>Other buildings</th>
<th>Residential buildings</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>50</td>
<td>40</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>2006</td>
<td>45</td>
<td>35</td>
<td>15</td>
<td>95</td>
</tr>
<tr>
<td>2007</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>90</td>
</tr>
<tr>
<td>2008</td>
<td>35</td>
<td>25</td>
<td>15</td>
<td>75</td>
</tr>
</tbody>
</table>

Source: NSI.

Lending for house purchases also moderated in the second half of 2008. Housing loans extended between July and December 2008 were less by 31 per cent than in the corresponding period of 2007. Preliminary data on foreign direct investment flow point to a slowdown in the real estates and business services sector observed over the first nine months of the review year.

Transactions concluded on the property market suggest that house prices continued to maintain strong annual growth in the third quarter of 2008 but there was a trend toward an increase in the number of regions where house prices decreased on the previous quarter which signals a gradual transmission of this trend across the country. The trend was more pronounced in the fourth quarter when house prices fell by 4.1 per cent on average and over the same period their annual growth rate moderated to 11.7 per cent from 27 per cent in the third quarter of 2008.

The expected slowdown in construction dynamics will also affect sales in the related sectors such as the manufacture of other non-metal mineral products, manufacture of rubber and plastics and metallurgy.

Economic activity in the services sector remained robust over the first nine months of 2008. Financial intermediation contributed most to value added growth (by 2.4 percentage points). In the fourth quarter of 2008 banks adopted a more conservative lending policy which is expected to be maintained in 2009. Economic activity moderation in Bulgaria will also result in a slowing credit demand. To this end, the high real value added growth rate in the sector of over 30 per cent on an annual basis realised in recent years will slow down. Despite the lower growth rate of the sector, financial intermediation is expected to continue to intensify reflecting the stability of the banking system and long-term strategic interests of major financial institutions in Bulgaria.

The operations in real property and business services sector also developed dynamically during the first nine months of 2008, reporting a 7.3 per cent real growth rate on an annual basis. Its accelerating growth since 2004 resulted from the foreign direct investment in the sector and the improved availability of bank credit. The sector’s expenditure on acquiring fixed assets increased, with their share in total expenditure on fixed assets in the economy coming to some 12 per cent. However, the expected lower demand for real estates during the next periods will result in moderate development in the sector.

Labour market flexibility and geographical and qualificational mobility of the labour force are key factors behind the adequate counteraction of Bulgarian producers to the effects of the global economic crisis. Over the last few years there was an increase in labour demand and supply and the number of unemployed, including long-term unemployed and discouraged, decreased. Driven by these factors, labour market conditions marked a significant improvement.

Since 2007 nominal and real wages have picked up briskly outpacing labour productivity growth which led to an increase in unit labour costs. Since early 2007 until mid-2008 the annual growth of nominal unit labour costs was 15.2 per cent on average, while that of real unit labour costs was 5.4 per cent. Whether these developments are sustainable and whether this trend can easily be reversed are important questions with a view to safeguarding the financial stability of Bulgarian firms. It would be of interest to the public if in the event of change in trends or expectations related to the companies’ future development, the latter could limit wage costs growth quickly.

During the third quarter of 2008 the annual growth rate of unit labour costs decreased by 13 per cent and 2.1 per cent in nominal and real terms respectively. The gross operating surplus of the economy picked up in nominal terms by 17.3
per cent. This shows that enterprises’ wage setting was flexible enough to preserve their profits. Furthermore, the increase in wages during the last two years was partly due to tax changes aimed at bringing grey economy out of the shadows, and to the agreed higher minimum wage and minimum insurance income levels.

Limiting the negative effects of the unfavourable international environment on Bulgaria’s economy, and on labour market in particular, also means that dismissed employees should easily find alternative employment. This will reduce the loss of human capital formed during the period of active employment and the rate of growth in the number of long-term unemployed and discouraged. In addition, in case of higher labour force mobility, the dismissal of employees by companies experiencing financial difficulties will result in spare labour resources for enterprises in good financial state that are planning future business expansion. Thus, skill shortages will be quickly overcome which will be favourable for keeping labour costs low.

Companies’ reactions to the unfavourable external environment depend on their expectations of the intensity and duration of the global crisis. The deeper and longer it is likely to be according to the companies, the more likely it is the reduction of wage costs to be achieved by a combination of redundancies and pay freezes. In the event the impact is weaker and lasts for a short period of time, labour-cost cuts could be achieved by shifting to reduced working hours and limiting wage growth.

In the first nine months of 2008 investment activity in Bulgaria remained very high extending corporations’ productive capacity. The expenditure on acquiring fixed assets for the economy as a whole went up in nominal terms by 35 per cent, and those in manufacturing by 10 per cent on the first nine months of 2007.

Expectations of business environment worsening recorded in the third quarter of 2008 will result in subdued investment activity in Bulgaria. The effect of lower domestic demand for machines and equipment on GDP economic growth will partly be offset by a slowdown in growth or even in imports. High imports of capital goods underlied high overall dynamics of imports of goods till recently and thus had a sizable negative contribution to GDP growth.
Unit Labour Cost (Quarterly)
(2000 = 100)

Total for the Economy

Manufacturing

Agricultural Sector

Mining and Quarrying

Construction

Electricity, Gas and Water Supply

Trade

Transport and Communications

Financial Intermediation

Other Sectors

Note: The methodology of computing unit labour costs has been changed and complies with ECB methodology. Nominal unit labour costs are computed as a ratio of compensation per employee and labour productivity (real value) per employee. Real unit labour costs are computed using the same formula but labour productivity per employee is based on nominal value added.

Sources: NSI, BNB.
In the first and second quarters of 2009 the dramatically worsened international situation is anticipated to affect foreign trade dynamics, slackening imports and exports growth rates. A nominal decrease in exports and imports are expected, compared with the respective quarters of 2008, due both to lower international prices and declines in traded physical volumes as a result of weaker demand.

In the first three quarters of 2008 foreign trade developed rapidly, posting export and import growth rates of and above 20 per cent. These rates were underpinned by high international prices and relatively sound external and domestic demand. Deepening global economic crisis over the last months of 2008 resulted in a sharp slowdown in the dynamics of foreign trade flows. In October import growth fell to 12.5 per cent on October 2007, while exports registered a 1.4 per cent decrease. In November these effects became stronger, with imports dropping by 11.8 per cent in nominal terms and exports by 15 per cent.13

Over the January to November 2008 period exports went up by 15.5 per cent on the respective period of 2007, reaching EUR 14,328.7 million. Imports (FOB) grew by 19.1 per cent, comprising EUR 22,507.3 million, with trade balance over the period coming to EUR 8178.5 million (down EUR 1.7 billion on the same period of the prior year). Against the background of uncertainty, falling international prices and shrinking demand, a nominal decrease in exports and imports on an annual basis may be expected. The effects of the changes in the prices and physical volumes, which are likely to be negative, will simultaneously follow this trend over the projection horizon. This will be particularly pronounced in the traditionally pro-cyclical sectors, such as metallurgy and energy.

Dynamics of Exports and Imports (million EUR)

Between January and October 2008 exports of mineral products and fuels picked up by 32.7 per cent. Despite the decrease in crude oil prices since mid-year, the dynamics of volumes stayed relatively high, starting to reflect the economic conditions only in October (-16.3 per cent on October 2007). Probably during the first half of 2009 exports of products within this group will fall due to the combined effect of lower prices and weak external demand.

Exports of Metal Products and Fuels (million EUR)

Source: BNB.

Exports of base metals and base metal products went up by 9.9 per cent between January and October. Since mid-2008 monthly dynamics of this product group exports has been moderating; as a result, drops of 6 per cent and 24.1 per cent respectively were reported in the third quarter and in October. Major export items within this group (copper and copper products, as well as cast iron, iron and steel) were affected. Falls of metal prices on international markets may suggest a substantial contribution to last months’ dynamics, which would imply that the second half of 2008 situation will undergo no changes in the first half of 2009 as well.

13 The analysis presented in this section is based on nominal export and import data in euro.
Exports of Base Metals and Base Metal Products

(million EUR)

Source: BNB.

Over the January to October period exports of machines, transportation vehicles and appliances increased by 26.8 per cent. Traditionally, exports of products within this group follow a steady trend, which was preserved in 2008 as well: the reported slowdown over the third quarter and in October was insignificant, with nominal growth rates being 20 per cent and 15.3 per cent respectively. The slowdown is likely to continue during the next months; however, as a whole the exports of machines and appliances may be expected to retain their positions of a relatively stable group.

Exports of Machines, Transportation Vehicles and Appliances

(million EUR)

Source: BNB.

Over the January – October 2007 period exports of food, drink and tobacco products reported high growth rates (69.7 per cent for the period), showing no signs of moderation during the last months. Their dynamics partially resulted from a base effect, driven by the 2007 poor harvest. This fact, coupled with the considerable uncertainty about domestic and external demand for the products within this group, makes the assessment of its dynamics more complicated.

Exports of Animal and Plant Products, Food, Drinks and Tobacco

(million EUR)

Source: BNB.

Since 2007 exports of textiles, clothing and footwear have registered low growth rates. The trend was sustained between January and October 2008; during the period this group’s exports declined by 3.5 per cent. Monthly dynamics displayed no definite developments; more specifically, during the third quarter and in October there were no further falls (-6.5 per cent and -1.4 per cent respectively). This was probably related to last year’s lower levels at which the exports of the products within this group stayed due to the gradual exhaustion of production cost advantages in Bulgaria. It may be suggested that with the deepening of the global crisis’ effects on the Bulgarian economy, data on exports of textiles, clothing and footwear will begin to more clearly reflect the external environment. Nevertheless, no abrupt declines in the rate of change over the projection period are expected owing to the adjustment that started in early 2007.

Exports of Textile, Clothing and Footwear

(million EUR)

Source: BNB.

During the first ten months of 2008, exports of chemical products picked up by 15.4 per cent, with growth rates stabilising at some 14 per cent in the second and third quarters, while in October a 4.5 per cent drop was registered. Exports of chemical products are expected to report slow
rates in the first half of 2009, posting nominal decreases. These expectations are based, on the one hand, on adverse future trends in the external environment, and, on the other hand, on the impact of reduced gas supplies from Russia at the beginning of the year, which will further impede the chemical product manufacturing.

Exports of Chemical Products, Plastics and Rubber (million EUR)

Changes in imports of energy resources during the first ten months of 2008 (a 39.1 per cent increase for the period) were mainly driven by crude oil prices on international markets. Growth rates close to 50 per cent were registered during the first and second quarters. In compliance with the decreased oil prices during the second half of the year, imports of energy resources slowed down to 29.4 per cent in the third quarter and to 13.9 per cent in October. Moderating nominal growth rates of energy imports are anticipated to continue in the first half of 2009, underpinned by lower international prices and lower imported volumes as a result of weakening demand. Imports of these products are likely to report negative growth rates over the forecast horizon.

Imports of Energy Resources (million EUR)

Over the January to October 2008 period imports of consumer goods went up by 24.1 per cent compared to the same period of 2007. Generally, this group’s dynamics was stable over the review period, showing no signs of a slowdown in the third quarter and in October. This behaviour, given the international price dynamics, does not correspond to national accounts data on food and non-food consumption in real terms, which indicate a clearly pronounced descending trend in the first three quarters of 2008. It can be expected that in the first half of 2009 the effects of the more moderate consumer demand will start to occur, adding to the slowdown in the imports of consumer goods.

Imports of Consumer Goods (million EUR)

Imports of investment goods increased by 20.7 per cent between January and October 2008. Throughout the year all major components of this group grew in line with the stable investment demand in Bulgaria. August, September and October saw lower rates (6.3 per cent, 10.1 per cent and 12.7 per cent respectively); however, the historical monthly volatility and accelerating growth over these three months allow no definite conclu-
sion about an outset of a slowdown in imports of investment goods. They are likely to moderate in the projection period, given the expected weaker investment demand in the Bulgarian economy.

Imports of Investment Goods

<table>
<thead>
<tr>
<th>(million EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
</tr>
<tr>
<td>140</td>
</tr>
</tbody>
</table>

Source: BNB.

Raw materials imports slowed down in the second half of the year, their growth comprising 13 per cent in the third quarter, 5.9 per cent in October and 15.6 per cent over the period since early year. Developments in individual components within the group were divergent, with some subgroups, such as textiles, registering a nominal decline, while others reporting positive and comparatively high growth rates (for example cast iron, iron and steel). This suggests divergent factors behind this group’s overall dynamics, providing no common explanation of the changes in the imports of raw materials. Nevertheless, a further moderation in the growth rates of this group’s imports, determined by lower international prices and weakening demand, may be expected in the first two quarters of 2009.

Imports of Raw Materials

Over the January to October 2008 period Bulgarian exports to EU Member States picked up by 15.8 per cent, while exports to non-EU countries increased by 24.2 per cent. Goods imported from the EU rose by 25.3 per cent and those from third countries by 20.5 per cent. The share of exports to the EU in Bulgaria’s total exports may experience a certain fall in the first half of 2009, provided the crisis affects more severely the EU economies. As a whole, over the forecast horizon no significant changes in the Bulgarian foreign trade geographic structure are expected.
In 2008 inflation reflected the strong fluctuations in international and domestic food and fuel prices. At the close of the year it slowed down substantially owing to the sharp fall in oil prices in the fourth quarter.

We expect inflation to continue slowing down in the first half of 2009 under the influence of lower international fuel and raw material prices in comparison with 2008.

Inflation accumulated in 2008 reached 7.2 per cent in December 2008 compared with December 2007; it was lower than that by end-2007 (11.6 per cent). During 2008 inflation in individual months was characterized by strong volatility which to a great extent reflected significant fluctuations in food and fuel international and domestic prices, including the indirect effects of these fluctuations on the prices of the other goods and services in the consumer basket.

Until mid-2008 an increase in inflation was observed; in June it reached its peak of 14.7 per cent on an annual basis. The second half of the year witnessed a gradual decline in the inflation rate, underpinned by moderating food prices inflation. During the last quarter inflation in Bulgaria decreased significantly, reflecting sharp falls in fuel prices as a result of the downward dynamics of international oil prices. By the end of 2008 foods added 1.5 percentage points to inflation (5.1 percentage points by the end of 2007), while fuels had a negative contribution of 1 percentage point to inflation accumulated throughout the year (a positive contribution of 1.2 percentage points by the close of 2007).

During the last year price dynamics was also impacted by the rise in administratively controlled prices and in tobacco product excise duties. In 2008 administratively controlled prices had a higher contribution to end-year inflation compared with 2007, coming to 1.65 percentage points (1.1 percentage points by end-2007); tobacco products also added to inflation by 0.5 percentage points (a 0.3 percentage point negative contribution in 2007).

In 2008 inflation (excluding foods, energy products, administratively controlled prices and tobacco products) stayed relatively high despite its slight moderation by the close of the year. Services were the main driver of this group’s dynamics, adding 3.4 percentage points to inflation accumulated by end-2008. The major factor behind rises in prices of services was the sustained high wage growth rate in Bulgaria which led to enhanced consumer demand and to the firms’ ability to transfer their higher expenditure on, inter alia, wages, fuels, energy and raw materials to end-use prices.

### Harmonized Index of Consumer Prices

(=inflation on corresponding month of previous year, %)

<table>
<thead>
<tr>
<th>Year</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1.5%</td>
<td>2.0%</td>
<td>2.5%</td>
<td>3.0%</td>
<td>3.5%</td>
<td>4.0%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

Source: NSI.

### Inflation Rate and Contribution of Major Goods and Services Groups to It, 2007–2008*

(=inflation on corresponding month of previous year, %)

<table>
<thead>
<tr>
<th>Year</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1.5%</td>
<td>2.0%</td>
<td>2.5%</td>
<td>3.0%</td>
<td>3.5%</td>
<td>4.0%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

* This structure corresponds to the Eurostat classification; tobacco products and goods and services with administratively controlled prices are presented separately.

Sources: NSI, BNB.

Average annual inflation reached 12 per cent, reflecting the early-2008 high inflation rate and the ongoing acceleration of consumer price rises by mid-year.
In 2007 the price of electricity for companies with less than 50 employees and an annual turnover of up to BGN 19.5 million was raised by 21 per cent on average, while in 2008 the increase came to 15 per cent.

Food Prices

In comparison with 2007, when food prices inflation picked up dramatically to 20.5 per cent, by end-2008 it dropped to 5.8 per cent.

One of the factors behind food price dynamics is the dependence of food industry output on agricultural products. It is characteristic of food output that intermediate consumption of agricultural products and of products within the industry itself occupies slightly over 50 per cent of this industry’s total output at base prices. On its part, the agricultural sector uses a great part of its own output for the production of end-use products; as a result, a one-off shock in this sector will have a spillover effect in the course of time. Another factor behind food price dynamics is the rise in the prices of raw materials, such as fuels, fertilizers and energy, which as being part of the expenses on intermediate consumption have a lagged effect on food end-use prices. 14

In addition, the implementation of European standards in the production of agricultural products calls for restructuring of agriculture in terms of enlarging the farms, which in individual sectors, such as manufacturing of dairy products (production of milk) and stock-breeding, is now accompa-

14 In 2007 the price of electricity for companies with less than 50 employees and an annual turnover of up to BGN 19.5 million was raised by 21 per cent on average, while in 2008 the increase came to 15 per cent.

15 The application of a quota system since Bulgaria’s accession to the EU has had a curbing effect specifically on the production of milk and dairy products.
commodities’ price dynamics. Materialised expectations of higher wheat and sunflower yields in 2008 in Bulgaria and globally were the factor behind the clearly pronounced downward trend in the prices of these agricultural commodities.\textsuperscript{16} The sharp decline in their prices was the main driver of the end-year fall in flour prices (by 21.3 per cent), bread prices (by 2.8 per cent) and sunflower oil prices (by 15.2 per cent) on December 2007. In December 2008 prices of vegetables and, to a lesser extent, those of fruit were also lower by 2.7 per cent and 0.7 per cent respectively, compared with December 2007, contributing negatively to inflation.

In line with expectations, the fall in international and domestic prices of agricultural products and foods brought about a moderate increase in the prices of the other food groups (on a monthly basis) during the last months of 2008.

Meat and meat products, whose prices went up by almost 17 per cent within a year, had the highest contribution to inflation at the end of 2008. Throughout 2008 a clearly pronounced upward trend in the producer prices of meat and meat products was observed.

We expect the trend to moderating food price rises to be sustained in the first half of 2009 owing to the decrease in commodity and fuel prices.

**Energy Products Prices**

In 2008 energy products prices were highly volatile, driven by divergent oil price dynamics during the first and second halves of the year. Domestic prices of energy products were also affected by raised excise duties since the beginning of 2008 (by 8 per cent on petrol and 12 per cent on diesel oil). The increase in fuel prices by almost 20 per cent until July 2008 was followed by a strong decline, especially during the fourth quarter, with the end-year decrease in fuel prices comprising 13 per cent on December 2007.

By mid-2008, amid rising fuel costs, end-use prices of transportation services (including those with administratively controlled prices), where fuel costs comprise a great part of expenditure on intermediate consumption, registered relatively fast growth. During the first half of the year, the growth rate of energy products prices and transportation services prices came to some 25 per cent. The subsequent fall in fuel prices, however, did not push down the prices of transportation services; hence, this group of services remained more expensive by some 19 per cent on December 2007.

If the expected relatively low oil price level is sustained during the first half of the present year, inflation of energy products and transportation services on an annual basis will continue falling.\textsuperscript{17}

**Harmonized Price Indices of Energy Products and Transportation Services**

<table>
<thead>
<tr>
<th>(inflation on corresponding month of previous year, %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
</tr>
<tr>
<td>3.6</td>
</tr>
</tbody>
</table>

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

**Sources:** NSI, BNB.

**Administratively Controlled Prices and Tobacco Products Prices**

Compared with 2007, goods and services with administratively controlled prices and tobacco products had a higher end-of-period contribution to inflation in 2008 (forming 2.2 percentage points of inflation accumulated throughout the year).

Major groups that contributed to the higher inflation of goods and services with administratively controlled prices were electricity and public transport. Adjustments in these groups’ prices (by 14.3 per cent and 33 per cent respectively) reflected, with a certain time lag, the rises in international and domestic prices of energy products during the 2007 to 2008 period, accumulated inflation and higher expenditure on wages. The year saw further increases in the prices of heating, water supply and sewerage services, medical and hospital services, legal services, and education fees. Owing to the relatively small weight of these

\textsuperscript{16} According to the initial assessment of final agricultural produce in 2008 at base prices, the physical volume of cereals and technical crops was double that in 2007. Vegetable yields exceeded those in 2007 by 56 per cent.

\textsuperscript{17} In 2009 fuel prices will not reflect changes in their excise duties, since they will stay at their 2008 levels. Within the group of energy products, only the coal excise duty will be raised in 2009.
groups in the consumer basket, their raised prices contributed less to inflation.

Fixed telephone calls were the only group of services with administratively controlled prices that registered a decline, with their prices being lowered by 35 per cent as a result of a new methodology for calculating the prices and price packages of universal telephone services adopted by the Council of Ministers. The negative contribution of telecommunication services to inflation will be sustained due to the upcoming reductions in the prices of calls between fixed and mobile networks that will be initiated in 2009.18

During the first half of the present year approved adjustments in the prices of medical and hospital services (as a result of the minimum wage rise in early 2009), heating19 and water supply (in Sofia), which belong to the group of services with administratively controlled prices, will have a positive contribution to inflation. Since these groups have a comparatively small relative share in the price index, their price rises are not expected to seriously impact the overall inflation rate.

Harmonized Indices of Goods and Services with Controlled and Non-controlled Prices
(inflation on corresponding month of previous year, %)

Harmonized Price Indices of Industrial Goods excluding Energy Products and Those with Administratively Controlled Prices
(inflation on corresponding month of previous year, %)

Note: Given the relation between tobacco product prices and administratively set excise rates, tobacco products are excluded from the group of goods and services with non-controlled prices despite the liberalization of the tobacco market in early 2007.

Sources: NSI, BNB.

Unlike 2007, in 2008 tobacco products had a positive contribution to end-of-year inflation (0.5 percentage points), reflecting price rises as a result of increased excise duties. In the current year higher excise duties of cigarettes were introduced; they are anticipated to push up their prices by some 20 per cent. The appreciation of tobacco products will contribute to the inflation rate by some 0.5–0.7 percentage points in 2009.

Industrial Goods Prices

During 2008 accumulated inflation of industrial goods (excluding energy products and those with administratively controlled prices) came to 5.4 per cent: down 1 percentage point on 2007.

The relatively high non-food inflation dynamics reflects the effect of several factors.20 Probably the most important of them is the enhanced demand for these goods, including those of higher quality and price (from imports as well) due to household income growth. Robust lending throughout most of 2008 also supported non-food consumption. Second, producer prices in industries producing consumer goods went up during the last few years, underpinned by, inter alia, higher expenditure on energy, fuels, raw materials and wages. Despite the fact that the bulk of non-foods are tradable, the ability of imported goods to exert a downward pressure on prices in most cases is limited as a result of the sustained lower price level in Bulgaria.

Non-food prices inflation is expected to further decelerate amid global financial and economic crisis’ negative effects on Bulgarian economy in 2009 that will result in a more moderate growth of household income and consumption compared

18 The Communications Regulation Commission (CRC) plays the role of a state regulatory and supervisory body in the field of telecommunication and postal services. In compliance with a CRC draft resolution of December 2008, based on a resolution of the European Commission on decreasing mobile calls prices, a reduction in mobile services wholesale prices will take place in stages between early 2009 and the middle of 2010. As a result, the upcoming reductions in the prices of calls between fixed and mobile networks, and consequently in those between mobile operators are expected in perspective to have a deflationary effect on the overall price index.

19 Under a resolution of the State Energy and Water Regulatory Commission dated 23 December 2008, some of the reasons for heating price rises are as follows: (1) the total increase in the natural gas price by some 40 per cent during the last quarter of 2008 and the first quarter of 2009; (2) the BGN/USD exchange rate fluctuations over the May 2007 to April 2008 period; and (3) inflation throughout 2007.

with previous years. Data on non-food retail sales and revenues from retail trade in textile, clothing, footwear and household goods, and home appliances show moderating growth since end-2008. This trend is also confirmed by consumers’ worsened expectations and sentiments during the last months of 2008 (see the Economic Activity section in this issue). Data of the recent 2008 business survey, that registered a significant deterioration in economic situation in retail trade due to the growing share of enterprises with a negative assessment of current and expected demand, are also indicative of this. The opinion balance of firms regarding the expected selling prices during the following three months decreased strongly. This suggests that current developments in demand are taken into consideration by entrepreneurs in price-setting.\(^{21}\)

**Services Prices**

The accumulated end-2008 inflation of services prices (excluding those with administratively controlled prices) remained close to the previous year level (12 per cent). Services contributed most to overall inflation by the end of the prior year (3.4 percentage points) not only as a result of their relatively high price growth rate, but also due to their large share in the consumer basket (some 29 per cent).

Indirect effects of food and fuel appreciation on public catering and transportation services between mid-2007 and mid-2008 were one of the factors behind fast increasing prices of services during the year. The continued strong rises in wage expenditure exerted a further upward pressure on prices of services on the part of firms. Against a background of growing consumer demand, firms’ higher costs were successfully transferred to final consumer prices.

Fuel depreciation and the significant slowdown in the inflation rate (on a monthly basis) over the recent months of the previous year were not accompanied by downward adjustments in the prices of services. While during the last quarter prices of transportation services stayed almost unchanged, those of the other services and of public catering in particular continued to grow, albeit at lower rates compared with previous quarters. These specific features of services price dynamics were driven by several factors. On the one hand, firms in individual fields of services do not yet seem to have serious difficulties with respect to demand; hence, they do not take any steps to reduce prices. On the other hand, the uncertainty in firms’ assessment regarding the time horizon over which fuel and other commodity prices will retain their low levels may motivate them to stop adjusting their prices downwards.

Growth in the prices of services is expected to moderate in the first half of 2009, underpinned by the anticipated slower wage rises, which will subdue the pressure of unit labour costs on prices and slow down consumer demand growth rates. Fuel depreciation will also contribute to the contained or more moderate growth rates of services prices.

| Harmonized Price Indices of Services Excluding Those with Controlled Prices |
|-----------------------------|-----------------------------|

We expect that inflation will keep its downward trend over the first half of 2009. In addition to the effects of the world financial and economic crisis, which are likely to keep the level of fuel and raw material prices low, inflation will also be impacted by slowing domestic demand and economic activity in Bulgaria. The expected moderation in wage rises will be related to considerably lower growth rates of unit labour costs compared with previous years. Firms’ lower costs of fuels and production resources, coupled with a possible reduction of labour costs pressure, will limit consumer price rises. A base effect reflecting the increases in the prices of consumer goods and services in the first half of 2008 will also contribute to the slowdown in inflation from the beginning of 2009.

\(^{21}\) According to the NSI business situation survey, as of December 2008 almost 68 per cent of retail trade enterprises expect their selling prices to remain unchanged, 13 per cent of them envisage a decline (the highest value since 1998), and some 19 per cent expect a rise in selling prices.