

# Economic Review

3/2007



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

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

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## Abbreviations

BIR	Base interest rate
BOP	balance of payments
BTC	Bulgarian Telecommunications Company
b. p.	basis points
CEFTA	Central European Free Trade Association
CIF	Cost, insurance, freight
CIS	Commonwealth of Independent States
EA	Employment Agency
EC	European Commission
ECB	European Central Bank
EIB	European Investment Bank
EMBI	Emerging Markets Bond Index
EONIA	Euro OverNight Index Average
EU	European Union
EURIBOR	Euro Interbank Offered Rate
FDI	foreign direct investment
FOB	Free on board
GDP	Gross Domestic Product
HICP	Harmonized Index of Consumer Prices
HRW	hard red wheat
IEA	International Energy Agency
IMF	International Monetary Fund
ISM	Institute for Supply Management
LIBOR	London Interbank Offered Rate
M1	narrow money
M2	M1 and quasi-money
M3	broad money
MF	Ministry of Finance
mt	metric tons
NPISHs	Non-profit institutions serving households
NSI	National Statistical Institute
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
PMI	Purchasing Managers' Index
p. p.	percentage points
PPP	Purchasing Power Parity
WB	World Bank
WTI	West Texas Intermediate

# Summary

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Financial market volatility and uncertainty around crude oil prices in the third quarter reflected on global economic indicators which point to growing pessimism in business and consumer sentiment and signal moderation in global economic growth rates. The ECB left the repo rate unchanged at 4 per cent, with market expectations showing its retention until the end of the year. The US Federal Reserve System reacted to the crisis in the subprime mortgage market by cutting the federal funds interest rate in September by 50 basis points to 4.75 per cent, with markets expecting another decrease by 25 basis points in October.

In Bulgaria, economic indicators show continued optimism in business. Economic growth rates are expected to remain high, investment contributing more significantly to growth compared with consumption. The significant foreign capital inflow into Bulgaria was primarily directed to financing investment activity. Based on financial account and international reserve data, a conclusion may be drawn that Bulgaria's external position underwent no significant changes. Between January and July 2007 balance of payments financial account surplus was above EUR 4.4 billion. Positive overall balance boosted BNB reserves by EUR 922.5 million (excluding valuation adjustments). Issue Department balance sheet figure reached BGN 22,893.7 million (EUR 11,705.3 million) as of end of September 2007.

Labour market situation improved, economic activity posted an increase and the level of unemployment dropped. The significant growth in real salary over the first half of 2007 and rising employment were the main factors contributing to continued household consumption growth. Reflecting the restrictive fiscal policies, government consumption contribution to GDP growth was negative in the first half of the year. Vigorous domestic demand dynamics reflected stable and high growth rates of imports. The rate of exports rebound which started in the second quarter is expected to accelerate by the end of the year, with net exports contribution to GDP growth improving in 2007 compared to 2006. Despite the favourable trends, the balance of payments current account deficit is anticipated to rise on 2006, and foreign direct investment inflow will ensure financing as in 2006.

Labour productivity increased by 4.9 per cent in the first half of 2007, with employment growing sizably (3.2 per cent). Manufacturing and financial intermediation contributed most significantly to productivity growth. High export activity in most industries and productivity growth indicate a retention of tradable sector competitiveness. Notwithstanding, if real wage and unit labour cost continue growing at the first half's rates, risks will be accumulated with respect to both the economy's capacity to retain its competitive positions and the prospects for a decrease in the inflation level over the coming year.

Inflation rates increased dramatically in July and August due to the significant rise in food prices. Food price rises reflected largely poor crops of wheat, corn and sunflower both in Bulgaria and in major producers, coupled with the effect of their high prices on the prices of related goods, such as meat, milk, eggs. On the other hand, 2007 saw a dramatic increase in external demand and correspondingly in exports of certain foods (milk, dairy products, apples, pears, sugar) which creates additional problems in satisfying the growing domestic demand.

Another factor behind inflation acceleration since mid-year was the July decision of the State Energy and Water Regulatory Commission to approve rises in electricity prices for households and small businesses and in electricity transfer fees of the National Electric Company (NEC) distribution net. Negotiations between large electricity consumers and the NEC led to a significant increase in prices, thus boosting firms' expenses.

Despite the inflation dynamics throughout the year and concerns about rising unit labour costs, the high investment return rate in the last two years is expected to result in significant labour productivity growth and price level stabilization.

# 1. External Environment

Leading economic indicators went down reporting expectations of moderation in world economic growth over the third and fourth quarters of 2007. Mid-September expectations show that interest rates on ECB main refinancing operations will remain unchanged at 4 per cent, while US federal funds interest rates are expected to drop by 25 basis points in October.

## Current Business Situation

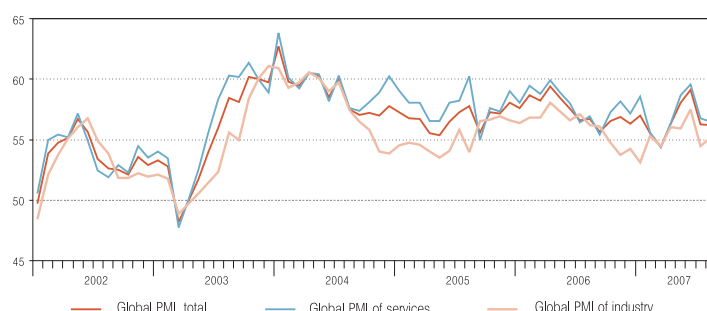
Global leading indicators show expectations of moderation in economic activity, especially in industry and services. Financial market volatility and uncertainty around crude oil prices also added to growth moderation over the last two quarters of 2007. World trade growth rates in the first half of the year decelerated, reflecting mainly trade volume decreases both in the USA and EU.

## Euro Area

In the second quarter of 2007 euro area economic growth moderated to 2.5 per cent on an annual basis (3.2 per cent in the first quarter). The major factor behind slowing economic activity was lower contribution of investment, especially in construction, reported by Germany. Consumption and net exports' contributions remained stable, reflecting sustainable growth of personal disposable income and strong external demand.

The third quarter saw a trend to a moderate decrease in most economic indicators of overall economic and business confidence. This supported expectations of a moderate slowdown in real GDP until the end of 2007, with its rate hovering around the potential level. The August crisis on financial markets affected adversely business sentiment and economic indicators, with *PMI* of industry and services and the *Ifo* business climate index in Germany reacting immediately to the growing pessimism.

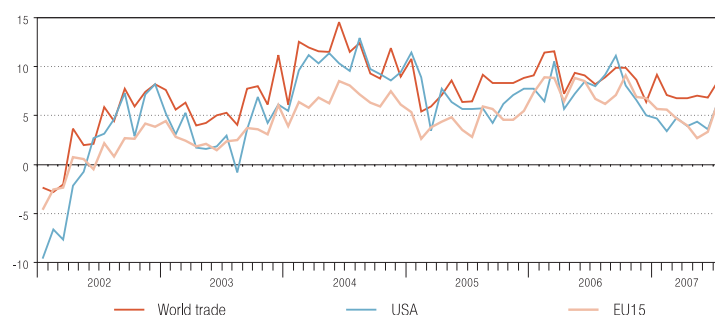
Chart 1  
Global PMI



Sources: NTC Research, JP Morgan.

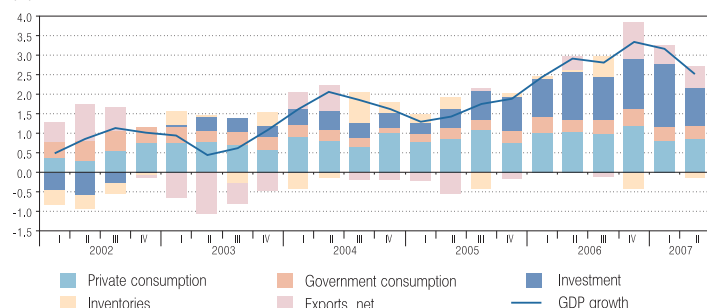
Chart 2  
World Trade

(annual rate of volume growth, %)



Source: CPB Netherlands Bureau for Economic Policy Analysis.

Chart 3  
Contribution to Euro Area Growth by GDP Component (Quarterly)



Source: Eurostat.



The increased interest rates in the euro area raised the cost of financing for corporations and decreased profitability of investment projects which may result in a possible further moderation in euro area investment. Economic growth is expected to enjoy the favourable effect of consumer demand which was further underpinned by the robust growth of disposable income and stable expectations of consumers about their financial performance in the coming months.

In the short term downside risks to euro area growth are associated with oil price dynamics and slowing global economic activity. The August crisis on financial markets posed a potential risk to euro area growth due to a possible negative effect on household assets and corporations' financial performance.

In July and August euro area HICP inflation remained close to the ECB target (1.7 per cent on an annual basis). Core inflation came to 1.9 per cent annually for the seventh consecutive month which signals that presently no significant second-round inflation tensions in the euro area are identifiable.

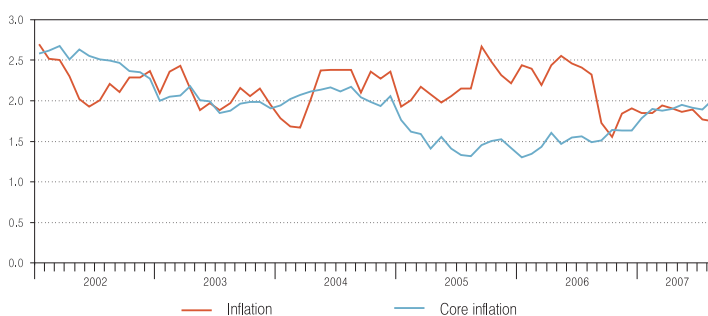
Due to expected exhaustion of the favourable base effect of fuel prices in the previous year, euro area HICP inflation is likely to rise above 2 per cent over the last months of 2007.

Annual growth of unit labour costs in the first quarter of 2007 was low, with a downward trend over the recent quarters. These developments supported prospects of retaining euro area core inflation around the current levels in the fourth quarter of 2007.

Upside risks to price stability stem from oil price dynamics and wage negotiations in key industrial sectors of the euro area. The second half of September saw higher medium-term inflation expectations derived from the French inflation-indexed bonds. The *expectations of price trends over next 12 months* component of the EC consumer confidence index also posted a significant increase in August which points to upside inflationary risks in the medium term.

Chart 4  
Euro Area Inflation Rate

(percentage change on same period of previous year)

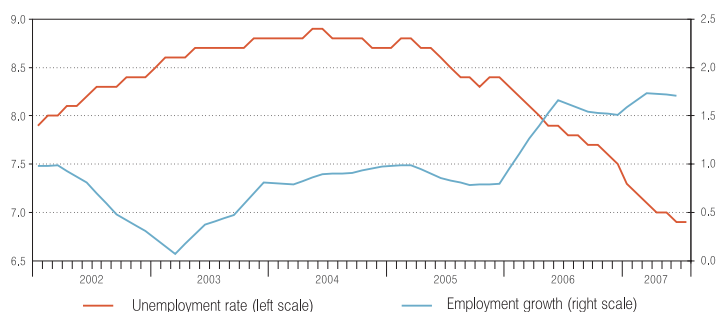


**Note:** Euro area core inflation excludes changes in energy, food, alcohol and tobacco prices.

Source: Eurostat.

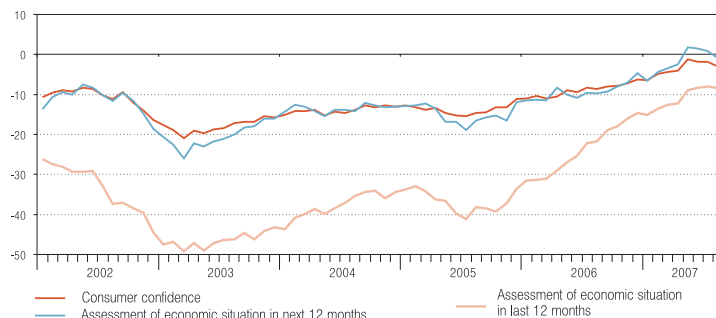
Chart 5  
Euro Area Unemployment Rate and Employment Growth

(%)



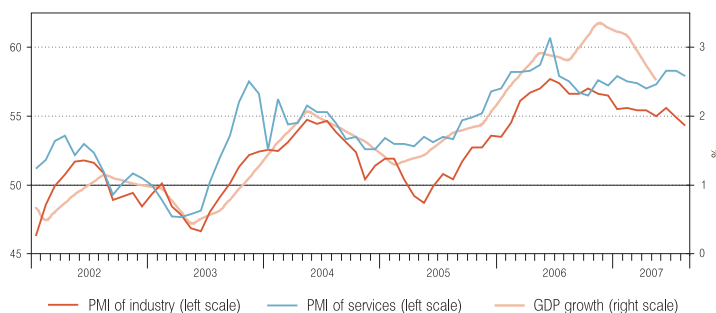
Source: Eurostat.

Chart 6  
Euro Area Consumer Confidence Indices



Source: Eurostat.

Chart 7  
PMI and Euro Area GDP Growth

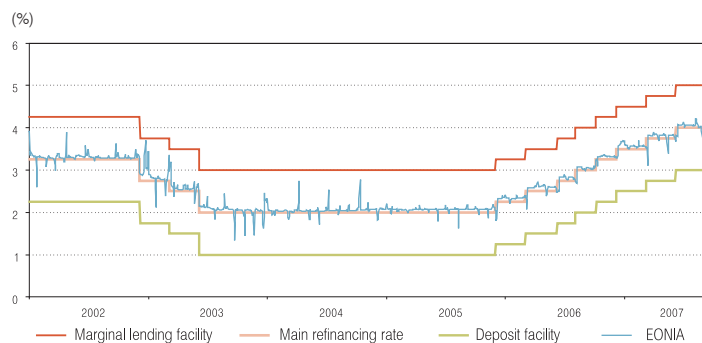


Source: NTC Research.

In early September the ECB Governing Council decided to leave unchanged the repo interest rate at 4 per cent. The decision was motivated by the recent increase in uncertainty on financial markets as a result of risk reassessment and heightened volatility. Though the repo rate was left unchanged in July and August, in August interest rates on overnight deposits fell below the reference level of 4 per cent due to balancing market demand and supply after long-term and main refinancing operations of the ECB.

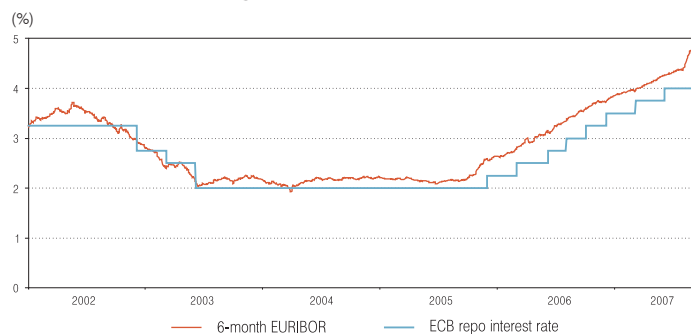
Market expectations of retaining the repo interest rate at 4 per cent until the end of 2007 are currently prevailing. Given these expectations and sustained high credit risk premium, the six-month EURIBOR is expected to fluctuate within a broad range of 4.3–4.8 per cent until the end of 2007.

Chart 8  
Euro Area Interest Rates



Source: Bloomberg.

Chart 9  
ECB Main Refinancing Rate and Six-month EURIBOR



Source: Bloomberg.

Chart 10  
Implied Yield on the Three-month EURIBOR Futures Contracts



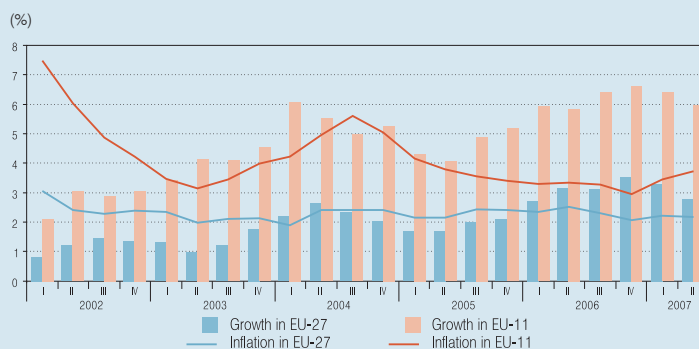
Source: Bloomberg.

## EU-11<sup>1</sup>

In the second quarter of 2007 EU-11 growth slowed down to 6 per cent on an annual basis, from 6.4 per cent in the prior quarter. Average monthly inflation in newly acceded countries rose to 3.7 per cent on an annual basis.

<sup>1</sup> EU-11 includes newly acceded EU countries, excluding Slovenia. As from 1 January 2007 Slovenia became a full-fledged member of the European Monetary Union.

Chart 11  
Growth and Inflation in EU-27 and EU-11



Sources: Eurostat, own calculations.

## The USA

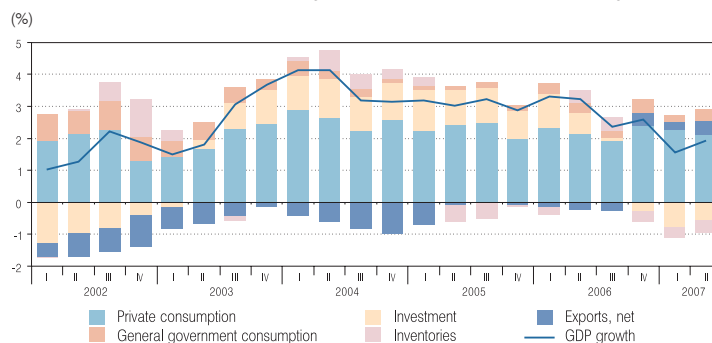
US economic growth rates stayed at relatively low levels. Moderation in private consumption growth and continued stagnation in the real estate sector resulting in housing investment contraction had a negative effect on economy. Credit risk reassessment on global financial markets in August further deteriorated growth prospects. Macroeconomic data show worsening in a number of indicators in August which is likely to reflect the negative effect of the financial market crisis on economic fundamentals.

Since the end of the second quarter of 2007 labour market has shown signs of worsening, with the rate of opening new jobs in the non-agricultural sector slowing considerably. Unemployment picked up gradually to 4.6 per cent. Overall, it stayed at relatively low levels reflecting partly the continuing decline in the economic activity rate. Growth in remunerations and unit labour costs slowed down which indicates weakening in inflation pressure in the future.

Consumer expenditure deflator reduced its growth to 2.1 per cent in July. The index excluding food and fuel prices also posted a decline (0.2 percentage points) to reach 1.9 per cent in July. Core inflation is likely to continue falling gradually due to expected economic growth moderation and weakening price pressures with respect to unit labour costs. Price rise risks in the future stem from possible increases in inflation expectations, high oil prices and the base effect a year earlier. An additional risk may come from possible rises in import prices due to the record-breaking US dollar depreciation.

In August the Federal Reserve System reported worsening in economic activity outlook due to the high volatility on financial markets and tightening of lending conditions. To this end, on 18 September a decision was taken to cut the federal funds interest rate from 5.25 per cent to 4.75 per cent. The decrease in core inflation to levels consistent with price stability was another factor which gave reasons for lower interest rates. By mid-September most participants expected additional interest rate cuts by the

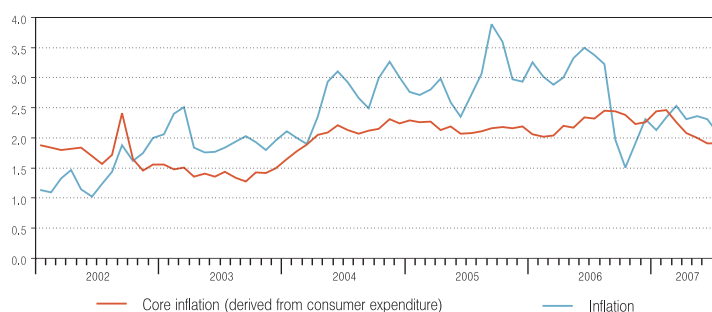
Chart 12  
Contribution to US Growth by GDP Component (Quarterly)



Source: Bureau of Economic Analysis.

Chart 13  
US Inflation Rate

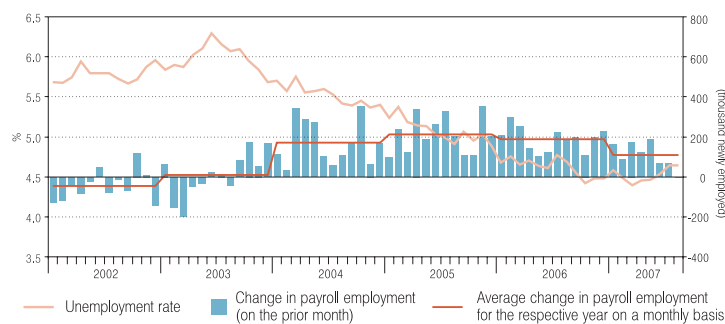
(percentage change on same period of previous year)



**Note:** The US core inflation is measured by consumer expenditure index excluding energy and food expenditure.

Sources: Bureau of Labor Statistics, Bureau of Economic Analysis.

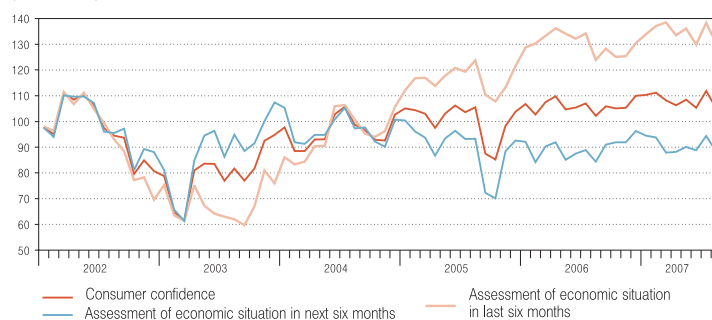
Chart 14  
US Unemployment Rate and Changes in Payroll Employment



Source: Bureau of Labor Statistics.

Chart 15  
US Consumer Confidence Indices

(1985 = 100)



Source: The Conference Board.

Federal Reserve System. Given the present higher credit risk premium on the interbank market and uncertainty around the future Federal Reserve steps, the six-month LIBOR deposit rate in USD is expected to vary between 4.60 per cent and 5.25 per cent.

## The USD/EUR Rate

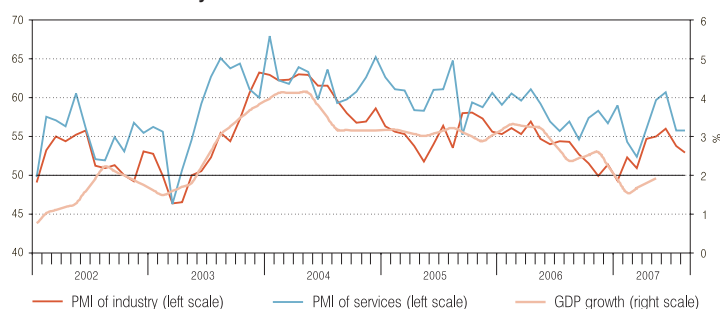
The third quarter of 2007 was marked by high volatility of exchange rates, with the USD/EUR rate hitting several historical highs to reach record values at the end of the review period. Markets focused on the US mortgage market crisis which became a global financial crisis and provoked reassessment of market expectations of interest rates. The US dollar has lost support due to the increased concerns about economic growth and expectations of lower interest rates on US dollar deposits in the future.

By mid-August the US dollar strengthened, reflecting the financial market crisis and demand for this safe-haven currency. This trend reversed suddenly after the US Federal Reserve System cut the discount rate and later the federal funds rate, giving priority to economic growth risks. The speculative long positions in US dollars were reduced significantly, thus pushing the dollar down to record lows against the euro.

In the fourth quarter the foreign exchange market is expected to be volatile. Short-term market expectations of the interest rate differential between the USA and the euro area continued to support the euro since they envisage a fall in the federal funds rate in October and no changes in the euro area repo rate until the end of 2007. From the macroeconomic point of view, market sentiment will be mostly affected by weakening housing and labour markets and slowing US consumption.

Chart 16

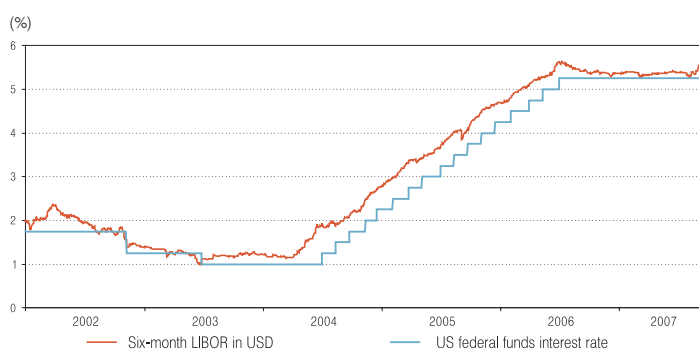
### US PMI of Industry and Services and GDP Growth



Source: Institute for Supply Management.

Chart 17

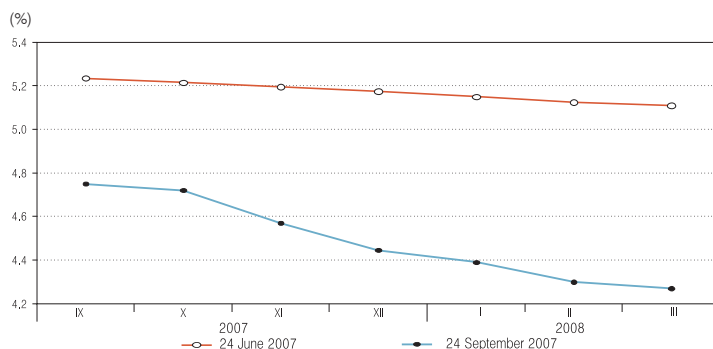
### US Federal Funds Rate and Six-month LIBOR in US Dollars



Source: Bloomberg.

Chart 18

### Implied Federal Funds Futures Interest Rate



Source: Bloomberg.

Chart 19

### USD/EUR Exchange Rate

(USD per EUR 1)



Source: ECB.



## The Balkan Region

In the second quarter of 2007 economic growth in the Balkans remained high, reflecting mainly vigorous domestic and external demand and foreign investment inflow. Serbia, Croatia, Bulgaria and Romania posted the highest GDP growth. Inflation in the region continued to slow down over the second quarter of 2007 reflecting mostly the base effect of fuel prices in the previous year. In July and August a slight increase in inflation rates was reported in most countries due to food price rises. Relatively high economic growth rates are expected, with a trend to a slight moderation as a result of the expected decrease in external demand.

Table 1  
Real Growth and Inflation in Balkan Countries (Quarterly)

	2006					2007	
	I	II	III	IV	Total	I	II
<b>Growth</b> (on the previous year, %)							
Bulgaria	5.5	6.4	6.7	5.7	6.1	6.2	6.6
Greece	4.2	4.2	4.5	4.4	4.3	4.6	4.1
Macedonia	2.0	3.4	4.0	2.7	3.0	7.0	4.0
Romania	6.9	7.8	8.3	7.7	7.7	6.0	5.6
Turkey	6.7	8.3	4.8	5.2	6.1	6.9	3.9
Croatia	6.0	3.6	4.7	4.8	4.8	7.0	6.6
Serbia	7.0	6.2	5.1	4.8	5.7	8.4	7.7
<b>Inflation</b> (averaged for the period, %)							
Bulgaria	8.7	8.6	6.7	5.7	7.4	5.3	4.7
Greece	3.2	3.4	3.5	3.2	3.3	2.9	2.6
Macedonia	2.7	3.4	3.6	3.1	3.2	0.7	1.1
Romania	8.7	7.2	5.9	4.8	6.6	3.9	3.9
Turkey	8.1	9.6	10.8	9.8	9.6	10.3	9.5
Croatia	3.5	3.8	3.2	2.2	3.2	1.6	2.1
Serbia	14.6	14.2	11.4	7.1	11.8	4.8	3.3

Sources: Statistical institutes and central banks of respective countries.

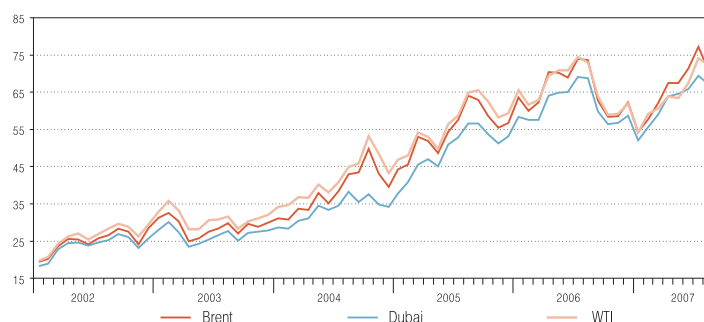
## International Prices of Crude Oil, Major Raw Materials, and Gold

### Crude Oil

In the second quarter of 2007 the average monthly Brent crude oil price rose by 18.4 per cent on the previous quarter to USD 68.7 *per barrel*. This upward trend continued in the third quarter. In September the Brent crude oil price rose significantly to a level above USD 80 *per barrel*. The reduced supply by OPEC countries and unfavourable weather conditions in the Mexican Gulf<sup>1</sup> were the major factors which contributed to oil price rises over the third quarter of 2007. In September OPEC decided to raise production quotas by 500,000 barrels *per day*, effective as of 1 November. Prices did not react to this increase since according to the data, these amounts are actually supplied into the market, whereas needs are significantly higher.

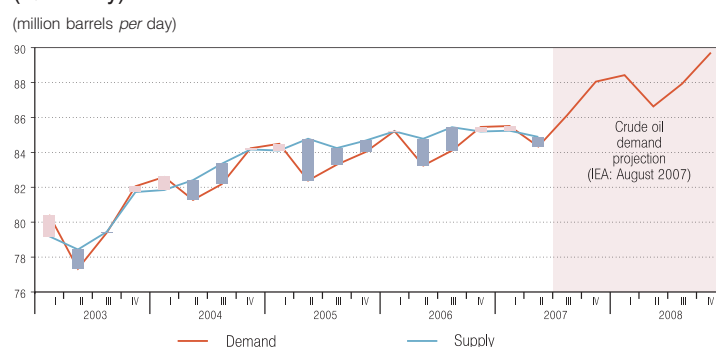
<sup>1</sup> In September due to fears about possible hurricane damages, oil facilities in this region stopped working for a couple of days, their number exceeding that during the Hurricane Katrina in 2005.

Chart 20  
Crude Oil Prices  
(USD per barrel)



Source: World Bank.

Chart 21  
World Crude Oil Demand and Supply  
(Quarterly)



Source: IEA.

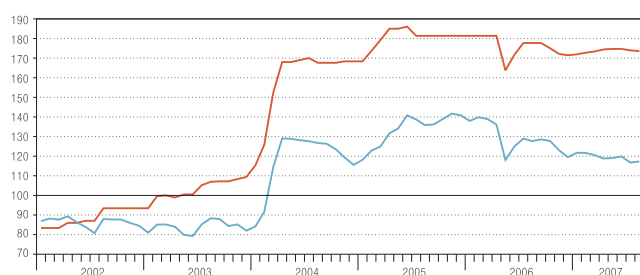
Over the fourth quarter of 2007 the average monthly Brent price is expected to fluctuate within the range of USD 70–80 *per* barrel. Oil prices will reflect inventory dynamics and refineries' capability to provide required heating fuels for the northern hemisphere. Risks to the projection concern primarily supply: uncertainty around the future OPEC policy, geopolitical uncertainty in the Middle East and especially in Iran, and winter weather conditions in the northern hemisphere. Risks concerning demand involve mainly global economic outlook and particularly economic growth in the USA.

### Major Raw Material and Commodity Prices

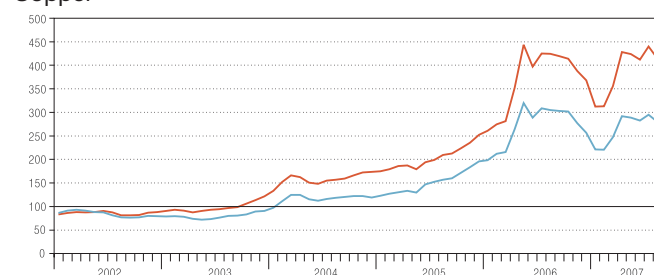
Metal prices stabilized over the third quarter. Expected lower world growth and increased supply eased the pressure on prices. Nickel prices fell by 36 per cent in July and August on the second quarter. Over the same period zinc prices decreased by 7 per cent and aluminum prices by 5 per cent, while copper and steel underwent no price changes. Solely lead prices rose sizably (by 43 per cent) after one of Australia's largest mining companies

Chart 22  
Price Indices of Major Commodities and Commodity Groups  
(2000 = 100)

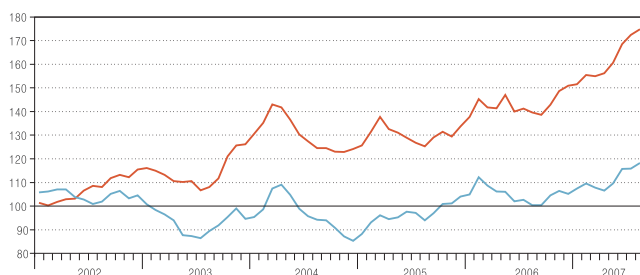
#### Steel



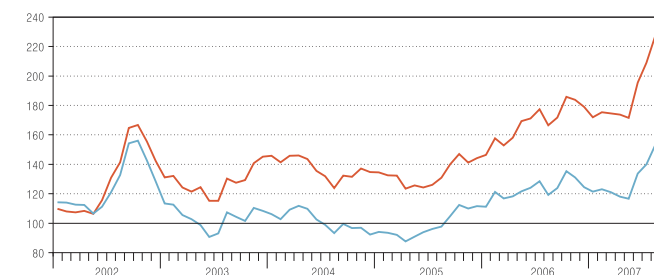
#### Copper



#### Food



#### Wheat



— USD

— EUR

Sources: World Bank, BNB.

(occupying 3 per cent of world output) disrupted its deliveries in March. Since early 2007 metal demand in the USA and euro area has been falling which is compensated by the significant metal demand by China. In the fourth quarter of 2007 market expectations show retention of metal prices at the third quarter's level.

Poor weather conditions contributed to the essential growth in food prices over the third quarter (8 per cent on the prior quarter). Lower-than-expected cereal and oil crops were registered. Wheat and sunflower prices rose by 95 per cent and 66 per cent on an annual basis. Unfavourable weather conditions in the EU, Ukraine, Russia, Canada and Australia were the major factor behind price spikes. Ship freight rates are among other yet vitally important factors. In the first nine months of 2007 they rose by 92 per cent. Expectations point to price stabilization over the next two quarters. A possible decline may be expected at the end of the first quarter of 2008 depending on the weather conditions.

## Gold

In the second and third quarters of 2007 gold price's technical dependence on the US dollar exchange rate was sustained, with a short-time correlation with major stock indices being observed during the credit crisis.

Over the second quarter of 2007 the World Gold Council estimated overall gold demand at USD 19.8 billion (+27 per cent), with a 19 per cent increase in quantity. Physical demand for gold remained stable, underpinned by strong performance of the Asian economies and high jewelry demand. During the second quarter of 2007 the one-month COMEX futures price moved between USD 640 and USD 695 *per* troy ounce.

Over the third quarter the gold price exceeded the level of USD 700 *per* troy ounce and the average gold price increased to USD 680 *per* troy ounce. Gold technical link with the US dollar was sustained, contributing most significantly to the gold appreciation. Credit market turmoil had a rather downward effect since it stimulated gold

Chart 23  
Spot Price of Gold

(USD *per* troy ounce)



Source: The London Bullion Market Association.

sales to cover stock exchange losses. Physical demand for gold remained traditionally subdued over the summer months.

Over the fourth quarter the gold futures are expected to vary from USD 680 to USD 750 *per* troy ounce, with the technical link with the US dollar driving gold price dynamics. The increased global uncertainty and possible volatility of crude oil prices may exert an upward pressure on the gold price. The last months of the year are an active period of an increased demand for gold by jewelry which will also underpin gold prices.

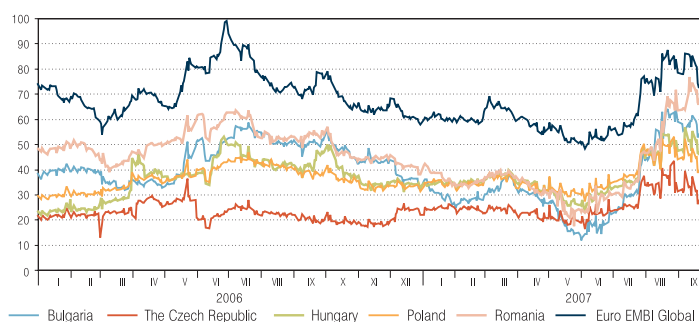
### Bulgarian External Debt Dynamics on International Financial Markets

During the second quarter of 2007 the yield spread of the emerging markets' government debt measured by the JP Morgan Euro EMBI Global index exhibited a slight improvement, its values decreasing by 4 basis points to 56 basis points at the end of the period. Within the quarter the index registered minimal variations in the corridor of 48 to 61 basis points. The greater global risk appetite resulted in retention of the historically lowest risk premium levels during the second quarter.

The yield spread of the Bulgarian government debt measured by the Euro EMBI Global index reached its historically lowest risk level of 12 basis points on 31 May 2007, while its average level came to 22 basis points.

In August the conditions on financial markets worsened dramatically. The global reassessment of the risk on credit markets prompted a sizable correction in the values of the index. Within the period between the start of July and mid-September 2007 the Euro EMBI Global index reached its maximum of 88 basis points displaying highly volatile dynamics. Over this period the Bulgarian EMBI subindex followed the general trend moving within the corridor between 22 and 64 basis points and reporting an average value of 47 basis points.

Chart 24  
Government Debt Yield Spreads in Bulgaria, Romania, Poland, The Czech Republic and Hungary (*Euro EMBI Global index*)



Source: JP Morgan.



An important indicator of market expectations about Bulgarian credit risk is the credit swap (CDS)<sup>2</sup> on government debt. In the second quarter of 2007 the quotation of the five-year agreement ensuring against Bulgaria's insolvency risk fell to the average of 14.8 basis points following an average of 18.5 basis points, registered in the first quarter of 2007. By the end of July and the beginning of August the global crisis in confidence affected not only the greatest industrialized countries but emerging markets as well. It also influenced the Bulgarian five-year credit swap which reached a maximum of 34.91 basis points against an average of 24 basis points between 1 July and 24 September 2007. Amid fluctuations it is difficult to isolate local factors which prompted the increase in the risk premium on the Bulgarian external debt. The high values of the Bulgarian credit swap in the last few days resulted mostly from the problems of global credit markets.

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<sup>2</sup> CDS – Credit Default Swap.

## 2. Financial Flows, Money and Credit

The Bulgarian economy continues to attract a sizable volume of financial resources – foreign direct investments and external loans – which, on the one hand, reflect the high return on investments and, on the other hand, contribute to the acceleration in the restructuring of the Bulgarian economy; they also serve as substantial resources for financing the high economic growth rates.

Capital inflow financed the sizable imports of investment goods, boosting investment activity. Foreign direct investments covered 88 per cent of balance of payments current account deficit which was caused to a great extent by the growing trade balance deficit. The total balance on the balance of payments was positive; over the period between January and July 2007 it prompted the BNB reserve growth by EUR 922.5 million (excluding changes due to exchange rate fluctuations)

Table 2  
Cash Flows Which Prompted Significant Changes in Gross International Reserves  
(million EUR)

	II quarter 2007	I quarter 2007	January – June 2007, total	2006, total
<b>Total for the period</b>	<b>538</b>	<b>-30</b>	<b>508</b>	<b>1360</b>
<b>Purchases and sales of euro</b>	<b>1081</b>	<b>101</b>	<b>1182</b>	<b>1720</b>
1) at tills	-10	-12	-22	-26
2) commercial banks	1 091	113	1 204	1 746
purchases from commercial banks	11 283	3 732	15 015	12 962
sales to commercial banks	10 192	3 619	13 811	11 216
<b>Flows on accounts of commercial banks, the Ministry of Finance, etc.</b>	<b>-543</b>	<b>-131</b>	<b>-674</b>	<b>-360</b>
incl. minimum required reserves	-360	296	-64	524
Government and other depositors	-183	-427	-610	-884

Source: BNB.

The Issue Department balance sheet figure came to BGN 22,893.7 million (EUR 11,705.3 million) by end-September 2007: up by BGN 6373.4 million on September 2006 and by BGN 5435.1 million on end-2006.

The high inflow of external financial resources into the private sector will be sustained till the close of the year and BNB international reserves will continue to grow.

The balance of payments financial account surplus of over EUR 4.4 billion between January and July 2007 was due to the foreign direct investment which came to EUR 2.67 billion:<sup>3</sup> up by EUR 332 million on the respective period of the previous year. Over the first seven months of 2007 the attracted equity (excluding privatisation) totaled EUR 1.6 billion, comprising 60 per cent of foreign direct investment.<sup>4</sup>

Financial account surplus resulted also from the decrease in deposits of Bulgarian commercial banks abroad (EUR 448 million), the decrease in loans of other non-resident sectors (EUR 989 million) and the growth in deposits of non-residents with local banks (EUR 268 million).

Over the January to June period *Real estate operations, lessors activities and business services* continued to occupy the largest share in foreign direct investment sectoral structure (36.4 per cent) owing to notable receipts from sales of real property to non-residents (EUR 1 billion against EUR 557 million over the same period of the prior year). *Financial intermediation* ranked second (18.2 per cent), followed by *Construction* (12.8 per cent) which also reflected non-residents' interest in acquiring real property in Bulgaria. The share of investment in *Manufacturing* was 7.4 per cent.

During the January to July 2007 period about one third of the capital flows into Bulgaria was in the form of borrowings; this led to an EUR 22 billion increase in the gross external debt. External debt dynamics resulted from private economic agents' decisions. Public and publicly guaranteed exter-

<sup>3</sup> Preliminary data. The source of data on foreign direct investment is the NSI. The different scope of NSI quarterly and annual surveys is the reason for revisions of data on foreign direct investment in Bulgaria. The BNB receives the NSI annual survey data a year after the review period; hence, the preliminary data which have been published need serious revisions, especially those in the balance of payments *Equity and Reinvested earnings* subitems. Different periodicity and delays in submitting reports to the BNB also result in revisions of this item.

<sup>4</sup> Privatisation revenue over the January to July 2007 period was minimal (EUR 1.4 million).

nal debt declined by EUR 443 million over the period reflecting global bonds' repayment in February and early repayment of the debt to the International Monetary Fund in April 2007.

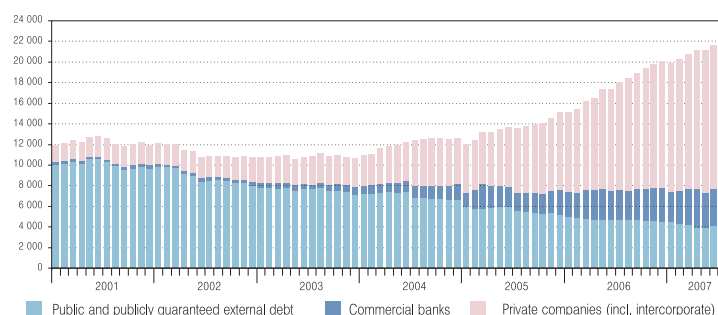
Private non-bank sector's external obligations went up by some EUR 1 billion to EUR 8.24 billion between January and July 2007 and they were evenly distributed between long-term and short-term obligations. By the end of the second quarter *Real estate operations, lessors activities and business services, Trade and repair and Electricity, gas and water supply* were the sectors occupying the largest shares in the non-bank sector's external debt: 25 per cent, 17 per cent and 14 per cent respectively. Loans related to direct investments picked up by EUR 944 million over the first seven months of 2007 reaching EUR 6.8 billion by end-July; they were the second largest component of gross external debt. Foreign investors' confidence and positive expectations of Bulgaria's overall economic development and particularly of the potential for development of local enterprises were the factors behind the sustainable intercompany loans' growth.

The increase in commercial banks' external obligations was relatively moderate between January and July 2007 (EUR 365 million), resulting primarily from negotiated long-term loans (74 per cent).

During the first half of 2007 external debt's foreign exchange structure experienced no substantial changes, with the share of euro growing by 2.3 percentage points to 81.2 per cent. The euro occupied the largest share (some 88 per cent) in commercial banks' external loans and loans related to direct investments, indicating low risks stemming from exchange rate fluctuations.

Gross external debt maturity structure was relatively steady, with short-term loans comprising 30.8 per cent as of July 2007 (30.3 per cent in December 2006). Short-term external obligations went up by EUR 678 million over the period: private non-bank sector's financial loans increased by EUR 500 million, while commercial loans by EUR 82 million.

Chart 25  
**Gross External Debt**  
(million EUR)



Source: BNB.



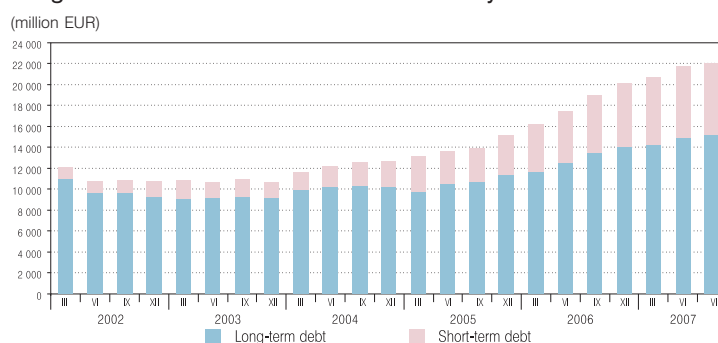
Private sector's external debt growth resulted from several factors, the most important of which were investors' positive assessment of the prospects for the development of Bulgarian economy and the relatively high yield against a low-level investment risk. The need for adaptation of companies to EU requirements, which presupposes the expansion of their export capacity, was an additional factor. These are factors connected with the intensive process of economic restructuring and they should be slightly affected by the fluctuating economic conditions on international financial markets. During the third and fourth quarters of the year Bulgarian companies are expected to continue attracting borrowings from abroad; thus, private external debt will go on rising as a share of GDP.

Bulgaria's gross external assets also grew during the January to July 2007 period, prompted mainly by an EUR 922.5 million increase in BNB international reserves. Commercial banks' foreign assets dropped by EUR 576 million over the period. Between January and July 2007 Bulgarian net external debt rose by EUR 1.6 billion, its share of GDP reaching 28.5 per cent, reflecting the dynamics of gross external debt and gross foreign assets.

The inflow of financial resources into Bulgaria determined to a great extent the flows on the balance of payments current account. During the January to July 2007 period the current account deficit came to EUR 3 billion against EUR 1.8 billion deficit during the same period of 2006. The growth in the trade balance deficit of EUR 1.2 billion contributed mostly to the change in the current account. The nominal increase in goods trading deficit matched the expectations of economic development. At the same time, since data are preliminary, they call for a cautious interpretation and analysis.<sup>5</sup>

The decrease in the balances of *income* and *current transfers* also affected current account deficit growth. Only the balance of

Chart 26  
Long- and Short-term Gross External Debt Dynamics



services improved compared with the January to July 2006 period, picking up by EUR 209 million. All components of services exports rose, with the *Other services – credit* item coming to 28 per cent. Exports of tourist services also retained their high growth rates (16 per cent). Imports of services posted a moderate increase (9 per cent) reflecting mostly the drop in the *Other services* (-12.3 per cent) item which registered high growth rates at the beginning of 2006.

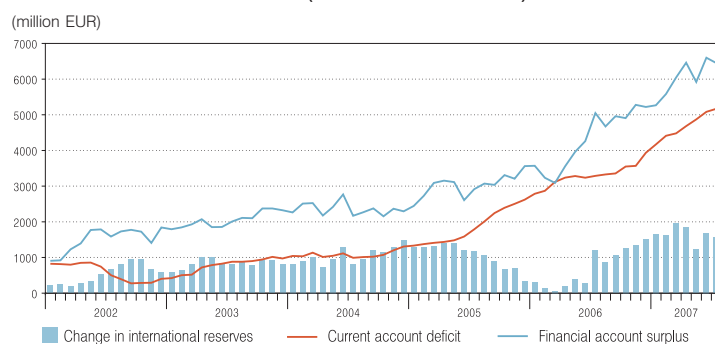
The *income* balance was negative, comprising EUR 86 million. The largest outflow was in terms of income from foreign direct investment: EUR 580 million for the first seven month of 2007, of which EUR 272 million were dividend payments. According to preliminary data, almost half of the exported income from foreign direct investment was reinvested in the economy.

Between January and July 2007 net current transfer revenue totaled EUR 205 million: down by EUR 175 million on the respective period of the prior year. The drop reflected mainly the contribution of BGN 157.7 million paid to EU budget. Private current transfers posted an insignificant increase compared with the January to July 2006 period.

The balance of *services* item is expected to improve by the year-end, with major contribution coming from the exports of tourist services. During the second half of the year income payments on foreign direct investment will stay high, thus worsening the *income* balance item, despite the sustainable growth of compensations to employees.

Financial account and international reserve dynamics data showed that no substantial changes occurred in Bulgaria's external position which remained steady. Capital inflow into Bulgaria is anticipated to stay high due to the EUR 471 million growth of international reserves reported in August compared with July. In addition, since 1 September 2007 international reserves have been rising as a result of the increase in the minimum required reserves maintained by banks with the BNB.

Chart 27  
Dynamics of Current Account, Financial Account and International Reserves (on an Annual Basis)



Source: BNB.

We expect the current account deficit to go up in nominal terms against the corresponding quarters of 2006; the increase will probably be revised downwards in the coming quarters.

## Monetary Aggregates

**As of 1 September 2007 the amount of minimum required reserves was raised from 8 per cent to 12 per cent. As a result, the growth of reserve money will accelerate considerably by the close of the year. Currency in circulation is anticipated to grow by some 19 per cent on an annual basis, and broad money by 29–30 per cent until end-2007.**

During the second quarter of 2007 currency in circulation had a positive contribution to the change in money supply (10.8 percentage points), while the contribution of bank reserves was negative (-2.6 percentage points). The negative contribution of commercial banks' deposits resulted from the lifting of administrative constraints on lending since the start of the current year, thus releasing additional minimum required reserves maintained by banks with the BNB.

Following the increase in the amount of minimum required reserves from 8 per cent to 12 per cent since 1 September 2007, commercial banks deposits posted a sizable growth. By end-September the increase came to 64 per cent on end-June. The trend of maintaining a greater portion of bank reserves in foreign currency (euro) was retained: some 66 per cent of monetary financial institutions' total deposits with the BNB were in euro and 34 per cent in levs. This ratio reflected the stronger use of euro purchases and sales transactions with the BNB as a liquidity management instrument. The need for additional liquidity stemming from the change in the regulation of minimum required reserve maintenance prompted a temporary rise in interest rates on the interbank money market at the outset of September.

In August reserve money reported a 17.5 per cent annual increase, with currency in circulation and deposits of commercial banks contributing by 13 percentage points and 4.5 percentage points respectively.

The growth of currency in circulation accelerated slightly following the 16.9 per cent

annual rise in banknotes and coins during the second quarter of the present year against 16.4 per cent in March 2007. A more significant acceleration was registered in August, reaching an annual growth of 18.7 per cent. As a whole, growth rates remained high and during the next two quarters currency in circulation is expected to go up by some 19 per cent on an annual basis amid a sizable inflow of foreign capital and buoyant economic activity.

During the second quarter of 2007 the budget withdrew a great amount of liquidity from the non-government non-bank sector due both to good implementation of direct taxes and excise revenue, and VAT revenue recovery following the temporary slowdown at the year's start. As a result, government deposit with the BNB picked up considerably, reaching BGN 6.3 billion by end-June despite the prepayment of the outstanding debt to the IMF (BGN 449.8 million) in April. Net financial flows from the government sector to the EU budget were positive in the second quarter of 2007; the contribution to the overall European budget totaled BGN 94.4 million and received grants BGN 158.8 million.<sup>6</sup> The bulk of funds received from the EU were intended to support the Schengen Agreement implementation and to facilitate the movement of budget cash flows.

In the third quarter we expect a substantial increase in the government deposit reflecting budget surplus maintenance: the effect of the 10 per cent rise of salaries and pensions from 1 July will partially be offset by the good revenue performance and the receipts (BGN 229 million) from two privatisation transactions concluded with foreign investors.<sup>7</sup> In the fourth quarter the traditional end-of-year flight of liquidity to the non-government non-bank sector is expected, prompted by growing budget expenditure; this will cause a decline in the government deposit on the end of the third quarter.

<sup>6</sup> In the first half of 2007 net financial flows between the EU budget and the national consolidated state budget were balanced.

<sup>7</sup> The sales of the Plovdiv Thermo-electric Heating System to the EVV (BGN 62.8 million) and the Rouse Thermo-electric Heating System to *Holding Slovenske elektrarne* (BGN 166.4 million) were finalized on 12 July 2007 and 28 August 2007 respectively.

Chart 28

### Trade Volume and Interbank Money Market Interest Rates

(million BGN)

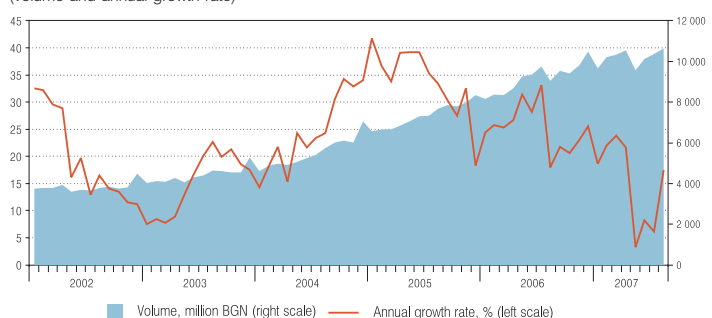


Source: BNB.

Chart 29

### Reserve Money

(volume and annual growth rate)

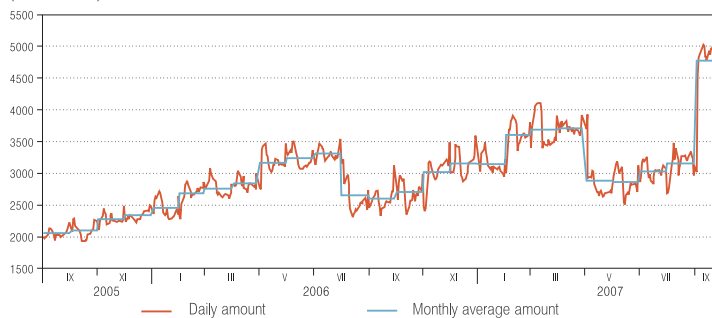


Source: BNB.

Chart 30

### Commercial Bank Deposits with the BNB

(million BGN)

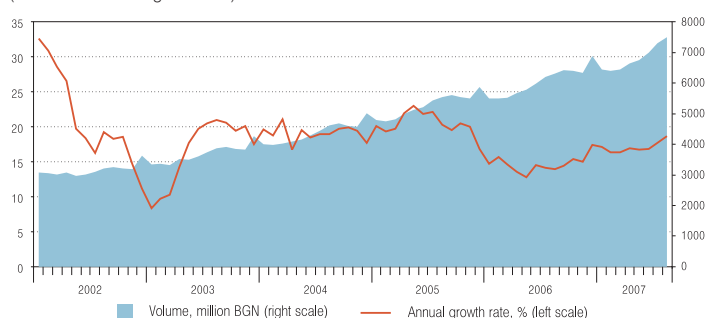


Source: BNB.

Chart 31

### Currency in Circulation

(volume and annual growth rate)



Source: BNB.



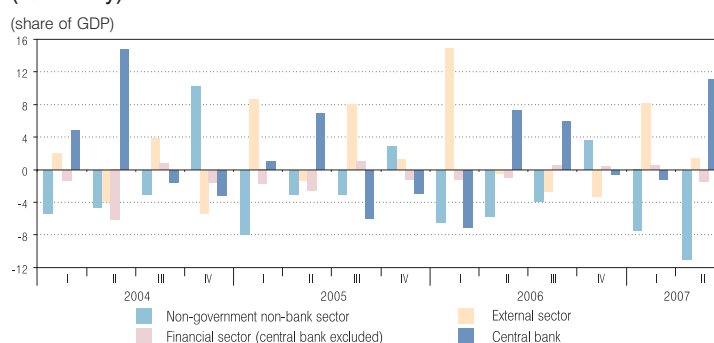
During the second quarter of 2007 broad money measured by the M3 monetary aggregate went up by 28.4 per cent compared with the same quarter of the prior year. The M1 monetary aggregate had a relatively greater contribution to the change in M3 (4.7 percentage points). Quasi-money had a 3.3 percentage point contribution to broad money growth, with foreign currency deposits again growing faster than lev deposits.

Within the M1 monetary aggregate, lev overnight deposits saw an annual growth of 41.3 per cent against 43.2 per cent in the previous quarter, while foreign currency overnight deposits increased by 48.8 per cent against an annual rise of 41.7 per cent in March. The growth of non-financial corporations' deposits continued to outstrip those of households; companies' annual growth of lev overnight deposits accounted for 45.4 per cent against a 28.3 per cent growth of households' deposits, while companies' annual growth of foreign currency overnight deposits came to 52 per cent against a 39 per cent growth of households' deposits. The fast growth of companies' overnight deposits could be explained by the abrupt rise in loans of non-financial institutions since the outset of the year.

As regards quasi-money components, lev-denominated deposits of non-financial corporations with agreed maturity of up to two years picked up by 13.2 per cent on an annual basis, their growth slowing down compared with the previous two quarters. Corporations' time deposits, denominated in foreign currency, displayed a similar trend. The annual change in the second quarter accounted for 25.6 per cent against a 47.5 per cent growth in March 2007 and a 57.6 per cent growth at the end of 2006. Households' time deposits denominated in levs increased by 18.5 per cent (17 per cent in the prior quarter), while their deposits denominated in foreign currency rose by 25.9 per cent (24.4 per cent in March).

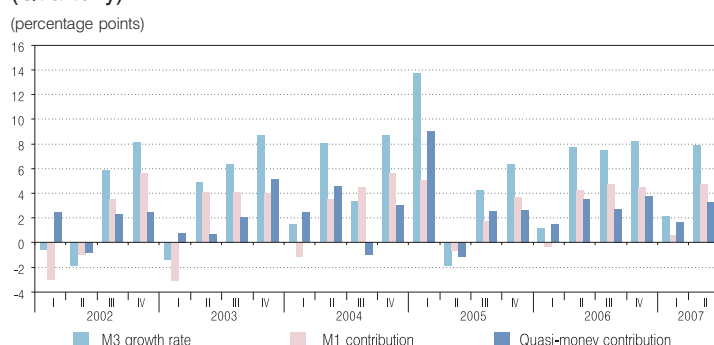
According to projections of the annual change in broad money, its growth rate will stay high (within the range of 29 to 30 per cent) in the third and fourth quarters as well. In August the reported growth of M3 came

Chart 32  
Influence of Consolidated Budget on Other Sectors Liquidity (Quarterly)



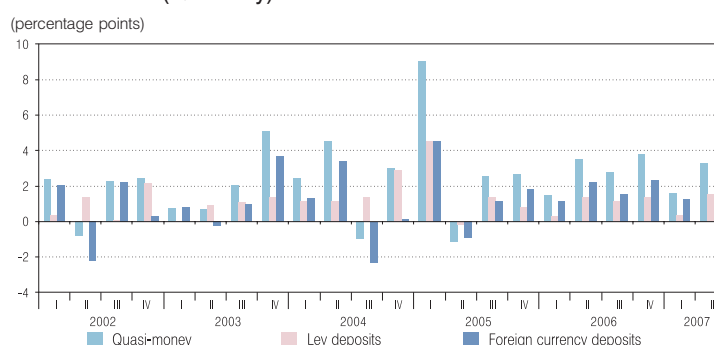
Sources: MF, BNB.

Chart 33  
M3 Growth Rate and M1 and Quasi-money Contribution (Quarterly)



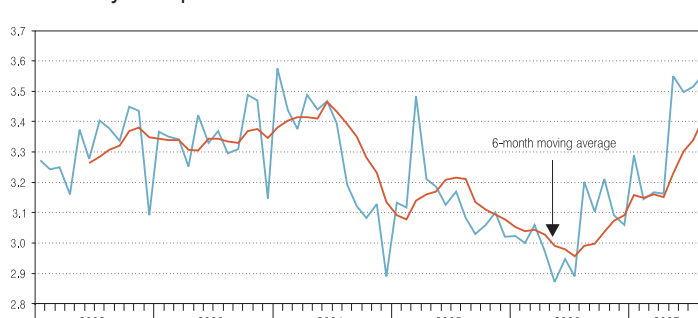
Source: BNB.

Chart 34  
Contribution of Quasi-money and Their Components to M3 Growth (Quarterly)



Source: BNB.

Chart 35  
M3 Money Multiplier



Source: BNB.

to 30.4 per cent. It did not reflect the higher demand for cash and was rather a mechanical effect of the fast growing loans.

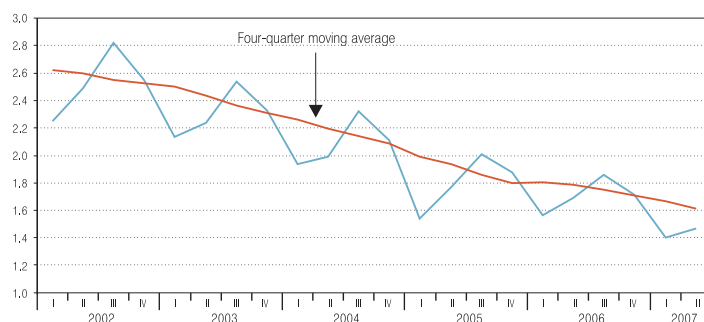
Due to the additional reserves that commercial banks exceeding the limits on loan growth rate had to maintain, the money multiplier stayed at the levels of 3.1–3.2 in the February to April 2007 period. Withdrawal of the additional reserves after this period, stemming from the removal of restrictions on lending, boosted money multiplier growth to the levels of 3.5–3.6 between May and August. Owing to the measures taken since 1 September by the BNB to curb credit activity, which will prompt the growth of bank reserves and, respectively, of money supply, expectations are for a drop in the M3 multiplier to 3.1: a level close to its average value in the last few years.

Money circulation velocity continued its decline, preserving its clearly pronounced seasonality. Given the projected M3 and GDP growth rates, the dynamics of this variable is expected to follow a downward trend in the next two quarters as well.

The second quarter of 2007 saw a rise in interest rates on time deposits in all kinds of currencies. The three-month average interest rates on deposits in levs picked up from 4.11 per cent in the first quarter to 4.15 per cent in the second quarter. Interest rates on EUR-denominated deposits increased from 3.01 per cent to 3.23 per cent, while those on USD-denominated deposits from 3.74 per cent to 3.98 per cent. The greater rise in the interest rates of time deposits denominated in foreign currency resulted predominantly from international interest rates' movements. The major factor behind this was the euro area interest rate rises and, more specifically, the interest rates on repos raised by 25 basis points by the ECB in March and June. In July a slight decrease in interest rates of time deposits was observed which was offset by the increase reported in August.

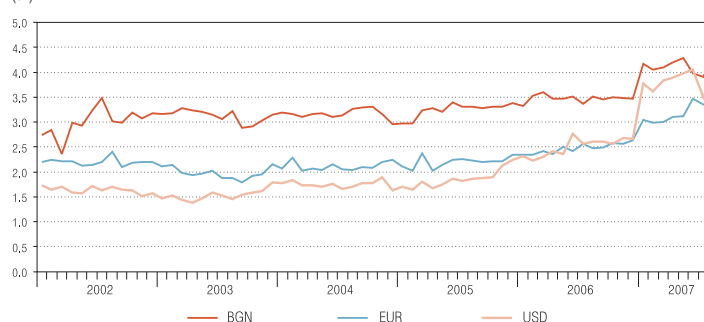
As regards the distribution of interest rates on one-month lev deposits of households, the most sizable change in June compared with March 2007 was the decreased number of banks offering interest rates between 2

Chart 36  
Currency Circulation Velocity (Quarterly)



Sources: BNB, NSI.

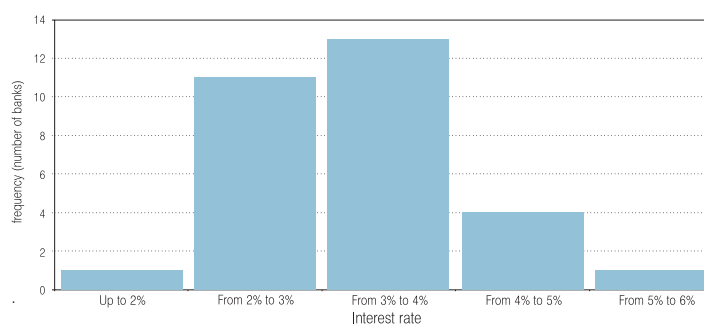
Chart 37  
Interest Rates on Time Deposits (%)



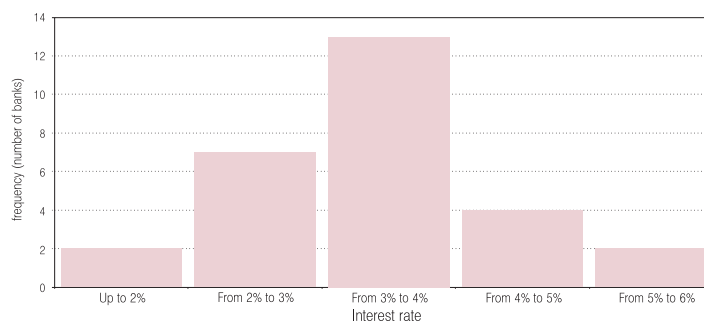
Source: BNB.

Chart 38  
Interest Rate Distribution of Household One-month Lev Deposits

as of March 2007



as of June 2007



Source: BNB.

and 3 per cent at the expense of those offering interest rates of up to 2 per cent and within the 5–6 per cent band.<sup>8</sup> The difference between the highest and the lowest offered interest rate rose to 4.16 percentage points in June against 3.68 percentage points in March. A certain increase in interest rate dispersion occurred as well.

## Credit Aggregates

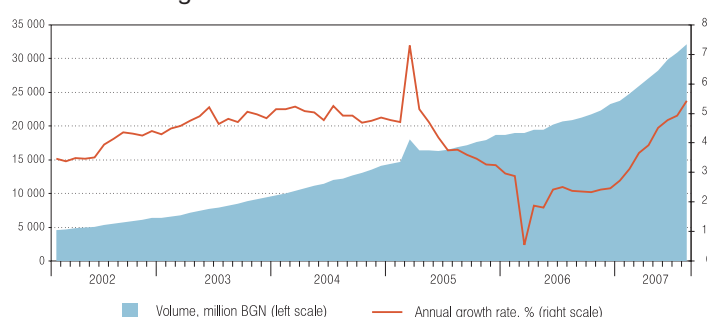
**Lending will remain high in the following months, although the increased minimum required reserves since early September are expected to contribute to the slower growth in claims on the non-government sector.**

Between April and August 2007 claims on the non-government sector went up by BGN 6.2 billion against an increase of BGN 1.9 billion in the corresponding period of 2006, and the growth rate accelerated from 36.6 per cent by end-March to 54.1 per cent in August 2007. Along with the sustained favourable macroeconomic trends and strong demand for loans by enterprises and households, the removed requirement for additional minimum required reserves since early 2007 also boosted lending.

Accelerated lending growth since the end of the first quarter of 2007 was the major reason behind the BNB Governing Council's decision of July to adopt amendments to the ordinance on the banks' minimum required reserves under which as of 1 September 2007 the minimum required reserves to be deposited by banks were raised from 8 per cent to 12 per cent of their deposit base. The increase in minimum required reserves is intended to subdue credit growth to moderate and sustainable levels which will not threaten the stability of the banking system. The effect of this measure is expected to occur in two directions: by withdrawing liquidity from the banking system which would have been used for financing credit activity, and by increasing the cost of commercial bank resources which may fully or partly be transferred to the credit price, and hence reflect on credit demand. Although the increased minimum required reserves are expected to contribute to the

<sup>8</sup> The number of banks decreased in June owing to data consolidation following the takeover of HVB Bank Biochim and Hebros Bank by Bulbank.

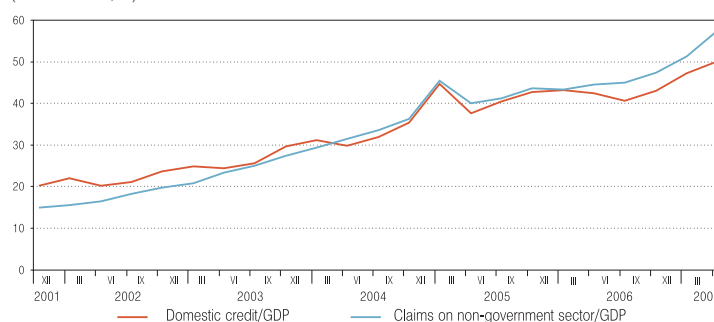
Chart 39  
Claims on Non-government Sector



Source: BNB.

Chart 40  
Domestic Credit

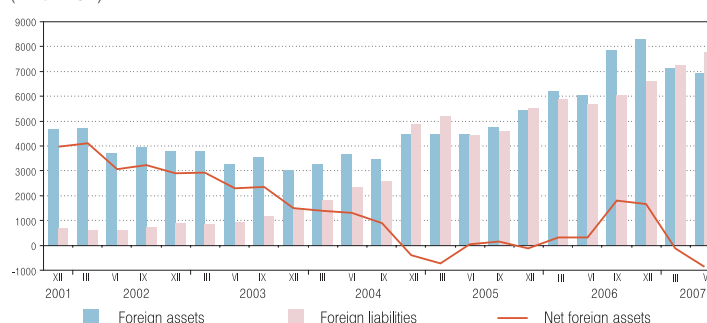
(share of GDP, %)



Source: BNB.

Chart 41  
Foreign Assets and Liabilities of Commercial Banks

(million BGN)



Source: BNB.

Table 3  
**Changes in Major Balance Sheet Items of Commercial Banks**  
(million BGN)

	2005	2006				2007		
	IV	I	II	III	IV	I	II	July – August
Claims on non-financial corporations	784.9	76.8	434.2	657.3	1105.4	1995.2	2678.6	1182.6
Deposits of non-financial corporations	710.3	140.8	974.0	1006.7	893.4	-196.4	1123.9	1141.8
Claims on households	704.2	188.2	767.9	367.0	793.6	744.3	1141.8	1100.3
Deposits of households	813.0	453.9	565.3	791.3	1045.4	550.0	908.1	842.3
Foreign assets	670.0	775.0	-179.2	1845.7	402.2	-1131.0	-236.5	692.2
Foreign liabilities	951.4	319.7	-174.7	374.2	543.9	627.5	510.4	462.4
Claims on general government	137.1	14.2	120.0	3.5	30.0	-48.3	172.4	83.2
Deposits of general government	-112.7	73.7	143.9	138.9	135.3	214.8	123.8	84.5
Claims on central government	133.8	-5.7	120.9	-7.0	-0.4	-51.1	154.7	65.2
Liabilities to central government	11.8	-54.9	81.1	135.7	64.5	-15.6	11.9	41.6

Source: BNB.

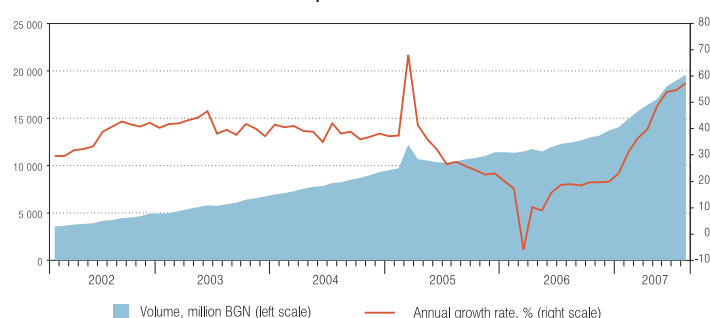
slower credit growth, lending is anticipated to remain high in the following months, with the annual growth rate ranging within 45–50 per cent.

Rapidly expanding lending sustained the trend toward deeper financial intermediation. The *claims on the non-government sector to the GDP* ratio reached 57.5 per cent by the end of June posting a 10.1 percentage point growth compared with early 2007 and a 13 percentage point growth compared with June 2006.

In addition to deposits of non-financial corporations and households, banks reduced their net foreign currency assets to use them as a source for financing credit activity. Irrespective of the fact that in the April–August 2007 period banks' foreign currency assets rose by BGN 456 million, the increase in funds borrowed from non-residents by BGN 973 million were responsible for the decrease in the net foreign currency assets by BGN 517 million to BGN -617 million.

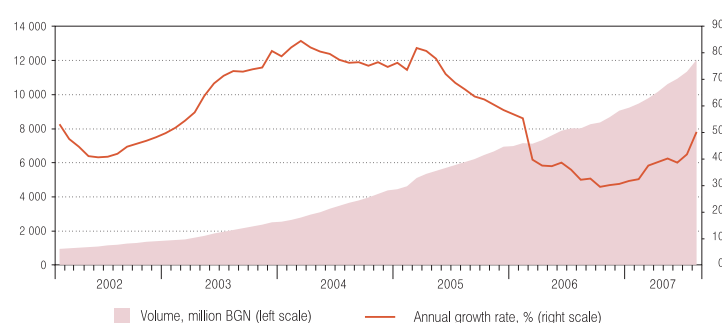
Non-financial corporations again had the most clearly pronounced credit activity reflecting enhanced demand for loans driven by high production and investment activity and good liquidity of banks. Between April and August 2007 claims on non-financial corporations picked up by BGN 3.9 billion against an increase of BGN 917 million in the corresponding period of 2006. Annual growth rate accelerated from 36.4 per cent in March to 57.4 per cent in August 2007.

Chart 42  
**Claims on Non-financial Corporations**



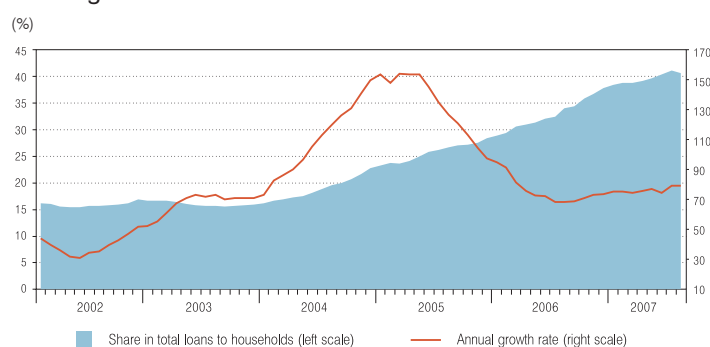
Source: BNB.

Chart 43  
**Claims on Households**



Source: BNB.

Chart 44  
**Housing Loans**



Source: BNB.

Table 4  
Claims on Non-government Sector (Quarterly)

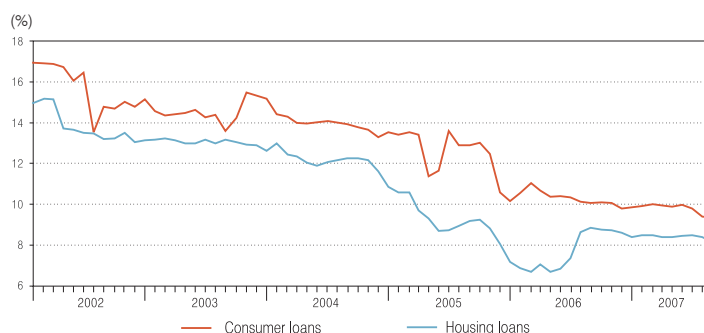
	Annual growth rate, %								Structure as of 30 June 2007
	2005		2006				2007		
	III	IV	I	II	III	IV	I	II	
Claims on non-government sector, incl.:	35.9	32.4	5.6	24.2	23.6	24.6	36.6	47.8	
on non-financial corporations	25.7	23.1	-5.9	15.8	18.3	19.9	36.4	53.9	61.6
on households and NPISHs	63.5	58.4	39.7	38.7	32.6	30.6	37.6	38.6	36.6
on financial corporations	-12.4	-31.1	-44.6	42.7	25.9	68.6	26.0	46.0	1.8

Source: BNB.

Favourable trends in employment and incomes contributed to the considerable increase in household loans. Between April and August 2007 household loans rose by BGN 2.2 billion against an increase by BGN 890 million in the corresponding period of 2006. The annual growth rate accelerated from 37.6 per cent by the end of March to 50.3 per cent by the end of August. Housing loans again posted the highest growth among credit market segments and contributed most significantly to the increase in household loans, with their annual growth rate rising from 74.5 per cent in March to 79.4 per cent by end-August and their share in total household loans reaching 40.6 per cent by the end of the reporting period.

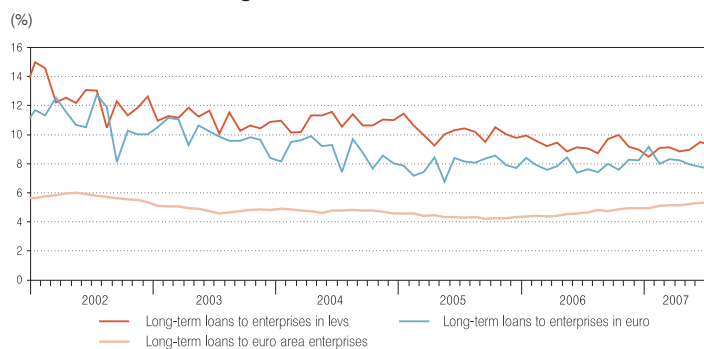
Between April and August interest rates on loans to enterprises did not experience significant changes, while interest rates on newly extended consumer and housing loans slightly went down. Lending rates may slightly increase in the following months consistent with the higher money market rates and increased minimum required reserves since early September. Irrespective of the fact that these factors will push up lending rates, their effect is expected to be limited given the enhanced bank competition.

Chart 45  
Interest Rates on Household Loans



Source: BNB.

Chart 46  
Interest Rates on Long-term Loans in Levs and Euro



Source: BNB.

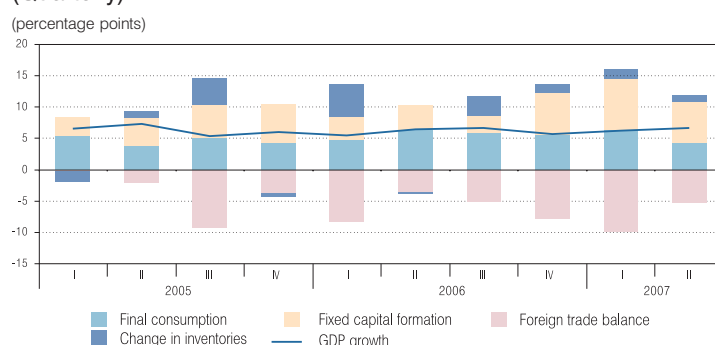


## 3. Economic Activity

In the second half of 2007 economic growth is expected to sustain its rate of over 6 per cent, consistent with increasing production capacities, sustainable domestic demand growth and the recovery of exports.

In the first half of 2007 economic growth, posting an increase by 1.1 percentage point on the first half of 2006, reached 6.4 per cent. The contribution of investment in fixed assets exceeded considerably that of final consumption, and labour productivity accelerated ensuring favourable economic prospects.

Chart 47  
Contribution to GDP Growth by Component of Final Consumption (Quarterly)



Source: NSI.

Table 5  
Final Consumption Dynamics (Quarterly)

(on corresponding period of previous year, %)

	2006				2007	
	I	II	III	IV	I	II
Consumption incl.	5.0	7.2	7.4	6.1	6.9	5.0
Household consumption	5.2	8.3	9.1	7.5	9.0	6.4
Government final consumption expenditure	11.7	8.2	3.5	-5.0	-1.2	-0.9
Collective consumption	-1.7	-0.6	-1.1	7.8	-2.7	0.9
Gross fixed capital formation	17.1	16.0	11.7	23.8	35.9	24.7
Exports of goods and non-factor services	12.7	10.0	8.4	5.4	2.2	5.7
Imports of goods and non-factor services	20.8	12.2	14.7	13.9	13.2	10.7
<b>GDP, real growth</b>	<b>5.5</b>	<b>6.4</b>	<b>6.7</b>	<b>5.7</b>	<b>6.2</b>	<b>6.6</b>

Source: NSI.

### Household Behaviour

Household consumption increased at comparatively high rates in the first half of the year. Data on retail trade earnings in July signaled slower consumption in the beginning of the third quarter.

Labour market conditions continued to improve over the reporting months of 2007. Employment rose considerably: 3.2 per cent on average in the first half of 2007. The downward trend in unemployment was sustained: it reached 6.8 per cent in the sec-

Table 6

**Consumer Demand Dynamics (Quarterly)**

(on corresponding period of previous year, %)

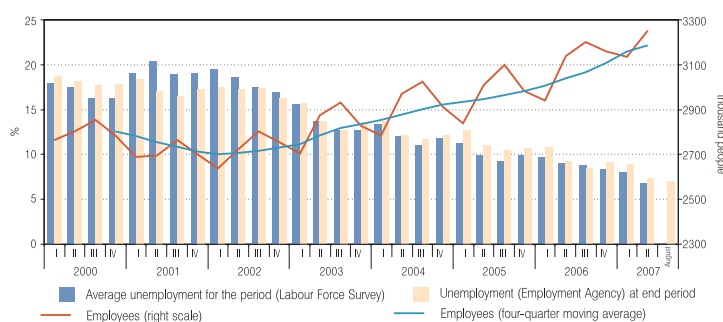
	2006				2007		
	I	II	III	IV	I	II	юли
Consumer spending <i>per</i> household member	3.7	6.3	6.7	9.7	11.3	12.3	13.4
Retail sales	10.9	13.3	14.2	14.0	12.0	10.0	
Income from retail trade	10.0	12.6	14.1	15.3	11.8	6.8	5.8
incl.							
Food, drinks, tobacco	6.5	5.8	7.4	8.8	9.6	9.9	6.7
Pharmaceutical and medical goods, cosmetics and toiletries	7.2	11.5	7.2	5.1	7.5	5.6	8.1
Textile, clothing, footwear and leather	7.3	12.1	17.9	15.7	11.3	6.0	10.5
Household goods and home appliances	14.6	18.8	20.2	19.4	18.0	6.8	5.2

Source: NSI: household budgets and domestic trade survey.

ond quarter based on NSI labour force survey. Unemployed registered in the labour offices were less than 260,000, the lowest level since 1991. A source of funds for growth in employment was the progressively increasing participation rate, i.e. the inclusion of the so-called discouraged persons in the labour market. Accelerated growth of real labour income in all economic activities continued, with the real wage increasing by 13.8 per cent on an annual basis in the first half of 2007.

As a result of favourable developments in employment and incomes, household indebtedness tended to increase, with household net assets in the banking system posting a fall in the first half of 2007. The service of obligations requires the respective increase in the savings rate and this will limit household consumption growth.

Chart 48

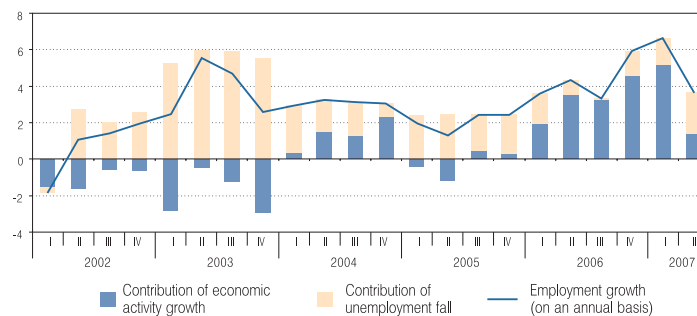
**Employment and Unemployment Level (Quarterly)**

Source: NSI, Employment Agency – Ministry of Labour and Social Policy.

Chart 49

**Sources of Employment Growth (Quarterly)**

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



Sources: NSI, BNB.

Table 7

**Employment and Income Dynamics (Quarterly)**

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

	2006				2007		
	I	II	III	IV	I	II	August
Employees (Labour Force Survey data)	3.1	1.9	2.2	2.5	4.2	2.3	
Real salary*	-0.5	3.2	4.3	6.8	12.9	14.5	
Unemployment at the end of the period, % of the labour force	10.8	9.2	8.4	9.1	8.9	7.4	7.0

\* Deflated by CPI.

Sources: NSI – System of National Accounts, Employment Agency.

## Government Finance and Consumption

Good income performance and conservative expenditure policy in the first half of 2007 supported the expectations for higher cash surplus on the 2007 consolidated budget accounting for about 3 per cent of GDP. The contribution of government consumption to GDP growth will increase in the following two quarters, consistent with the salary increase and traditionally higher expenditure by the end of the year. The government contribution for the whole 2007 will remain between 0.4 and 0.6 percentage points.

Total income and aid on the consolidated budget in the second quarter of 2007 amounted to BGN 6199.6 million, with the annual growth rate accounting for 19.1 per cent. Revenue from indirect taxes contributed most significantly (12.7 percentage points) to tax revenue growth, reflecting restored revenue from VAT after its temporary fall in the first months of the year attributable to the change in taxation. Despite the cut in corporate tax from 15 to 10 per cent as of early 2007, direct taxes grew substantially between April and June, consistent with companies' good financial performance and significantly higher salaries and increased number of employed. The contribution of direct taxes to tax revenue growth is expected to remain close to the present level (6–7 percentage points). With the decrease in the contributions to the Pension Fund by 1 percentage point and Unemployment Fund by 2 percentage points as of 1 October 2007, the contribution of social security to tax revenue growth in the last quarter of 2007 is expected to be close to nil.

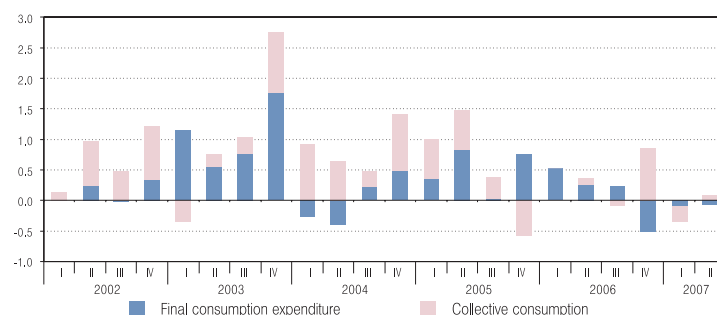
Current non-interest expenditure on the consolidated budget (excluding the contribution to the EU budget) in the second quarter of 2007 rose by mere 3 per cent. The atypically low rate of growth reflects the negative contribution (2.75 percentage points) of subsidies, a result of withdrawn payments on the Tobacco Fund in the first quarter. Expenditure on salaries, social security and costs also grew moderately and the contribution of government consumption in the second quarter of 2007 remained close to nil (0.01 percentage points) accordingly.

Growth of current spending is expected to significantly rise, with social payments contributing most substantially due to a twofold increase in pensions by 10 per cent as of 1 July and 1 October 2007. The contribution of

Chart 50

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

(percentage points)

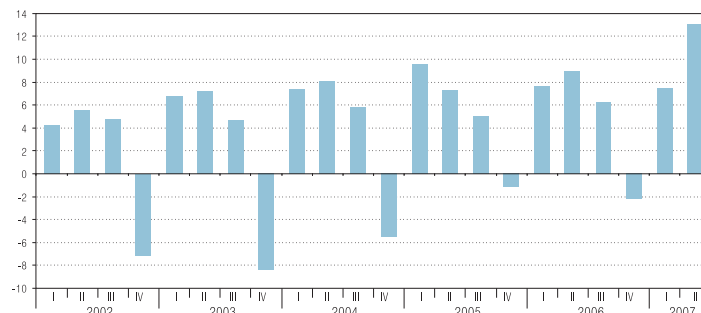


Sources: NSI, BNB.

Chart 51

### Primary Balance (Quarterly)

(share of GDP for the quarter, %)

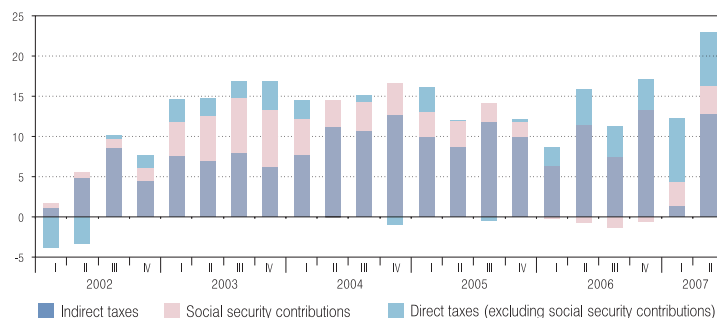


Sources: MF, BNB.

Chart 52

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

(percentage points)



Sources: MF, BNB.

expenditure on salaries and social security to current expenditure growth will increase to 5–6 percentage points in the third quarter due to higher salaries in budget organizations as of 1 July, while in the fourth quarter it may decrease with the cut in social security contributions by 3 percentage points.<sup>9</sup> Costs are traditionally expected to grow by the end of the year and their contribution to current non-interest expenditure growth will reach 4–5 percentage points. Under these developments in salary expenditure and costs, the contribution of government consumption in total economic growth is expected to exceed 0.8–1 percentage point in the following two quarters and to range between 0.4 and 0.6 percentage points in 2007 as a whole.

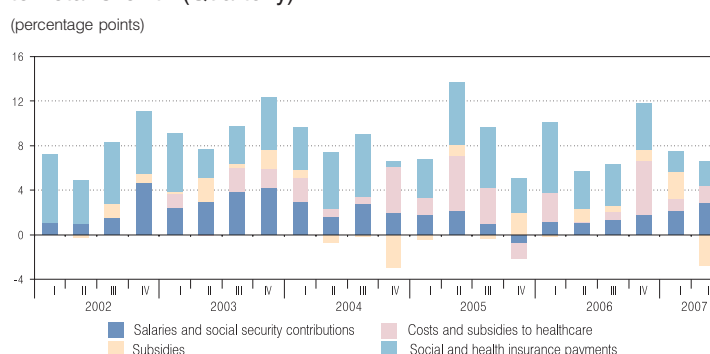
The positive execution of the consolidated fiscal program by July 2007 and the government's intent to continue implementing a restrictive fiscal policy aimed at counteracting the increasing current account deficit<sup>10</sup> backed the expectations for a higher than initially projected cash surplus on the consolidated budget accounting for about 3 per cent of GDP in 2007.

## Behaviour of Firms and Competitiveness

**The intensive investment activity in recent years has boosted labour efficiency growth. Enterprises have the potential to preserve their competitiveness under moderate pressure exerted by labour costs.**

Fixed capital investment posted a real growth of 30 per cent *per annum* over the first half of 2007, with its contribution to GDP growth significantly exceeding that of consumption. Manufacturing, energy and trade contributed most substantially to the high investment activity. Capital formation dynamics and industry-oriented investment support the thesis that Bulgaria's economy is undergoing a period of restructuring, intensive

Chart 53  
Contribution of Major Groups of Current Non-interest Expenditure to Total Growth (Quarterly)



Sources: MF, BNB.

<sup>9</sup> The net effect of additionally increased pensions by 10 per cent as of 1 October and decreased social security contributions by 3 percentage points as of the same date will be negative amounting to about BGN 200 million in 2007.

<sup>10</sup> The 2007 Republic of Bulgaria State Budget Law provides for two buffers aimed at limiting expenditure if the balance of payments current account deficit worsens: by saving 10 per cent of non-interest expenditure (Article 5, paragraph 4) and by saving 10 per cent of total supplementary subsidy for municipalities (Article 10, paragraph 2).

renovation and building of its production capacities, infrastructure and export potential.

Between January and June 2007 gross value added rose by 8.2 per cent compared with the corresponding period of 2006, posting the highest growth since 1999. The major factors behind this growth were manufacturing industry and financial intermediation exhibiting an increase by 15 and 40 per cent respectively.

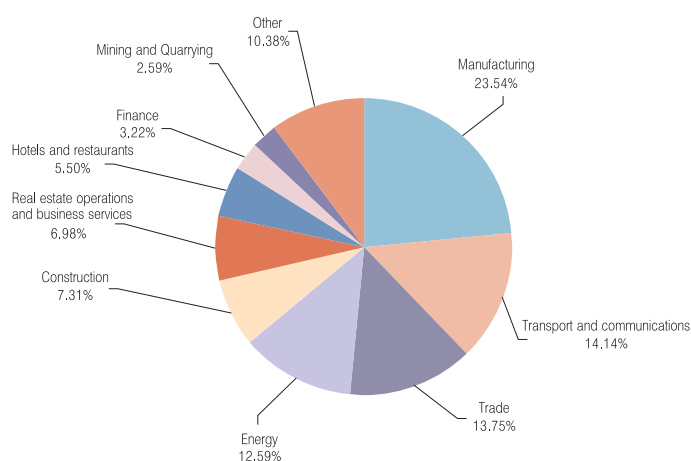
Over the review period value added in industry grew under the conditions of a steady increase in domestic market sales and a volatile dynamics of export sales showing a significant decrease against the first half of 2006. Industries exhibiting the largest growth of domestic sales include energy, food and drink production, non-metal raw materials, metal articles, machines, equipment and home appliances, furniture. These developments also reflect a strong consumer, investment, trade and production activity.

Restructuring of non-ferrous metallurgy and putting production capacities out of operation in energy had a negative effect on exports in the first half of 2007. The production fall in these industries affected total export growth due to the sizable share of metallurgy and production of energy resources in the structure of industrial sales earmarked for exports. On the other hand, all other industries, in which the bulk of the sector's workers (more than 80 per cent) are employed, exhibited a two-digit export sales growth.

Foreign trade balance retained its negative contribution to GDP growth due to continued dynamic import growth. Final domestic demand and intermediate consumption have practically a permanent import component. Imports of investment goods accounted for about 70 per cent of fixed capital investment. Imports of raw materials, materials and energy resources cover about 30 per cent of intermediate consumption. Investment goods and input goods are those that continue to dominate in the volume and dynamics of imports.

Chart 54

#### Structure of Expenditure for Acquiring Fixed Assets by Economic Activity in the First Half of 2007

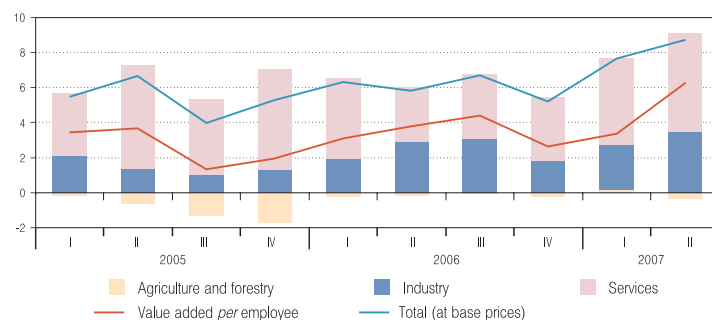


Source: NSI.

Chart 55

#### Value Added Growth and Contribution by Sector

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

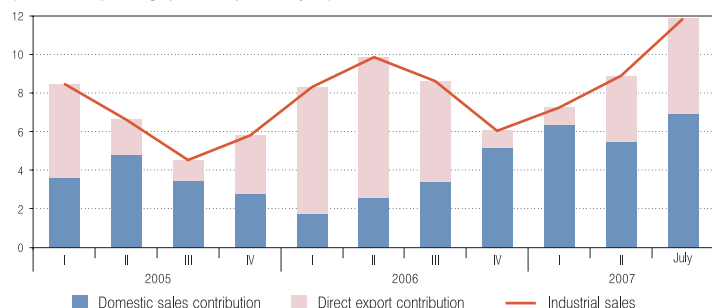


Source: NSI.

Chart 56

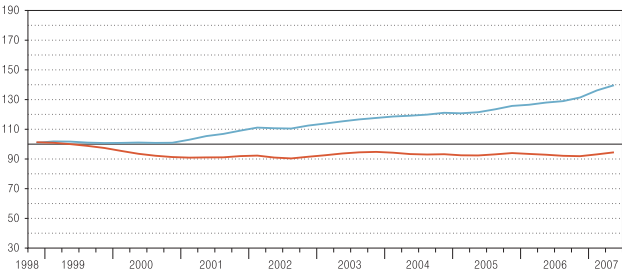
#### Industrial Sales Growth

(% on corresponding quarter of previous year)

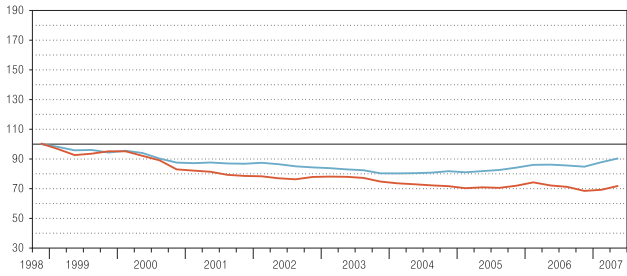


Sources: NSI, BNB.

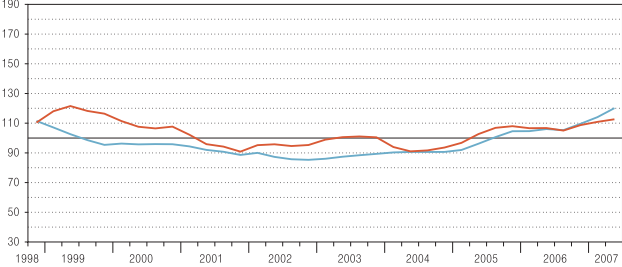
Chart 57  
**Unit Labour Cost (Quarterly)**  
 (1998 = 100)  
**Total for the Economy**



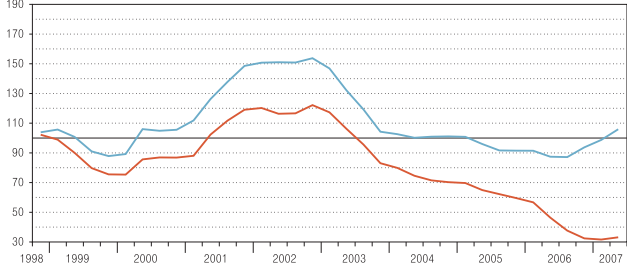
**Manufacturing**



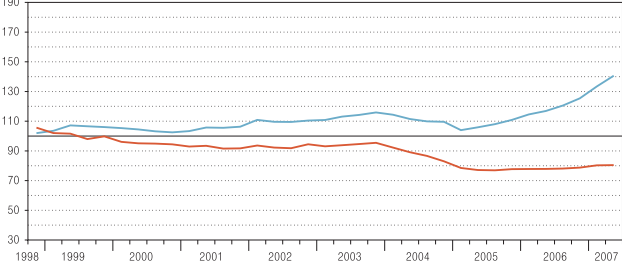
**Agricultural Sector**



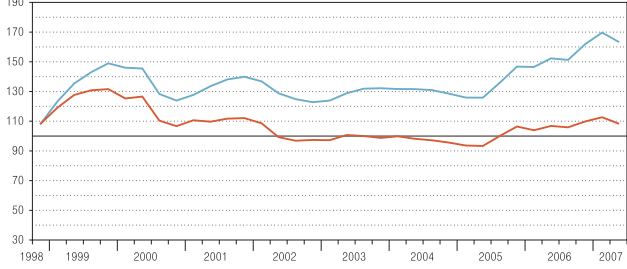
**Mining and Quarrying**



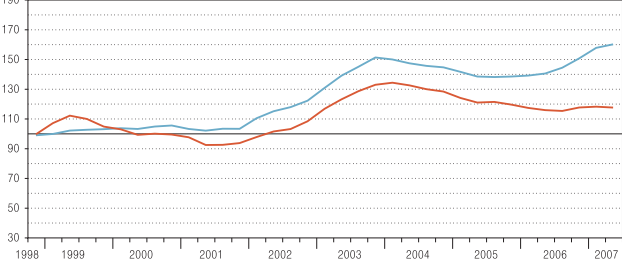
**Construction**



**Electricity, Gas and Water Supply**



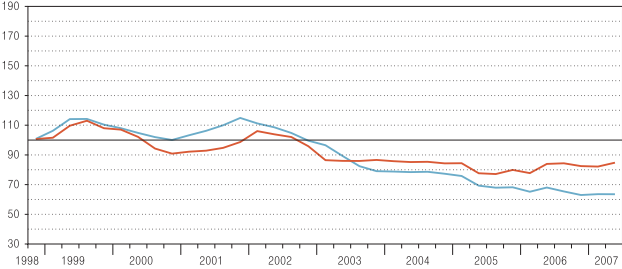
**Trade**



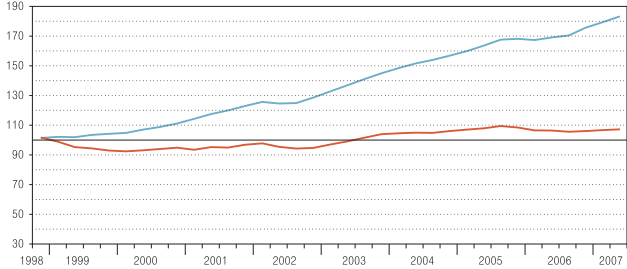
**Transport and Communications**



**Financial Intermediation**



**Other Sectors**



— Four-quarter moving average (nominal)  
 — Four-quarter moving average (real)

Sources: NSI, BNB.



The buoyant investment activity and improved technological level of economy helped accelerate labour efficiency. The value added *per* employee went up by 4.9 per cent in the first half of 2007 against the background of significant employment growth (3.2 per cent). Manufacturing and financial intermediation, posting an increase by 13 per cent and 30 per cent respectively, were the sectors contributing most significantly to the improved production efficiency.

High export activity in most industries and the growth rate of production efficiency evidence a sustained competitiveness of the economy despite the dramatic salary rise and gradually increasing real unit labour costs. The general unit labour cost indicator in manufacturing reflects the relationship between labour efficiency and wage growth. In a comparatively long period of time enterprises kept real wage growth lower than labour efficiency growth, and consequently unit labour costs went down allowing enterprises to strengthen their financial state and renovate production capacities. Unit labour costs have slightly grown since 2005 but their level remained far below that of the base year (1998). Thus, enterprises managed to sustain their competitiveness under the pressure exerted by labour costs.

## Exports and Imports of Goods

**In the third and fourth quarters of 2007 nominal export growth is expected to increase compared with the original data on export dynamics in the first half of 2007, and relatively sustainable growth in imports of goods to sustain. Major assumptions underlying these expectations are as follows: comparatively stable consumer demand in the euro area, preserved competitiveness of Bulgarian production and sustainable domestic demand growth in Bulgaria.**

In terms of value, export growth is expected to accelerate over the forecast horizon supported by the increasing physical volumes, consistent with the improving competitiveness of domestic industry. Sustainable growth of labour productivity in manufacturing, high investment activity, improving provision of export orders and increasing share of Bulgaria's exports in total EU member states' imports suggest that competitive positions of domestic production in international markets are retained. Major external assumptions underlying the forecast export

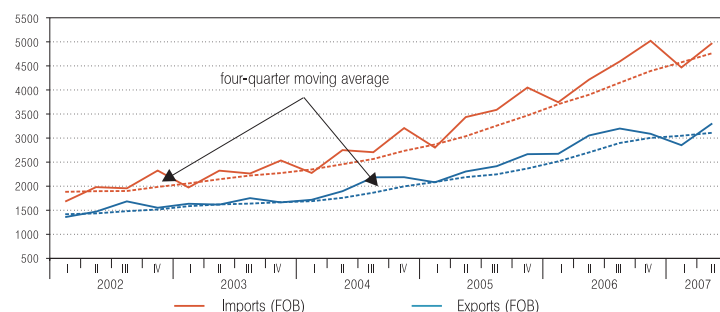
dynamics are sustained strong consumer activity and a real economic growth higher than the euro area potential growth, as well as stabilized prices of metals, food and crude oil around the average third quarter levels. Taking into account the structure of foreign trade flows and assumptions about international prices of major raw materials, positive changes in Bulgaria's terms of trade are expected until the end of 2007. The forecasted moderation of global economic growth will be mostly attributable to the lower activity in the USA which is expected to have a limited direct effect on Bulgaria's economy.

Goods imports are expected to retain their steady dynamics in the third and fourth quarters of 2007, with the price effect gradually increasing at the expense of physical growth. Major factors underlying import growth will be strong investment dynamics, domestic demand growth and dependence of some export oriented industries on imported raw materials.

In accordance with the forecasts on export and import dynamics, the negative contribution of foreign trade balance to real GDP growth is expected to gradually decrease in the third and fourth quarters of the year. These developments will reflect primarily the increase in the positive contribution of exported goods and non-factor services, while imported goods and non-factor services are expected to retain their negative contribution relatively unchanged in the two quarters.

The new methodology of collecting data about commodity trade between Bulgaria and other EU member states applied since the beginning of 2007 prompted a structural change in the available macroeconomic time series and increased the uncertainty of originally published foreign trade statistics. Given the specificity of the new methodology, quarterly data revisions will be carried out and according to our expectations they will be more profound on an annual basis, which increases uncertainty of current analysis and forecasting of these processes. The employment of Intrastat system requires more time for collecting, processing and

Chart 58  
Dynamics of Exports and Imports (Quarterly)  
(million EUR)



Source: BNB.

publishing original data on the commodity and geographical structure of Bulgaria's foreign trade. Companies are provided with a significantly longer time frame after the expiry of the reporting period for adjusting originally supplied data, which is the major reason for the expected data revision.<sup>11</sup>

According to preliminary data, exports of goods in euro reached EUR 7386.1 million in the first half of 2007 posing a nominal increase by EUR 586.9 million or 8.6 per cent on the corresponding period of 2006. Imports (FOB) amounted to EUR 11,272.6 million between January and July, a nominal increase by EUR 1781.9 million or 18.8 per cent compared with the first seven months of 2006.

Investment goods and raw materials contributed most significantly to the increase in trade deficit by EUR 1052.6 million in the January – June 2007 period. In the first group of goods, imports of machines, equipment and appliances rose significantly, while in the second group, the decline in exports of non-ferrous metals by 6.7 per cent annually contributed most substantially to the deficit growth. On the other hand, foreign trade dynamics of textile and raw materials for food production helped decrease the deficit: the negative balance in textile went down and Bulgaria's net revenue from raw materials for food production posted an increase.

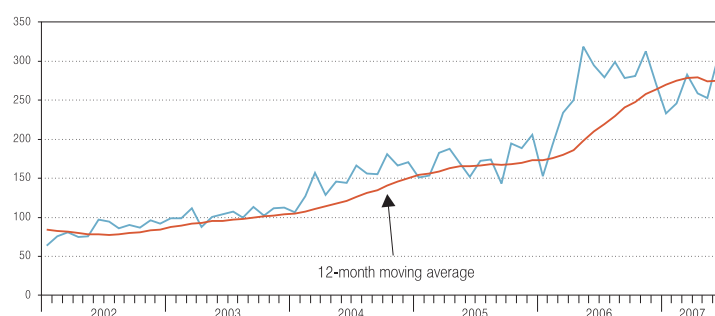
Between January and June 2007 exports grew by 7.5 per cent on an annual basis reflecting to the largest extent the dynamics of base metals and base metal products, animal and vegetable products, food, drinks and tobacco. In the first category, export revenue rose by EUR 135.3 million supported both by higher international market prices of zinc, lead and aluminum and increased production and export activity in ferrous metallurgy. The increase in cast-iron, iron and steel (by 2.2 percentage points) and zinc and zinc products (0.9 percentage points) contributed most significantly to the total growth, while exports of copper and

<sup>11</sup> For further details and analysis of Intrastat system operation, see the box on the *Original Data on Commodity Exports and Imports within the Scope of the Intrastat System*, Economic Review, 2007, issue 2, p. 40.

Chart 59

#### Exports of Base Metals and Base Metal Products

(million EUR)



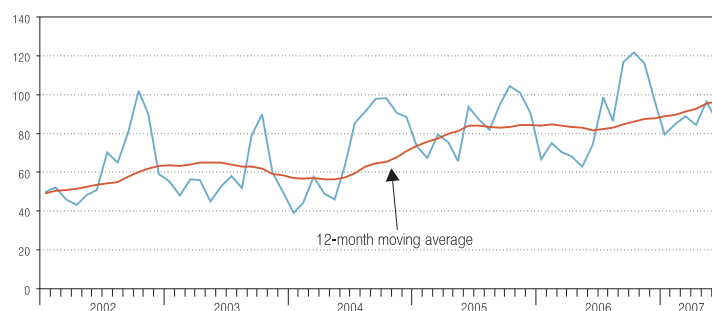
Source: BNB.

copper products (-1.9 per cent) had a negative contribution. Income from exports of food, drinks and tobacco reached EUR 521.2 million in the first half of the year, with oil seed (0.5 percentage points) and soft and alcohol drinks (0.3 percentage points) contributing most substantially to this growth. The positive trends in exports of base metals as a result of favourable competitive position of this industry in international markets are expected to be sustained in the third and fourth quarters of 2007. Exports of food, drinks and tobacco in the second half of the year will depend on the production of major agricultural products over the year, as well as on the efforts of an increasing number of producers to meet the EU standards and to have a free access to the single European market.

Mineral products and fuels (down by -2.6 percentage points) contributed negatively to the total export growth in the first half-year, while all other groups had a positive development over the same period. Realized revenues from exported energy resources were lower by 18.8 per cent in exported petroleum products and by 27.3 per cent in other energy resources compared with the January – June 2006 period. The major factor behind these developments was the real decline in exports of these products, with the physical volume of exported petroleum products over the period decreasing by 18.3 per cent on an annual basis. Forecasts about export developments in energy resources over the third and fourth quarters of 2007 are for upward trends and an increasing positive contribution to Bulgaria's total exports. These expectations are based on the assessment that the reported slowdown in growth of the exported petroleum products is temporary; it was observed only in the first quarter of 2007. Volume growth in exported petroleum products and higher international petroleum prices on an annual basis are expected to offset the decline in exports of electricity.

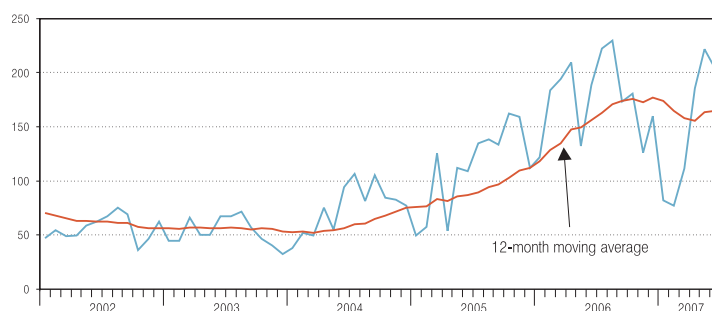
Income from exports of machines, transportation vehicles and appliances amounted to EUR 1049.6 million for January – June 2007: up by 9.1 per cent on the same peri-

Chart 60  
Exports of Animal and Plant Products, Food, Drinks and Tobacco  
(million EUR)



Source: BNB.

Chart 61  
Exports of Mineral Products and Fuels  
(million EUR)



Source: BNB.

ods of the prior year. The main positive contribution to the overall dynamics in the group was reported by *nuclear reactors, machines and appliances* (1.8 percentage points), while *sea and river shipping* saw a negative contribution (-1.4 percentage points). Over the second half of 2007 exports of machines, transportation vehicles and appliances are expected to sustain their upward trend and to have a positive contribution to export growth.

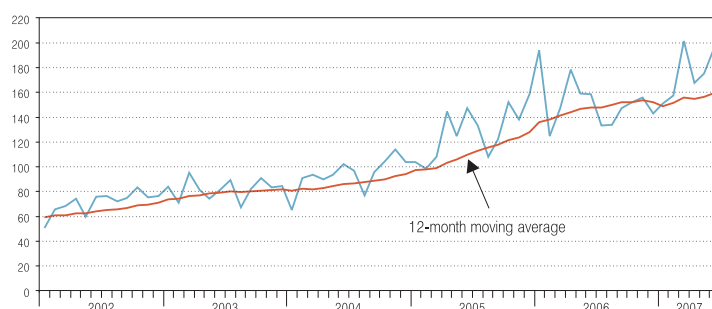
Imports (CIF) reached EUR 9910.3 million between January and June 2007, posting a nominal increase of EUR 1546 million (18.5 per cent) on the corresponding period of 2006. Within the structure of imports by use, raw materials contributed most significantly to import growth (8.7 percentage points) followed by investment goods (6.1 percentage points), while energy resources had a negative contribution (-0.9 percentage points).

Imported raw materials totaled EUR 3752.1 million in the first half of 2007, an increase by EUR 729.4 million on the corresponding period of 2006. Imports of *cast-iron, iron and steel, plastics and rubber, and ores* contributed most significantly to total import growth by 2.3 percentage points, 1.2 percentage points and 1 percentage point respectively. Imports of investment goods remained sustainable over the first half of 2007, with *machines, equipment and appliances* contributing most significantly to total growth: by 3.2 percentage points. The decline in imports of transportation vehicles reported in the first quarter of 2007 was offset during the second quarter posting a minimum positive contribution to the overall import dynamics in the first half-year. The volume of imported investment goods for the first six months of the current year reached EUR 2668.7 million, with this group ranking second in the structure of imports with a share of 26.9 per cent. In the third and fourth quarters of 2007 the upward trend in imports of raw materials and investment goods is expected to be retained underpinned by the increasing production activity in metallurgy and the high investment demand in Bulgaria. After the reconstruction of key non-ferrous metallurgy companies in

Chart 62

### Exports of Machines, Transportation Vehicles and Appliances

(million EUR)



Source: BNB.

Table 8

### Contribution of Commodity Groups to Trade Growth, January – June 2007

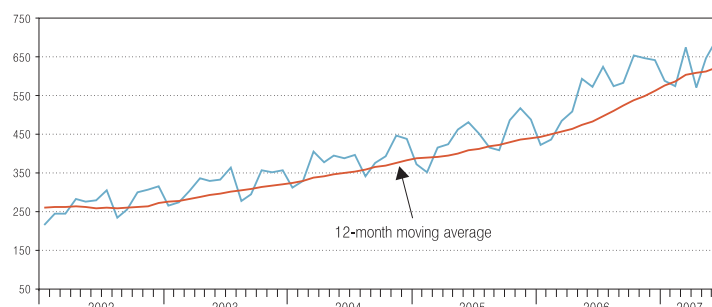
	Exports		Imports	
	growth,%	contribution, p.p.	growth,%	contribution, p.p.
Consumer goods	9.9	2.4	34.2	5.0
Raw materials	16.8	7.3	24.1	8.7
Investment goods	6.9	1.1	23.8	6.1
Energy resources	-20.1	-3.3	-3.8	-0.9
Other			-100.0	-0.5
<b>Growth, total</b>	<b>7.5</b>		<b>18.5</b>	

Source: BNB.

Chart 63

### Imports of Raw Materials

(million EUR)

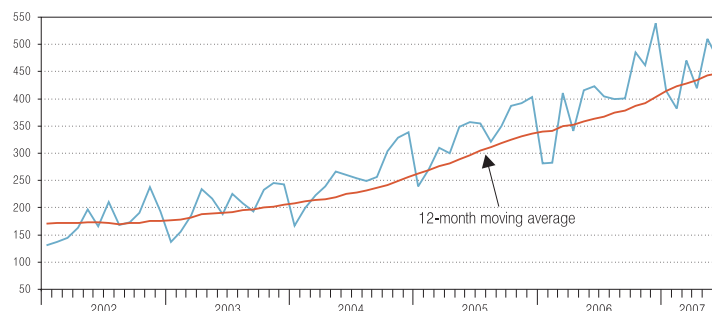


Source: BNB.

Chart 64

### Imports of Investment Goods

(million EUR)



Source: BNB.

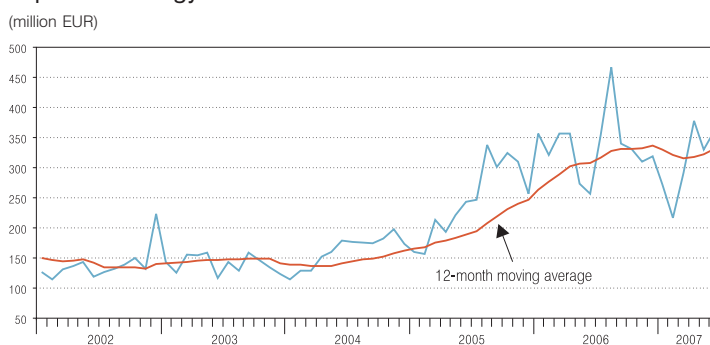
the second quarter, an enhanced production activity and ore imports acceleration are expected over the second half of 2007.

Over the first six months of the year under review payments on imported energy resources decreased by EUR 72.3 million on the corresponding period of 2006. Crude oil and natural gas, and fuels contributed most substantially to these developments (-1 percentage point and -0.4 percentage points respectively). The negative dynamics in imports of mineral products were seen mainly in the first quarter of 2007 and the increase in imported physical volumes in the second quarter offset the decrease in the international prices on an annual basis. In the first half of 2007 the total physical volumes of imported crude oil are almost equal to those imported over the same period of the prior year, while the average price (in euro) was 9 per cent lower on an annual basis. A sustainable production activity in *oil refining* is foreseen to prompt real growth in imported crude oil over the third and fourth quarters of 2007. Assumptions on international oil prices suggest an increasing price effect (on an annual basis) resulting in higher payments on imports.

Between January and June 2007 imports of consumer goods rose by EUR 418 million on the corresponding period of 2006 to reach EUR 1641.1 million. *Furniture and home equipment* and *food, drinks and tobacco products* contributed most significantly to import growth in this commodity group (by 1.6 percentage points each). A decline in this group is reported in imported automobiles, with a contribution of -0.5 percentage points to total imports. In the third and fourth quarters imports of consumer goods are expected to retain their steady growth rates supported by the stable domestic demand.

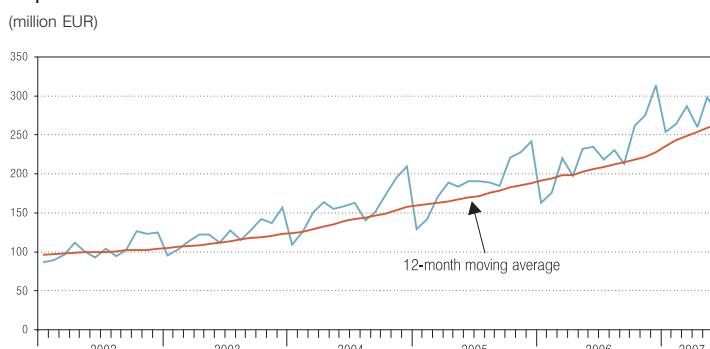
During the first half of 2007 Bulgarian exports to other EU Member States went up by 10.4 per cent based on preliminary data, and exports to countries outside the Community picked up by 2.8 per cent. Imports of goods show a similar trend in terms of regional distribution, with imported goods originating from the Community going up by 22.8 per cent and those from third countries

Chart 65  
Imports of Energy Resources



Source: BNB.

Chart 66  
Imports of Consumer Goods



Source: BNB.



by 13.9 per cent. One of the qualitative changes in the regional distribution in the first half of 2007 was that exports to the Asian region decreased by 29.3 per cent. The other export destinations saw growth in exports over the same period, with the fifteen old EU Member States contributing most significantly to the overall dynamics. Hence, by the end of the second quarter of 2007 the market share of Bulgarian goods in total imports of the Member States of the Community rose to 0.55 per cent (on an annual basis) against 0.5 per cent in the prior year. No significant changes in the geographical structure of Bulgaria's foreign trade are expected over the forecast horizon, and the share of Intracommunity trade will continue to increase gradually.

### Comparative Analysis of Economic Developments in Bulgaria and the Baltic Countries

Over the recent years economic developments in Bulgaria and the three Baltic countries (Estonia, Latvia and Lithuania) have been marked by a number of similarities which often resulted in grouping these countries when analyzing potential risks to their developments and the challenges to the policy they conduct. The main similarities in economic developments and the current situation in these four countries are as follows:

- the monetary regime chosen: in three of them, a currency board functions with the euro as a foreign reserve currency and in Latvia there is a fixed exchange rate with the national currency being pegged to the euro with a fluctuation margin of +/-1 per cent;
- the EU membership guaranteeing a stable economic development and expectations of increasing incomes;
- high rates of investment return attracting large foreign capital flows;
- high economic growth rates and increasing domestic demand resulting in a current account deficit;
- the process of enhanced financial intermediation and the related expansion of lending activity;
- relatively high price dynamics over the recent years partly due to the rise in excises in the process of their harmonization with the minimum EU levels.

Apart from the aforementioned similarities, there are also differences in the development of Bulgaria and the three Baltic countries. Therefore, a mechanical grouping of these countries might be misleading in certain cases. The main features indicative of the stable economic development in Bulgaria and not observed in all of the Baltic countries are that:

- investment has taken the lead in Bulgaria's economic development. Gross fixed capital formation has the most sizable contribution to enhanced domestic demand and economic growth. Investment demand, stemming from sizable imports of investment goods, is the main factor behind current account deficit deterioration;
- foreign direct investment flow ensures a full coverage of the current account deficit;
- Bulgarian producers improve their competitive positions on international markets and the increase in salaries is consistent with the labour productivity growth rate;
- there is an ongoing process of harmonization of excise rates, which started before EU accession, thus limiting the effects on inflation after accession.

One of the conclusions of the analysis is that the country which differs most significantly from the other countries subject to this analysis is Latvia where private consumption is the main factor behind growth, and fast salary growth rates result in a sizable increase in nominal unit labour costs (by 14.6 per cent on an average annual basis for the 2005–2006 period) deteriorating the competitive position of domestic producers.

The comparative analysis emphasizes the importance of economic policy measures aimed at intensifying structural reforms and improving the overall business environment, market liberalization and competition protection, as well as enhancing labour market flexibility.

# 4. Inflation

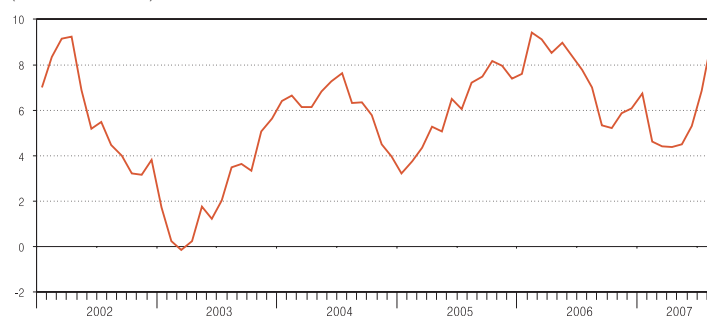
In August the annual rate of change of HICP accelerated to 9.3 per cent, from 6.8 per cent (July). Foods contributed most significantly to the summer inflation. Annual HICP inflation is expected to start slowing gradually until the end of the year.

At the end of August inflation accumulated since the beginning of the year reached 6.8 per cent, reflecting inflation rates in July and August: a monthly price rise by 1.7 per cent and 2.2 per cent respectively. Foods' contribution to the accumulated inflation was 3.03 percentage points. The increase in prices of major food products affected directly catering services prices which rose by 11.5 per cent for the same period, contributing by 1.12 percentage points to the inflation since early 2007.

Between April and June prices of processed foods rose by 10.8 per cent on average compared to the same period of the prior year, while between July and August their average increase was 20.6 per cent.<sup>12</sup> The *bread and cereals* and *milk, cheese and eggs* groups had the largest contribution to overall annual inflation, their average inflation in the beginning of the third quarter coming to 31 per cent and 22 per cent respectively on the same period of 2006. Prices of unprocessed foods also posted a significant increase in annual growth, with the prices of *vegetables* and *meat* (by 38 and 7.2 per cent on the corresponding period of 2006) contributing most sizably to overall inflation. The average rise in *fruit* prices in July and August was 16.8 per cent on the corresponding period of 2006.

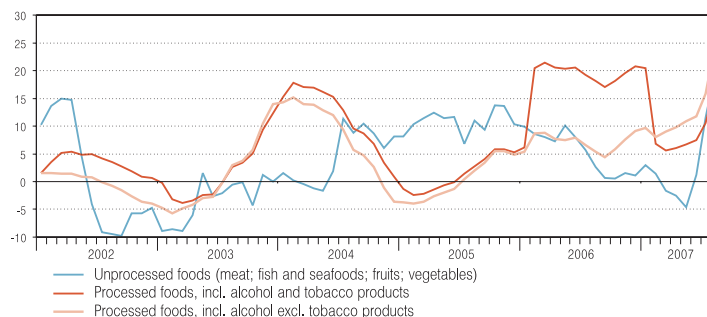
<sup>12</sup> Under the Eurostat classification, the group of processed foods include: *bread and cereals; milk, cheese and eggs; animal and plant oils and fats; sugar, jam, honey, chocolate and confectionery; foods not classified elsewhere; non-alcoholic beverages; alcohol and tobacco products*. For the purposes of the analysis, tobacco products are excluded from the group of processed foods with a view to distinguishing the effect of their prices.

Chart 67  
Harmonized Index of Consumer Prices  
(on an annual basis)



Source: NSI.

Chart 68  
Harmonized Price Indices of Processed and Unprocessed Foods  
(on an annual basis)



Sources: NSI, BNB.

The continuing drought in Bulgaria decimated cereal crops and led to lower corn and sunflower yields and fodder shortages. The reduced supply of foods could not be compensated by imports due to poor crops in major producer countries. Prices of wheat, corn and oil-bearing crops on international markets increased significantly (see Section 1. *External Environment*).

Bulgaria's membership in the EU also affected food price dynamics. Direct effects on domestic prices of foods and raw materials stemming from applying the EU Common Agricultural Policy are hard to estimate but some indicators signaled an increased external demand for domestic food products. The Commodity Exchange and Wholesale Markets State Commission data show that between January and August 2007 sales of Bulgarian fruits and vegetables rose by 93 per cent on an annual basis, whereas sales of imported fruits and vegetables increased by 38 per cent. Preliminary information on foreign trade dynamics indicates a significant change in physical volumes of exports in the groups of *milk and dairy products, apples and pears, sugar* over the first half of 2007 compared to the same period of 2006 (see the box 'External Demand and Effects on Prices of Certain Food Products' on page 46).

The reduced supply due to unfavourable weather conditions and the significant increase in demand, including in external demand, resulted in sizable rises in food prices in Bulgaria during 2007.

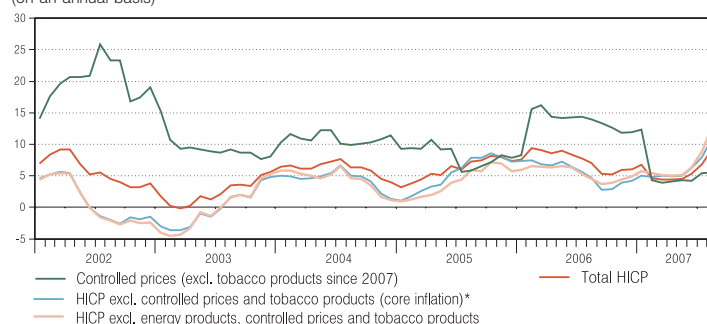
Another factor driving prices of major food products was the higher manufacturing cost of food industry enterprises as a result of investments needed to cover EU requirements. The production price index in food and drink output followed an upward trend which started in 2006 and continued over the first eight months of 2007.

Food prices are expected to stabilize at the August – September levels until the end of the year.

Rises in administratively set prices continued to be a proinflationary factor. Inflation in this group accelerated on the corresponding

Chart 69  
**Harmonized Price Indices**

(on an annual basis)



\* Since tobacco product prices depend on administratively set excise rates, they are excluded from the group of goods and services with non-controlled prices (core inflation) despite the liberalization of the tobacco product market since early 2007.

Sources: NSI, BNB.

periods of 2006 from 4.2 per cent on average in the second quarter to 5.5 per cent in the first two months of the third quarter. Electricity (0.32 percentage points), vignette charges (0.16 percentage points) and water supply and sewerage services (0.15 percentage points) contributed most significantly to the overall inflation accumulated until August.

Significant rises in electricity prices were approved. The decision taken by the State Energy and Water Regulatory Commission to raise the price of electricity for households by 7.8 per cent, effective as of 1 July 2007, had a direct effect on inflation. The unexpected high prices of electricity for industrial consumers approved by the State Energy and Water Regulatory Commission on 1 July 2007 had an indirect effect on inflation. Electricity prices for firms with up to 50 employees and an annual turnover of up to BGN 19.5 million grew by 20 per cent, while charges on transmission and access to the electricity distribution network rose by 25 per cent. For all large and medium-sized businesses in Bulgaria, the charge paid to the National Electric Company (NEC) on transmission was raised by 45 per cent. After the liberalization of the electricity market as from 1 July 2007, the large consumers negotiate directly prices with the NEC. Publicly announced data show that price rises after this date varied between 34 per cent and 41 per cent.

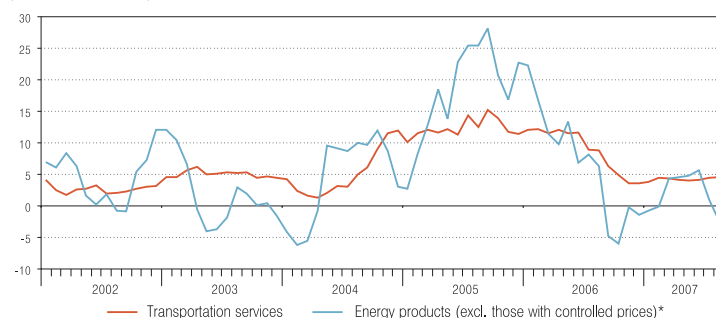
In the second and third quarters of 2007 the State Energy and Water Regulatory Commission approved rises in water supply and sewerage services in some cities. As a result of price rises in other cities over the first quarter, average growth in prices of water supply and sewerage services between January and August was 13.7 per cent and 14.9 per cent respectively.

Changes in controlled prices until the end of the year will depend on rises in annual fees charged by state universities<sup>13</sup> since no other essential adjustments are expected until the end of the year. The only possible

<sup>13</sup> CM Decree No. 127 of 2 June 2007 on approving application and education fees in state universities for 2007–2008 (published in the *Darjaven Vestnik*, issue 49 of 19 June 2007).

Chart 70  
Harmonized Price Indices

(on an annual basis)

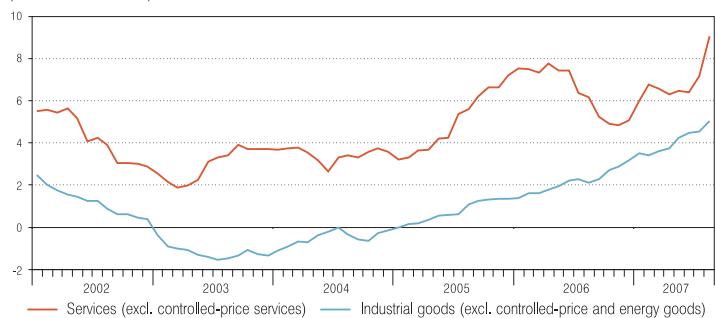


\* Energy products excl. those with controlled prices include fuels and lubricants for personal transportation vehicles, and solid, fluid and gaseous fuels for households.

Sources: NSI, BNB.

Chart 71  
Harmonized Price Indices

(on an annual basis)



Sources: NSI, BNB.

rise is expected in heat energy prices after the State Energy and Water Regulatory Commission allowed Bulgargas to increase natural gas prices in the fourth quarter of 2007.

Over the May to June period prices of energy products (primarily transportation fuels) posted an average increase of 5.2 per cent on the same months of 2006, reflecting the continued crude oil price rises on international markets. Reflecting the base effect of the significant surge in crude oil prices in the beginning of the summer of 2006, fuel prices decreased their annual growth rates in the first two months of the third quarter. Annual growth of transportation fuels is likely to accelerate in the fourth quarter, also reflecting the base effect of relatively low oil prices in the last four months of 2006. Our expectations show that average inflation of fuels will hover around 11 per cent in the last quarter compared to the same period of 2006. Risks to the projection stem from possible additional increases in international prices *vis-à-vis* current expectations.

The rate of change in the prices of industrial goods (excluding controlled-price and energy goods) accelerated from 4.2 per cent on average in the second quarter compared with the same period of 2006 to 4.8 per cent on an annual basis in the July to August period. As in the case of services, maintaining high transportation expenditures over the year had an indirect effect on the prices of industrial goods.

In the first two quarters of 2007 average services inflation (excluding administratively set prices) was around 6.4 per cent on the corresponding quarters of 2006, whereas in the July to August period it came to 8.1 per cent on the same months of 2006. One of the major driving factors for services inflation was the prices of catering services which continued to maintain relatively high growth rates under the pressure of food prices, high transportation expenditures over the year and robust consumption. In August prices in the *restaurants and cafes* group posted a 15 per cent increase on an annual basis, an acceleration of 6 percentage points compared with the average annual

inflation for 2007 up to July. A relative moderation in inflation dynamics is anticipated in catering services prices after the stabilization of food prices over the coming months.

Core inflation excluding administratively set prices and tobacco products (whose prices depend largely on changes in excise rates) accelerated from 5.4 per cent in the second quarter to 9.5 per cent in July and August. Foods and services (of which predominantly catering services) had the largest contribution to increasing inflation dynamics.

Core inflation acceleration resulted from the simultaneous effect of external and internal factors. More important external proinflationary factors include: fast and significant rises in international prices of agricultural products; indirect effects of world crude oil price rises; effects of higher external demand for Bulgarian foods after Bulgaria's accession to the EU. Internal factors are associated with shortages in supply of some food products due to unfavourable weather conditions, with higher electricity prices for firms as from 1 July 2007 which pushed manufacturing costs up, with maintaining high growth in household consumption resulting from significant real salary and employment growth over the first half of the year. These developments created a specific situation of uncertainty and inflationary expectations favouring more aggressive behaviour in price decisions on the part of supply. In the last quarter of 2007 annual rates of overall and core inflation are expected to gradually slow down after the stabilization of food prices and associated moderation in inflation dynamics of catering services prices and services prices as a whole.

Table 9  
HICP Inflation Accumulated since Year's Start

	2006	2007
	January – August	
<b>Inflation(%)</b>	<b>3.72</b>	<b>6.83</b>
<b>Contribution, percentage points</b>		
Processed foods (excl. tobacco products)	0.40	2.71
Unprocessed foods	-1.33	0.32
Energy products (excl. those with administratively set prices)	0.87	0.70
Non-energy industrial goods (excl. those with administratively set prices)	0.09	0.56
Services (excl. those with administratively set prices)	1.04	1.91
<i>Catering services</i>	<i>0.31</i>	<i>1.12</i>
Tobacco products	2.25	-0.26
Goods and services with administratively set prices (excl. tobacco products)	0.40	0.89
<i>Electricity</i>	<i>0.00</i>	<i>0.32</i>
<i>Water supply and sewerage services</i>	<i>0.00</i>	<i>0.15</i>
<i>Charges related to personal transportation vehicles</i>	<i>0.02</i>	<i>0.16</i>
<i>Medical and hospital services</i>	<i>0.05</i>	<i>0.10</i>

**Note:** This structure corresponds to the Eurostat classification used to present in a comparable manner the major components of HICP for euro area and EU countries. These components include: *processed foods* (incl. *alcohol and tobacco products*), *unprocessed foods* (*meat; fish and seafood; fruits; vegetables*), *energy products* (*electricity; solid, liquid and gaseous fuels for households; heating; fuels and lubricants for personal transportation vehicles*), *non-energy industrial goods and services* (incl. *catering services*). With the purpose of distinguishing the effects of goods and services with administratively set prices and goods whose prices largely depend on changes in excise rates (tobacco products), their prices are excluded from the major HICP groups under Eurostat.

Source: NSI.



## External Demand and Effects on Prices of Certain Food Products

Bulgaria's integration into the single European market is reflected in stronger external demand and a process of price level convergence, especially evident for food products. After introducing the Common Customs Tariff as from 1 January 2007 and applying the Common Agricultural Policy, higher demand and higher import duties on certain food products pushed up their prices. Indirect indications of higher external demand resulting from the accession to the single European market may be found in commodity exchange markets, export dynamics and the geographical breakdown of exports of some groups of food commodities.

Commodity exchange data for Bulgaria show increased sales of domestic fruits and vegetables by 93 per cent on an annual basis between January and August 2007. Preliminary information on foreign trade dynamics indicates a significant change in physical volumes of exports over the first half of 2007 compared to the corresponding period of 2006 concerning the following groups:

- *milk and dairy products*: real growth in exports by 35 per cent, with higher growth reported for some major commodities and raw materials, i.e. around a four-fold increase in *sour milk and yoghurt* exports;
- *apples and pears*: real growth in exports by around 18 times;
- *sugar*: growth in physical volumes by 22 times.

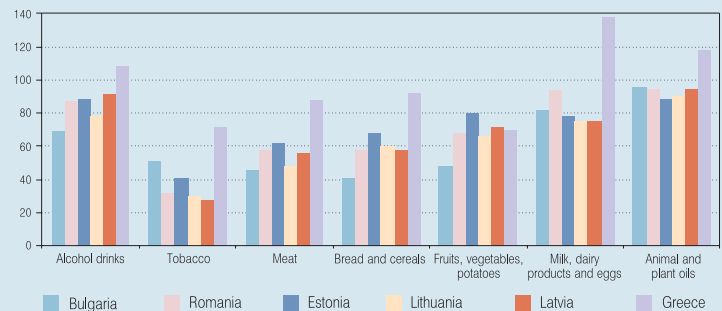
Exports of these commodities to Bulgaria's neighbour EU Member States Greece and Romania grew significantly. In these countries, price levels of milk products and fruits are higher than in Bulgaria which stimulates growth in trade volumes. A comparative analysis of the price levels suggests continued upward price dynamics in certain commodity groups with the lowest relative prices, as:

- *bread and cereals* whose price level in Bulgaria is nearly 40.4 per cent of the average EU-25 level in 2006;
- *meat and meat products*: 46 per cent of the average EU-25 level;
- *fruits and vegetables*: 48.2 per cent respectively.

In the medium term food price dynamics will depend not only on the external and internal demand but also on the velocity of the price convergence process.

Chart 72  
Indices of Comparative Price Levels

(EU-25 = 100, 2006)



Source: Eurostat.



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