



Republic of Bulgaria

CONVERGENCE PROGRAMME

(2007–2010)

Table of Contents

List of Abbreviations	5
List of Tables in the Text	7
List of Figures in the Text	8
1. Overall policy framework and objectives	9
2. Economic Outlook	10
2.1. World Economy and Technical Assumptions.....	10
2.2. Cyclical development and current prospects	10
2.2.1. Economic growth	10
2.2.2. Cyclical position	12
2.2.3. Labour Market – Employment and Unemployment	13
2.2.4. Incomes and Labour Productivity.....	15
2.2.5. Inflation	17
2.2.6. External Sector.....	20
2.2.7. Monetary Sector	23
2.3. Medium-term Scenario	24
2.4. Effects from Structural Reforms.....	26
2.4.1. Social Security.....	26
2.4.2. Education	27
2.4.3. Healthcare	27
3. General Government Balance and Debt	29
3.1. Policy Strategy	29
3.2. Medium-term Objectives	29
3.3. Actual Balances and Implications of Budget for Next Year.....	31
Main Elements of Tax Policy for 2008-2010.....	33
Main Policies in the Expenditure Part of the Three-year Budget Forecast.....	38
3.4. Structural Balance and Fiscal Position	43
3.5. Debt Levels and Development	45
3.6. Budget Aspects of Main Structural Reforms	46
3.6.1. Social Security.....	46
3.6.2. Education	48
3.6.3. Healthcare	48
4. Sensitivity Analysis and Comparison with Previous Update	50
4.1 Alternative Scenarios and Risks	50
4.1.1. Higher Oil Prices	50
4.1.2. An Appreciating Euro	51
4.1.3. A Weaker Development of the World Economy	51

4.1.4. Fiscal Risks	52
4.2. Sensitivity of Budgetary Projections to Different Scenarios and Assumptions....	53
4.3. Comparison with Previous Update.....	55
5. Quality of Public Finances	56
5.1. Policy Strategy	56
5.2. Developments on the Expenditure Side	57
5.3. Revenue Side Developments.....	58
6. Sustainability of Public Finances.....	59
6.1. Policy Strategy	59
6.2. Long-term Budgetary Prospects, Including the Implications of Aging Population	61
6.2.1. Social Security	61
6.2.2. Education	62
6.2.3. Healthcare	63
7. Institutional Features of Public Finances.....	65
7.1. Implementation of National Fiscal Rules.....	65
7.2. Budget Procedures, Including Statistical Requirements of Public Finances and Governance	66
7.3. Reforms on the Are of Revenue Administration	70
7.3.1. National Revenue Agency.....	70
7.3.2. Customs Agency.....	71
7.4. Fiscal Decentralization	72
Appendix 1: Tables.....	73
Appendix 2: Description of the Model Used by AEF to Assess the Long-term Impact of Demographic Processes.....	88
Long-term Demographic Projection	88
Long-term Macroeconomic Forecast	89
Impact of Demographic Processes on Public Finances.....	89
<i>Education</i>	89
<i>Healthcare</i>	90
<i>Unemployment Benefits</i>	90

List of Abbreviations

AEAF – Agency for Economic Analysis and Forecasting
BCC – Bank Consolidation Company
BGN – Bulgarian Lev, New International Code
BICIS – Bulgarian Integrated Customs Information System
BMA – Bulgarian Medical Association
BNB – Bulgarian National Bank
CBA – Currency Board Arrangement
CCT – Common Customs Tariff
CPI – Consumer Price Index
DG ECFIN – Economic and Financial Affairs Directorate General
EC – European Commission
ECB – European Central Bank
ECOFIN – Economic and Financial Affairs Council of the European Union
ECS – Exports Control System
EDP – Excessive Deficit Procedure
EPC – Economic Policy Committee
ERM II – Exchange Rate Mechanism II
ESA – European System of Accounts
EU – European Union
EUR – Euro
EURIBOR – Euro Interbank Offered Rate
FDI – Foreign Direct Investment
FISIM – Financial Intermediaries’ Services Indirectly Measured
GDP – Gross Domestic Product
GNI – Gross National Income
GVA – Gross Value Added
HICP – Harmonized Index of Consumer Prices
ICT – Information and Communication Technologies
IFI – International Financial Institutions
IMF – International Monetary Fund
ISCED – International Standard Classification of Education
ISPA – Instrument for Structural Policies for Pre-Accession
IT – Information Technology
ITMS – Integrated Tariff Management System
LCIT – Law on Corporate Income Taxation
LFS – Labour Force Survey

LIBOR – London Interbank Offered Rate
LLTF – Law on Local Taxes and Fees
LPIT – Law on Personal Income Taxation
MLSP – Ministry of Labour and Social Policy
MoF – Ministry of Finance
MTFF – Medium-term Fiscal Framework
MTO – Medium-term Objective
MTO^{HD} – Medium-term Objective, High Debt
MTO^{IL} – Medium-term Objective, Implicit Liabilities
MTOSM – Medium-term Objective, Safety Margin
MWh – Megawatt Hour
NAMRB – National Association of Municipalities in the Republic of Bulgaria
NATO – North Atlantic Treaty Organization
NCTS – New Computerized Transit System
NHIF – National Health Insurance Fund
NRA – National Revenue Agency
NSI – National Statistical Institute
NSSI – National Social Security Institute
OECD – Organization for Economic Cooperation and Development
PLC – Public Limited Company
PSS – Public Social Security
ROG – Representative Output Gap
SAF – State Agency for Forestry
SAITC – State Agency for Information Technologies and Communications
SAYS – State Agency for Youth and Sports
SG – State Gazette
SGP – Stability and Growth Pact
SIC – Social Insurance Code
SRM – Software for Revenue Management
TFP – Total Factor Productivity
UK – United Kingdom of Great Britain and Northern Ireland
UMTS – Universal Mobile Telecommunications System
USD – United States Dollar
VAT – Value-added Tax
VIES – VAT Information Exchange System
VOES – Value Added Tax on Electronic Services System

List of Tables in the Text

Table 1: Assumptions on macroeconomic indicators*.....	10
Table 2: HICP Forecast (%)	19
Table 3: Foreign sector indicators (% of GDP)	21
Table 4: Minimum MTOs (% of GDP)	30
Table 5: Time schedule for amending excise tax rates	37
Table 6: Tax revenues elasticities	44
Table 7: Budget revenue and expenditure sensitivity to GDP	45
Table 8: Effects on macroeconomic indicators from increasing the price of oil.....	50
Table 9: Effects on macroeconomic indicators resulting from euro appreciation	51
Table 10: Effects from the deceleration of the growth rates of the USA and the EU	52
Table 11: Effects from alternative assumptions on budgetary indicators	54
Table 12: Sustainability Indicators	59
Table 13: Participation rate (15-64)	60
Table 14: Average annual real GDP growth (2011-2050).....	61
Table 15: Education expenditure by type of education (% of GDP).....	63
Table 16: Healthcare expenditure (% of GDP)	63

List of Figures in the Text

Figure 1: Demand-side sources of economic growth	12
Figure 2: Number of employed* and unemployment rate**	14
Figure 3: Real ULC growth, 2000=100	16
Figure 4: HICP: Non-energy industrial goods and services (monthly change on an annual basis)	18
Figure 5: Foreign direct investment in Bulgaria	23
Figure 6: Budget balance (% of GDP).....	31
Figure 7: Revenue structure, 2008.....	34
Figure 8: Government expenditure by function	39
Figure 9: Cyclical budgetary position	44
Figure 10: General government debt (% of GDP).....	45
Figure 11: Dependency and replacement ratios	47
Figure 12: Population of Bulgaria by age groups, millions	60
Figure 13: Balance of the public social security funds (% of GDP).....	61
Figure 14: Replacement and dependency ratios	62

1. Overall policy framework and objectives

The main priority of the government is to maintain macroeconomic stability and high rates of economic growth in the medium term. The most important factors to accelerate economic growth will be the structural reforms, the improvement of the business climate and the increase in the efficiency of institutions.

The budgetary objectives finding expression in the generation of significant positive budget balances during the programming period are targeted to smoothing the business cycle, to decreasing the demand-side inflationary pressures in the economy, and to counteracting the increasing external sector imbalances. The maintenance of the level of fiscal consolidation will contribute significantly to the optimization of the public sector activities and to the increase of its efficiency. The efforts to achieve a sustainable medium-term fiscal framework, the transition to the programme budgeting approach, and the further development of fiscal decentralization are also crucial factors to boost the efficiency and quality of public finances.

The development of the private sector as the main driving force behind economic growth is a priority of the economic policies of the country. In this context stand the intention of the government to restrict the share of the public sector, the envisaged amendments to tax policy and social security, and the restructuring and redirection of public expenditures to productivity-enhancing activities, such as education, research and development and investments in infrastructure.

The efficient management and utilization of EU funds is one of the main guarantees for the achievement of the long-term economic policy objectives.

The successful development of the labour market is an important issue on which depends the long-term success of economic policies. In the area of labour markets, the priority of economic policies is to improve their flexibility, to develop human resources, and to increase the labour force participation.

The development of the private sector continues being a priority when employment and economic growth policies are formulated. In order to limit the risks of crowding out the private sector from the labour market, until the middle of 2008 the government will take steps to decrease the number of personnel in the budget sector by at least 12% in certain units.

Bulgaria will maintain its currency board arrangement (CBA) while preserving the current level of the exchange rate (BGN 1.95583/EUR 1) until the country becomes a member of the euro area. The government and the central bank have already formulated and are in the process of assuming the respective commitments to include the Bulgarian lev in Exchange Rate Mechanism II (ERM II).

2. Economic Outlook

2.1. World Economy and Technical Assumptions

The elaboration of the macroeconomic framework for the period 2007-2010, used in the Convergence Programme and the 2008 state budget, is based on external environment assumptions of the European Commission (EC), the International Monetary Fund (IMF), and the Agency for Economic Analysis and Forecasting (AEAF). The divergence from the common assumptions used in the Autumn Forecast of the EC is due to the relatively late dissemination of the latter.

Table 1: Assumptions on macroeconomic indicators*

	2007	2008	2009	2010
Exchange rate USD/EUR	1.3570	1.4000	1.3800	1.3500
GDP (in real terms, percentage change) – World Economy	5.10	5.00	5.00	5.00
GDP (in real terms, percentage change)- EU25	2.72	2.60	2.60	2.60
Oil price (USD/barrel)	68.10	70.30	68.00	67.00
Six-month LIBOR on USD-denominated deposits	5.33	4.80	4.60	4.80
Three-month LIBOR on EUR-denominated deposits	4.30	5.00	4.90	4.80
Commodity prices (1995=100)	155.71	147.60	137.52	128.01
Food	117.01	116.42	113.91	112.01
Beverages	90.64	87.56	85.48	83.17
Agricultural raw materials	99.04	97.23	94.04	92.19
Metals	259.61	236.03	209.46	183.02

* Assumptions take into account data available as of September 15, 2007.

Source: EC, IMF, AEAF

The forecast values of the indicators used in the Convergence Programme are based on the medium-term macroeconomic model and other auxiliary models of the Agency for Economic Analysis and Forecasting as well as on estimates of the Ministry of Finance, the National Social Security Institute and the National Health Insurance Fund.

2.2. Cyclical development and current prospects

2.2.1. Economic growth

Real GDP growth reached 6.1% in 2006 and accelerated to 6.4% in the first half of 2007. During the period under review the increase in industry accelerated to almost 10% and was a major factor for the value added growth. Domestic sales turned into the main driving force of the sector's performance since the beginning of the current year while the contribution of exports dwindled. The highest growth rate of about 15% in the first half of 2007 was registered by value added in manufacturing. Construction continued its dynamic development (growth rate of about 10% in the last four years,

including the current one). The closure of two of the reactors of the nuclear power plant in Kozloduy affected electricity production and the branch declined in the first quarter. Both electricity production and value added, however, registered positive growth rates in April – June. Mining declined for the third quarter in a row mainly due to the deterioration in the external environment.

The growth rate of the services, which are the largest sector of the economy, also accelerated this year reaching real 8.8% in the first half against 6.1% last year. The financial and the trade sector accounted for half of the services growth in 2006. The increase in employment and in the incomes of economic agents spurred consumption and thus backed the development of the two branches but also pushed the accumulation of savings in various financial instruments. A reason for the acceleration of the real growth of financial intermediation to more than 40% in the first half as compared to 17% last year is credit expansion.

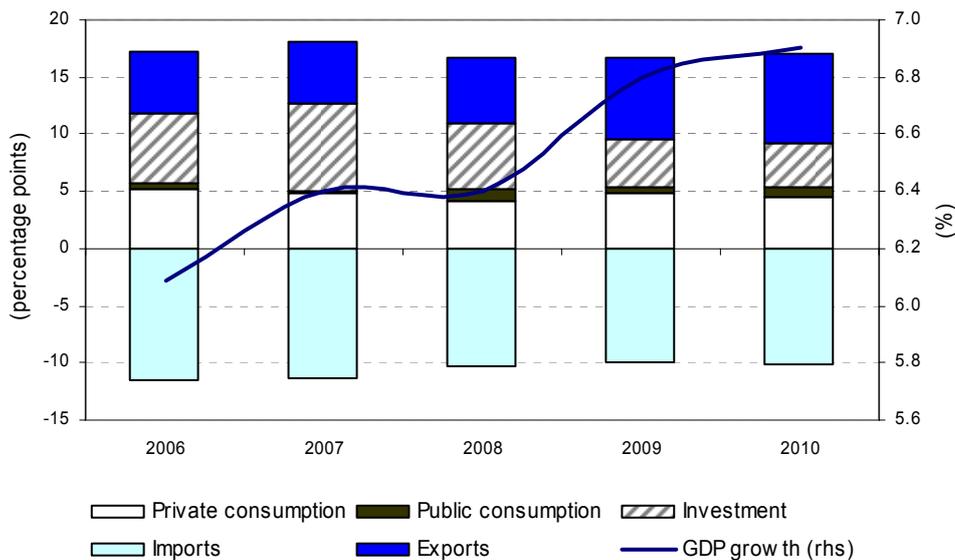
After the weak rebound in January-March, agriculture dropped again as a result of unfavourable weather conditions. The latter are a major determinant of the sector's development due to the low technology base.

Considering the final-use breakdown, the increase in domestic demand was the main determinant of GDP growth. Investments in fixed capital contributed the most (17.6% real growth in 2006 and almost 30% in the first half of 2007). Unlike the last year, when most of the investments were allocated to trade, manufacturing and electricity production captured the greatest share this year. The change in the structure of investments is expected to result in an increase in the competitiveness of the economy and in narrowing the current account deficit. The change in inventories also contributed positively to economic growth during the period under review. The share of total investments in GDP reached 31.9% in 2006 and 36% in the first half of the current year. Investment activity was financed by domestic resources as well as by foreign direct investment and external loans.

Private consumption increased in real terms by 7.5% in 2006, mainly due to the increases in incomes and employment. Since the beginning of 2007 the increase of the indicator by 7.7% is due to the same factors, aided by the increased credit activity of the commercial banks. Government consumption remained flat in the first half as compared to its level a year ago.

Real exports increased by 9% in 2006. After a slowdown to 2.2% in the first quarter, the indicator rebounded in the next three months and scored a 4.1% real growth in first half. The real growth rate of imports slowed down in the first half compared to its last year value but due to its large value the foreign-trade balance continued deteriorating.

Figure 1: Demand-side sources of economic growth



Source: AEF, NSI

2.2.2. Cyclical position

The assessment of the cyclical position is based on the methodology, which was used for the analysis presented in the Convergence Programme (2006-2009).¹

The calculations show a 5.1% increase in potential GDP for 2006 driven mainly by the expansion of the capital stock in the economy resulting from the exceptionally high investment activity. Lower contribution comes from employment and total factor productivity growth.

The output gap is estimated at 0.9% and corresponds to the acceleration of the inflation rate for the same year, although it cannot be considered as its main determinant (see the section devoted to inflation).

The potential growth rate of the country is expected to accelerate to about 7.5% annually in the period 2007 to 2010, again driven mainly by the increase in the capital stock. The latter is due to the continuing high domestic investment activity as well as to the foreign direct investment inflows and the gradual acceleration of EU funds absorption. The contribution of total factor productivity is expected to increase at the expense of lower contribution of employment. The expectations for such developments are based on the increase in the capital stock per worker and the expected slow-down of the employment growth.

The output gap is expected to decline gradually in the first two years of the period 2007-2010 and faster thereafter, reaching a negative but close to zero value at the

¹ One of the assumptions in the model, namely labour share in total income, was changed in line with a recommendation by the Output Gap Working Group. The value of 0.65 was adopted to reflect the technological parameters of production derived in economic theory instead of the ratios calculated on the basis of the income approach of GDP (through the share of compensation of employees, etc.). Two years, 1997 and 1998, were excluded from the estimations due to the financial crisis in the country and the recovery of the main macroeconomic indicators to normal values afterwards, which affect considerably the final results. Therefore the analysis starts from 1999.

end of the period. As far as inflation depends also on other factors, it is hard to distinguish the pure contribution of the cyclical position to price level dynamics.

2.2.3. Labour Market – Employment and Unemployment

The number of employed has been increasing continuously in the last year and a half while the unemployment rate has been following a sustainable downward trend reaching a level of about 7% in the last months. The average number of employed increased by 4.4% and 5.1% respectively in 2006 and in the first half of 2007.² Major factors behind the employment growth were the job creation in the private sector, the increase in the participation rate as well as the reduction in the social security burden for employers as of the beginning of 2006. Part of the employment growth, especially in 2006, was due to a decline in the share of the grey employment as a result of the lower labour costs.

As a result of the increased number of job offerings on the primary labour market, the number of unemployed continued decreasing. The latter reached an average share of 9% and 7.4%³ of the labour force respectively in 2006 and in January-June 2007. In the second quarter the indicator declined to 6.8%, which is the lowest level since the start of the survey.

The Employment Agency administrative statistics confirmed the downward trend of unemployment dynamics. The level of registered unemployment hit a 16-year record low of 7% as of end-August.

The scope of subsidized-employment programmes was narrowed again and this reduced further their impact on labour market developments. The number of beneficiaries of active programmes and employment enhancement measures followed a downward trend. The average number of persons employed under these programmes and measures per month was by 11.6% lower in 2006 as compared to 2005. The decline reached 21.9% in January-August 2007 against the first eight months of 2006.

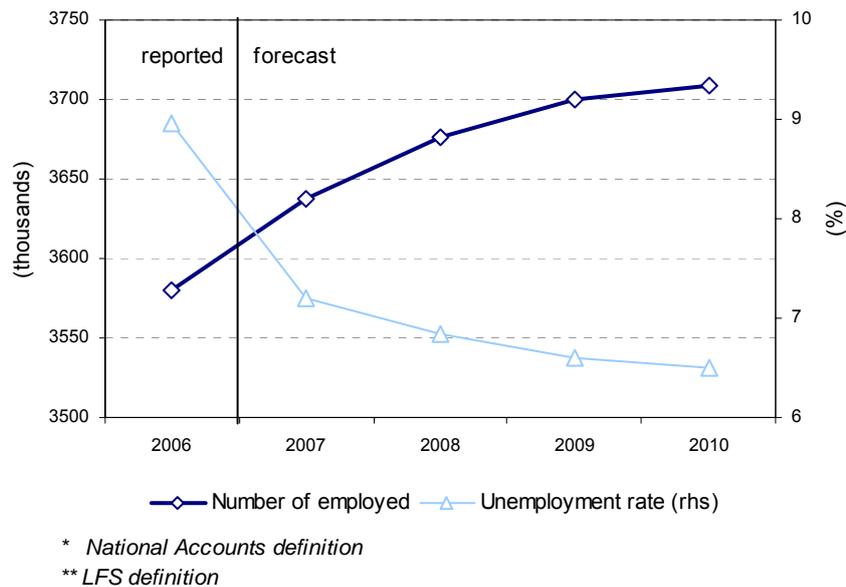
The participation rate rose by 2.4 and 2.3 percentage points compared to 2005 and the first half of 2006, respectively, to an average of 64.5% and 65.5%⁴ in 2006 and in the first half of 2007. The growth of the indicator was influenced also by the return to the labour force of persons, who were not participating in the previous periods. The number of discouraged workers has been continuously decreasing in the last year and a half. They were by 81.2 thousand less in the first half of 2007 as compared to a year earlier.

² According to NSI Labour Force Survey (LFS) data, for the age group 15+.

³ According to the LFS data.

⁴ In the age group 15-64.

Figure 2: Number of employed* and unemployment rate**



Source: NSI, AEAf

Employment and unemployment, supported by the expected sustainable growth of the economy, are expected to develop positively in the period 2008-2010. As a result of the expected increase in the participation rate and the higher economic activity of the companies, the number of the employed is expected to grow respectively by 1.1%, 0.6% and 0.2%⁵ in the next three years. The slowdown of the indicator's growth is explained by the demographic processes in the country. The increase in the private sector job openings is expected to support the trend of unemployment-rate reduction during the period under review. The jobless rate will gradually reach an average of about 6.5%⁶ in 2010.

Labour market policies in the programming period will target mainly increasing the labour supply. Measures for increasing the flexibility and the mobility of the labour force through expanding the applicability of fixed-term contracts and measures with regard to working day and working week duration are envisaged. Budget expenditures on government active measures will be restructured towards reducing the scope of the programmes for subsidized employment. Public services in the area of employment will be improved and the measures aiming to raise the qualification and to provide assistance in job seeking, especially for disadvantaged groups, will be amplified. In order to solve the issue related the relatively low participation rate, from January 2008 onwards the government will enforce the restrictions concerning the period of granting monthly social aid to unemployed persons of working age to 18 months, implementing at the same time targeted measures for promoting higher employment. The increase in the labour supply will work in favour of eliminating a considerable part of the risks related to the sustainable economic development of the country and will provide opportunities for higher potential growth.

⁵ The presented estimates concerning the development of employment are based on the national accounts definition of employed persons.

⁶ LFS definition.

2.2.4. Incomes and Labour Productivity

The growth rate of labour incomes slowed down in 2006 as compared to 2005. The average wage⁷ increased 9.5% in nominal and 2% in real terms on an annual basis. At the same time, labour productivity⁸ rose by 3.5%⁹ and outpaced the real wage increase. As a result, unit labour costs¹⁰ continued decreasing in real terms, which may be considered as a factor for improvement of the competitiveness of the country.

Unlike 2006, the growth of incomes and labour productivity in the total economy accelerated in the first half of 2007. The average wage surged by 17.4% in nominal and by 11.9% in real terms compared to the same period of 2006. Like in the previous several years, the private sector contributed the most. The indicator's dynamics was influenced to some extent by the cut in the share of the grey economy as a result of the reduction in the social insurance burden since the beginning of last year but also by the shortage of labour force in some specific branches. Labour productivity growth thus lagged behind the real wage increase as a result of the above factors. During that period labour productivity in the total economy rose by 4.9% in real and by 10% in nominal terms on a yearly base. Although the indicator peaked in the second quarter as compared to the last few years, for the first time incomes dynamics caused an increase in unit labour costs.

Nevertheless, unit labour costs remain among the lowest amid other EU countries. Regarding competitiveness, unit labour costs are still considered as a comparative advantage. It should be noted, however, that it is one of short-term nature only and therefore in the medium-to-long run the envisaged policies target convergence of the indicator to the EU average level in order to retain and raise the labour potential for the development of the economy.

The government encouraged the increase in real incomes in the last few years through cutting direct taxes and social insurance contributions and through gradual increases in the wages controlled by the government.

The government intends to introduce a flat tax on personal incomes as of 2008. Thus, though the envisaged redistribution of 5 percentage points of the social insurance contributions from employers to workers, the average disposable wage income is expected to be by 1% higher as compared to a scenario preserving the current tax income brackets. The higher rate of increase of disposable funds is expected to increase the labour supply and the participation rate in the country. A positive effect is expected with regard to households' savings, and this will decrease the shortage of domestic funds for financing investment in the country. This is also expected to reduce the current account deficit.

The minimum wage used to be raised once a year as of January – by 6.7% in 2006 and by 12.5% in 2007. The indicator is planned to increase by 22% in 2008. It should be noted, however, that the minimum wage was not taxed in the previous years. As of the beginning of 2008 the introduction of the flat tax is envisaged to apply to the minimal wage as well. Thus the minimum disposable income will rise by 10% in nominal terms on an annual basis and will not exceed the projected growth of the nominal GDP.

⁷ Preliminary data from Enterprises Survey.

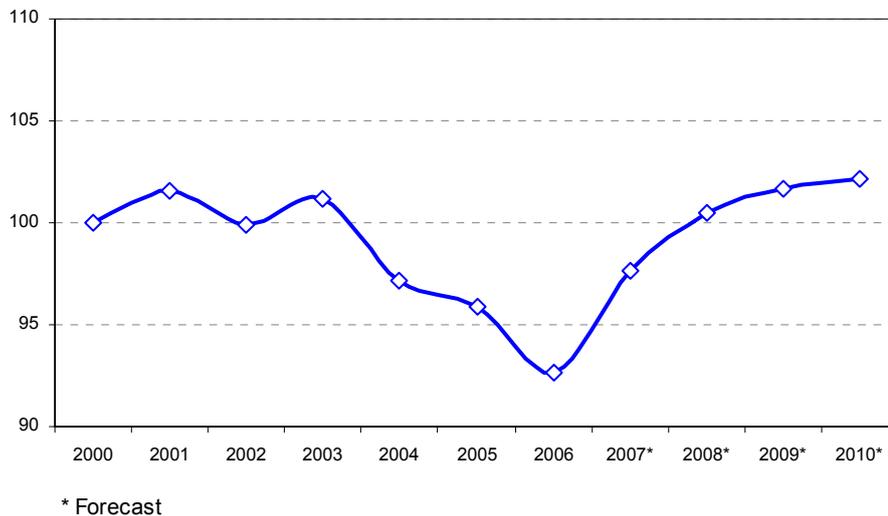
⁸ The indicator was calculated as a ratio between GVA at constant prices and the number of employed from the national accounts statistics.

⁹ The indicator includes imputed rent on self-occupied dwellings. The value amounts to 4.7% if the imputed rent is excluded.

¹⁰ Eurostat methodology.

The average wage in the budget sector was raised by an average of 6% as of July 2006 and by 10% as of July 2007. It is planned to increase by 10% next year and the government has made a commitment that its growth will not outpace the expected labour productivity growth. Thus, the indicator will not cause deterioration of the competitiveness of the economy.

Figure 3: Real ULC¹¹ growth, 2000=100



Source: AEF, NSI

The factors that influenced incomes and labour productivity in the first half of 2007 are expected to remain at play in the next few years as well. Labour productivity and wages are expected to continue increasing in the medium term, impacting positively the country's convergence to the EU.¹² Achieving higher income levels and improved living standards during the period under review is in close connection with the growth of the production of goods and services, labour productivity and employment. In addition, the income policy of the government in the next three years will also influence positively the disposable income of the households. The expected acceleration of the labour productivity growth is based on the registered investment expansion and the overall dynamics of the economy. It is possible that labour incomes growth will outpace that of labour productivity in 2007 and 2008 having in mind the lagging behind of the former in the last few years. The share of the compensation of employees in gross value added is still below the EU average and also supports the above scenario in the short run. Such development is not expected to impact significantly on the country's competitiveness. Incomes and labour productivity are expected to develop in parallel at the end of the programming period.

¹¹ Ratio between the nominal compensation of employees per employee and the nominal GDP per employed.

¹² Additional gains to total labour productivity growth are expected as a result of the envisaged reduction of the public sector employees and the transfer of the latter to the private sector, which is more productive.

2.2.5. Inflation

The end-of-year and annual-average inflation rates measured by HICP reached respectively 6.1% and 7.4% in 2006. In October 2007 HICP on an annual basis increased by 10.6% while the annual-average rate scored 6.6%.

The increase in the market prices part of the inflation was mostly due to foodstuffs as a result of the poor harvest of cereals and oleaginous plants in the country and the rise of the international prices of food and energy goods.¹³ Food inflation reached 22.6% in October on an annual basis, and the acceleration was registered mainly during the summer months. Historically such a development is not typical in the country as summer months are usually characterized by decreases or very small increases in food prices. The higher cereals prices had a direct impact on flour, bread, and vegetable oils prices but also affected indirectly meat and dairy products due to the higher fodder prices. Food inflation slowed down in September and October and the registered values were close to the anticipated ones. This indicates that the market has returned to its normal behaviour as food price increases were in line with the historical values typical for this period.

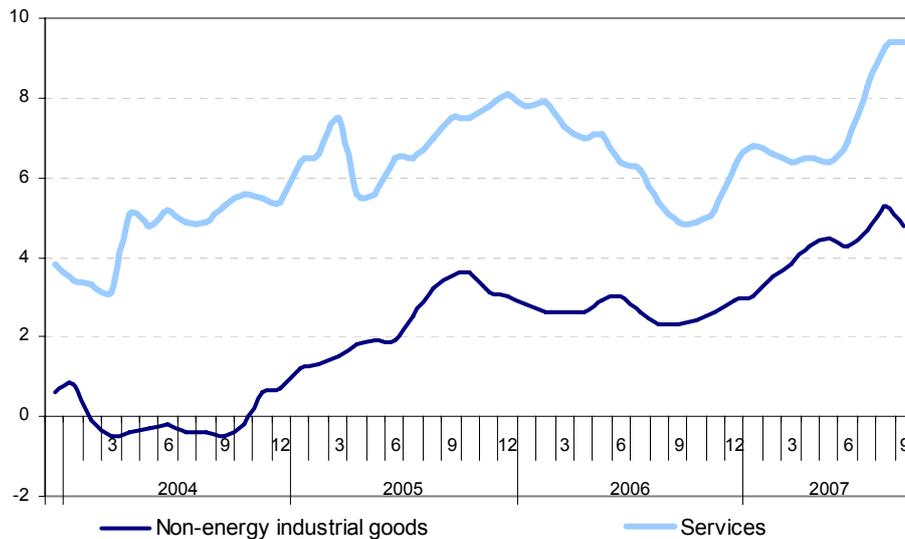
Core inflation¹⁴ also accelerated slightly in the last two years. This was due to the increase in the prices of non-energy industrial goods and services. The higher solvent demand of the population resulting from the real incomes growth and the continuing credit expansion is the main factor at play behind the increase in the prices of durable goods and services.

The first year following the EU accession of the country was characterized by higher demand for goods and services on the part of Greece and Romania as the price levels in those two countries are relatively higher as compared to that in Bulgaria. According to tourism statistics, visitors from Greece and Romania rose respectively by 31.9% and 113.5% in January-September against the same period of the last year and gained the largest share of all tourist visits. The purchases of goods and services by foreigners on the domestic market together with the higher solvent demand raised the prices not only in specific regions but on the national level as well. The higher external demand also explains part of the price increase in the catering services.

¹³ According to World Bank data the international prices of several goods peaked in 2007 (crude oil, natural gas, wheat and other cereals, fats and oils). This comparison concerns the change in international prices in euro (leva).

¹⁴ Eurostat definition.

Figure 4: HICP: Non-energy industrial goods and services (monthly change on an annual basis)



Source: Eurostat

The prices of energy goods and services increased by an average of 8.4% in January-October 2007 mainly due to the dynamics of the international crude oil prices. The electricity price increased both for households and for industrial users as of July 1.

The impact of newly adopted excise taxes on total inflation was negligible in 2007 compared to that in 2006.¹⁵ The cigarettes market was liberalized at the beginning of 2007. In January-October the prices of locally produced cigarettes dropped by 6.3% due to increased pressure from foreign competitors. The growth of liquid fuels prices was considerably lower than the one expected as a result from the new excise tax rates. The lower international oil prices in January caused a 2.6% average growth of liquid fuel prices against an increase of 20% in the unleaded petrol excise tax rate and 24% in the diesel excise tax rate.

The inflation forecast, presented in the Convergence Programme (2006-2009), was elaborated assuming no external or domestic shocks, which could affect the price developments in the agricultural sector and in the food industry. The drop of the agricultural sector in 2007 due to the drought shows, however, the presence of a negative shock on the food supply for a third year in a row, which together with the high international food prices explains the divergence between the forecasted and the registered values.¹⁶

The projection is largely based on the process of adjusting the price level in the country to the EU average. This process is directly linked also to real GDP growth and more specifically to labour productivity increases. The outpacing growth rate of labour productivity in the country as compared to the EU average gives opportunity for a

¹⁵ See Convergence Programme of the Republic of Bulgaria (2006-2009)

¹⁶ The inflation forecast published in the Convergence Programme 2006-2009 was based on the national CPI. NSI started calculating and publishing HICP as of the beginning of 2007. Available index numbers start from the beginning of 2005. The national CPI is not harmonized in terms of including non-residents' expenditures only. Nevertheless, the national index diverges significantly from the harmonized one due to big differences in the weights structure, especially with respect to the share of food and services expenditures. The relative share of food and soft drinks is 22.5% in HICP while 35% in the national index. The services weight is 36.3% in HICP and 21.2% in the national index.

parallel real convergence of the income level¹⁷ and hence of the price level, which implies higher than the EU average inflation in Bulgaria.

Table 2: HICP Forecast (%)

Year	End-of-period	Annual average
2007	9.3	7.2
2008	4.5	6.9
2009	4.7	4.4
2010	3.6	3.7

Source: AEAF

For 2008-2010 Inflation of energy goods and services is expected to remain low at 4.0%, 0.5% and 1.4% at the end of each respective year. This group consists of goods and services with both market and controlled prices. Additionally, some of the items from the two groups are subject to excise taxes and will be influenced by the future increases in the excise tax rates. The impact of electricity and coals excises on overall inflation is low and is estimated at a total of 0.2 percentage points for the period 2008-2010.

The excises on tobacco are planned to reach the EU minimal level until 2010. According to the time schedule approved by the government, the excises on tobacco will be raised by equal rates at the beginning of each of the three years until the end of the period. Therefore, the anticipated increase in the price of tobacco products stands at 27.6% in 2008, which accounts for a contribution of about one percentage point to total inflation. The contribution of cigarette prices increase to 2009 and 2010 inflation is expected at a total of 1.5 percentage points.

Annual food inflation is expected to remain low with the exception of 2007. The average expected end-of-year food prices growth stands at 1.2% for the period 2008-2010. The expectations concerning food price dynamics on the international markets point to a downward correction. The latter takes also into account the fluctuations of the EUR/USD exchange rate. For some specific commodity groups, such as cereals, meat, and citrus fruits, the international prices are expected to decrease.

Services are expected to sustain a trend of relatively high inflation: 5.2% at the end of 2008 and about 6.8% at the end of 2009 and 2010. This group includes also the prices of catering, which have increased historically by a rate higher than total inflation. Prices of services are expected to increase by 8.4% in 2007.¹⁸ The slow down of services inflation in 2008 is conditioned also on the expected lower increase in the prices of catering. The process of price convergence is expected to affect the services group more than the other groups due to the fact that the services price level is much lower as compared to the EU average than the corresponding ratio for goods.

The prices of non-food goods are expected to increase by diminishing rates – from 4.1% at the end of 2007 to 2.8% at the end of 2010. The growth of consumption of durable goods has been accelerating in the last three years, and the higher real incomes and wealth of the households are among the main reasons for their increased

¹⁷ According to Eurostat data, income and price levels in the country were 37.1% of the EU 25 average in 2006. GDP per capita in terms of purchasing power standards was used as a proxy of the income level.

¹⁸ A major factor influencing this forecast are the prices of catering, which increased by 15.7% in January-October; part of this growth was due to the food inflation.

share in total consumption. Despite the increased demand, the inflation of non-food goods remained the lowest due to high competition from imports.

The major risk factors for the forecast accuracy are related to international price dynamics of energy and food. Domestic risk factors include the electricity price dynamics and the wage growth. The rate of increase of real wages in the economy is expected to stay close to the real growth of productivity except for 2007.

The high food prices inflation in 2007 will raise considerably the relative price level of the group as compared to the EU average, and the effects stemming from the high food demand from the neighbouring countries is expected to diminish in the following years.

The impact of excises rates increases on inflation is expected to fade away almost fully in the following three years. The process of harmonizing the excise rates with the EU minimal levels will be completed at the beginning of 2010. Thus one of the major sources of inflation concerning controlled prices will cease existing.

2.2.6. External Sector

The main factors that determine the dynamics of the external sector of the Bulgarian economy are the high rates of economic growth, the rise in income, productivity and competitiveness, as well as the transition period record-high FDI inflow.

In 2006 the balance-of-payments current account deficit reached 15.7% of the country's GDP. The main factor, which contributed to the formation of a negative balance of the current account, was the external trade deficit. For the period January-August 2007 the current account deficit amounted to EUR 3203.5 million (12% of the forecasted annual GDP), and the tendency of an increasingly negative foreign trade balance leading to a higher current account deficit remained unaltered. It is expected that in 2007 the current account deficit will reach 21% of the forecasted GDP and remain at this level in the medium term. The main factors behind this scenario are the expected high investment demand, capital inflows (predominantly FDI), and repayment of dividends and other income from foreign investments, wages and employment dynamics, etc. The maintenance of relatively high current account deficit in medium term reflects the process of production capacity augmentation and consequently does not pose risks to macroeconomic stability and to the economy's growth potential.

In the latest several years our country pursues a strict fiscal policy finding expression in the realization of a budget surplus. In this way a restriction on the current account deficit is targeted. This effect is expected to be further deepened through the impact of the increase of the minimum required reserves held by the banks at BNB to 12% of their deposit base (from the current 8%), as from September 1, 2007.

In 2006 the financial account provided full coverage of the current account deficit and currently this trend continues. The overall balance at the end of 2006 was in surplus and the foreign reserves increased by EUR 1505.8 million. In the past year there was a buyback of Bradies, while in 2007 there was a repayment of EUR 250 million of global bonds and an early and full repayment of the outstanding debt to IMF. In the medium term the financial inflows are expected to continue increasing and thus cover the current account deficit.

Table 3: Foreign sector indicators (% of GDP)

	2006	2007*	2008*	2009*	2010*
Current account balance	15.7%	- 21%	21.9%	21.2%	21.1%
Trade balance	22.2%	27.5%	29.1%	- 29 %	29.3%
Balance on services	3.9%	4%	4%	4.4%	5%
Balance on income	0%	0%	-0.3%	-0.4%	-0.6%
Current transfers, net	2.6%	2.4%	3.5%	3.8%	3.9%

* Forecast: AEF

Source: AEF, BNB

In 2006 the imports of goods registered an increase of 26% compared to the previous year, mainly due to the higher imports of raw materials and energy resources, driven to a large extent by very high oil and non-ferrous metals prices on the international markets. Machinery, appliances, equipment and vehicles contributed most to the growth of investment goods imports, stimulated by the good investment and business climate, as well as by the remarkable inflow of FDI. During the first half of 2007 the imports of crude oil did not increase as a result of lower exports of petroleum products in the first quarter. At the same time there was a significant growth in the imports of consumer goods, driven mostly by the higher household incomes. In 2007 the imports of investment goods continues to grow at high pace. In the medium term the real growth of imports is expected to slow down compared to its current level and to remain stable thereafter.

In 2006 the exports of goods increased by 26.9%. The most significant contribution came from oil products and non-ferrous metals. In the same year the structure of exports of goods changed significantly with the increasing relative share of raw materials, mineral fuels and energy resources and the declining relative share of consumer goods. The underlying reason for this were the strong exports in real terms of non-ferrous and petroleum products, which was further supported by the substantial growth of their prices at the international markets. The exports of apparel and footwear grew by 4.6% with the EU Member States being the main trade partners of Bulgaria. During the first half of 2007 the exports of goods grew at a slower pace because of the weaker exports of petroleum products and electricity. The closure of Kozloduy units III and IV exerted an important impact on electricity exports. In addition, the exports of non-ferrous metals did not pick up due to the halts in production caused by the repair activities in a key metallurgic company. Until the end of 2007 the exports of goods is expected to register a nominal growth of 10.4% on an annual basis. In medium term the growth of exports in real terms will remain high in the range of 11-13% due to the dynamically developing economy, the investment inflow, and the improved competitiveness and productivity.

The highest trade turnover in 2006 was with the EU 15 countries (50.4% of total exports and 41.2% of total imports). For the period January-June 2007 an increase in the EU 15 shares in imports and exports was observed. In medium and long term the process of intensification of trade with the EU countries is expected to continue.

An important point is that after the accession of Bulgaria to the EU at the beginning of 2007 the trade turnover with the EU Member States is registered through the INTRASTAT system. The change in methodology of registration might lead to some underestimation of the trade flow values. Similar problems have already been observed in many other New Member States during the first year of their EU membership.

In 2006 the net balance of services was positive and higher by 18.6% compared to the previous year. During the current year a significant improvement in the net overall balance was recorded due to increased revenues from tourism, stimulated by EU-accession and the entry of low-cost airlines. In addition, the balance on other services item improved considerably as a result of higher revenues and lower expenditures as compared to the same period of 2006.¹⁹ The expectations for the medium term are that the net balance on services will increase, and the positive trend of attracting more tourists will continue.

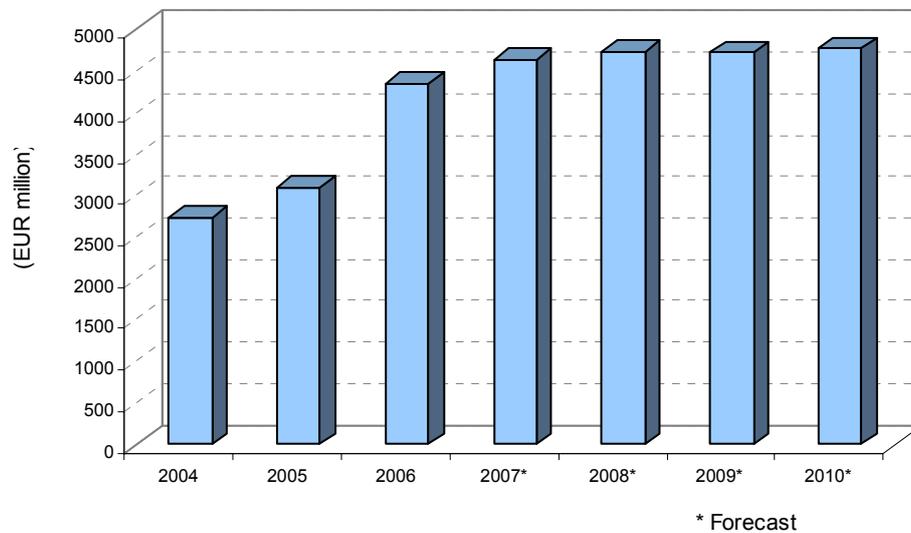
In 2006 the net flow of current transfers amounted to EUR 661.9 million, while in January-August 2007 it was EUR 218.2 million. Net income outflow in 2006 was EUR 5.8 million, while during the first eight months of the current year it amounted to EUR 81.4 million. In medium term the net outflow of income is foreseen to expand due to increasing payments on FDI.

In 2006 the inflow of foreign direct investment (FDI) amounted to EUR 4 364 million. More than 70% of the investments were in the sectors of financial intermediation, manufacturing and real estate, renting and business services. Most of the investments are from the UK (16.9% of total FDI inflow), the Netherlands (15.5%), and Austria (10.6%). The tendency of attracting high FDI continues during the current year and for the period January-August their amount reached EUR 3 396.2 million. Among the most important factors behind the recorded FDI inflow were the high return on investments in Bulgaria relative to most of the European countries, the growing investors confidence in the country, as well as the expansion of the markets for the local producers following the abolition of borders with the neighbouring EU Member States and the emergence of new opportunities for more investments, consumption and exports.

The new directions of the government policy towards investment activities had already been reflected in the approved changes of the Law for Investment Encouragement. The aim is to attract the interest of investors and to encourage their activities in sectors like manufacturing, renewable energy resources, IT and communication services. Most of the efforts are going to be focused on raising investments in high unemployment regions and in new technologies.

The preliminary expectations are that in 2007 total inflow of FDI will increase to EUR 4.6 billion, including the already received payments on concluded privatization deals of EUR 118.4 million. The expectations are that during the next years the amount of FDI in the country will continue to rise due to the relatively good ratio of risk and investment return. Other important factors for attracting investments are the favourable investment and business climate, the high economic growth, the growing openness of the economy due to the EU accession and the reduction of the social security and tax burden.

¹⁹ The improvement is due to higher revenues from computer and IT-related, commercial, law, accounting and management services, as well as to lower expenditures on construction, architectural and engineering services.

Figure 5: Foreign direct investment in Bulgaria

Source: BNB, AEF

2.2.7. Monetary Sector

The main objective of the monetary policy of Bulgaria is to maintain price stability through securing the stability of the national currency. The framework, within which that policy is being pursued, is the currency board arrangement (CBA). The principles of the currency board arrangement include a full coverage of the monetary obligations of the central bank by foreign reserves, as well as its obligation to purchase and sell the reserve currency (the euro) without limitations and at a fixed exchange rate. The central bank cannot perform open market operations and be a lender of last resort to the commercial banks or to the government.

The fixed-exchange-rate regime and the full liberalization of the financial account facilitate to a substantial extent the deepening of the financial integration with the euro area countries. Under the absence of an activist monetary policy, the decisions of the ECB concerning the euro area interest rates are transmitted to the interest levels in Bulgaria. The strongest channel for monetary policy transmission is through the money market interest rates, which completely follow the euro area interest rates dynamics. The property structure of the commercial banks in the country plays an important role in intensifying the process of integration between the Bulgarian economy and EU Member States in the area of financial intermediation. As of June 2007 76% of the assets of the banking system were managed by financial institutions based in EU Members States, and 61% of the assets were managed by euro area investors.

The abolishment of the administrative restraints on bank lending at the beginning of 2007 in the circumstances of strong investment activity and growth of employment and wages led to significant acceleration of corporate and household credit. At the end of June 2006 the "claims on the non-government sector/GDP" ratio reached 57%. Although the value of this indicator is still significantly lower compared to the average euro area level, the high rates of growth of private sector indebtedness towards the banking system and the ensuing risks for the financial stability became a reason for the central bank to put some restraints on monetary conditions. With the decision of the Executive Board of BNB of July 19, 2007 the level of the minimum required

reserves was increased from 8% to 12%, in force from September 1, 2007, which led to liquidity drawing-out of BGN 1.6 million. Since the banks' accounts held at BNB are not interest-bearing, the increased cost of financing is expected to be transferred towards the interest rates level and to restrain the credit demand.

At the same time, the central bank continues to apply strict supervision requirements in order to preserve the bank assets quality from worsening and to guarantee the stable development of the banking system. The policy of prudent risk management will be followed in the future due to the growing indebtedness of the private sector.

The general framework for risk management and control in the banking system is at a very good level as the banking supervision legislation is entirely harmonized with the EU requirements. Since the beginning of 2007 the country introduced the Basel-II standards. A very conservative and restrictive approach has been followed. The capital adequacy requirements are 50% higher than the EU requirements. Also, the risk weights applied to all kinds of loans are significantly higher than the standard-determined, which provides a guarantee that the accumulated risk in the banking system is adequately backed with capital. In addition, BNB adopted very rigid and conservative rules as regards the loan classification and provision.

Following its consistent policy during the last ten years, BNB will continue to closely monitor the supervision framework implementation and the efficiency of every regulation concerning credit risk accumulation and the effectiveness of its management.

BNB applies a set of supervision and monetary measures in order to slow down the rates of bank credit growth. These measures are mainly directed towards the increase of capital requirements for those of credits that grow at the highest pace and lead to a fast accumulation of credit risk (mortgage and corporate loans).

2.3. Medium-term Scenario

A set of measures for business environment and institutional framework improvement will be undertaken in order to guarantee high and sustainable economic growth in the long term. As a first step, a clear roadmap and a time schedule to implement the reform in the business registration system will be adopted. As an element of this reform, the start of the commercial register will be accomplished as of January 1, 2008.

The Programme for Better Regulation will be adopted until the end of 2007. The Programme will address the key issues related to the institutional capacity of public administration, including through better training of civil servants, streamlining of administrative structures, administrative procedures simplification and more effective monitoring and evaluation of policy implementation. Currently an evaluation of regulatory regimes is being performed. Until the end of 2008, the Government will implement measures to reduce the administrative burden, notably by simplifying licensing and permit systems.

The one-fiche-payment system will be introduced at 80% of the border checkpoints until 2009. The time for servicing will be reduced and this will improve considerably the quality of service provided to individuals and businesses.

In order to improve the long-term competitiveness of the Bulgarian economy the implementation of policies to stimulate competition and to deepen the liberalization of markets (especially in the energy and water sectors) will continue.

The privatization programme of the Government, including the sale of 38 enterprises and minority shares: Bulgartabak Holding PLC, 7 hydroelectric power plants, 1 thermal power plant, 2 central heating companies, etc., will be accomplished until 2009.

The role of the non-bank financial institutions will strengthen further as they will become more important rivals of the commercial banks. This is expected to have a positive impact on the accumulation of additional savings in the economy.

The positive development of the capital market will also contribute significantly to the increase of savings. It will play a more important role in financing companies' activities, in increasing local and foreign investors' confidence and in providing households with opportunities for obtaining additional return on alternative to banks' deposits investment instruments, including collective investment schemes.

The Bulgarian capital market is fully harmonized with the *acquis* requirements. In order to strengthen financial supervision and to create conditions for more efficient functioning of the capital market, the Law on the Markets in Financial Instruments was adopted²⁰. The measures for coordination of supervisory institutions will be strengthened. Another set of measures will be introduced to improve the technical infrastructure and the institutional framework of capital markets.

The pension and insurance companies, offering alternative forms of savings, will become more important. In this relation incentives will be provided to increase the share of the second and third pillar of the pension system, as well as of the second pillar of the health insurance system.

With the adoption of regulatory framework changes in 2006 and 2007, defining the non-bank financial institutions' activities (investment intermediaries and companies, insurance companies, pension funds), the best of practices and achievements of the European legislation were applied in order to provide a good legislative environment for stable functioning of those financial intermediaries. At the same time the safety of the accumulated financial resources that are attracted from the economic agents in the country is guaranteed. Further steps to strengthen the licensing and supervisory regime for the non-banking financial sector will also be undertaken until the end of 2007 and during the first months of 2008.

As a result of the reforms envisaged in all sectors in the period 2008-2010, the dynamic and upward development of the Bulgarian economy is expected to continue. The economic growth rate is foreseen to exceed 6% on a yearly basis, and at the end of the programming period it is expected to accelerate to almost 7%. The main factors that determine the high rate of economic growth are the high investment activity in the country, the increase in production efficiency due to the introduction of new materials, resources and technologies, the external capital inflows and the better absorption of EU funds.

The growth rate of the external demand of Bulgarian goods and services is expected to remain relatively stable with respect to its value in 2006, while it is foreseen to accelerate in 2010 и 2011. The growth rate of imports is expected to decelerate to some extent and then to stabilize in 2010 at slightly higher than 11%. Regarding the GDP structure by final-use components, an increase of exports' contribution to almost 8 percentage points is foreseen in 2010, while the contribution of imports is expected to stabilize at about 10 percentage points from 2008 on. The contribution of domestic demand is also expected to diminish to about 9% in 2010.

The final consumption expenditure of households will continue to increase at annual rates of 6 to 7%. Its dynamics will be determined by the sustainable increase of incomes due to rising labour productivity, as well as by the accelerating inflow of EU funds into the country. Total consumption will grow by 6% on a yearly basis during the whole programming period.

²⁰ Promulgated State Gazette issue 52/29.06.2007, and entering into force on November 1, 2007.

After reaching its peak in 2007, the fixed capital investments are expected to continue increasing at a high but decelerating pace reaching about 13.5% in 2010. The shares of gross investments and fixed capital investments in GDP are expected to remain relatively constant during the entire period. In 2007 and 2008 national savings are foreseen to decrease slightly as a share of GDP, which will sustain the current account deficit at the currently observed high levels.

During the period under review services which are the largest economy sector, are expected to have the highest contribution to value added growth. However, industry is expected to remain the most dynamic sector of the economy. The capital accumulation in that sector is expected to enhance the producers' capacity and to improve the quality of the products. High industry growth rates are among the main assumptions for increasing the contribution of exports to economic growth. By the end of the period agriculture's share in value added is expected to fall by about 2 percentage points.

2.4. Effects from Structural Reforms

2.4.1. Social Security

The reforms that were implemented in the area of the social insurance, as well as the favourable national economy's development and good budget indicators created further room to decrease the total amount of the social security contributions. In January-September 2007 the insurance contribution rate for the Pensions Fund was 23%²¹. As of October 2007 it is 22% for the insured persons born before January 1, 1960, and 15% for the persons born after that date. As well, since October 2007 the insurance contribution to Unemployment Fund was decreased from 3% to 1%.²²

At the same time in 2007 the pensions were indexed twice – in conformity with schedule on July 1, 2007 (by 10%, or 1.5 percentage points more than what was planned), and on October 1, 2007 by another 10% due to revenue over-performance of the budget of Public Social Security (PSS), as well as because of the expected economies in the budget of PSS. After the pensions' increase on October 1, 2007, the minimum personal social security pension became EUR 52.6, while the social old-age pension – EUR 39. The average pension per pensioner after October 1, 2007 is expected to reach EUR 93.7. The planned increase of pensions will be entirely on behalf of the budget of PSS with no need for supplementary financing at the expense of the central republican budget.

Pension-related expenditures are expected to reach 8.1% from the estimated 2007 GDP. The decrease of their share in GDP is mainly a result of higher than expected GDP growth. The several decreases of the insurance contribution to the Pensions Fund of the Public Social Security (PSS) since 2000 and the allocation of a share of it to the universal pension funds (in 2007: 5 percentage points) led to granting a considerable subsidy from the central republican budget for financing the pensions from the public social security system (3.03% of GDP for the current year). As a result of the implemented reforms the deficit of the public social security budget is expected to

²¹ For the current year the distribution of contributions between employers and workers is 65:35.

²² The decrease of social security contributions had been made possible due to the good revenues execution of the Budget of Public Social Security and the unemployment decrease in the country to the average European level, in accordance with §70 of the transitional and concluding provisions of the Law on the State Budget.

decrease to 2.09 of GDP in 2027, which will lead also to a decreased necessity for financing from the central republican budget. After 2027, mainly due to the accelerated process of population aging and the decrease of the active population below working age, the deficit of the public social security is foreseen to start increasing again and to reach 3.73% of GDP in 2050.

2.4.2. Education

The educational system reforms aim to improve the quality of education, to guarantee equal access to education, to lower the dropping-out of the educational system, to expand the use of ICT in the process of education, as well as to develop various forms of lifelong learning.

At the beginning of 2007 a unified standard for education resources allocation on the basis of the number of children/pupils was introduced. Its purpose is to allocate funds from the central budget to the first-level spending units (municipalities) stimulating the restructuring of the educational system in accordance with the ongoing demographic processes. The accelerated investment in human resources will support the increase of productivity and competitiveness of the economy while at the same time it will guarantee high and sustainable economic growth in the long term.

The envisaged optimization and gradual consolidation of the numerous schools and higher-education institutions in the conditions of decreasing student numbers in order to increase the student-teacher ratio are conditioned by the need for higher efficiency of spending of the available budget funds for the sector. The freed funds due to optimization will be used for modernization of the school base, for higher wages of teachers, for improvement of their qualifications, for improvement of the study curricula, and for introduction of modern teaching methods in order to improve the overall performance of the educational system.

The complete reform of the educational system is also necessary in order to stimulate the development of human resources and the successful training of qualified workers corresponding to the modern requirements of the labour market. The changes foreseen are fully compliant with the growth and jobs goals set in the Lisbon Strategy.

2.4.3. Healthcare

In response to the problems of the healthcare system and the recommendations of the Council of Ministers regarding the Convergence Programme (2006-2009), a National Healthcare Strategy 2007-2013 was elaborated. Its examination by the Council of Ministers is forthcoming.

The draft foresees a cancellation of the veto on the medical establishments' privatization in order to stimulate the competition among them.

One of the still unresolved issues in the healthcare sector is the lack of binding between the increase in healthcare expenditures and healthcare services quality improvement. The introduction of a system for efficient control both at the level of supplying healthcare services and at the level of financing the healthcare system is envisaged in order to identify correctly the existing problems and to suggest solutions concerning expenditure efficiency and quality of the medical service.

A novelty in the National Healthcare Strategy is also the setting of expenditure ceilings for the budget of every medical institution for hospital care for the respective financial year, on the basis of defined in advance objective criteria. The setting of ceilings is done by the National Health Insurance Fund (NHIF), the Bulgarian Medical Association

(BMA), the Ministry of Health, and the providers of medical assistance. A limitation in concluding agreements with new contracting parties, structures and units during the process of budget execution of NHIF for the running year is foreseen to be introduced. These measures aim at stimulating the competition among healthcare establishments, a more efficient allocation of the available financial resources, and limiting the opportunities for draining funds from the Fund.

In order to stimulate the development and competition among the voluntary health insurance companies, and to assure more resources for the sector in the strategy project, the voluntary health insurance companies are supposed to finance the medical services costs, which are not covered by the National Health Insurance Fund.

The main objective of the strategy is to improve the financial state and the functioning of the system, to improve the efficiency of fund allocation while retaining the universal and equal access and coverage of healthcare.

3. General Government Balance and Debt

3.1. Policy Strategy

The main strategic priorities of fiscal policy for the new programming period remain unchanged in comparison with the previous Convergence Programme, specifically creating suitable conditions for sustainable economic growth, boosting competitiveness and catching up with the living standards in the EU.

These objectives are reflected in the medium-term fiscal framework, which sets up the base for a fast development of the private sector. At the same time it takes account of the particular economic situation while maintaining its degree of conservativeness, looking to balance the newly-emerging risks for economic growth. The practice of incorporating buffers in budget planning was retained in order to secure the achievement of the fiscal targets. In this respect, the buffer, used during the last years (the so-called "90% rule"), will be replaced by a strategic fiscal sustainability reserve in the central budget, amounting to EUR 153.4 million.

Keeping strict fiscal discipline on spending will continue to be a central priority of public finances. Adherence to such a policy is guaranteed by the institutional framework, which has proved its effectiveness for the past years.

3.2. Medium-term Objectives

The medium-term fiscal policy targets are subordinated to the overall strategy and the guidelines of the Stability and Growth Pact (SGP). Specific instruments for the achievement of these objectives will be maintaining macroeconomic stability, introducing tax policy incentives as well as an appropriate allocation of budget spending to priority areas.

Maintaining the present macroeconomic stability will be the key medium-term priority as it is a crucial pre-condition for further economic growth. To this end, the budget position will remain conservative with no large loosening in the medium-term, taking also into account the increasing risks for the economy. The general government budget will thus target a 3% of GDP surplus for each year in the period 2008-2010, corresponding to the policy intentions for avoiding a pro-cyclical fiscal stance and to the SGP recommendations.

The medium-term objective (MTO) is revised up to 1.5% of GDP for 2011 in line with the adjustment of the targeted budgetary balance for the programming period. Increasing the MTO comes despite the expected shrinking of the output gap to negative values in 2010 and aims to counter the deepening current account deficit and the projected ageing impact.

The level of the MTO complies completely with the fiscal policy requirements²³.

²³ See "Incorporating Implicit Government Liabilities in the Medium-term Budgetary objectives: A Methodology for Prudent Policies (Note for the attention of the Ageing Working Group attached to the Economic Policy Committee)".

Table 4: Minimum MTOs (% of GDP)

ROG*	MTO ^{SM*}	ROG**	MTO ^{SM**}	MTO ^{IL}	MTO ^{HD}
-4.2	-1.4	-3.5	-1.7	-0.2	-1.0

* According to the Ameco database

** According to AEF's estimate of the output gap

According to the methodology, recently proposed by EC, the MTO should be determined as the strictest budget balance, satisfying simultaneously the following three conditions:

- Ensure a safety margin against breaching the 3% deficit limit;
- Long-term sustainability of public finances;
- Maintain government debt below the 60% of GDP level in line with Maastricht criteria.²⁴

According to the calculations, the old MTO for a balanced budget in structural terms is fully sufficient since it secures the stability of the government debt to GDP ratio, provides a buffer against breaching the Maastricht budgetary criterion as well as guarantees compliance with the long-term budgetary constraint even after factoring ageing pressure in. Nevertheless, the revision of the MTO to a 1.5% of GDP surplus is required with a view of the specific economic situation in the country and particularly, the rising external imbalance and accelerating inflation.

Similarly, the acting Debt Management Strategy for 2006-2008 was updated in 2007 by taking into account the present external, macroeconomic and political conditions, related mainly to the EU accession of the country from January, 2007. It also adopts a consistent approach in pursuing the government-defined priorities and objectives for the period as follows:

1. Strict monitoring of the debt level.

During the current year, borrowing policy was directed mainly to preserving the efficiency of the domestic market and to securing financing of strategic infrastructure and social project of national importance. This activity was accompanied by a complex analysis of borrowing instruments with constant monitoring of the debt profile and the debt servicing costs, considering also the development of the macroeconomic and market environment.

2. Keeping debt servicing costs at a low level in the medium- and long-term aspect with an acceptable degree of risk.

The trend of falling debt servicing spending continued in 2007 as they registered a decline of more than 2% on an annual basis, mainly due to the shrinking debt volume, the reduction of the risk premium on Bulgarian government debt and the depreciation of the US dollar. Another important element for the achievement of this objective is the optimal selection of debt instruments (volume, type, structure, location of issue, main parameters) for new borrowing in order to have a balanced time distribution of

²⁴ In the table, MTOs for each of the three conditions are labelled respectively as MTOSM, MTO^{IL} и MTO^{HD}. Calculations of the MTOSM use two alternative estimates for the representative output gap (ROG), according to output gap data for Bulgaria in the Ameco database and according to AEF's own calculations. The results show that the strictest budgetary restraint is imposed by the condition for guaranteeing the long-term sustainability of public finances, which includes financing the discounted impact of ageing on public finances to a full extent.

interest and amortization payments and to support the development of a liquid domestic capital market.

Another approach is the preference of borrowing policy to standardized instruments with fixed coupon rates, denominated in national currency or euro.

3. Securing stable financing sources for budget operations and debt refinancing.

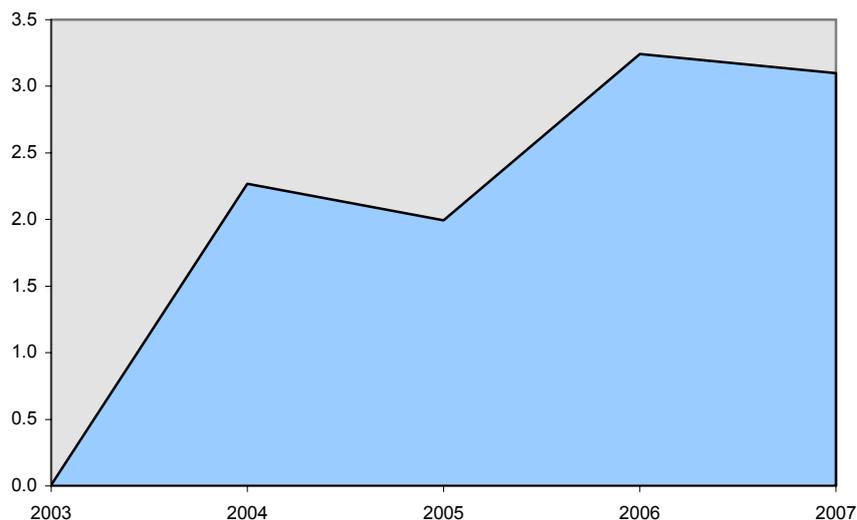
Following the principle in the acting Debt Management Strategy for priority borrowing from the domestic market, the domestic government liabilities are expected to increase by 4% year-on-year at the end of 2007. The main basic restrictions to the adopted policy are related to the maintenance of fiscal sustainability, strict adherence to the reference values for government debt, the expected significant budget surplus, the high fiscal reserve level, the current account deficit and other macroeconomic parameters. During the current year the efforts were directed at strengthening the strategic partnership with IFIs as a financing source for projects under development programmes in key economic sectors like transport, environmental protection, agriculture, etc.

The levels of the budgetary balance for the past couple of years and the fiscal policy targets for the next years pre-determine the use of new borrowing extensively for rolling over existing debt and financing of new projects, related to EU structural funds and the Cohesion Fund.

3.3. Actual Balances and Implications of Budget for Next Year

The balance of the general government budget for 2006 was positive and amounted to EUR 814 million (3.24% of GDP). The primary balance was positive and amounted to EUR 1.1 billion (4.6% of GDP).

Figure 6: Budget balance (% of GDP)



Source: MoF

The achieved high positive value of the budget balance was mainly due to a good execution of the revenue side of the budget. For the same period, total revenues increased by 11.1% on a yearly base, mainly as a result of good tax compliance. Tax

revenues were higher by 15.5% compared to the previous year, while non-tax revenues marked a minor decrease. Similarly to 2005, the fast growth of indirect-tax revenues was determined by strong imports. The increase in VAT revenues was 17.8%, and in duty income – 22.4%. In the beginning of 2006 excise tax revenues were negatively influenced by the stockpiling of excise goods in the end of the previous year. The stockpiling was intended for taking advantage of the planned increase in excise tax rates on fuels in the beginning of 2006. Those stocks were depleted by the start of the second quarter of 2006, after which the excise tax revenues started increasing steadily as a result of the higher excise tax rates, and eventually registered an increase of 23.5% for the entire year.

The most significant amendment to the tax and social security burden in the beginning of 2006 was related to the decrease in the social security contribution to the Pensions Fund by 6 percentage points. The expected revenue loss to the budget from this was about EUR 350 million. In 2006 social security revenues decreased by 2.3% on a yearly base. According to AEF's calculations this was equivalent to a real revenue loss of about EUR 297 million. This result gives grounds to reason that the expected negative effect from decreasing the amount of the contribution on revenues had been overestimated. A possible explanation for this is the positive effect on the share of the grey economy stemming from the lower tax and social security burden. Respectively, this was reflected in higher compliance with respect to social security contributions. The labour market data confirm the allegation that the decrease in social security contributions has allowed employers to approve a higher wage growth due to the decreased labour costs, and the creation of new jobs has been stimulated. It is probable that a share of the newly-registered jobs and the income increases have been at the expense of decreasing the size of the grey economy.

Corporate tax revenues increased significantly during this period while the main tax rate on profits was maintained unchanged. This confirms the positive effect from the decrease in social security contributions. Another important factor which led to an increased financial result of the companies was the favourable economic development. The positive influence of these processes on wage and employment growth was not observed directly in revenues from taxing personal incomes, due to the decrease in the tax burden implemented with the adopted legal amendments in the beginning of the year.

The growth of general government expenditures for this period amounted to 7.3% and respectively lagged behind the growth of revenues. This growth was rather generated by capital expenditures which increased by 9.2% on an annual base. Interest expenditures decreased by 8.6% for that year, while subsidies increased by 24.9% as a result of the higher volume of funds granted to railway companies, as well as to the healthcare sector. The latter had been envisaged to cover the unpaid expenditures in the sector, after the measures taken in the beginning of the year contributed successfully to tightening budgetary discipline in the sector and stopping the increase in the volume of arrears.

The focus of fiscal policy in 2006 was the social sphere. The social expenditures of the general government budget increased for the period by 10.5% compared to the same period of the previous year. This resulted from both higher pension expenditure and higher welfare payments. It was due to the measures to improve the financial condition of the pensioners including increases in the size of the minimum and maximum pension from the beginning of the year, as well as the separation of the minimum social security pension from the social old-age pension from the middle of 2006. The health insurance payments had the largest weight in the increase of welfare payments, which was related to the higher volume of funds for hospital and dental care and medicines.

For the first half of 2007 the execution of the budget follows to a large extent the developments from the last year. The high economic growth and the good tax

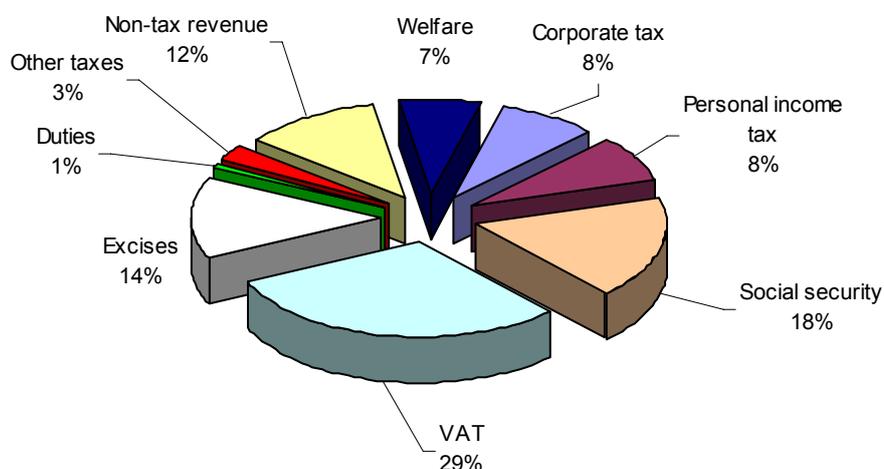
compliance are reflected in a fast growth of budget revenues. The accession of the country to the EU in the beginning of the year did not lead to considerable perturbations in public finances, despite the expected revenue loss, mainly from VAT. VAT revenues registered a considerable decrease in the first two months of the year but it was mainly due to a technical lag in tax compliance considering the change in the tax regime and the treatment of imports from EU countries as intra-community supplies. This decrease was fully compensated during the following months and eventually the VAT revenues are expected to exceed the level planned in the Law on the State Budget. Over-performance is planned for all revenue items of the budget, with the exception of duty revenues. The latter were negatively influenced by the process of accession and the transition to the Common Customs Tariff of the EU. This effect was incorporated in the budget forecasts in the beginning of the year but its magnitude was found to be unexpectedly large, and respectively the duty revenues are expected to decrease by about 18% below the level planned in the Law. The highest over-performance for the year of more than 20% is envisaged for the revenues from direct taxes, due to the high growth of wages and profits in 2007, and also for the non-tax revenues. The latter have increased above the planned level mainly due to a high dividend for the budget from enterprises partially owned by the state, as well from the sale of land and other non-financial assets by the ministries.

In general the over-performance of total budget revenues is expected to amount to 10.7%. In conformity with the commitment assumed in the Convergence Programme (2006-2009), the government will save a large share of the extra revenues in 2007, and the level of the budget balance in the end of the year will be about 3% of GDP. As a result of the good revenue performance the buffer clause to spend 90% of the envisaged current non-interest expenditures will not be activated despite the deterioration of the current account balance. The budget expenditures will also exceed the planned levels which will be mostly due to capital expenditures. For the first nine months of the year budget investments increased by about 33.5%, mainly as a result of higher investment costs of municipalities, which are not part of the total expenditure ceilings. In general, the higher expenditures of the general government budget in 2007 stem from the increased municipality expenditures, which explain 45.5% of the total increase in general government expenditure for the first nine months of the year. The identification of new revenue sources allowed the increases in municipal expenditures.

Main Elements of Tax Policy for 2008-2010

The forecasted revenues in the general government fiscal programme for the period 2008-2010 was elaborated in compliance with the overall tax strategy of the government, with the indicators forecasted in the macroeconomic framework of the AEAF, with the expected amendments in the tax legislation, and with the tendencies in revenues for the latest several reporting periods.

Figure 7: Revenue structure, 2008



Source: MoF

The novelties with respect to the proposed tax policy are as follows:

- Introduction of a flat rate of 10% for taxing personal incomes with no minimum income exempt from taxation;
- Amendments to the Law on Corporate Income Taxation (LCIT), by which the tendency to improve tax legislation is continued;
- In 2008 33% of the excise tax increase on cigarettes envisaged for 2010 and 100% of the excise tax increase on fuels envisaged for 2010 (for gasoline the rate will be increased by EUR 25.6/1000 litres, and for diesel fuel – by EUR 33.2/1000 litres) will be introduced;
- In 2008 patent taxation will be transferred from the regulative scope of the Law on Personal Income Taxation (LPIT) to the scope of the Law on Municipal Taxes and Fees).

The reforms in the tax and social security system are intended to stimulate business development, to increase tax compliance, and to decrease the size of the grey economy. Tax policy in the area of direct taxation is intended to support economic growth and to stimulate investment.

In the framework of the strategic process of fiscal decentralization, along with the increasing number of commitments and responsibilities of municipalities, their authority to define and administer their own revenue sources also increases. Central administration will no longer be authorized or be responsible for collecting and administering municipal revenues.

The calculations of the forecast corporate tax revenues for the period 2008-2010 have been made using the assumption that the corporate tax rate introduced with the Law on Corporate Income Taxation in the beginning of 2007 (corporate tax rate of 10%) is kept unchanged. The low tax rate is intended to increase the investment incentives, to encourage economic activity and to decrease the share of the grey economy.

Amendments to the Law on Corporate Income Taxation which continue the tendency of improving tax legislation have been proposed, such as recalculation of monthly advance payments for the first quarter of 2008 on the basis of 2007 tax profits;

payment of the fourth quarterly advance instalment in 2008; exemption of small enterprises (having a turnover of less than BGN 100 thousand/EUR 51.1 thousand) from the obligation to pay taxes in advance, etc.

The estimated considerable revenue increase for the next year is based on the forecasted increased economic activity, as well as on the expectations to continue the increased tax compliance observed in 2007. Additionally, the aforementioned measures are expected to have a positive effect on corporate tax revenue amounting to EUR 30 million in 2008.

It is expected that during the next years of the programming period the low tax rate will lead to even more substantial increases in the budget revenues from corporate taxes through stimulating investment, respectively corporate profits, and increasing the incentives of companies to legalize their profits.

Concerning personal income taxation policy in 2008, a considerable change in the type of taxation is made by introducing a flat tax rate for all taxpayers irrespective of their level of income. The envisaged decrease in the tax burden on wage incomes which are about or above the country average will be accompanied by measures to compensate lower-income groups. The aim is, besides decreasing the tax burden, to preserve and increase the disposable income of the population, as well as savings.

The current forecast also reflects the expected effects from the amendments to the tax and social security legislation during the latest years, targeted at 'whitening' the number of employed persons and their incomes, as well as to decrease the tax burden and increase real disposable income and savings.

The existing regime of personal income taxation is one of progressive taxation in which the tax rate increases with taxable income. With the amendments to the Law on Personal Income Taxation it is proposed that in 2008 proportional personal taxation is introduced. The proposed tax rate is 10% (with no tax-free minimum income); it does not depend on the level of income, and it is uniform across all taxpayers and sources of income, with the exception of incomes of sole proprietorships from commercial activities for which the envisaged rate is 15%. The effect from the transition from progressive to proportional taxation at the rate of 10% will be, other things being equal, a decrease of state budget revenues by EUR 88 million.

In elaborating the forecast of personal income tax revenues for 2008 the following main factors have also been accounted for:

- The average wage growth in the country. For the budget sector the income policy includes an increase of up to 10% from the middle of 2008;
- The effects on the budget stemming from the cancellation of tax relieves for families with children and for donations, as well those from the cancellation of patent taxation of incomes under the Law on Personal Income Taxation (the taxation of those incomes is transferred to the Law on Municipal Taxes and fees) have been taken into account;
- Legislative amendments, related to the size of legally determined operating expenses.

The estimates concerning 2009 and 2010 have been made considering the expected values of the parameters related the elaboration of the budget forecast (number of employed persons, wages, rates of social security contributions, etc.) and under the assumption of no change in the relevant legislation.

It is envisaged that in 2008 the patent tax will be transferred from the Law on Personal Income Taxation to the Law on Municipal Taxes and Fees. In general the taxation regime existing until the end of 2007 is preserved; the existing patent activities under the Personal Income Tax also remain unchanged. The persons subject to patent taxes will be exempt from taxes under the Law on Personal Income

Taxation. The patent tax revenues are transferred to the municipal budgets, and the revenues from that tax expected for 2008 may differ from the actual receipts taking account of the fact that the municipalities will determine independently the size of the tax within legally specified limits (the lower limit is envisaged to coincide with the current level).

After the reduction of social security contributions in force since October 1, 2007, their level is envisaged to remain unchanged during the whole programming period. The contribution for supplementary mandatory pension insurance is also envisaged to remain unchanged at its 2007 level.

Those measures are expected to lead to a decrease in the revenues from social security contributions. The structure of insured persons also acts to decrease the revenues of the Public Social Security. During the course of years the share of insured persons born after December 31, 1959, for whom the social security contribution is by 5 percentage points lower (due to their insurance in the second pillar of the pension system), has been constantly increasing.

On the other hand, a compensating effect with respect to the revenues from social security contributions is expected as a result of the negotiated higher insurance thresholds compared to 2007. Within the programming period it is envisaged that the size of the minimum insurable income for self-insured persons will increase from EUR 112.5 in 2007 to EUR 122.7 in 2008, EUR 127.8 in 2009, and EUR 132.9 in 2010. The size of the maximum insurable income for self-insured persons is also increased from EUR 715.8 in 2007 to EUR 1022.6 in 2008, 2009 and 2010. It is expected that in 2008 the increase in the minimum insurable income will lead to an increase in revenues by EUR 5.3 million, and the increase in the maximum insurable income – to an increase in revenue by EUR 36.4 million.

The distribution of the social security burden between employers and employees will change to 60:40 in 2008.²⁵ The increase of the average insurable income in 2008 will be 18.2% compared to the 2007 level. The increase in the insurable income thresholds on the one hand is intended to balance the loss of revenue due to the changes in the tax and social security rates, and on the other – to limit the share of the grey sector in the economy.

Concerning the health insurance contribution it is envisaged that its level of 6% is kept unchanged during the whole programming period.

The forecast concerning VAT revenues has been elaborated under the assumption of an unchanged tax rate of 20%, and it is reflecting the effects from Bulgaria's accession to the EU and the harmonization of Bulgarian tax legislation with the requirements of EU directives in the area of indirect taxation. Among the main factors, which influence the accumulation of revenues from VAT are the GDP of the country and its structure by components of final demand, the exchange rate, and the inflation rate. The new and higher excise tax rates on fuels and tobacco products which form a part of the tax base for those commodities will lead to additional budget revenues amounting to about EUR 66.5 million from VAT for 2008.

Concerning the Law on Excise Taxes and Tax Warehouses, during the forecast period 2008-2010 the harmonization of the Bulgarian legislation with *acquis communautaire* will continue. The envisaged increase in the excise taxes for some types of commodities is in conformity with the time schedule for amending the levels of excise taxes negotiated with the European Commission.

In determining the revenues from excise taxes the expected volumes of consumption of the main excise commodities (fuels and tobacco products), legislative amendments,

²⁵ In 2009 and 2010 the ratio will be changed respectively to 55:45 and 50:50.

and other factors, have been taken into consideration. In 2008 the excise tax rates on beer and spirits will not be increased.

As a result of the amendments of the excise tax rates additional budget revenues amounting to EUR 90 million from liquid fuels, EUR 71.1 million from cigarettes (considering the expected decrease in cigarette consumption resulting from the 20% higher excise rates), EUR 3.1 million from electricity, coal and coke, are expected for 2008. From the abolition of the excise tax on coffee beans in 2008 the budget loss will be about EUR 10.2 million.

Table 5: Time schedule for amending excise tax rates

Excise taxes on:	2007	2008	2009	2010
Unleaded gasoline	EUR 324.7/1000 l.	EUR 350.2/1000 l.		
Diesel fuel	EUR 273.5/1000 l.	EUR 306.8/1000 l.		
Kerosene	EUR 248/1000 l.	EUR 273.5/1000 l.	EUR 289/1000 l.	EUR 306.8/1000 l.
Coke and coal	EUR 0.15 per 1 gigajoule heat generation potential	EUR 0.2 per 1 gigajoule heat generation potential	EUR 0.26 per 1 gigajoule heat generation potential	EUR 0.31 per 1 gigajoule heat generation potential
Electricity	EUR 0.51 per 1 MWh	EUR 0.61 per 1 MWh	EUR 0.72 per 1 MWh	EUR 1.02 per 1 MWh

Source: MoF

For 2008 a decreased rate is proposed for:

- Blends of gasoline and bio-ethanol in which the content of the bio-fuel is between 4% and 5% inclusive, to be taxed at a decreased rate which will be 3% lower than the standard one: EUR 339.5 per 1000 litres (the standard rate for gasoline is EUR 350.2);
- Blends of diesel fuel and bio-diesel in which the content of the bio-fuel is between 4% and 5% inclusive, to be taxed at a decreased rate which will be 3% lower than the standard one: EUR 297.6 per 1000 litres (the standard rate for diesel fuel is EUR 306.8).

In 2008 an increase of the excise tax on cigarettes by 33% of the increase planned for 2010 is envisaged. In 2009 another increase amounting to 33% of the increase planned for 2010 will be introduced, and in 2010 the increase of the excise tax will amount to the remaining 34% of the initial increase planned for that year, in order to reach the minimum rate for the Community.

The forecast concerning the revenues from duties and customs fees for the period 2008-2010 is in conformity with the application of the Common Customs Tariff (CCT) of the EU, with the discontinued import duty receipts by EU Member States, and with the efforts of customs administration to increase compliance and precision in determining customs receipts due.

A risk factor concerning duty revenues is the abolition of customs controls at the so-called internal Community borders. Another factor is the possibility to document commodity imports to Bulgaria in another EU Member State where the duties are paid. About 15% of the commodities originating from third countries are imported by EU Member States – mainly by Austria, Germany, Greece, the Netherlands, etc; 60% of the commodities originating from China are imported directly, and the remaining 40% are imported by EU Member States.

During the last year the duty receipts were mainly due to the imports of industrial goods, the largest share being that of the imports of Chinese goods (28.0% of total duties and 42% of duties on industrial goods). Concerning duties on agricultural imports, the largest share is that of Brazil (mainly from sugar imports).

In elaborating the forecast the net amount of duty revenues of the republican budget is taken into account; the revenues have been forecasted after deducting the share collected for the EU budget (75% of total duty revenues).

Non-tax revenues include revenues and incomes from property, from governmental, municipal and court fees, from fines, sanctions and penalty interest, from concession revenues, from dividends payable to the state, etc. The revenues from governmental, court and municipal fees (including road fares) are an important budget item.

The forecast concerning the non-tax revenues has been made while seeking conformity with the legislative framework and taking account of the influence of the following factors:

- In forecasting the dividend revenue of the government the fact that the larger share of state property has already been privatized has been taken into consideration;
- The amount of concession revenue is consistent with the execution of the concluded concession contracts, and the preliminary assessment of the conceding ministries has been summarized;
- The level of revenues and incomes from property will remain unchanged;
- The amount of revenues from fines and sanctions will remain unchanged.

Main Policies in the Expenditure Part of the Three-year Budget Forecast

The focus of expenditure policies during the programming period 2008-2010 are education and healthcare. In addition, an important element of government policies will be the active investment programme for building modern infrastructure through mutual financing on behalf of the private sector and the state budget, and through the highest possible efficient utilization of EU funds.

The relatively higher share of capital expenditure determined by the co-financing component of projects related to EU funds and public investment loans, as well as the increased welfare expenditure, impose certain restrictions in financing current maintenance costs in the public sector systems. The maintenance costs imply a potential for budget savings by means of reviewing one-off expenses and the delaying of new expenses where possible although they might be pre-determined by the already attained base, the number of personnel, buildings, etc.

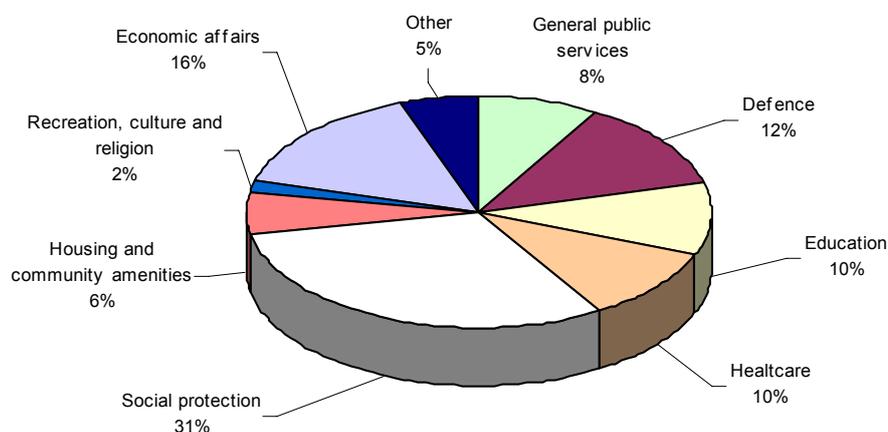
Capital expenditure defined in the budget in the latest years increase both in relative (as a percentage of GDP) and absolute terms, the main financing source being the Republican Budget. To a large extent the increase of the share of investment expenditure is related to the pursuit to absorb as much as possible from EU funds. In this respect, the focus of the investment policy is set on sectors and projects generating the highest level of social benefit – transport infrastructure and environmental protection.

Capital expenditure is envisaged to reach 7.6% of GDP at the end of the programming period, while the rule of limiting the share of budget expenditure (excluding the contribution to the EU budget) to 40% of GDP is observed. The increase in the share of capital expenditure compared to the previous periods is expected to exert a positive influence by increasing the economic growth and export potential of the country.

Within the structure of the sources of capital expenditures, the national financing of investment expenditure, including external grants from EU pre-accession and structural funds (national co-financing inclusive), is increasing. The amount of funds which our country will absorb from external investment loans under already concluded agreements is also increased. The funds, which our country absorbs from external investment loans are mainly under agreements on the construction of large priority infrastructure projects of national importance and are absorbed through the budgets of ministries and other government institutions.

The main principles of planning public capital expenditures in the medium term are as follows: the requirement for complementarity of financing under structural funds related to the provision of budget co-financing, priority financing of accompanying investment projects directly related to investment projects envisaged for realization under the Operational Programmes, as well as financing of transitional investment projects with a view to decrease the share of unfinished construction.

Figure 8: Government expenditure by function



Source: MoF

Wages

With regard to the wages in the public sector (including the wages in state-owned companies) a prudent policy will be pursued, so that they are not a leading factor for the dynamics of wages in the private sector, and so that they do not increase at rates which may lead to a deterioration of the competitiveness of the Bulgarian economy or increase inflationary pressures. The average increase of the wages in the public sector will be determined in such a way as to not exceed the growth rate of the overall labour productivity.

Considering the government priorities related to increasing the living standards of the Bulgarian citizens in the medium term, and the introduction of a 10% flat-tax rate from January 1, 2008, an increase in the wage income is envisaged in two steps in 2008:

- From January 1:
 - Compensating all wages up to EUR 220 for the persons employed under labour contracts in the public sector and up to EUR 191.7 for

- the civil servants, which are influenced negatively by the introduction of the flat tax;
- o The disposable income from wages above EUR 220 for the persons employed under labour contracts in the public sector and above EUR 191.7 for the civil servants increases due to the favourable effect from the introduction of the flat tax, since the persons receiving wages above those figures increase their disposable monthly incomes through decreasing the absolute amount of the tax.
- From July 1 – indexation of all wages of public sector employees by 5 to 10%, which is lower than the expected labour productivity growth.

Maintenance

The maintenance expenditures of the consolidated state budget for 2008 are set to EUR 2541.9 million, which represents about 8.1% of the forecast GDP. It should be mentioned that this expenditure category expresses a part of the effect from budget restructuring in order to place EU funds within the general budget limits.

Subsidies to non-financial enterprises

During the budget year 2008 the government will continue working on the implementation of its programming priorities, on the measures and actions to boost national productivity and private entrepreneurship through:

- Structural reforms;
- Privatization of state-owned assets;
- Agricultural reforms;
- Measures to encourage foreign direct investment, etc.

It is expected that the privatization process will be finalized and the monopoly markets will be liberalized, which is a continuation of the positive tendency to foster competitiveness among local enterprises and boost their potential when operating under market conditions.

The main targets to which real sector public expenditure is directed are non-financial enterprises: commercial entities from the transport and communications sector which provide mandatory services of public interest assigned to them by the state under certain parameters and conditions. The financial support of non-financial enterprises is linked to the implementation of programmes and with the achievement of specific results.

The positive tendency of relative decreasing of subsidies as a share of GDP continues in favour of investment expenditure which facilitates the achievement of a sustainable real economic growth rate.

Social Security, Support, and Care

The social security, support, and care expenditures take the largest share in the functional classification of public expenditure. For 2008 their amount in consolidated terms with a reserve included is up by 13.4% compared to the previous year.

In 2008 the policy of social support will continue developing towards guaranteeing social protection to the vulnerable population groups through better focusing of welfare and improving programme efficiency. The active employment policy will be based on the application of measures aimed at increasing employment and the professional and qualification level of the labour force.

In 2008 the implementation of the approach of effective social inclusion through providing employment to welfare receiving persons with a view to decrease their number will continue. In order to quickly provide employment to those persons and to avoid the risk of their impoverishment, they will be included in subsidized employment, in literacy training and professional qualification courses.

The pension expenditures of the PSS budget for 2008 amount to EUR 2717.2 million, excluding the reserve intended for the social security reform. In planning those amounts the following factors have been considered:

- Updating of pensions by 9.5% from July 1, 2008, according to the rule that the percentage is equal to the sum of half the increase of insurable income and half the increase of the consumer price index for the previous calendar year. The increase in expenditures as a result of this measure amounts to EUR 123.2 million;
- The maximum amount of pensions in 2008 is retained at EUR 250.5 – i.e. 35% of the maximum insurable income for the previous calendar year;
- An increase from July 1, 2008 of the minimum amount of the social security pension to EUR 57.6;
- An increase from July 1, 2008 of the old-age social pension to EUR 42.7 and an increase of the minimum amounts of pensions unrelated to labour activity – social disability pensions, civilian disability pensions, war veterans disability pensions, and personal pensions. The average amount of the pension is expected to reach EUR 100.4 in 2008.

Monetary indemnifications for pregnancy and child birth have been planned while retaining the length of period for which indemnifications are received – 315 calendar days. For 2008 the funds for indemnifications related to the unemployment risk have been planned while keeping the minimum amount of monetary indemnification for unemployment unchanged at the 2007 level – EUR 46, and considering the increase in the maximum amount of the indemnification from EUR 92 to EUR 97.1 in 2008. The cumulative effect on expenditures is an increase of EUR 2.2 million. The indemnifications for raising young children up to 2 years old have been planned at the level of EUR 97.1 per month for 2008 compared to EUR 92 in 2007. The expected increase of expenditures as a result of the latter measure amounts to EUR 4.7 million.

For 2008, EUR 97.1 million have been planned for active labour market policies, by which the continuation and development of the policy of decreasing unemployment, and preserving and maintaining the labour force is guaranteed. Funds have also been envisaged for social and labour integration of persons with permanent disabilities, as well as for refunding the 30% of social security contributions of disabled employees paid by employers. Also, additional funds amounting to EUR 1.02 million have been planned in the budget of the MLSP for projects and programmes aimed at improving working conditions.

Reserve

A Reserve for Unforeseen and Urgent Expenditures amounting to EUR 354.8 million has been envisaged in the consolidated fiscal programme for 2008. It includes a Reserve for Structural Reforms and Fiscal Sustainability, for Prevention and Liquidation of the Consequences of Disasters and Accidents, as well as a reserve attached to the budgets of the National Health Insurance Fund, the National Social Security Institute and the National Assembly.

From the funds in the Reserve for Unforeseen and Urgent Expenditures, in its part concerning the prevention, taking control of, and overcoming the consequences from disasters, up to 25% are spent on preventive activities aimed at implementing the

policies and programmes related to activities of prevention of consequences of disasters and accidents, after a proposal by the Minister of State policy for Disasters and Accidents, and after receiving the consent of the Minister of Finance.

Public Investment

The draft budget for capital expenditures for 2008 differs significantly in terms of its structure of sources of financing compared to the expenditures for 2007. The funds are allocated while the investment subsidies which the country intends to absorb from EU funds and through measures for social and economic cohesion, display an increased share. In 2008 significant progress is expected as regards the ISPA Programme, which is entirely devoted to big infrastructure projects. The amount of funds, which the country will absorb from external investment loans under already-concluded agreements, is also increased.

The capital investments of the government in 2008 are mainly directed to large-scale projects of national importance such as the construction of Danube Bridge 2, reconstruction and electrification of the railroad between Plovdiv and Svilengrad, etc.

Within the target subsidy for capital expenditures of municipalities, the central budget provides funds for the continuation of the construction of environmental projects of high regional and national importance: waste-water treatment facilities, solid-waste depots, etc.

The allocation of funds by investor has been done with a view to warrant the concentration of financial resources for the implementation of investment programmes and projects of national priority, such as the funds envisaged for the restructuring of the defence system according to the NATO standards.

In the technical and social sphere priority has been given to co-financing related to external loan financing with a view to support the absorption of negotiated external resources, and the implementation of reforms started in many systems and activities. Those are investment programmes and projects of the Ministry of Regional Development and Public Works, the Ministry of Transport, the Ministry of Agriculture and Food Supply, the Ministry of Labour and Social Policy, etc.

Interest payments

In 2008 the interest expenditures related to external loans are envisaged to amount to about EUR 261 million. The greater part of them will be under government loans, and about EUR 38 million will be under government investment loans (including government investment loans administered under the budgets of the respective ministries amounting to EUR 29.1 million, and government investment loans having commercial entities as final beneficiaries amounting to EUR 9.2 million).

Effects of the EU Funds on the Medium-term Fiscal Framework

The effect²⁶ on the general government budget from the absorption of the EU funds will be negative for each year of the programming period. Moreover, its size will increase in absolute terms reaching -2.1% of GDP in 2010. Both revenues from the EU budget and the expenditures related to EU membership will be gradually increasing during the following three years. This is related both to the time distribution of funds and to the assumption for an increasing absorption rate. The total receipts from the EU budget (excluding pre-accession funds) have been planned at 3.6% for 2010, while

²⁶ The effect takes account of the flows between the consolidated budget and the EU budget, excluding pre-accession funds, and including national co-financing.

total expenditure for the same year will reach 5.7% of GDP. The difference between those two figures is due, on the one hand, to the contribution of the country to the EU budget, and on the other – to the national co-financing amounts envisaged in the expenditure part.

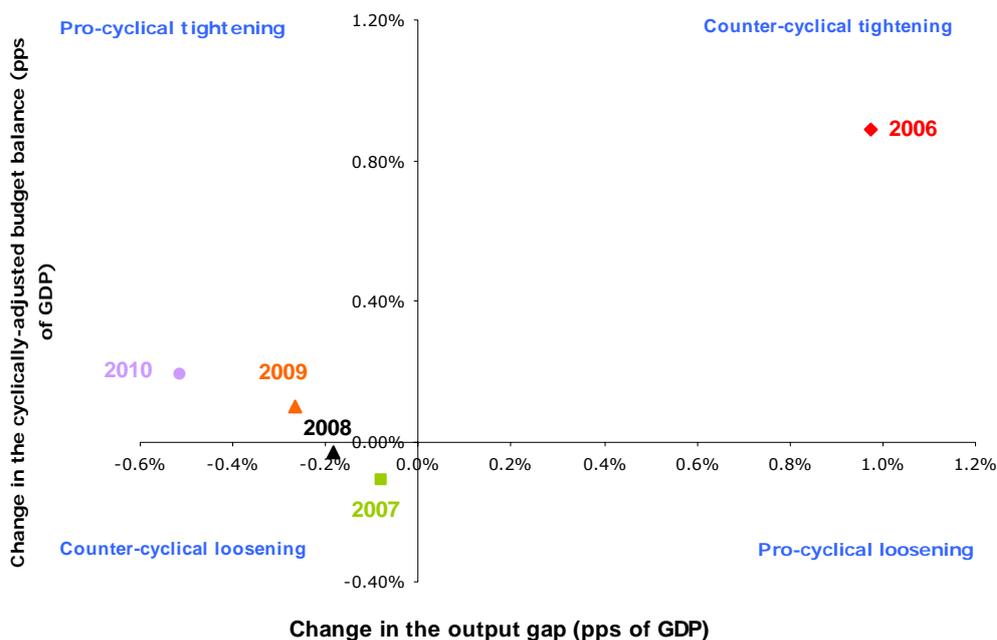
The greater share of EU funds will be used for financing investment. In 2008 the expected expenditures on EU-related projects will be uniformly distributed between capital and current non-interest expenditures – maintenance and subsidies. The relative share of capital expenditures will increase and in 2009-2010 they will represent 60% of expenditures under EU-funds-related projects. Those funds will ensure an increase of total municipal investments respectively by 1 percentage point of GDP in 2008, 2.3 percentage points in 2009, and 2.7 percentage points in 2010.

The increase in the amounts received from EU funds during the programming period will be accompanied by the respective policy to gradually limit the remaining part of the budget in order to not allow the expansion of the public sector above the limit of 40% of GDP. The most considerable savings will be realized in the area of maintenance, reaching a relative decrease of those expenditures as a share of GDP, even after the additional EU funds are taken into account. The limiting of wage expenditures as a result of the planned 12% reduction of personnel in the public sector will also provide an opportunity to increase the EU-related expenditures, along with the reduction of the expenditures for social welfare and indemnifications.

3.4. Structural Balance and Fiscal Position

The general government budget is expected to have a cyclically-adjusted surplus for each year of the programme period. During the period the change in the structural balance will follow the change in the output gap so as not to allow a pro-cyclical loosening of the fiscal position. Having in mind the immediate and long-term risks for public finances, fiscal policy acknowledges the need to keep a high positive budgetary surplus. Accordingly, the budgetary targets for 2009 and 2010 imply a pro-cyclical tightening of the stance but it is acceptable in light of the overall economic situation. No one-off or temporary measures with significant impact on the budget balance are projected during the programme period.

Figure 9: Cyclical budgetary position



Source: AEF

For the purposes of decomposing the budget balance to a cyclical and a structural part, a budget sensitivity estimate of 0.369 is used, which is a relatively low value, given the experience of other EU Member States. The estimate is based on the OECD methodology for calculating tax revenue and expenditure elasticities to GDP. Eurostat and NSI were used as sources for data on the budget execution for the period 2000-2006, according to the ESA95 methodology. Values for tax revenues and expenditure elasticities are as follows:

Table 6: Tax revenues elasticities

	Elasticity to GDP	Elasticity to GDP (EC estimates)
Personal income tax	1.74	1.4
Corporate income tax	1.56	1.4
Social security contributions	0.70	0.7
Indirect taxes	1.00	1.0
Unemployment benefits	-3.30	-3.3
Current taxes	1.03	-
Current primary expenditure	-0.03	-0.08

Source: AEF

The elasticities of revenues from social security contributions, indirect taxes and of the expenditure on unemployment benefits coincide with the preliminary estimates of the EC. There are slight differences with the EC in the estimates for the personal income tax and corporate income tax revenue elasticities. In both cases, the applied approach is one and the same, namely the commonly agreed OECD methodology. EC calculations on the personal income tax, however, are based on the taxation regime as

of 2004 while AEAF uses the taxation regime for 2006, which includes the implemented tax relief for families with children. Concerning the corporate income tax, a difference in the input data like the share of profit in GDP explains the weak divergence between the elasticity estimates of the EC and AEAF. Weights, used for the aggregation of individual elasticities into current tax revenue and current primary expenditure elasticity to GDP, are derived as the arithmetic mean of the respective revenue or expenditure items' share in the total revenues or expenditures for the period 2000-2006.

As a result, the following sensitivity parameters were obtained for the total revenues and expenditures to GDP, valid for 2006:

Table 7: Budget revenue and expenditure sensitivity to GDP

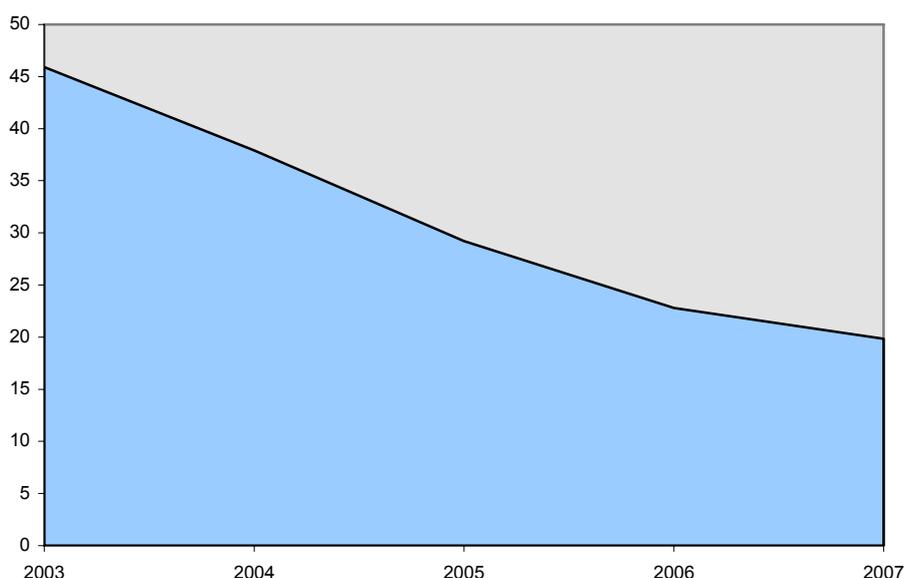
	Sensitivity to GDP	Sensitivity to GDP (EC estimates)
Budget revenue	0.358	0.33
Budget expenditure	-0.011	-0.01
Budget balance	0.369	0.34

Source: AEAF

3.5. Debt Levels and Development

General government debt continued declining during the current year as well, due to the consistent and transparent debt management policy, suited to the dynamics of the domestic and external macroeconomic parameters. Its level thus is expected to reach EUR 5.6 billion at the end of 2007. In terms of GDP ratio, this is 40 percentage points (pps) less than the fixed maximum level of 60% of the convergence criterion.

Figure 10: General government debt (% of GDP)



Source: MoF

The debt of the central government continued its established sustained trend for gradual nominal decline despite its dominant share in the consolidated liabilities of the state – 98% as of end-2007. Following the overall negative net financing, including the early repayments of IMF debt, its level is projected to decline on an annual basis by around EUR 179 million at the end of 2007.

Maintaining a debt level, considerably below the reference ceiling, is accompanied by a change in the currency and interest structure of the debt towards a higher degree of risk neutrality. In the overall debt structure, the share of the debt, independent from exchange rate fluctuations, is expected to be almost 75% as of the end of the current year. The share of debt, carrying a fixed interest payment, should reach the same value.

Debt servicing payments again took up a minimum of budgetary resources during the past year. Interest outlays levels in 2006 amounted to 1.3% of GDP and 3.8% of tax revenues. These indicators are projected to improve further to 1.2% and 3.5% respectively until the end of 2007.

At the end of the past year the fiscal reserve reached EUR 2.97 billion while the legislatively defined minimum was EUR 1.28 billion. The budget surplus was the main source for accumulation of significant cash balances. The availability of free financial resources allowed the government to reduce the nominal level of government debt by an early redemption of IMF debt. The significant volume of the fiscal reserve will provide an opportunity to use the future financing for achieving strategic debt management objectives instead of just guaranteeing the coverage of debt servicing payments.

3.6. Budget Aspects of Main Structural Reforms

3.6.1. Social Security

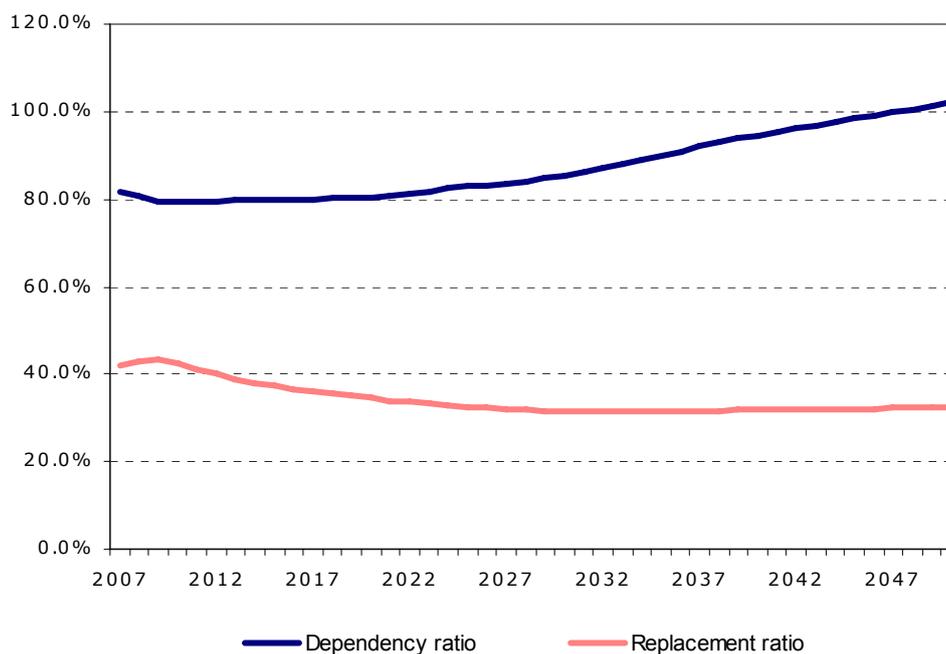
The dependency ratio²⁷ is expected to gradually decline from 81.6% in 2007 to 79.3% in 2010 as a result of the introduction of stricter requirements for pension eligibility and of the rising number of insured persons.

The income replacement ratio (first pillar)²⁸ is presently 41.9% and is expected to reach 42.4% in 2010.

²⁷ Number of pensioners to 100 insured persons.

²⁸ Average pension to net average insurance income.

Figure 11: Dependency and replacement ratios



Source: NSSI

After 2010 the replacement ratio is expected to fall smoothly through the period until 2050. The dependency ratio will remain relatively stable till 2020 and then it will start rising at an accelerating rate due to the more pronounced population aging.²⁹

The actuarial balance³⁰ is projected to remain negative (-22.5%)³¹ for 2007 but a slight improvement is expected, leading to a -20.03% value of the indicator for 2010.³² This trend is on account of the 6 pps cut of the social contribution rate for pension insurance in 2006 and the new 1 pps reduction from October 2007, together with the simultaneous hike of the minimum pension level and the "old" social security pensions. The total size of the projected deficit of the NSSI is expected to reach EUR 0.85 billion in 2007.

²⁹ The forecasts assume no change in the current legislation.

³⁰ Revenue level as a percentage of the insurance base (all income from labour activities) minus spending on public social security (also as a percentage of the insurance base).

³¹ The forecasts are derived from the long-term actuarial model, used by the NSSI, which includes projections for the actuarial balances of the public social security funds on a consolidated basis for the period 2007-2050.

³² The forecasts are derived from the long-term actuarial model, used by the NSSI, which includes projections for the actuarial balances of the public social security funds on a consolidated basis for the period 2007-2050. Specific simulations were made on the basis of demographic assumptions, compatible with the population forecast of AEF. The macroeconomic assumptions are also aligned with the long-term macroeconomic projection, elaborated by AEF. Assumptions, related with public social security: 1. Pensions are indexed with the arithmetic mean of the inflation and the insurable income growth for the previous year, in line with the provision of art. 10 of the Social Insurance Code (SIC). 2. There is a new cut in the social contribution for pension insurance by 1 pps from October 1, 2007.

3.6.2. Education

Education expenditure on a consolidated basis will increase by 22.2% in 2008. This growth is due to the gradual introduction of delegated budgets in all municipalities in the country and securing of resources for the new financing mechanism of the secondary education system.

A gradual increase of the funding for the sector is planned during the period 2008-2010. As a whole, no difficulties are expected in relation to the provision of resources for the common standard arrangement during the programme period. The main reason in this respect is the significant unutilized reserve for expenditure optimisation in the system. One of the key reserves will be realized through the expected decline in the number of children at school age of around 3.5% annually – the so-called demographic dividend. At the same time around 3% of the children in school's age will not be enrolled in the system. Even if the coverage of the system improves (which is one of the main objectives of the reform) and around 0.5% of children, not enrolled, are included each year, the net impact of the demographic dividend would still be 3% (around EUR 23 million).

Unlike 2007, during the next year there will be no additional spending on compensation of the decreased funding for education in municipalities, where the number of pupils is declining. This will lead to additional saving of resources.

The introduction of delegated budgets is a priority in the implementation of the reform in the area of school education in 2008. The draft law on the state budget for 2008 envisages an obligation for every municipality to introduce formulae for the allocation of education resources at the individual school, kindergarten, and servicing unit level as well as incentives for municipalities, which introduce delegated budgets in full extent. Another priority is to continue and strengthen the process of optimisation of the network of municipal schools. As a result of the continuing implementation of the School Network Optimization National Programme in 2008 the number of schools is expected to decrease by at least 100, and the funds which the municipalities will receive amount to about EUR 13.8 million. These resources will be re-invested by each municipality for securing financially the education and training of relocated pupils, for payment of dismissed teachers, for measures aimed at the reduction of the risk of dropouts, etc.

The expenditures on the programme component of the financing model are to be increased with additional EUR 15 million to EUR 100 million, which will be mainly directed for school network optimisation programmes, to raising the qualification of teachers and directors, for extraordinary remuneration of teachers, etc.

All savings, together with the planned average annual increase in the education expenditures and the financing opportunities from the structural funds, will ensure the financial stability of the system in the medium term.

3.6.3. Healthcare

Resources, allocated for healthcare, are planned to increase by 16% in 2008 and they are projected to gradually increase further to 4.3% of GDP in 2010. Subsidies for hospital care are budgeted at EUR 71.6 million in 2008, up by 7.7% year-on-year, in order to secure financial resources for the specific activities of healthcare facilities.

The revenues of the Health Ministry budget are forecast to increase by 12% in 2008 and by 3% in both 2009 and 2010, which will be on account of revenues from state fees. Total expenditures are planned to rise by 9% in 2008, 11% in 2009 and 10% in 2010. Revenues of the ministry will not be sufficient to cover its expenditures and to

this effect, the transfer from the republican budget will be increased in order to cover the lack of funding in the medium term.

One of the main risks for the budget are still the incomplete reforms in the sector as well as the allocation of resources without binding it to the achievement of a certain level of quality of services.

Until the end of the year the Parliament is expected to approve a revision of the NHIF budget for 2007. It should provide for an increase of the transfer from the central budget to the NHIF budget by EUR 28.6 million in order to cover the shortfall of resources for financing expenditures on health insurance payments for hospital care. Despite the planned significant raise of the contributions to 3% for persons, aged up to 18 years, the revenues of the budget will not manage to cover the spending growth during each of the next three years. Consequently, the gap will be covered by transfers from the republican budget.

Population ageing, the increased demand for expensive (mainly hospital) treatment and the lack of sufficient reforms in the sector lead to rising pressures for a higher share of healthcare expenditures in the medium term. In the medium term the expected deficits on the NHIF budget represent a risk for the overall functioning of the sector.

4. Sensitivity Analysis and Comparison with Previous Update

4.1 Alternative Scenarios and Risks

Three alternative scenarios related to changes in the key assumptions of the baseline model have been considered – higher prices of crude oil, appreciating euro, and a weaker-than-expected development of the world economy. The results from the simulations are described in separate subsections below.

4.1.1. Higher Oil Prices

The price of crude oil affects considerably the main indicators concerning the development of the Bulgarian economy. The effects from increasing it by USD 10 compared to the baseline scenario are given in the table below.

Table 8: Effects on macroeconomic indicators from increasing the price of oil

Indicator	2008
GDP	-0.4%
Private consumption	-0.4%
Investment	-1.0%
Exports	-0.01%
Inflation rate	+0.6%
Current account balance, % of GDP	-0.5%
Number of employed persons	-0.4%

Source: AEF

As can be seen in the table, such a development is expected to boost the annual average inflation rate in the country by 0.6 percentage points. This on its own is expected to decrease the growth rate of private consumption by 0.4 percentage points. The higher price level and the higher growth rate of consumption will affect adversely the investment process and in real terms investment will increase by 1.0 percentage points less. The constraining of the domestic demand growth rate on behalf of the supply side will lead also to a growth rate of GDP which is lower by 0.4 percentage points. For that reason, the growth of the number of employed persons is also expected to decrease by 0.4 percentage points.

Under this scenario, no considerable changes concerning exports in real terms are expected but the increase in the price of oil will lead to higher imports in nominal terms, which is the reason behind the deterioration in the current account balance by 0.5% of GDP.

4.1.2. Appreciating Euro

Bulgaria operates a currency board arrangement and has fixed exchange rate of the lev to the euro. Also, the main trading partners of the country are EU Member States, and in particular euro area Member States. Nevertheless, the dynamics of the USD/EUR exchange rate is of considerable importance to Bulgarian exports. One of the reasons for this is the fact that Bulgaria competes in the Common Market with producers from third countries. In the table below the effects from an appreciating euro to 1.50 dollars per euro are displayed.

Table 9: Effects on macroeconomic indicators resulting from euro appreciation

Indicator	2008
GDP	+0.1%
Private consumption	+0.9%
Investment	+0.2%
Exports	-1.3%
Inflation rate	-1.5%
Current account balance, % of GDP	+1.1%
Number of employed persons	+0.1%

Source: AEAF

In this scenario two opposite effects are observed. One of them is related to foreign trade and is expressed in the realization of a growth rate of imports which is lower by 1.3 percentage points. The other one is related to inflation which is strongly influenced by international prices: the international prices measured in euro are expected to decrease, which is the main reason for the decrease in the inflation rate by 1.5 percentage points. This will leave more disposable income to households and domestic demand is expected to increase by 0.9 percentage points. The latter will generate additional incentives to increase investment, which will compensate for the negative effects stemming from the lower growth of exports.

As regards GDP, in this scenario the domestic demand effect is expected to prevail, as a result of which the economy is expected to grow by 0.1 percentage points more. The latter itself will lead also to a higher growth of employment.

Despite the lower growth the change in the current account balance is expected to be positive amounting to 1.1% of GDP. This strong effect is expected to show through restricting the imports of goods in nominal terms due to the lower international prices denominated in euro, and on the other hand there will be lower growth rates in real terms due to the lower exports.

4.1.3. A Weaker Development of the World Economy

Since Bulgaria is a small and highly open economy, its economic development is strongly influenced by external shocks. In the table below the effects from the deceleration in the growth rates of the US and EU economies, respectively by 0.6 and 1.1 percentage points, are shown.

Table 10: Effects from the deceleration of the growth rates of the USA and the EU

Indicator	2008
GDP	-0.5%
Private consumption	-0.6%
Investment	-0.7%
Exports	-2.0%
Inflation rate	-0.2%
Current account balance, % of GDP	+0.1%
Number of employed persons	-0.7%

Source: AEAF

The main effect is related to the considerably lower growth rate of exports which in turn leads to a 0.5 percentage point lower GDP growth rate and a 0.7 percentage point lower employment growth. From the income side this will be reflected in a weaker increase in consumption and investment, which will affect favourably the inflation rate – the latter is expected to be 0.2 percentage points lower. The weaker domestic and external demand will restrict the imports of goods and services, as a result of which the net effect on the current account balance is expected to be positive and its deficit will decrease by 0.1% of GDP. It should be noted that in this scenario the improvement in the current account balance in nominal terms is higher but the lower nominal GDP leads to its deterioration by 0.2% and leads to a smaller improvement in terms of a percentage of GDP.

4.1.4. Fiscal Risks

The main risks before fiscal policy in 2007 were related to the challenges stemming from EU accession and the effects of that process on public finances. However, the execution of the budget for the first eight months of the year showed that the expected negative influence on revenues and expenditures is not justified. Correspondingly, the EU membership of the country may not be viewed as a serious risk to the 2008 budget, too. Certain problems in this respect might arise only from a contingent increase in the amounts coming from EU funds which would create a necessity of providing additional national resources in the form of co-financing.

The relatively high positive value of the budget balance, as well as the low level of government debt and its balanced structure imply the absence of a considerable direct effect on the budget stemming from an unexpected development in the assumptions on external indicators such as interest rates, exchange rates, etc. In this framework the risks related to public finances reduce largely to maintaining economic growth sustainability due to the existing imbalances in the economy (mostly the increasing current account deficit and the acceleration of the inflation rate). The structure of GDP growth, in which domestic demand has the leading share, currently implies a fast growth of budget revenues. The deepening of imbalances, however, brings the risk of decelerating demand and decreasing budget revenues. This risk does not relate so much to 2008 as to the medium term but the potential effect on the budget is not negligible. A deceleration of the nominal GDP growth rate by one percentage point would mean a revenue loss of 1.1% or about EUR 127.8 million in nominal terms.

In addition, the deteriorating age structure of the population poses a challenge before the budget in the long term. The unfavourable demographic processes are expected to lead to increasing public expenditures mostly on pensions, which is a serious risk to the sustainability of public finances and requires an adequate reaction of fiscal policy even in the medium term. This reaction has to be partly expressed in maintaining the positive budget balance and sustaining low levels of government debt as a share of GDP, which would allow assuming the burden of aging population in the future without threatening the stability of public finances.

The pension system also represents a source of risk to the budget, both in the short and in the long run, since it continues to count on substantial amounts of subsidies and transfers from the central budget. The financial condition of the pension fund will deteriorate additionally as a result of the planned reduction in the social security contribution by three percentage points since October 2007. The experience from the reduction of the social security contribution by 6 percentage points in 2006 shows that it facilitates the increase of wages and employment in the economy, which compensates for the negative effect on budget revenue. This compensation, however, is only partial and correspondingly the additional reduction of the social security contribution will lead to a revenue loss of the pension fund and will widen the resource gap in the system. In this way the difference with the sustainability state will increase and this will create a tension in public finances as a whole.

4.2. Sensitivity of Budgetary Projections to Different Scenarios and Assumptions

The budgetary sensitivity to the different assumptions in the macroeconomic framework is relatively low. The simulations performed with alternative assumptions concerning the price of oil, the interest levels, the exchange rate of the US dollar vis-à-vis the euro as well as the developments in the international environment imply that the nominal level of the primary expenditures remains unchanged in the different scenarios since they are determined by the Law on the State Budget and will not be revised in the course of the year.

An increase in the oil price by USD 10 above the assumed value in the baseline scenario will deteriorate the budgetary balance as a share of GDP by 0.05 percentage points in 2008, other things being equal. This outcome is determined by the decline in the nominal level of revenues mainly as a result of corporate tax and social insurance revenues directly following from the lower GDP growth rate. On the other hand, the indirect tax revenues will not be seriously affected since for them any deterioration in the growth rate is expected to be largely compensated by price increases. The personal income tax revenues will also remain unchanged in comparison to the baseline scenario as a combined outcome of the reduction in income and the reduction of social insurance contributions leading to a small change in taxable income. At the same time, the lower level of the nominal GDP will have a positive effect on the budget balance as a percentage of GDP but it will be significantly lower than the effect of the lower nominal level of revenues.

Table 11: Effects from alternative assumptions on budgetary indicators

	Baseline scenario	Price of oil	Growth rate of world economy	Change in the exchange rate
Budgetary balance (%of GDP)	3.0%	2.90%	2.62%	2.92%
Difference from the baseline scenario		-0.052%	-0.330%	-0.035%
Effect from changes in revenues		-0.057%	-0.350%	-0.045%
Effect from changes in expenditures		0.000%	0.000%	-0.017%
Effect from changes in GDP		0.005%	0.021%	-0.007%

Source: AEAF, MoF

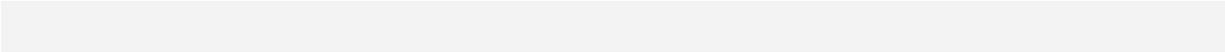
The budgetary position also will not be affected by an appreciation in the weighted average of the BGN/USD exchange from 1.4 in the baseline scenario to 1.3. In this case, the nominal level of GDP will increase but nevertheless the nominal budget revenues are expected to decline compared to the baseline scenario. Two opposite effects will influence the budget revenues, more specifically the increase of revenues from income taxes and a decline in the revenues from indirect taxes due to the lower inflation rate. The larger share of indirect revenues in the budget correspondingly determines the bigger weight of this factor which will lead to a decrease in the general level of budget revenues. In addition, the interest expenditures on government debt will decrease by about EUR 5 million. The budgetary balance as a percentage of GDP will decrease by 0.07 percentage points as a combined outcome of lower revenues, lower expenditures, and a higher nominal level of GDP.

The magnitude of influence of an eventual change in the levels of the current exchange rates and interest rates on the nominal value of government debt as well as on the amount of impending payments was determined by means of the performed sensitivity analysis. The results confirmed the expected relatively weak sensitivity of debt-related liabilities with respect to changes in the values of basic market indicators. It was found that for the period 2008-2010 a change in the EUR/USD exchange rate by 10% will lead to a fluctuation in the nominal level of government debt amounting to less than EUR 240 million. Under this hypothesis the repayments of government obligations react with an average deviation for the period amounting to 1.7%, and the planned depreciation costs – with an average deviation of 0.3%. The parallel change in the levels of the six-month LIBOR in euro and the six-month EURIBOR by 10 base points lead to a change of magnitude 0.3% in the envisaged interest expenditures. The data from the performed analysis show that under the same assumptions for changes in the six-month LIBOR in USD the amount of the budget funds allocated for interest for the period 2008-2010 will practically remain unchanged. A ten percent change in the current exchange rate of the yen (the currency with the second biggest share in the currency composition of debt after the USD) exerts a considerably weaker influence. Under this assumption the debt for the same period will change by about EUR 37 million.

The strongest impact on budget execution would come from stagnation in the development of the world economy since it would affect all growth components of the country's GDP. A decline in the EU economy by 0.6 percentage points and a decline in the US economy by 1.1 percentage points compared to the baseline scenario will lead to a serious decrease in tax revenues in the budget.

4.3. Comparison with Previous Update

The update of the medium-term fiscal policies compared to the previous Convergence Programme sought compliance with the recommendations of the ECOFIN Council to save extra budget revenues collected during the current year. The ECOFIN Council concluded also that the reduction of the positive balance of public finances envisaged for 2007 might turn into a pro-cyclical policy. The medium-term fiscal objectives were also updated in order to conform with the ECOFIN Council conclusions and at the same time to counter the risks related to the continuously growing current account deficit. The maintenance of strict budget policy also aims at strengthening the sustainability of public finances with a view to the expected unfavourable demographic processes. The strong initial position guarantees fully the coverage of the related expenses. The considerable difference between the forecast level of the "government debt/GDP" ratio and the value from the previous update of the Convergence Programme is on the one hand due to the higher-than-expected nominal debt reduction (as a result of the expected higher positive value of the budget balance), and on the other – to the higher forecast value of the nominal GDP growth rate.



5. Quality of Public Finances

5.1. Policy Strategy

The Ministry of Finance continues its efforts to improve the management of public finances. Its main targets are related to the achievement of a stable medium-term public expenditure framework, a stable process of spending planning for primary budgetary spending units by policies/programmes, as well as to the development of fiscal decentralisation and administrative service. The draft 2008 budget will be the first to present the parliament the expenditures of all ministries and three state agencies related to the policies under the authority of the respective minister of agency director, for discussion and approval. This marks an important step to the management of public finances, guided by the results of the government policy implementation. It will allow prioritizing public spending in the medium term on the basis of information (quantity, quality, time and cost) on the results from achieving the policy objectives. Thus one of the sustained aims of fiscal policy is to shift the focus of the dialogue on the various decision-making levels from resource demands by line ministries to policy prioritisation in terms of policy effects (not only financial), on society.

The adoption of expenditures by policies sets the start of the implementation of a sectoral approach in the policy prioritization, and spending ceilings for first-level spending units will be approved in this framework. The institutionalisation of this new planning and prioritisation mechanism guarantees a resource management, which improves the efficiency and effectiveness of public expenditure in the individual sectors and thus the potential economic growth.

Current focus will be put on the challenges, related to the strengthening of the achieved reform effects. These include the legislative definition and further improvement of the budgetary planning methodology, the improvement of the administrative capacity of the participants in the budgeting process, the delegation of authority and responsibilities with respect to the budget and at last but not at least, developing and refinement of the existing information environment for the requirements of the budget management through implementation of new information technologies.

Efforts on increasing the effectiveness and the quality of public spending through improvement of medium-term planning and budgeting in programme format continue. Two of the main instruments in this respect will be the enhancement of the principle of fiscal decentralisation and the introduction of a practice for regular sectoral review of public expenditures. A plan for full review of budget spending will be approved for the following three years, including the justice and internal affairs, healthcare, education and other sectors.

The preparation of a new organic budget law is at an advanced stage and it should serve as the framework for improvement of the budget procedure and its organisation as well as for the delegation of responsibilities within the boundaries of the constitutional authority of all participants in the budget process.

The process of preparation of the medium-term fiscal framework (MTFF), together with its inherent model for fiscal target setting, is fully consistent and bound to the currency board system. The scope of the framework can be characterized as broad due to the achieved high degree of budget consolidation. It also includes a fiscal risk and economic development analysis, which aims to provide a basis for government decisions and ensure a transparent and effective management of public finances.

MTFF preparation is related to the adoption by the Council of Ministers of main assumptions and policy instruments at an early stage of the budget procedure. These decisions lead to policy prioritization and form the basis for the Council of Ministers approval of expenditure ceilings for first-level spending units and for the expected results of policy implementation. Each allocation of resources is done within the limits imposed by the budget balance target set in the consolidated fiscal plan.

5.2. Developments on the Expenditure Side

Each year the budget law incorporates implicit buffers, aiming to offset the fiscal risk. Budget planning is based on setting target values for the budget balance and the expenditures as a ratio to GDP in order to reduce the size of the public sector (keeping the level of expenditures³³ at a level not exceeding 40% of GDP).

The buffer or the so-called 90%³⁴ rule is not used for the first time in the draft 2008 budget law in its role of an instrument for reacting to the deteriorating current account deficit in the balance of payments. It will be replaced by a single buffer in the form of a structural reserve in the central budget. As a result, the state institutions, ministries and agencies will have at their disposal the full volume of the expenditures, approved with the Law on the State Budget for 2008.

This approach is in line with the intention to optimize budget spending while simultaneously maintaining strict fiscal discipline, taking into account the role and commitment of the state for guaranteeing a certain level of public services and the further strengthening of institutions.

The programme formats of the budgets of the first-level spending units reflect the introduced changes in the budget planning process, following the budget reform from the past several years. These reforms are mainly concerned with shifting the focus in the budget decision-making from planning of input resources to planning of objectives and results of policies, linked with the required financing.

The single account system significantly enhances the effectiveness of budget resource management through centralisation of cash funds and optimisation of the payment process. This ensures aggregate control over spending by way of setting cash payment limits by the Ministry of Finance on the accounts of first-level spending units in the BNB.

The fiscal reserve consists of the cash balances in BGN and foreign currency of all bank budgetary accounts and deposits, including the state budget, NSSI, NHIF and the extra-budgetary funds at a central level, as well as other highly liquid external assets of the central government. It provides security against potential external shocks and a guarantee for debt service payments, minimizing the fiscal risk in the course of the current budget execution. In this respect, the annual budget law defines a minimum level of the fiscal reserve, which guarantees the stability of the fiscal position during the year.

³³ Excluding the contribution to the EU budget.

³⁴ The percentage fluctuates between 88% and 93% during the various years.

5.3. Revenue Side Developments

The most important reforms for improving the quality of public finances on the revenue side are related to the introduction of a flat tax of 10% on personal income. Besides simplification of the tax system, it will have an additional positive effect in removing several tax relieves in personal income taxation. These include a relief for donations as well the so-called "tax expenditures" under the form of family relief for children. Tax expenditures represent hidden expenditure, which reduce the fiscal policy transparency and therefore, their removal will simplify the system and expand the tax base under the tax neutrality principle. It should be noted that the flat tax will completely eliminate the progressivity of taxation since it will be implemented without setting a non-taxable threshold. The effective tax and social security burden on personal income will be also proportional³⁵, which theoretically should stimulate savings in the economy.

At the same time the purposeful policy of a relative shifting of the tax burden from direct to indirect taxes will continue. In this way the economic efficiency of the tax system will be also improved through the creation of more favourable conditions for savings and capital accumulation.

³⁵ Up to the level of the maximum insurable income; for higher levels of income taxation will be regressive.

6. Sustainability of Public Finances

6.1. Policy Strategy

The policy strategy related to the sustainability of public finances remains unchanged compared to the strategy declared in the Convergence Programme (2006-2009).

The prudent fiscal policy implemented during the past years led to the stabilisation of public finances and to a sharp reduction of the government debt level. Besides that, the present budgetary stance guarantees the public finance sustainability in the long term as it fully satisfies the long-term budget constraint condition, which states that the present value of the primary structural balances should cover the present value of the government debt. Sustainability indicators, proposed by the EC, serve as a check for compliance with this condition.

Table 12: Sustainability Indicators

	Programme scenario		
	S1	S2	RPB
Value	-7.3	-4.8	-0.2
<i>of which:</i>			
Initial budgetary position	-4.7	-4.8	-
Debt requirement for 2050	-2.4	-	-
Future changes in the budgetary position	-0.2	0.0	-

Source: AEF

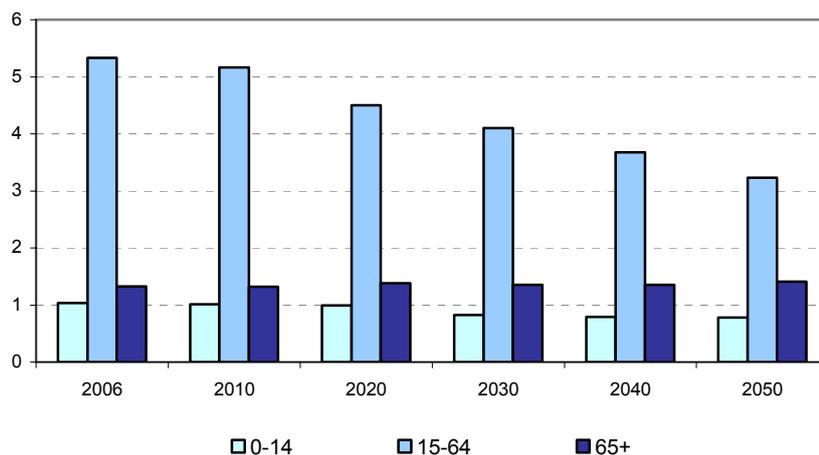
The two indicators – S1 and S2, reflect the difference between the long-term fiscal position, according to the programme, and the sustainable position. They differ from each other in that the S1 guarantees that the government debt would meet the Maastricht debt criterion of 60% of GDP in 2050 while S2 sets a stricter condition that the budgetary restraint should satisfy the budgetary restraint for an infinite period in the future. The negative values for the two indicators suggest that the current fiscal stance, as well as its projected changes in the long-term due to the aging impact, completely meet requirements for budgetary sustainability. Direct interpretation of the S2 indicator means that the current primary budget balance could be reduced by the indicator value without jeopardizing the sustainability of public finances. This difference is captured by the required primary balance, which here is represented as the simple sum of the S2 indicator and the current primary balance. It should be noted that the primary balances in the analysis are in cyclically-adjusted terms while for government debt is used in gross values (not netted with the fiscal reserve). In practice, with the current primary balance and government debt levels, the cyclically-adjusted value of the primary balance, guaranteeing the public finance sustainability, is a deficit of 0.2% of GDP. The relatively low level of the required primary balance is due to the solid fiscal position as well as to the weak sensitivity of the budget to the long-term demographic changes. According to the AEF long-term demographic model and the pension model of the NSSI, the so-called cost of ageing till 2050 is low.³⁶

³⁶ The effect from the population aging is reflected in the item "Future changes in the budgetary position", which tracks changes in the public spending, related only to the demographic processes. The dynamics of the fiscal balance for the next years is based on the assumption for reaching the MTO in 2012 and a

The estimate concerning public finance sustainability is highly sensitive to the assumptions for the long-term economic development. The main parameters are shown in Table 7 in Appendix 1, and the description of the long-term model, used for the preparation of the long-term forecasts, is given in Appendix 2.

Population dynamics has the greatest influence on the economic development of the country. As indicated on Figure 12, the population of Bulgaria declines and ages as the share of people, aged above 65, rises in absolute terms during the forecasting period.

Figure 12: Population of Bulgaria by age groups, millions



Source: AEF

With respect to the labour market, the negative impact of the demographic trends is partially compensated by an increase in the participation rate (Table 13), which is expected to climb by 10.3 percentage points for the period under review. This tendency is explained by the low participation rates, mainly in the group of people at pre-pension age. Following the strong economic development for the past years, the participation rate of the people, aged 50-65 years, is expected to rise substantially. This is the reason why the increase is concentrated in the first half of the period. Another factor to influence this development is the convergence process with the EU economies, which drives the participation rate increase during the second half of the period.

Nevertheless, the participation rate is expected to remain below the average EU level and the main explanation is the relatively lower retirement age in Bulgaria.

Table 13: Participation rate (15-64)

Country/group of countries	Level			Change		
	2006	2025	2050	2006-2025	2025-2050	2006-2050
Bulgaria	64.5	73.0	74.8	8.6	1.7	10.3
EU 25	70.6	74.9	75.5	4.3	0.6	4.9
EU 15	71.7	76.0	76.1	4.3	0.1	4.4

Source: AEF, Eurostat, DG ECFIN

balanced budget in 2016. It should be borne in mind that the cost of ageing could be underestimated since the negative impact of the demographic processes on the budget revenues is not taken into account.

A main assumption in the long-term forecast is the process of nominal and real convergence to the average levels for the EU and the end-of-period price and income levels are around 75% of the EU 15. Despite that, the real GDP growth would be close to zero during the last years of the period due to the labour force dynamics (Table 14).

Table 14: Average annual real GDP growth (2011-2050)

Country/group of countries	2011-2020	2021-2030	2031-2040	2041-2050
Bulgaria	4.6	2.6	0.4	0.1
EU 25	2.2	1.5	1.2	1.2
EU 15	2.1	1.4	1.2	1.3

Source: AEF, DG ECFIN

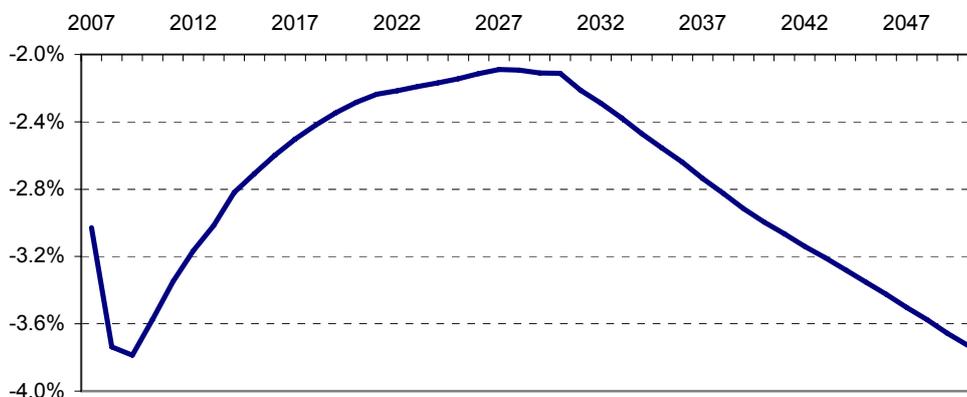
6.2. Long-term Budgetary Prospects, Including the Implications of Aging Population

6.2.1. Social Security

The NSSI long-term forecast builds on the demographic and macroeconomic forecasts of AEF as well as on assumptions on the public social security, based on the current legislation in the country. It applies the model for long-term projection of the funds of the Public Social Security, used in the Convergence Programme (2006-2009).

Measures, adopted during the past years for boosting the Public Social Security revenue, cannot generate sufficient income, which is expected to bring a deficit in the system of around 3.7% of GDP for each of the following three years. For the forecasting period until 2050 long-term fiscal stability is not observed, even though the deficit is projected to decline and reach around 2.09% of GDP in 2027. The gap is then expected to rise back and amount to 3.73% of GDP at the end of the period.

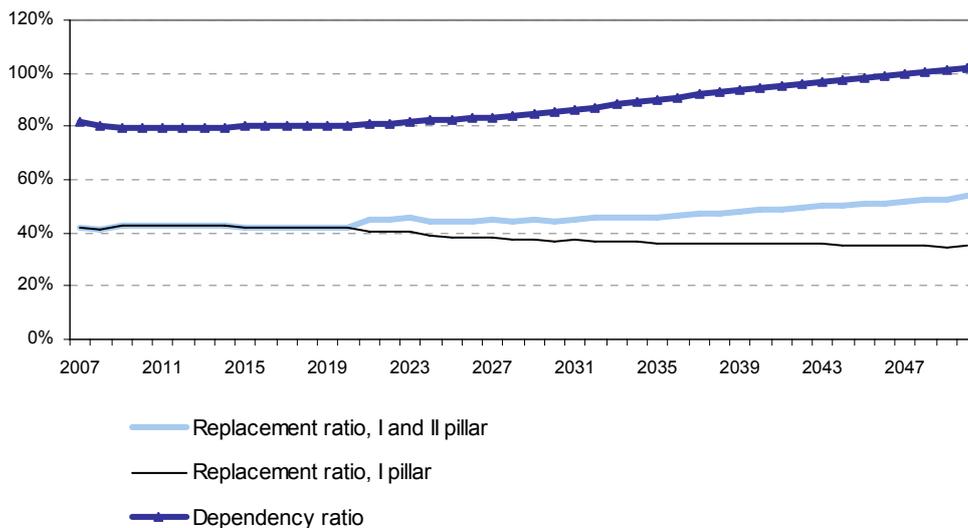
Figure 13: Balance of the public social security funds (% of GDP)



Source: NSSI

The long-term trend for rising spending in the first pension pillar stems from the joint dynamics of the dependency and income replacement ratios. The dependency ratio is projected to decline during the next five years, compared to its current level of 81.6% (in 2007), reaching 79.6% in 2012. This is mainly on account of the increase of the retirement age and the removal of the opportunity for early retirement for some profession categories. In the long term, however, the low fertility ratios and the rising life expectancy are pre-conditions for an increase in the dependency ratio to 102.1% in 2050. One of the possible ways to resolve this issue is to stimulate the active aging and the prolongation of the working life.

Figure 14: Replacement and dependency ratios



Source: NSSI

The rising trend in the dependency ratio is accompanied by a long-term downward tendency in the income replacement ratio³⁷. The latter is a result of the gradual reduction of the individual coefficient, used for the calculation of the pension size.

6.2.2. Education

The long-term forecast of public expenditure on education is based on the long-term demographic forecast and the assumption for no change in the costs at current prices, set in the common expenditure standard. The implementation of the common expenditure standard as the financing model from 2007 is expected to improve the efficiency of resource management in the sector by stimulating the optimisation of the school network. This explains the forecast assumption, which does not envisage a reduction in public expenditure on education as a result of restructuring and optimisation of the school network. The education system should effectively command more resources with the implementation of this type of reform. On the other hand, the long-term forecast does not assume that freed resources, due to a lower number of pupils and students, will be re-invested for other spending in the area of education. Accordingly, education expenditure in the long-term forecast will decline from its current level, reaching its minimum around 2040. A stabilisation of the demographic

³⁷ Average pension to average insurance income.

dynamics of the population, aged less than 18 years, will lead to a gradual rise in the total spending after this year.

Table 15: Education expenditure by type of education (% of GDP)

Educational level	2000	2010	2020	2030	2040	2050
ISCED 1	0.80%	0.90%	1.03%	0.91%	0.91%	1.00%
ISCED 2	0.90%	0.74%	0.89%	0.86%	0.78%	0.88%
ISCED 3-4	0.82%	0.93%	0.83%	0.93%	0.82%	0.87%
ISCED 5-6	1.71%	1.74%	1.26%	1.38%	1.35%	1.28%
Total	4.24%	4.30%	4.01%	4.08%	3.87%	4.03%

Source: AEAf, Eurostat

6.2.3. Healthcare

In the long term the aging of the population is expected to deepen. The combination between the sharp decline of the working-age population and the projected rise of the demand for healthcare services by older people explain the increasing financial burden for the employed as well as the growth of the total spending on healthcare.

The forecasted dynamics of long-term expenditure on healthcare is based only on population dynamics. This assumption is quite strong as it suggests no change in healthcare policy, concerning the expansion of the scope of healthcare services, financed by the budget. At the same time, a number of econometric studies show that technical progress and other non-demographic factors are among the main reasons behind the increase in healthcare expenditures in developed countries. These considerations are not included in the current forecast and therefore, it might underestimate the healthcare expenditures. At the same time, the forecast also does not take into account the spending impact, caused by the expansion of financing for medical prevention measures, which would ultimately lead to lower spending on healthcare in the long term.

Table 16: Healthcare expenditure (% of GDP)

Indicator	2010	2020	2030	2040	2050
Healthcare expenditure, % of GDP	4.3%	4.2%	4.3%	4.5%	4.8%
Share of healthcare expenditure in total expenditure, 65+	31.5%	33.8%	35.4%	36.4%	40.9%
Share of population 65+	17.6%	20.1%	21.6%	23.3%	26.0%

Source: AEAf

Table 16 shows that the increase in healthcare expenditure is due to the deterioration of the demographic structure of the population. The share of people, aged above 65 years, substantially rises from 17.3% in 2007 to 26% of the total population at the end of the period. Having in mind that most expenditures on healthcare for a given individual are concentrated in the last years of his lifetime, the aging of the population logically entails a higher share for healthcare spending of older people in total

spending, keeping the ratio of healthcare expenditure of people, aged 65+,³⁸ unchanged. At the end of the monitored period, the share for healthcare spending of older people in total spending is expected to exceed 40%. Total healthcare expenditures are projected to rise from their current level of 4.1% of GDP for 2006 to 4.3% of GDP in 2010.

³⁸ According to NHIF data, currently they exceed by 85% the expenditure by person in the age group 0-65 r.

7. Institutional Features of Public Finances

7.1. Implementation of National Fiscal Rules

The Decision of the Council of Ministers concerning the budget procedure for 2008 introduces for the first time basic rules at the political and at the technical level. The rules at the political level aim at:

- Binding the policies pursued by the government to the budgets of the respective first-level spending units while sticking to the commitments taken;
- Achieving a stable medium-term fiscal framework and expenditure ceilings by first-level spending units which are in conformity with the Government Programme and the Convergence Programme (2006-2009);
- Adopting a decision at an early stage of the procedure on the medium-term development of the main horizontal policies and the set of policy instruments of the first-level spending units;
- Strengthening the role and the responsibilities of the first-levels spending units in the planning process.

At the technical level the rules are aimed at:

- Performing a review and prioritization of the policy instruments of the first-level spending units, including those which are financially secured, those which are not financially secured (i.e. legally defined), as well as the proposals for new instruments replacing already existing ones;
- Transition from a process of planning resources at the input level to result-oriented budgeting (in programme format);
- Strengthening the role of the consultation process in defining the medium-term fiscal framework, the basic assumptions, the set of policy instruments, the expenditure ceilings, and the expected results from the implementation of the policies.

The rules allow amendments to the medium-term fiscal framework, to the basic assumptions, to the policy instruments and the results expected from their implementation, and to the expenditure ceilings of the first-level spending units (excluding those of the municipalities) approved by the Council of Ministers, if there are substantial changes in the macroeconomic forecasts, in the policies pursued and/or in cases of unforeseen or emergency situations. The first-level spending units, excluding the municipalities, elaborate their three-year budget forecasts in programme format and by economic classification, and their 2008 draft budgets – also by functional classification. If the deadlines defined in the decision on the budget procedure are not met, the minister of finance defines ex officio the expenditure ceilings of the first-level spending units.

Each year buffers aimed at neutralizing fiscal risks are implicitly defined in the Law on the State Budget. Budget planning is based on the definition of target values of the budget balance, as well as of expenditures as a percentage of GDP (limiting budget expenditures³⁹ to the maximum of 40% of GDP).

The endeavours of the government to optimize budgetary expenditures and counteract the deteriorating current account balance are institutionalized through the definition of fiscal rules in the draft law on the state budget for 2008. Additional budget credits

³⁹ Excluding the contribution to the EU budget.

may be allotted under the terms of a decision by the Council of Ministers after the Minister of Finance issues a proposal and only conditional on the following requirements:

- The expected budget balance for the year exceeds 3% of GDP;
- They do not deteriorate the planned budget balance of the republican budget.

The amount of the additional budget credits may not exceed 25% of the expected over-performance of revenues during the year. The over-performance does not include the received extra transfers, the receipts from the sale of durable assets, and the receipts of the healthcare reform fund. The Minister of Finance may allow spending of the entire amount received from the sale of durable assets if the funds are going to be used for investment expenditures.

In case the forecast of the current account balance shows some deterioration compared to the previous year the Minister of Finance may impose additional restrictions (besides those envisaged in the Law on the State Budget) concerning the amount of the possible extra budget credits from revenue over-performance.

7.2. Budget Procedures, Including Statistical Requirements of Public Finances and Governance

The budget procedure for 2008 is formally divided into four main stages. At the first stage the first-level spending units update their budgets according to the laws on the state budget for 2006 and 2007 and the decision of the Council of Ministers of 2006 for adopting expenditure ceilings of first-level spending units for the period 2007-2009. This stage includes the following steps:

- The Agency for Economic Analysis and Forecasting (AEAF) to the Minister of Finance elaborates the forecast of basic macroeconomic indicators for the medium term;
- The Minister of Finance issues instructions on the preparation of the information concerning the first, the second, and the third stage of the budget procedure;
- The collective governing bodies in the ministries and other state institutions discuss the instructions and adopt internal operational deadlines;
- The first-level spending units, excluding the municipalities, update and present to the Ministry of Finance their 2006 and 2007 budgets as approved by the National Assembly and their expenditure ceilings for 2008 in programme format and by elements of the Unified Budget Classification as approved by the Ministry of Finance.

At the second stage, the medium-term fiscal framework (MTFF), the basic assumptions and the set of main policy instruments for the period 2008-2010, which are approved by the Council of Ministers, are elaborated. At this stage:

- The ministers and the chairpersons of the State Agency for Youth and Sports (SAYS), the State Agency for Forestry (SAF), and the State Agency for Information Technologies and Communications (SAITC) present to the Ministry of Finance information including:
 - Analysis of the policies, programmes and policy instruments for 2006 and 2007, including information on the financially secured policy instruments and the legally defined policy instruments, which are not financially secured;
 - The basic assumptions for the period 2007-2010;

- Substantiated proposals and calculations concerning the policy developments for 2008-2010, including those related to the EU pre-accession instruments, as well as those related to programmes financed by amounts from EU funds by year for the period 2007-2015, for financially secured policy instruments, legally defined policy instruments, which are not financially secured, a proposal for new policy instruments, and a proposal to abolish existing policy instruments, inclusive.
- AEF updates the forecast of basic macroeconomic indicators;
- The Minister of Finance drafts a proposal concerning the main assumptions underlying the elaboration of the MTF and the set of policy instruments, and holds consultations on their precise definition, on the results from their implementation, and on the assessment of their fiscal impact;
- The Minister of Finance drafts and submits to the Council of Ministers the MTF, the basic assumptions, and the set of policy instruments, for consideration and approval. The Council of Ministers submits the approved document package for information to the National Assembly.

At the third stage the expenditure ceilings of the first-level spending units for the period 2008-2010 are elaborated and the results expected from policy implementation are approved by the Council of Ministers. The third stage includes the following major steps:

- The Minister of Finance issues additional instructions on the elaboration of the medium-term budget forecasts of the first-level spending units, including information on the basic macroeconomic indicators;
- If the instructions of the Minister of Finance, the decisions taken in relation with the MTF, the basic assumptions and the set of policy instruments are observed, the first-level spending units elaborate and present to the Ministry of Finance their medium-term budget forecasts;
- The Ministry of Finance makes an assessment of the policies, programmes and instruments, and the results from their implementation according to the medium-term budget forecasts, including the budget forecasts in programme format;
- The Minister of Finance holds consultations and signs memoranda/agreements with the first-level spending units, excluding municipalities, and with the National Association of Municipalities;
- In accordance with the memoranda/agreements the first-level spending units, excluding municipalities, update and submit to the Ministry of Finance their budget forecasts;
- The Minister of Finance drafts and submits to the Council of Ministers the expenditure ceilings of first-level spending units, excluding those of the municipalities, and the results expected from the implementation of government policies, for consideration and approval. The Council of Ministers submits the approved document package for information to the National Assembly.

At the fourth stage the draft of the Law on the State Budget for 2008 is elaborated and approved by the Council of Ministers. This last stage includes the following steps:

- The Minister of Finance issues instructions to the first-level spending units on the elaboration of their drafts of annual budgets and on the update of their expenditure ceilings;
- In conformity with the approved expenditure ceiling and the instructions of the Minister of Finance on the elaboration of the annual draft budgets of the first-level spending units and their updated expenditure ceilings, the first-

- level spending units elaborate and submit to the Ministry of Finance their draft budget for 2008 and updated forecasts for 2009 and 2010;
- AEF updates the forecast of the basic macroeconomic indicators;
 - The Ministry of Finance, leaning on the adopted by the Council of Ministers decisions concerning the MTF, basic assumptions, set of policy instruments, expenditure ceilings of first level spending units, excluding those of municipalities, and the expected government policy outcomes, elaborates a draft of the state budget for 2008 and a draft update of the expenditure ceilings of first-level spending units, excluding those of municipalities;
 - The Minister of Finance holds consultations and signs memoranda/agreements with the first-level spending units, excluding municipalities, for a precise definition of their draft budgets and their expenditure ceilings, including in programme format, and with the National Association of Municipalities in the Republic of Bulgaria (NAMRB);
 - In accordance with the signed memoranda/agreements and the minutes, the first-level spending units, excluding municipalities, update their draft budgets and forecasts, including in programme format and submit them to the Ministry of Finance for inclusion in the document package supplementing the draft law on the state budget of the Republic of Bulgaria for 2008 and the draft update of expenditure ceilings for the period 2008-2010;
 - The Minister of Finance drafts and submits to the Council of Ministers the draft law on the state budget of the Republic of Bulgaria supplemented with the budgetary documents, including the programme budgets and the draft update of the expenditure ceilings, for consideration and approval;
 - Until October 31, 2007, the Council of Ministers submits the draft law on the state budget of the Republic of Bulgaria for 2008 along with the budgetary documents to the National Assembly.

The draft budget is discussed in various parliamentary commissions, the leading commission being the Commission for Budget and Finance. The draft law on the state budget reflects the interrelations regulated in the substantive tax laws, the annual law on the budget of the Public Social Security (PSS) and the annual law on the budget of the National Health Insurance Fund (NHIF).

The National Assembly adopts the Law on the Budget of the PSS. The draft law on the budget of the PSS is elaborated by the National Social Security Institute (NSSI) and is presented to the Council of Ministers by the Minister of Labour and Social Policy.

The budget of the NHIF is the main financial plan for collecting and spending monetary funds of the mandatory health insurance and it is separate from the state budget. The Management Council of the NHIF, through the Minister of Health, submits to the Council of Ministers the draft law on the budget of the NHIF within the deadlines specified for submission of draft law on the state budget of the Republic of Bulgaria for the next calendar year. The draft of the law on the annual budget of the NHIF is discussed by the National Assembly simultaneously with the draft laws on the state budget and on the budget of the Public Social Security.

The structure of municipal budgets is defined in the Law on Municipal Budgets, and the budgets of the municipalities are adopted by the municipal councils.

Methodological developments concerning government financial statistics

In relation with the commitments made to the European Commission for regular submission of statistical information, Bulgaria, being a fully-fledged Member State since January 1, 2007, in accordance with Regulation 3605/93 and its subsequent

amendments concerning the excessive debt procedure and the general government debt, prepared and submitted to the European Commission by April 1 and October 1 notification tables for the period 2003-2007, as well as quarterly data on the debt of the general government sector (in conformity with the requirements of Regulation 1222/2004 of June 28, 2004).

The 2007 fiscal notification tables include for the first time:

- The financial intermediaries' services indirectly measured (FISIM), of local and foreign origin, were distributed by the NSI by institutional sectors over the period 2002-2006 and were correspondingly included in the GDP, GNI and interest (EDP D.41) shown in the notifications;
- Technical reserves related to the general government sector and reflecting the guaranteeing of the security of the insurance companies by means of the pre-paid insurance premiums;
- Following the recommendation made by Eurostat in 2006 and after an in-depth analysis in cooperation with the NSI, the data on health institutions which are commercial entities (state and public property) during the period 2002-2005 were re-classified in the general government sector and submitted to the European Commission with the fiscal notification valid by October 1;
- The data from the turnover registers for the accounting group "Other accounts and activities" reflecting the operations of the budget units with other entities' funds;
- Consolidated data on the debt of the general government sector;
- The debt of the hospitals was also included, distributed correspondingly between the central government and local government sectors.

The improvement of the quality of the data continued in order to reflect in the best way the accrual-basis operations, in conformity with the ESA 95 rules:

- The compensatory instruments included by face value in 2006 were re-calculated and included in the October 2007 notification at annual average market prices;
- Improvement of the quality of the accrual-basis estimates of the taxes for 2006 (the corporate income tax and the personal income tax);
- Elimination from revenues and expenditures of the funds allotted to Bulgaria by the EU;
- Adjustment of the availabilities in accordance with the year of collection of the amounts from bank privatization carried out by the Bank Consolidation Company (BCC). (Following the ESA 95 criteria for the purposes of fiscal notification from 2001 BCC is re-classified in the general government sector.);
- The reported data concerning the contribution of the BNB were adjusted for the realized profits and losses from revaluation.

The issues that the European Commission monitors with particular attention in relation with the excessive deficit and debt procedure are as follows:

- Universal Mobile Telecommunications System (UMTS) – in relation with reflecting in the notification of the receipts from the sale of licenses for third-generation mobile operators. In the case of Bulgaria a re-classification of the amounts is not necessary since the accrued receipts are collected immediately after the finalization of the deal;
- Carbon trading rights – until present in Bulgaria there are no operations completed with respect to the quotas for harmful emissions of carbon dioxide;

- Write-off/restructuring of receivables from other countries – until present no data are available on any write-offs or restructuring of other countries' debt to Bulgaria;
- Publishing – a decision was adopted on the publishing of the fiscal notification data in a suitable format, after a study of other Member States' experience was carried out.

7.3. Reforms on the Are of Revenue Administration

7.3.1. National Revenue Agency

During the reporting period, the National Revenue Agency (NRA) has introduced new alternative ways of servicing liabilities and information dissemination – through the Internet, the post office services or the banking system, which do not require visits to the administrative office of the agency.⁴⁰ A total of 10,300 forms for corporate tax obligations were submitted through the internet in 2007 (as compared to 857 in 2006) and more than 4,200 for personal income tax obligations respectively (as compared to 258 in 2006), which is 16 times more as compared to 2006.

A capacity for analyzing the performance and for assessing the economic effectiveness and efficiency of the National Revenue Agency has been built. An increasing number of research works has been applied with respect to observing the types of taxes and the economic sectors in order to support the effectiveness and the efficiency of the inspections.

NRA takes part in the process of programme budgeting of the Ministry of Finance. NRA has defined its main activities and priorities in the Programme on Government Revenues Administering.

A strategic plan of NRA for the period 2008-2013 was elaborated from April to September 2007.⁴¹ The main priorities of the agency in 2008 are as follows:

1. To improve the servicing of the clients
2. To improve the quality of supervision and compulsory collection as forms of protecting the revenues from violations and frauds.
3. Development and management of the NRA business processes.
4. Guaranteeing and developing the processes of mutual cooperation and exchange of information with the other EU Member States and institutions.
5. Participation in the building and supporting the functioning of e-government in the country.
6. Participation in the decision-taking process of the EU institutions with respect to maintaining the country's interests (preparing national positions within the working groups and the committees at the Council of the European Union and the European Commission).
7. Improving the professional training and development of the employees.
8. Unproblematic transfer to the status of civil servant.

⁴⁰ As of the end of August 2007, NRA provides the following e-services: forms submission under the Law on the Corporate Income Tax, the Law on the Personal Income Tax, the Law on the Value Added Tax, VIES, and Intrastat; notifications submission under the Labour Code, requests for issuing of documents, payments of duties, reports on health security status, etc.

⁴¹ Approved and adopted by the Board of Directors of NRA on September 25, 2007.

9. Applying modern methods for management at the NRA.
10. Corruption fighting.
11. Improving the organizational efficiency.
12. Software for revenues management (SRM).
13. Improving the equipment.

Each priority is complemented by specific measures to support its implementation.

In order to improve the efficiency of operation, the main principles for servicing taxpayers and for management of inspections on the basis of risk management have been introduced. A system for appeals has been introduced and improved. The latter includes also control of the inspection teams through feed-back methods. It aims at constant training and improvement. Debt management and compulsory collection have also been improved.

With respect to the EU membership of Bulgaria, all requirements concerning NRA have been fulfilled within the set deadlines. VAT information exchange system for intra-community supplies in the EU (VIES) and Intrastat system for data collection on trading with goods of VAT-registered entities within the EU were built. The system, which secures the activities on VAT administering of e-services of entities unsettled in the EU – VOES, has been functioning successfully as well.

Real peer reviews with EU countries based on requests have been held since the beginning of 2007. Information in cases of suspected VAT frauds, administrative problems and problems of VAT legislation implementation in the different countries is being exchanged.

7.3.2. Customs Agency

The reform, which started in 2006, changed the scope of functions and tasks of administration. The enforcement of the Law on Excises and Tax Warehouses and the legislation on its implementation as of July 1, 2006 has enabled the Customs Agency to take over the thorough administering of excise taxes, which were partially administered by the National Revenue Agency until that time. With respect to the implementation of the measures envisaged by the trade mechanisms of the Common Agricultural Policy as of Jan 1 2007, the Customs Agency took up the supervision on exports, imports and traffic of agricultural goods, subject to that policy.

Parts of Bulgaria's borders have become external borders of the European Union since January 1, 2007. This spurred the infrastructure improvement of the border checkpoints. The linkages with the information systems of the Directorate-General for Taxation and the Customs Union (NCTS – New Computerised Transit System, ITMS – Integrated Tariff Management System, ECS – Export Control System) have been successfully established and conditions for their implementation during daily customs inspections have been secured through the functioning of the Bulgarian Integrated Customs Information System (BICIS) in each customs institution, including through administering of the specialized activities at the central level.

New forms of cooperation have been introduced and the existing ones with the bodies competent on the trans-border and internal control of goods under the different EU policies (Ministry of Agriculture and Food Supply, Ministry of Economy and Energy, Ministry of Environment and Water, Ministry of Interior) have been improved. The fundamentals for building the relevant administrative capacity for protection of the financial and other interests of the Community, including through administrative restructuring and additional training in the implementation of the new controlling functions, have been raised. The scope of the mobile customs control in border areas has been expanded.

The strategic medium-term goals of the Bulgarian customs administration are as follows:

- Providing protection and security to the citizens through external border control;
- Protection of the financial interests of the Community and of the Member States on the one hand and of the national budget – on the other;
- Protecting the Community from unfair and illegal trade and supporting and simplifying at the same time the legal activities of the economic operators;
- Raising the competitiveness of the companies through modern working methods, supported by an easily accessible electronic customs environment.

7.4. Fiscal Decentralization

A draft law on the amendment of the Constitution has been adopted. It envisages strengthening fiscal decentralization. With the amendments envisaged, Article 141 of the Constitution empowers the municipal councils to define the size of the local taxes under conditions, rules and within the limits set by a law. Paragraph 4 of the same article defines the right of municipal councils to set the size of the local taxes under the rules of a special law.

With the continuation of the fiscal decentralization process further efforts are put in the area of tax reform and in guaranteeing the necessary revenue base for covering the planned costs on local activities of municipalities. The amendments in the Law on Local Taxes and Fees adopted in 2006 empower fully the municipalities to administer the local taxes and fees. The identification, securing and collection of local taxes are performed by municipal administration staff, having rights and obligations of revenue bodies. This contributes to improved tax revenue collection for the municipal budgets.

New amendments to the Law on Local Taxes and Fees are envisaged in order to reflect the amendments to the Constitution adopted in 2007. These changes will empower the municipal councils to define the sizes of local taxes in a regulation within the thresholds and ceilings for each local tax proposed by the Law on Local Taxes and Fees (LLTF). The amendments to LLTF aim at the introduction of a new local tax in 2008, the patent tax, which will be transferred from the Law on Personal Income Taxation to the Law on Local Taxes and Fees.

Appendix 1: Tables

Table 1a. Macroeconomic prospects⁴²

	ESA code	2006	2006	2007	2008	2009	2010
		Level	Rate of change				
1. Real GDP ⁴³	B1*g	25100	6.09%	6.40%	6.40%	6.80%	6.90%
2. Nominal GDP	B1*g	25100	14.70%	11.76%	12.48%	10.90%	10.27%
Components of real GDP							
3. Private consumption expenditure	P.3	17362	7.50%	7.11%	5.98%	6.90%	6.39%
4. Government consumption expenditure	P.3	4365	2.38%	0.86%	6.16%	2.91%	4.64%
5. Gross fixed capital formation	P.51	6585	17.57%	26.07%	18.26%	13.53%	12.73%
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52+P.53	5.69	1.9	0.3	-0.2	-0.4	-0.4
7. Exports of goods and services	P.6	16065	8.96%	8.70%	8.95%	11.22%	11.61%
8. Imports of goods and services	P.7	-20830	15.15%	13.57%	11.69%	11.14%	11.05%
Contributions to real GDP growth⁴⁴							
9. Final domestic demand		-	9.94	11.90	10.76	9.58	9.30
10. Changes in inventories and net acquisition of valuables	P.52+P.53	-	1.91	0.70	0.17	-0.03	-0.05
11. External balance of goods and services	B.11	-	-6.18	-5.70	-4.53	-2.75	-2.34

⁴² The levels of the variables are in EUR million.⁴³ At 2006 prices.⁴⁴ In percentage points.

Table 1b. Price dynamics

	ESA code	2006	2006	2007	2008	2009	2010
		Level	Rate of change ⁴⁵	Rate of change	Rate of change	Rate of change	Rate of change
1. GDP deflator		100	8.1%	5.0%	5.7%	3.8%	3.2%
2. Private consumption deflator		100	5.2%	6.2%	7.0%	3.6%	3.0%
3. HICP ⁴⁶		100	7.4%	7.2%	6.9%	4.4%	3.7%
4. Public consumption deflator		100	8.2%	8.1%	9.0%	5.2%	4.2%
5. Investment deflator		100	7.3%	2.3%	-1.3%	-0.4%	0.7%
6. Export price deflator (goods and services)		100	11.9%	4.4%	2.4%	3.0%	3.2%
7. Import price deflator (goods and services)		100	8.2%	4.9%	1.9%	1.5%	2.2%

⁴⁵ In percentage points compared to the previous value.

⁴⁶ Annual average.

Table 1c. Labour market developments⁴⁷

	ESA code	2006	2006	2007	2008	2009	2010
		Level	Rate of change	Rate of change	Rate of change	Rate of change	Rate of change
1. Employment, persons ⁴⁸		3579.5	2.4%	1.6%	1.1%	0.6%	0.2%
2. Employment, hours worked ⁴⁹		5953.8	2.7%	1.8%	1.3%	0.8%	0.4%
3. Unemployment rate ⁵⁰		9.0%	-1.1 ⁵¹	-1.8	-0.4	-0.3	-0.1
4. Labour productivity (EUR per worker) ⁵²		7012.0	3.6%	4.7%	5.3%	6.1%	6.6%
5. Labour productivity (EUR per 1000 hours worked) ⁵³		4215.7	3.3%	4.5%	5.1%	5.9%	6.5%
6. Compensation of employees (thousands of euro)	D.1	8082045	10.9%	18.1%	15.9%	12.3%	10.9%
7. Compensation per employee		3126.3%	8.2%	16.0%	14.5%	11.5%	10.5%

⁴⁷ The rates of change in items 4 and 5 are in real terms, and those in items 6 and 7 – in nominal terms.

⁴⁸ Occupied population, domestic concept, national accounts definition.

⁴⁹ National accounts definition.

⁵⁰ Harmonised definition, Eurostat; levels.

⁵¹ The rate of change for the unemployment rate is in percentage points.

⁵² Real GDP per person employed.

⁵³ Real GDP per hour worked.

Table 1d. Sectoral balances

% of GDP	ESA code	2006	2007	2008	2009	2010
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	-15.0	-19.9	-20.7	-19.5	-18.6
Of which						
- Balance on goods and services		-18.7	-23.5	-25.1	-24.6	-24.3
- Balance of primary incomes and transfers		3.0	2.5	3.2	3.4	3.3
- Capital account		0.7	1.1	1.2	1.6	2.4
2. Net lending/borrowing of the private sector ⁵⁴	B.9/EDP B.9	-18.2	-23.0	-23.7	-22.5	-21.6
3. Net lending/borrowing of general government	B.9	3.2	3.1	3.0	3.0	3.0
4. Statistical discrepancy		-	-	-	-	-

⁵⁴ Due to the unavailability of official statistical information for 2006 the values of the indicator are obtained as a residual, using rows 1 and 3 from the table.

Table 2. General government budgetary prospects

	ESA code	2006	2006	2007	2008	2009	2010
		Level	% of GDP				
Net lending (EDP B.9) by sub-sector							
1. General government	S.13	814.0	3.2	3.1	3.0	3.0	3.0
2. Central government	S.1311	883.8	3.5	3.3	3.0	3.0	3.0
3. State government	S.1312	-	-		-	-	-
4. Local government	S.1313	52.2	0.2	-0.4	0.0	0.0	0.0
5. Social security funds	S.1314	-122.0	-0.5	0.1	0.0	0.0	0.0
General government (S13)							
6. Total revenue	TR	10 113.8	40.3	42.2	43.7	43.9	43.9
7. Total expenditure	TE ⁵⁵	9 299.8	37.1	39.1	40.7	40.9	41.0
8. Net lending/borrowing	EDP B.9	814.0	3.2	3.1	3.0	3.0	3.0
9. Interest expenditure	EDP D.41	329.9	1.3	1.2	1.1	1.0	1.0
10. Primary balance ⁵⁶		1 143.9	4.6	4.3	4.0	4.0	4.0
11. One-off and other temporary measures ⁵⁷		0.0	0.0	0.0	0.0	0.0	0.0
Selected components of revenue							
12. Total taxes (12=12a+12b+12c)		6 605.8	26.3	26.8	28.0	27.5	27.5
12a. Taxes on production and imports	D.2	4 872.6	19.4	19.6	20.2	19.8	19.8
12b. Current taxes on income, wealth, etc.	D.5	1 625.4	6.5	6.6	7.3	7.1	7.1

⁵⁵ Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

⁵⁶ The primary balance is calculated as (EDP B.9, item 8) plus (EDP D.41, item 9).

⁵⁷ A plus sign means deficit-reducing one-off measures.

Convergence Programme (2007-2010)

	ESA code	2006	2006	2007	2008	2009	2010
		Level	% of GDP				
12c. Capital taxes	D.91	107.8	0.4	0.6	0.6	0.6	0.6
13. Social contributions	D.61	2 203.2	8.8	8.8	7.8	7.6	7.6
14. Property income	D.4	317.8	1.3	1.3	1.0	1.0	1.0
15. Other ⁵⁸		987.1	3.9	5.3	6.8	7.8	7.9
16=6. Total revenue	TR	10 113.8	40.3	42.2	43.7	43.9	43.9
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995) ⁵⁹		8 628.0	34.4	35.1	35.8	35.1	35.1
Selected components of expenditure							
17. Compensation of employees + intermediate consumption	D.1+P.2	4 260.6	17.0	16.8	16.8	16.2	15.9
17a. Compensation of employees	D.1	2 269.5	9.0	8.8	8.7	8.4	8.4
17b. Intermediate consumption	P.2	1 991.1	7.9	8.1	8.1	7.8	7.5
18. Social payments (18=18a+18b)		3 201.0	12.8	12.1	12.2	11.9	11.5
18a. Social transfers in kind supplied via market producers	D.6311, D.63121, D.63131	317.2	1.3	1.0	1.1	1.0	1.0
18b. Social transfers other than in kind	D.62	2 883.7	11.5	11.2	11.1	10.9	10.5
19=9. Interest expenditure	EDP D.41	329.9	1.3	1.2	1.1	1.0	1.0
20. Subsidies	D.3	237.7	0.9	1.4	1.5	1.7	1.8
21. Gross fixed capital formation	P.51	1 001.7	4.0	5.7	6.2	7.0	7.6
22. Other ⁶⁰		269.0	1.1	1.7	3.0	3.1	3.1

⁵⁸ P.11+P.12+P.131+D.39+D.7+D.9 (other than D.91).

⁵⁹ Including those collected by the EU and including an adjustment for uncollected taxes and social contributions (D.995), if appropriate.

	ESA code	2006	2006	2007	2008	2009	2010
		Level	% of GDP				
23=7. Total expenditure	TE	9 299.8	37.1	39.1	40.7	40.9	41.0
p.m.: Government consumption (nominal)	P.3	4 403.7	17.5	17.0	17.5	17.0	16.9

⁶⁰ D.29+D4 (other than D.41)+ D.5+D.7+D.9+P.52+P.53+K.2+D.8.

Table 3. General government expenditure by function

% of GDP	COFOG code	2005	2010
1. General public services	1	3.0	3.2
2. Defence	2	2.2	2.0
3. Public order and safety	3	2.7	2.8
4. Economic affairs	4	4.7	6.5
5. Environmental protection	5	1.2	1.6
6. Housing and community amenities	6	0.5	1.3
7. Health	7	4.7	4.3
8. Recreation, culture and religion	8	0.8	0.7
9. Education	9	4.2	4.3
10. Social protection	10	13.0	12.2
11. Total expenditure (=item 7=23 in Table 2)	TE ⁶¹	39.6	41.0

⁶¹ Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

Table 4. General government debt developments

% of GDP	2006	2007	2008	2009	2010
Gross debt ⁶²	22.8	19.8	18.3	17.4	16.9
Change in gross debt ratio	-6.4	-3.0	-1.6	-0.9	-0.4
Contributions to changes in gross debt					
Primary balance ⁶³	4.6	4.3	4.1	4.0	4.0
Interest expenditure (including FISIM) ⁶⁴	1.3	1.2	1.1	1.0	1.0
Stock-flow adjustment	0.4	2.5	1.3	2.2	2.8
Of which:					
Differences between cash and accruals ⁶⁵	0.0	0.0	0.0	0.0	0.0
Net accumulation of financial assets ⁶⁶	2.4	2.5	1.3	2.2	2.8
Of which:					
- Privatization proceeds	1.5	0.5	0.3	0.1	0.1
- Valuation effects and other ⁶⁷	-2.0	0.0	0.0	0.0	0.0
p.m.: Implicit interest rate on debt ⁶⁸	5.2	6.0	6.1	6.4	6.6

⁶² As defined in Regulation 3605/93 (not an ESA concept).

⁶³ Cf. item 10 in Table 2.

⁶⁴ Cf. item 9 in Table 2.

⁶⁵ The differences concerning interest expenditure, other expenditure and revenue could be distinguished when relevant.

⁶⁶ Liquid assets, assets on third countries, government controlled enterprises and the difference between quoted and non-quoted assets could be distinguished when relevant.

⁶⁷ Changes due to exchange rate movements, and operation in secondary market could be distinguished when relevant.

⁶⁸ Proxied by interest expenditure (including FISIM) divided by the debt level of the previous year.

% of GDP	2006	2007	2008	2009	2010
Other relevant variables					
Liquid financial assets ⁶⁹	-	-	-	-	-
Net financial debt (7=1-6)	-	-	-	-	-

⁶⁹ 8AF1, AF2, AF3 (consolidated at market value), AF5 (if quoted in stock exchange; including mutual fund shares).

Table 5. Cyclical developments

% of GDP	ESA code	2006	2007	2008	2009	2010
1. Real GDP growth (%)		6.1	6.4	6.4	6.8	6.9
2. Net lending of general government	EDP B.9	3.2	3.1	3.0	3.0	3.0
3. Interest expenditure (including FISIM)	EDP D.41 + FISIM	1.3	1.2	1.1	1.0	1.0
4. One-off and other temporary measures ⁷⁰		0.0	0.0	0.0	0.0	0.0
5. Potential GDP growth (%)		5.07	6.49	6.59	7.08	7.45
Contributions:						
Labour		1.18	1.88	1.15	1.04	0.86
Capital		2.11	2.84	3.27	3.46	3.60
Total factor productivity		1.78	1.76	2.18	2.58	2.99
6. Output gap		0.90	0.81	0.63	0.36	-0.15
7. Cyclical budgetary component		0.33	0.30	0.23	0.13	-0.05
8. Cyclically-adjusted balance (2 - 7)		2.91	2.80	2.77	2.87	3.05
9. Cyclically-adjusted primary balance (8 + 3)		4.23	4.03	3.87	3.87	4.05
10. Structural balance (8 - 4)		2.91	2.80	2.77	2.87	3.05

⁷⁰ A plus sign means deficit-reducing one-off measures.

Table 6. Divergence from previous update

	ESA code	2006	2007	2008	2009	2010
Real GDP growth (%)						
Previous update		5.9	5.9	6.2	6.1	
Current update		6.1	6.4	6.4	6.8	6.9
Difference		0.2	0.5	0.2	0.7	
General government net lending (% of GDP)	EDP B.9					
Previous update		3.2	2.0	1.5	1.5	
Current update		3.2	3.1	3.0	3.0	3.0
Difference		0.0	1.1	1.5	1.5	
General government gross debt (% of GDP)						
Previous update		25.3	22.7	22.3	21.1	
Current update		22.8	19.8	18.3	17.4	16.9
Difference		-2.5	-2.9	-4.0	-3.7	

Table 7. Long-term sustainability of public finances

% of GDP	2000	2005	2010	2020	2030	2050
Total expenditure	42.4	39.6	41.0	38.7	38.7	40.4
Of which: age-related expenditures	17.4	17.7	17.0	15.2	15.2	17.1
Pension expenditure	9.3	8.6	8.2	6.9	6.7	8.2
Social security pension	0.6	0.4	0.3	0.2	0.2	0.2
Old-age and early pensions	8.0	6.8	6.5	5.6	5.6	7.2
Other pensions (disability, survivors)	0.7	1.4	1.4	1.1	0.9	0.8
Occupational pensions (if in general government)						
Healthcare	3.3	4.7	4.3	4.2	4.3	4.8
Long-term care (this was earlier included in the health care)						
Education expenditure	4.2	4.2	4.3	4.0	4.1	4.0
Other age-related expenditures	0.6	0.2	0.1	0.1	0.1	0.1
Interest expenditure	4.0	1.6	1.0	0.5	0.5	0.3
Total revenue	41.4	41.6	43.9	43.9	43.7	43.5
Of which: property income	1.6	1.3	1.4	1.4	1.4	1.4
<i>Of which: from pensions contributions (or social contributions if appropriate)</i>	8.3	8.1	6.1	6.1	5.8	5.7
Pension reserve fund assets	-	-	-	-	-	-
<i>Of which: consolidated public pension fund assets (assets other than government liabilities)</i>	-	-	-	-	-	-
Assumptions						
Labour productivity growth	8.4	5.8	6.4	4.3	2.7	1.1
Real GDP growth	5.4	6.2	6.9	3.4	1.9	0.1
Participation rate males (aged 20-64)	73.4	74.2	79.1	82.8	83.7	85.8
Participation rates females (aged 20-64)	61.0	63.1	69.4	73.3	74.0	74.2

% of GDP	2000	2005	2010	2020	2030	2050
Total participation rates (aged 20-64)	67.1	68.6	74.2	78.0	78.9	80.0
Unemployment rate	16.2	10.1	6.5	5.8	5.0	5.0
Population aged 65+ over total population	16.5	16.8	17.6	20.1	21.6	26.0

Table 8. Basic assumptions

	2006	2007	2008	2009	2010
Short-term interest rate (annual average), 3-month EURIBOR, %	5.28	5.33	4.80	4.60	4.80
Short-term interest rate (annual average), 6-month USD LIBOR, %	3.08	4.30	5.00	4.90	4.80
Long-term interest rate (annual average), %	3.8	4.3	4.4	4.5	4.5
USD/€ exchange rate (annual average)	1.25	1.36	1.40	1.38	1.35
Nominal effective exchange rate, percentage change, previous year=100 ⁷¹	-0.1	0.5	0.2	0.2	0.2
Exchange rate vis-à-vis the € (annual average)	1.96	1.96	1.96	1.96	1.96
World excluding EU, GDP growth, %	5.5	5.1	5.0	5.0	5.0
EU GDP growth, %	3	2.7	2.6	2.6	2.6
Growth of relevant foreign markets, %	8.7	7.4	6.7	8.5	8.5
World import volumes, excluding EU, %	8.4	7.8	7.1	7.7	7.7
Oil prices (Brent, USD/barrel)	64.3	68.1	70.3	68.0	67.0

⁷¹ Positive numbers denote appreciation, and negative numbers – depreciation.

Appendix 2: Description of the Model Used by AEF to Assess the Long-term Impact of Demographic Processes

The model of the Agency for Economic Analysis and Forecasting for estimating the long-term impact of demographic processes follows broadly the methodology, employed by the EC.⁷² It can practically be divided in three separate sub-components:

- Demographic dynamics;
- Long-term macroeconomic projection;
- Effect on public finances.

The demographic part of the model is more or less the base of the overall forecast exercise, and the other two components use its output in constructing a long-term path of economic growth and the effect on the sustainability of public finances.

Long-term Demographic Projection

The main data source for the demographic projection is Eurostat. The inputs in the model are total population, fertility rates, number of deaths and probabilities of dying, which are available separately for men and women as well as for different age groups. The age groups represent all the people (men or women), which are at a given age. People above the age of 100 are grouped together. Historical demographic data are generally available until 2005 with the exception of total population data, which are available until 2006. Therefore, 2007 is the first projection year and the forecasting horizon is set until 2050. In practice, however, the model can be easily extended until 2060.

The main output of the demographic component is population by sex and age groups, which is required for forecasting the labour force as well as the impact on public finances. The transition of people to the next age group is captured by taking the population in a given age group, adding the net migration flows and subtracting the number of deaths in this group for one year, to arrive at the number of people of the following age group for the next year.

The number of newborn babies is calculated by multiplying the fertility rate for a given age group by the number of women in this age group at fertility age.

Concerning fertility rates, the structure of the average fertility rate by age groups for the forecasting period is kept constant against 2005 for which the latest historical data are available.

The number of deaths calculated as the death probability at a given age times the number of population in the respective age group.

The development of the average fertility ratio, the net migration and the death probability are key assumptions in the forecast. The fertility ratio is set to increase linearly from 2005 until reaching 1.75 in 2050.⁷³ The death probabilities for both men

⁷² Economic Policy Committee (2005), "The EPC projection of age-related expenditure: Agreed underlying assumptions and projection methodologies", *European Economy*, N° 19.

⁷³ The target value is based on the assumptions contained in the EPC forecasts concerning some of the Member States. In the case of Bulgaria the date of reaching the target is pushed back to the end of the period due to the relatively low current value of the fertility rate.

and women in a given age group is assumed to decline discretionary until the end of the forecasting period assuming a differentiated approach in three age groups – youth, workers and pensioners. Another assumption in the model is that the share of men/women in newborn children remains unchanged during the forecasting period and is set equal to the average share for the 1990-2006 period, for which historical data are available.

The forecasting method thus allows projecting the dynamics of the number of people at a certain age, separately for men and women. The summation of the population calculated by age groups and by sex yields the total population for a given period.

Long-term Macroeconomic Forecast

A simple Cobb-Douglas production function is used to model the GDP growth in the long run. It incorporates a fixed capital-labour ratio of 0.7 to 0.3 and assumes that a steady state will be reached in 2030. The dynamics of total factor productivity (TFP) follows the commonly agreed assumption that its growth will converge to 1.75% until 2030 and to 1.1% in 2050. TFP convergence in the model is linear. A key assumption is that the equilibrium unemployment rate is set at 5% from 2030 until 2050 and a gradual decline of the unemployment rate to this level is factored in during the period 2007-2030. This allows the calculation of the number of employed, using the labour force projection from the demographic part of the model. The capital stock in the production function is modeled as a product of an assumption on the capital per head level for each year and the number of employed. The projection is adjusted as to allow for real convergence to the labour productivity level in the EU at the end of the period.

For the purposes of projecting the nominal GDP level, the GDP deflator is assumed to follow a broadly linear convergence path to the 2% annual inflation target for the euro area. The inflation rate is also modeled as to imply convergence not only in the rate but in the price level with the EU 15 average as well.

Impact of Demographic Processes on Public Finances

The model currently does not include pensions and long-term care. For the purposes of the aging projection exercise, the pension model of the NSSI would be used and its inputs and assumptions would be aligned with the specific results of the demographic forecast of the AEF model to ensure consistency.

Education

The model projects the number of students by age group and sex, as enrolled in the different stages of education. The latter are classified according to the International Standard Classification of Education (ISCED) definition. Historical data for enrollment ratios are available from Eurostat until 2004 and are assumed to remain unchanged from 2004 until the end of the forecasting period. Eurostat also provides figures for education expenditure per student in terms of a share in per-capita GDP. The assumption with respect to the enrollment ratios is applied to the education expenditure per student as well. Thus, the number of students in a given educational level can be easily obtained from the enrollment ratios and the demographic projection of the total population by age groups. Combining then the number of students with the respective assumed expenditure per student and the projected GDP per capita yields the total education spending per year until 2050. Under assumptions

for flat enrollment ratios and expenditure per student, the nominal level of budget expenditures on education would thus depend solely on the number of students.

Healthcare

Data for budget spending in the healthcare sector are scarce, which required a simplification of the forecasting approach. The starting point for the model is data, taken from NHIF 2006 reports, on the distribution of public expenditure on healthcare among age groups and for hospital care only, but the model assumes the distribution holds true for all healthcare expenditures. The age groups are broader than in the demographic projection, which is not an obstacle for using consistently the two sets of data together, but limits the output to the more aggregate age group classification. Another input to the calculation is the total public healthcare expenditure for 2006, which then can be used to arrive at the nominal level of health expenditures per age group and further to the nominal per capita expenditures per age group. This represents actual figures and the assumption in continuing to the forecast is that the nominal per capita healthcare expenditures per age group increase each year with the rate of growth of GDP per capita. The reverse formula is then applied, using the projection for the total population per age groups, to obtain total health expenditures for a given year until 2050. This approach then serves to estimate the dynamics of budget spending on healthcare, caused only by demographic changes, leaving aside possible policy decisions or structural reforms.

Unemployment Benefits

Unemployment benefits are assumed to increase at the rate of the labour productivity increase. Given the assumption for a fixed unemployment rate of 5%, this yields a flat share of unemployment benefits in GDP over the long term.



Agency for
Economic
Analysis and
Forecasting

November 2007