



Republic of Bulgaria

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# CONVERGENCE PROGRAMME

(2006 – 2009)



Agency for  
Economic  
Analysis and  
Forecasting

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December 2006



## CONTENTS

LIST OF ABBREVIATIONS .....	5
LIST OF TABLES .....	7
LIST OF FIGURES .....	7
INTRODUCTION.....	9
1. OVERALL POLICY FRAMEWORK AND OBJECTIVES .....	11
2. ECONOMIC OUTLOOK .....	14
2.1. WORLD ECONOMY / TECHNICAL ASSUMPTIONS .....	14
2.2. CYCLICAL DEVELOPMENTS AND CURRENT PROSPECTS .....	15
2.2.1. ECONOMIC GROWTH .....	15
2.2.2. CYCLICAL POSITION .....	18
2.2.3. LABOUR MARKET (EMPLOYMENT AND UNEMPLOYMENT).....	20
2.2.4. INCOMES AND LABOUR PRODUCTIVITY .....	22
2.2.5. INFLATION .....	24
2.2.6. EXTERNAL SECTOR.....	30
2.2.7. MONETARY SECTOR.....	32
2.3. MEDIUM-TERM SCENARIO .....	33
2.4. EFFECTS FROM STRUCTURAL REFORMS.....	35
2.4.1. SOCIAL SECURITY .....	35
2.4.2. EDUCATION .....	37
2.4.3. HEALTHCARE.....	39
3. GENERAL GOVERNMENT BALANCE AND DEBT .....	41
3.1. POLICY STRATEGY .....	41
3.2. MEDIUM-TERM OBJECTIVES .....	42
3.3. ACTUAL BALANCES AND IMPLICATIONS OF BUDGET FOR NEXT YEAR.....	45
3.4. STRUCTURAL BALANCE AND FISCAL STANCE.....	48
3.5. DEBT LEVELS AND DEVELOPMENTS .....	49
3.6. BUDGET ASPECTS OF MAIN STRUCTURAL REFORMS.....	51
3.6.1. SOCIAL SECURITY .....	51
3.6.2. EDUCATION .....	52
4. SENSITIVITY ANALYSIS AND COMPARISON TO THE PREVIOUS UPDATE.....	54
4.1 ALTERNATIVE SCENARIO AND RISKS.....	54
4.2. SENSITIVITY OF BUDGET PROJECTIONS TO THE DIFFERENT SCENARIOS AND ASSUMPTIONS .....	55
4.3. COMPARISON WITH PREVIOUS UPDATE.....	56
5. QUALITY OF PUBLIC FINANCES .....	58
5.1. POLICY STRATEGY .....	58
5.2. DEVELOPMENTS ON THE EXPENDITURE SIDE .....	58

5.3. DEVELOPMENTS ON THE REVENUE SIDE .....	60
6. SUSTAINABILITY OF PUBLIC FINANCES.....	63
6.1. POLICY STRATEGY.....	63
6.2. LONG-TERM BUDGETARY PROSPECTS, INCLUDING THE IMPLICATIONS OF AGING POPULATION.....	63
6.2.1. SOCIAL INSURANCE.....	65
6.2.2. HEALTHCARE .....	68
6.2.3. EDUCATION.....	70
7. INSTITUTIONAL FEATURES OF PUBLIC FINANCES .....	71
7.1. IMPLEMENTATION OF NATIONAL FISCAL RULES .....	71
7.2. BUDGETARY PROCEDURES, INCLUDING PUBLIC FINANCE STATISTICAL NEEDS GOVERNANCE.....	72
7.3. OTHER INSTITUTIONAL DEVELOPMENTS IN RELATION TO PUBLIC FINANCES .....	77
7.3.1. BUDGETARY PROCESS REFORM.....	77
7.3.2. REVENUE ADMINISTRATION REFORM.....	78
7.3.3. FISCAL DECENTRALIZATION .....	80
7.3.4. PUBLIC FINANCE TRAINING – PUBLIC FINANCE SCHOOL .....	80
APPENDIX 1: TABLES.....	81
APPENDIX 2: METHODOLOGICAL FRAMEWORK FOR THE CALCULATION OF POTENTIAL GDP GROWTH AND OUTPUT GAP .....	92
APPENDIX 3: GOVERNMENT FINANCE STATISTICS METHODOLOGY DEVELOPMENT .....	95
APPENDIX 4: DESCRIPTION OF NSSI MODEL USED FOR FORECASTING THE LONG-TERM STATE OF THE PUBLIC SOCIAL SECURITY FUNDS.....	98

## LIST OF ABBREVIATIONS

AEAF	– Agency for Economic Analysis and Forecasting
AMECO	– Annual Macroeconomic Database of the European Commission
BAS	– Bulgarian Academy of Sciences
BGN	– Bulgarian Lev
BNB	– Bulgarian National Bank
BNR	– Bulgarian National Radio
BNT	– Bulgarian National Television
CA	– Customs Agency
CBA	– Currency Board Arrangement
CEE	– Central and Eastern Europe
CO	– Customs Office
CoM	– Council of Ministers
CPI	– Consumer Price Index
EA	– Employment Agency
EC	– European Commission
ECB	– European Central Bank
EDP	– Excessive Deficit Procedure
EMEPA	- Enterprise for Management of Environmental Protection Activities
EMU	– Economic and Monetary Union
ERM II	– Exchange Rate Mechanism II
ESA95	– European System of Accounts, 1995 revision
EU	– European Union
EUR	– Euro
EURIBOR	– Euro Interbank Offered Rate
FDI	– Foreign Direct Investment
FISIM	- Financial Intermediation Services Indirectly Measured
FLSU	– First-level Spending Unit
GDL	– Government Debt Law
GDP	– Gross domestic product
GFSM	– Government Financial Statistics Manual
GVA	– Gross Value Added
HICP	– Harmonized Index of Consumer Prices
IFIs	– International Financial Institutions
IMF	– International Monetary Fund
ISPA	- Instrument for Structural Policies for Pre-Accession
JCRA	– Japan Credit Rating Agency
LFMCPS	- Law on Financial Management and Control in the Public Sector
LFS	– Labour Force Survey
LIBOR	– London Interbank Offered Rate

LSSB – Law on the Structure of the State Budget  
MoF – Ministry of Finance  
MTFF – Medium-term Fiscal Framework  
MTO – Medium-term Objective  
NAMRB - National Association of the Municipalities in the Republic of Bulgaria  
NAO – National Audit Office  
NHIF – National Health Insurance Fund  
NRA – National Revenue Agency  
NRP – National Reform Programme  
NSI – National Statistical Institute  
NSRF – National Strategic Reference Framework  
NSSI – National Social Security Institute  
PEP – Pre-accession Economic Programme  
PFS – Public Finance School  
PHARE - Poland and Hungary Aid for Restructuring of the Economies  
PIM – Permanent Inventory Method  
PLC – Public Limited Company  
RARP – Revenue Administration Reform Project  
SFA – State Fund Agriculture  
SG – State Gazette  
SGP – Stability and Growth Pact  
SIC – Social Insurance Code  
SIGMA – Support for Improvement in Governance and Management  
SLSU – Second-level Spending Unit  
PSS – Public Social Security  
TFP – Total Factor Productivity  
USD – US Dollar  
VAT – Value-added Tax  
VBA – Visual Basic for Applications  
WB – World Bank  
WHO – World Health Organization

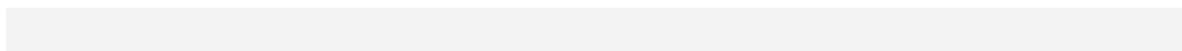
## LIST OF TABLES

TABLE 1: ASSUMPTIONS ON THE MACROECONOMIC INDICATORS .....	14
TABLE 2: FORECASTED INFLATION, 2006-2009.....	27
TABLE 3: FOREIGN SECTOR INDICATORS (% OF GDP).....	30
TABLE 4: COMPARISON BETWEEN THE BASELINE AND ALTERNATIVE ASSUMPTIONS .....	54
TABLE 5: COMPARISON BETWEEN THE BASELINE AND THE ALTERNATIVE SCENARIO OUTCOMES.....	55
TABLE 6: TOTAL HEALTHCARE SPENDING AND EXPENDITURES FOR POPULATION OVER 65.....	69
TABLE 7: TOTAL HEALTHCARE EXPENDITURES COVERED BY PUBLIC FUNDS (% OF GDP).....	69
TABLE 8: ALTERNATIVE RESULTS CONCERNING POTENTIAL GROWTH AND THE OUTPUT GAP.....	94
TABLE 9: ALTERNATIVE RESULTS CONCERNING THE CYCLICAL BUDGETARY COMPONENT, THE CYCLICALLY-ADJUSTED BALANCE, AND THE CYCLICALLY-ADJUSTED PRIMARY BALANCE.....	94

## LIST OF FIGURES

FIGURE 1: FOREIGN DIRECT INVESTMENT IN BULGARIA.....	15
FIGURE 2: DEMAND-SIDE SOURCES OF GROWTH.....	17
FIGURE 3: CONTRIBUTIONS TO POTENTIAL GROWTH (PERCENTAGE POINTS).....	19
FIGURE 4: ANNUAL AVERAGE NUMBER OF EMPLOYED PERSONS IN THE ECONOMY AND ANNUAL AVERAGE UNEMPLOYMENT RATE .....	21
FIGURE 5: RATES OF CHANGE IN LABOUR PRODUCTIVITY AND AVERAGE REAL WAGE.....	23
FIGURE 6: INFLATION RATE SINCE THE INTRODUCTION OF THE CURRENCY BOARD ARRANGEMENT (PERCENTAGE CHANGE COMPARED TO THE CORRESPONDING MONTH OF THE PREVIOUS YEAR) .....	26
FIGURE 7: ANNUAL AVERAGE RATE OF PRICE INCREASE FOR THE PERIOD 1998-2005 .....	26
FIGURE 8: NET BORROWING (-)/ NET LENDING (+), % OF GDP.....	46
FIGURE 9: CYCLICAL FISCAL POSITION .....	49
FIGURE 10: GOVERNMENT DEBT, % OF GDP .....	50
FIGURE 11: AGE STRUCTURE OF THE POPULATION OF THE REPUBLIC OF BULGARIA (2004) .....	64

FIGURE 12: BALANCE OF THE PUBLIC SOCIAL INSURANCE FUNDS AS PERCENTAGE OF GDP .....	66
FIGURE 13: DEPENDENCY AND REPLACEMENT RATIOS .....	67
FIGURE 14: THE POPULATION OF BULGARIA IN THE PERIOD 2005-2050 ACCORDING TO THE REALISTIC SCENARIO OF THE BULGARIAN ACADEMY OF SCIENCES .....	68



## **INTRODUCTION**

The present document constitutes the first Convergence Programme of the Republic of Bulgaria, which has to be submitted to the European Commission in the first days of the country's full European Union membership starting from January 1, 2007. The Programme is a logical extension of the Pre-accession Economic Programmes covering the main parameters of the macroeconomic policies and reforms, which in the latest years the Bulgarian government committed itself to follow within a three-year programming period.

The Convergence Programme 2006 is elaborated in compliance with the requirements stemming from the process of multilateral fiscal surveillance within the framework of EU macroeconomic policies coordination. It addresses the sustainability parameters of the fiscal policy of the country according to the recommendations of the Stability and Growth Pact while at the same time it outlines the policies whose implementation would allow a sustainable achievement of the Maastricht criteria for Eurozone membership. The policies defined in the Programme are closely linked to the National Reform Programme and the National Strategic Reference Framework of the Republic of Bulgaria.

The document reflects the priorities and directions of the government programme of the Cabinet<sup>1</sup>, the current trends in the development of the national economy and the key parameters of budgetary policies. The time frame of the Programme encompasses the three-year period from 2007 to 2009, and a medium-term budgetary objective for 2011 is defined in it. The macroeconomic forecasts, which form the development scenario for the Bulgarian economy in the programming period, take an account of the full set of latest reported data and expectations of the government analysts, the non-government economists and the international financial institutions.

The Convergence Programme consists of seven parts. The first part contains the general framework of the governmental economic policies in the different areas, as well as the goals set for accomplishment within the programming period.

In the second part an analysis of the macroeconomic development of the country in 2005 and the elapsed part of 2006 with respect to GDP growth, business cycle, labour markets and incomes, inflation, external sector, and monetary sector, has been made. The

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<sup>1</sup> „Programme of the Government of European Integration, Economic Growth and Social Responsibility”, Council of Ministers of the Republic of Bulgaria, 2005.

part also contains forecasts concerning the key macroeconomic indicators as well as the effects of the envisaged structural reforms in some important sectors of the Bulgarian economy.

Part three presents a description of the strategic goals of fiscal policy with respect to budget balance and government debt. There, a medium-term budgetary objective to be achieved in 2011 is explicitly defined. In this part the current budgetary status and its expected development in 2007 are set forth. Special attention is devoted to the structural balance and the fiscal position of the country both at present and in the future. The general prospects on the debt stance of the government during the years of the programming period are outlined. Also, the budgetary aspects of some important structural reforms are included.

In part four, a sensitivity analysis of the baseline macroeconomic scenario forecasts is made. An alternative scenario is elaborated and the main risks concerning the forecasts are outlined. A special analysis is devoted to the sensitivity of budget forecasts to the different scenarios and assumptions.

Part five is devoted to the quality of public finances. Here, the strategies of the government policy in this area, as well as the developments concerning the revenue and expenditure sides of the budget, are outlined.

Part six treats the sustainability of public finances. The main focus in this part is set on the long-term budgetary perspectives with a view to the manifestation of the effects of aging population.

In the last part, a review of the institutional characteristics of public finances in Bulgaria (budgetary procedures, fiscal rules, etc.) has been made.

Four Appendices complement the main text of the Programme.

## **1. OVERALL POLICY FRAMEWORK AND OBJECTIVES**

As a whole, the overall framework of the government policies is characterized with continuity with respect to the objectives supported by the preceding governments. Considering the fact that Bulgaria completed successfully the negotiations with the European Commission and from January 1, 2007 will be a full member of the European Union, the policy focus will be shifted from the fulfilment of the pre-accession commitments to the effective participation in the European structures and common policies, and to the achievement of an accelerated convergence of real incomes to the EU averages.

The Government of the Republic of Bulgaria will continue working towards the achievement of a high and sustainable economic growth rate while maintaining a stable and foreseeable macroeconomic environment. With a view to the fulfilment of this objective, the topmost priority of the government will be the maintenance of sustainability of public finances and a level of government and government-guaranteed debt, which allows for a stable compliance with the Maastricht criteria. During the whole programming period a budget surplus will be maintained in order to curb the growth of domestic demand and to restrict the deficit of the current account of the balance of payments. The fiscal consolidation during the period of strong economic growth will be used to decrease the level of government debt. This will ensure long-term flexibility of the policy and will guarantee that if the macroeconomic environment eventually deteriorates in the long run, the level of the government debt will not exceed the maximum specified in the nominal convergence criteria.

Considering the institutional framework for joining the single European currency and the principles of the country's pursued macroeconomic policy based on a fixed exchange rate and on the absence of an independent monetary policy, in its position on Chapter 11 "Economic and Monetary Union" submitted to the European Commission in November 2000, Bulgaria expressed its intention to apply for Exchange Rate Mechanism II (ERM II) membership at the earliest possible time after EU accession, while unilaterally maintaining the currency board arrangement (CBA). In 2004 the government and the central bank signed an agreement on the introduction of the euro in Bulgaria. The strategy of the country on EMU membership outlined in that document is based on the following principles:

- Joining the Exchange Rate Mechanism II at the earliest possible date after the date of official accession of Bulgaria to the EU;
- Maintenance of the currency board arrangement until joining the Eurozone, at the existing level of the fixed exchange rate of the Bulgarian lev;
- A unilateral commitment on behalf of the Bulgarian government and BNB to maintain a zero deviation of the exchange rate from the fixed level (i.e. maintenance of the currently existing policy);
- Adherence to the minimum period defined in EU legislation for participation in Exchange Rate Mechanism II and a timely taking of all necessary actions concerning the Eurozone membership application procedure.

This fundamental position has been re-confirmed many times in other documents related to European integration, by three consecutive governments. It remains unchanged at present, too, and should be viewed as an integral part of the rest of economic policy elements, and in particular a part of the present Convergence Programme.

The policy objectives concerning employment and incomes will be fully coordinated with the ambition to achieve an EU-catching-up development of the country, while opening new job opportunities, continuously increasing the population participation rate, and permanently and in a sustainable manner keeping the unemployment rate under 10%.

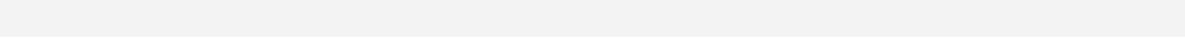
The government will continue to intensively work towards the firm establishment of the market-economy and competition principles by persistently following the way of liberalization and monopoly abolition, and by optimally utilizing the opportunities for maintaining a favourable business environment for small and medium-sized enterprises development and competitiveness improvement. An important element of the government economic policy is the realization of an active investment programme<sup>2</sup> for the building of a modern infrastructure through mutual financing on behalf of the private sector and the state budget and through a maximum efficient utilization of European funds.

Parallel with the other processes, the modernization of state administration will continue in order to facilitate the process of creation of a knowledge-based economy, as well as the creation of an efficient mechanism to stimulate innovation, research and development, and the usage of information technologies. The development of education

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<sup>2</sup> National Strategy for Integrated Development of the Infrastructure of the Republic of Bulgaria and Action Plan for the Period 2006 – 2015.

will be oriented towards the stimulation of lifelong learning and the conformity with the needs of businesses, state administration, and the non-governmental sector. Concerning the health aspect of human capital, the government will aim at providing a guaranteed and affordable healthcare with higher quality of healthcare services, while at the same time stimulating the voluntary health insurance.



## 2. ECONOMIC OUTLOOK

### 2.1. World economy / technical assumptions

For the elaboration of the macroeconomic framework for the period 2006-2009, which is used in the forecasts presented in the Convergence Programme, the common external assumptions of the European Commission of September 28, 2006 have been used.

**Table 1: Assumptions on the macroeconomic indicators**

	2006	2007	2008	2009
Exchange rate USD/EUR	1.25	1.28	1.28	1.28
GDP (in real terms, percentage change) – USA	3.5	2.3	2.8	2.8
GDP (in real terms, percentage change) – Japan	2.7	2.3	2.1	2.1
GDP (in real terms, percentage change)- EU25	2.8	2.4	2.4	2.4
Oil price (USD/barrel)	65.6	69.1	69.1	69.1
Six-month LIBOR on USD-denominated deposits	5.4	5.5	5.5	5.5
Six-month LIBOR on EUR-denominated deposits	3.1	3.7	3.8	3.9
Commodity prices (1995=100)	131.0	124.7	113.3	105.4
Food	105.6	105.3	101.6	98.3
Beverages	84.3	80.8	79.0	77.2
Agricultural raw materials	91.6	89.8	88.5	86.2
Metals	201.4	183.6	153.0	133.7

Source: EC, IMF

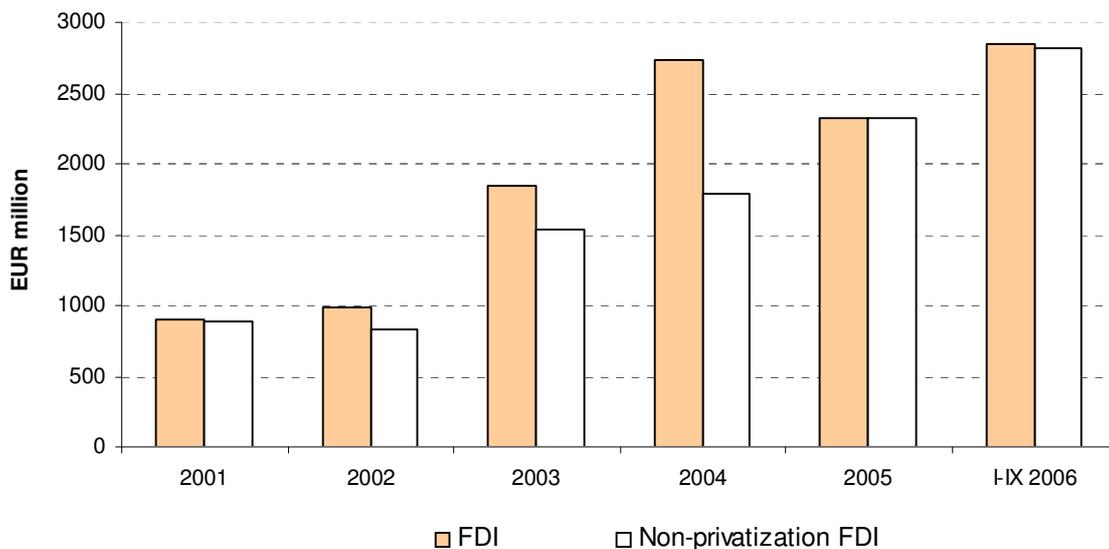
The forecasted values of the indicators used in the Convergence Programme have been calculated on the basis of the medium-term macroeconomic model and other auxiliary models of the Agency for Economic Analysis and Forecasting, as well as calculations of the Ministry of Finance, the National Social Security Institute, and the National Health Insurance Fund.

## 2.2. Cyclical developments and current prospects

### 2.2.1. Economic growth

In 2005 the rate of real GDP growth exceeded 5% once again, and in the first half of 2006 it reached 6.1%. The main final-use-side factor for that growth both in 2005 and in the first half of 2006 was domestic demand: final consumption increased by 6.8 and 5.8% and the investments recorded an increase of correspondingly 23.3 and 23% in 2005 and the first six months of 2006. The share of investment in GDP exceeded 30%, half of it due to the foreign investors' interest in the national economy. Unlike 2005, when domestic investment was the engine of gross fixed capital formation growth, since the beginning of 2006 the foreign direct investment has been the most important, and during the last year most of it has been mainly non-privatization investment.

**Figure 1: Foreign direct investment in Bulgaria**



Source: BNB

The consumption dynamics was due mainly to private consumption whose real growth rate was respectively 7.6 and 6.6%. After the slightly higher growth rate in the beginning of 2005, government consumption<sup>3</sup> decelerated in the second half of the year, and for the entire year it increased by a rate close to its average growth rate for the latest

<sup>3</sup> Sum of the final consumption expenditure of the government and collective consumption.

several years (3.8%). Its growth rate decelerated considerably since the beginning of 2006, and was scarcely 2.4%. The main contribution to consumption growth continued coming from consumers' own funds (pensions and wages). The main factors, which determined the increase of own financial funds, were the increase of employment and the increase of pensions as of 2006. Labour incomes also increased and additionally stimulated consumption. While in 2005 loans had a positive (though decreasing compared to a year earlier) contribution to the changes in consumption, since the beginning of 2006 their contribution has been negative due to the restrictions on credit expansion of commercial banks. A negative contribution came also from incomes from abroad, due to the smaller net inflows through the balance of payments.

The continuously increasing investment opportunities in the country require substantial financial resources. Having a relatively stable level of national saving (on average about 15% of GDP for the latest years), this leads to increased imports of investment goods and therefore to a relatively high current account deficit. The financing shortage manifests itself mostly in the private sector where in the latest years about 80% of total investments have been made. This share increased to 90% in the first half of 2006.<sup>4</sup>

While in 2005 the highest investment<sup>5</sup> growth rate was recorded in the services sector (26.2%), for the first half of 2006 the investments in industry<sup>6</sup> had the fastest growth rate (about 40%, with a growth rate of total investment of 32.3%). The high investment activity is expected to exert a direct positive influence on the competitiveness of the sector both on the domestic and the external markets. This will help the companies to generate own savings, with which to finance the required investments.

The most attractive to investors remained the services sector where in the first six months of 2006 about 56% of the investments were made. Those investments were rather intended to meet the increased domestic demand but they also exerted an indirect positive influence on the entire economy by improving the infrastructure and the overall business environment. A high growth rate of investment was also observed in agriculture. To some extent this was related to the acceleration of the process of absorption of pre-accession funds, and to the fulfilment of EU requirements for enterprises.

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<sup>4</sup> For the first half of 2005 this share was 83.7%.

<sup>5</sup> Measured by the expenditure on fixed asset acquisition.

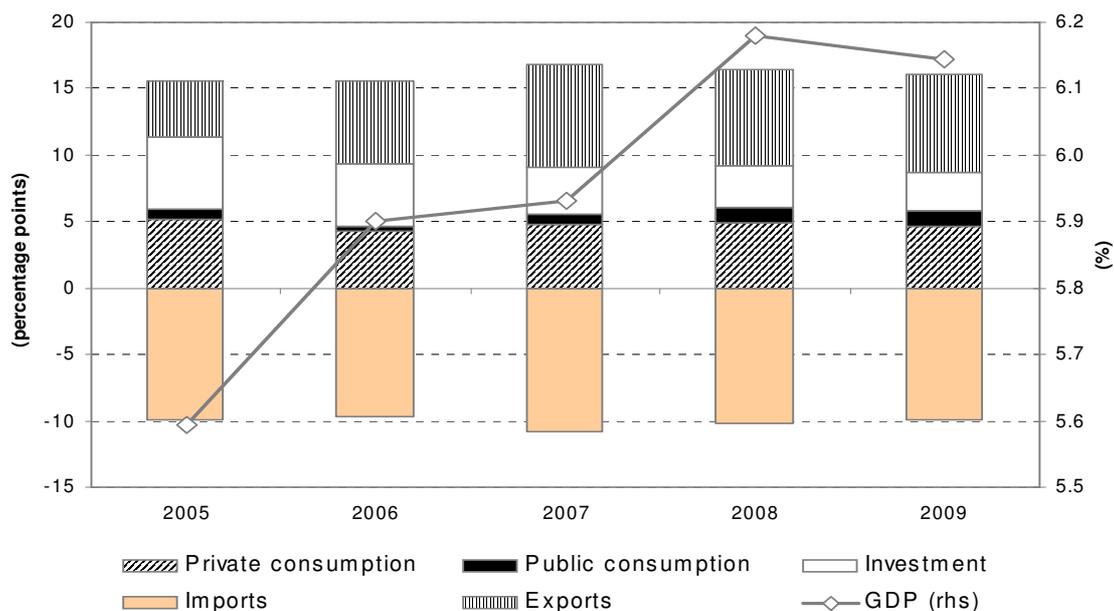
<sup>6</sup> Including construction.

The growth rate of industry continued to accelerate. The main factors for that growth were the higher international prices of metals and the continuing expansion of construction in the country. The business climate in industry improved and the average capacity utilization reached 71.6% in July 2006 (to compare, a year earlier the value of the indicator was 62.2%).

The growth in the services sector was mainly due to the growth of trade and to a lesser extent to financial intermediation deepening. The increasing demand has determined the considerable improvement of the business climate in services since the second quarter of 2006. Although the competition in the supply of services has been increasing, the improved access to financing and the recorded decrease in the uncertainty related to economic environment have led to an overall improvement in the conditions for doing business in the services sector.

The bad weather conditions were the major reason for the 2005 decrease in agriculture and forestry. The main contribution to the negative results came from the drop in plant-growing output, while the gross output in livestock breeding recorded a minimum growth. The large decrease in value added of agriculture was also determined by the increase in the volume of resources used in production. Since the beginning of 2006 the change in value added of the sector has continued being negative but this has been due mainly to the increased expenditures and not to a fall in total output.

**Figure 2: Demand-side sources of growth**



Source: NSI, AEAF

### **2.2.2. Cyclical position**

The calculations related to the cyclical position of the Bulgarian economy were performed using a macroeconomic production function following the main features of the methodological framework recommended by the European Commission<sup>7</sup>.

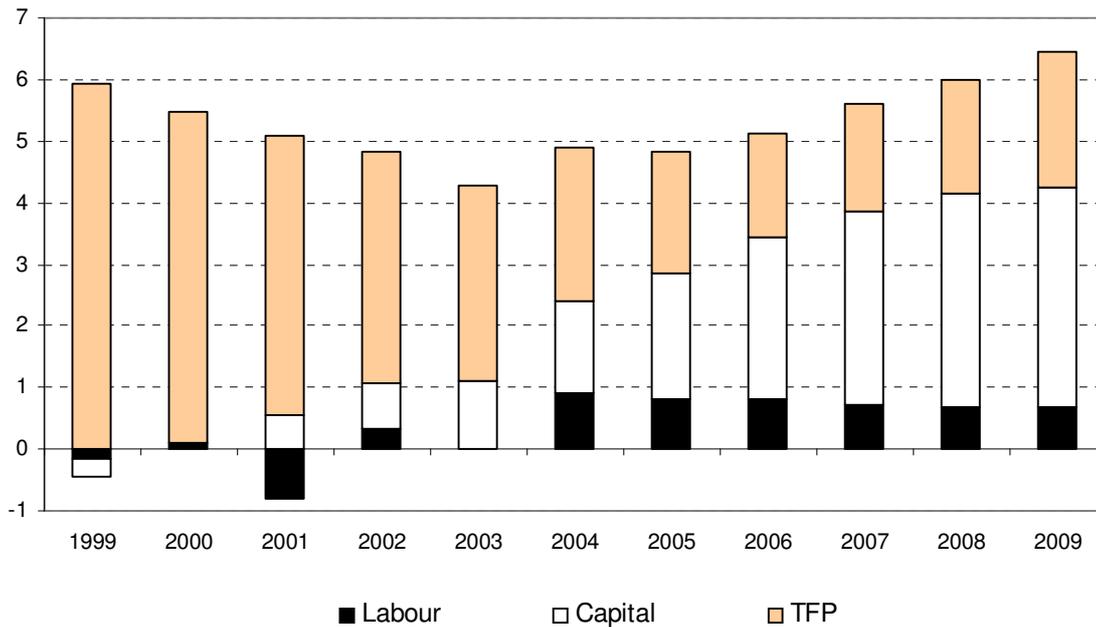
For 2006 the results from the performed calculations show an excess of the actual GDP over the potential GDP amounting to 0.69% (compared to a close-to-zero value of the output gap of -0.13% in 2005). For the next three years the calculations assume a slight increase in the value of this gap, reaching in 2008 its maximum value of 1.19% corresponding to the peak of the estimated business cycle; after that the economy is expected to start returning to its long-term equilibrium.

According to these calculations, the potential GDP of Bulgaria increases with high rates, and for 2006 its growth rate is 5.12% (compared to 4.83% in 2005); for the three years of the programming period some acceleration is observed and the value of potential growth reaches 6.45% in 2009. The most significant contribution for the increase of the potential GDP comes from capital (due to the high rates of investment in the Bulgarian Economy), and as the second-largest contributing factor emerges total factor productivity (TFP). A more restricted influence comes on behalf of employment due to the expected deceleration in its growth rate.

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<sup>7</sup> Denis, C., K. McMorrow and W. Röger (2002), "Production Function Approach to Calculating Potential Growth and Output Gaps – Estimates for the EU Member States and the US", Economic Papers, No.176, European Commission, DG ECFIN. For details on the calculations concerning Bulgaria, see Appendix 2.

**Figure 3: Contributions to potential growth (percentage points)**



Source: AEF

Due to the theoretical and empirical uncertainty generally associated with the estimation of potential growth and output gaps, in Appendix 2 an alternative analytical framework for the calculation of the two indicators, which was used in PEP 2005, as well as the results obtained from its application, are presented.

The alternative results show that it is possible that the application of approach recommended by the European Commission leads to an underestimation of the values of potential growth at the expense of increasing the output gap. This may be explained by the deficiencies of the method stemming from the features of the Hodrick-Prescott filter and the assumption for a “smoother” dynamics of potential GDP than the actual one.<sup>8</sup> Following the same line of thought, it is possible that the approach using a production function underestimates the value of the structural budget surplus.

<sup>8</sup> Taking into consideration the extremely fast acceleration of investment activity in the country in the recent years, there are grounds to claim that the potential output is accelerating faster than the values obtained in the main approach. In this case this acceleration has been “smoothed out” by the Hodrick-Prescott filter and has been attributed to the cyclical component. We will also note that in some modern economic theories (e.g. the real business cycle theory) the hypothesis for a smooth dynamics of the supply side is strongly criticized.

### **2.2.3. Labour market (employment and unemployment)**

The sustainable economic growth in the latest several years created a good fundament to continue the trends of increasing employment and decreasing unemployment in the country. In 2005 and the first six months of 2006 the average number of employed persons increased respectively by 2 and 3.7% on a yearly base,<sup>9</sup> and the major contribution to the development of the indicator came from the private sector of the economy. The active labour market policy pursued by the government did not have a significant contribution to the increase in overall employment in the country since in the beginning of 2005 the coverage of the active programmes was limited. The analysis of the employment developments by industries of the overall economy shows that the highest contributions to the increase in the number of employed persons came from trade, construction, manufacturing, etc., which is in line with the data showing an increased economic activity in these branches. At the same time the dynamic increase in the number of employed persons since the beginning of 2006 has also been supported by the introduced decrease in the social security burden on employers.

The unemployment rate in the country followed a constantly decreasing trend in the four and a half years reaching an average value of 10.1% in 2005 and 9.1% for the period January-September 2006.<sup>10</sup> The decreasing trend in unemployment was also confirmed by the administrative statistics of the Employment Agency (EA). As of the end of September the rate of registered unemployment reached 8.4%, which is the lowest level of the indicator for the last fifteen years.

The creation of sustainable jobs in the private sector of the economy contributed both to the decrease in the number of unemployed persons and to the return to the labour force of a share of the persons who had left it in the previous years. As a result the participation rate increased and its annual average value reached 62.1%<sup>11</sup> (by 0.4 percentage points higher than in 2004), with a more significant increase (by 2.2 percentage points to 64.2%) displayed by the indicator in the first nine months of 2006.

In spite of the observed improvement in the major labour market indicators in Bulgaria in the latest several years, there exist considerable challenges related to increasing

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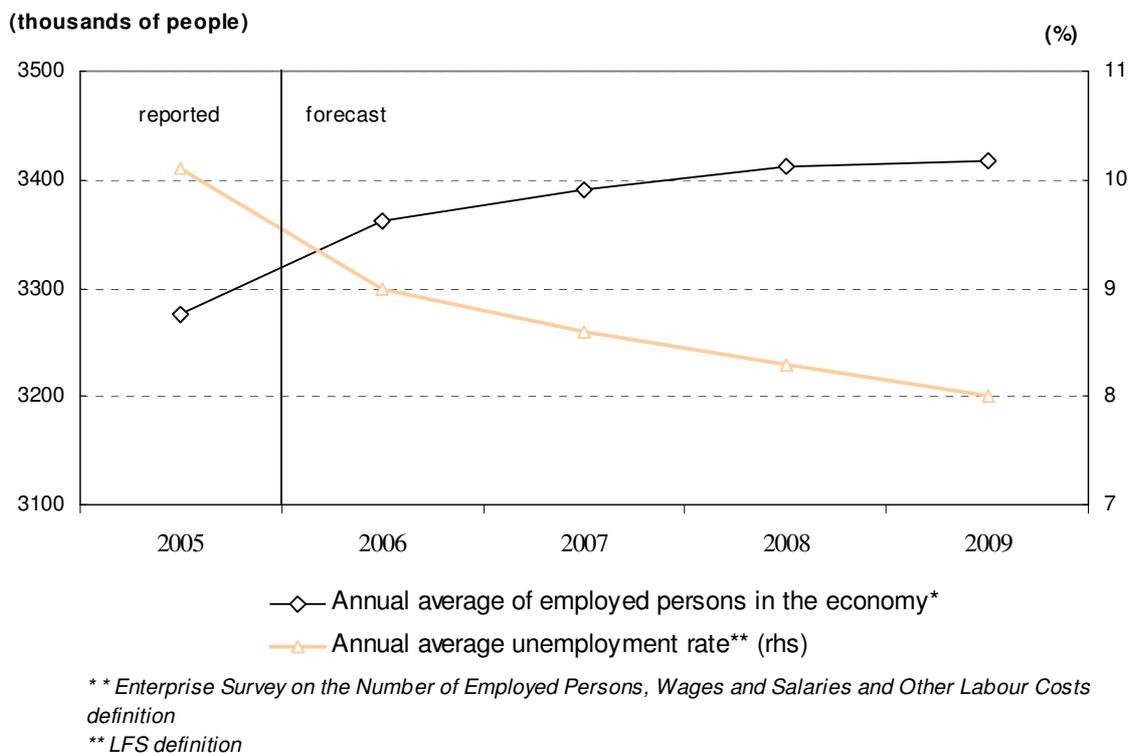
<sup>9</sup> According to Labour Force Survey (LFS) data, for the 15+ age group.

<sup>10</sup> According to LFS data.

<sup>11</sup> In the age group 15-64.

the employment and the participation rate of the population. The prevailing demographic trends will continue to exert their influence on the developments of the labour force in the country. Therefore, the necessity to stimulate more actively the return to the labour force of the discouraged workers stands as a first priority. In this sense, the major prerequisites for the development of the labour market in the next several years will be linked with activities to increase its flexibility, with increasing the spatial and professional mobility, with an incomes policy motivating labour force participation, with active measures aimed at increasing the quality of the labour force in line with the requirements and needs of the market.

**Figure 4: Annual average number of employed persons in the economy and annual average unemployment rate**



Source: NSI, AEAF

For the period 2007-2009 the annual average number of employed persons will continue increasing, and the major contribution to this growth is expected from the development of the private sector. The expectations concerning the development of the indicator amount to a gradual deceleration in its annual growth rates, respectively to 0.8%

in 2007, 0.6% in 2008, and 0.2% in 2009,<sup>12</sup> as a result of the demographic processes in the country.

The increased labour demand on behalf of the private entrepreneurs is expected also to be a major determinant of the decrease in the unemployment rate in the country and of the increase in the participation rate. It is expected that in 2009 the values of these two indicators will reach respectively 8 and 66.4%.

#### **2.2.4. Incomes and labour productivity**

In 2005 labour productivity and incomes in the country continued to increase. According to NSI data, in the same year the annual average wage reached BGN 319.5<sup>13</sup> (EUR 163.4), which represents a growth rate of 9.3% in nominal and 4% in real terms compared to 2004. A major contribution to the increase of the indicator came from the private sector of the economy. Parallel with that, labour productivity<sup>14</sup> for the overall economy registered a growth rate of 3.9% compared to the previous year. The change in GVA per employed by industries shows that in most of them the indicator exceeded the reported value for the overall economy, and only in the agricultural sector and in the electricity generation and distribution branch a decrease on a yearly base was observed.

The observed trends in both indicators remained unchanged in the first six months of the current year. For the period January-June 2006 the annual average wage increased by almost 10% in nominal terms, which has been the highest value of the indicator for several years. The wage increase during that period was to a large extent a result of the decrease in the social security burden in favour of the employers in the beginning of the year. This was confirmed by the fact that the income growth in the first half of the year was mainly due to the private sector of the economy. In real terms, the average wage increased only by 1.6% on a yearly base due to the higher inflation observed since the beginning of the year.

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<sup>12</sup> The presented estimates concerning the developments of employment are based on the definition of employed persons from the Enterprise Survey on the Number of Employed Persons, Wages and Salaries, and Other Labour Costs.

<sup>13</sup> Provisional data from the Enterprise Survey on the Employed Persons, Wages and Salaries, and Other Labour Costs.

<sup>14</sup> The indicator is calculated as a ratio of real GDP and the number of employed persons taken from the Enterprise Survey.

According to NSI data, in the first half of 2006 labour productivity for the overall economy increased by about 2%<sup>15</sup> in real terms on a yearly base, and the slower growth of the indicator compared to 2005 was a result of the increase in the number of employed persons mainly in construction, transport, and trade sectors where the effect of the decreased social security rates is most pronounced.

The increase in the real wage is in line with labour productivity growth and therefore it can be inferred that in this respect there is no risk of deteriorating competitiveness and efficiency of the Bulgarian economy.

**Figure 5: Rates of change in labour productivity and average real wage**



Source: NSI, AEF

The observed development trends in these two indicators are expected to remain unchanged during the entire 2006. Labour productivity and the average real wage will continue to increase both in nominal and in real terms. For the period 2007-2009 the two indicators are expected to increase by rates higher than the averages for the latest several years. The real growth rate of the average wage is expected to reach an annual average value of 5%. The rate of change of labour productivity is expected to exceed that of the real wage and to vary in the range of 5-6% in real terms. As a consequence, the attainment of higher income levels and of a higher standard of living of the population during the

<sup>15</sup> Calculated as a ratio of real GDP and the number of employed persons according to the LFS.

period into consideration is related to the increases in the output of goods and services, in labour productivity, and in employment.

### **2.2.5. Inflation**

In 2005 inflation measured by the CPI was 6.5% at the end of the year, and the annual average was 5%. The price dynamics during the last year was determined by several factors: the increased international crude oil prices, the floods during the summer months, and the changes in the administrated prices.

Of the adjustments in the administrated prices, the most significant increase was in heating energy (20.4%). Besides the factors, which led to an increase in production costs, account needs to be taken of the influence of the increased household consumption during the year, which managed to push up the prices of some non-tradable goods and services (a contribution of 1.5 percentage points to inflation at the end of 2005). For the marketed non-food commodities a small increase in the prices was observed not only during the current year but during the whole period since the introduction of the currency board arrangement. These commodities may be classified as tradable due to the fact that they face the strongest competition of imported analogs.

At the end of 2005 the overall increase of administrated prices, which constitute about 21% of the weights in the consumer basket, was 6.1%. The non-controlled prices, which account for the core inflation in Bulgaria, increased by 6.5% at the end of the year.

The overall accumulated inflation since the beginning of 2006 is 2.5%.

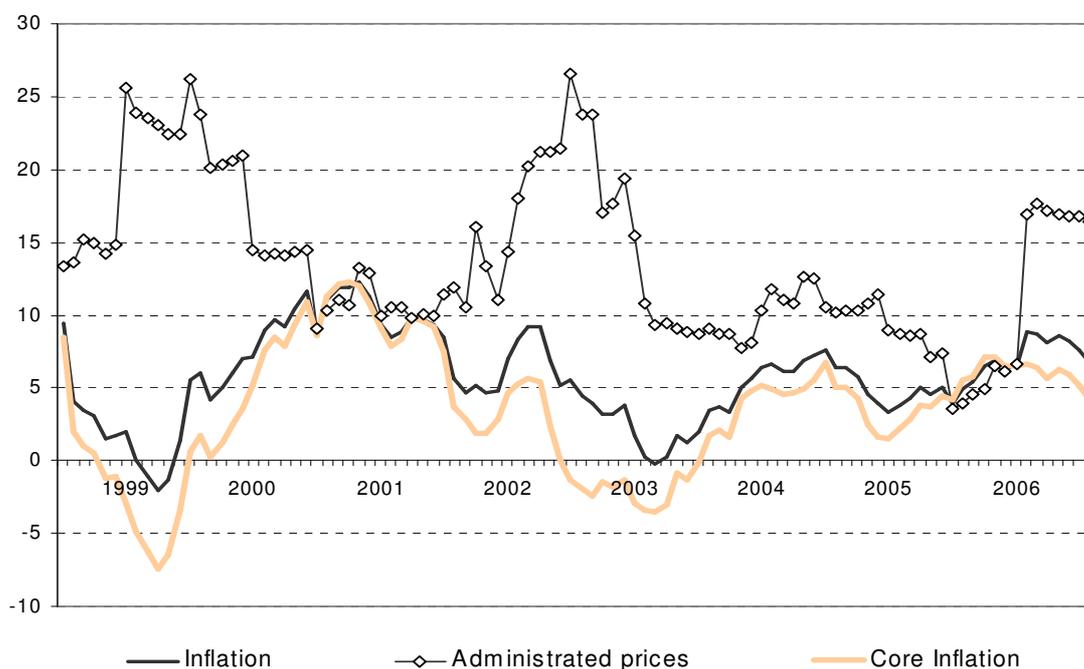
The core inflation for 2006 is expected to be low. For the period January-September its value was negative (-0.4%). For the period since the introduction of the currency board the inflation of non-controlled prices has been low, with the exception of the years, in which external and internal factors exerted negative influence on supply.

For the period January-September 2006 the prices of foods decreased by 3.2%. The lower level of the prices of fresh fruit and vegetables in 2006 was due to the larger supply. For the period from the beginning of the year to September the producer prices of oil products increased by 8.7% and the consumer prices of liquid fuels – by 1.6%. For the period January-September the prices of marketed non-food commodities increased by 1.4%, and those of the marketed services – by 2.7%.

From the beginning of 2006 to September the administrated prices increased by 13.5%, and their contribution to overall inflation was 2.9 percentage points. This considerable increase in prices was mainly due to the new excise tax rates for cigarettes introduced at the beginning of the year. In order to reduce the risk of inflation in the medium term, which is expected to emerge as a consequence of the process of harmonization of excise tax rates to the EU levels, the government decided to introduce the excise tax rates for cigarettes, initially planned for 2008, in 2006. This led to a significant price increase for cigarettes, and the accumulated increase in their prices was 74.8%; their contribution to overall inflation was 2.7 percentage points. In the beginning of the year new excise tax rates were introduced also for spirits and liquid fuels.

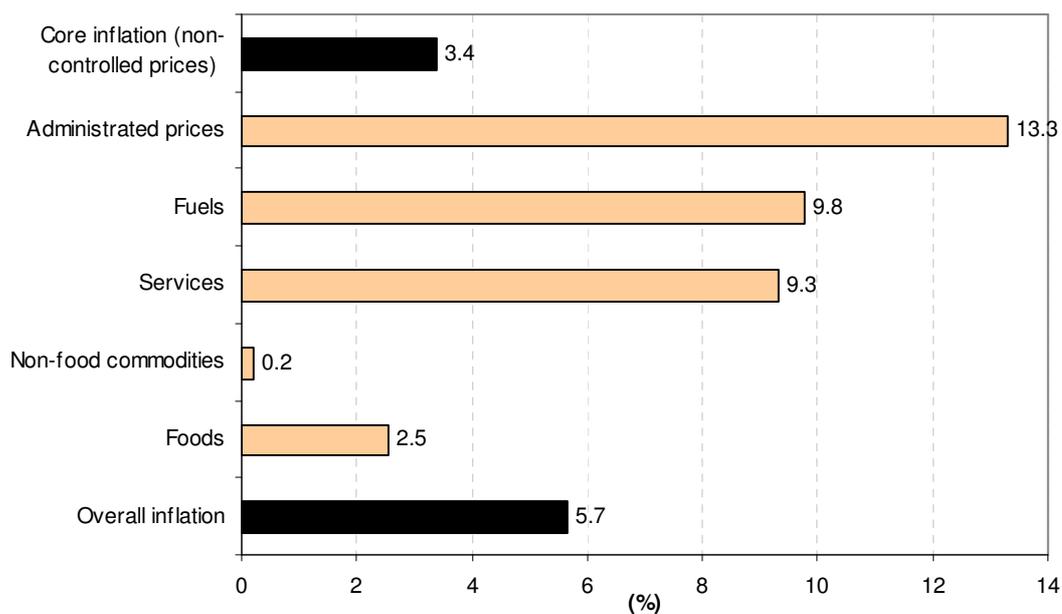
The relatively low inflation after the introduction of the currency board arrangement was achieved in a period of substantial structural reforms in the economy and several external shocks. For the period 1998-2005 the largest growth rate and the largest contribution to overall inflation were recorded for administrated prices. For the goods and services with non-controlled prices the highest growth rates were observed for the prices of fuels and services. The prices of fuels were influenced by the international prices of oil and by administrative measures such as the introduction of higher excise tax rates. The prices of marketed services were influenced through supply (the Balassa-Samuelson effect) and through demand as a result of the increased disposable incomes of the households. The lowest rate of price increases was recorded for the group of marketed non-food commodities.

**Figure 6: Inflation rate since the introduction of the currency board arrangement (percentage change compared to the corresponding month of the previous year)**



Source: NSI, AEAf

**Figure 7: Annual average rate of price increase for the period 1998-2005**



Source: NSI, AEAf

In the first 2-3 years from the accession of Bulgaria to the EU we expect that the development of the inflationary processes in the country will continue to be determined mainly by the above-listed factors. Under this assumption, we do not expect that the accession of the country to the EU will bring about an acceleration of the inflation rate. In the first years from the accession of Bulgaria to the EU the process of excise tax rates harmonization and administrated prices adjustment will continue, and this will have one-time effects resulting in increases in overall inflation. According to the programme of the Ministry of Finance (MoF) for gradual increasing of the excise tax rates until the minimum Community rates are reached, in the period 2007-2009 the excise tax rates for liquid fuels will be increased, and excise tax rates for coal and electricity will be introduced. The total contribution to the annual inflation during that period is calculated to be respectively 0.5, 0.4 and 0.3 percentage points. The overall effects represent the sum of the contributions of the direct effect on the CPI and the effect coming from the producer prices, which exerts an indirect influence on consumer prices. These contributions can be classified as a pessimistic variant. If there is a favourable situation on the international markets in energy raw materials, we could expect a weaker contribution to inflation on behalf of the excise tax rates harmonization.

**Table 2: Forecasted inflation, 2006-2009**

	2006		2007		2008		2009	
	End of the year	Annual average						
Overall inflation	6.1	7.4	3.4	4.0	3.0	3.0	2.9	3.0
Administrated prices	18.3	16.5	3.8	6.7	3.5	3.5	3.2	3.2
Core inflation	2.8	4.9	3.3	3.2	2.8	2.9	2.9	3.0

Source: AEF

The main factors, which will influence the core inflation, will be the international prices of raw materials, fuels and imported goods, and the domestic factors: the ratio between the growth rates of productivity and wages, and the increases in the disposable income of the households. The abolition of duties in the trade with the EU countries and the introduction of the single Community policy with respect to trade with third countries will reflect in a decrease of the current overall level of duties for agricultural and industrial goods. The effect from the common trade policy will lead to decreasing the levels of some

prices. We do not expect pressures on the prices of clothes, household appliances, and some food commodities, whose prices may face competition from imports.

We expect a higher acceleration of the convergence process for the prices of services compared to the overall price level. If the price level of services in the EU is adopted as a base, their level in Bulgaria is lower compared to that of goods.<sup>16</sup> It can be expected that in the years to come the demand for some types of services will be increasing (e.g. the demand for high-quality healthcare services, educational services, tourism, and recreation services). The Balassa-Samuelson effect also exerts influence on the prices of services. The manifestation of this effect is estimated also taking into consideration the position of the trade partners of the country. The difference between the growth rates of labour productivity in the tradable and non-tradable sector in the country and in the EU explains to some extent the differences in the overall inflation rates. For the period 1998-2005 there existed a long-term relation between the difference in the inflation rates<sup>17</sup> between Bulgaria and EU-15 and the differences in the relative productivity (tradable and non-tradable sector) in Bulgaria and EU-15. According to our estimates, the excess of Bulgaria's productivity over that of the EU-15 by one percentage point would lead to an increase in the overall gross value added deflator by 0.6 percentage points.

For the non-food commodities we expect low rates of inflation. In the period after the introduction of the currency board arrangement the durable goods consumption of households (non-food commodities) increased by higher rates compared to that of non-durables (foods and services). This was due to a large extent to the recovery of consumption after the crisis in 1996-1997, but higher rates of growth for the durables were also observed after financial stabilization was achieved. The increase in real incomes and wealth of households is the reason behind the increase in the share of durables in consumption, as well as the existing tendency of decrease of the relative price of durables vis-à-vis the non-durables and services. In spite of the increasing consumer demand, the prices of non-food commodities remained with the lowest inflation rate, since under the liberalized foreign trade regime these commodities face the largest competition on behalf of imports. This creates obstacles before the local producers and traders to respond to the increased demand with price increases.

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<sup>16</sup> According to Eurostat, in 2004 the price level of consumer goods in Bulgaria was 58.7% of the EU 25 level and that of consumer services– 31.9%.

<sup>17</sup> The calculations are based on GVA data. The computed price effects relate to the GVA deflator.

For the foods we expect an annual inflation rate of about 1.6% for the period 2007-2009. This expectation is valid under the assumption that there will be no internal or external shocks, which could bring about a price increase in agriculture and in the food-and-beverages industry.

Bulgaria has announced its intentions to join the Economic and Monetary Union (EMU) with derogation from the date of its EU membership and will pursue the policy to introduce the euro within the shortest possible timeframe.<sup>18</sup> The fulfilment of the price stability criterion constitutes some challenge before the country considering the inflation rate history for the past years, as well as the factors, which determine the overall price changes.

Bulgaria is a small open economy, in which the core inflation depends to a large extent on external factors such as international prices of crude oil, non-energy raw materials, and imported consumer goods. The expected relatively high rates of economic growth, together with factors such as the low base, from which the process of adjustment of price and income levels in Bulgaria to the EU average starts, as well as the adjustments in the administrated prices, may lead to some acceleration of the inflation rate. On the other hand, however, the decreased average duties, the extended access to the Bulgarian market of third countries' importers of agricultural goods and the increased competition among the local producers are expected to act in the opposite direction.

It is very important that the good ratio between the increase in labour productivity and the increase of real wages is preserved. The increase in employment due to the intensified economic activity of the private sector will stimulate the consumption of households. We could expect an increased influence of domestic demand on inflation. The continuation of the policy of budget surpluses in the first years of Bulgaria's accession to the EU will be of high importance.

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<sup>18</sup> On November 25, 2004 an Agreement between the Council of Ministers of the Republic of Bulgaria and the Bulgarian National Bank on the policy and the commitments which will be pursued in the process of euro adoption in the Republic of Bulgaria.

## 2.2.6. External sector

In 2005 the balance-of-payments current account deficit reached 11.3% 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 2006 the current account deficit amounted to EUR 1 908 million (7.9% 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 2006 the current account deficit will reach 14.1% of the forecasted GDP. In the medium term, in 2007-2009 a deceleration of the current account deficit increase is foreseen. The deceleration of the trade deficit growth and the recording of additional inflows of EU funds are expected to be the most important contributing factors in this respect. 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 policy is intended to remain unchanged during the next several years. In the short and in the medium term a full coverage of the current account deficit by foreign direct investment inflows is foreseen. Since the foreign capital inflow is related to investment risks, the investors found their decisions on the policies pursued in the country. The existence of a stable fiscal position will be an additional guarantee for the maintenance of high foreign direct investment inflows and for the financing of the current account deficit.

**Table 3: Foreign sector indicators (% of GDP)**

	2005	2006*	2007*	2008*	2009*
Current account	- 11.3%	- 14.1%	- 13.6%	- 12.8%	- 12.4%
Trade balance	- 20.2%	- 21.4%	- 21.4%	- 21.6%	- 21.5%
Current transfers	4.6%	4.7%	5.1%	6.6%	7.2%
FDI in the country	10.8%	14.8%	14.2%	13.6%	12.7%

\*Forecast

Source: BNB, AEF

During the last year the imports of goods registered an increase of 26.2% compared to the previous year, mainly due to the higher imports of energy resources and investment goods. For the period January-August 2006 the growth of imports amounted to 27.2% compared to the same period of 2005. During the current year stronger imports of energy resources and raw materials (over 20% of overall country imports are formed by fuel

imports). The price dynamics on international markets plays an important role in the formation of the value of the imported fuels, respectively of the overall imports. The high dependence of the country on external supplies of energy resource should also be mentioned. The imports of investment goods amounted to one quarter of the country imports. Machinery and vehicles contributed most to the growth of investment goods imports. It is expected that in 2006 the nominal growth rate of imports will remain the same as in 2005, and in the medium term it is expected to register decelerate considerably. Its rate of real growth is expected to remain unchanged.

In 2005 the exports of goods increased by 18.6% compared to 2004. The most significant contribution came from oil products, non-ferrous metals, and vehicles. The textile industry, which had the largest relative share in total exports (16.3%), did not increase due to the increased competition of cheap Chinese goods on the markets of the EU countries that are main trade partners of Bulgaria in this sector. For the period January-August 2006 the growth rate of exports accelerated and reached 30% compared to the same period of 2005. The value of exports of non-ferrous metals and oil products increased substantially due to the increased prices of those commodities on the international markets. An increase was observed also for the volume of exported oil products. Due to the recovery in the textile sector, the exports of textile products increased by 4.7%, and their share equalized with that of non-ferrous metals and oil products. The total share of clothes and footwear, non-ferrous metals and oil products in total exports for the period January-August 2006 increased to 42%. For the period 2007-2009 exports are forecasted to increase at slower rates due to the expectation for stabilizing international prices in the medium term. In real terms, the growth rate of exports will remain high due to the dynamically developing economy, the investment inflow, and the improved competitiveness and productivity.

In 2005 Bulgaria recorded the highest trade turnover with the EU-15 countries (51.5% of total imports and 43.9% of total exports). For the period January-August 2006 a decrease in the EU-15 shares in imports and exports was observed. At the same time, the share of Russia increased due to the larger imports of crude oil. The shares of the Balkan countries and those of the EU-15 countries also increased. In the medium and long term the trade with the EU countries is expected to increase.

In 2005 the net balance of services was lower by 2% compared to the previous year, mainly due to the increased expenditures on the other services item. For the period

January-August 2006 a lower net balance compared to the same period of 2005 was observed, too. The main reason for that were the high transportation costs related to the increased international trade turnover and the expenditures on other services. The expectations for the period 2007-2009 are that the net balance on services will increase, and the revenue from tourism is foreseen to register slightly higher growth rates.

In 2005 the inflow of foreign direct investment amounted to EUR 2326 million. More than 70% of the investments were in the sectors of financial intermediation (28.2%), manufacturing (22.1%) and real estate, renting and business activities (20%). According to preliminary data, about 90% of the total inflow of FDI came from EU Member States. For the period January-August 2006, according to preliminary data their amount reached EUR 2 484.2 million. The expectations are that in 2006 it will increase to EUR 3 591.2 million and will cover 105.4% of the current account deficit. The favourable investment climate, the dynamically developing economy, the EU accession of Bulgaria, the reduction of the corporate tax rate to 10% from January 2007, the low trade expenses, the stable policy and the transparent legislation are the main factors, which are expected to contribute to the increases in the foreign direct investment inflows in the country during the following years.

### **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. 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. As a part of the overall framework of the monetary regime of the country, the central bank cannot perform open market operations and be a lender of last resort to the commercial banks or to the government.

Under the absence of an activist monetary policy and controls over interest rates in the country, 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 Eurozone countries. The decisions of the ECB concerning the Eurozone interest rates are transmitted to the interest levels in Bulgaria, and the relation with respect to the inter-bank interest rates and the interest rates on euro-denominated deposits and credits is particularly strong. The relatively quick transmission of the interest rates is a function of the increased

competition in the banking system, of the large share of floating-rate loans, and of the property structure of the commercial banks in the country. As of the end of 2005 74% of the assets of the banking system were managed (owned) by financial institutions based in EU Members States, and 59% of the assets were managed (owned) by Eurozone investors.

The structural reforms in the economy and the entering of foreign investors in the banking sector contributed to the fast development of financial intermediation during the latest several years. The low international interest rates and the high return on investment in the Bulgarian economy determined the considerable capital inflows in the country. A considerable share of those inflows was attracted by the commercial banks in the form of foreign liabilities in order to grant loans to non-financial enterprises and households in the country. As a result of this the 'claims on the non-government sector/GDP' ratio increased from 27.5% at the end of 2003 to 46.1% as of September 2006. In order to limit the risks to the banking system resulting from the high credit activity of the commercial banks, BNB undertook a series of measures to stabilize credit growth. These measures included the introduction of quantitative limitations on the increase of credit portfolios and additional required reserves for the banks violating the restrictions. As a result of these measures the annual growth rate of the claims on the non-government sector decelerated from 48.6% in 2004 to 32.4% in 2005, and to 23.6% as of September 2006. In October 2006 BNB decided to fully abolish the administrative restrictions on credit growth, and the decision will be in force from January 1, 2007. At the same time, the central bank continues to apply strict supervision requirements, and closely monitors the banking sector dynamics. In case a tendency for high bank credit growth appears, BNB will use the instruments, which it has at its disposal in order to achieve and maintain credit growth rates that do not pose substantial risks to financial and macroeconomic stability.

### **2.3. Medium-term scenario**

One of the main assumptions in the elaboration of the baseline macroeconomic scenario was that during the period 2007-2009 the economy of Bulgaria will continue to maintain high rates of economic growth, which will contribute considerably to the real convergence process observed since the introduction of the currency board arrangement. For 2008 and 2009 the growth rate of GDP is expected to accelerate and to exceed 6% on a yearly base. The logic of the scenario was also based on the assumption of maintaining

macroeconomic stability through the pursuance of cautious government policies, on the expected results from the reforms implemented in all areas of the economy, and on the expected effects from Bulgaria's accession to the EU on January 1, 2007.

In 2007 an acceleration of the growth rate of external demand is expected (11.7% compared to 10.2% in 2006). This will lead to a slight alteration in the structure of the final-use side of GDP: the contribution of exports will increase (7.8 percentage points in 2007 compared to 6.2 percentage points in 2006) at the expense of domestic demand (9 percentage points in 2007 compared to 9.4 percentage points in 2006). This distribution of contributions to the GDP growth rate is expected to remain unchanged in 2008 and 2009.

The final consumption expenditure of households will continue to increase at moderate rates. The sustainable increase of the real incomes from both internal sources and from the inflow of EU funds in the country is expected to be a determinant of their increase. The forecasted annual growth rate of household consumption for the period 2007-2009 is on average 6.8%. Total consumption will accelerate its growth rate from 6.4% in 2007 to 7% in 2008 and will reach 6.5% in 2009.

The European funds are expected to exert a direct influence on the investment activity in the country. The effects will manifest both through the government sector and through the increased investments in the private sector. For the period 2007-2009 the share of total investment in GDP is expected to be on average 31.3%. The effect from the financial incentives will be manifested most significantly in the first two years of EU membership when the fixed capital investments are expected to increase respectively by 16.8 and 12.7%. In spite of the increases in savings, which will reach 18.8% of GDP at the end of the forecast period, the high growth rate of the share of investments in GDP is expected to sustain the current account deficit at relatively high levels.

Industry is expected to remain the most dynamic sector of the economy, but high growth rates are expected also in services. The agricultural funds transfers are expected to contribute for a higher efficiency of agricultural producers and thence to improve the conditions in the sector.

## 2.4. Effects from structural reforms

### 2.4.1. Social security

As a result of the reform in the area of social security implemented in 2000 the system is characterized with the following advantages:

- Re-classification of labour at the point of retirement and elimination of almost all specialized categories of workers from the national social security system in 2000, although those workers retained their additional privileges and were covered by the newly-established professional pension funds (as a part of the second pillar). The retirement privileges granted to those workers will not be eliminated from the public social security system (the first pillar) for the retiring workers until 2010, and they will not be eliminated from the existing group of pensioners;
- Introduction of a new pension formula, which altered the income-replacement coefficient by accounting for the insurance contribution of every insured person. The real replacement coefficients were already decreased by applying the factors of the replacement coefficient not to an artificially undervalued “average wage” but to an “average insurable income”. The existence a “personal register” in the information system of the NSSI made possible the calculation of the “average insurable income” indicator;
- Increase of the pension age, which started in 2000<sup>19</sup>. With the new system the right to pension for insured length of service and old age from the first pillar (public social security) is gained when two conditions are simultaneously fulfilled: a specified age of 63 years for men<sup>20</sup> and 58 years and 6 months for women<sup>21</sup>, and if the sum of the insured length of service and age is not less than

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<sup>19</sup> By Decision №784/15.11.2006 of the Council of Ministers of the Republic of Bulgaria a draft of the Law on the Budget of Public Social Security for 2007 was approved. The latter envisages an amendment of Article 70, paragraph 1 of the Social Security Code, according to which the weight of the length of service in the formula for pension calculation is increased from 1% to 1.5% under specified circumstances, stimulating through this delayed retirement.

<sup>20</sup> Fulfilled in 2005.

<sup>21</sup> The data are as of the current date. It expected that the legal requirement concerning the pension age for women of 60 years to be fulfilled in 2009, and this age will be increased in the first day of each calendar year by 6 months.

a specified number (the so-called points). The legally specified number of points for men is 100 and for women it is 94<sup>22</sup>. Moreover, many workers will not be able to retire until they are 65 if they don't have at least 15 years of insured length of service. The privileged categories of workers will have to meet these new requirements for retirement until the beginning of 2010;

- Coverage of all economically active persons and stimulation of labour mobility;
- Regulation of voluntary pension insurance (third 'capital' pillar) by means of personal insurance contributions and by contributions on behalf of the employer and by tax-free (within a specified amount) contributions;
- Codification of social-insurance matter in a single legislative act – the Social Insurance Code;
- Increasing the motivation for participation and the opportunities for personal choice in the second and in the third pillar, where the insurance contributions are accumulated and capitalized by reform;
- Establishment of a differentiation by funds of the socially insured risks (respectively in the Pensions Fund, the Pensions Not Related to Labour Activity Fund, the Job Accidents and Professional Diseases Fund, the General Illness and Maternity Fund, the Unemployment Fund<sup>23</sup>, the Teachers' Pension Fund, and the Guaranteed Claims of Workers and Employees Fund<sup>24</sup>) and improvement of their administration by the National Social Security Institute;
- In 2002 Bulgaria introduced in practice the second pillar with the universal pension funds by diverting a specified share of insurance contributions from the first pillar and streaming it to the second one.

At the beginning, when the reform started, the pension insurance contribution rate was 32% of gross labour income or insurable income. Until present, the implemented reforms took a long way to create a system that can be financed by considerably decreased social insurance contributions. Currently the contribution rate is 23% (65% are paid by the employers, and 35% are paid by the workers). From the middle of 2007, if there are fiscal possibilities, the insurance contribution rate for the Pensions Fund is foreseen to become

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<sup>22</sup> Will be reached in 2009.

<sup>23</sup> As a separated fund since January 1, 2002.

<sup>24</sup> Since January 1, 2005.

20% for the insured persons born before January 1, 1960, and 15% for the persons born after that date. In 2000 the pension expenditures were 9.4% of GDP, and in 2005 they were 9.0%. The decrease of the insurance contribution for the Pensions Fund of the Public Social Security (PSS) and the allocation of a share of it to the universal pension funds (in 2006: 4 percentage points for the insured persons born after December 31, 1959; 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% of GDP in 2006). As a result of the implemented reforms and the forecasted migration waves after 2020 the deficit of the public social security budget is expected to decrease to 1.8% of GDP in 2030, which will lead also to a decreased necessity for financing from the central republican budget. After 2030, mainly due to the accelerated process of population ageing the deficit of the public social security is foreseen to start increasing again and to reach 2.44% of GDP in 2050.

In the beginning of 2006 an amendment to the Social Security Code concerning the regulatory framework of investments of pension funds was adopted. By this amendment of the legislation the regulatory framework was liberalized and an opportunity for greater portfolio diversification was granted to pension funds. At the same time, requirements for guaranteeing the security of the assets they accumulate were introduced. The minimum requirement for investments in government bonds (50% in government bonds for the funds for supplementary mandatory insurance and 30% for the supplementary voluntary insurance funds) was removed, by which the privileged access of the state to the activities of the financial institutions was abolished. Also, equal treatment of investments in the country and investments in EU Member States was provided for. The liberalization of the regulatory framework was necessary also due to the accumulation of considerable financial resources in the pension funds. As of the end of September 2006 the total assets of all pension funds reached BGN 1 378.3 million (EUR 704.7 million), which represents an increase by 23.9% compared to December 2005. In 2005 this increase of assets amounted to 41.2%.

#### **2.4.2. Education**

The expenditures on education as a share of GDP increased gradually in the latest several years. For the period 2007-2009 the expenditures on education are foreseen to increase annually by BGN 180-240 million (EUR 92-123 million). The acceleration of

investment in human resources will facilitate the increase of productivity and competitiveness of the economy. The increase of public expenditure on education as a share of GDP will not lead alone to an improvement in the performance of the Bulgarian education system without the respective overall reform in that sector. The education expenditures as a share of GDP in Bulgaria are at a level comparable to that in many Central and Eastern European (CEE) countries and are slightly below the levels in the EU-15 countries (5% of GDP), but a decrease in the performance indicators of the Bulgarian students was being registered in the latest years.

A higher efficiency of the available budgetary expenditures for the educational sector should be sought. This implies optimization and gradual consolidation of the large number of schools and higher-education institutions in the conditions of decreasing student numbers in order to increase the student-teacher ratio. The support of the excess capacity in the educational system requires substantial funds for wages and maintenance costs. The freed funds could 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 reformation of the educational system is also necessary in order to stimulate the development of human resources and successful training of qualified workers corresponding to the modern requirements of the labour market.

The successful implementation of the planned reforms in the educational system is a prerequisite for using and efficiently absorbing the EU funds for programmes related to the development of human resources. The overall framework of the reforms is set in the National Programme for Development of School Education and Pre-School Education and Preparation (2006-2015) approved by the Parliament on May 11, 2006<sup>25</sup>. The major goals set in it are: equal access to education and high quality of education. The main directions in the Programme are a change in the study curricula, establishment of an efficient system of internal and external standardized grading, diminution of the number of drop-outs and children not covered by the system, optimization of the school network, and decentralization of management and financing. The changes foreseen in the National Programme are fully compliant with the growth and jobs goals set in the Lisbon Strategy.

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<sup>25</sup> Promulgated State Gazette issue 41/19.05.2006.

### **2.4.3. Healthcare**

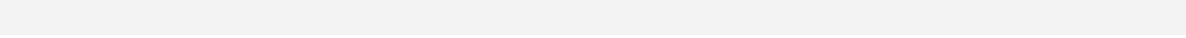
The negative demographic trends since the beginning of the 90s, the increased healthcare expenditures, as well as the need to supply high-quality healthcare services to the population have made necessary the reform of the system. The reform started in 1998 with the adoption of the Law on Health Insurance. Among the main goals of the reform stand: higher quality of medical service; higher efficiency – reaching higher standards at moderate levels of expenditures; rational utilization of the available financial, material and human resources; equal access to medical services; satisfaction and mutual trust between patients and medical staff. With the adoption of the law the National Health Insurance Fund (NHIF) was established in order to finance the healthcare system mainly with the resources accumulated by collecting the mandatory health-insurance contributions.

For the period 2007-2009 the healthcare expenditures are foreseen to increase annually by BGN 200-220 million. However, the more important issue is to achieve a higher efficiency of those expenditures, a better monitoring and optimization of the available resources, and their allocation to the improvement of the performance of physicians and hospitals. The quality of the supplied healthcare services at present does not correspond to the actual needs of citizens. The issue related to monitoring and control in the healthcare system and in the health insurance system still remains unresolved. There are a series of problems related to the financing of the medical institutions. The undertaken reform of the sector has not achieved the expected results yet – to improve the financial condition and the functioning of the system, to improve efficiency of fund allocation while retaining the universal and equal access and coverage of healthcare. In this relation, it is necessary to undertake some actions to resolve those issues, the most important of them being:

- To guarantee the access to high-quality healthcare services through the improvement and financial security of the medical-service package provided to every person having health insurance;
- A fair resolution of the issue related to health insurance contributions through a classification of the persons with infringed health-insurance rights and providing an opportunity for renewing their inclusion in the health insurance system;
- Increase of the public funds allocated to healthcare;

## *Convergence Programme (2006-2009)*

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- Pursuance of a rational drug policy through continuous monitoring of the medicine-supply system, including the prices of medicines;
  - Priority financing of programmes related to the treatment and prophylaxis of nation-wide significant diseases;
  - Introduction of a system for efficient control both at the level of supplying healthcare services and at the level of financing the healthcare system;
  - Restricting the non-registered payments in the system.
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## 3. GENERAL GOVERNMENT BALANCE AND DEBT

### 3.1. Policy strategy

The fiscal policy is directed at maintaining the macroeconomic stability and the sustainability of public finances as well as creating pre-conditions for economic growth and competitiveness of the Bulgarian economy.

The levels of the fiscal parameters for the period 2007-2009 are compliant with the forecast for the development of the main macroeconomic indicators and create conditions for achieving the government priorities while at the same time balancing the fiscal risks with the budget constraints. The fiscal policy of the cabinet provides flexibility for adequate reaction to potential external and domestic shocks, including the high level of the current account deficit. The latter represents an important consideration when setting the fiscal target for the period.

Maintaining the medium-term fiscal stability for the programme period is based on the basic policy principle of running a budget, which is close to balance or in surplus. The general government surplus during the period 2007-2009 will be kept in the range of 0.8%-2% of GDP. The adherence to tight fiscal discipline has proved its effectiveness in the past years and this determines the necessity to maintain it in the future as well.

With regard to the government debt policy, the Constitution defines the Parliament as the institution, which denounces and ratifies by law international contracts, which contain financial obligations for the state, and gives its consent for contracting government borrowing.

The rules for contracting, servicing, accounting and management of the government debt are specified by several laws:

1. The Government Debt Law (GDL), adopted in 2002, regulates the procedures and conditions for issuing debt and government guarantees, the possible types of debt as well as the debt intermediation. It defines the government, consolidated government and the government and government-guaranteed debt. According to the law, the outstanding consolidated government debt at the end of each year should not increase on an annual basis as a share of GDP as long as it is above 60%. This provision guarantees the compliance with the criterion of the Stability and Growth Pact. The particular limits, associated with this rule, are determined each year with

the Law on the State Budget for the respective year. GDL delegates the responsibility for preparing a three-year debt management strategy to the finance minister. The main objective of the document is to determine the most important directives and priorities of the debt policy in the medium term. The strategy is updated once a year and is adopted by the Council of Ministers. In addition, the finance minister is legally obliged to prepare an annual report on the fulfilment of the defined targets during the past year.

2. Each year the Law on the State Budget determines the ceiling on the government borrowing and the maximum level of the government debt at the end of the respective year.
3. The Municipal Debt Law governs the procedures and conditions for issuing municipal debt and municipal guarantees. It defines the term “municipal debt”. According to the law, the municipal debt is not guaranteed by the central government and does not represent a liability for the state except in the cases of an issued government guarantee. The law limits the annual level of the municipal debt service payments to 25% of the total own revenues plus the equalizing budget subsidy. The limit for issuing municipal guarantees is 5% of the total own revenues plus the equalizing budget subsidy.

The achieved success of the rational government debt management policy under conditions of consistent and strict fiscal discipline creates room for shifting the emphasis from restricting the nominal debt level to improving its structure. This includes diversification of the investor base, selecting market debt instruments by taking stock of the current market conditions as well as assuming new debt for financing infrastructure projects of high importance for the economy.<sup>26</sup>

### **3.2. Medium-term objectives**

The medium-term objectives of the fiscal policy are subordinated to the general strategic targets of the public finances and more specifically to maintaining the

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<sup>26</sup> The assumption of new loans will take place only at the expense of debt restructuring rather than net increase of the debt level.

macroeconomic stability and fiscal discipline as well as creating conditions for sustainable economic growth and catching up with the living standards in the EU.

To this end, the main priority will be to hold a stable fiscal position, which should contribute for containing the imbalances in the other economic sectors. This position will be in conformity with the phase of the economic cycle in order to avoid a pro-cyclical impact of public finances on the economy. In the medium-term the government policy will target a budget balance in line with the recommendations of the Stability and Growth Pact by maintaining a neutral cyclically-adjusted stance and letting automatic stabilizers work. In this sense, the medium-term objective (MTO) of the public finances will be to reach a balanced cyclically-adjusted budget in 2011 when the economy is expected to return to its potential output level.

At the same time, the budget policy will aim to react to the challenges of the demographic developments in the country. The main emphasis will be to reconsider the social policy in order to improve the efficiency of the social safety net and to restrain the increase in the number of beneficiaries under various social programs. The government will continue with its active labour market policy, which will be concentrated on stimulating employment and investment activity as well as on programs for retraining the labour force in order to improve the flexibility of the labour market.

The main medium-term priorities of Bulgaria in the field of debt policy reflect the full continuity with respect to the strategic targets defined in the Government Debt Management Strategy for the period 2003-2005 but at the same time they take into account the specifics of the new programming period and the EU accession of the country from the beginning of 2007. The definition of the debt management targets takes into consideration the new external political environment, the macroeconomic forecast, and the market situation as well as the analysis on the current and future path of the government debt. These targets for the next three-year period are:

**Target 1: Strict monitoring of the debt level.**

Tight control over the debt level is provided for with the aim of eliminating its potential negative impact on macroeconomic stability, the planning and execution of the government budget and the compliance with the nominal convergence criteria for entry in the Eurozone.

**Target 2: Maintaining a low level of debt servicing expenditures in the medium and long term within acceptable risk limits.**

To achieve this target the emphasis will be put on:

- An optimal choice of debt instruments (volume, type, structure, place of issuance, and other main parameters) for new borrowing;
- Support for the development of a liquid domestic capital market for government debt;
- Achieving a uniform time distribution of interest and debt amortization payments;
- Priority will be put on contracting new debt under fixed coupon rates while still considering the opportunities, provided by floating coupon rates in a low-interest environment on the external market;
- Sticking to a policy of borrowing in BGN or in EUR.

**Target 3: Securing stable sources for financing the budget and debt roll-over:**

- Floating of securities on the domestic and international capital markets.

The choice of a particular market will be made on the basis of capital cost and denomination of the debt instruments in euro, considering the good position of the country on the US and Eurobond markets.

- Loans from international financial institutions (IFIs).

The EU accession of Bulgaria and the target of achieving a fast rate of convergence determine the need for close cooperation with IFIs as a source of additional financing in the process of utilizing the grants from the EU funds.

The efforts to improve the quality of public finances will continue in the medium term. The expenditures side of the budget will be one of the fiscal policy instruments for stimulating the economy by optimal allocation of the available resources to strategic sectors. The planning and execution of the budget will consequently seek to enhance the efficiency of budgetary spending and to change its structure in order to achieve a positive impact on potential economic growth. In this regard the priority sectors will be education and healthcare as their development supports the accumulation of human capital in the economy. Moreover, the current situation of these two sectors suggests the need for structural reform in order to optimize their operation and to improve the efficiency of public spending in these areas by linking it with specific results.

The process of raising the quality of the public finances will be also related to increasing the share of the capital outlays in total budget expenditures. This corresponds to

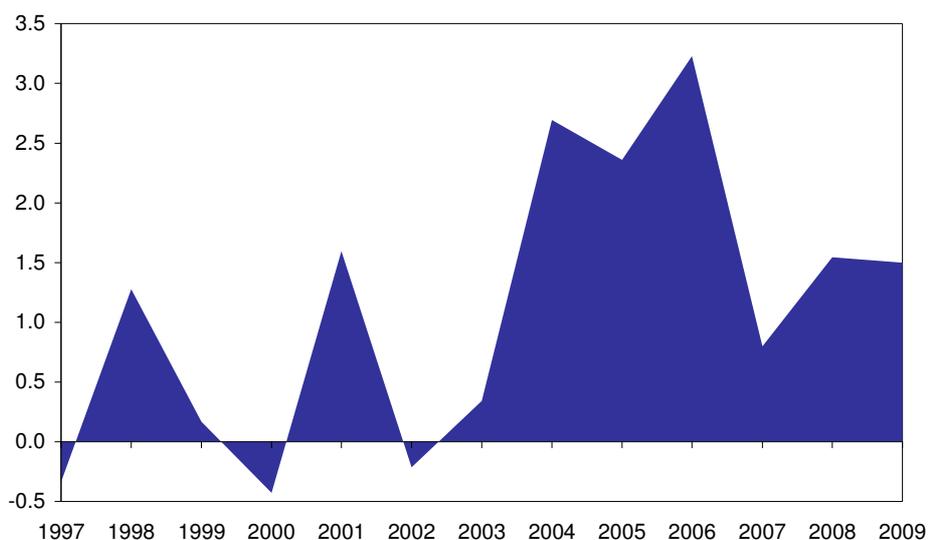
the need for building and modernization of the infrastructure in the country, which should improve the business environment and stimulate the economic activity. This process will be supported by financing from the EU funds and therefore, creating conditions for their effective utilization will be one of the priorities of the fiscal policy. Accordingly, earmarking of sufficient budget resources for national co-financing is a clearly defined target when planning public spending.

### **3.3. Actual balances and implications of budget for next year**

The consolidated budget registered a cash surplus of EUR 1.1 billion for the first three quarters of 2006 and increased by 37.2% compared to the same period of the previous year. It reached 4.4% of GDP but is expected to decline significantly during the last two months of the year due to a seasonal hike of the budget spending. The primary surplus amounted to EUR 1.4 billion, or 5.7% of GDP.

The achieved high surplus for the period is due mainly to the strong collection of the budget revenues. The total revenues increased by 9.6% on an annual basis for the period as a result of good tax compliance. The tax revenues were up by 11.3% year-on-year while the non-tax revenues dropped slightly. Similarly to last year, the high growth of indirect tax revenues was determined by strong imports. Revenues from VAT and custom duties rose respectively by 17.2% and 19.5%. The latter already exceeded the planned level for the year while the former met the plan at 73.3% but are still expected to outperform the annual target by 3.5% for the year. The excise revenues were negatively affected by stock accumulation at the end of 2005, which took place in order to beat the already announced hike of the excise rates on fuels from the beginning of 2006. These stocks were consumed until the beginning of the second quarter of this year, after which the excise revenues started to show a steady growth due to the higher rates, and ultimately recorded an increase of 15.8% year-on-year for the January-September period.

**Figure 8: Net borrowing (-)/ net lending (+), % of GDP**



Source: MoF, AEAF

The most significant change in the tax and social security burden from the beginning of the year was related to the reduction of the pension contribution by 6 percentage points, which was estimated to cause a EUR 350 million loss for the budget. The revenues from social security contributions fell by 2.5% on an annual basis for the first three quarters, corresponding to an actual revenue loss of EUR 190 million, based on AEAF calculations. This result gives reasons to believe that the effect of the rate cut was overestimated. One possible reason is the positive effect of the reduced rates on the grey economy reflected in higher social security contributions compliance.

A similar effect might be present in the corporate income tax compliance as the revenues from it increased substantially for the period without any change in the tax rate. Another important factor is the favourable economic development reflected in an improvement of the companies' financial results. On the other hand, the positive influence of these factors on the revenues from personal income taxation were not observed directly due to the reduction of the tax burden with the adopted change in the income brackets from the beginning of the year.

The expenditures in the consolidated budget increased by 6% year-on-year for the period and thus lagged behind the revenue growth. Their performance was dominated by the current spending as the capital outlays remained practically unchanged at their nominal level from last year due to lags in their utilization. The interest outlays were down by 7.1%

for January-September and the subsidies – by 24%. The lower expenditures on subsidies are mainly on account of healthcare financing but they are expected to partially catch up until the end of the year due to settlement of arrears in the sector.

The social field was an obvious priority of the fiscal policy for the year. The social spending of the consolidated budget increased for the period by 13.3% year-on-year, driven both by higher pension payments and by higher benefits. Their growth was due to the measures for improving the financial situation of the pensioners, which included raising the level of the pension floor and the pension ceiling from the beginning of the year and the second indexation of the lowest pension levels (to BGN 150/EUR 77) as well as the minimal pension for period of social security schemes participation and age from July 1, 2006. The health insurance contributions had a significant weight in the increase of the benefits resulting from higher spending on medical and dental services and drugs.

The finance ministry organized on 10-12 July, 2006 a pre-accession meeting with Eurostat experts in view of the commitment to the EC for regular submission of statistical information (preparation of the notification tables on the budget balance and debt). The aim of the meeting was to clarify in details the sources and methodology for compiling the required balance and debt data and to pinpoint the areas, where further improvement was necessary for full compliance with Eurostat standards and regulations. A number of methodological issues were discussed, related to the gathering and submission of data under the excessive deficit procedure. The Eurostat mission acknowledged the progress of the country in the field of government finance statistics, emphasizing that the methodology for preparing the 2002-2006 notification tables of Bulgaria corresponded to a large extent with the ESA95 regulations and the Manual on deficit and debt. The Eurostat experts gave specific recommendations for achieving full compliance and suggested that the notification tables be sent by the country in September 2006 as well (as is the usual practice with the EU Member States). The country did submit updated notification tables in September, which reflect the remarks of the mission and for the first time present consolidated data for the debt of the “General Government” sector. For this purpose an evaluation of the assets, owned by the sub-sectors of the “General Government” sector was prepared in order to eliminate government debt, held by budgetary units. In this way the country displayed readiness for full cooperation and strict compliance of the Eurostat instructions and simultaneously achieved significant progress in the synchronization of the government financial statistics with the European requirements.

More details on the methodological developments in the financial statistics of the government sector are provided in Appendix 3.

The close cooperation between the institutions responsible for the reporting of statistical data of the Member States and the acceding countries is of paramount importance for the quality of the information submitted to the EC. Therefore, a Memorandum of cooperation was signed in 2005 between the BNB, NSI, MoF and the Financial Supervision Commission on the preparation of quarterly and annual national financial accounts and notification tables on the government balance and debt. The signing of an Annex to the Memorandum about the additionally required data from the government financial statistics by ECB and Eurostat is pending.

### **3.4. Structural balance and fiscal Stance**

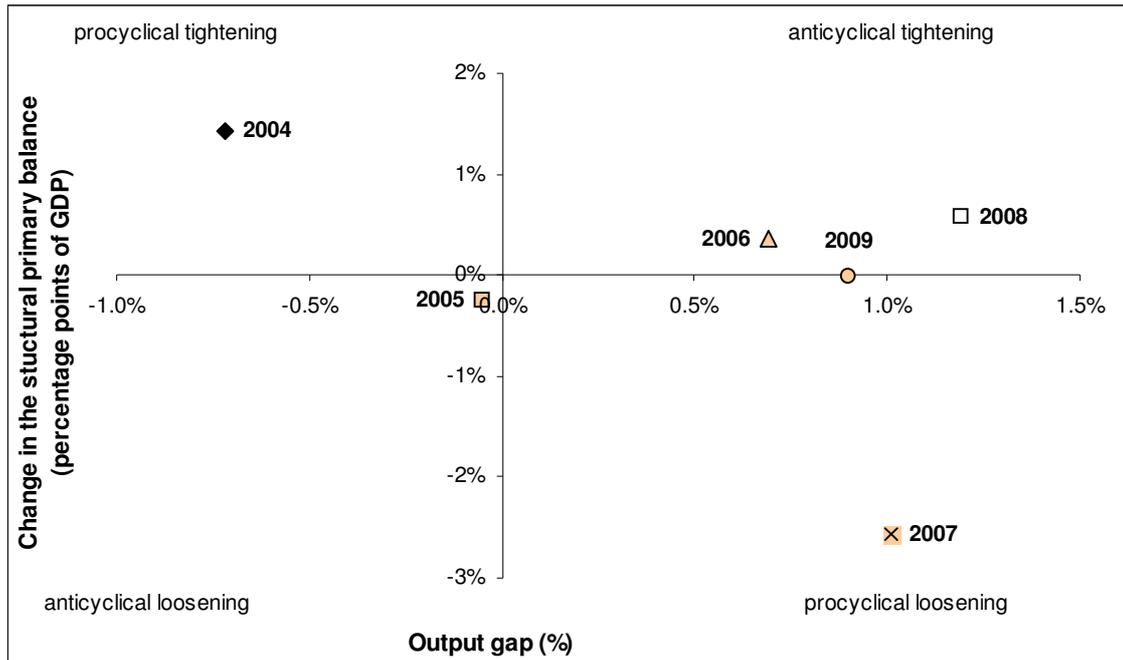
The planned conservative policy of the Cabinet will guarantee the achieving of a cyclically-adjusted surplus for each year during the programming period. Maintaining this fiscal stance corresponds to the economic cycle phase since it is expected that the economy will remain above its potential until the end of the period. The one-off fiscal loosening in 2007 is associated with the provision of buffers, which should accommodate the risks for the public finances arising from the EU accession in 2007. Despite that, the medium-term fiscal framework sets mechanisms to guarantee the accumulation of savings in light of the need to avoid a pro-cyclical fiscal position. These savings could be fully realized with the rule of disbursement of only 90% of the ceilings on the primary spending of the budgetary units. The remaining 10% will be saved in order to reach a surplus on the consolidated budget of no less than 2.0% of GDP.<sup>27</sup> The condition for this rule is emergence of a risk that the current account deficit will deteriorate on an annual basis. The main macroeconomic scenario of AEAF does not project such deterioration but the margin is not high and even a slight forecast error would trigger the savings rule. It would secure an increase of the budget surplus against the planned level by EUR 350 million, or 1.3% of GDP. In addition, any over-performance of the revenues at the end of the year will be saved. The level of the cyclically-adjusted surplus will follow a convergence path to the

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<sup>27</sup> Article 5, paragraph 4 of the Law on the State Budget of the Republic of Bulgaria for 2007, promulgated SG issue 108/29.12.2006.

MTO of a balanced budget on a cyclically-adjusted basis in 2011. A gradual loosening of the fiscal position would be implemented after 2008 when the overheating is projected to start decreasing. The cyclical component of the budget surplus represents a small share of the total balance due to the relatively low sensitivity of the budget to the economic cycle as well as to the low output gap. In the medium-term, no one-off measures are foreseen, which might have extraordinary impact on the budget execution.

**Figure 9: Cyclical fiscal position**

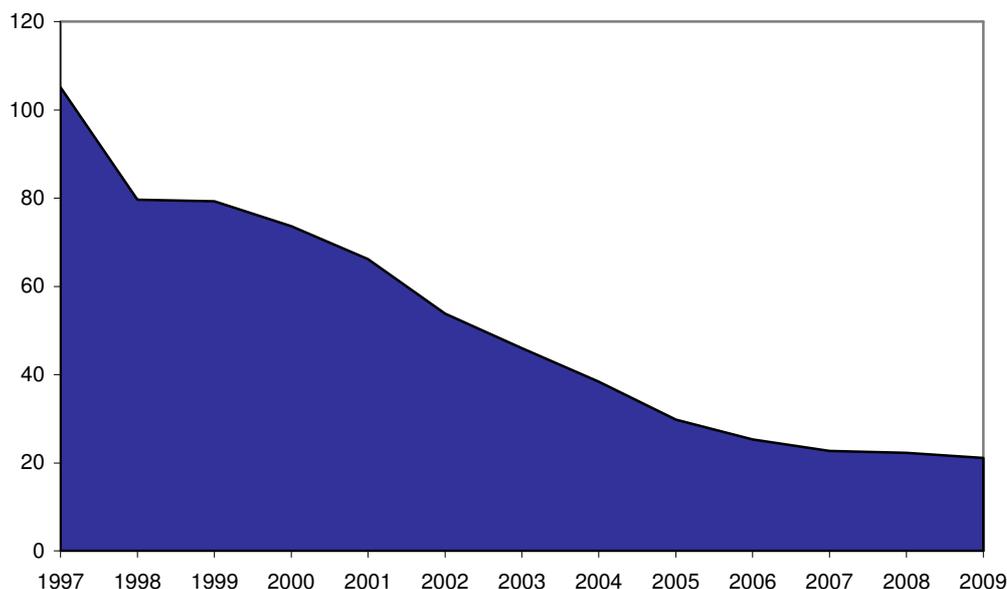


Source: AEAF

### 3.5. Debt levels and developments

The persistent downward trend in the government debt level continued during the current year as a result of the favourable domestic and external macroeconomic environment, the expectations for achieving a budget surplus (for a third consecutive year) and the government consistent policy for debt management. The level of the government debt is projected to amount to EUR 6.3 billion at the end of 2006, or 26% as a share of GDP. For comparison, the levels of these indicators at the end of 2005 were EUR 6.4 billion and 29.8%. The central government accounts for the majority share of the total consolidated government debt during the current year as well – the statistical data for 2005 showed that this share amounted to 98.9%.

**Figure 10: Government debt, % of GDP**



Source: MoF

The reduction of the government debt in 2006 was significant – EUR 517 million, despite it had the largest weight in the consolidated debt. This reduction was a result of the negative net external financing as well as the early payment of loans to the WB and the IMF with a total volume of EUR 339.4 million. The changes in the currency structure are determined by the government policy of gradual increase in the euro-denominated debt in the conditions of the acting currency board arrangement and the peg to the euro. The share of the euro-denominated debt is expected to reach 51% at the end of the year. Consequently, the portion of the debt, which is not sensitive to exchange rate fluctuations, will be almost 70%. The share of the debt, which pays out fixed interest payments, will amount to the same level, rising by 7 percentage points since the beginning of the year.

The debt servicing in 2005 remained at levels identical to the previous year and the interest expenditures amounted to 1.6% of GDP and 6.3% of the tax revenues. These indicators are projected to reach 1.4% and 5.5% respectively at the end of 2006.

The active dialogue with the rating agencies continues fully in line with the strategic directions for development, defined in PEP 2005 and the Debt Management Strategy. Confirming the achieved positive results in the economy during 2005, *Standard & Poor's*, *Fitch* and *JCRA* upgraded once again the credit rating of the Bulgarian long-term debt in foreign currency, which is already two notches above investment grade. This will

contribute to reducing the cost of future external financing if needed and will create more favourable conditions for the investor confidence in the country.

The realized budget surplus at the end of 2006 was 2.4% of GDP. It is expected that a surplus would be reached for 2006 as well (3.2% of GDP), which means that the new borrowing would be used only to roll over the existing debt, to stimulate the liquidity of the domestic securities market, and to finance new projects under the EU funds.

The fiscal reserve amounted to EUR 2.3 billion at the end of 2005, given the legislative minimum of EUR 1.3 billion. The main source for the accumulation of these significant funds was the surplus on the consolidated budget, generated by the strong imports and the sharp increase in the oil prices, together with the improvement of the tax collection and the better efficiency of the tax and customs administration.

The accumulation of free financial resources allowed the Cabinet to reduce the nominal level of the government debt by paying in advance part of its liabilities to the WB and the IMF. The high level of the fiscal reserve will provide an opportunity to use the future financing for achieving particular debt management objectives, rather than just provide resources for the debt servicing.

### **3.6. Budget aspects of main structural reforms**

#### **3.6.1. Social security**

Bulgaria successfully introduced a points system for pensioners (the sum of age and period of insured length of service), accompanied by gradual increase in the retirement age until it reaches 60 years for the women and 63 years for the men<sup>28</sup>. The number of the new pensioners was thus limited by strengthening the criteria for age and working experience. Consequently, the ratio between the number of the insured and the number of the pensioners improved, which is one of the most important conditions for achieving financial stability of the social security system.

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<sup>28</sup> Reached in 2005

The dependency ratio<sup>29</sup> is expected to gradually decrease from 89.1% in 2005 to 81.2% in 2009 as a result of the introduction of stricter pension eligibility requirements and the growth of the number of the insured people.

The coefficient of income replacement (first pillar)<sup>30</sup> currently stands at 41.8% and is projected to reach 47% in 2009.

The actuarial balance is estimated to remain negative (-5.14%)<sup>31</sup> in 2006 and to increase to -20.99% in 2009<sup>32</sup>. This trend follows from the reduction of the pension insurance contribution by 6 percentage points in 2006 and the simultaneous increase of the minimal pension level and the pensions for age and period of social insurance schemes participation. The total deficit of the NSSI is expected to reach EUR 716 million in 2006.

### 3.6.2. Education

The fiscal risks stemming from the introduction of a new financing model in the education sector are insignificant. The average annual growth of the budget expenditures on education for the period 2007-2009 is planned at 10.5% (around EUR 100 million per year), compared to an annual inflation rate of 3-4%. The expenditures growth in 2007 alone is above 12%. This significant hike aims to secure the required funds for the main components of the new financing model. Its main impact on the government budget in 2007 will be through the increase on its programming component, which will amount to EUR 60 million. This increase is related with the implementation of programs for the optimization of school network and for improvement of the qualifications of the teachers and school managers.

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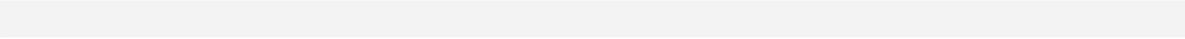
<sup>29</sup> Number of pensioners to 100 insured people

<sup>30</sup> Average pension level to net social security income.

<sup>31</sup> The forecasts are based on the long-term actuarial model, used in the NSSI, which includes the projections of the actuarial condition of the public social security funds for the 2006-2050 period on a consolidated basis.

<sup>32</sup> The forecasts are based on the long-term actuarial model, used in the NSSI, which includes the projections of the actuarial condition of the public social security funds for the 2006-2050 period on a consolidated basis. They are made under demographic assumptions, corresponding to the population forecasts of the Demographic Institute of the National Academy of Sciences (total fertility ratio of 1.65% in 2050, mortality ratio of 1% in 2050, net migration of 20 000 people in 2050). The macroeconomic assumptions in the model are in line with the long-term macroeconomic framework, prepared by the AEAF. Assumptions, related to the social security funds: pensions are indexed with 50% of the inflation rate and 50% of the insurable income growth for the previous year under the provisions of art. 10 of the Social Security Code; the social security contribution rate is reduced by 3 percentage points as of mid-2007.

The financing for the introduction of the single standard is fully secured as these expenditures are the most important item in the total spending in the sector – they exceed 65% of the total public spending on education and reach EUR 600-650 million. These expenditures are directly related to the education process. In 2007 they will be increased by around 6.5% year-on-year. Additionally, the budget has earmarked EUR 3.3 million for full compensation of municipalities with a decreasing number of pupils, in relation to the introduction of the single standard. In general, no difficulties are expected in the financing of the single standard system during the period 2007-2009. The main reason is tapping the significant unused reserves to be found by the optimization of the spending in the system. One of the most important reserves is created by the reduction of the number of pupils or the so-called demographic dividend. The expected average annual decline of the number of pupils is around 3.5%. At the same time, around 3% of the children in school age are not covered by the system. One of the main objectives of the reform is to improve this coverage by including 0.5% of all children each year. The net effect from these two factors – improving coverage and declining number of pupils, would still lead to annual reduction of the number of pupils by 3%, which translates into a demographic dividend of EUR 20.5 million per year. These funds might be used as a reserve to finance unplanned spending in the system. Along with that, the compensation for the pupils decline will be eliminated in 2008, which would lead to additional savings. They, together with the average annual increase of the financing for education of EUR 100 million and the EU structural funds, will ensure the financial stability of the system during the programme period.



## 4. SENSITIVITY ANALYSIS AND COMPARISON TO THE PREVIOUS UPDATE

### 4.1 Alternative scenario and risks

The alternative scenario elaborated for the period 2007-2009 is based on the assumption of a 10% lower oil price vis-à-vis the baseline scenario. This, however, has also to do with expectations for a lower inflation rate in the economy<sup>33</sup>. Concerning the remaining underlying assumptions, no change resulting from the expected lower oil price is assumed in them, as it is difficult to gauge the effects accurately due to the lack of data for the used methodology of estimation.

**Table 4: Comparison between the baseline and alternative assumptions**

	2007		2008		2009	
	Baseline	Alternative	Baseline	Alternative	Baseline	Alternative
Average spot oil price, USD/barrel	69.1	62.2	69.1	62.2	69.1	62.2
Inflation rate, end-of-year	3.43%	2.71%	2.95%	2.80%	2.92%	2.73%
Inflation, annual average	4.02%	3.40%	3.00%	2.75%	3.01%	2.75%

Source: AEF

The alternative scenario estimates display a positive effect on the economy in the period surveyed amounting to stronger growth and a current account improvement. Real GDP growth in 2007 is expected to remain unchanged vis-à-vis the base-line scenario while picking up in 2008 and 2009 due to the more robust foreign demand anticipated. Final consumption is to step down insignificantly throughout the period, with the patterns of distribution displaying certain changes. As a result of the weaker exports, government revenues under the alternative scenario are to go on the decrease, entailing lower

<sup>33</sup> The forecasts concerning the world oil price level and the USD/EUR exchange rate are employed as exogenous variables in projecting the changes in the local liquid fuels prices. They are subsequently used to make forecasts as to the commodity groups of CPI, which constitute the core inflation indicator. The groups include food and marketed non-food items (tradables), as well as marketed services (non-tradables). The forecast price index for core inflation is calculated by arithmetically weighting the series representing the price changes of the three groups of commodities and services.

Administrated price inflation is calculated on the basis of future price adjustments for these groups and the excise duty increases related to the alignment of the local duty rates with the EU levels.

The overall forecast CPI is the weighted average of the administrated and free price indices.

government consumption in the entire programming period. At the same time, following the initial drop in 2007, household spending is to go up in 2008 and 2009. The slight increase in exports and imports contraction expected will result in a current account improvement.

The main risks associated with the realization of both the baseline and alternative scenarios are mainly the uncertainty as to the future crude world oil price developments, affecting the price dynamics in the local economy, and hence its growth rate. Furthermore, a certain amount of uncertainty also derives from the specific size of the effect from the country's accession to the EU, but the direction, magnitude and combined outcome of the manifestations are at present difficult to measure..

**Table 5: Comparison between the baseline and the alternative scenario outcomes**

Real growth rates	2007		2008		2009	
	Baseline	Alternative	Baseline	Alternative	Baseline	Alternative
GDP	5.93%	5.93%	6.18%	6.24%	6.14%	6.19%
Final consumption	6.35%	6.06%	6.95%	6.91%	6.54%	6.47%
Household expenditures	6.83%	6.49%	7.06%	7.08%	6.53%	6.55%
Government expenditures	4.39%	4.25%	6.41%	6.13%	6.49%	6.06%
Investments	11.00%	11.00%	9.70%	9.70%	9.60%	9.60%
Exports of goods	13.63%	13.36%	12.85%	12.83%	12.48%	12.46%
Imports of goods	13.93%	13.86%	13.15%	13.19%	13.01%	13.09%
Current account (% of GDP)	-13.60%	-13.27%	-12.76%	-12.42%	-12.40%	-12.03%

Source: AEF

## 4.2. Sensitivity of budget projections to the different scenarios and assumptions

The sensitivity of budget revenues and expenditures to changes in the main macroeconomic parameters and assumptions is not particularly strong. Given the work-out of the currency and interest structure of the debt, the sensitivity analysis has pointed to a relatively weak impact of the key market indicators on debt servicing and the nominal central government debt. Thus, for example, a fluctuation up or down of one cent on average in the EUR/USD exchange rate in the period 2007-2009 will bring about a change in the payments due on principle and interest of less than 1% and 2.5%, respectively of

about EUR 4 million and EUR 7 million. The nominal debt change is estimated at EUR 270 million. The assumptions of a 10% change in the yen's exchange rate (i.e. the currency enjoying the second largest share in the debt's composition after the USD) is not expected to result in a tangible deviation from the mid-term levels of government liabilities planned (about EUR 47 million). Furthermore, a likely change of 10 base points in the six-month LIBOR and EURIBOR is to have an even weaker effect on interest payments. On average, the 0.38% change expected throughout the period under review is to amount to about EUR 1 million in absolute terms. In addition, data indicate that given the same assumptions as to changes in the six-month LIBOR on USD-denominated deposits, interest payments will remain practically unchanged.

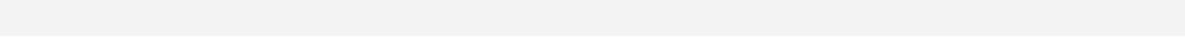
The sensitivity of the budget to the business cycle phase is within the normal value range. Budget revenue elasticity to GDP is estimated at 0.99, running slightly higher than the average in the new EU Member States while remaining well below the average in the old EU members. On the other hand, the elasticity of budget expenditures to GDP is practically nil due to the rather low weight of unemployment benefits within the total current non-interest expenditure. The overall budget sensitivity, as measured by the difference between revenue and expenditure sensitivities, is close to the EU average as a whole: 0.41.

There is a positive correlation between budget revenues and the price of oil. An alternative scenario of the country's macroeconomic development in a medium-term perspective, given the assumption of a 10% lower crude oil price vis-à-vis the baseline scenario, shows that budget revenues are to step down by about EUR 25 million in 2007, EUR 40 million in 2008, and by around EUR 50 million in 2009. However, the lower budget revenues will be entirely due to the loss of VAT revenues, triggered by the decrease in nominal imports and consumption as a result of the lower oil prices. Due to the weak sensitivity of oil consumption to its price dynamics, revenues from excise duties are not to go on the increase, as the quantities of fuel sold are to potentially go up.

### **4.3. Comparison with previous update**

The difference in the fiscal policies vis-à-vis the previous update stems mainly from the tighter budget position in 2006. The deepening current account imbalances and the need for stricter fiscal discipline called for more rigid measures. Furthermore, the estimates

of the output gap are also important as they indicate a persistent tendency of a certain overheating of the economy. The huge 2006 surplus will allow for some additional spending while suffering a revenue loss having to do with the country's accession to the EU. This will correspondingly be reflected in the generation of a surplus of the general government during the entire period instead of the previously planned deficits for 2007 and 2008. The comparatively more restrictive fiscal policies, together with the higher-growth forecasts, are the main factors at play behind the revisions in the government debt for the period 2006-2009.



## 5. QUALITY OF PUBLIC FINANCES

### 5.1. Policy strategy

The main priorities of the 2007 budget are to create conditions for maximal utilization of the resources from the EU funds, increased emphasis on the social aspect of the budget and building up of a modern society, based on new technologies, innovations and accumulation of human capital. These priorities correspond to the main areas for economic development of the country. The 2007 budget addresses them in a balanced way with regards to the limited budget resources and the top objective of maintaining the macroeconomic stability.

The planned surplus on the consolidated budget amounts to EUR 197.2 million, which represents 0.8% of GDP. The budget law for 2007 envisages fiscal mechanisms for reaction against external shocks, which include:

- planning of a reserve for financing unplanned and urgent expenditures as well as structural reforms, equal to 0.6% of GDP;
- a provision, allowing disbursement of only 90% of the primary spending of the budget spending units<sup>34</sup> in case of a deterioration of the deficit on the current account balance. The provision would be in force till achieving a surplus on the consolidated budget not lower than 2.0% of GDP.

The restrictive fiscal policy takes into consideration the deficit of the current account of the balance of payments and the possible impulse from the EU funds inflows on the domestic demand.

### 5.2. Developments on the expenditure side

The total consolidated public expenditures would amount to 41% of GDP in 2007, including the contribution to the EU budget.

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<sup>34</sup> This limit is not applied to the Financial Supervision Commission, the National Audit Office, the Higher Judiciary Council, the Bulgarian National Radio and the Bulgarian National TV and to transfers for universities under the authority of the education or defence ministries, all of which have independent budgets.

The government will concentrate its efforts and measures on the efficient use of the public resources. The quality of the public finances will be increased through improvement of the procedures for strategic planning and control of the public spending, their identification and association with specific programs and results in order to enhance their economic benefit, efficiency and to achieve optimal allocation. The last stage of the implementation of the programme budgeting approach was completed during the procedure for budget 2007 by including all line ministries in this process.

Budget 2007 gives priority to the capital outlays, which increase significantly compared to the planned 2006 execution. The main share of the investments will be directed to transport, defence and security, environment, education and agriculture. This will be at the expense of a reduction in the spending on maintenance as a share in GDP, which will accommodate the restructuring of the budget spending.

Education funding, planned at 4.2% of GDP in 2007, will cover the government priorities in the sector. Budget 2007 introduces new financing model of the education system, based on the output principle. Measures are taken for implementing the decentralized management approach in the sector.

The public expenditures on healthcare are planned at 4.3% of GDP in 2007. The deficit of the NHIF for the year will be covered by a subsidy from the central budget to guarantee the stability of the institution.

A pension indexation of 8.5% is set in the budget, to be implemented from July 1, 2007. The rate is calculated as the arithmetic average of the consumer price inflation rate and the insurable income growth for the previous year. The maximal level of the pensions is tied to the maximal insurable income for the previous year.

Resources for wages in the budget sector are planned at more than EUR 1.5 billion, which finance wage indexation of 10% from the middle of the year assuming an average employment level of 490 000 people. This policy will ensure a growth of the average wage in the sector of over 12% year-on-year. The minimal wage for the overall economy will be increased from EUR 81.8 to EUR 92 in 2007.

### **5.3. Developments on the revenue side**

The revenues of the consolidated budget will increase slightly to 41.8% of GDP in 2007 against the expected execution for the current year. The projected higher inflows of grants from the EU funds are the main factor behind this forecast. Practically, however, their level would remain relatively stable during the programme period in the range of 41.7-41.8% of GDP. At this stage, changes in the tax rates are planned only for 2007 with the exception of the excises, which would be increased in line with the adopted schedule for alignment with the minimum EU levels. There are no plans to cut any tax rates for subsequent years and the Cabinet has assumed a political commitment not to propose hikes of the direct tax rates.

The corporate income tax rate will be reduced by 5 percentage points to 10% in 2007. The expected revenue loss for the budget is estimated at EUR 148 million. On the other hand, this measure should lead to additional revenues due to the induced reduction of the grey economy as a result of the lower tax rate. The total corporate income tax revenues will increase by around 7% next year<sup>35</sup> as a result also of the expansion of economic activity, which has a more than proportional impact on the companies' financial result. Nevertheless, the lower tax rate will translate into a reduction of the revenues from this tax as a share in GDP.

Other changes concerning the tax regime for corporate entities will involve the elimination of the donations tax (revenues loss of EUR 3 million) and the taxation of the social spending of the employers. The latter will be treated under the regulations of the Personal Income Tax Law, which will lead to a reduction of the corporate income tax revenues by around EUR 35 million but would have a positive impact on the revenues from the personal income tax.

The changes in the taxation of personal income aim to ensure a growth of disposable income in real terms through a reduction of the tax burden. This reduction will be directed with priority to people with low or middle level of income. To this end, the non-taxable portion of the income will be increased by 11% to EUR 102.3 from the beginning of 2007 and the highest impact from this measure fall in the income range of EUR 150-200. The loss for the budget is expected to amount to EUR 60 million but it will be partially

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<sup>35</sup> Against the expected revenue collection for 2006

compensated by an increase in the wages in the budget sector by 10% from the beginning of next year.

The VAT revenues from 2007 onwards would be seriously affected by the EU accession process. Introducing the EU regulations on tax incidence and the treatment of imports from other Member States is expected to cause a loss for the budget of around EUR 230 million. In addition, the risk for tax evasion will increase because of the reduced customs control over VAT payment after EU accession and the introduction of a more liberal administrative regime. Nevertheless, the VAT forecast is based on a more favourable assumption on the collection rate of 93% in 2007 against the expected 91.5% rate for 2006. It envisages a 10.5% year-on-year growth of the VAT revenues in 2007, compared to the expected execution in 2006.

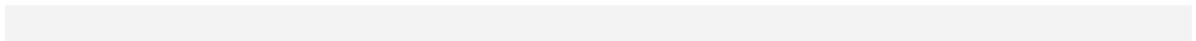
Excise taxes on coke, coal and electricity will be introduced in 2007 in line with the EU regulations. The positive effect for the budget from this measure will be minimal and is estimated as additional budget revenue of EUR 7 million. A more pronounced positive impact will be realized from the planned raise of the excise rates on some fuels, which will bring EUR 72.5 million higher revenues in the budget. The revenues from the excise taxes will be also dependent on the import dynamics, which assumes the trend of accelerating import growth of excise goods to be preserved throughout the programme period. The excise rates on coal, coke and electricity will be hiked again in both 2008 and 2009.

The adoption of the Common Customs Tariff of the EU after the accession in 2007 will translate into a reduction of the average customs rates on import. As a result, the revenues from customs duties should significantly drop in 2007 and their level would reach EUR 123 million. Compared to the hypothetical revenues under the acting Customs Tariff of the Republic of Bulgaria, this forecast reflects a revenue loss of EUR 97 million.

The revenues from social security contributions in 2007 will depend mainly on rate changes. The share of the pension contribution for people, born after December 31, 1959, which is transferred to the second pillar of the pension system, will be increased by 1 percentage point to 5%. In this way, the weight of the pension insurance will be gradually shifted to the second pillar, aiming to improve the sustainability of the system in the medium and long term. The revenues of the social insurance will be supported by negotiation of higher insurable income floors. The 2007 budget allows for a cut in the pension contribution by 3 percentage points from the middle of the year in case of a favourable budget execution. Taking into account the revenue collection for the first half of

2006, this measure should not significantly affect the total budget revenues. The total insurable income in 2007 is expected to rise by 8.1% against its estimated level in 2006 and the number of the insured people is projected to go up by 4.1% as a result of the measures to control the informal labour market. The distribution of the social insurance burden between the employer and the employee will remain constant in 2007 at the ratio 65:35.

The access to financing from the EU structural and Cohesion funds from the beginning of 2007 is expected to lead to a significant growth of the revenues from grants. Their level is forecasted to double in 2007 and to continue increasing during all years of the programme period as a result of increased absorption capacity. At the same time, the non-tax revenues will remain more or less flat during the period. This is related to some revenue loss from lower dividend income after the completion of the privatization process as well as the restructuring of the state-owned gas utility Bulgargas, which will be followed by a gradual reduction and an ultimate elimination of the company contribution to the government budget.



## 6. SUSTAINABILITY OF PUBLIC FINANCES

### 6.1. Policy strategy

Assessments of long-term public finance sustainability draw upon the inter-temporal government budget constraint, requiring that total current government liabilities, i.e. the current public debt and the discounted value of future expenditures should be covered by the discounted value of future budget revenues.

Fiscal policies should be considered in light of the country's stable macroeconomic environment and accelerated economic growth. In this sense, any external imbalances will be partly offset by maintaining a restrictive fiscal stance. At the same time, growth in the economy is to be further boosted by implementing reforms aimed at improving the quality of human capital and labour market efficiency, and reinforcing public-sector management and public infrastructure investment.

### 6.2. Long-term budgetary prospects, including the implications of aging population

In the long term the demographic trends underway in the country rather than one-off shocks are gaining importance concerning public finance sustainability. On the one hand, they influence directly potential economic growth by determining not only its average rate, which can be maintained without supply-side inflationary pressure, but also the opportunities for job creation, and income and welfare generation in general. On the other, demographic trends are also reflected in budget spending (and revenues), in particular in the social area.

The nation's demographic profile is being shaped not only by the common developments shared by all developed economies like decreased marriage and birth rates, large-scale urbanization, etc., but also by some characteristics that are specific for the transition economies - higher mortality rates and intensive emigration.

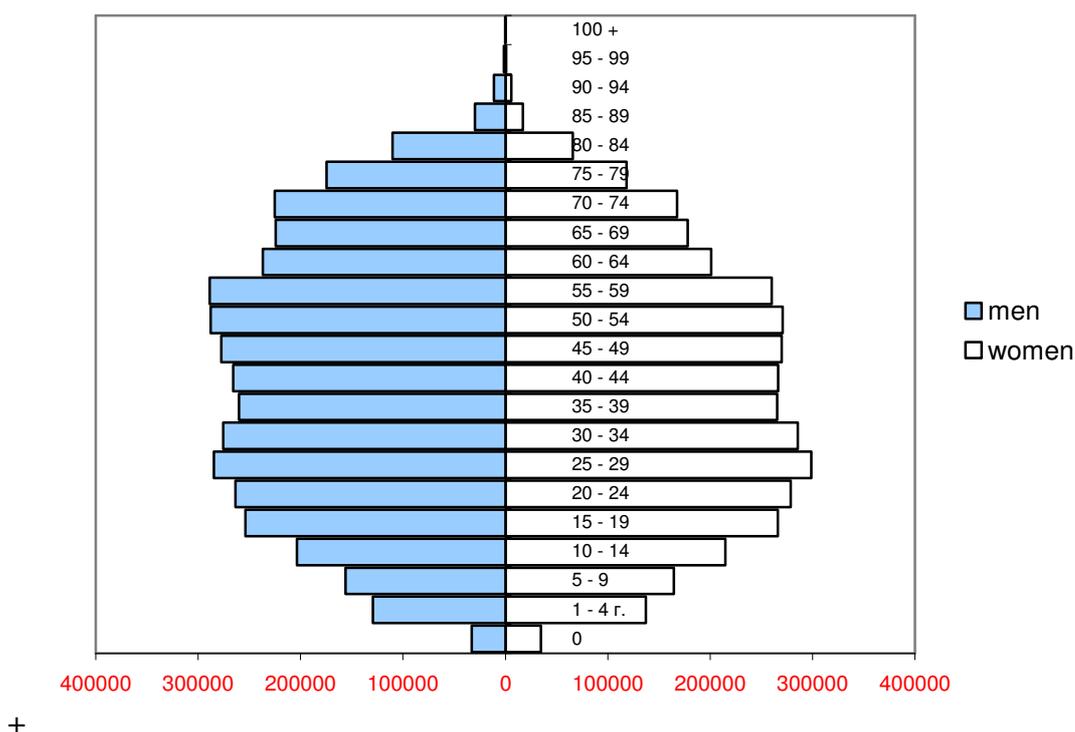
The socio-economic changes in the post-1989 period made the drop in the already deteriorating country's birth rate all the stronger, pushing it down to 7.7‰ in 1997.

Following this trough, the birth rate recovered at a steady pace, aimed to gradually reach the typical of most Western European countries level of 9-11‰ by 2020.

The growth rate of average life expectancy in Bulgaria has been very low, especially since 1990. Throughout 1990 to 2003 life expectancy stepped up by only 0.88 years on the whole. The expectations are that once the reforms in the healthcare system are brought to an end and the quality of life improves, life expectancy is to go on the increase in a gradual manner.

The process of ageing population in Bulgaria over the past few years has deepened, as characterized by rather high birth and death rates as well as by high average life expectancy. The age structure of the country's population has further worsened as a result of the large-scale emigration processes affecting the young age groups in particular, resulting in a larger relative share of elderly people.

**Figure 11: Age structure of the population of the Republic of Bulgaria (2004)**



Source: NSI

Fiscal sustainability in a long-term perspective may be mainly challenged by demographic developments, which exert a strong pressure on public finances by raising government spending on pensions, healthcare and social care for the elderly.

### **6.2.1. Social insurance**

Ever since the start of the reforms in 2000 the dearth of resources in the social insurance system has been met by way of budget allocations on a regular basis because of the high expenditure amounts, scarce revenue collections to cover spending, and the transfer of some part of the Pension Fund contributions to the second pillar as of early 2002. In general, the country's pension system can be said to be insufficiently stable. Its long-term stabilization is foreseen to be attained by achieving a number of targets, as follows:

- Further improvement of the current pension insurance model by a balanced development of all the three pillars of the system;
- Introducing more flexible forms of participation in and contribution to the country's pension insurance schemes and offering incentives and benefit packages for delayed retirement of elderly employees and workers in line with the demographic trends and labour market developments;
- Improving the mechanisms of reporting insurance contributions in setting the pension amounts for insured length of service and age so that stable insurance rights are guaranteed to part-timers, as well as for extra work and other forms of additional and flexible employment;
- Updating pensions according to the so-called golden Swiss rule, leading to a real increase in pensioners' income;
- Elaborating more accurate and adequate mechanisms of setting maximum pensions for length of participation and age in order to improve fairness and enhance compliance;
- Tying the minimum pension amounts for insured length of service and age with the country's minimum wages as of 2007;
- Tying the pension benefits for old age and disability with the official poverty line as of 2007;
- Establishing a Demographic Reserve Fund ('silver fund') providing financial support to the first pillar of the pension insurance system.

Long-term forecasts draw upon the demographic projections of the Centre for Population Studies to the Bulgarian Academy of Sciences (BAS), AEAFF's macroeconomic

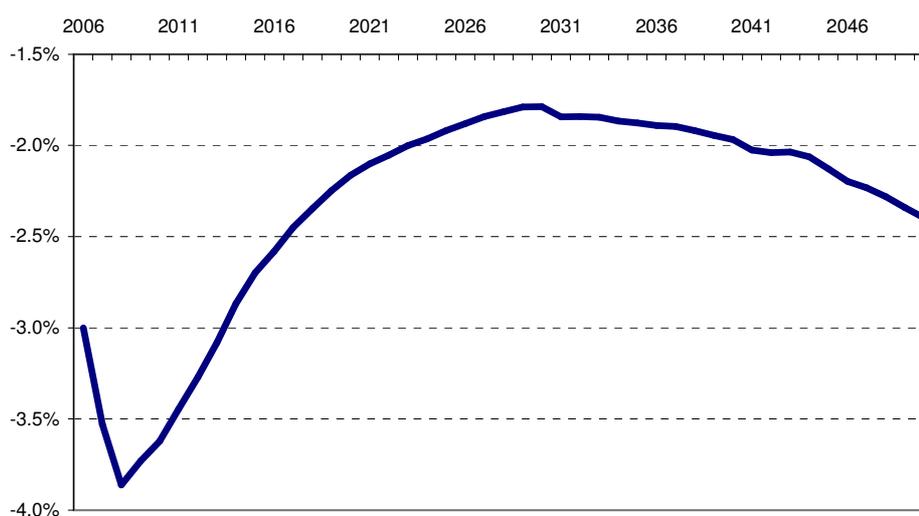
projections, as well as assumptions related to the public social insurance system, as based on the current country's legislation in the area. The model herein used highlights some long-term estimates of the public social insurance funds<sup>36</sup>. A detailed description of the model is given in Appendix 4.

Over the past couple of years the government has introduced a number of measures aimed at improving contribution compliance and collection as follows:

- Registration of labour contracts;
- Introducing minimum insurable income thresholds for employees by economic activity and occupation group;
- Establishment of the National Revenue Agency in charge of both tax and insurance contribution collection.

These measures, however, will not be sufficient to make up for the significant decrease in the contribution amounts to the Pension Fund of the public social insurance system, which is to suffer a shortage of 3.5% of GDP on a yearly basis over the next five years, followed by a period of recovery. As shown in the figure below, the programming period is not marked by long-term financial stability and despite the improvement of about 1.7% of GDP expected by 2030, the shortage in the remaining years to 2050 is estimated at around 2.4% of GDP.

**Figure 12: Balance of the Public Social Insurance funds as percentage of GDP**



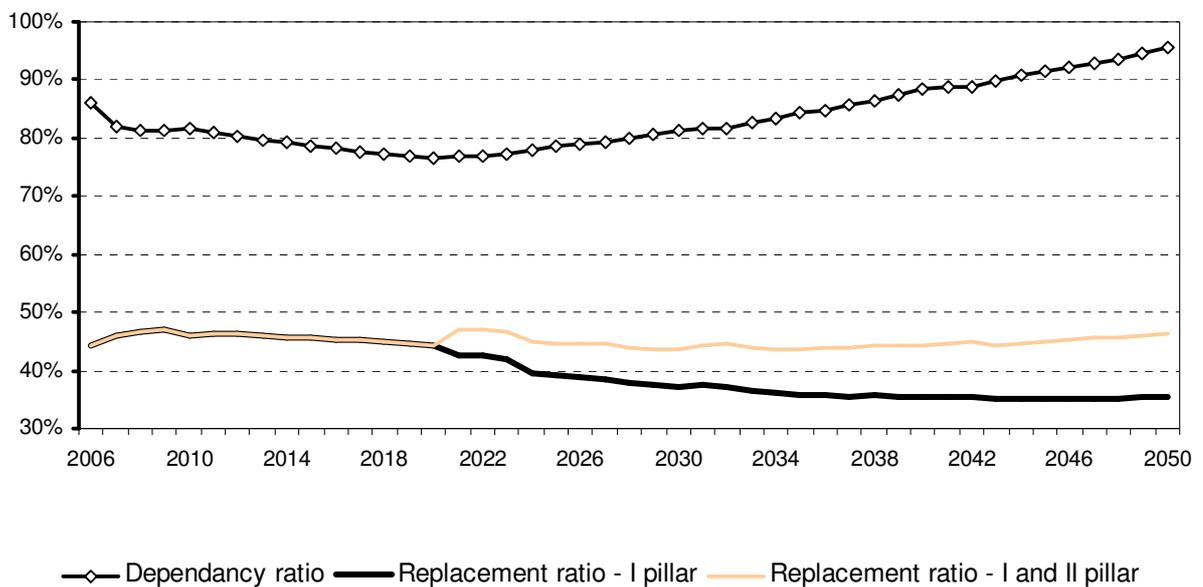
*Source: NSSI*

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<sup>36</sup> The model was constructed by John Wilkin (an actuary working for the World Bank) and NSSI analysts.

The long-term trend of spending in the state pension system derives from the combined dynamics of the age dependency ratio and the income replacement ratio, as shown below. The dependency ratio is expected to go on the downturn in the next decade from its current level of 82% in 2007 to 77% in 2017 as retirement age has been increased and early-retirement entitlement privileges for some categories of occupation removed. In the long run, however, the projected persistently declining fertility ratio and growing life expectancy will push the dependency ratio up to about 95.7% by 2050. This is a rather high dependency ratio, which makes a further increase in retirement age inevitable.

**Figure 13: Dependency and replacement ratios**



Source: NSSI

The upward trend in the dependency ratio is coupled with a long-term downswing in the income replacement ratio<sup>37</sup>. The latter is due to the steady drop in the individual ratio employed in pension calculation. The figure above highlights the income replacement ratio applied to average pensions under the first and second pillars of mandatory pension insurance.

<sup>37</sup> The ratio of average pensions to net average insurable income.

## 6.2.2. Healthcare

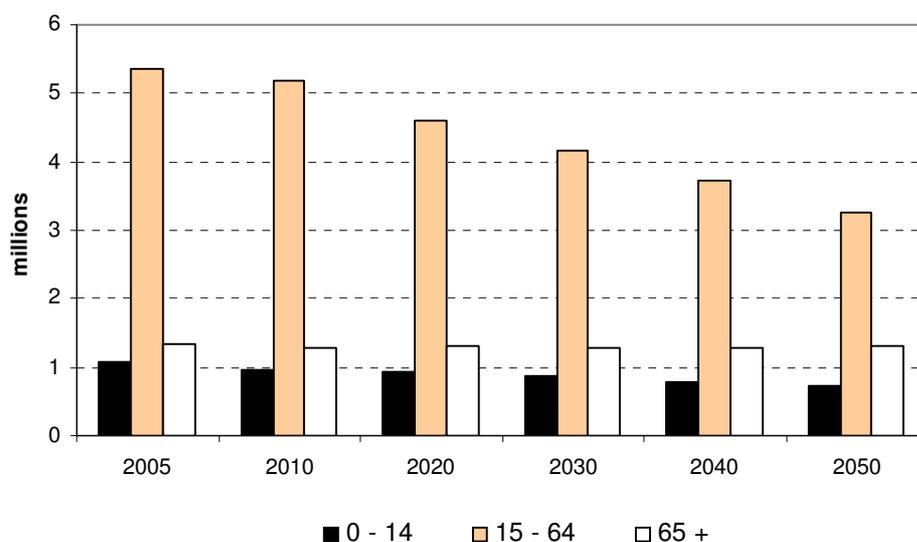
The deterioration in the country's demographic indicators has had far-reaching consequences for the national healthcare system. The process of ageing population continues, and spending on treatment goes on the increase and the higher share of people at retirement age vis-à-vis the working age population makes the burden of payments heavier.

Average life expectancy in good health is a pressing problem for the country, which needs special attention. According to World Health Organization (WHO) estimates the indicator for Bulgaria in 2000 amounted to 61.0 years for males and 65.8 years for females, running some 5 to 9 years lower than in the other European nations.

The aging process will have a most drastic effect on social safety net spending. Although the total amount of this expenditure item as percentage of GDP is lower than expenditures on healthcare, social care schemes per person are rather costly.

Public spending on healthcare is financed by the National Health Insurance Fund (NHIF), ministries, local governments and the central government budget. Due to the worsening demographic structure of the population (i.e. a relatively constant level of the population over working age in place and decreasing numbers of people under and at working age) forecasts for Bulgaria need to accommodate the impact of the demographic developments on healthcare spending.

**Figure 14: The population of Bulgaria in the period 2005-2050 according to the realistic scenario of the Bulgarian Academy of Sciences**



Source: Centre for Population Studies to BAS

According to NHIF data, as of today healthcare expenditures on the age group over 65 run some 85% higher than medical care costs per capita of the 0-65 age group. This fact, together with the forecasts of the Centre for Population Studies, which point to an 8% increase of the population over 65 (from 17 per cent in end-2005 to 25 per cent in the middle of 21<sup>st</sup> century) give us solid grounds to assume that healthcare services financed by public funds will be in greater demand.

**Table 6: Total healthcare spending and expenditures for population over 65**

Indicators	2010	2020	2030	2040	2050
NHIF spending (millions of EUR)	1 271	2 713	6 191	11 502	18 386
Share of the population over 65	17%	19%	21%	23%	26%
Share of healthcare expenditures (population over 65)	28%	31%	33%	35%	39%
Effect of the aging population as of 2010 (in millions of EUR)	-	77	297	827	2 036

Source: NHIF

Drawing upon forecasts concerning the change in the age profile of the population, the expectations are that long-term health care expenditures financed by public funds will amount to 6.44% of GDP as of 2050 if the current health insurance contribution rate is kept at 6% and total spending on health care financed by ministries, local governments and the central budget accounts for 1.43% of GDP.

**Table 7: Total healthcare expenditures covered by public funds (% of GDP)**

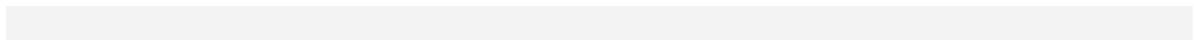
Year	2010	2020	2030	2040	2050
Total healthcare expenditures	5.21%	5.54%	5.87%	6.21%	6.44%
NHIF	3.78%	4.11%	4.45%	4.78%	5.01%
Ministries, local governments and the central budget	1.43%	1.43%	1.43%	1.43%	1.43%

Source: AEA, NHIF

The above estimates provide for a ratio of NHIF expenditures to GDP of 5.01 per cent as of 2050. The Fund's budget is expected to run a deficit throughout 2010 to 2050 (period's cumulative), the level of which is to catch up with revenues in 2040. Therefore, the government needs to undertake urgent measures to reduce the economic effect of aging, which among other things may include broadening the insurance base, improving contribution compliance, etc.

### **6.2.3. Education**

2007 is to see a new pattern of financing pre-school and school education based on a single spending standard, combining staff remuneration costs and the output costs per pupil/child within a year at schools, kindergartens, and support units. Introducing this pattern means improving resource management in the sector while optimising the existing school network. However, having drawn upon assumptions of no policy change, the cost savings, having to do the decline in the under working-age population will remain in the sector. It follows that the new pattern of financing is not to lead to significant budget savings as a whole.



## 7. INSTITUTIONAL FEATURES OF PUBLIC FINANCES

### 7.1. Implementation of national fiscal rules

The Bulgarian medium-term fiscal framework (MTFF) is largely based on the main macroeconomic indicators development scenario, adopted by the Bulgarian government. The main factor for the achieved macroeconomic stability in the last years is the functioning Currency Board Arrangement (CBA) since 1997, largely limiting the Central Bank role in shaping monetary policy. Thus, fiscal policy became the main instrument to achieve the government's economic and social goals.

The MTFF elaboration process and the underlying fiscal objectives model are completely in line with the CBA. The Framework could be characterized as broadly-based, due to the achieved high level of budgetary consolidation. The fiscal risk assessment aims at providing transparent and efficient public finance governance, as well as comparable data on economic development allowing for policy decision-making.

According to the Law on the Structure of the State Budget, along with the budget forecasts, the CoM adopts three-year expenditure ceilings for the first level spending units, fixed for the first year and indicative for the following two years of the period under consideration. All resource reallocations are within the imposed limits for the projected overall deficit of the general government budget.

Every year the Law on the State Budget implies safety margins to neutralize fiscal risks. Budget planning is based on the definition of target values of the amount of the budget deficit/surplus as well as of the expenditures as a percentage of GDP with a view to decreasing the share of the public sector (reducing the amount of non-interest expenditures to below 40% of GDP).

The Law on the State Budget has an annual safety margin (the so-called 90%<sup>38</sup> rule) to guarantee meeting a certain target concerning the deficit/surplus of the general government budget while in the last two years the rule has been implemented as an instrument limiting the deteriorating of the current account balance of the balance of payments. Thus, the rule imposes a limit on spending budgetary resources during the first three quarters of the budget year up to 90% of the amount, envisaged for the respective

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<sup>38</sup> Varying between 88 and 93% through the past years.

quarter but only if the reimbursement is in line with the underlying overall budgetary balance. Budgetary execution is controlled through a system, allocating resources on a monthly basis. This approach conforms with expenditure optimization while keeping strict fiscal discipline concerning the role and commitment of the state to maintain a certain level of public services and to contribute to further institutional building.

The introduction of the single account, along with stricter control and more effective and transparent budgeting, considerably improved budget resource governance.

Possible unforeseen circumstances within the budgetary year are dealt with a special scheme – the fiscal reserve. It minimizes fiscal risk and ensures external debt servicing by keeping a certain minimum, covering its annual size.

## **7.2. Budgetary procedures, including public finance statistical needs governance**

The budgetary process is regulated by the Law on the Structure of the State Budget.

The budgetary procedure for drafting the budget for the following year is regulated every year with a Decision on the Budgetary Procedure of the CoM, starting the planning and drafting phase, and ending with the CoM submitting the draft Law on the State Budget for the following year to the Parliament in October.

The 2007 budgetary procedure includes the following main stages:

- The Minister of Finance instructs the first level spending units (FLSU) to prepare a three-year budgetary forecast within an internal time schedule.
- The Agency for Economic Analysis and Forecasting (AEAF) to the Minister of Finance elaborates a macroeconomic framework with forecasts on main macroeconomic aggregates (GDP growth rate, inflation, unemployment rate, exchange rate, etc.). Every year the framework time horizon is extended with an additional year. The Agency elaborates and updates the macroeconomic framework in March and September respectively.
- The Ministry of Finance (MoF) prepares a three-year budgetary forecast, comprising a substantiation of the macroeconomic forecast for the period under consideration, proposals for the main policies to be implemented by the

government and consolidated levels of budgetary aggregates by sector and function and submits it to the CoM for approval.

The expenditure section of the fiscal framework is based on categories by function (education, social security and care, defence and security, healthcare, etc.). It aims to reflect national priorities in developing sectoral policies in line with revenues, expected by the government. Expenditure allocation by function effectively constitutes sectoral ceilings for the next stage of budget drafting. Expenditures by function do not coincide with expenditures by sectors.

- FLSU submit a medium term budgetary forecast by policies and functions to the MoF, while the MoF simultaneously and independently from FLSU estimates their revenues and expenditures for the three-year period. The CoM Decision on the Budgetary Procedure invites the Bulgarian National Audit Office, the Financial Supervision Commission, the National Social Security Institute (NSSI), the National Health Insurance Fund (NHIF), the Bulgarian National Radio, the Bulgarian National Television, the Supreme Judicial Council and the municipalities whose autonomous budgets are included in the consolidated fiscal programme to submit their medium term budgetary forecasts to the MoF.
- Under a specified time schedule, the MoF consults the FLSU and the National Association of the Municipalities in the Republic of Bulgaria (NAMRB) on clarifying their priority policies and their medium-term budgetary forecasts.
- The Minister of Finance prepares and submits for approval to the CoM expenditure ceilings by FLSU but not by municipality.
- The Minister of Finance addresses budgetary guidelines to FLSU for the elaboration of their annual budgets.
- The MoF, along with and independently from the elaboration of the draft annual budgets of public authorities, makes a draft state budget.
- The MoF updates the draft state budget on the basis of the updated main macroeconomic indicators forecast for the respective three year period and the draft budgets elaborated by the FLSU.
- The MoF consults and signs memoranda and agreements with FLSU clarifying their priority policies and detailed draft budgets, and with the NAMRB on the draft Law on the State Budget in the municipalities section.

- In October the Minister of Finance submits the draft Law on the State Budget of the Republic of Bulgaria for the following year and the budget documents to the CoM to submit it to the National Assembly after discussions and approval.

The draft Law on the State Budget for the respective year consists also of an analytical report, a consolidated fiscal programme and numerous annexes. The draft Budget is discussed by a number of parliamentary committees, the Budget and Finance Committee being in charge.

The submission of the substantive tax laws for the following year, of the annual Public Social Security budget law and of the annual NHIF budget law to the National Assembly by the CoM is in line with the submission of the draft Law on the State Budget for the following year.

The National Assembly adopts the annual PSS budget law. The draft Law is elaborated by the NSSI and is presented to the CoM by the Minister of Labour and Social Policy.

The NHIF budget is a basic financial plan to raise and spend the resources of mandatory health insurance and is not a part of the state budget. The NHIF Board of Governors submits to the CoM the draft NHIF Budget Law via the Minister of Health within the deadlines as envisaged for presenting the draft Law on the State Budget of the Republic of Bulgaria for the following calendar year. The draft Law on the NHIF annual budget goes under examination by the National Assembly simultaneously with the draft laws on the State budget and on the PSS budget.

The structure of the municipalities' budgets is outlined in the Law on Municipalities Budgets, and the budgets are approved by the municipal councils.

In 2003 Bulgaria began to introduce programme- and result-oriented budgeting in sectoral Ministries. Parallel to budget planning in the traditional classification by economic elements, the Ministries submit their budgets in a programme format as well. After a decision taken to gradually involve sectoral Ministries in the process, the Ministry of Environment and Water, the Ministry of Transport, the Ministry of Labour and Social Policy, the Ministry of Education and Science, the Ministry of Economy and Energy, the Ministry of Agriculture and Forestry, the Ministry of Health, the Ministry of Regional Development and Public Works, the Ministry of Culture and the State Agency for Youth

and Sport<sup>39</sup> presented their draft 2007 budgets in a programme format as an element of the draft Law on the State Budget, while the National Assembly will adopt their budgets in a traditional format (revenues, expenditures, transfers (net), subsidies/contributions, deficit/surplus, financing) and their policies expenditures. The programme formats of the 2007 draft budgets of the other Ministries (the Ministry of Foreign Affairs, the Ministry of Justice, the Ministry of Finance, the Ministry of Defence, the Ministry of Disaster Management Policy and the Ministry of Interior) are annexed to the report to the draft Law on the State Budget for MPs information. As stated in the 2007 draft Law on the State Budget, the CoM will submit to the National Assembly for examination and adoption the 2008 draft programme budgets of all Ministries, the State Agency for Youth and Sport and the State Agency for Information Technology and Communications<sup>40</sup> as sections of the 2008 draft Law on the State Budget of the Republic of Bulgaria.

Within a month after the promulgation of the annual state budget law the CoM adopts a Decree on its implementation, specifying the values and natural indicators by public authority and budgetary organization budget and the expenditure distribution by programme within the limits of approved expenditure of the ministries by policy.

The FLSU allocate their budgets, approved by the National Assembly and specified by the CoM, by full budgetary classification and on a quarterly basis.

The CoM organizes the implementation of the republican budget<sup>41</sup> via the Ministry of Finance and the public authorities (FLSU). The Supreme Judicial Council organizes the execution of the judiciary power budget via the Supreme Court of Cassation, the Supreme Administrative Court, the courts, the Prosecutor General Office and the National Investigation Service. The state budget is implemented on a cash basis and is serviced by the Bulgarian National Bank and the commercial banks.

The MoF monitors and analyzes the process of budget execution. The MoF priority is to protect public financial interests. According to the Law on Financial Management and Control in the Public Sector (LFMCPS) and the Law on the Internal Audit in the Public Sector, the Minister of Finance is responsible for the coordination and harmonization of the financial management and control and the internal audit in spending units. In this regard,

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<sup>39</sup> The Ministry of Youth and Sport during the previous government mandate.

<sup>40</sup> It was within the structure of the Ministry of Transport and Communications during the previous government mandate.

<sup>41</sup> Consisting of a central budget and public authorities budgets.

he is responsible for the elaboration, distribution and update of methodological guidelines on financial management, control and strategy and of an integrated methodology on internal audit in the public sector and on EU programmes and funds audit.

The issued methodology and instructions aim at assisting managers of public sector organizations to establish adequate and efficient systems for financial management and control and independent internal audit and to ensure effective financial management of public resources.

To achieve the set of goals, the Minister of Finance prepares an annual report on the state of financial management and control in the public sector. In this regard, by 1 November of the respective year the Minister endorses a Questionnaire on the State of Financial Management and Control Systems. The deadlines to fill it are specified in Article 10 of the Ordinance on the Format, Content, Sequence and Deadlines for Presenting Information under Article 8, paragraph 1 of the LFMCPs, stating that:

- The Heads of second level spending units (SLSU) are to receive by 1 February the reports and filled-in questionnaires on the state of financial management and control systems of their existing lower level spending units;
- The Heads of organizations-SLSU analyze the obtained information, elaborate an independent report and fill in a questionnaire with data on financial management and control of all lower level spending units under their supervision. The preceding year report and the questionnaire are sent to Heads of organizations-FLSU by 28 February;
- The FLSU prepare a report and fill in a questionnaire on the state of financial management and control in their organization, incl. an analysis of the information obtained from SLSU. The preceding year report and questionnaire are sent to the Minister of Finance by 31 March. As an annex to the report, the heads of the internal audit enclose a statement on the compliance between the info in the report and the questionnaire and the findings of the internal audits.

Concerning the internal audit work, its heads elaborate an annual report on it, containing information on completed audit commitments; main findings on financial management and control systems functioning in the organization and recommendations on improving the organization's work; actions undertaken to implement the recommendations, etc.

The annual report is sent to the Minister of Finance by the organization Head by 28 February of the following year.

The info thus obtained feeds the Consolidated Annual Report on Internal Control in the Public Sector, elaborated and submitted by the Minister of Finance to the CoM by 31 May. After its adoption by the CoM, it is submitted to the National Assembly and the National Audit Office (NAO).

The deadline to wind up the state budget is by 31 January of the following budgetary year. The FLSU prepare periodical and annual reports on their budgets' cash execution and on the implementation of programmes in their programme budgets.

The MoF elaborates a report on the execution of the state budget by full budgetary classification on the basis of central budget, the judiciary power and FLSU reports, endorsed by the NAO. The annual report on the execution of the state budget is examined by the CoM and is submitted to the National Assembly. The NAO submits to the National Assembly a report on the report on the execution of the state budget. The Parliament adopts with a Decision the report on the execution of the state budget by the end of the following budgetary year.

The EU pre-accession funds, as well as structural funds and Cohesion Fund resources, are also planned multi-annually on the basis of strategic documents (the PHARE Programme Multi-annual Programme Document 2004-2006, the ISPA Programme Sectoral Strategy on Environment/Transport, the National Strategic Reference Framework 2007-2013), contributing to necessary national co-financing planning.

### **7.3. Other institutional developments in relation to public finances**

#### **7.3.1. Budgetary process reform**

The main objectives of budgetary reform are linked to achieving a stable medium term public expenditure framework, introducing programme and result-oriented budgeting in all stages of the budgetary process, along with the progress of financial decentralization and administrative services improvement related processes.

Concerning legislation, the elaboration of a new Law on the Structure of the State Budget to serve as a framework to improve budgetary procedure and its organization and

to delegate responsibility within the Constitutional powers of all budgetary process participants is a priority. Some of the intentions to modernize financial management procedures were materialized in the already adopted amendments to the Law on the Structure of the State Budget.

The budgetary reforms, implemented in the last few years, aim at shifting the budgetary decision making focus from resource planning at the entry of systems to planning of objectives and results of implemented policies, linked to the resources needed.

The currently implemented approach to plan in detail and control expenditures by economic elements hampers the achievement of technical efficiency. The introduction of more flexible financial management in the FLSU carries the potential risk of financial control loss. This risk is considerably reduced by combining opportunities for more flexible resource management and requirements to achieve certain results.

The finalization of the process of pilot introduction of programme and result-oriented budgeting in the Ministries and the implementation of the other budget reform components set the challenges of their endorsement through legal regulation, improvement of budgetary methodology, increasing the administrative capacity of budgetary process participants, delegating rights and responsibilities with respect to the budget and last but not least establishing and improving the existing information environment for budgetary needs by introducing new IT at the forefront of the agenda.

### **7.3.2. Revenue administration reform**

Since late 2004 the tax administration along with the then project-structured Central Office of the National Revenue Agency (NRA) have been implementing the Revenue Administration Reform Project (RARP) with total staff of both structures being then 9 500 employees. They are responsible for administering BGN 4.8 billion of tax revenues in the central budget (BGN 500 thousand or EUR 256 thousand of revenues per employee).

Within the process of fiscal decentralization municipalities began gradually to obtain the freedom to manage their own budgets. As a result, a total of 1 300 tax administration employees were transferred to municipal administration.

In early 2006 the NRA started to operate, integrating the remaining 8 200 tax administration employees and nearly 900 employees on the already detached “Collection” function of the NSSI (totalling to 9 100 employees).

After the supervening structure optimization and a 10% real staff reduction to spread more evenly the workload of NRA regional directorates and the transfer of nearly 200 NRA employees to the Customs Agency, the NRA staff already consisted of around 8 000 employees in the second half of 2006.

This NRA staff is expected to collect revenues amounting to about BGN 7.5 billion by the end of year for the central budget, for the supplementary mandatory pension social security, and for the NSSI and the NHIF budgets as well (BGN 940 thousand or EUR 481 thousand of revenues per employee thus registering a 88% rise of the indicator compared with 2005).

After the beginning of 2007, marking Bulgaria's full EU membership, the NRA will not administer excise duty revenues (already transferred to the Customs Agency since 1.07.2006), but will be responsible for intra-Community supplies VAT administering, i.e. we expect the NRA to offer the government a stable public claims collection system ensuring the collection of a minimum of BGN 10.2 billion (BGN 1 275 thousand or EUR 652 thousand of revenues per employee, thus registering a 155% rise of the indicator compared with 2005).

The NRA aims at eliminating double data declaration when requiring information from users and particularly when elaborating forms. The information exchange between the NRA, the other administrations and the banks has increased considerably – firms and self-employed do not already submit declarations for tax and social security registration, do not declare newly opened or closed bank accounts, because the information is officially exchanged between the respective organs and the banking sector. The requirement to double register firms for tax and social security purposes was also eliminated.

One-stop shops needed fewer offices and as a result about 140 properties are to be vacated.

The introduced new alternative methods to service obligations via the Internet, the post offices and the banks without visiting the administration contribute to diminishing corruption pressure.

With respect to the NRA activity until now, the following conclusions could be made:

- The revenues per employee indicator registered a 88% rise in one year;

- If the present NRA staff is retained in 2007 as well (consisting of around 8 000 employees), the NRA will register an improvement of efficiency of above 2.5 times for 2 years (i.e. 155% rise of the revenues per employee indicator);
- The NRA is a real example of economies of scale – the implemented structural changes, including staff reduction, makes mandatory social security contributions collection, in theory and practice, free of charge for the budget because the NRA collects taxes and social security contributions with the same number of employees (around 8 000) as in 2005 when it collected only taxes;
- Currently taxes and social security contributions are administered with a 10% expenditures and resources less than previously. The objective set is to achieve greater efficiency compared with the period before the merger of tax administration and NSSI, along with additional budget revenues, diminishing administration maintenance and public resources economizing.

### **7.3.3. Fiscal decentralization**

On November 21, 2006 the National Assembly adopted on a first reading the Law on Amendment on the Constitution of the Republic of Bulgaria envisaging fiscal decentralization strengthening. The amendments stipulate that municipality councils have the power to fix the size of local taxes and fees, as the respective terms, sequence and limits will be set in specialized laws. The latter are expected to be elaborated and adopted within 6 months after the coming into force of the amendments to the Constitution.

### **7.3.4. Public finance training – Public Finance School**

Within the MoF structure a specialized unit – the Public Finance School (PFS) – operates to help establish a modern public finance administration. It provides specialized training courses to target groups within the public administration on the basis of identified training needs. The target groups are employees from central and local administrations involved in the process of financial and budgetary management, management bodies, EU Structural and Cohesion Funds intermediate units and beneficiaries and FLSU internal auditors and Heads as well. The PFS involves as trainers leading Bulgarian and international public finance experts.

**APPENDIX 1:  
TABLES**

**Table 1a. Macroeconomic prospects<sup>42</sup>**

	ESA code	2005	2005	2006	2007	2008	2009
		Level	Rate of change				
1. Real GDP <sup>43</sup>	B1*g	20654	5.54%	5.90%	5.93%	6.18%	6.14%
2. Nominal GDP	B1*g	21448	9.60%	12.86%	9.93%	9.10%	9.18%
<b>Components of real GDP</b>							
3. Private consumption expenditure	P.3	14354	7.57%	6.15%	6.85%	7.09%	6.55%
4. Government consumption expenditure	P.3	3780	3.78%	1.94%	4.39%	6.41%	6.49%
5. Gross fixed capital formation	P.51	4849	19.01%	18.31%	16.83%	12.67%	10.24%
6. Changes in inventories (% of GDP)	P.52 + P.53	3.91%	1.13	0.39	-1.30	-0.70	-0.10
7. Exports of goods and services	P.6	12168	7.24%	10.20%	11.70%	10.84%	10.93%
8. Imports of goods and services	P.7	-15295	14.55%	12.53%	12.72%	11.87%	11.49%
<b>Contributions to real GDP growth<sup>44</sup></b>							
9. Final domestic demand		-	9.83	9.02	10.16	9.72	8.74
10. Changes in inventories	P.52 + P.53	-	1.50	0.32	-1.12	-0.56	0.04
11. External balance of goods and services	B.11	-	-5.73	-3.49	-3.11	-2.97	-2.63

<sup>42</sup> The levels of the variables are in millions of euro.

<sup>43</sup> At 2004 constant prices.

<sup>44</sup> In percentage points.

**Table 1b. Price developments**

	ESA code	2005	2005	2006	2007	2008	2009
		Level	Rate of change <sup>45</sup>	Rate of change	Rate of change	Rate of change	Rate of change
1. GDP deflator		3.84%	-0.94	2.73	-2.79	-1.03	0.11
2. Private consumption deflator		4.64%	0.47	1.27	-2.62	-0.78	-0.49
3. HICP <sup>46</sup>		5.04%	-1.11	2.37	-3.38	-1.02	0.01
4. Public consumption deflator		5.34%	0.63	0.57	-1.02	-1.03	0.01
5. Investment deflator		6.16%	2.02	3.17	-10.62	-0.20	1.00
6. Export price deflator (goods and services)		7.17%	0.98	4.38	-12.36	-0.57	1.53
7. Import price deflator (goods and services)		8.47%	3.37	2.26	-12.50	-0.16	1.06

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<sup>45</sup> In percentage points compared to the previous value.

<sup>46</sup> Annual average.

**Table 1c. Labour market developments**

	ESA code	2005	2005	2006	2007	2008	2009
		Level	Rate of change	Rate of change	Rate of change	Rate of change	Rate of change
1. Employment, persons <sup>47</sup>		3 276.1	1.5	2.6	0.8	0.6	0.2
2. Unemployment rate (%) <sup>48</sup>		10.1	-1.9	-1.1	-0.4	-0.3	-0.3
3. Labour productivity, persons <sup>49</sup>		6304.23 <sup>50</sup>	3.9	3.2	5.1	5.5	5.9
4. Compensation of employees	D.1	7390.11	11.42 <sup>51</sup>	10.57	9.48	8.72	9.0

**Table 1d. Sectoral balances**

% of GDP	ESA code	2005	2006	2007	2008	2009
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	-11.3	-14.1	-13.6	-12.8	-12.4
of which:						
- Balance on goods and services		-17.1	-19.2	-19.3	-19.6	-19.5
- Balance of primary incomes and transfers		5.8	5.1	5.7	6.9	7.1
- Capital account		0	0	0	0	0
2. Net lending/borrowing of the private sector <sup>52</sup>	B.9/ EDP B.9	-13.66	-17.33	-13.60	-14.36	-13.91
3. Net lending/borrowing of general government	B.9	2.36	3.23	0.80	1.56	1.51
4. Statistical discrepancy		0	0	0	0	0

<sup>47</sup> Occupied population, domestic concept national accounts definition.

<sup>48</sup> Harmonized definition, Eurostat; levels.

<sup>49</sup> Real GDP per person employed.

<sup>50</sup> The indicator was calculated as a ratio of GDP at last year prices and the number of employed persons.

<sup>51</sup> Nominal growth rate.

<sup>52</sup> Due to the lack of official statistical data, the values of the indicator are obtained as residuals using rows 1 and 3 from the table.

**Table 2. General government budgetary prospects**

	ESA code	2005	2005	2006	2007	2008	2009
		Level	% of GDP				
<b>Net lending (EDP B.9) by sub-sector</b>							
1. General government	S.13	989.6	2.36	3.23	0.80	1.5	1.5
2. Central government	S.1311	1 212.7	2.89	3.84	0.80	1.5	1.5
3. State government	S.1312						
4. Local government	S.1313	-216.5	-0.52	-0.08	0.00	0.00	0.00
5. Social security funds	S.1314	-6.7	-0.02	-0.52	0.00	0.00	0.00
<b>General government (S13)</b>							
6. Total revenue	TR	17 803.2	42.4	41.5	41.8	41.8	41.7
7. Total expenditure	TE <sup>53</sup>	16 813.6	40.1	38.2	41.0	40.2	40.2
8. Net lending/net borrowing	EDP B.9	989.6	2.4	3.2	0.8	1.5	1.5
9. Interest expenditure (incl. FISIM)	EDP D.41, incl. FISIM	664.9	1.6	1.4	1.4	1.3	1.2
9a. FISIM		-	-	-	-	-	-
10. Primary balance	<sup>54</sup>	1 654.4	3.9	4.6	2.2	2.8	2.7
<b>Selected components of revenue</b>							
11. Total taxes (11=11a+11b+11c)		10 654.9	25.4	25	25.4	25.2	24.8
11a. Taxes on production and imports	D.2	7 943.0	18.9	19.0	19.2	19.2	19.1
11b. Current taxes on income, wealth, etc	D.5	2 581.5	6.2	5.8	6.0	5.8	5.5
11c. Capital taxes	D.91	130.4	0.3	0.2	0.2	0.2	0.2
12. Social contributions	D.61	4 413.0	10.5	9.0	8.9	8.9	8.9
13. Property income	D.4	548.5	1.3	1.2	1.1	1.1	1.1
14. Other (14=15-(11+12+13))		2 186.8	5.2	6.2	6.3	6.2	6.5
15=6. Total revenue	TR	17 803.2	42.4	41.5	41.8	41.8	41.7

<sup>53</sup> Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

<sup>54</sup> The primary balance is calculated as (EDP B.9, item 8) plus (EDP D.41 + FISIM recorded as intermediate consumption, item 9).

Tax burden (D.2+D.5+D.61+D.91-D.995) <sup>55</sup>		14 610.1	34.8	33.0	33.2	33.0	32.6
<b>Selected components of expenditure</b>							
16. Collective consumption	P.32	4 097.2	9.8	9.1	9.0	9.1	9.2
17. Total social transfers	D.62 + D.63	8 679.4	20.7	20.5	20.2	20.3	20.0
17a. Social transfers in kind	P.31 = D.63	3 691.7	8.8	8.7	8.7	8.8	8.9
17b. Social transfers other than in kind	D.62	4 987.7	11.9	11.8	11.5	11.4	11.1
18. = 9. Interest expenditure (incl. FISIM)	EDP D.41, incl. FISIM	664.9	1.6	1.4	1.4	1.3	1.2
19. Subsidies	D.3	875.5	2.1	1.3	1.8	2.4	2.6
20. Gross fixed capital formation	P.51	1 298.7	3.1	4.0	4.1	4.3	4.2
21. Other (21=22-(16+17+18+19+20))		1 197.9	2.9	2.0	4.5	2.9	2.9
22. = 7. Total expenditure	TE <sup>56</sup>	16 813.6	40.1	38.2	41.0	40.2	40.2
Compensation of employees	D.1	2 689.9	6.4	5.8	6.0	6.0	5.9

<sup>55</sup> Including those collected by the EU and including an adjustment for uncollected taxes and social contributions (D.995), if appropriate.

<sup>56</sup> Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

**Table 3. General government expenditure by function**

<b>% of GDP</b>	<b>COFOG code</b>	<b>2004</b>	<b>2009<sup>57</sup></b>
1. General public services	1	2.9	3.4
2. Defence	2	2.3	2.2
3. Public order and safety	3	2.8	2.9
4. Economic affairs	4	4.9	5.8
5. Environmental protection	5	1.0	1.3
6. Housing and community amenities	6	0.5	0.8
7. Health	7	4.6	4.3
8. Recreation, culture and religion	8	0.8	0.7
9. Education	9	4.3	4.2
10. Social protection	10	13.7	12.3
11. Total expenditure (= item 7=26 in Table 2)	TE <sup>58</sup>	39.7	40.2

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<sup>57</sup> The assumption concerning the absorption of EU funds is cautious. Depending on the difference between it and the actual state a restructuring of expenditures by sectors is possible.

<sup>58</sup> Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

**Table 4. General government debt developments**

% of GDP	2005	2006	2007	2008	2009
Gross debt <sup>59</sup>	29.8	25.3	22.7	22.3	21.1
Change in gross debt ratio	-10.9	-4.5	-2.6	-0.4	-1.2
<b>Contributions to changes in gross debt</b>					
Primary balance <sup>60</sup>	3.9	4.6	2.2	2.8	2.7
Interest expenditure (incl. FISIM) <sup>61</sup>	1.6	1.4	1.4	1.3	1.2
Stock-flow adjustment	3.43	1.22	0.1	0.1	-0.1
of which:					
- Differences between cash and accruals <sup>62</sup>	-	-	-	-	-
- Net accumulation of financial assets <sup>63</sup>					
of which:					
- privatisation proceeds	3.45	1.33	0.38	0.2	0
- Valuation effects and other <sup>64</sup>	-0.02	-0.11	-0.3	-0.08	-0.08
Implicit interest rate on debt <sup>65</sup>	5.4	5.5	6.2	5.8	5.7
<b>Other relevant variables</b>					
Liquid financial assets <sup>66</sup>	-	-	-	-	-
Net financial debt (7=1-6)	-	-	-	-	-

<sup>59</sup> As defined in Regulation 3605/93 (not an ESA concept).

<sup>60</sup> Cf. item 10 in Table 2.

<sup>61</sup> Cf. item 9 in Table 2.

<sup>62</sup> The differences concerning interest expenditure, other expenditure and revenue could be distinguished when relevant.

<sup>63</sup> Liquid assets, assets on third countries, government controlled enterprises and the difference between quoted and non-quoted assets could be distinguished when relevant.

<sup>64</sup> Changes due to exchange rate movements, and operation in secondary market could be distinguished when relevant.

<sup>65</sup> Proxied by interest expenditure (incl. FISIM recorded as consumption) divided by the debt level of the previous year.

<sup>66</sup> AF1, AF2, AF3 (consolidated at market value), AF5 (if quoted in stock exchange; including mutual fund shares).

**Table 5. Cyclical developments**

<b>% of GDP</b>	<b>ESA code</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
1. Real GDP growth (%)		5.5	5.9	5.9	6.2	6.1
2. Net lending of general government	EDP B.9	2.36	3.23	0.8	1.5	1.5
3. Interest expenditure (incl. FISIM recorded as consumption)	EDP D.41 + FISIM	1.6	1.4	1.4	1.3	1.2
4. Potential GDP growth (%)		4.83	5.12	5.59	6.00	6.45
contributions:						
- labour		0.81	0.8	0.71	0.69	0.67
- capital		2.06	2.64	3.15	3.45	3.59
- total factor productivity		1.97	1.68	1.73	1.86	2.19
5. Output gap		-0.05	0.69	1.01	1.19	0.90
6. Cyclical budgetary component		-0.02	0.29	0.42	0.50	0.37
7. Cyclically-adjusted balance (2-6)		2.38	2.94	0.38	1.05	1.13
8. Cyclically-adjusted primary balance (7+3)		3.98	4.34	1.78	1.35	1.33

**Table 6. Divergence from previous update**

	ESA code	2005	2006	2007	2008	2009
Real GDP growth (%)		5.7	5.7	5.9	5.9	
Previous update						
Current update		5.5	5.9	5.9	6.2	6.1
Difference		-0.2	0.2	0	0.3	
General government net lending (% of GDP)	EDP B.9	2.2	0	-0.2	-0.7	
Previous update						
Current update		2.36	3.23	0.8	1.5	1.5
Difference		0.16	3.23	1.0	2.32	
General government gross debt (% of GDP)		31.3	26.3	23.9	22.7	
Previous update						
Current update		29.8	25.3	22.7	22.3	21.1
Difference		-1.5	-1.0	-1.2	-0.4	

**Table 7. Long-term sustainability of public finances**

<b>% of GDP</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2050</b>
<b>Total expenditure</b>	<b>42.5</b>	<b>40.1</b>	<b>38.1</b>	<b>36</b>	<b>35</b>	<b>35</b>
Pension expenditure	9.2	9.1	9.4	7.8	7.3	7.9
Old age and social security pensions	8.2	8.3	8.22	6.82	6.45	7.02
Healthcare	3.3	4.8	5.21	5.54	5.81	6.44
Long-term care	0.04	0.04	0.04	0.04	0.03	0.03
Education expenditure	4.2	4.3	4.4	4.3	4.3	4.3
Interest expenditure	4.0	1.6	1.2	1.2	1.2	1.2
<b>Total revenue</b>	<b>42.1</b>	<b>42.4</b>	<b>38.6</b>	<b>36</b>	<b>35</b>	<b>35</b>
Of which: property income	1.7	1.3	1.0	1.0	1.0	1.0
<i>of which: from pensions contributions (or social contributions if appropriate)</i>	9.0	8.3	4.3	4.2	4.2	4.2
<b>Assumptions</b>						
Labour productivity growth	9.2	3.9	5.2	4.9	4.1	2.0
Real GDP growth	5.4	5.5	5.3	4.5	3.7	2.0
Participation rate males (aged 20-64)	71.7	74.2	77.8	82.7	86.5	86.5
Participation rates females (aged 20-64)	60.3	63.1	67.3	71.8	74.2	74.2
Total participation rates (aged 20-64)	65.9	68.6	72.5	77.2	80.3	80.3
Unemployment rate, %	16.8	10.1	7.9	5.9	5.0	5.0
Population aged 65+ over total population, %	16.3	17.1	17.3	19.2	20.4	24.7

**Table 8. Basic assumptions**

	2005	2006	2007	2008	2009
Short-term interest rate (6-month LIBOR, EUR) (annual average)	2.2	3.1	3.7	3.8	3.9
Short-term interest rate (6-month LIBOR, USD) (annual average)	3.8	5.4	5.5	5.5	5.5
Nominal effective exchange rate <sup>67</sup>	100.58	100.76	96.56	98.93	99.50
Exchange rate USD/EUR (annual average)	1.25	1.25	1.28	1.28	1.28
Exchange rate BGN/EUR (annual average)	1.95583	1.95583	1.95583	1.95583	1.95583
World excluding EU, GDP growth*	3.5	3.6	2.6	2.9	2.9
EU GDP growth	1.8	2.8	2.4	2.4	2.4
Growth of relevant foreign markets for Bulgarian exports	2.5	3.1	2.5	2.6	2.6
Oil prices (Brent, USD/barrel)	53.4	65.6	69.1	69.1	69.1

\* Incompatible with European Commission assumptions.

<sup>67</sup> Base index, previous year = 100. Indexes below 100 show a nominal appreciation of the lev, and indexes above 100 – nominal depreciation.

## **APPENDIX 2: METHODOLOGICAL FRAMEWORK FOR THE CALCULATION OF POTENTIAL GDP GROWTH AND OUTPUT GAP**

### **Main approach**

The calculations related to potential growth and the output gap are based on a Cobb-Douglas production function having the following specification:

$$Y_t = TFP_t \cdot L_t^\alpha K_t^{1-\alpha},$$

where  $Y_t$  is the gross domestic product,  $L_t$  is labour, measured by the number of employed persons,  $K_t$  is physical capital (machines, equipment, buildings, etc.), and  $TFP_t$  is total factor productivity. The elasticity  $\alpha$  is equal to 0.54 and has been calculated as the average of the labour's share in total income for the period 1995-2007 using data from the AMECO statistical database of the European Commission. The physical capital has been measured according to the so-called permanent inventory method (PIM) having the following analytical representation:<sup>68</sup>

$$K_t = I_t + (1 - \delta)K_{t-1},$$

where  $I_t$  is investment measured by the 'gross fixed capital formation' indicator, and  $\delta$  is the depreciation rate, which here takes the annual value of 5%.

Total factor productivity is measured as a residual after taking logarithms of both sides of the production function:

$$\ln TFP = \ln Y - \alpha \ln L - (1 - \alpha) \ln K$$

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<sup>68</sup> The initial value of the capital stock is for 1990 and represents the production facilities in the national economy. Cf. Statistical Yearbook of the Republic of Bulgaria, 1991, NSI.

Potential output is measured after substituting potential employment and the long-term component of total factor productivity respectively for the values of actual employment and total factor productivity in the production function. The long-term component of total factor productivity is obtained through extracting the trend component using the Hodrick-Prescott filter.

$$YPOT = e^{SRHP} LP^\alpha K^{1-\alpha},$$

where  $YPOT$  is potential GDP,  $SRHP$  is the long-term component of total factor productivity, and  $LP$  is potential employment.

Potential employment itself is obtained from the equality:

$$LP = POPW \cdot PARTS \cdot (1 - NAIRU),$$

where  $POPW$  is the working-age population in the age group 15-64., and  $PARTS$  and  $NAIRU$  are respectively the participation rate and the natural unemployment rate smoothed applying the Hodrick-Prescott filter to the actual participation rate and the unemployment rate in the age group 15-64.

The output gap is obtained using the formula:

$$YGAP = \frac{Y - YPOT}{YPOT}$$

where  $YGAP$  is the output gap.

The estimates obtained in the present Convergence Programme cover the period 1997 – 2011. The starting year of the period was chosen in order to avoid the structural break in the gross domestic product series in 1997, which tends to bias the results from the application of the Hodrick-Prescott filter. The end of the estimation period was extended by two years until 2011 in order to avoid the end-point problem related to the results from the Hodrick-Prescott filter.

**Alternative approach**

The alternative approach is based on the assumption for a possibility to decompose the gross domestic product series into a structural component (trend, or potential GDP) and a cyclical component (reflecting the output gap):

$$y_t = \bar{y}_t + z_t,$$

where  $y_t$  is the actual GDP<sup>69</sup>,  $\bar{y}_t$  is the potential GDP, and  $z_t$  is the cyclical component. With respect to potential GDP it is assumed that the variable follows a second-order random walk, while the cyclical component is a second-order autoregressive process. The unobservable variables  $\bar{y}_t$  and  $z_t$  are extracted from  $y_t$  using a Kalman filter<sup>70</sup>, and the obtained results are as follows:

**Table 8: Alternative results concerning potential growth and the output gap**

	2005	2006	2007	2008	2009
Potential growth	4.97%	5.70%	6.18%	6.50%	6.26%
Output gap	0.20%	0.39%	0.15%	-0.15%	-0.25%

Source: AEF

On the basis of these results alternative values of the cyclical budgetary component, the cyclically-adjusted balance, and the cyclically-adjusted primary balance were obtained:

**Table 9: Alternative results concerning the cyclical budgetary component, the cyclically-adjusted balance, and the cyclically-adjusted primary balance**

% of GDP	2005	2006	2007	2008	2009
Cyclical budgetary component	0.09	0.16	0.06	-0.06	-0.10
Cyclically-adjusted balance	2.27	3.07	0.74	1.61%	1.60%
Cyclically-adjusted primary balance	3.87	4.47	2.14	2.91	2.80

Source: AEF

<sup>69</sup> All variables are in logarithms.

<sup>70</sup> The GAP software created in the Joint Research Center of the European Commission was used.

### **APPENDIX 3: GOVERNMENT FINANCE STATISTICS METHODOLOGY DEVELOPMENT**

The indicator measuring the deficit on an accrual basis – Net Lending/Borrowing, introduced by ESA 95 and the Government Financial Statistics Manual 2001<sup>71</sup> (GFSM 2001), allows for a more accurate assessment of the fiscal position because it comprises not only cash but also non-cash budgetary sector transactions (including accounts payable and receivable arrears).

According to the national methodology in the Law on the Structure of the State Budget (LSSB), the deficit is calculated on a cash basis. This indicator is directly linked to money supply and thus to the goals and objectives of monetary policy.

According to ESA 95, general government is divided into three sub-sectors: central government, social security funds and local governments. According to the national methodology, the consolidated state budget comprises the republican budget, the judiciary power budget, the municipalities' budgets, PSS, the NHIF, the higher schools, the Bulgarian Academy of Sciences, the Bulgarian National Television, the Bulgarian National Radio and the extra-budgetary accounts and funds.

In line with ESA 95 general government assets and liabilities are to be calculated at market value, while the Council Regulation (EC) N3605/93 and Council Regulation (EC) 475/2000 stipulate that consolidated government debt of Member States in the Notification tables is to be calculated at nominal value and does not include state-guaranteed debt. Data on government debt of the Republic of Bulgaria are in line with this requirement and are presented in nominal value in the Notification tables.

Since 2001, to unify the accounting process and to ensure data on an accrual basis, a single Chart of Accounts of budgetary organizations was elaborated and introduced, in line with ESA 95 and GFSM 2001 requirements and with the assistance of SIGMA Programme experts and a special IMF technical mission.

The 2001-2005 balances are consolidated and under analysis, thus being the assessment basis of Other accounts receivable (+) and Other accounts payable (-), reflected in the September Fiscal notification.

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<sup>71</sup> Government Financial Statistics Manual, IMF, 2001.

Since 2005 Bulgarian Notification Tables comprise a tax (VAT, excise duties and corporate tax) assessment on an accrual basis. The modified cash basis approach was adopted. The amount of cash revenues is adjusted with respect to the date of reporting, so as to assign the respective revenues to the period of taxable activity (or of setting the tax size for some income taxes). The tax estimate was improved and the 2005 income tax estimate was included in the data for the September Fiscal Notification.

According to the Law on Customs, customs bodies determine and calculate the size of customs duties and the sums of customs duties due to customs obligations at the moment of importing or exporting and enter them in customs forms and in a Reporting Register at the respective customs office (CO). The CO levy customs duties and customs fees, VAT and excise duties on imports and transfer them to the central budget. The calculated customs duties and customs fees for the reporting year are equal to the paid-in ones by cash statement for the respective period.

In line with the Eurostat Decision on recording Structural and Cohesion Funds operations in the Notification tables of Member States to be implemented for pre-accession funds as well, the September Fiscal Notification excludes project revenues and expenditures, financed by the EU, and includes only project state budget co-financing paid.

At the meeting with Eurostat experts the return on State Fund Agriculture (SFA) loans was discussed. The Mission required information on SFA long term loans and financial credit line servicing and recorded provisions in the Fund balance sheet to estimate bad credits by year and to record them as capital transfers. The share of non-serviced loans was estimated and deemed to be below the usual ceilings for such types of bank system loan portfolios and as a result, the Notification was not corrected.

According to Eurostat recommendations the Bulgarian Consolidation Company was re-classified in the government sector for fiscal notification purposes. The underlying motive was that it was established by the government for bank privatization purposes and after the process completion it would be closed down. It also operates on behalf of the state and without a decision-taking autonomy.

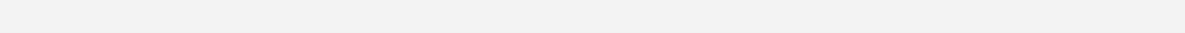
Applying the 50% rule for fiscal notification purposes, the government sector comprises the state Enterprise for Management of Environmental Protection Activities (EMEPA) (operating since 01.01.2003 as an assign of a SLSU at the Ministry of Environment and Water, but according to ESA 95 it belongs to the general government sector). According to the national methodology EMEPA has not been a part of the

consolidated state budget since 2003, when it was transformed from a SLSU into a company pursuant to the Law on Commerce. In that respect, EMEPA is included in the Net Lending/Borrowing indicator estimate for 2003 and 2004.

The MoF, in cooperation with the NSI, reviews institutional units in view of their correct re-classification in line with the over 50% own revenue criterion. The Eurostat Mission recommended to the MoF to include medical institutions-companies (under state and municipal ownership) when calculating general government sector deficit/surplus in the Notification tables. The information, submitted by the Ministry of Health and the NHIF (reports and references on medical institutions-companies under state and municipal ownership) is being analyzed for classification in line with ESA 95 criteria.

The motives and goals for the state acquisition of stakes, shares and partnership in the National Sport Base PLC in 2003 were assessed in view of their accurate recording as capital transfers under 2002-2006 consolidated government deficit and debt in the Notification tables according to ESA 95 methodology.

The MoF included compensatory instruments, put into use during the privatization in the period 2001-2005, when calculating general government sector deficit/surplus in the September Notification on deficit and debt according to the ESA 95 requirements.



## **APPENDIX 4: DESCRIPTION OF NSSI MODEL USED FOR FORECASTING THE LONG-TERM STATE OF THE PUBLIC SOCIAL SECURITY FUNDS**

In relation with the new amendments to social security legislation and the elaboration of the Compulsory Social Security Code in 2000, a Long-term Forecasting Model of PSS Funds was devised. The model was elaborated by John Wilkin, an actuary engaged by the World Bank, and the “Statistics, Actuarial Analysis and Forecasting” Department staff at the NSSI. After 2000, the model was fundamentally updated in 2002 (with respect to the launch of universal pension funds for supplementary mandatory pension social security) and is currently maintained to reflect the present PSS state. It is deterministic and is elaborated in Visual Basic for Applications (VBA) for Microsoft Excel. The model forecasts on the basis of many parameters – data and selected legal provisions according to the Social Security Code (SSC). It can make forecasts for an 80-year period, and besides forecasts on the state of PSS funds, it can also make demographic forecasts and forecasts on supplementary mandatory pension funds.

The main macroeconomic assumptions in this model, serving as input to short-term forecasts, are consistent with the MoF and AEAF macroeconomic forecasts on: labour productivity growth, GDP growth, CPI changes, real wage changes, interest rate, unemployment rate, etc.

The input data for the model comprise the reporting information on PSS in the NSSI information system – number of PSS Funds insured persons and beneficiaries (consumers); PSS Funds revenues and expenditures, etc; NSI statistical data (GDP in nominal and real terms; population and its demographic characteristics; annual average wage by sex and occupation; number of unemployed etc. for the year preceding the first year of the forecast).

The following formula for calculating the pension by age and by insurable length of service is used:

$$P = AMSSI * IPC * SSP * 1\%$$

where:

P – individual pension;

AMSSI – average monthly social security income for 12 months;

IPC – individual pension coefficient;

SSP - social security period.

The minimum insurable length of service is 15 years; the highest net replacement ratio is 0.75; the minimum pension by age and by insurable length of service is 1.15 of the social pension, while the highest pension is equal to 35% of the insurable income for the previous calendar year.

Since 2000 the so-called points system (a sum of the years of the social security period and the required exit age) has assigned 98 points for men and 88 points for women. Besides, a minimum retirement age was introduced and it will be gradually raised. Since 2000 the third category labour workers exit age has been raised - in 2005 it was already 63 for men and in 2009 it is expected to reach 60 for women – the main principle being of raising it by 6 months every calendar year. The sum of the years of the social security period and the required exit age was raised by a point by 2002 and became 100 points for men and 90 points for women. Since 2002 the points for men have remained 100 during the whole period under consideration, while since 2005 the points for women have been raised by a point every calendar year and will reach 94 in 2008.

The main model input parameters and results are presented in Microsoft Excel tables:

1. The Assumptions Table containing the main economic assumptions; parameters of current legislation and the amendments in the SSC, forming the basis for the calculations of PSS Funds state. Some of the assumptions are fixed, i.e. imputed only in the base year, while others change every year of the period under review;
2. The PSS Funds Operations Forecast Table being the main table displays cash flows (revenues and expenditures) of the Funds for each year of the period under review.

It contains more specifically:

- GDP in nominal terms;
- Social insurance base, being the sum of social security wages for employees of all categories;
- Insurable income, equal to the sum of social security wages for employees of all categories adjusted with the level of compliance;
- Revenues, equal to the sum of social security contributions and other fund revenues;

- Expenditures, equal to the sum of pensions and short-term benefits expenditures and administrative expenditures;
  - Annual funds balance change equal to the difference between funds revenues and expenditures;
  - End-of-year funds balance equal to the difference between funds revenues and expenditures on an accrual basis;
  - Funds ratio, equal to the end-of-year funds balance to annual funds expenditures ratio;
  - Required funds ratio, equal to the funds reserve required to ensure servicing pensions expenditures for the adopted minimum period;
  - Actuarial balance, being the difference between annual rate of revenue and the annual rate of expenditure related to social security contributions;
  - Expenditures as a percentage of GDP, equal to the annual funds expenditures to annual GDP ratio.
3. The Main indicators influencing the PSS Funds Table, containing the main demographic and economic indicators influencing the trends in the annual fund actuarial balance during the period under review. It contains more specifically:
- Population; number of insured persons; number of pensioners;
  - Dependency ratio; pensioners ratio, being the number of fund pensioners to the number of insured persons;
  - Average insurable income for insured persons; average pension;
  - Replacement ratio, being the average pension to the average social security income ratio;
  - Social security compliance rate;
  - Calculated required contribution rate, being equal to the replacement ratio, multiplied by the dependency ratio and divided by the social security contributions collection rate;
4. The Active Population Table, containing population, aged above 15; labour force dynamics (participation rate; number of unemployed and employed) and insured persons by type of social security for each year of the period under review.

5. Second Pillar Assumptions Table, containing the main assumptions, linked to Supplementary Mandatory Social Security (the second pillar) with a direct impact on PSS. Second pillar pensions have a specified size of contributions and contributions are collected in personal accounts every year. The accounts are modified annually with underlying interest rate and administrative costs rate. On retiring, the monthly pension is calculated on the basis of the accumulated amount in the personal account of the insured person. When the second pillar was launched, a portion of the first pillar social contribution was transferred to the second pillar social contribution. The Fund's operative costs are calculated as 1% of every social contribution and as a percentage of the Fund's annual revenues. Every year an interest rate for the contributions accumulating period and for the contributions reimbursing period is introduced. Pensions indexation is also needed. The model makes use of social security contributions by year, by labour category and by contribution type (whether transferred from the first pillar or being supplementary for the second pillar only). Some of the assumptions are fixed, i.e. registered only in the base year, while others change every year of the period under review.
6. Second Pillar Fund Operations Table, showing the state of Supplementary Mandatory Social Security Funds every year of the period under review. It contains more specifically:
  - Second pillar revenues, containing social security contributions revenues and interest revenues;
  - Second pillar expenditures, containing pensions (old age and inheritable) expenditures and administrative expenditures;
  - Funds growth, being the difference between funds annual revenues and expenditures;
  - Funds balance, being the difference between Funds annual revenues and expenditures on an accrual basis.