

# Economic Review

1/2006





# Economic Review

1/2006



BULGARIAN  
NATIONAL  
BANK

Bulgarian monetary policy regime seeks national currency stability with a view to price stability. The BNB *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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## Abbreviations

BCC	Bank Consolidation Company
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
FDI	foreign direct investment
GDP	Gross Domestic Product
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
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
PPP	Purchasing Power Parity
WB	World Bank

# Summary

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In recent years Bulgaria's economic development was determined by capital inflows. Higher international interest rates in 2005 did not change the direction and volume of financial inflows into Bulgaria's economy due to significant return on investments in the country. BNB international reserves went up and by December 2005 the Issue Department balance sheet figure reached EUR 7370.3 million (up by EUR 599.9 million on December 2004) irrespective both of the sizable outflow of funds on government operations, the bulk of which on early debt payments (EUR 1.3 billion), and worsened current account balance.

The balance of payments current account dynamics over 2005 indicated a growing deficit but with the exception of the third quarter the developments matched forecasts. The analysis of factors affecting the current account over the third quarter established two groups of factors: factors with permanent effect which will determine also the dynamics of current account flows in 2006 and factors with temporary effect which were concentrated in the third quarter of 2005.

Progressively growing domestic demand in line with increased incomes both of households and companies is a permanent factor contributing to relatively high growth rates of imports and exports. Economic agents' positive expectations associated with pending Bulgaria's membership in the European Union as of early 2007 were the major reasons behind the sizable foreign capital inflow, high growth rates of investment demand and enhanced imports of investment goods.

Against all expectations, over the third quarter of 2005 the current account balance worsened as a result of the simultaneous effect of several one-off factors. The increased international oil prices between August and September (disturbed oil supplies from the Gulf of Mexico caused by Katrina hurricane led to a panic and correspondingly to a dramatic increase in international crude oil prices) and larger volume of imported crude oil pushed up the imported crude oil value in euro. Domestic demand went up by 50 per cent which had an immediate effect on the dynamics of imported consumer and particularly investment goods. Relatively high growth rates of exports slowed down due to several temporary problems: the post-privatization technological renewal of the metallurgical enterprises prompted a decline in exports of metals over the second half of 2005; the summer floods (June – August) which affected a significant territory of the country were responsible for decreased exports of agricultural and forestry goods, and probably for the less-than-expected revenue from summer tourism.

The temporary nature of the above factors was confirmed by the balance of payments data for the fourth quarter of 2005. The year-end saw absolutely divergent dynamics of the trade balance components compared with the third quarter, indicating a recovery in export growth and slower import growth. Exports growth was clearly pronounced in all three months and encompassed all major commodity groups (see the Economic Activity Section). Exports posted a 25.4 per cent growth over the fourth quarter against 32.5 per cent in the third quarter. The slowdown reflects lower growth in imports of investment goods and slower growth rate of imported consumer and energy goods. By the close of the year foreign trade dynamics matched the expected domestic demand and confirmed the conclusion that the balance of payments dynamics over the third quarter is an exception.

Based on the analysis results, a gradual improvement in the current account deficit to GDP ratio was expected in 2006. In the first quarter of 2006 this ratio is anticipated to fall under 14.5 per cent and to stay around 14 per cent in the second quarter of the year. Exports are expected to grow annually by 22–24 per cent in the first quarter and approximately by 19–24 per cent in the second quarter of the year, consistent with the improving competitiveness of the Bulgarian industry and accelerated growth in the euro area. Economic growth will stay relatively high and sound in the first half of 2006, with household consumption and investments in fixed capital contributing most significantly to this effect. Domestic demand and retention of international

prices of products of key significance for the Bulgarian economy will maintain nominal growth rates of imports and exports at 18–20 per cent in the first quarter of 2006 and 17–20 per cent in the second quarter compared with the corresponding periods of 2005. Under this scenario of economic development, the negative foreign trade balance contribution will gradually diminish to neutral.

Current account deficit will be financed by inflow of foreign direct investments and loans to the private sector. The private debt is expected to reach 42–44 per cent of GDP by the end of the first half of 2006. Given the flight of funds in the form of early payments on the external government debt and other government transactions, during the first quarter international reserves will temporarily decline and their growth will be restored in the second quarter of 2006.

Money supply dynamics will be determined by the increase in international reserves, government operations and the BNB policy of limiting credit to the non-government sector. Broad money growth rates will slow down in the first quarter of 2006 due to the March 2005 high base, while in the second quarter the M3 monetary aggregate is expected to grow by approximately 18–20 per cent on an annual basis.

To make credit growth over the rates set by BNB Ordinance No. 21 more expensive, as of early 2006 a progressive scale will be introduced for determining additional commercial bank reserves in the BNB, with the first required reserve maintenance period starting on 4 May 2006. In case of compliance with the constraints on credit growth, the increase in claims on the non-government sector is expected to slow down to 24–25 per cent in mid-2006.

Energy commodity prices were the major inflationary factor in 2005, and a specific factor behind the higher inflation in the second half of the year were food price rises as a result of decreased supply. The lower supply reflected losses of agricultural produce caused by the summer floods. Inflation is anticipated to go up to 7.7–8 per cent (on an annual basis) in the first quarter of 2006 reflecting mostly adjusted excise duties on cigarettes. In the second quarter of 2006 the annual inflation rate is expected to subdue to approximately 7.5 per cent.

# 1. External Environment

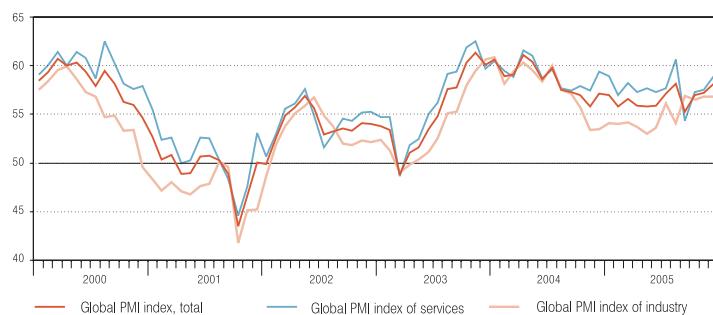
Moderate world economic growth will be retained in the first half of 2006. Inflationary pressure will subdue provided the expected crude oil prices rise at a slower pace. In accordance with the market expectations, the interest rates on US federal funds and those on ECB refinancing operations may rise.

## Current Business Situation

The expected moderate growth of the world economy between January and June 2006 is based on the global economic indices which show increased optimism. The world trade dynamics is another important global economy indicator. In 2005 international trade volume rose at relatively stable rates slightly accelerating in the second half of 2005.

Risks may arise from enhanced global uncertainty associated with the talks and possible measures to be initiated by the UN against Iran's nuclear programme. This leads to a stronger volatility in international fuel price. The risk of avian flu spread worldwide is also challenging for the development of international trade and tourism.

Chart 1  
Global PMI Indices



Source: NTC Research, JP Morgan.

Chart 2  
World Trade  
(annual rate of volume growth, %)

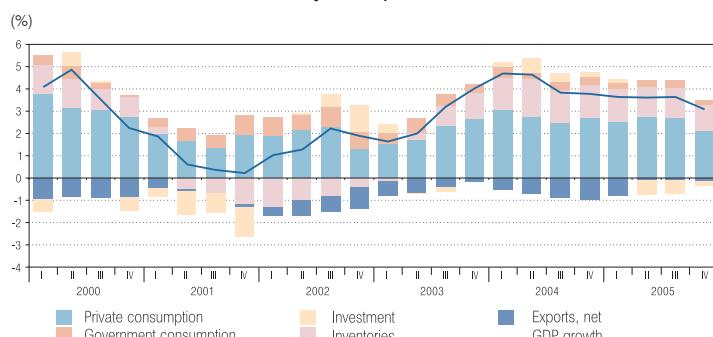


Source: CPB Netherlands Bureau for Economic Policy Analysis.

## The USA

Preliminary data on the US GDP for the fourth quarter of 2005 show a slowdown of economic growth to 3.1 per cent (on an annual basis), reflecting mostly the lower rates of private consumption. Investments in production equipment had a positive effect on growth though their contribution was smaller than in the previous quarter. Housing purchases followed the downward trend of economic growth. Given the reduced defense spending, government consumption affected adversely the economic activity in the fourth quarter.

Chart 3  
Contribution to US Growth by Component  
(%)



Source: Bureau of Economic Analysis.

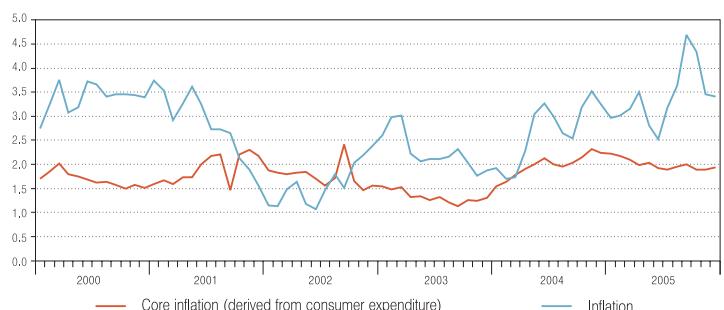
Over the first quarter of 2006 the economic activity associated with enhanced consumption and construction expenditure on recovering the regions destroyed by the Katrina and Rita hurricanes is expected to boost, while the rate of economic growth over the second quarter of 2006 may slow down.

During the last two months of 2005 overall inflation subdued, reflecting the fall of energy prices. Core inflation did not change significantly. Consumer price index growth went down from 4.7 per cent by the end of September to 3.4 per cent in December 2005 on an annual basis. Price index of imported goods, disregarding the effect of oil prices, outstripped core inflation. Companies' opportunities to transfer their expenses on the end-prices remained insignificant. The growth of labour efficiency influencing price dynamics slowed down to 2.2 per cent on an annual basis in the fourth quarter but given the insignificant salary rise, unit labour costs grew at a slower pace which fell to one per cent in the fourth quarter on an annual basis.

Between January and June 2006 core inflation will probably match that reported at the end of 2005 and overall inflation will strongly depend on the movements in international oil prices, which restored the upward trend and are expected to sustain high until the end of 2006.

Labour market conditions stayed stable in the fourth quarter of 2005. Unemployment was five per cent (unchanged on the previous quarter) and the rate of employment growth stabilized at 1.5 per cent.

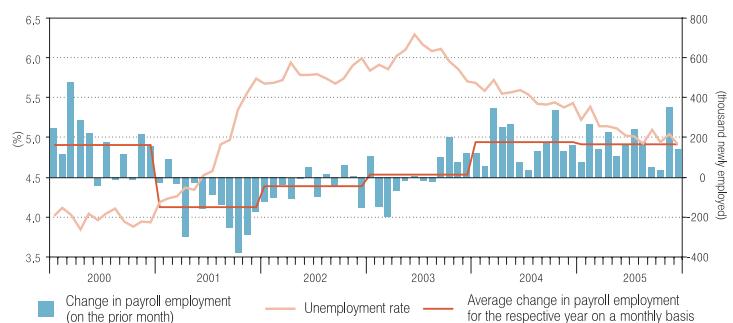
**Chart 4  
US Inflation Rate**  
(change on same period of previous year, %)



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

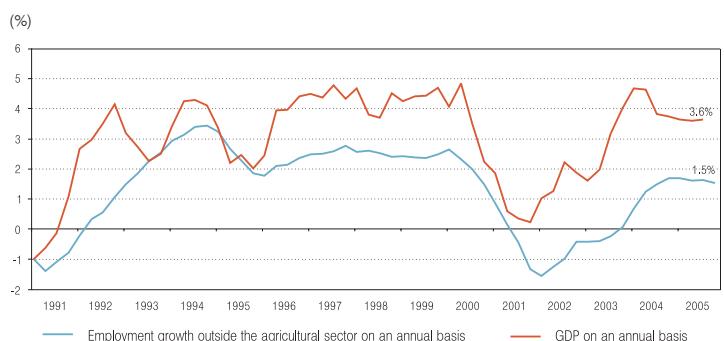
**Note:** The US core inflation is measured by personal consumption expenditures index excluding energy and food expenditures.

**Chart 5  
US Unemployment Rate and Change in Payroll Employment**



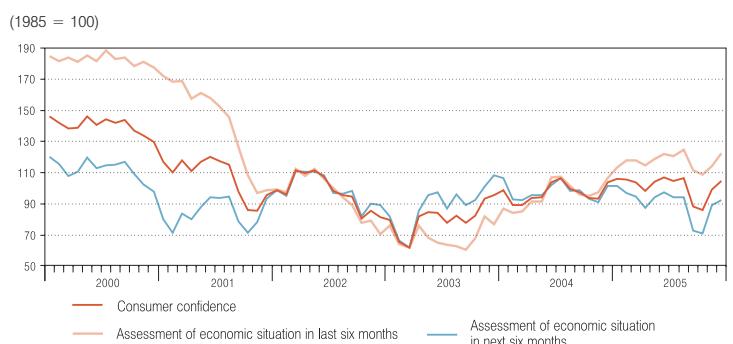
Source: Bureau of Labor Statistics.

**Chart 6  
US Growth and Labour Market**



Source: Bloomberg.

**Chart 7  
US Consumer Confidence Indicators**

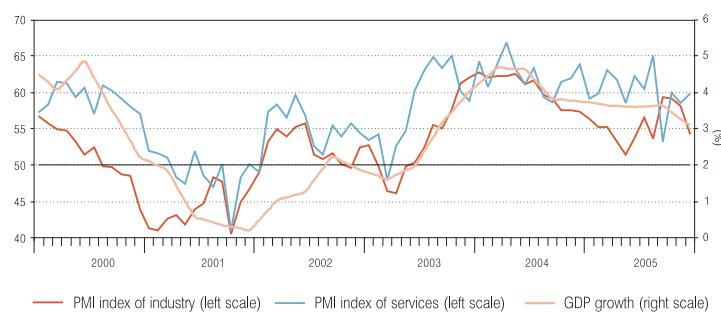


Source: The Conference Board.

At the meeting of the Federal Open Market Committee held at the end of January, federal funds interest rates were raised by 25 basis points to 4.5 per cent. The press release following the meeting states that there is a risk of a price increase under the current economic conditions which may prompt a new interest rate rise. Market participants are unanimous in their expectations of a new rise in interest rates on federal funds by 25 basis points at the March meeting of the Committee and another 25 basis points at the end-June meeting.

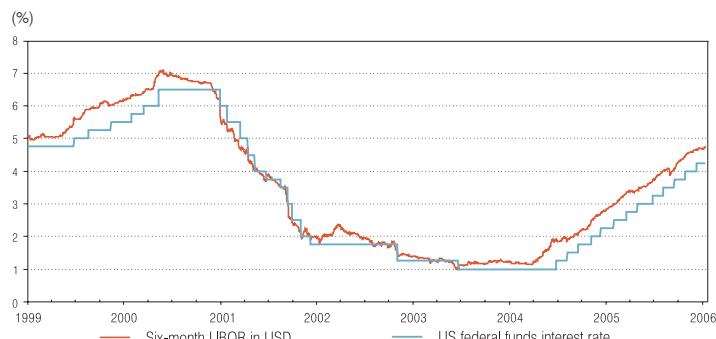
In the last few months fluctuations in the spread between the interest rate on six-month LIBOR deposits in US dollars and that on federal funds remained unchanged (within 30–60 basis points). If it is assumed that the interest rate rise to five per cent is the last for the current interest cycle, the interest rate on six-month LIBOR deposits in US dollars will probably vary between 4.60 and 5.20 per cent in the first half of 2006.

Chart 8  
US PMIs and Growth



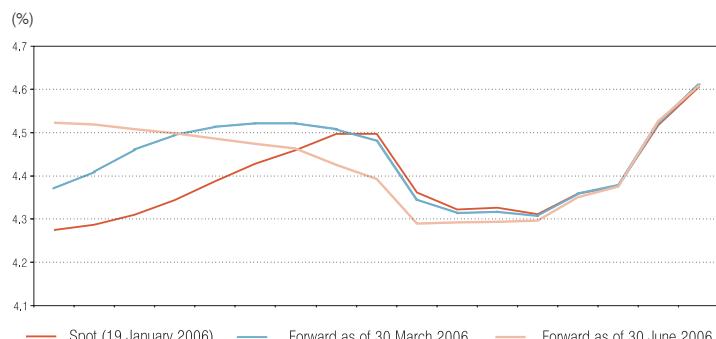
Source: Institute for Supply Management.

Chart 9  
US Federal Funds Rate and Six-month LIBOR in US Dollars (%)



Source: Bloomberg.

Chart 10  
Expected US Yield Curve

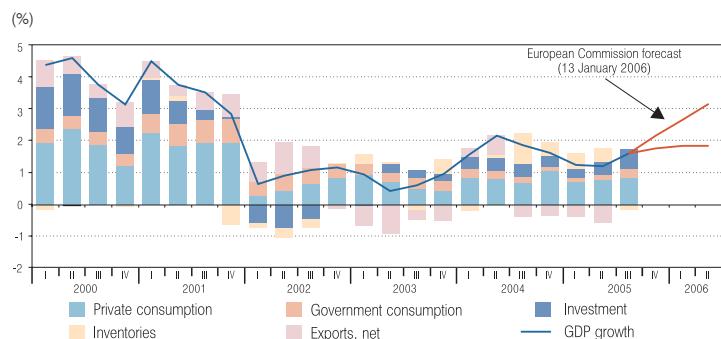


Source: Bloomberg.

## Euro Area

Euro area economy posted moderate growth in the third quarter of 2005. Based on revised data, GDP increased to 1.6 per cent on an annual basis against 1.2 per cent in the previous quarter. Initial data on Germany's GDP show that investment in machines and equipment and net exports contributed significantly to the 2005 growth. Consumer activity remains sluggish irrespective of enhanced economic confidence (ZEW index) and improving labour market conditions in Germany.

Chart 11  
Contribution to Euro Area Growth by Component (%)



Source: Eurostat.

The upward movement of most leading euro area indicators (Ifo index of business climate, index of OECD leading indicators, index of economic confidence of the European Commission) gives rise to expectations for retaining the moderate economic growth in the region. Sound investment demand will have a positive effect on economic growth, while consumer activity is unlikely to recover.

ECB December forecasts about economic growth were changed to 1.2–1.6 per cent (against 1–1.6 per cent) for 2005 and 1.4–2.4 per cent (against 1.3–2.3 per cent) for 2006. According to the opinion of experts from EU financial and non-financial institutions the expected annual GDP growth is 1.3 per cent for 2005 and 1.7 per cent for 2006. The European Commission forecasts point out annual GDP growth of 1.3 per cent for 2005 and 1.9 per cent for 2006.

Inflation in the euro area subsided to reach 2.2 per cent in December on an annual basis (2.6 per cent in September, the highest inflation rate for the last three years). Retention of core inflation at a stable low level (the average value of 1.4 per cent for 2005 on an annual basis) suggests lack of secondary effects of higher fuel prices. Notwithstanding, higher crude oil prices and a possible salary rise in the future may threaten the medium-term price stability.

Given the sluggish consumer demand, euro area corporations refrain from transferring higher production costs on consumer prices. Reported good financial results in the last quarters indicate that they could cover a part of increased raw materials prices and labour costs without raising end selling prices in the domestic market.

Chart 12  
Euro Area: Incomes, Consumption and Savings

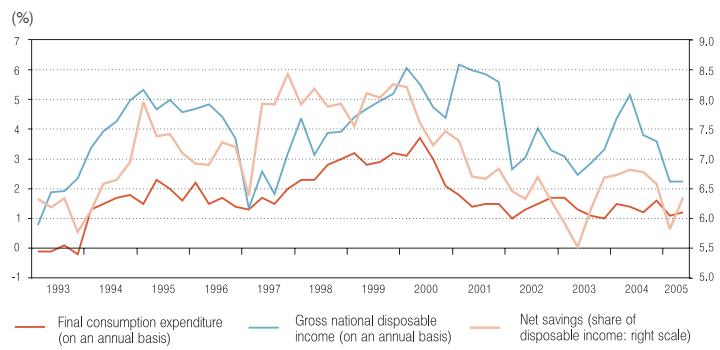
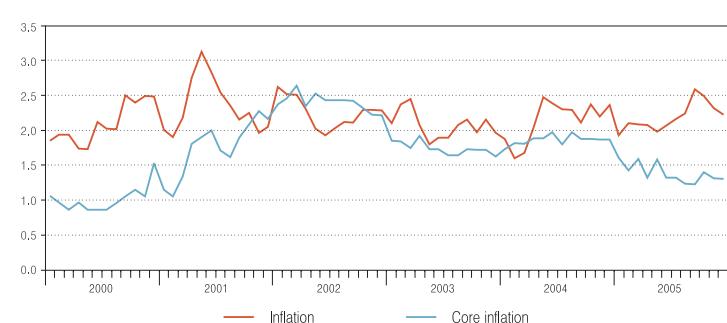


Chart 13  
Euro Area Inflation Rate

(change on same period of previous year, %)



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

Chart 14  
Euro Area: Inflation

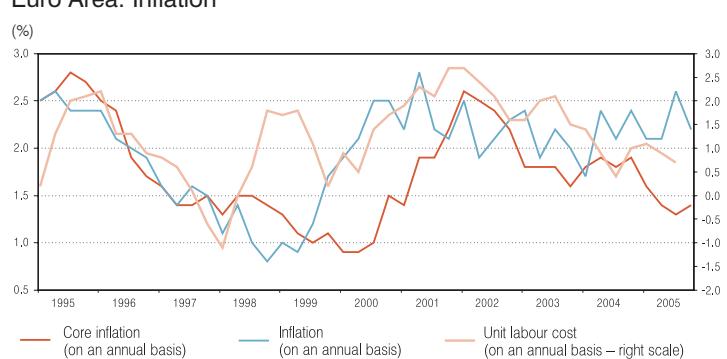
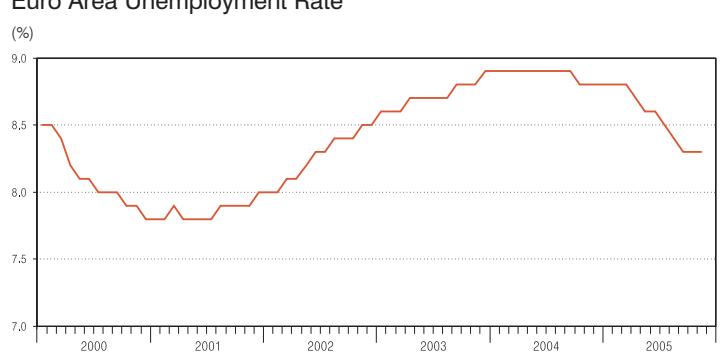


Chart 15  
Euro Area Unemployment Rate



During the last quarter of 2005 labour market did not experience significant changes, with unemployment subsiding to 8.4 per cent in December (on an annual basis). The results from the economic survey conducted by the European Commission in December suggest consumer subsided concerns about unemployment in the following twelve months. PMI indices dynamics show a moderate increase in the assessments of employment in manufacturing and services sectors. These indicators supported the expected retention of favourable labour market prospects in the first half of 2006.

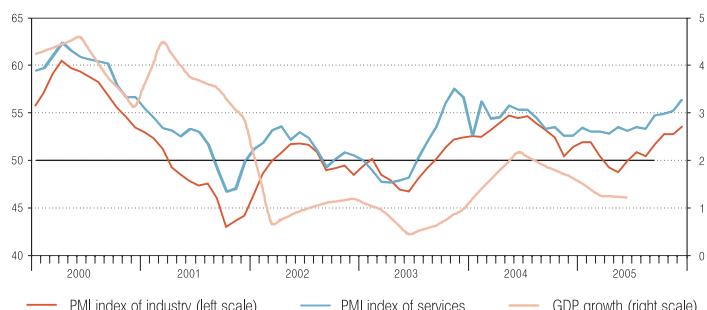
December saw the first ECB rise in the interest rates on refinancing operations by 25 basis points since two and half years in response to the growing risks to price stability. Market participants' expectations had changed immediately after the ECB November meeting, prior to the December changes in the ECB monetary policy. At its January and February meetings the ECB did not change interest rates but intensified anti-inflationary measures. As a result, most market participants expect a rise in interest rates in March.

Chart 16  
Euro Area Consumer Confidence Indicators



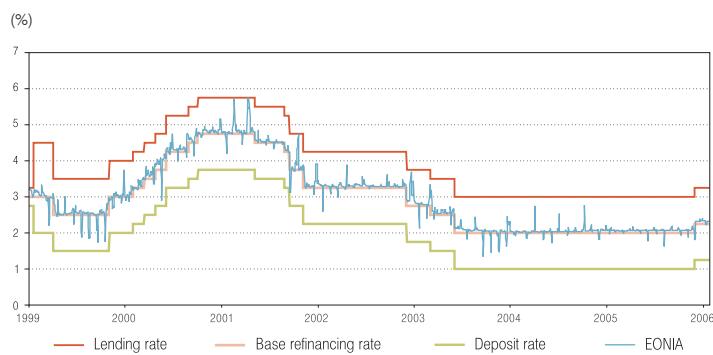
Source: Eurostat.

Chart 17  
PMI Indices and Euro Area Growth



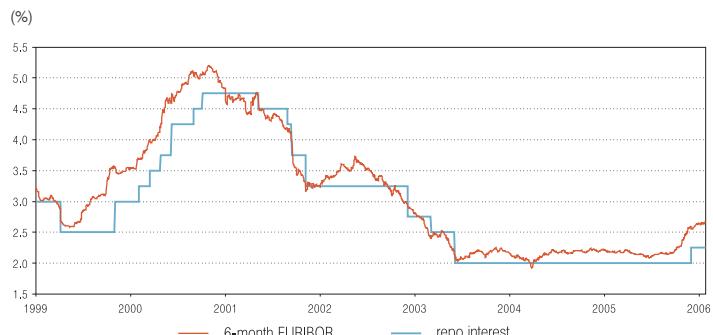
Source: Eurostat.

Chart 18  
Euro Area Base Interest Rates



Source: Bloomberg.

Chart 19  
BIR on Refinancing Operations and Six-month EURIBOR



Source: Bloomberg.

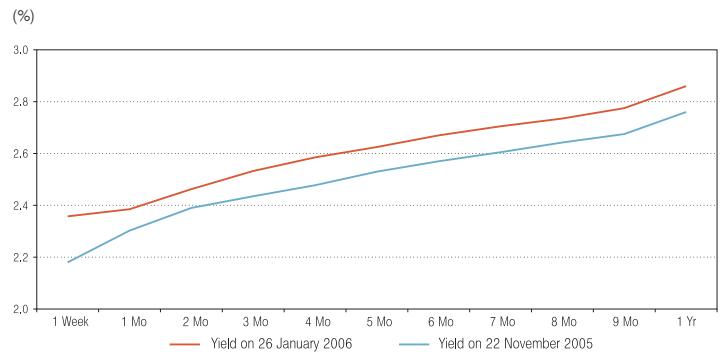
Following the December meeting, the yield of six-month LIBOR deposits slightly went up to reach 2.69 per cent in the beginning of February. At the close of January expectations were for a change in interest rates by 25 basis points to 2.50 per cent. If this happen, the six-month LIBOR will vary within 2.60–2.90 per cent until mid-2006.

Chart 20  
Curve of Expected Euro Area Yield



Source: Bloomberg.

Chart 21  
Euro Area Money Market Yield Curve



Source: Bloomberg.

## The Monetary Policy and Yield Curve in the Euro Area

December saw the first ECB rise in the interest rates on refinancing operations by 25 basis points since two and half years in response to growing risks to price stability. Steadily appreciating crude oil in the fourth quarter contributed to the progressive increase in the euro area inflation rate which reached 2.6 per cent in September 2005 (on an annual basis) significantly outstripping the target set by the ECB. Monetary policy alternations were preceded by ECB official press releases with strong anti-inflationary purposes and market participants expected the pending interest rate rise. November saw the yield curve rise in the sectors with maturity of up to two years, the ones directly dependant on the expected monetary policy changes. Therefore, the yield of short-term benchmark Eurobonds did not change dramatically immediately after the ECB December meeting at which the decision to raise the repo interest rate was taken.

The increased ECB interest rate combined with the monetary authorities readiness for initiating additional measures to cut off the monetary stimulus (provided the inflation threatens price stability) and the descending trend in oil prices in December added to subsided inflationary expectations. This affected the yield curve in the long-term maturity sectors which posted a decline at the close of 2005 and early 2006. The slope of the yield curve straightened out as measured by the spread between the sectors of ten and two years which fell to 45 basis points in early 2006 against 72 basis points in the beginning of December 2005.

## EU-25

In the third quarter of 2005 the EU-25 growth accelerated to 1.8 per cent on an annual basis. Over the review period the new member states showed relatively high growth rates of 4.6 per cent. Estonia, Lithuania and Latvia reported the highest growth and following the slowdown in the second quarter of 2005 economic growth in Poland also boosted.

The average monthly inflation in newly acceded states was 2.2 per cent over the fourth quarter of 2005 tending to decline consistent with subdued inflation rates in fuel and transportation prices.

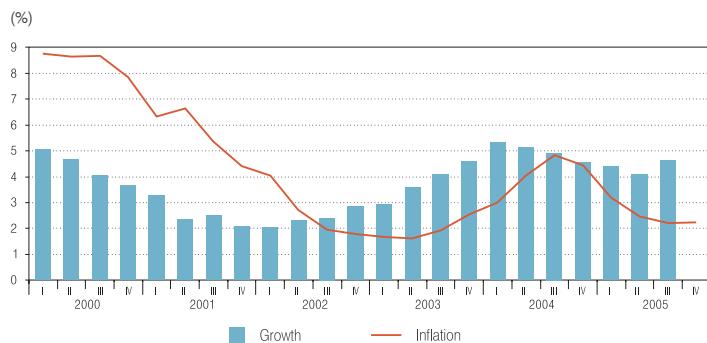
## The USD/EUR Rate

During the fourth quarter of 2005 the USD/EUR dynamics was impacted by the expected changes in the interest rate differential between the two currencies. The US trade deficit, a fundamental factor underlying market participants' expectations, temporarily lost its significance as the worsened trade deficit was a result of the one-off rise in the value of imports, consistent with larger physical volumes and higher prices of petroleum products. Increased deficit was accompanied by a sizable capital inflow in the form of US purchases of financial assets.

The US dollar was traded within USD 1.167–1.230 *per euro*, tending to appreciate at the start of December underpinned by the widened interest rate differential in favour of the USA. The strengthened euro in early December reflected the changed official position of the US Federal Reserve System which announced after the December meeting that the period of rising interest rates would be over. Concurrently, enhanced optimism in the euro area coupled with ECB decision to raise interest rates on refinancing operations in the beginning of December changed expectations in favour of the euro.

In the following months of 2006 the expectations for a change in the interest rate differential between the two currencies will dominate the dynamics of market fluctuations with the exchange rate volatility expected to intensify.

Chart 22  
Growth and Inflation in the New EU Member States



Source: Eurostat, BNB.

Chart 23  
USD/EUR Exchange Rate



Source: Bloomberg.

## The Balkan Region

Balkan countries' growth stayed high in the third quarter of 2005 and data on industrial output at the close of 2005 give grounds to expect a favourable economic situation in the first half of 2006. Low Romania's growth in the third quarter of 2005 reflects both the losses in agriculture caused by the summer floods and the high 2004 base when an enormous volume of agricultural output was reported.

Turkey and Romania made a significant progress in their efforts to subdue inflation irrespective of unfavourable international economic conditions for fuel prices. The average inflation reported in 2005 was 8.2 per cent and 9 per cent respectively (against 10.7 per cent and 11.9 per cent in 2004).

Table 1  
Real Growth and Inflation in Balkan Countries

	2003		2004					2005				
	Total		I quarter	II quarter	III quarter	IV quarter	Total	I quarter	II quarter	III quarter	IV quarter	Total
<b>Growth</b> (on an annual basis, %)												
Bulgaria	4.5	4.5	5.5	5.8	6.2	5.6	6.0	6.4	4.6	4.6	4.6	:
Greece	4.7	4.3	4.1	4.0	4.2	4.2	3.5	3.7	3.8	3.8	3.8	:
Macedonia	2.8	3.5	4.8	4.6	3.4	4.1	2.8	4.8	3.9	3.9	3.9	:
Romania	4.9	6.1	7.1	11.1	8.9	8.3	5.9	4.1	1.8	1.8	1.8	:
Turkey	5.8	11.8	14.4	5.3	6.3	8.9	4.8	4.2	7.0	7.0	7.0	:
Croatia	4.3	4.2	3.8	3.6	3.6	3.8	1.8	5.1	5.2	5.2	5.2	:
Serbia and Montenegro	2.4	7.5	5.5	9.5	14.2	9.3	5.3	6.8	5.6	5.6	5.6	:
<b>Inflation</b> (as of end of period, %)												
Bulgaria	5.6	6.4	6.7	6.8	4.8	6.2	3.8	4.9	4.8	6.6	6.6	5.0
Greece	3.1	2.9	3.1	3.0	3.2	3.0	3.4	3.2	3.8	3.5	3.5	3.5
Macedonia	2.6	1.6	-0.5	-1.5	-1.1	-0.4	-0.4	0.9	0.8	0.8	0.8	0.5
Romania	14.1	13.6	12.3	11.9	10.0	11.9	8.9	9.9	8.9	8.5	8.5	9.0
Turkey	18.4	14.1	9.3	9.5	9.7	10.7	8.6	8.6	7.9	7.6	7.6	8.2
Croatia	1.7	1.8	2.3	1.8	2.3	2.1	3.1	3.0	3.4	3.8	3.8	3.3
Serbia and Montenegro	8.1	8.5	10.2	12.3	13.0	11.0	16.0	16.5	15.6	16.8	16.8	16.2

Source: Statistical institutes and central banks of respective countries.

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

### Crude Oil

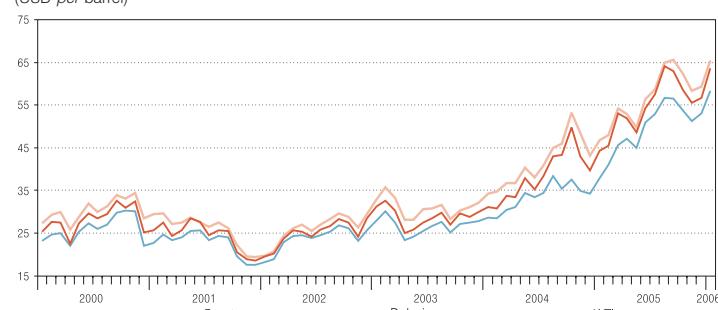
Uncertainty of crude oil market subdued over the last quarter of 2005 due to additional OPEC and IEA supplies and the lower US demand caused by atypically high temperatures in the beginning of the winter. The average monthly Brent price was USD 56.9 per barrel in the review quarter (against USD 61.6 per barrel in the previous quarter).

As from the second half of December 2005 crude oil again started appreciating, reflecting growing global uncertainty. Iran announced that its nuclear programme will be renewed in 2006 which was followed by a sharp reaction by the EU and the USA.

Chart 24

Crude Oil

(USD per barrel)



Source: World Bank.

This again resumed the market fears that the UN Security Council would impose trade sanctions against Iran. Nigeria, where the extraction and exports of crude oil were partially disturbed in January 2006, was another factor eroding the crude oil market stability. At that time petrol facilities of several international companies were attacked by local armed groups and a facility with extracting capacity of 220,000 barrels a day (10 per cent of the Nigeria's net exports) was damaged.

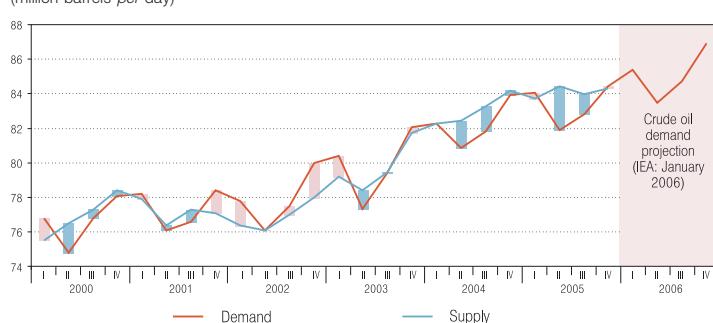
These two factors which increase the uncertainty about future crude oil supply coupled with the January disturbances in Russian natural gas supplies to Ukraine and Europe, which actually did not change significantly demand and supply, contributed to the Brent price rise in January 2006 to USD 63.6 *per barrel*.

Trade on crude oil term markets, and particularly 'non-trade' transactions conducted by large hedging funds, continued to impact crude oil price dynamics. The number of contracts in the short-term segment of 'non-trade' transactions in the fourth quarter of 2005 increased by 77 per cent on an annual basis.

The Brent crude oil price is expected to vary between USD 56 and USD 66 *per barrel*. In case of unfavourable developments in the geopolitical situation, crude oil price may rise significantly.

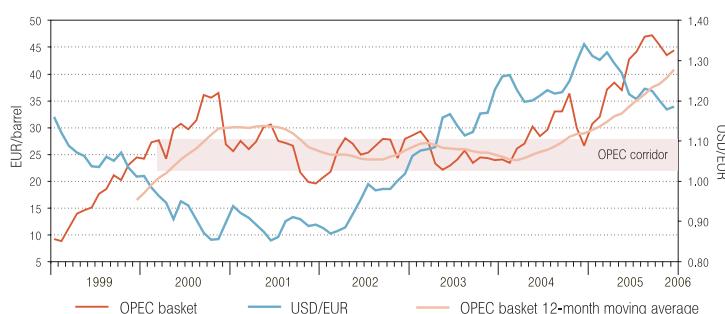
The price of crude oil OPEC basket, calculated in euro declined during the fourth quarter of 2005 down to EUR 44.5 *per barrel* with slight monthly fluctuations of ± EUR 1 *per barrel* (a 3.6 per cent decline compared with the previous quarter and a 43.5 per cent increase compared to the third quarter of 2004). Based on market expectations about the USD/EUR exchange rate for the first half of 2006, the price will vary between EUR 46 and EUR 52 *per barrel*.

Chart 25  
World Crude Oil Demand and Supply  
(million barrels *per day*)



Source: IEA.

Chart 26  
OPEC Crude Oil Basket Price in Euro



Source: World Bank, ECB, BNB, OPEC.

## The Effect of Crude Oil Prices on Major Macroeconomic Indicators for Bulgaria in 2005

During 2005 the crude oil price followed its ascending trend established in the previous two years, with the average EUR price for Brent oil increasing by 43 per cent on the international markets. This sizable increase worsened the trade balance and pushed up inflation rate in Bulgaria. The economic activity in the country is still not seriously affected by the growing prices of crude oil, which is evidenced by the real increase in oil product and fuel consumption during the year.

### *The effect on the trade balance and the current account*

According to the Bulgarian foreign trade data crude oil and petroleum products accounted for 16 per cent of total imports (CIF), with petroleum products comprising ten per cent of exports (FOB). Due to the relatively larger share of these products in foreign trade, price changes had a significant impact on the trade balance.

The analysis shows a strong relationship between the international crude oil prices, the prices of imported crude oil and the prices of exported petroleum products. Based on Customs Agency data, the correlation coefficient between the price of the imported crude oil and the international price of the Brent oil is evaluated at 0.91<sup>1</sup>, and the correlation coefficient between the price of the imported crude oil and the price of the exported petroleum products at 0.85. Export price growth lagged behind the import prices during 2005, since the price (in euro) of the imported crude oil increased by 44.9 per cent and the price of the exported petroleum products by 41 per cent. This is an additional factor affecting negatively the trade balance.

In addition to the price effect, the positive relationship between the dynamics of prices and the quantity of imported crude oil also affected the trade balance. The evaluated correlation between the two indicators for the last two years on the basis of monthly data is 0.68, while on a quarterly basis for the last four years it is 0.53. The calculated coefficient determining the quantity by the price of imported crude oil is 0.48, and the marginal effect is 1.33 if using monthly series.

During the January – December 2005 period expenditure on Bulgaria's crude oil imports exceeded by EUR 655.2 million that in 2004, including the changes caused by price increases, worth EUR 507.9 million. Imported natural gas cost EUR 61.2 million more; of this EUR 56 million due to higher prices. The income generated from petroleum product exports increased by EUR 351.5 million on the previous year, including EUR 277.3 due to the price factor.

The net effect of price increases in crude oil, petroleum products and natural gas during 2005 led to worsening the trade balance of the country by EUR 286.6 million (21 per cent of the total worsening effect).

Table 2  
The Effect of Prices of Crude Oil, Petroleum Products and Natural Gas (January – December 2005)  
(million EUR)

	Change on January – December 2004, due to the price factor			
	crude oil and petroleum product	natural gas	total	reported change (%)
Exports (FOB)	277.3	-	277.3	19%
Imports (FOB)	507.9	56.0	563.9	20%
Trade balance	-230.6	-56.0	-286.6	21%
Current account	-257.4	-60.5	-317.9	21%

### *The effect on inflation and economic activity*

The increase in international oil prices during 2005 led to a price increase in transportation fuels by 24.1 per cent. The largest jump took place in July, when the threshold of USD 55 per barrel of Brent was crossed. The price of the fuel for households increased by 8.3 per cent. Fuels (coal and wood) had the largest share. Given the sustained high petroleum product prices and increased natural gas prices, in the second half of the year adjustments were made in heating prices, which increased by 20.5 per cent. The direct result on consumer prices was 8.6 per cent inflation for the energy products and services.

The calculation of energy expenditure as part of the prime cost of products and services result in an indirect effect, which to a large extent affects the main consumer products and services. Following the fuel price increase, first the transportation services went up by 11.7 per cent for the year. During 2005 the transport companies began to transfer a larger amount of the prime cost increase of the services onto consumers and customers, which is reflected in the data on gross output deflators and the intermediate consumption of transportation. Chart 27 indicates that this step has delayed by nearly an year.

<sup>1</sup> The analysis is based on data from the 'Balance of Payments for Bulgaria (January – December 2005)' publication, data from customs declarations from the Customs Agency and additional analysis prepared by the Economic Research and Forecasts Directorate of the BNB. Monthly data for 2004 and 2005.

Table 3  
Transportation Services Produced and Used

	2004												2005												
	January – September			January – November			January – September			January – November			growth			growth			growth			growth			
	Nominal	Real	appreciation	Nominal	Real	appreciation	Nominal	Real	appreciation	Nominal	Real	appreciation	Nominal	Real	appreciation	Nominal	Real	appreciation	Nominal	Real	appreciation	Nominal	Real	appreciation	
Transportation expenditure per household member, including fuels <sup>1</sup>	11.9	7.5	4.1	10.4	4.8	5.3	15.3	3.5	11.4	13.9	2.3	11.4													
Transport services used <sup>2</sup>	5.3	1.9	3.3				14.8	2.3	12.2																
Transport industry <sup>2</sup>	Gross output	10.6	5.7	4.6			12.0	3.8	7.9																
	Intermediate consumption	12.5	6.9	5.3			10.6	2.8	7.6																
	Value added	6.9	3.5	3.3			14.9	5.9	8.6																
Producer price index in oil refining industry <sup>3</sup>				4.9			10.1			35.3															33.0

Note: All data indicate percentage change on the corresponding period of the previous year.

<sup>1</sup> NSI data on household budgets.

<sup>2</sup> The System of National Accounts.

<sup>3</sup> Statistics of industry.

Immediately after the sudden petroleum price jump, in July the price of bread also increased by 3.3 per cent on a monthly basis. In the following months the growth subsided and at the end of the year the accumulated inflation for processed foods amounted to 2.9 per cent. As the international energy prices were sustained at the level of the second half of 2005, no secondary effects were recorded.

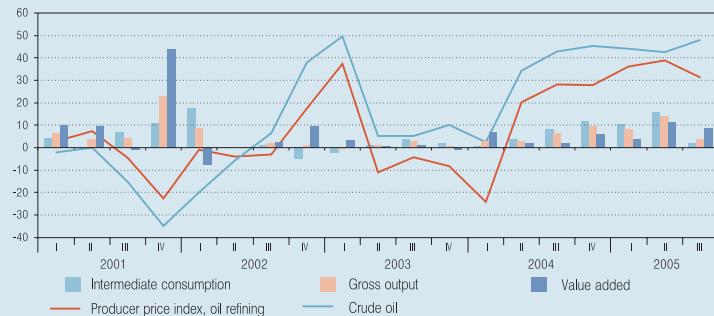
Due to the low price elasticity of household fuel consumption, the expenditure on fuel and transportation services increased by 14 per cent in 2005, which increased the relative share of the transportation group in total monetary expenditure *per a* household member from 6.9 per cent in 2004 to 7.1 per cent in 2005. As a result of the 6.5 per cent real income increase *per* household member in real terms, the consumption of products and services for transportation purposes increased by 3.8 per cent, though at a slower rate compared with the previous year (6.5 per cent).

Consumption of petroleum products and fuel for the economy between January and October increased by 8.5 per cent compared to the same period of the previous year, including gasoline and propane-butane by 10 per cent each and diesel fuel by 23 per cent. The main factor behind the consumption increase is the buoyant economic activity and the more intense usage of the transportation vehicles, construction machines, etc. The increase in petroleum products consumption is a sign showing that the increased crude oil prices do not affect economic growth.

Chart 27

### Price of Petroleum and Oil Products and Deflators in Transportation

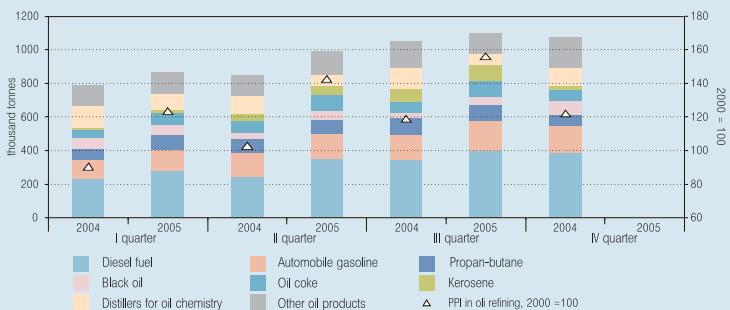
(share on corresponding quarter of the previous year)



Source: World Bank, NSI.

Chart 28

### Consumption of Oil Products in Bulgaria



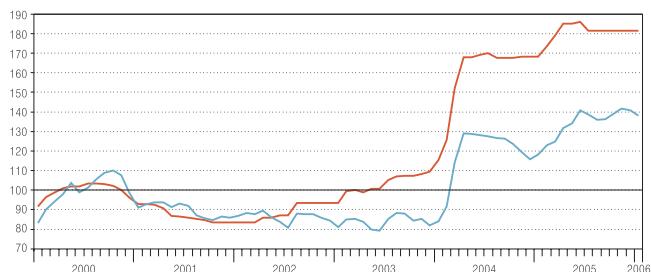
Source: NSI.

## Major Raw Materials and Commodity Prices

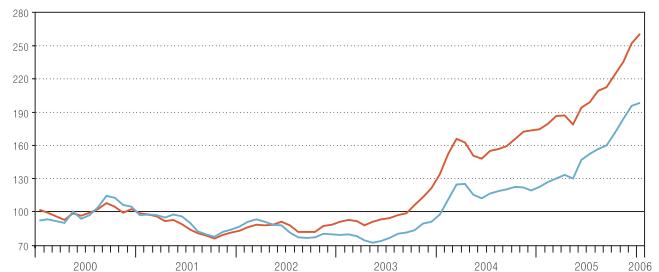
The non-ferrous metals continued to appreciate during the fourth quarter of 2005. Zinc, copper and aluminium prices increased most significantly: by 47.3 per cent, 39.1 per cent and 13.6 per cent respectively (against the fourth quarter for 2004). The low world deposits and the enhanced demand, especially from China, continued determining the metals price dynamics. Steel price rose by 7.9 per cent compared with the last quarter of 2004. During 2005 a growth of 6.5 per cent was reported in the steel production, with China contributing most substantially (27.1 per cent), followed by India (19.8 per cent) and the two countries contributing by 7.1 and 0.6 percentage points respectively to the world output. The USA and EU reported a decline in production by 4.4 per cent and 3.8 per cent. It is expected that the non-ferrous metals will continue to appreciate during the first half of 2006, and the price of steel will retain its end-2005 level.

Chart 29  
Price Indices of Major Commodities and Commodity Groups

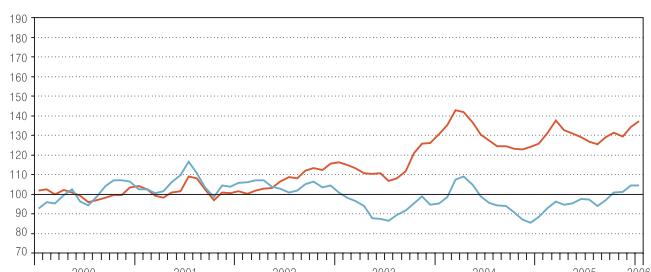
Steel (2000 = 100)



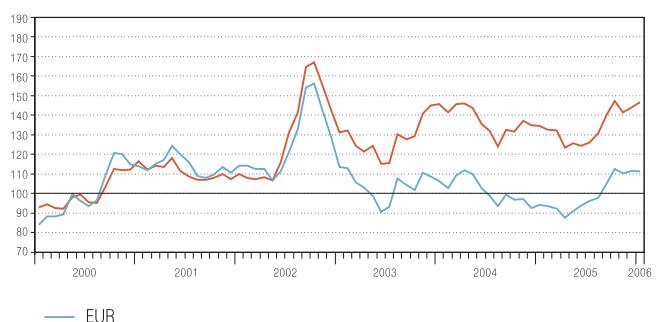
Copper (2000 = 100)



Food (2000 = 100)



Wheat (USA, HRW) (2000 = 100)



— USD

— EUR

Source: World Bank, BNB.

Food prices increased during the fourth quarter by 6.7 per cent compared with the same period of 2004. As in the previous quarter, most of the grain prices went up. Sugar price also rose, and enhanced demand reflected the use of sugar cane for production of ethanol. During the first quarter of 2006 the price levels of the last quarter of 2005 are expected to sustain.

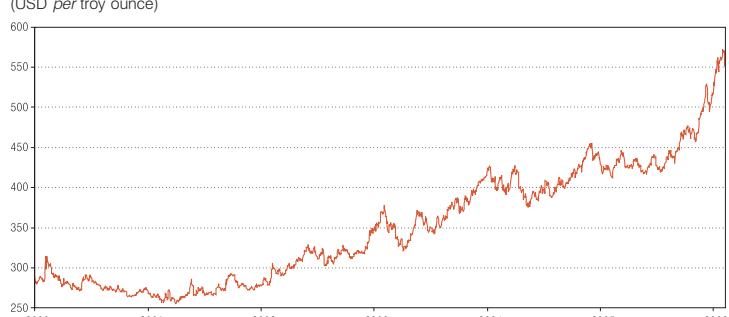
## Gold

During the fourth quarter of 2005, consistent with the expectations for realizing higher yield, demand for gold for investment purposes noticeably increased. The strong investment interest came from Japan, where low interest rates and the appreciation of the yen against the US dollar decreased the relative expenses for exposure financing in this asset class. The demand for gold for investment purposes was accompanied by intentions of diversifying the foreign currency reserves of the central banks of China, Russia and South Africa which created expectations for future price increases.

The higher liquidity on the financial markets in a global aspect continued to provide considerable support to the demand for gold. Concurrently, the rise in oil prices stimulated the speculative demand, motivated by the store of value function of gold in case of rising inflation. With the geopolitical tension rising due to Iran's nuclear programme and following Palestine's elections, gold is regarded as a secure investment haven.

The market expectations regarding the gold price movements during the first two quarters of 2006 are dominated by the belief for sustained investment interest. Appreciation of gold is expected to be driven by the high physical demand for jewelry production in Asia. Regarding the trend of changing policies of excess liquidity and low interest rates on behalf of the central bank of Japan and the expected increase in the US and the euro area interest rates in the next months, the price of financing exposures in gold will increase.

Chart 30  
Spot Price of Gold  
(USD per troy ounce)



Source: Bloomberg.

## Bulgarian External Debt Dynamics

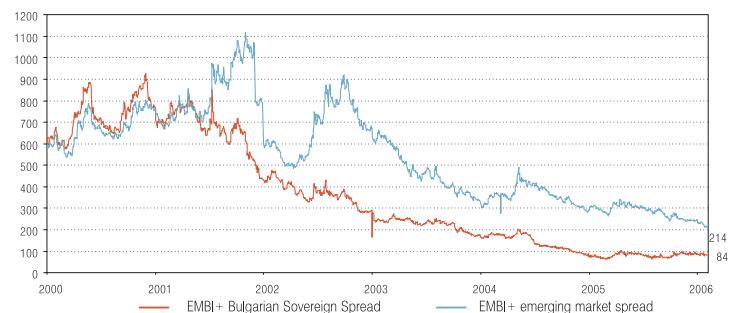
At the end of 2005 and early 2006 the trend towards a progressively increasing interest in government debts of emerging markets was sustained. The expectations of the US interest rate policy related to a possible discontinuation of the federal funds interest rates increase, as well as investor inclination for undertaking higher risk, led to stronger demand for financial instruments with higher yield. The growing interest is accompanied by expectations of favourable macroeconomic conditions, related to the lowered interest rates in Brazil and Turkey, which have a large share of the global external debt market of developing countries, and early payments on external debt made by Brazil and Argentina.

Under the conditions of growing market interest, the spread on the Bulgarian external debt yield, measured by the JP Morgan EMBI+ index, stayed stable by end-2005 and early 2006. The sustainable investment interest in the Bulgarian external debt reflected the stable macroeconomic conditions in the country and the positive effect of country's pending EU accession. At the end of 2005 and the beginning of 2006 operations on early redemption of debt to the IMF and on the loans from the World Bank amounting to EUR 339.1 million were another favourable sign for the international investors.

The outlooks are for sustaining the stable investors' interest in Bulgaria's external debt, accompanied by the expectations of favourable macroeconomic conditions and prudent fiscal policy.

Chart 31  
Spread of JP Morgan Index for Emerging Markets

(basis points)



Source: Bloomberg.

## 2. Financial Flows, Money and Credit

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Over the recent three years Bulgaria's economic development was determined by capital inflows. The increase in international interest rates in 2005 caused no change in the direction and volume of financial inflows due to relative high investment returns in the country. The worsened trade conditions and slower growth rates of the EU countries contributed to the increase of the trade balance deficit, but the notable inflow of financial resources during 2005 was in excess of the current account deficit. The direct result from the capital inflow is a private sector investment growth which aids the businesses in renewal of their assets. The indirect result is shown in international reserves growth, which through the mechanism of the currency board leads to an increase in monetary base, and through the process of money multiplication it affects broad money and credit dynamics.

International reserves of the BNB increased and in December 2005 the Issue Department balance sheet figure reached EUR 7370.3 million, up EUR 599.9 million on December 2004. The outflow of financial resources on government operations, the bulk of which was the early repayment of debt amounting to EUR 1.3 billion, exerted substantial influence on the level of international reserves.

Table 4  
Cash Flows Which Prompted Significant Changes in Gross International Reserves

	October – December 2005	2005, total
<b>A) Purchases and sales of reserve currency</b> (million EUR)		
- Net purchases from commercial banks	EUR +221 million	EUR +1408 million
- Revenue (outflows) related to net purchases (sales) at tills	EUR +224 million	EUR +1419 million
	EUR - 3 million	EUR - 11 million
<b>B) Changes due to revenue (outflows) on commercial banks' minimum required reserve accounts in foreign currency</b>	EUR - 7 million	EUR + 394 million USD - 99 million CHF - 52 million*
<b>C) Changes due to flows on government accounts (only the largest cash flows: revenue and payments)</b>	<b>Revenue:</b> EUR 116 million, a loan disbursed by the IBRD <b>Payments:</b> EUR 450 million; JPY 307 million; SDR 7 million; USD 5 million	<b>Revenue:</b> 1) EUR 602 million from privatization; 2) EUR 175 million from external loans; 3) EUR 17 million from domestic debt issues. <b>Payments on external debt**:</b> USD 1777 million; EUR 728 million; JPY 2.1 billion; SDR 26 million. <b>Payments on domestic debt:</b> EUR 14 million.

\* Outflows in US dollars and Swiss Franks for the year result from amendments to Ordinance No. 21, stating that banks can no longer maintain minimum required reserves in currencies other than levs and euro.

\*\* External debt payments include an early repayment of EUR 1.3 billion.

Source: BNB.

The inflow of financial resources, mainly in the form of net currency purchases by commercial banks, offset the decrease in international reserves caused by the government operations, and set grounds for international reserves growth.

## Financial Flows and External Position Sustainability

In the first quarter of 2006 a current account deficit is expected on an yearly basis under 14.5 per cent of GDP and around 14 per cent for the second quarter of the same year. The inflow of FDI and borrowings towards the private sector will continue, and private debt will reach 42–44 per cent of GDP at the end of the first half of 2006.

International reserves will temporarily decline over the first quarter due to the early external government debt repayment and other transactions of the government, but will start to increase over the second quarter.

In 2005 the current account deficit amounted to EUR 3163 million, a deterioration of EUR 1514.7 million. Half of this decline (EUR 778 million) was realized during the third quarter of the year, and instead of the expected seasonal current account surplus reflecting a set of factors, a deficit of EUR 426.8 million was reported. These factors led to the simultaneous slowdown in growth rates of goods exports, speeding up of goods imports rates and a smaller

growth of income from tourism compared to the third quarter of 2004. For forecasting purposes, it was necessary to analyze the factors which prompted worsening of the current account and trade balance in the third quarter of 2005. It was also necessary to determine which of these factors were one-off and which will continue to influence the current account flows. It is expected that the processes which fall in the latter category will maintain their leading role during the first half of 2006, while the one-off factors will cease to be important for Bulgaria's foreign trade.

## Factors Worsening the Current Account in 2005

Factors which contributed to the current account deficit growth in 2005 could be separated into constant and temporary.

### *1. Factors which will maintain their influence over the foreign trade in 2006*

- The positive expectations of economic agents related to the upcoming membership of the Republic of Bulgaria in the EU at the beginning of 2007 give reason for high flow of foreign capital, high growth rates of investment demand and increased imports of investment goods.
- The increased employment rate and real growth of household income lead to increases in cumulative domestic demand and in imports of goods (in particular consumer goods).
- The international prices of crude oil will probably maintain at levels close to the average price for the second half of 2005 (by around 12 per cent higher than the average price for the whole 2005).
- The increasing international competition in the textile and clothing sector is the reason for re-orientation of the local producers towards the domestic market. The ongoing production restructuring will prompt a change in the quality of produced goods and improve effectiveness, but the exports rates in this sector will not reach the levels of previous years.

### *2. Temporary factors which arose in 2005*

- Floods during the summer months (June – August) which damaged considerable territories of the country were the reason for the decline in exports of agricultural products in the third quarter. It is possible that the floods are also the reason for the lower-than-expected income from tourism during the summer months of 2005.
- The increased imports of crude oil in physical volumes coincided with the substantial increase in international oil price in August – September (the disruption of oil deliveries from the Mexican gulf caused by the Katrina hurricane led to panic and respectively to a jump in the international price of crude oil). As a result, the trade balance worsened over the third quarter of the year.
- The significant increase in investment and consumer demand over the third quarter of 2005 led to a faster rate of imports growth. In 2006 the forecast is for a more moderate domestic demand growth rates.
- The post-privatization technological renovation in the metallurgy sector enterprises led to a decrease in metals exports in the second half of 2005. From the beginning of 2006 exports of this group are expected to be restored (a relative share of approximately 8 per cent in total exports).

The current account of the balance of payments continued to worsen during the fourth quarter of 2005, but at much slower rates and within anticipated ranges. In October the current account worsened by

EUR 165.4 million, in November by EUR 92.7 million and in December by EUR 115.6 million. For these three months the main reason for worsening was the trade deficit, which increased by EUR 161 million, EUR 107.2 million and EUR 66.8 million respectively. The end of the year saw a substantially different trade balance component dynamics compared to the third quarter, with restoring exports growth and a relative slowdown in imports growth rates. Exports growth affected all main groups of goods and was clearly expressed during the three months (see the *Economic Activity Section*). Imports growth in the fourth quarter came to 25.4 per cent compared to 32.5 per cent for the third quarter. The slowdown was due to the weak increase in imports of investment goods, as well as to the slowdown in imports of consumer and energy goods. This is in line with expected dynamics of domestic demand for the fourth quarter of 2005 and confirms the finding that the development in the balance of payments over the third quarter is rather an exception.

The balance on services worsened by EUR 60.5 million in the fourth quarter, the balance on income by EUR 31.7 million which partially was offset by the increase in net current transfers by EUR 55.2 million. These results support the expectations that in the beginning of 2006 the trade balance will continue to determine the current account dynamics.

The trade balance will continue to worsen in nominal value during the first two quarters of 2006 due to the expectation of a relatively large imports of energy resources and sustaining the high international prices of crude oil. The large domestic demand connected with the positive expectations of economic agents regarding the upcoming EU membership will influence the non-energy goods imports, and especially the imports of investment goods. At the same time, the expectations of the external environment give reasons to forecast an exports growth over the first and second quarters, close to the exports levels of the end of 2005.

During both quarters the assumptions are for a better current transfers balance and a

Chart 32  
Dynamics of Current Account, Financial Account and International Reserves on an Annual Basis



Source: BNB.

minimum worsening of the income balance. As a result, the current account deficit will begin to improve as a percentage of GDP, and on an yearly basis it will be slightly below 14.5 per cent of GDP for the first quarter and approximately 14 per cent for the second.

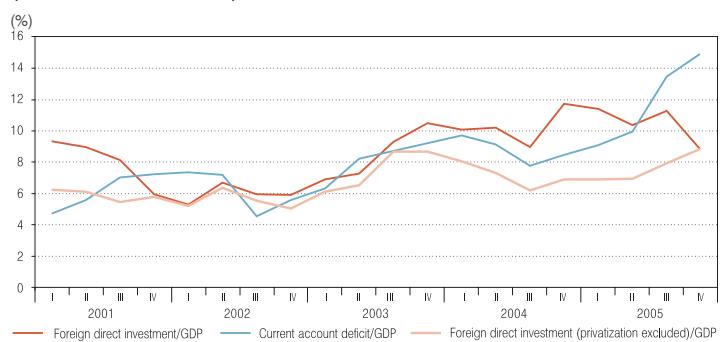
The current account financing for 2005 includes FDI and debt flows in relatively equal proportions. During the January – December period the FDI reached EUR 1876.1 million. This is EUR 402.2 million less than the inflow during 2004 due to the absence of privatization deals. Receipts from non-privatization FDI for 2005 increased by EUR 534.1 million (39.8 per cent) on the January – December 2004 period. We expect that in 2006 the inflow from FDI into Bulgaria will continue to increase under the influence of the following factors: comparatively high returns on investments, the upcoming EU membership and revenue from privatization deals.

Debt flows are an important resource for financing Bulgaria's economic growth. Part of them directly finances companies, and the other part is distributed on the domestic market through the banking system.

During the fourth quarter of 2005 the short-term external debt continued to grow (EUR 221.6 million for November compared to September) due largely to the growth in non-resident deposits with commercial banks. For the same period long-term external debt increased by EUR 291.8 million, with the *General government* sector contributing by some EUR 100 million.

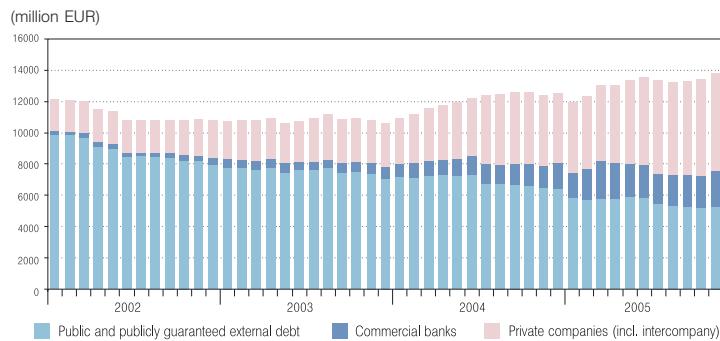
Regarding the expectations of the current account deficit for the first and second quarters of 2006, the positive flows of borrowings will most likely be maintained and in tandem with FDI will ensure an adequate coverage of the current account. International reserves dynamics will be mainly determined by the government transactions, with debt payments towards the IMF and the World Bank in the first quarter prompting a decline in the BNB reserves by approximately EUR 300–330 million. In the second quarter the financial account surplus is expected to be in excess of the current account deficit

Chart 33  
*Current Account Deficit to GDP and Foreign Direct Investment to GDP (On an Annual Basis)*



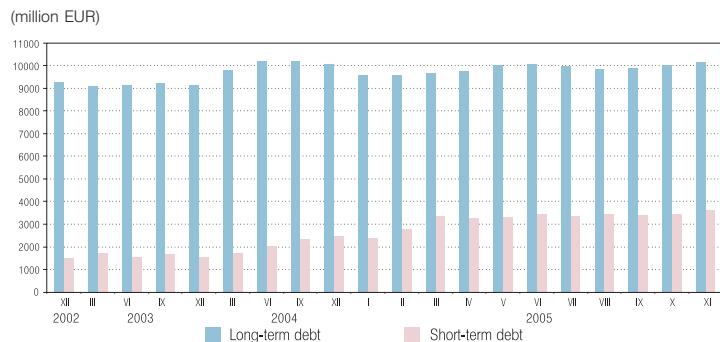
Source: BNB, NSI.

Chart 34  
*Gross External Debt*



Source: BNB.

Chart 35  
*Long- and Short-term Gross External Debt Dynamics*



Source: BNB.

and the international reserves to increase by approximately EUR 400 million.

After the early debt repayment towards the IMF and the World Bank conducted by the government at the end of 2005 and beginning of 2006, a net decline in public and publicly guaranteed debt is forecasted for the first quarter of 2006. The public and publicly guaranteed debt at the end of the first quarter will be around 22 per cent of GDP on an yearly basis. In the second quarter of 2006 minimal public debt flows are expected and it will fall slightly below 22 per cent of GDP on an yearly basis.

Dynamics of commercial banks' debt in the second half of 2005 and introduction of additional measures for curbing credit growth at the end of the year confirm our expectations that the tendency toward a more gradual increase in banks' debt will be maintained during 2006. Probably the need for financial resources will be at least partially satisfied by greater indebtedness of the private non-bank sector. On an yearly basis, private debt is expected to reach around 43 per cent and 44 per cent of GDP for the first and second quarters of 2006.

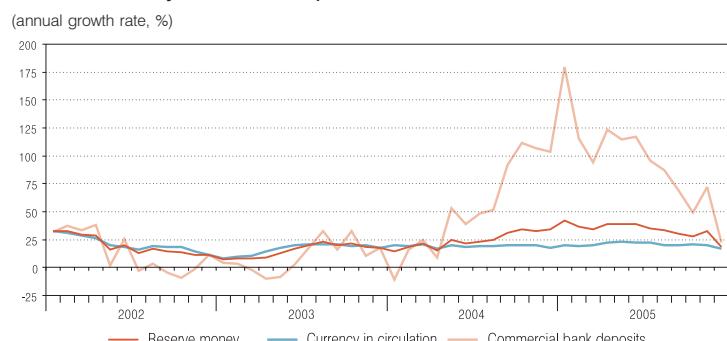
## Monetary Aggregates

Reserve money will further increase over the first half of 2006. On an annual basis, the expected growth rate for the second quarter is 14–15 per cent. Broad money growth will slow down. The driving factor for this over the first quarter of 2006 will be the high base of March 2005. In the second quarter of 2006 the M3 monetary aggregate is expected to rise by approximately 18–20 per cent on an annual basis.

No significant changes in deposit interest rates are projected.

The annual growth rate of reserve money slowed to 18.3 per cent at the end of 2005 and then returned to its usual values after exhausting the effect of the increase in commercial banks' deposits with the BNB associated with credit growth restriction measures in 2004.<sup>2</sup> In the first quarter of 2006 reserve money is expected to rise since banks exceeding credit growth rates under Ordinance No. 21 will deposit additional reserves in February. Projections for the second quarter are based on the assumption that following the latest amendments to

Chart 36  
Reserve Money and Its Components



<sup>2</sup> For details see *Economic Review*, February 2005.

Ordinance No. 21 of November 2005, banks will adhere strictly to regulatory values, and reserve money growth rates will reach 14–15 per cent.

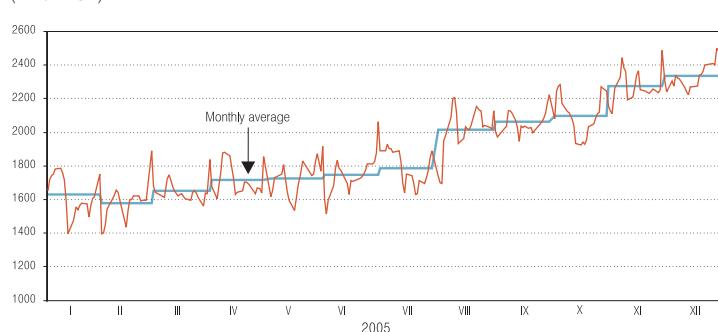
Commercial banks' deposits with the BNB rose by 22 per cent by end of December 2005 on December 2004: a significantly lower rate compared with the second (117 per cent) and third (69 per cent) quarters. An increase of BGN 177 million in bank reserves was reported in November 2005 on the prior month, mostly due to depositing additional minimum required reserves in line with the provisions of Ordinance No. 21.<sup>3</sup> Growth rates of commercial banks' deposits are expected to rise temporarily in the first quarter of 2006 as a result of depositing additional reserves in February. By the end of the first half-year these rates are projected to fall to nearly 15–20 per cent on a year-on-year basis. A certain change in projected levels is likely to occur due to high variability of this component of reserve money.

Over the fourth quarter of 2005 currency in circulation rose by 16.8 per cent on an annual basis, matching the rates attained in the corresponding period of previous two years (17.5–17.8 per cent). Its dynamics is estimated at 14–15 per cent for the first half of 2006. Retaining comparatively high growth rates of currency in circulation may be explained by enhanced household consumption and intensified investment activity.

Deposits of the government and budget organizations with the central bank set limits to fiscal policy effect on liquidity of individual economic sectors and correspondingly on the BNB balance sheet and monetary aggregates dynamics. The past year saw an outflow of resources to the external sector associated with a sizeable early redemption of external government debt (approximately EUR 1.3 billion for 2005). As a result, the net growth in government deposits with the BNB fell on the previous year. In July the last Brady debt buybacks of USD 607.6 million

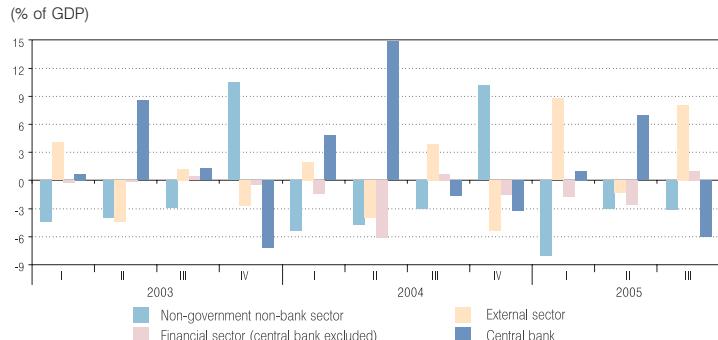
<sup>3</sup> In the second quarter of 2005 eight banks reported credit portfolio rates exceeding those under Ordinance No. 21 and deposited additional reserves to the amount of BGN 383 million in November 2005 (an increase of BGN 147 million compared with August).

Chart 37  
Commercial Bank Deposits  
(million BGN)



Source: BNB.

Chart 38  
Influence of Consolidated Budget on Other Sectors Liquidity  
(Quarterly)  
(% of GDP)



Source: MF, BNB.

led to a decrease in government deposits with the BNB at the end of the quarter. Following the dynamic first half-year period which was characterized by comparatively higher liquidity withdrawn from the non-financial sector, in the third quarter net flows from households and enterprises returned to their usual levels (see Chart 38).

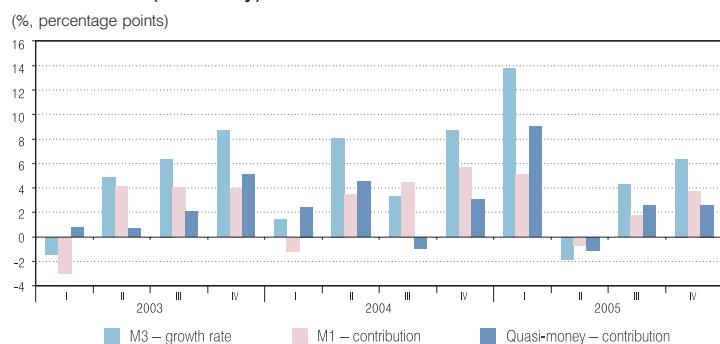
Preliminary data for 2005 show that external debt payments effected in the fourth quarter were mostly offset by the World Bank disbursements to the amount of USD 150 million. In the first quarter of 2006 the early redemption of debt<sup>4</sup> and other financing operations of the government will prompt a significant outflow of resources (EUR 583.1 million) from government deposits with the BNB. The consolidated state budget surplus which is expected in the first quarter will not be sufficient to compensate this outflow, and budget organizations' funds are likely to drop below BGN 3 billion. This drop will have no significant effect on monetary aggregates dynamics associated with relationships between the fiscal sector and non-residents.

In the fourth quarter of 2005 the year-on-year growth rate of broad money came to 23.9 per cent, decreasing on the first three quarters of the year. Slowing broad money rates involved all major components of this monetary aggregate and corresponded to lower reserve money growth. The annual growth rate of overnight deposits in December (24.2 per cent) decreased on September (29.7 per cent). Time deposit growth rates decreased from 34.2 per cent in the third quarter to 32.3 per cent by end-year. The lev component of time deposits rose most significantly on an annual basis (34.7 per cent), while the foreign currency component of overnight deposits showed an outstripping growth (34.9 per cent).

After the dramatic rise in non-financial institutions' deposits in the first quarter of 2005 (72.6 per cent), by the close of the year their rates returned to normal levels of 24.4 per cent. Consequently, growth rates of non-financial corporations' deposits lagged be-

Chart 39

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



Source: BNB.

<sup>4</sup> Advanced payments to the amount of EUR 191.7 million to the World Bank and EUR 151.4 million to the IMF.

hind those of households' deposits. Lev deposits with agreed maturity of up to two years, the most dynamic component of corporate deposits, rose by 47 per cent. Overnight deposits in levs (7.9 percentage points) and lev deposits with agreed maturity of up to two years (7.5 percentage points) contributed most significantly to corporate deposits growth on an annual basis.

Time lev deposits were the most rapidly growing component of households' deposits at 36.9 per cent in December 2005. Growth in BGN-denominated deposits of households at 30.6 per cent outstripped that in foreign currency deposits (27.9 per cent) which led to an increased share of lev deposits from 43 per cent (average for 2004) to 45.7 per cent (average for 2005).

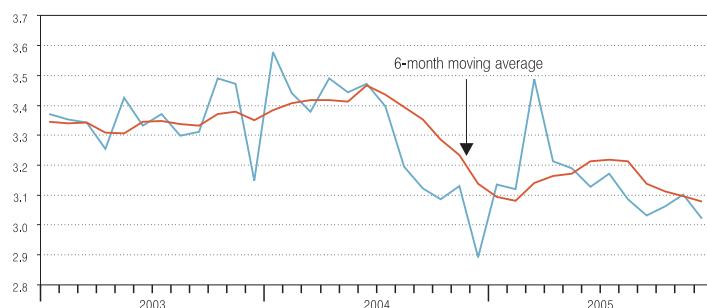
EUR-denominated deposits continued growing and occupied 57 per cent of foreign currency deposits in December 2005 (53 per cent in December 2004). This reflected both higher yield of euro deposits and the foreign currency risk inherent to assets in US dollars.

Broad money growth rates are expected to fall to 11–13 per cent in March 2006 (due to the high base of March 2004) and to reach 18–20 per cent in June 2006. In a medium term, a comparatively high nominal growth of broad money is projected, with the effect of high economic growth rates and the respective increase in incomes and savings outstripping the effect of slowing banking credit.

The registered decrease in lending rates after enforcing amendments to Ordinance No. 21 affected money multiplier which fell to 3.02 in December. In line with expected broad money dynamics, money multiplier is likely to slightly increase in the first quarter of 2006.

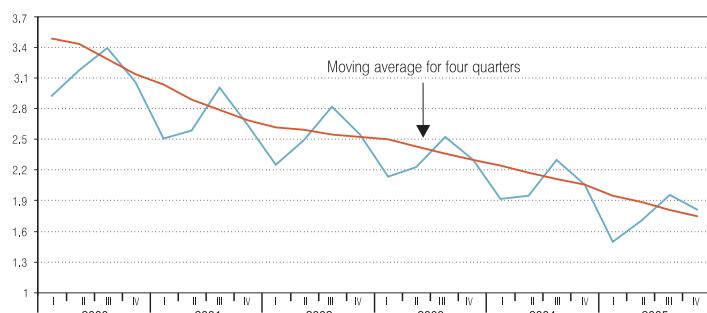
Amid projected changes in broad money over the first half of 2006, the money circulation velocity is in line with recent years' downward trends and seasonal fluctuations. A drop in money circulation velocity to around 1.5 is expected in the first quarter of 2006.

Chart 40  
M3 Money Multiplier



Source: BNB.

Chart 41  
Currency Circulation Velocity



Source: BNB.

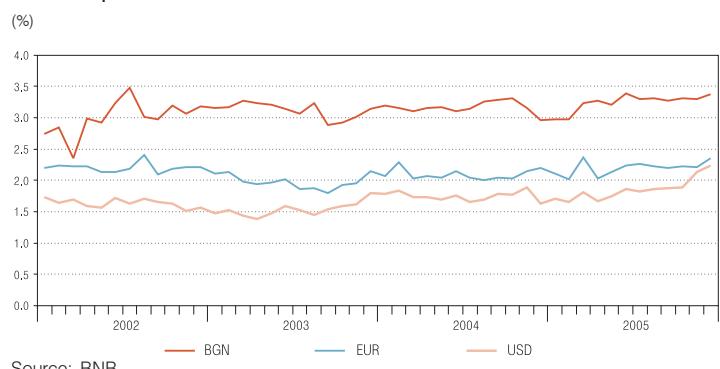
**Note:** The velocity of circulation for the fourth quarter of 2005 is based on GDP projections.

In the first half of 2006 interest rates on time euro deposits are projected to remain stable at around 2.3–2.4 per cent, with a possible movement in case of rises in euro area reference interest rates. Lev deposit interest rates will mostly follow euro deposits dynamics at levels of nearly one percentage point higher than those of euro deposits.

A more significant increase was reported in interest rates on USD deposits. This was primarily due to international interest rate rises in US dollars reflecting the Federal Reserve's policy of rising interest rates. Following the December 2005 increase, interest rates on federal funds reached 4.25 per cent, up two percentage points on the end of 2004. In Bulgaria, interest rates on USD deposits rose by merely 0.61 percentage points. The most significant increase was reported in November and December: up 0.24 and 0.11 percentage points on the prior month. In Bulgaria, interest rates in US dollars lagged behind international USD rate levels. The weak elasticity and slow reaction of domestic interest rates may be ascribed to comparatively low demand for USD loans and significant amount of deposits in US dollars.

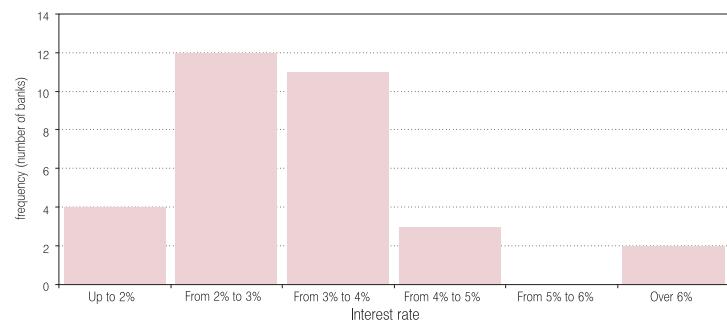
In December no sizeable changes in distribution of interest rates on time lev deposits among banks were registered compared with September 2005. The average value of interest rate levels slightly fell: from 3.05 per cent in September to 2.99 per cent in December. Only one bank offered interest rates over 6 per cent (two banks in the previous period). The share of banks offering rates between 2 and 4 per cent rose to 75 per cent. Thus, the standard deviation of interest levels went down from 1.1 to 1 percentage point. If the bank offering a deposit rate of over 6 per cent is excluded, this indicator would further decrease to 0.8 percentage points.

Chart 42  
Time Deposit Interest Rates

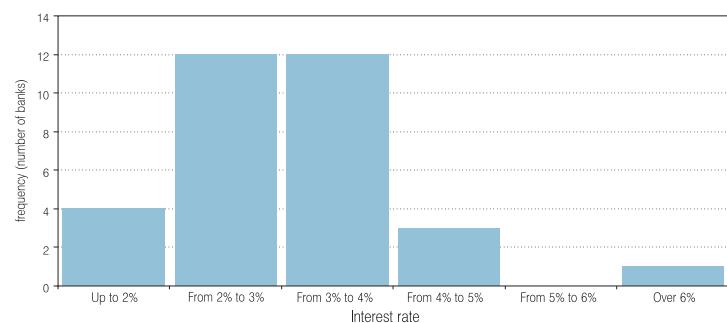


Source: BNB.

Chart 43  
Interest Rate Distribution on Household One-month Lev Deposits  
as of September 2005



as of December 2005



Source: BNB.

## The Effect of ECB Interest Rate Rises on the Bulgarian Financial Market

The 25 basis point increase in ECB interest rates had an immediate effect on interest rate levels on Bulgaria's money market. Between 6 and 30 December the average interest rate on the money market rose to 2.26 per cent and the LEONIA (LEv OverNight Index Average) to 2.25 per cent.

In December interest rates on time deposits in levs and euro increased by 7 b. p. and 14 b. p. on the previous month, which may be ascribed to raised euro area reference rates. This increase might possibly affect loans extended at rates corresponding to the price of money market resources. However, due to the slight increase, it is hard to establish this effect amid monthly fluctuations of lending interest rates (in 2005 monthly changes in interest rates on long-term loans to corporations in levs and euro were 1 and 1.6 percentage points respectively).

## Credit Aggregates

**Under BNB-imposed lending constraints, growth rates of claims on the non-government sector will slow to 24–25 per cent by mid-2006. No significant changes in lending interest rates are expected.**

The BNB measures enforced to curb credit activity played a decisive role in credit aggregates dynamics in 2005. Great demand for loans by corporations and households continued to create conditions for rapidly expanding credit activity. However, the banking system behaviour was in line with introduced constraints on credit growth. In the fourth quarter claims on the non-government sector rose by BGN 1454.5 million (*vis-à-vis* BGN 1436.9 million in the same period of 2004), while by the close of the year their rates went down to 32.4 per cent.

To raise the efficiency of BNB restrictions on lending, Ordinance No. 21 was further amended. The amendments provide for introducing a progressive scale for determining additional required reserves. This change raised considerably the cost of excess of growth rates as specified under the said Ordinance. Thus, a more effective regulation of additional minimum required reserves was achieved. Under BNB-imposed lending constraints, growth rates of claims on the non-government sector are expected to slow to some 24–25 per cent by mid-2006, with an annual growth of 7–8 per cent projected for the close of the first quarter due to the base effect of the significant credit growth at the end of March 2005.

Chart 44  
Claims on Non-government Sector

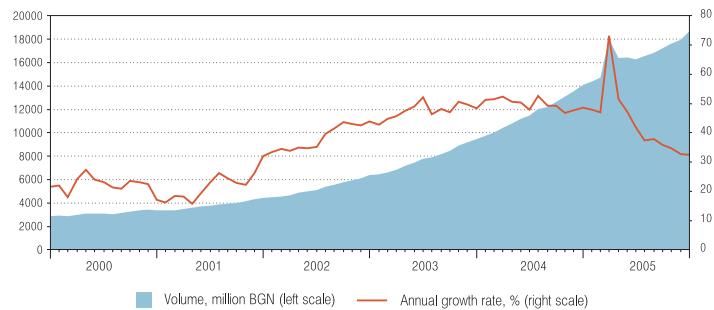
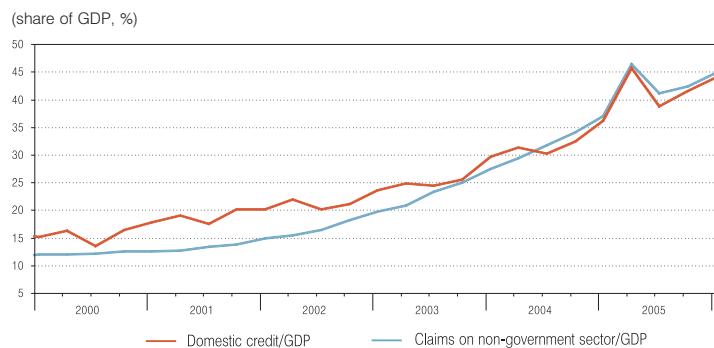


Chart 45  
Domestic Credit  
(share of GDP, %)



## Amendments to BNB Ordinance No. 9 and Ordinance No. 21 Adopted in November 2005

Amendments to Ordinance No. 9 and Ordinance No. 21 were in line with the policy of stabilizing credit growth rates at moderate levels which pose no risks to financial stability.

### Amendments to Ordinance No. 21 on Minimum Required Reserves Maintained with the BNB by Banks

To make more expensive the excess of credit over the growth rates as set in Ordinance No. 21, as from the beginning of 2006 a progressive scale for determining additional required reserves was introduced, with the first period starting from 4 May 2006. According to this scale, banks shall maintain additional minimum required reserves, as follows:

- to the double amount of the excess of all loans extended in each basis period over the ratio as set in the Ordinance, provided the respective ratio has been exceeded by up to one per cent;
- to the triple amount of the excess of all loans extended in each basis period over the ratio as set in the Ordinance, provided the respective ratio has been exceeded by up to two per cent;
- to the quadruple amount of the excess of all loans extended in each basis period over the ratio as set in the Ordinance, provided the respective ratio has been exceeded by two and over two per cent.

### Amendments to Ordinance No. 9 on the Evaluation and Classification of Risk Exposures of Banks and the Allocation of Provisions to Cover Impairment Loss

Rapid growth rates of household loans over the recent three years gave grounds to expect further worsening in the quality of banks' consumer portfolios. A similar trend affecting the quality of household mortgage loans was observed in the outset of 2005. To reverse the trend, the BNB approved more conservative requirements for provisioning of these loans.

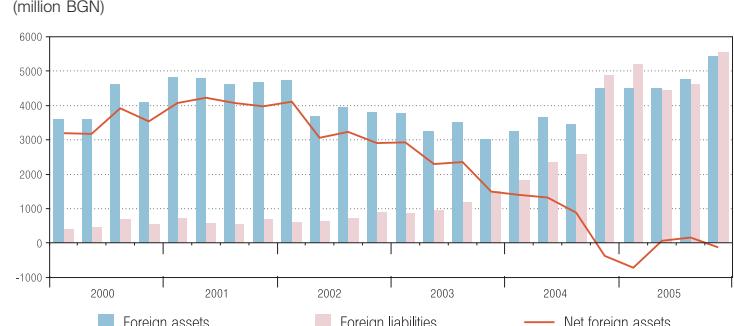
1. Specific provisions for watch exposures are to be raised from not less than 10 per cent to not less than 20 per cent, where exposures are to natural persons.
2. Specific provisions for substandard exposures are to be raised from not less than 50 per cent to not less than 75 per cent, where exposures are to natural persons.

The trend to fast growing financial intermediation was sustained. By end-2005 the *claims on the non-government sector to GDP* ratio reached 45 per cent (up 7.9 percentage points on the end of the prior year).

The BNB-imposed measures had also an effect on net foreign assets of banks. Over the last three months foreign liabilities growth outstripped foreign assets growth. However, restrictive measures set strong limits to banks in attracting funds from non-residents to finance their credit activity.

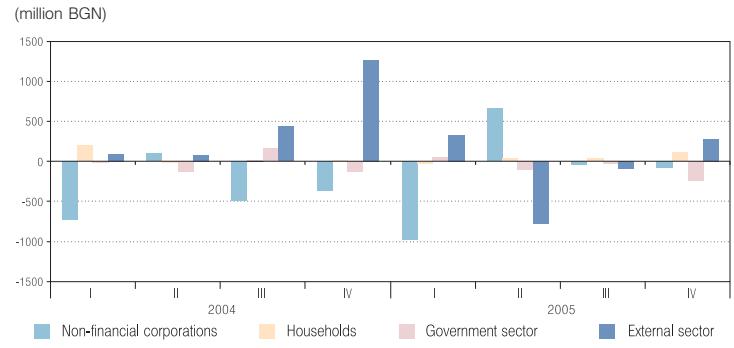
The slowdown in annual growth rates involved all segments of the credit market. Between October and December claims on non-financial corporations rose by BGN 784.9 million (against BGN 817.8 million in the fourth quarter of 2004), while their annual growth fell from BGN 2178.6 million (25.7 per cent) by end-September to BGN 2145.7 million (23.1 per cent) by end-December. In absolute terms, the fall in bank credit growth is insignificant and firms are unlikely to experience any liquidity problems since external loans to the non-financial sector and foreign direct investment increased over the review period.

Chart 46  
Foreign Assets and Liabilities of Commercial Banks  
(million BGN)



Source: BNB.

Chart 47  
Net Financial Flows to Commercial Banks  
(Quarterly)  
(million BGN)



Source: BNB.

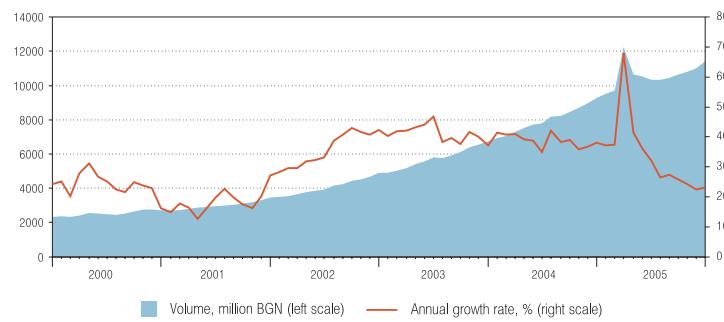
Volumes of loans extended to individual borrowers remained high: over the fourth quarter claims on households rose by BGN 704.2 million or an annual growth of BGN 2554 million by end-December (against BGN 2416.8 million by the end of the previous quarter). The annual growth rate of claims on households continued to decrease under the influence of the growing base and reached 58.4 per cent at the close of the year. The most significant fall was registered in housing loans: from 121.2 per cent as of end-September to 97.4 per cent as of end-year (an annual growth of BGN 921.7 million and BGN 970.9 million by the end of the third and fourth quarters). Housing loans remained the most rapidly developing segment on the credit market, and their share in total claims on households increased to 28.4 per cent.

Table 5  
Changes in Major Balance Sheet Items of Commercial Banks  
(Quarterly)  
(million BGN)

	2005			
	I quarter	II quarter	III quarter	IV quarter
Claims on non-financial corporations	2948.8	-1922.6	334.6	784.9
Deposits of non-financial corporations	1971.2	-1258.6	292.5	710.3
Claims on households	721.7	590.6	537.5	704.2
Deposits of households	702.9	633.0	575.6	813.0
Foreign assets	-9.3	23.1	251.2	670.0
Foreign liabilities	325.7	-752.7	155.6	951.4
Claims on government sector	17.1	209.8	135.4	137.1
Deposits of government sector	65.8	105.4	110.6	-112.7
Claims on central government	16.3	203.5	113.9	133.8
Liabilities to central government	-95.6	94.7	129.9	11.8

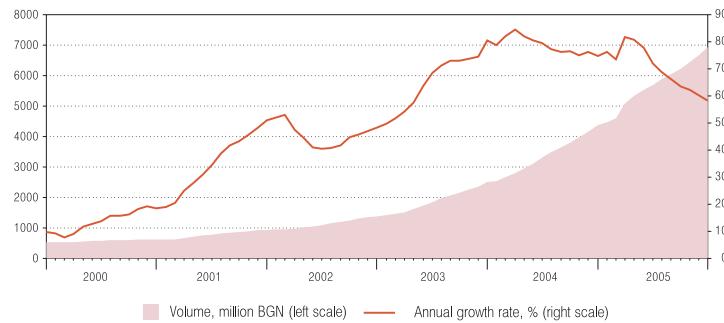
Source: BNB.

Chart 48  
Claims on Non-financial Corporations



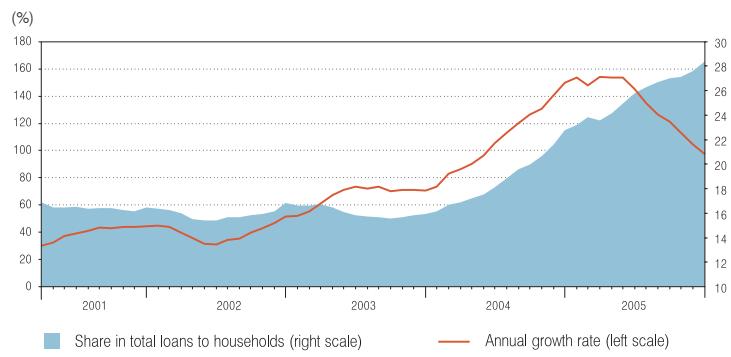
Source: BNB.

Chart 49  
Claims on Households



Source: BNB.

Chart 50  
Housing Loans



Source: BNB.

Table 6  
Claims on Non-government Sector

	Annual growth rate, %				Structure as of 31.XII.2005	
	2005					
	I quarter	II quarter	III quarter	IV quarter		
Claims on non-government sector, incl.:	73.1	41.8	35.9	32.4		
Claims on non-financial corporations	68.0	32.2	25.7	23.1	61.3	
Claims on households and NPISHs	81.8	72.2	63.5	58.4	37.1	
Claims on financial corporations	113.4	-27.6	-12.4	-31.1	1.6	

Source: BNB.

Loans to households occupied increasingly larger share in banks' claims on the non-government sector: from 31 per cent in early 2005 to 37.1 by end-December.

Changes in the structure of claims on the non-government sector were associated with the greater potential for developing household lending and firms' opportunities to replace loans from local banks by external financing sources.

The ECB decision to raise the interest rate on its main refinancing operations by 25 b. p. in early December had an effect on interest rate levels on the domestic money market. This decision is likely to affect loans disbursed at interest rates corresponding to the price of money market resources. However, due to the slight increase, this effect is hardly to establish amid monthly fluctuations in lending interest rates (in 2005 monthly changes in interest rates on long-term loans to corporations in levs and euro were 1 and 1.6 percentage points respectively). No significant changes are expected in lending interest rates over the coming months. Although another increase in the price of at-

Chart 51  
Structure of Claims on Non-government Sector

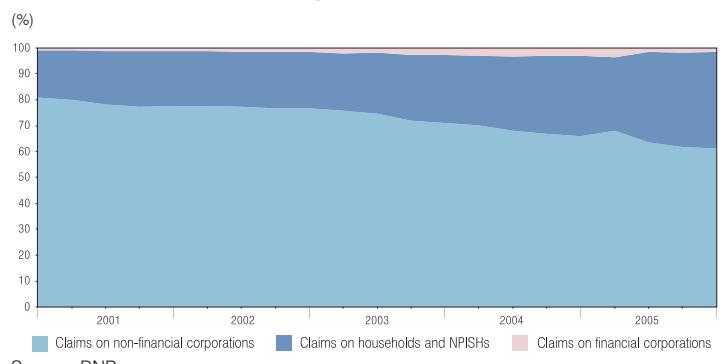
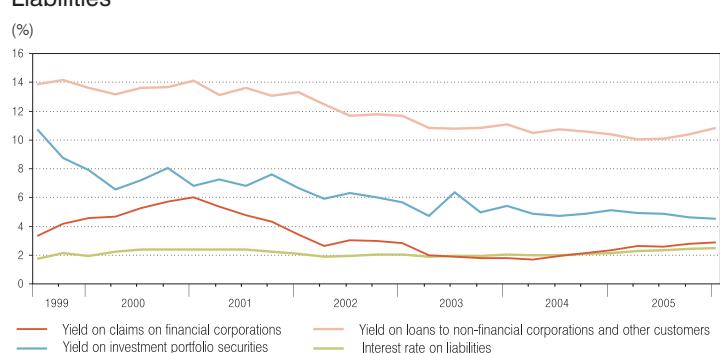


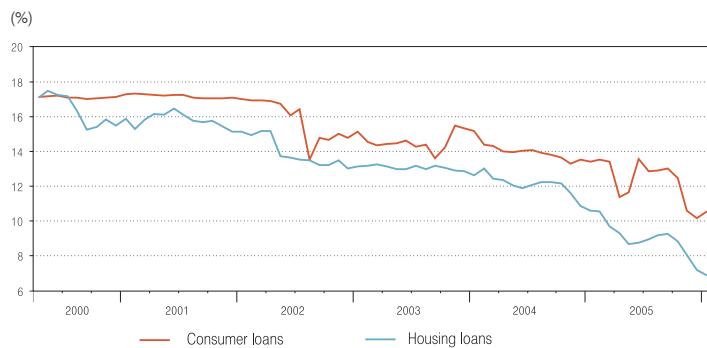
Chart 52  
Yield on Assets and Interest Expenditure on Commercial Bank Liabilities



Source: BNB.

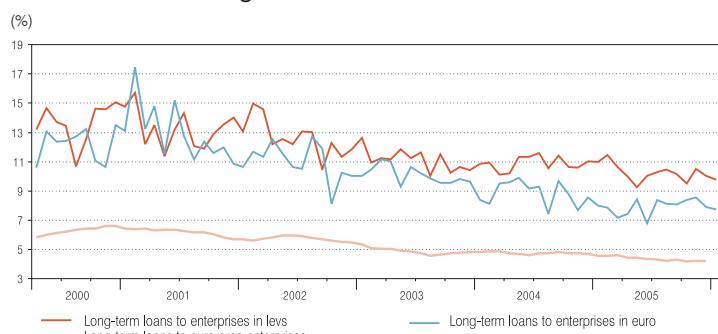
tracted funds and further rises in euro area interest rates would probably generate an increase in domestic interest rates, the strong competition within the banking system is a factor which could significantly reduce these effects.

Chart 53  
Interest Rates on Household Loans



Source: BNB.

Chart 54  
Interest Rates on Long-term Loans in Levs and Euro



Source: BNB.

### 3. Economic Activity

Economic growth is expected to stay comparatively high and sound over the first half of 2006. Household consumption and fixed capital investment will contribute mostly to growth. The negative effect of the foreign trade balance will be gradually neutralized. Under the current budget policy pursued, government consumption will have low contribution to growth.

Consumption dynamics will be further affected by household income and employment growth. Investment activity will depend on better assessments of Bulgaria's business climate, the improving profitability of firms and financial resource inflow on the balance of payments financial account.

In the first and second quarters of 2005 GDP growth rates exceeded those attained in the corresponding quarters of the previous year, retaining the trend to accelerating economic growth which started in the fourth quarter of 2003. In the third quarter of 2005 domestic demand accelerated dramatically. Household consumer expenditure rose by 10.8 per cent or 6.7 percentage points on the third quarter of 2004. Investments also grew at higher rates: over 25 per cent or a two-fold increase on the corresponding quarter of 2004.

It is hard to establish the reasons behind accelerating growth in these components of domestic demand. At the same time, its importance should not be exaggerated, since the seasonal profile of quarterly dynamics in individual components of end-use GDP has not been firmly established. Yet, due to economy's size and openness, it is normal to observe fluctuations in the level and dynamics of consumption and investments. Recent years' trends show that consumption dynamics reflected primarily household income growth, while investment was stimulated by comparatively high investment returns in Bulgaria and foreign capital inflow.

Two-digit growth rates of consumption and investments were accompanied by slowing rates of exports and accelerating growth of imports. Hence, the negative contribution of net exports was largely neutralized by high dynamics of domestic demand, prompting a slowdown in GDP growth to 4.6 per cent.

Chart 55  
Contribution to GDP Growth by Component of Final Consumption (Quarterly)

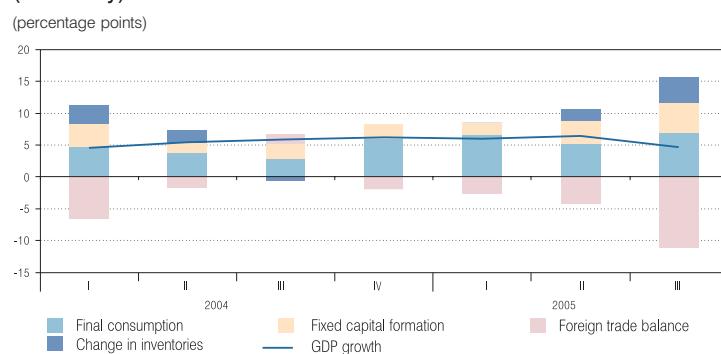


Table 7

**Dynamics of GDP Components According to Final Consumption Method**

(on corresponding period of previous year, %)

	2004				2005		
	I quarter	II quarter	III quarter	IV quarter	I quarter	II quarter	III quarter
Consumption, incl.	5.3	4.3	3.7	6.6	7.3	5.9	9.1
Household consumption	5.8	5.3	4.1	6.8	7.7	5.3	10.8
Government final consumption expenditure	-2.7	-4.0	3.6	5.0	4.0	9.7	-0.3
Collective consumption	8.9	5.6	2.0	6.8	7.3	7.4	5.2
Gross fixed capital formation	22.1	6.9	12.6	9.9	9.2	16.8	25.4
Exports of goods and non-factor services	7.0	10.6	14.1	19.8	8.8	12.0	0.9
Imports of goods and non-factor services	16.7	11.1	11.9	16.9	10.8	15.5	19.0
<b>GDP, real growth</b>	<b>4.5</b>	<b>5.5</b>	<b>5.8</b>	<b>6.2</b>	<b>6.0</b>	<b>6.4</b>	<b>4.6</b>

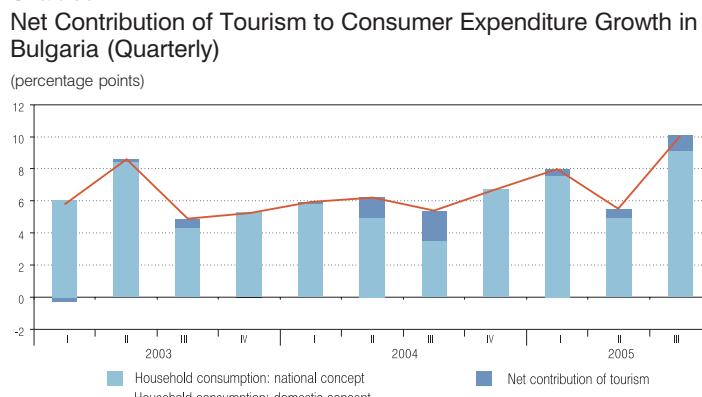
Source: NSI.

## Household Behaviour

Over the third quarter of 2005 household consumer expenditure increased by 10.8 per cent or up 6.7 percentage points on the corresponding quarter of the prior year. Domestic consumption<sup>5</sup> rose by 10 per cent, with its growth rate accelerating by 4.6 percentage points on the third quarter of 2004 and net tourism contributing significantly less to growth.

The main factor driving consumption dynamics was household behaviour which in turn depended mostly on income growth.

Chart 56



Source: NSI.

Table 8  
Employment and Income Dynamics (Quarterly)  
(%)

	2004				2005			
	I quarter	II quarter	III quarter	IV quarter	I quarter	II quarter	III quarter	IV quarter
<b>Unemployment at the end of the period *</b>	13.7	12.2	11.7	12.2	12.7	11.1	10.5	10.7
Change on corresponding period of previous year								
<b>Employees**</b>	2.9	3.3	3.1	3.1	2.0	1.3	2.4	
<b>Employed under labour contract***</b>	6.2	5.1	5.3	5.4	4.3	4.1	4.5	5.3
<b>Real salary***</b>	-0.4	-1.2	-0.3	1.5	2.4	3.1	2.2	-0.1

\* Employment Agency.

\*\* NSI: Labour Force Survey.

\*\*\* Current employment and salary survey.

Data derived from various sources of information on Bulgarian economic developments confirm the increasing household income as the main driving factor behind consumption in recent years. Sustainable downward trends in unemployment, the increased employment and real salary income growth were confirmed by the NSI salary

<sup>5</sup> A sum of household consumption and tourism (net).

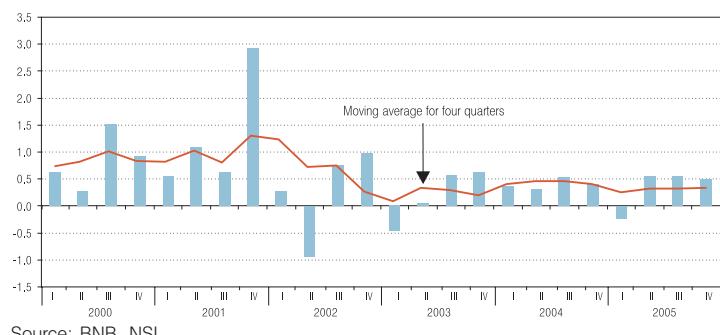
and labour force survey. The household budget survey conducted by the NSI on a monthly basis showed a sizeable increase in the 2005 household income from sources other than salary, *i. e.* property and entrepreneurship. Balance of payments data show a significant growth in labour income and private transfers from abroad.

Larger household incomes improved credibility and helped expand access to additional financial resources. Based on monetary statistics for the January to September 2005 period, the net amount of newly extended consumer loans comprised some 7 per cent of realized consumer expenses. Comparison with other sources of financing shows that the role of consumer credit in financing consumption increased but still failed to be a leading factor for significant consumption growth in 2005. On the other hand, households continued to be a net creditor to the banking system.

Chart 57

### Net Household Loans Extended (+)/Received (-) to/from the Banking System (Quarterly)

(share of annual GDP, %)

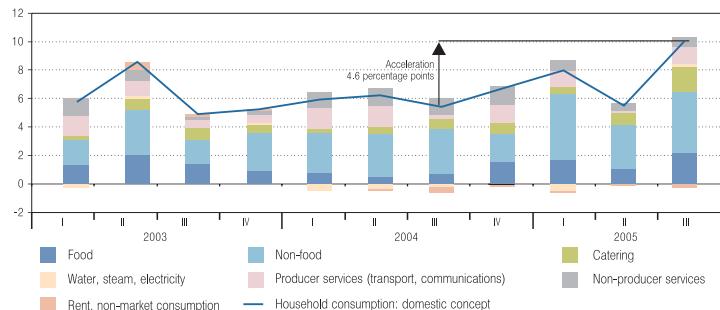


Source: BNB, NSI.

Chart 58

### Contribution of Household Final Consumption Expenditure Components to Growth: Domestic Concept (Quarterly)

(percentage points)



Source: NSI.

## Sources of Financing Household Consumption

High growth rates of household consumption pose the problem of financing sources. An entire picture of household income distribution could be achieved upon developing a System of Financial Accounts by the NSI.

Chart 59 presents a partial assessment of potential financing sources prepared on the basis of the available statistical information:

- an Income Formation Account in the System of National Accounts containing data on Wages and Salaries Fund, operating surplus and mixed household income;
- fiscal statistics containing data on paid pensions and benefits;
- balance of payments statistics containing data on household income from abroad;
- monetary statistics with data on the amount of consumer loans.

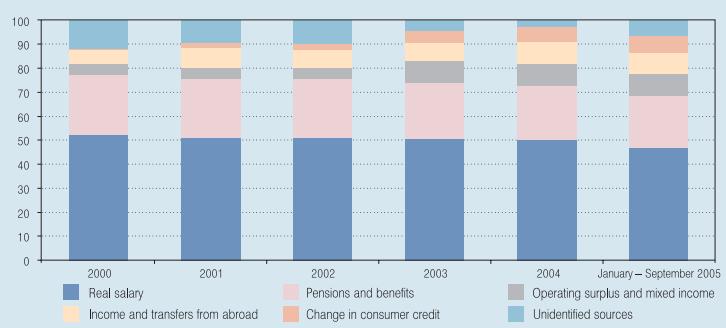
Certainly, household income is used for saving in addition to consumption. Of note is the fact that households continued to be a net creditor to the banking system.

The Chart illustrates the importance of various sources for financing household consumption. Household labour and entrepreneurship income occupied the largest share, followed by budget transfers in the form of pensions and social security benefits. Private transfers from abroad comprised a steady share in financing consumption over the period. Since 2003 consumer credit's role has increased, but still remains insignificant in household consumption.

Chart 59

### Sources of Financing Households

(share of consumer expenditure, %)



Source: NSI, MF, BNB.

**Note:** The value of household consumer expenditure, its operating surplus and mixed income less imputed rent and consumption in kind.

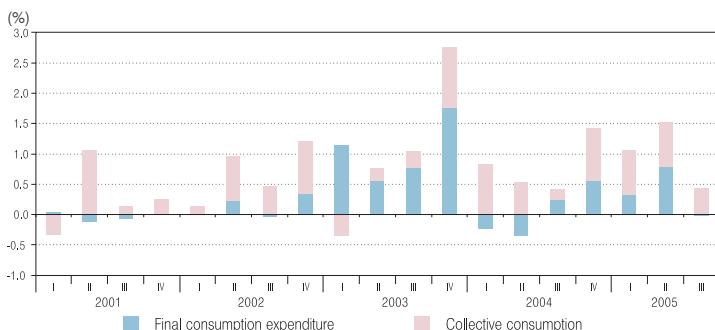
Consumer expenditure components contributing mostly to a 4.6 percentage point growth in consumption on the same period of 2004 include foods (growth by 7.8 percentage points and contribution by 1.4 percentage points), non-foods (growth by 4.5 percentage points and contribution by 1.2 percentage points), public catering (growth by 9.8 percentage points and contribution by 1 percentage point), producer services<sup>6</sup> (growth by 6.8 percentage points and contribution by 0.9 percentage points). Higher growth in non-food, catering, transport and communications consumption reflected both the gradual improvement in living standards and intensified economic activity. It is harder to explain the increase in food spending reported by end-use GDP components. However, an important factor for this growth is the downward trend in natural economy production. Among specific factors affecting this trend in the third quarter of 2005 were the floods which caused production losses and gave rise to uncertainty about normal food supply.

## Government Finance and Consumption

In 2005 the consolidated budget displayed considerable overperformance of BGN 1.9 billion in revenue and BGN 0.7 billion in expenditure on the planned levels and, according to preliminary data, by the year-end the surplus amounted to 2.4 per cent of GDP.<sup>7</sup> Indirect tax revenue reflecting domestic demand growth underlay the better-than-expected revenue performance.

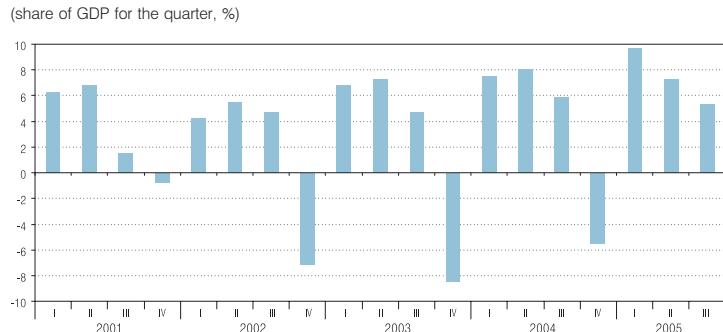
In the third quarter of 2005 government consumption growth rates slowed down, and this trend is most likely to sustain until the end of June 2006 due to the anticipated weaker increase in salary, social security and operating expenditure. The contribution of these components to the annual nominal rise in current non-interest expenditure went

Chart 60  
Contribution of Final Government Consumption Expenditure and Collective Consumption to Economic Growth (Quarterly)



Source: NSI, BNB.

Chart 61  
Primary Balance (Quarterly)  
(share of GDP for the quarter, %)



Source: MF.

<sup>6</sup> Transport, communications and other services.

<sup>7</sup> In December the budget data reporting form was changed. Expenditure of Public Investment Projects EAD, launched in 2004, was included in budget capital expenditure statistics. Expenditures on required financing and acquisition of shares were reclassified and reported as expenditure rather than as financing.

down to five percentage points in the third quarter of 2005 and, according to our estimates, it will stay under this level until end-June 2006. Government consumption may report negative values in the first two quarters of 2006 mostly attributable to the high base of the previous year.

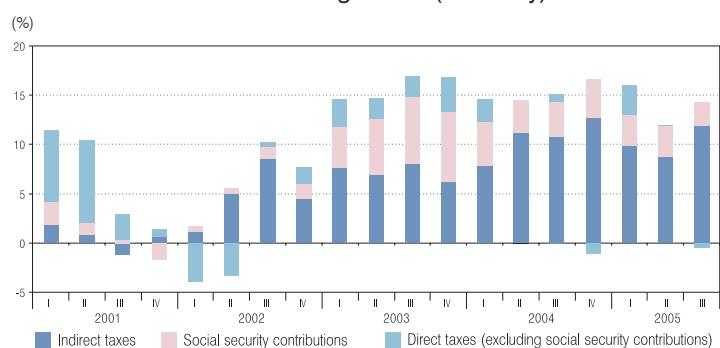
The terms of government's agreements with the IMF regarding 2006 budget policy envisage a budget surplus amounting to three per cent of GDP under certain conditions. In 2005 the budget surplus reflected entirely the revenue overperformance resulting from relatively high domestic demand growth rates and planned expenditure did not need to be curtailed. However, this could hardly happen in 2006. We expect moderate consumption growth rates in 2006 and hence limited opportunities for considerable budget revenue overperformance. Under this scenario, the provision of the 2006 State Budget Law that government authorities, ministries, public institutions and state-owned higher education institutions may utilize up to 93 per cent of the annual amount of funds allocated to them for expenditure and transfers will most likely be applied in order to form a three per cent budget surplus.<sup>8</sup> Given these circumstances, the contribution of government consumption to GDP growth will fall and it is expected to be close to zero in 2006.

## Behaviour of Firms

In the third quarter of 2005 value added growth slowed down to 3.3 per cent compared with the respective quarter of the previous year, when the growth rate came to 5.6 per cent. Floods in the summer months (July to September) impacted adversely agriculture and the sector reported some seven per cent decrease in gross value added. Probably, floods also affected production results and tourism and communications, the sectors which slowed down their growth most dramatically in the third quarter of 2005. Difficulties in transportation commu-

Chart 62

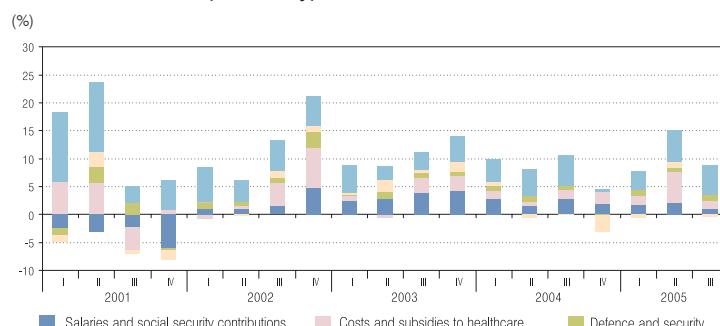
Contribution of Major Tax Groups Growth to Tax Revenue Growth under Consolidated Fiscal Programme (Quarterly)



Source: MF, BNB.

Chart 63

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



Source: MF, BNB.

<sup>8</sup> Pursuant to Article 5, paragraphs 3 and 4 of the 2006 State Budget Law, these expenditure and transfers may comprise up to 93 per cent of allocated funds and the other seven per cent can be utilized only in case the current account deficit is not worsened.

nifications caused by floods prevented tourism from posting higher growth and this had a negative effect on the current account balance of services.

Manufacturing and financial intermediation were the sectors reporting buoyant growth: in the third quarter of 2005 value added went up by eight and 16 per cent respectively. Oil processing, manufacture of food and drinks, chemical products, machines, equipment and household appliances, metallurgy, and manufacture of electrical machines and appliances were the leading sectors in manufacturing. Exports were the major factor behind growth in oil processing, chemical industry and engineering, while the increase in metallurgy and in food industry was prompted by sales on the domestic market. The two subsectors of metallurgy – ferrous and non-ferrous metallurgies – displayed divergent trends. Ferrous metallurgy registered a fall in total and export sales and non-ferrous metallurgy reported a rise in domestic and export sales.

Besides in ferrous metallurgy, a decrease in export sales was also observed in branches manufacturing agricultural produce, clothing (see *Exports and Imports of Goods* below) and furniture. This impacted the weak growth in exports of goods.

Brisk consumer activity underpinned strong trade growth (8.2 per cent). Construction registered an increase of 14 per cent in gross production and of 11 per cent in value added. Thus, the early-year trend to enhanced activity in this sector was sustained. It reflected intensified investment demand in Bulgaria.

Investment growth accelerated considerably in the third quarter. Gross fixed capital formation picked up by 25.4 per cent against the respective quarter of the previous year. Data on sectoral distribution of costs for acquiring fixed assets show that the most buoyant investment activity was reported by industry, transport and communications, construction and trade. Government's investment expenditure contributed by some three percentage points to investment growth.

Table 9  
**Gross Value Added Growth by Sector**  
(corresponding quarter of previous year = 100)

	2004				2005		
	Quarters				I	II	III
	I	II	III	IV			
Agriculture and forestry	-1.0	-0.4	3.7	3.3	-1.7	-5.2	-6.6
Industry	4.9	6.1	5.3	4.8	8.2	9.3	6.5
Services	5.9	5.7	6.5	6.0	7.4	6.4	4.8
At base prices, total	5.1	5.2	5.6	5.4	7.1	6.2	3.4
Contribution, percentage points							
Agriculture and forestry	-0.1	0.0	0.7	0.3	-0.1	-0.5	-1.1
Industry	1.6	1.8	1.5	1.4	2.6	2.8	1.9
Services	3.6	3.4	3.4	3.7	4.6	3.9	2.6

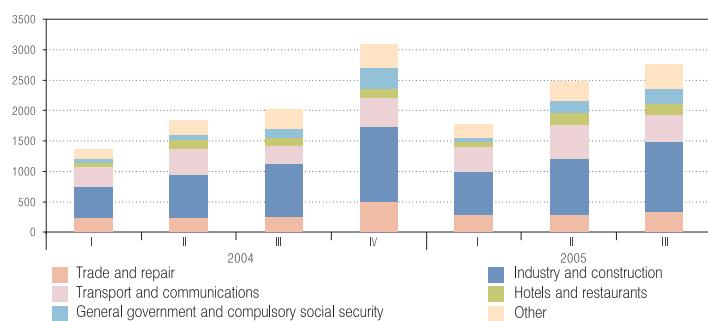
Source: NSI.

In the third quarter of 2005 imports of investment goods rose by 37 per cent in nominal terms. Machines, tools and appliances (excluding electrical appliances) and vehicles contributed mostly to this effect. In 2005 the share of imported investment goods exceeded 80 per cent of investment demand total amount. High return on investments in Bulgaria (see the *Financial Flows, Money and Credit* Section) continued to attract foreign capital which is an important source of funds for financing investment projects.

The rising share of investment in GDP is a major factor for improving the technological level and productivity of economy and it is also an important prerequisite for increasing real salary without threatening Bulgarian producers' competitiveness. Unit labour cost, one of the cost competitiveness quantitative measures, retained its favourable trend in almost all sectors in the third quarter of 2005.

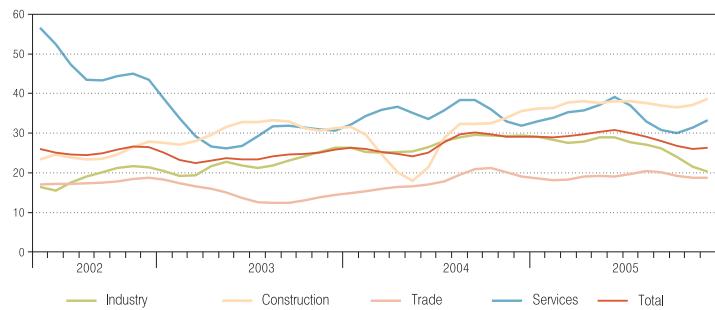
Prospects for goods and services production dynamics in the first six month of 2006 are favourable. Expectations of external demand developments are positive. The business climate indicator for services showed an upward trend in the last few months and the favourable business climate in construction was preserved. Economic indicators for industry give grounds to expect a certain slowdown in growth rates. At the same time, the sector displayed a robust investment activity and the trend to improving cost competitiveness was retained. These circumstances will boost industrial production growth.

**Chart 64**  
**Expenditure on Acquiring Fixed Assets by Industry (Quarterly)**  
(million BGN)



Source: NSI.

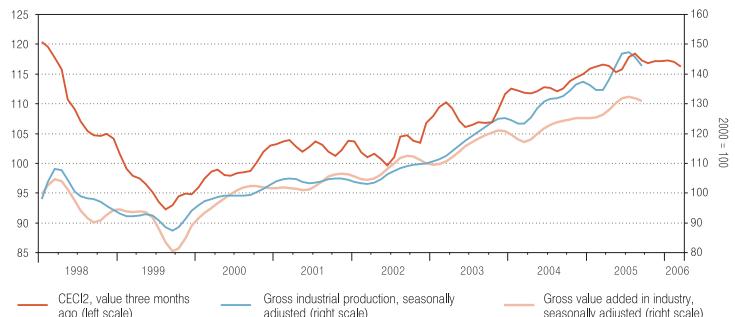
**Chart 65**  
**Trends in Business Climate by Sector**



Source: NSI, business survey.

**Note:** Data adjusted by the TRAMO-SEATS procedure.

**Chart 66**  
**Expectations of Industrial Production (Quarterly)**



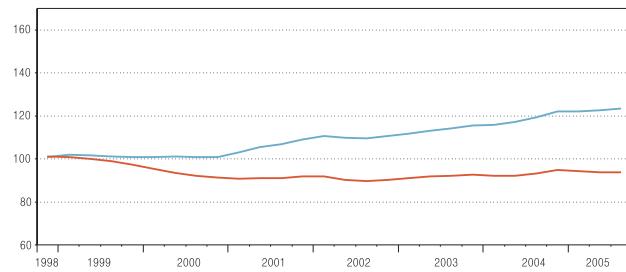
Source: NSI, BNB.

Chart 67

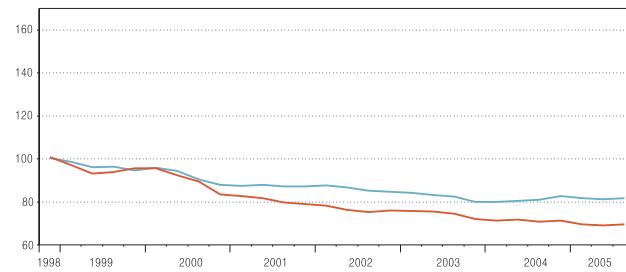
**Unit Labour Cost (Quarterly)**

(1998 = 100%)

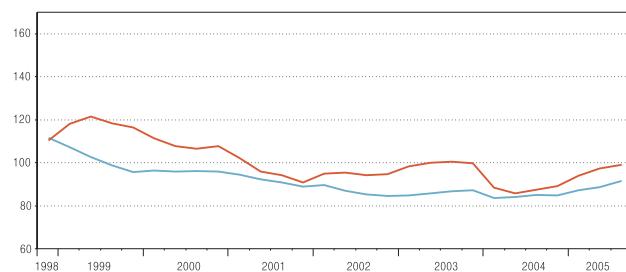
**Total for the Economy**



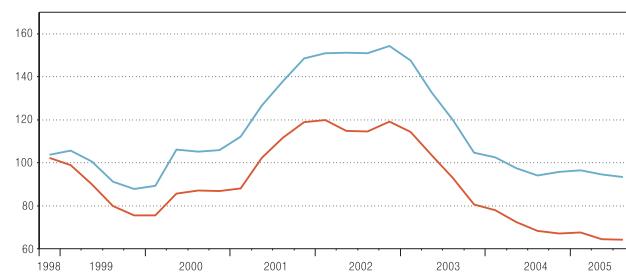
**Manufacturing**



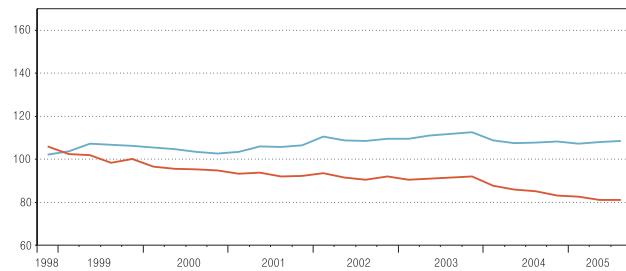
**Agricultural Sector**



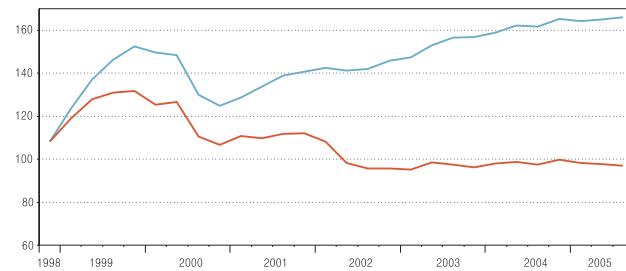
**Mining and Quarrying**



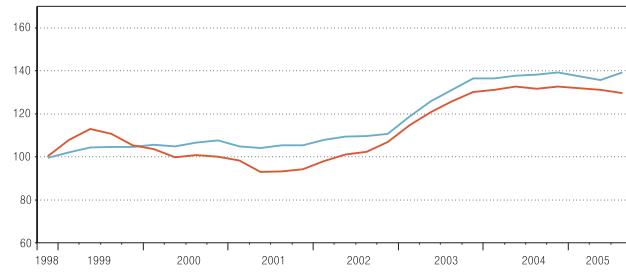
**Construction**



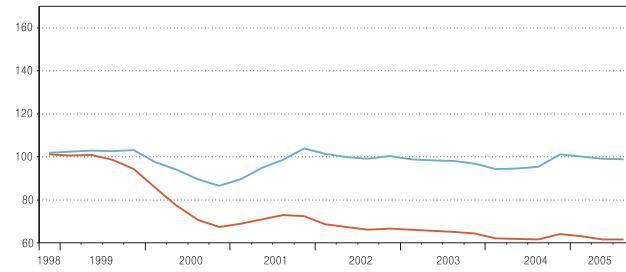
**Electricity, Gas and Water Supply**



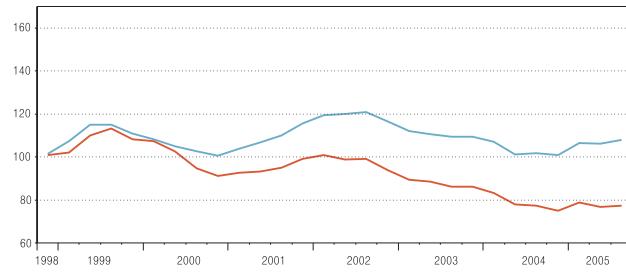
**Trade**



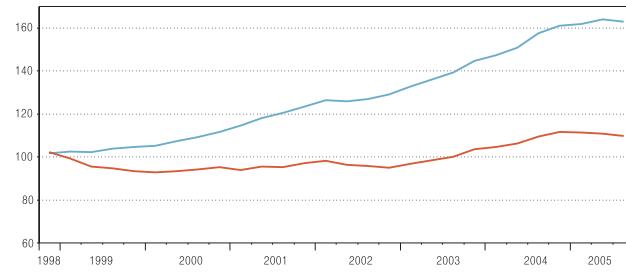
**Transport and Communications**



**Financial Intermediation**



**Other Sectors**



— Moving average for four quarters (nominal)  
— Moving average for four quarters (real)

Source: NSI, BNB.

## Exports and Imports of Goods

Improving competitiveness of the Bulgarian economy, accelerating growth in the euro area and decreasing impact of the temporary adverse factors of the previous year are the major assumptions on which projections of export developments are based. Expectations put annual growth rates of nominal goods exports in euro at some 22 to 24 per cent for the first quarter and approximately 19 to 24 per cent for the second quarter of the current year. Domestic demand and stable international prices of some products playing a key role for the Bulgarian economy will keep the nominal growth rates of goods imports within the range of 18 to 20 per cent for the first quarter of 2006 compared with the respective quarter of the previous year and within 17 to 20 per cent for the second quarter.

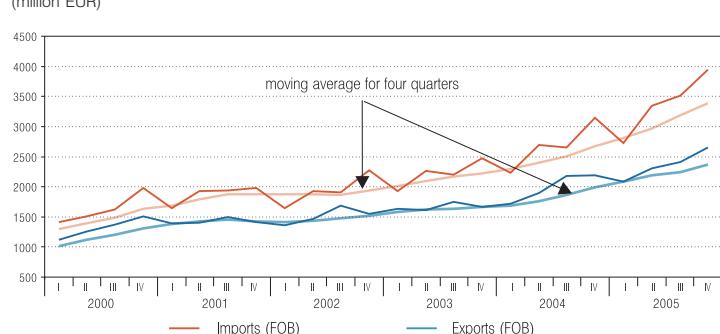
Against the background of the foreseen export and import dynamics, in the first quarter of 2006 the trade balance deficit will come to some 18.5 to 19 per cent of GDP on an annual basis and in the second quarter to some 18.6 to 19.3 per cent.

In 2005 exports in euro reached EUR 9454.1 million: a nominal increase of EUR 1469.2 million or by 18.4 per cent on the previous year. Imports (FOB) came to EUR 13,536.7 million over the period, rising nominally by EUR 2822.8 million or 26.3 per cent compared with 2004.

Projections of rising export growth rates in the first two quarters of 2006 reflect expectations of enhanced external demand (especifically in the euro area) and improved competitiveness of the Bulgarian industry. Another reason for the foreseen export dynamics is the subsiding importance of the temporary factors which had a negative influence on Bulgarian exports in the second half of 2005.<sup>9</sup> In the first and second quarters of 2006 imports are expected to slow down on 2005 due primarily to the stable international raw material prices, the improved trade conditions for Bulgaria and the high base reached in the previous year. Domestic demand will stay high which gives grounds for an anticipated annual nominal increase in imports between 18 and 20 per cent in the first quarter of 2006 and between 17 and 20 per cent in the second quarter.

Compared with 2005, in the first two quarters of 2006 no qualitative changes in the dynamics of growth by commodity group and respectively in the contribution of commodity groups to total exports are expected. Mineral products and fuels posted the highest growth in 2005 (49.5 per cent), followed

Chart 68  
Dynamics of Exports and Imports  
(million EUR)



Source: BNB.

<sup>9</sup> Such factors include, for instance, the July and August floods in the country and the closing of metallurgical enterprises due to technological renewal. They resulted in a drop or a sizable slowdown in exports in sectors of key importance for the Bulgarian economy, such as agriculture, food industry and ferrous metallurgy, in the third and fourth quarters of 2005.

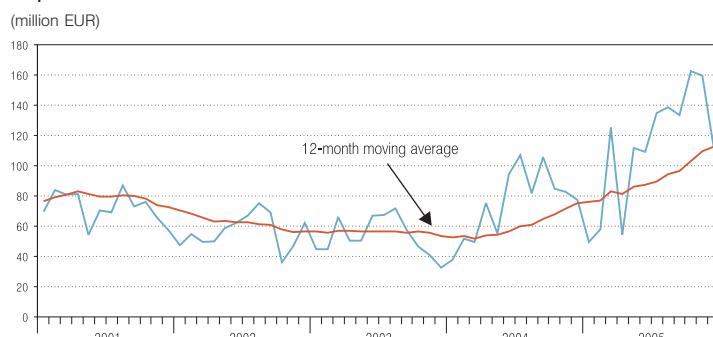
by machines, vehicles and appliances (35.5 per cent) and animal and plant products, food, drink and tobacco (19.1 per cent).

High international prices of oil and energy resources were among the factors behind the considerable increase in the exports of mineral products and fuels. The average price of oil products (in euro) exported by Bulgaria went up by 41 per cent in 2005, and their physical volumes by 11 per cent.<sup>10</sup> The increase in the physical volumes of crude oil imports in 2005, and particularly in the second half of the period, will probably result in a rise in exports of oil products at the start of 2006 given the relatively stable consumption in Bulgaria. Therefore, in the next two quarters the physical volumes of oil product exports are expected to rise, leading to high rates of nominal growth in the group.

The increase in exports of machines and vehicles over the January to December 2005 period came to EUR 399.8 million on the corresponding period of the previous year, their volume totaling EUR 1526.8 million. Following the exports of mineral products, this commodity group reported the highest growth rates in the year. Thus, its relative share in the structure of exports went up from 14.1 per cent in 2004 to 16.1 per cent in 2005. We expect retention of the relatively high growth rates in the first two quarters of 2006.

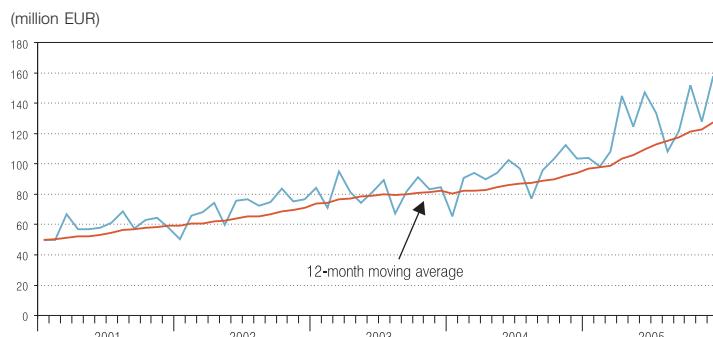
In 2005 exports of animal and plant products, food, drink and tobacco rose by EUR 163.1 million and amounted to EUR 1014.8 million. However, the reported increase (by 52 per cent) reflects the accelerating growth in the first half of 2005, while the third quarter saw a four per cent decrease and the fourth quarter a seven per cent rise. Floods were one of the reasons behind the weaker exports of unprocessed foods, tobacco and cigarettes in the third quarter of 2005. Based on a more detailed disaggregation, oil seeds and fruit (contributing to growth by 0.8 percentage points) and cereals (contributing to growth by 0.7 per-

Chart 69  
Exports of Mineral Products and Fuels



Source: BNB.

Chart 70  
Exports of Machines, Vehicles, Appliances, Tools and Weapons



Source: BNB.

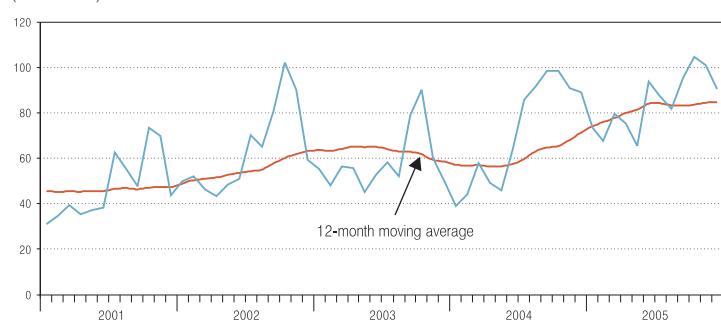
<sup>10</sup> Average Brent price (in US dollars) on international markets rose by 42 per cent over the January to December 2005 period against the prior year.

centage points) added most significantly to total export growth, while tobacco and live animals had a negative contribution of -0.2 percentage points and -0.1 percentage points respectively. Available data confirmed projections of recovered positive growth rates of food and drink exports in the fourth quarter of 2005 following the fall in the third quarter. Retention of positive growth rates, although lower than those in the first half of 2005, is expected in the first and second quarters of 2006.

Solely, exports of textiles, leather, clothing, footwear and miscellaneous consumer goods remained almost unchanged in 2005, with an insignificant increase of 1.6 per cent on the previous year. Probably, the reason behind the reported drop in the first quarter of 2005 and the minimum nominal rise in the following three quarters reflect the competition from foreign manufacturers, as well as limited practice of work with materials supplied by the customer and orientation of local companies to the higher income segment of the market. Available data show reorientation of domestic manufacturers to domestic markets (where sales in real terms increased by seven per cent in the first eleven months of 2005<sup>11</sup>) at the expense of exports (where the real decrease came to two per cent). Forecasts about buoyant EU-25 growth in the first two quarters of 2006 give grounds to expect a positive growth in exports of textiles, leather, clothing, footwear and miscellaneous consumer goods.

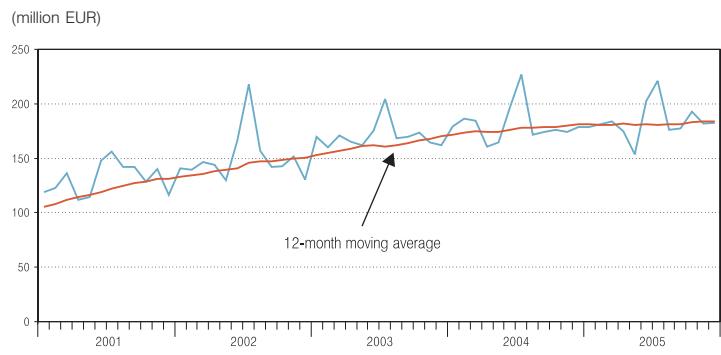
Between January and December 2005 imports (CIF) totaled EUR 14,682.4 million, posting a nominal increase of EUR 3062.9 million (26.4 per cent) on 2004. Energy resources and investment goods displayed the largest growth (52.4 and 31.2 per cent respectively) in the structure of imports by use, contributing to import growth by 8.8 and 8.3 percentage points. Accelerated growth in the value of imported energy resources reflected primarily high international prices of crude oil and petroleum products. The average price of imported crude oil (in

Chart 71  
Exports of Animal and Plant Products, Food, Drink and Tobacco  
(million EUR)



Source: BNB.

Chart 72  
Exports of Textiles, Leather, Clothing, Footwear and Miscellaneous Consumer Goods  
(million EUR)



Source: BNB.

<sup>11</sup> Based on data from the NSI monthly survey on sales and production of industrial enterprises.

euro) rose by 44.9 per cent between January and December 2005, while the physical volume growth for the same period was 13 per cent. Overall costs of crude oil imports exceeded those of the previous year by EUR 655.2 million, with 78 per cent of them attributable to the price factor. The group is expected to report a lower nominal growth in the first two quarters of 2006 compared with that in second half of 2005.

These projections are based on anticipated dynamics of crude oil international prices, as well as on the high base attained as a result of intensified growth in the prior year. We assume that international oil prices will stabilize around their end-2005 levels. Nevertheless, the increase in this group's imports will stay around or higher than the overall import increase.

In support of our forecasts, growth rates of investment goods imports slowed down in the last months of 2005 compared with the first three quarters of the year. However, rates stayed relatively high (fourth quarter growth came to 22 per cent), the nominal change for 2005 being 31.2 per cent. In value terms, imports of investment goods grew by EUR 961.5 million in 2005 reaching EUR 4046.6 million which matched the GDP data (gross capital formation increased nominally by 33 per cent for the first nine months of 2005). Maintenance of relatively high growth rates of investment goods imports until the end of 2005 and expectations of sustained growth in the first two quarters of the current year give grounds for projecting the highest real growth of gross capital formation for this period (albeit at lower rates than reported for the third quarter of 2005).

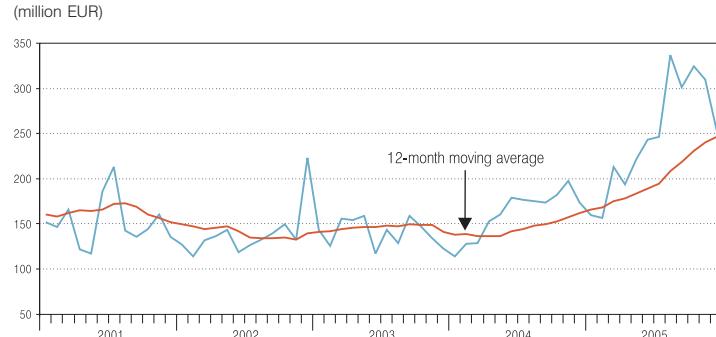
Forecasts for dynamics in consumer goods imports show a slowdown in growth rates in the first two quarters of 2006 compared with those in the second half of 2005. Imports of these goods picked up in the first three quarters of the previous year, although the last few months saw a certain slowdown resulting in an accumulated nominal change of 19.2 per cent in 2005. Consumer goods imported over the January to December 2005 period reached EUR 2258.8

Table 10  
Contribution of Commodity Groups to Trade Growth between January and December 2005  
(percentage points)

	Exports		Imports	
	growth	contribution	growth	contribution
Consumer goods	4.0	1.3	19.2	3.1
Raw materials	16.6	7.2	14.8	5.9
Investment goods	34.7	4.7	31.2	8.3
Energy resources	51.1	5.2	52.4	8.8
Other			38.6	0.3

Source: BNB.

Chart 73  
Imports of Energy Resources  
(million EUR)



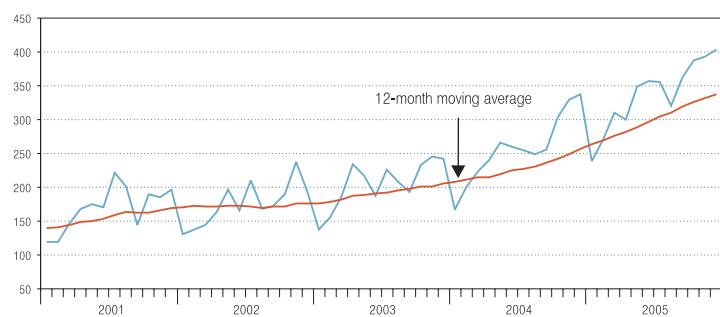
Source: BNB.

million, up by EUR 364.1 million on 2004. In the first two quarters of 2006 retention of growth rates below those of total imports is expected.

Raw material imports had a dominant share in overall commodity imports, weighting some 36 per cent over the January to December 2005 period. Imports in this category reported the lowest growth rates since the year-start (the nominal change came to 14.8 per cent in 2005), their value reaching EUR 5283.6 million. Following the moderate growth of 15 per cent in the third quarter of 2005, raw material imports went up to 24 per cent in October. However, in the last two months of the year they declined to 16 and 11 per cent respectively. In the first quarter of the current year the dynamics of this import component is expected to be close to that of end-2005 and to slow down in the second quarter of 2006. Projections for sustained positive growth rates, yet below those of total imports, are based on positive expectations of economic development.

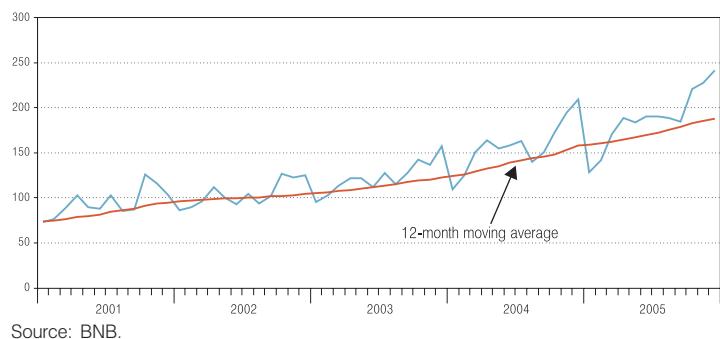
No sizeable changes in export and import geographic structures are expected until mid-2006. The high level of Bulgaria's integration with the EU-25 countries and improving economic relationships between the Balkan countries are evidenced by the large shares of these regions in Bulgaria's foreign trade. The EU member states occupied nearly 57 per cent of the nation's commodity exports for 2005. Exports to the new member states (EU-10 countries) comprised approximately five per cent of overall exports for the review period, rising by around one percentage point on 2004, which is likely due to greater domestic demand in these economies. Imports from the European Union came to about 50 per cent of overall imports between January and December 2005, with no signs of a change in the EU-10 share.

**Chart 74**  
**Imports of Investment Goods**  
(million EUR)



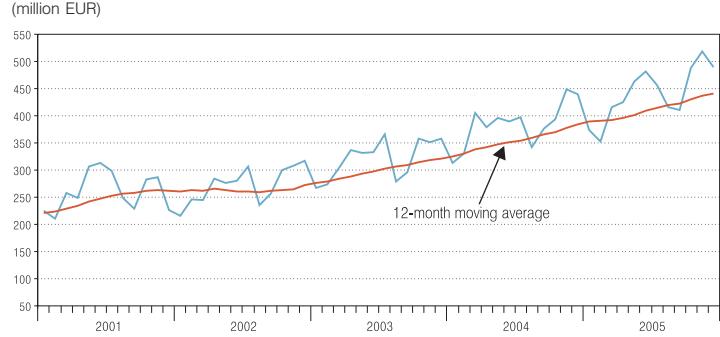
Source: BNB.

**Chart 75**  
**Imports of Consumer Goods**  
(million EUR)



Source: BNB.

**Chart 76**  
**Imports of Raw Materials**  
(million EUR)



Source: BNB.

In the first three quarters of 2005 growth rates in imports of goods and non-factor services were higher than export growth rates in real terms (according to the System of National Accounts data). This trend is expected to sustain in the last quarter of 2005 and to reverse at the beginning of 2006. The increase in the physical volume of exports of goods and non-factor services is predicted to range between 10 and 13 per cent in the coming periods as a result of improving competitiveness of the Bulgarian industry and the assumption that demand would be higher in the euro area. Other reasons for the projected export dynamics were the decreasing impact of the temporary adverse factors of the second half of 2005 (the floods and technological renewal of metallurgical enterprises). Projections put the real growth in imports of goods and non-factor services at 9.5–11 per cent in the following two quarters. They are based on expected domestic demand dynamics. Following the acceleration in the third quarter of 2005, over the forecasting period growth rates are anticipated to slow down to levels lower than those for 2005. The assumption that the *EUR/USD* exchange rate will stay around its current levels in the following two quarters presupposes a nominal depreciation of the lev against the US dollar on an annual basis which will further improve Bulgaria's foreign trade balance.

# 4. Inflation

In the first quarter of 2006 inflation is expected to go up to 7.7–8 per cent on an annual basis (mainly due to the adjusted excise duty on cigarettes). In the second quarter annual inflation is expected to slow down to some 7.5 per cent.

Avian flu spread in Europe and the dramatic sugar price rises on international markets make projections uncertain owing to the big relative share of foods in the consumer basket (over 35 per cent).

By the close of 2005 inflation increased to 6.5 per cent (exceeding the previous year's level by 2.5 percentage points). Prices of energy resources whose overall contribution to inflation (direct and indirect) came to some 2.2 percentage points were a major inflationary factor over the year.<sup>12</sup> Under the influence of international prices, fuels on the domestic market increased by 16.5 per cent and impacted the prices of the other goods and services: transportation services were mostly affected and their prices rose by 12 per cent. A specific factor behind the 2005 higher inflation was the price rises in foods stemming from insufficient supply as a result of agricultural produce losses caused by summer floods.<sup>13</sup>

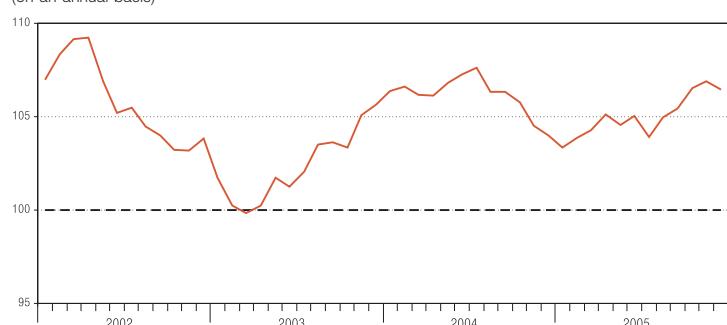
In 2005 prices of controlled goods and services rose by 6.2 per cent, which is almost two times less than their 2004 growth (12.2 per cent). Their contribution to overall inflation came to 1.24 percentage points in 2005, with medical goods ranking first (0.48 percentage points) reflecting increasing production costs. Rises in heating and electricity prices by 20.5 per cent and one per cent respectively in the second half of 2005 were not planned but reflected the considerable price hikes of energy resources on international markets. At the start of 2006 adminis-

Table 11  
Inflation Accumulated since Year's Start

	January – December	
	2004	2005
Inflation, %	3.98	6.45
Contribution, percentage points		
Foods	0.35	2.57
Non-foods	1.37	1.84
Fuels	0.11	0.67
Catering	0.15	0.35
Services	2.11	1.68
Goods and services with administratively set prices	2.89	1.24
Controlled-price goods	1.28	0.72
Tobacco	1.19	0.25
Controlled-price services	1.60	0.52
Electricity and heating	1.08	0.46

Source: NSI.

Chart 77  
Consumer Price Index  
(on an annual basis)



Source: NSI.

<sup>12</sup> The direct effect of fuel appreciation on inflation is estimated at 0.9 percentage points. The indirect results are related to rises in other prices: transportation services (a contribution of 0.3 percentage points), bread and cereals (a contribution of 0.3 percentage points), electricity (a contribution of 0.1 percentage points), heating (a contribution of 0.4 percentage points) and tradable goods which follow international prices and the BGN/USD exchange rate (a contribution of 0.1 percentage points).

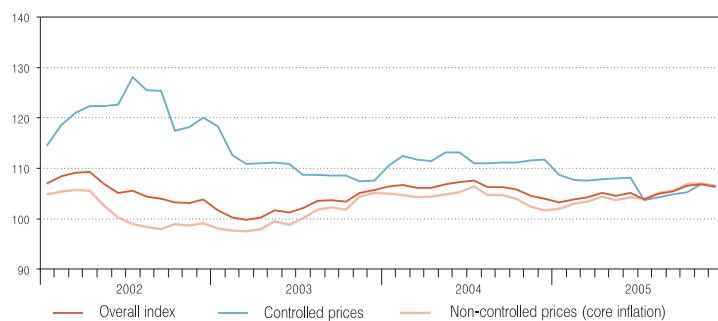
<sup>13</sup> Floods' effect on inflation is estimated at approximately 1.2 percentage points.

tratively set prices will grow by 13 per cent on an annual basis owing mainly to the new excise duty on cigarettes and the rises at the close of the previous year. In the second quarter of 2006 the annual growth rate of controlled prices will come to 16.2 per cent. We assume that the effect of the adjusted excise duty on cigarettes (estimated at a 65 per cent increase in the end price) will subside in the first three months of the year.

Core inflation<sup>14</sup> fell from 6.8 per cent as of October 2005 to 6.5 per cent by year-end on an annual basis. Its high rates were determined primarily by the 6.8 per cent increase in foods prices due to their big relative share in the consumer basket (38 per cent). Increased food prices resulted from two proinflationary factors. On the one hand, summer floods pushed up the prices of unprocessed foods to 10.3 per cent, and on the other, the indirect effect of fuel price rises on the domestic market was responsible for a considerable 4.5 per cent rise in the price of processed foods. Since early 2006 core inflation annual rates will start dropping due to the tailing-off secondary effect of fuel price rises and they are expected to reach 5.2 per cent reflecting the recovered unprocessed foods' deflationary behaviour typical of this period.

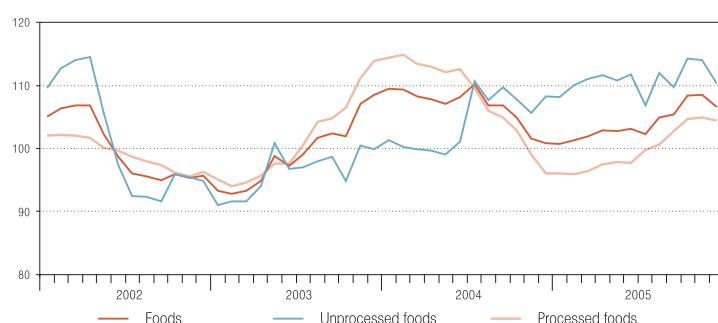
Higher international prices of energy resources in 2005 reflected directly on fuel price rises on the domestic market by 16.5 per cent. Fuels for transportation purposes picked up by 24.5 per cent and those for households, where solid fuels prevail, by 8.3 per cent. High energy prices had secondary effects not only on foods but also on services, especially on transportation services where inflation reached 12 per cent on an annual basis. The new excise duties on petrol and gas oil will push up fuel prices on the domestic market at the start of 2006 and thereupon their annual growth will drop owing to the expected stabilisation of world energy prices. Despite the lack of a subsequent inflationary pressure on services, a slight rise in transportation services is antici-

Chart 78  
Price Indices  
(on an annual basis)



Source: NSI, BNB.

Chart 79  
Price Indices  
(on an annual basis)



Source: NSI, BNB.

<sup>14</sup> Defined as inflation of goods and services excluding controlled-price ones.

pated reflecting the new administratively set prices of road fees and insurances.

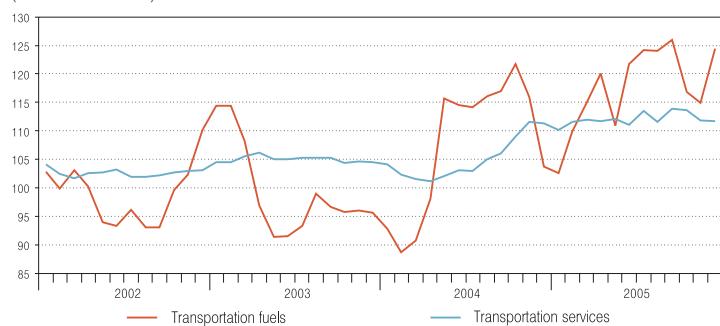
As a result of the US dollar appreciation and rises in the prices of fuels and transportation services, by December 2005 prices of non-foods (excluding controlled-price ones and fuels) went up by 1.6 per cent on an annual basis. This growth will sustain in the first half of 2006 in line with the expected exchange rate stabilisation at the previous year-end's levels and retention of this commodity group's international prices.

In early 2006 prices of services (except those with controlled prices) will continue to maintain an annual growth rate of some seven per cent. The overall index of services will be affected by rises in prices of administrative services (administrative and legal fees, insurances, social services, etc.) and by minimum salary growth which directly affects prices of medical services. By the end of the first six months annual growth in prices of services will fall due to the high base effect during the same period of the previous year.<sup>15</sup>

On an annual basis, inflation in the first half of 2006 will stay high due to the base effect: the dramatic price rises in the second half of 2005. In the first quarter of 2006 we expect inflation to range between 7.7 and eight per cent which will be largely attributable to controlled-price goods and services. In the second quarter annual rates of consumer prices are projected to fall to some 7.5 per cent as a result of slowing inflation rates of foods and market services.

**Chart 80**  
**Price Indices**

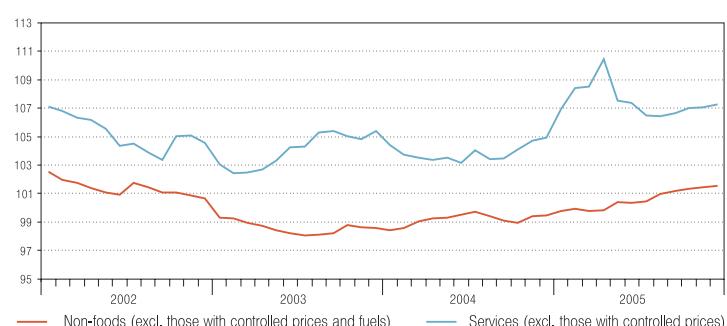
(on an annual basis)



Source: NSI, BNB.

**Chart 81**  
**Price Indices**

(on an annual basis)



Source: NSI, BNB.

<sup>15</sup> Since the start of 2005 fixed telephone services were excluded from the group of controlled-price goods and services. In April of the same year their prices rose by nine per cent on a monthly basis (close to the previous administrative adjustments). As of the moment of publishing the *Economic Review, issue 1 of 2006*, no warning on possible rises in 2006 has been given.