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BULGARIA: MACRO FISCAL ASSESSMENT
AN ANALYSIS OF THE DECEMBER 2008 UPDATE OF THE CONVERGENCE
PROGRAMME

The Stability and Growth Pact requires each EU Member State to present an annual update of its medium-term budgetary programme, called “stability programme” for countries that have adopted the euro as their currency and “convergence programme” for those that have not.

The attached technical analysis of the programme, prepared by the staff of, and under the responsibility of, the Directorate-General for Economic and Financial Affairs (DG ECFIN) of the European Commission, was finalised on 18 February 2009. Comments should be sent to Elena Pavlova and Bozhil Kostov (Elena.Pavlova@ec.europa.eu, Bozhil.Kostov@ec.europa.eu). The main aim of the analysis is to assess the realism of the budgetary strategy presented in the programme as well as its compliance with the requirements of the Stability and Growth Pact. However, the analysis also looks at the overall macro-economic performance of the country and highlights relevant policy challenges.

The analysis takes into account (i) the Commission services’ January 2009 interim forecast, (ii) the code of conduct (“Specifications on the implementation of the Stability and Growth Pact and guidelines on the format and content of stability and convergence programmes”, endorsed by the ECOFIN Council of 11 October 2005) and (iii) the commonly agreed methodology for the estimation of potential output and cyclically-adjusted balances. Technical issues are explained in an accompanying methodological paper prepared by DG ECFIN.

Based on this technical analysis, the European Commission adopted a recommendation for a Council opinion on the programme on 18 February 2009. The ECOFIN Council is expected to adopt its opinion on the programme on 10 March 2009.

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All these documents, as well as the provisions of the Stability and Growth Pact, can be found on the following website:

http://ec.europa.eu/economy_finance/about/activities/sgp/main_en.htm

1. INTRODUCTION

This document assesses the December 2008 update of Bulgaria's convergence programme. It takes into account all currently available information, notably the Commission services' January 2009 interim forecast and the short-term fiscal measures adopted by the Bulgarian authorities in response to the economic downturn. The programme, which was submitted to the European Commission on 1 December 2008, covers the period 2008-2011 and builds on the 2009 budget proposal and the 2009-2011 central government spending limits decision. It was approved by the government on 27 November 2008. An addendum to the programme, detailing the measures adopted by the Bulgarian authorities in response to the economic downturn, was submitted on 23 December. The addendum does not present any significant changes in the fiscal and structural policies compared to those in the convergence programme. The overall effect of the measures on the budgetary projections is minimal and therefore the latter have not been updated relative to the programme.

2. MAIN CHALLENGES IN THE ECONOMIC DOWNTURN AND THE POLICY RESPONSE

In the past several years Bulgaria has witnessed strong real GDP growth underpinned by high credit impulse and large foreign investment flows. The robust economic activity, however, was accompanied by increasing macroeconomic imbalances such as a widening external deficit and substantial inflationary pressures. The FDI-led investment boom and high wage increases, far exceeding productivity gains, have aggravated these imbalances. In the context of the currency board framework, monetary and credit conditions tightened in 2008 amid higher country risk perceptions and a continued appreciation of the real effective exchange rate. As the impact of the global economic slowdown and the financial crisis unfolds, economic activity in Bulgaria is expected to weaken noticeably. After a positive output gap in 2004-2008, the Commission services' January 2009 interim forecast projects a sharp deceleration of GDP growth in 2009-2010, well below potential. The economy is clearly witnessing economic bad times in 2009-2010 (see Figure 1 in Annex 2). Thus Bulgaria faces the challenge of sustaining growth in a severe and protracted global economic downturn, while addressing the existing macroeconomic imbalances. In terms of long-term public finance adjustment, the country is confronted with the need to improve the quality of public expenditure while facing fast ageing population and worsening demographics (see Annex 1).

The unfavourable external conditions have started to affect the economy mainly via the foreign investment and exports channels. Tighter global financing conditions have already resulted in a noticeable decline of FDI inflows, which will lead to a sharp deceleration in investment growth. As wage and employment growth as well as credit growth decelerate, private consumption expenditure would slow considerably. Weaker investment and private consumption growth would take their toll on domestic demand, which has so far been the driver of buoyant GDP growth. The significant and protracted downturn in both global economic activity and trade flows would lead to a much lower external demand, reducing considerably the economy's exports growth in both goods and services. Despite some narrowing in the trade deficit as import volumes and prices decline, the very high current account deficit is projected to fall only gradually to below 20% of GDP in 2010. The partial correction of the external imbalance will be supported by reduced inflation and more moderate wage growth compared to the double-digit peaks in 2008. However, containing wage pressures remains a major challenge to maintaining the economy's competitiveness and ensuring sustainability of its growth path.

As far as the financial sector is concerned, the main direct impact of the global tightening of liquidity and lending conditions has so far been the slowdown of credit growth that has declined from over 60% at the end of 2007 to around 30% a year later. The sound financial sector balance sheets and very limited investment on the international and domestic stock market, as well as the predominance of foreign-owned universal banks, imply a relatively limited direct effect of the financial crisis on the Bulgarian economy.

The budgetary position in recent years remained sound as a result of favourable revenue outcomes, while on the expenditure side discipline has not been fully maintained. However, as the impact of the global economic downturn unfolds, revenue shortfalls as a result of lower GDP growth and a less tax intensive composition of growth could lead to some deterioration in the budgetary outcome over the programme period. Thus the main challenge for public finances in Bulgaria over the short to medium term would be to sustain a sound fiscal position by restraining expenditure growth in order to counteract possible revenue shortfalls.

Given the country's high external imbalances, despite the positive budgetary balance and low debt ratio, the fiscal room available for stimulus measures to respond to the economic slowdown seems limited. In this line, the convergence programme does not envisage a comprehensive fiscal stimulus package to contain the adverse effects of the international financial crisis and the global economic downturn on the Bulgarian economy. Instead, fiscal policy is geared towards maintaining investor confidence and preserving the macro-economic stability. The programme puts forward measures aiming at maintaining a sound fiscal policy, limiting public expenditure, increasing the existing fiscal reserves and structural measures to improve the business climate and enhance the economy's growth potential (e.g., cutting red tape and improving the work of regulatory bodies, ensuring flexicurity on the labour market, reforming education, pension, and healthcare sectors, etc). The policy actions implying immediate costs involve increasing capital spending by 0.1% in 2009. P.

The Bulgarian government has not adopted any specific package to stabilize the financial sector. However, in order to enhance the confidence in the banking system the deposit guarantee level was raised to BGN 100,000 and the government increased the capital of the state-owned Bulgarian Development Bank to facilitate financing to SMEs.

3. MACROECONOMIC SCENARIO

The programme projects real GDP growth to decelerate from 6½% in 2008 to 4¾% in 2009, followed by a recovery to above 5% in the following years (see Table I). The slowdown would be mainly driven by weakening domestic demand, private investment in particular. Export growth is expected to actually accelerate over the programme horizon, while imports would grow at a lower pace, thus making the growth contribution of net exports less negative. In line with the economic slowdown, employment growth is projected to fall significantly, but the unemployment rate would continue decreasing steadily to 5¼ % in 2011. Both HICP inflation and nominal wage growth are expected to moderate, compared with the elevated levels in 2008.

The macroeconomic scenario presented in the programme is based on broadly plausible growth assumptions for 2008, but is markedly favourable thereafter. Based on less favourable projections for world GDP growth and trade volumes, the Commission services' January 2009 interim forecast anticipates a deeper and more protracted downturn, with growth in 2009-2010 remaining well below the average recorded in the past five years. The main drivers of this development would be a sharp slowdown in investment growth as a result of lower FDI,

accompanied by a strong deceleration of private consumption. The longer and more pronounced slowdown implies an easing of inflationary and wage pressures, stronger than implied by the programme.

Cyclical conditions, as measured by the output gap as recalculated by Commission services based on the information in the programme using the commonly agreed methodology, reveal a steady decline in the output gap, which would be in negative territory over 2009-2011. These projections are broadly in line with the Commission services' interim forecast, which foresees a larger negative output gap in 2010, due to a weaker recovery of real GDP growth. Given the protracted global economic downturn and high uncertainty to the outlook, the macroeconomic scenario of the programme is subject to significant downside risks, stemming in particular from a possible further deterioration in external demand and foreign investment inflows.

Table I: Comparison of macroeconomic developments and forecasts

	2008		2009		2010		2011
	COM	CP	COM	CP	COM	CP	CP
Real GDP (% change)	6.4	6.5	1.8	4.7	2.5	5.2	5.8
Private consumption (% change)	5.0	5.0	1.2	4.1	2.4	4.1	5.0
Gross fixed capital formation (% change)	19.0	22.4	1.8	10.6	2.9	9.0	10.1
Exports of goods and services (% change)	5.2	5.8	0.1	6.3	3.4	7.8	8.8
Imports of goods and services (% change)	7.7	9.6	0.5	6.1	3.3	6.1	7.0
<i>Contributions to real GDP growth:</i>							
- Final domestic demand	9.4	10.3	1.8	6.3	2.9	5.8	7.0
- Change in inventories	0.3	0.8	0.4	-0.3	0.2	-0.3	-0.9
- Net exports	-3.3	-4.5	-0.4	-1.3	-0.6	-0.3	-0.3
Output gap ¹	3.0	1.1	-0.3	-0.7	-2.3	-1.8	-1.4
Employment (% change)	3.2	3.3	0.9	0.8	0.7	0.4	0.2
Unemployment rate (%)	6.0	6.0	6.3	5.7	6.4	5.5	5.3
Labour productivity (% change)	3.1	3.1	0.9	3.8	1.8	4.8	5.5
HICP inflation (%)	12.0	12.4	5.4	6.7	4.8	4.7	4.0
GDP deflator (% change)	10.1	10.3	6.5	5.7	4.3	3.6	3.3
Comp. of employees (per head, % change)	19.0	19.9	10.9	12.0	9.0	10.0	9.5
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	-23.3	-22.9	-19.1	-20.7	-17.6	-18.4	-16.6
<i>Note:</i>							
¹ In percent of potential GDP, with potential GDP growth according to the programme as recalculated by Commission services.							
<i>Source:</i>							
Commission services' January 2009 interim forecasts (COM); Convergence programme (CP)							

The main challenges to the Bulgarian economy, including the unsustainable current account deficit, high inflation and wage growth have been identified by the programme. The medium-term scenario foresees a gradual correction of these imbalances, as GDP growth and domestic demand decelerate. A package of anti-inflationary measures, aiming at stimulating competition in goods and services markets, improving energy efficiency and raising consumer awareness, has been adopted in October and incorporated in the updated National Reform Programme (2008-2010) and the Action Plan attached to it. In view of the need to curb the external imbalances, no demand-boosting fiscal stimulus measures are envisaged. However,

the need for wage moderation in view of the persistently high core inflation has not been sufficiently addressed by the programme¹.

4. BUDGETARY STRATEGY

4.1. Budgetary implementation in 2008

At 3% of GDP, the general government surplus for 2008 in the updated programme is in line with the original target and slightly lower than the projections of the Commission services' January 2009 interim forecast². The unchanged budgetary outcome reflects a revenue shortfall of almost 2½% of GDP compared to the December 2007 update, offset by expenditure savings of the same magnitude.

Lower-than-targeted revenue was mainly due to base effects (a negative revenue surprise in 2007). According to the update, despite the significant imports growth and high inflation in 2008, the revenue collected from indirect taxes is 1½% of GDP lower than initially projected. Following the introduction of a 10% flat personal income tax rate, direct tax revenue collection was ½% of GDP lower than anticipated in the December 2007 update.

On the expenditure side, both primary and interest expenditure have been lower than in the initial programme, by 2¼% and ¼% of GDP respectively. However, after correcting for the impact of the one-off expenditure-increasing measure of around 3¼% of GDP in 2007 (reflecting Iraqi and Libya debt cancellation), the lower-than-planned-expenditure ratio in 2008 seems mostly due to the denominator effect, and therefore is not so much a result of expenditure restraint. Moreover, expenditures were not kept fully in control in 2008, as additional social and infrastructure spending of around 1¾% of GDP has been adopted. Given the strong domestic demand, high inflation and decreasing unemployment rate, the financial crisis has not had a noticeable direct budgetary impact in 2008.

4.2. Near-term budgetary strategy

The updated programme's target of a general government budget surplus of 3% of GDP in 2009 has been introduced in the budget law as adopted by Parliament on 17 December 2008. Revenue- and expenditure-to-GDP ratios are set to grow by around 2% of GDP each.

¹ In fact, a budgetary sector wage bill increase, substantially exceeding the projected inflation rate, is planned for 2009.

² By contrast, in the Action Plan to the National Reform Programme (2008-2010) a commitment to achieve a budget surplus above the annual target for 2008 (about 3½% of GDP) has been announced.

Table II. Main budgetary measures for 2009

Revenue measures ¹	Expenditure measures ²
Measures in response to the downturn	
	<ul style="list-style-type: none"> • Limiting the disbursement of non-interest expenditure (excluding social security transfers) to 90% of budgeted allocations in case of a worse-than-budgeted revenue outcome (-2.3% of GDP) • Higher capital spending (0.1% of GDP)
Other measures	
<ul style="list-style-type: none"> • Reduction in the pension social contribution rate by 4% (-0.9% of GDP) • Increase in the mandatory minimum insured income thresholds (0.7% of GDP) • Increase of the healthcare contribution rate by 2% (0.5% of GDP) • Increase in excise rates on kerosene, coal, electricity for economic and administrative needs and cigarettes (0.3% of GDP) • Increase in property valuations for local property taxes (0.3% of GDP) 	<ul style="list-style-type: none"> • Increasing pensions from 1 April and further pension indexations from 1 July 2009 (1% of GDP) • Increase in allocations for salaries in the budgetary sector by 10% (0.3% of GDP)
<p><u>Note:</u></p> <p>¹ Estimated impact on general government revenue</p> <p>² Estimated impact on general government expenditure</p> <p><u>Source:</u> Commission services, December 2008 Convergence Programme, December 2008 Addendum to the Convergence Programme.</p>	

According to the programme, the revenue-to-GDP ratio will increase to almost 43½% of GDP in 2009 (from 41¼% in the previous year), supported by higher direct tax collection and other revenues. The most important revenue-side measures for the budgetary year involve social contributions. As of 1 January 2009 the contribution rate to the public pension fund has been reduced by 4%, whereby payment of the overall rate of 18% is split into 10% paid by the employers and 8% - by the insured persons. The state is included as third contributor, making a transfer to the public pension fund equal to 12% of the social insurance income for all insured persons for the calendar year. In addition, the healthcare contribution rate has been raised by 2% and the mandatory minimum insured income thresholds have been increased by 26.6% on average. Certain excise tax rates have been increased in line with EU harmonisation requirements and property valuations for local property taxes have been raised significantly.

On the expenditure side, primary expenditure is set to grow, mainly due to higher social payments and compensation of employees. Apart from an indexation by 9.7% from 1 July in line with the pension indexation rule set in the law, pensions will be increased by further 10% from 1 April through an increase in the weight of insured periods from 1 to 1.1 in the pension calculation formula. The wage bill in the general government sector is envisaged to grow by 10%. The 90% rule limiting the disbursement of non-interest expenditure (excluding social security transfers) in case of a worse-than-budgeted revenue outcome to 90% of budgeted allocations, abandoned in 2008, has been re-introduced with the 2009 budget law. The non-

interest expenditure can be reduced further if the underperformance of the consolidated fiscal revenue reaches a level that may lead to a negative general government balance.

Apart from an increase in capital expenditure by 0.1% of GDP³, no major measures with budgetary impact in response to the economic downturn are envisaged. Several below-the-line operations aimed at supporting lending to SMEs, export performance and the absorption of EU funds by municipalities through capital injections to the Bulgarian Development Bank, the Bulgarian Export Insurance Agency and the FLAG fund⁴ amounting to around 0.7% of GDP are to be implemented in late 2008 and 2009.

Overall, the structural balance as recalculated by the Commission services on the basis of the information in the programme according to the commonly agreed methodology is projected to increase by 0.6% of GDP compared to 2008, implying a restrictive fiscal policy stance in 2009. Based on a less tax-intensive growth scenario, the Commission services' forecast projects a deterioration of the structural balance by 0.1% of GDP.

³ Plans to increase capital spending have been announced before the European Economic Recovery Plan was communicated.

⁴ FLAG is an extra-budgetary fund for support to municipalities to improve EU funds absorption

Table III: Composition of the budgetary adjustment

(% of GDP)	2007	2008		2009		2010		2011	Change: 2008-2011
	COM	COM	CP	COM	CP	COM ¹	CP	CP	CP
Revenue	41.6	41.4	41.3	40.8	43.4	40.9	43.4	43.7	2.4
<i>of which:</i>									
- Taxes on production and imports	18.5	18.5	18.7	18.0	18.8	17.8	18.9	18.9	0.2
- Current taxes on income, wealth, etc.	6.6	6.7	6.7	6.7	7.1	6.7	6.9	7.1	0.4
- Social contributions	8.7	8.6	8.0	8.5	8.2	8.6	8.2	8.3	0.3
- Other (residual)	7.8	7.6	7.9	7.7	9.3	7.9	9.4	9.4	1.5
Expenditure	41.5	38.2	38.3	38.8	40.4	38.9	40.4	40.7	2.4
<i>of which:</i>									
- Primary expenditure	40.4	37.3	37.4	38.0	39.5	38.2	39.5	39.8	2.4
<i>of which:</i>									
Compensation of employees	9.0	8.8	8.2	8.8	8.7	8.9	8.8	8.9	0.7
Intermediate consumption	8.0	7.8	7.7	7.6	7.8	7.5	7.8	7.7	0.0
Social payments	12.2	12.1	11.5	12.3	12.4	11.8	12.0	11.7	0.2
Subsidies	0.8	0.8	1.7	0.8	2.2	0.8	2.3	2.1	0.4
Gross fixed capital formation	4.8	5.4	6.6	6.1	6.7	6.9	6.9	7.4	0.8
Other (residual)	5.7	2.3	1.8	2.3	1.7	2.2	1.6	2.0	0.2
- Interest expenditure	1.0	0.9	0.9	0.8	0.9	0.7	0.9	0.9	0.0
General government balance (GGB)	0.1	3.2	3.0	2.0	3.0	2.0	3.0	3.0	0.0
Primary balance	1.1	4.1	3.9	2.8	3.9	2.7	3.9	3.9	0.0
One-off and other temporary measures	-3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GGB excl. one-offs	3.4	3.2	3.0	2.0	3.0	2.0	3.0	3.0	0.0
Output gap ²	2.7	3.0	1.1	-0.3	-0.7	-2.3	-1.8	-1.4	-2.6
Cyclically-adjusted balance ²	-0.8	2.2	2.6	2.1	3.2	2.8	3.6	3.5	0.9
Structural balance³	2.5	2.2	2.6	2.1	3.2	2.8	3.6	3.5	0.9
<i>Change in structural balance</i>		-0.3	0.1	-0.1	0.6	0.7	0.4	-0.1	
Structural primary balance ³	3.5	3.1	3.5	2.9	4.1	3.5	4.5	4.4	0.9
<i>Change in structural primary balance</i>		-0.4	0.0	-0.2	0.6	0.7	0.4	-0.1	
Notes:									
¹ On a no-policy-change basis.									
² Output gap (in % of potential GDP) and cyclically-adjusted balance according to the programme as recalculated by Commission services on the basis of the information in the programme.									
³ Structural (primary) balance = cyclically-adjusted (primary) balance excluding one-off and other temporary measures.									
Source:									
Convergence programme (CP); Commission services' January 2009 interim forecasts (COM); Commission services' calculations									

4.3. Medium-term budgetary strategy

Taking into account the increasing external risks and macroeconomic vulnerabilities of the Bulgarian economy (ageing population, high current account deficit and inflation), the medium-term budgetary strategy aims at maintaining positive fiscal balances and significant fiscal reserves to provide for adequate space and flexibility for reaction in case an unfavourable macroeconomic scenario materialises.

The medium-term objective (MTO) of a 1½% of GDP surplus in 2012, presented in the programme has remained unchanged compared to the December 2007 update. It satisfies by a wide margin the condition of ensuring a safety margin against breaching the 3% deficit limit.

The current update of the programme envisages the general government balance to remain in surplus of 3% of GDP over the programme period. The budgetary targets for 2010 and 2011 represent projections under a no-policy change assumption. The primary balance would remain unchanged at a surplus of almost 4% of GDP until 2011. In structural terms (i.e. cyclically-adjusted net of one-off and other temporary measures), the budgetary balance is projected to improve by around ½ % of GDP in 2009 and by further ½% of GDP thereafter, from a surplus of around 3¼% of GDP in 2009 to a surplus of around 3½% of GDP in the next two years. Given the constant share of interest expenditure to GDP, this development reflects the adjustment of the cyclically-adjusted balance, resulting from a widening of the negative output gap compared to 2009. The underlying fiscal policy stance is thus broadly neutral in 2010 and 2011.

4.4. Risks to the budgetary targets

The programme budgetary outcomes are subject to significant downside risks. The main risk stems from the underlying macroeconomic scenario, which is based on markedly favourable growth assumptions. The output gap is projected to become negative in 2009-2011, pointing to economic "bad times". Still, compared to the Commission services' January 2009 interim forecast the economic downturn is projected to be milder and less protracted. In particular, there is a risk that a stronger-than-expected deterioration in the external demand and a much lower (even negative) investment growth may cause a sharper deceleration of economic growth.

The programme does not rely on any one-off or temporary measures to achieve the budgetary targets. The update projects an increase in the revenue-to-GDP ratio in 2009, compared to a drop in the Commission services' January 2009 interim forecast. On the revenue side, risks for public finances over the programme period are higher than in previous years and are associated with a sharper contraction and rebalancing of economic growth towards less revenue rich growth composition. Moreover, a stronger-than-expected decline in inflation would have a negative impact on indirect tax revenue, which account for around 45% of total budget revenue. As far as direct taxes are concerned, nominal revenue growth for 2008 has been revised downwards in the December 2008 update compared to the previous year programme. With unemployment rising and wage growth decelerating, it is possible that the envisaged increase in direct tax revenue in 2009-2010 does not materialise. The social contribution projections seem to be on the optimistic side, given that the net reduction by 2 pps of the contribution rate as of 2009 may have not been fully offset with other revenue-raising measures. Moreover, as identified in the programme, there is a risk stemming from lower-than-anticipated EU funds absorption, affecting the "other revenue" item. On this basis, the revenue projection underpinning the programme could be too optimistic.

In view of the expected economic slowdown and pressures to increase demand-enhancing expenditure, controlling expenditure growth through the 90% budget execution rule might prove to be difficult in 2009. From a long-term perspective, the deterioration of the age structure of the population may pose significant pressure on budgetary expenditure for pensions and healthcare and represents a major challenge to sustainability of public finances in Bulgaria. Furthermore, the government may face difficulties in restraining expenditure

growth, in view of the forthcoming parliamentary elections, which could lead to a worsening in the projected fiscal surplus.

Bulgaria's track record in respecting its budgetary targets has been very good⁵ (see Table 1 and Figure 2 in Annex 2), although in a context of buoyant economic growth. Better-than-targeted budgetary outcomes have been recorded over the past years, due to very conservative revenue projections and buffers on the expenditure side.

In summary, there are unusually high risks stemming from the current economic juncture. Revenue projections appear to be optimistic over the programme period, while expenditure projections are broadly plausible. However, the risks are to some extent offset by the very strong track record in meeting budgetary targets over the past several years and the envisaged expenditure buffer.

5. DEBT DEVELOPMENTS AND LONG-TERM SUSTAINABILITY

5.1. Debt developments

Over the past several years the government gross debt-to-GDP ratio has been consistently reduced from around 38% on average in the period 2002-06 to about 18% in 2007 thanks mainly to high primary surpluses, strong nominal GDP growth, and substantial privatization receipts. The programme projects the debt ratio to fall further to 15½% of GDP in 2008 and then stabilize around this level for the remaining forecast period as the impact of the expected high fiscal surpluses and still robust nominal GDP growth will be offset by large positive debt-increasing stock-flow adjustments. Privatizations are expected to become insignificant for the debt ratio development.

The substantial debt-increasing stock-flow adjustments of around 4¼% of GDP on average over the programme horizon reflect a further accumulation of net financial assets, mainly through the government fiscal reserve account with the central bank. The fiscal reserve increased from close to 13% of GDP at the end of 2007 to around 17% in November 2008. The significant amount of reserves has allowed the government to carry out early debt repayments to the World Bank in 2008. According to the programme, maintaining high positive fiscal reserves would provide adequate space and flexibility for reaction to the expected economic downturn.

The projections for the debt-to-GDP ratio in the programme appear broadly plausible. In the Commission services' January 2009 interim forecast government gross debt is estimated to gradually fall to below 11% of GDP by 2010 in line with the past track record of using the fiscal reserves for early public debt repayments instead of their further accumulation. Therefore, the differences with the programme are due almost entirely to the lower stock-flow adjustments and in particular to the lower accumulation of financial assets. In the programme the impact of the stock flow adjustments offsets the higher primary balances and slightly stronger nominal GDP growth effect.

⁵ The discrepancy in 2007 was due to an expenditure-increasing one-off reflecting debt cancellation.

Table IV: Debt dynamics

(% of GDP)	average 2002-06	2007	2008		2009		2010		2011
			COM	CP	COM	CP	COM	CP	CP
Gross debt ratio¹	37.9	18.2	13.8	15.4	12.2	15.4	10.7	15.3	15.2
Change in the ratio	-8.9	-4.5	-4.4	-2.8	-1.7	0.0	-1.5	-0.1	-0.1
<i>Contributions²:</i>									
1. Primary balance	-2.9	-1.1	-4.1	-3.9	-2.8	-3.9	-2.7	-3.9	-3.9
2. "Snow-ball" effect	-2.3	-1.7	-1.7	-1.7	-0.3	-0.6	0.0	-0.3	-0.4
<i>Of which:</i>									
Interest expenditure	1.8	1.0	0.9	0.9	0.8	0.9	0.7	0.9	0.9
Growth effect	-2.4	-1.2	-1.0	-1.0	-0.2	-0.7	-0.3	-0.7	-0.8
Inflation effect	-1.8	-1.6	-1.6	-1.6	-0.8	-0.8	-0.5	-0.5	-0.5
3. Stock-flow adjustment	-3.6	-1.5	1.5	2.9	1.4	4.5	1.3	4.2	4.2
<i>Of which:</i>									
Cash/accruals diff.	-0.1	0.2		0.0		0.0		0.0	0.0
Acc. financial assets	-1.0	-1.2		4.1		3.3		3.7	3.9
<i>Privatisation</i>	-2.9	-1.1		0.7		0.4		0.1	0.0
Val. effect & residual	-2.4	-0.5		0.4		-0.3		-0.2	-0.2

Notes:
¹End of period.
²The snow-ball effect captures the impact of interest expenditure on accumulated debt, as well as the impact of real GDP growth and inflation on the debt ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.

Source:
Convergence programme (CP); Commission services' January 2009 interim forecasts (COM); Commission services' calculations

5.2. Long-term sustainability

This section presents sustainability indicators based on the long-term age-related government spending as projected in the Convergence Programme. The Member States and the EPC will publish common projections, including Bulgaria for the first time, according to an agreed methodology by May 2009. Until then, it is not possible to assess the impact of population ageing in Bulgaria on a comparable and robust basis as it is currently done for the 25 Member States, for which the projections on this basis are available. The programme presents the country's contribution to the current process of updating of the common EPC projections. However, until the updated projections are not finally validated by the EPC, they can only be considered as "national projections".⁶

Table 7 in Annex 3 shows that the projected increase in age-related spending is rising by 3.6% of GDP between 2010 and 2050. Sustainability indicators for two scenarios are presented in

⁶ Economic Policy Committee and the European Commission (2006), 'The impact of aging on public expenditure: projections for the EU-25 Member States on pensions, health care, long-term care, education and unemployment transfers (2004-50)', *European Economy – Special Report* No. 1/2006. European Commission (2006), 'The long-term sustainability of public finances in the European Union', *European Economy* No. 4/2006. European Commission (2008), *Public finances in EMU – 2008*, *European Economy* No. 4/2008.

Table 4 in Annex 2. Including the increase of age-related expenditure and assuming that the structural primary balance remained at its 2008 level, Bulgaria has no sustainability gap in the baseline scenario (S2 is -1¼% of GDP)⁷. The starting budgetary position would be sufficient to stabilize the debt ratio over the long-term even before considering the long-term budgetary impact of ageing.

The "programme scenario", which is based on the end-of-programme structural primary balance, projects the budgetary situation to improve, thus no sustainability gap would arise, either.

For an overall assessment of the sustainability of public finances, other relevant factors are taken into account. They are summarized in Table 5 in Annex 2.

Until the EPC/Commission will have included Bulgaria for the first time in its common long-term projections of age-related expenditures, based on the common macroeconomic assumptions, by May 2009, it is not possible to assess the impact of population ageing in Bulgaria on a comparable and robust basis as it is currently done for the previously acceded 25 Member States. The budgetary position in 2008, with a large structural surplus, contributes significantly to debt reduction before considering the long-term budgetary impact of ageing. Maintaining high primary surpluses over the medium-term would further limit any risks to the sustainability of public finances.

6. INSTITUTIONAL FEATURES OF PUBLIC FINANCES

The quality of public finances and in particular improving the quality of public expenditure is discussed in more detail in Annex 1 of this assessment. The analysis emphasizes that the issue is particularly important for Bulgaria which has one of the fastest ageing populations and worsening demographics among the EU countries as well as in the context of tackling the large external imbalances and for sustaining the catching-up process. Further, it stresses that, although reforms have recently been launched in certain areas, due attention is needed to enhance the efficiency of spending in growth-enhancing areas such as education, healthcare, public infrastructure, R&D and innovation.

As regards the budgetary framework, Bulgaria has a binding budget balance rule which changes from year to year (3% of GDP in 2009), a ceiling for the general government debt-to-GDP ratio of 60%, and is following a soft, non-binding expenditure rule that aims at limiting the overall expenditure to 40% of GDP⁸. Given the expected deterioration in the economic environment due to the current global crisis and deteriorating public finances the so called '90%' budget execution rule, which was abandoned in 2008, has been reintroduced in the 2009 budget. Under the rule, only 90% of the non-interest budgeted allocations (excluding social security transfers) will be disbursed to the spending units in the course of the year to

⁷ The S2 indicator is defined as the change in the current level of the structural primary balance required to make sure that the discounted value of future structural primary balances (including the path of property income) covers the current level of debt.

⁸ The expenditure ratio excludes the contribution to the EU which is in the order of 1% of GDP. Also, the basis for the rule - whether ESA 95 or national accounting methodology, has not been specified.

ensure achieving the overall fiscal target of 3% of GDP. In case of substantial revenue shortfalls the budget law makes it possible to go below that level of expenditure disbursement to ensure at least a zero budget balance. While the 90% rule aims at controlling the overall expenditure growth in order to meet the budgetary target, it may not be effective from the point of view of budget planning and efficient and transparent use of public resources. In the past, it has led to accumulation of arrears in the budgetary units and excessive discretionary spending hikes at the year-end, undermining expenditure prioritization and the efficiency of resource allocation. Instead of re-introducing the rule, the underlying budgetary macro-framework could have been revisited and the whole budget be drafted on a more realistic budget revenue estimates, thus making the budget much more transparent. Nevertheless, the government has a good track record in meeting the budgetary targets, although in a context of a buoyant economic growth.

The medium-term fiscal framework has been improved over the last several years by streamlining the budgetary procedure and including a more comprehensive macro-economic analysis and assessment of the fiscal risks in the budgetary documents. However, to ensure the conduct of time consistent fiscal policies, the expenditure ceilings set in the course of the medium-term fiscal planning would need to be made binding for the entire three-year budgetary horizon. Removing the existing certain discretionary spending powers of the government would further improve the domestic framework strengthening the fiscal transparency and accountability. The implementation of performance based budgeting has continued in the 2009 budgetary procedure by expanding the scope of spending units required to submit programme budgets for approval by parliament as well as strengthening the reporting requirements. The use of performance information on the programme execution would need to be further expanded into the budgetary decision-making process. Progress with better integration of the performance budgeting into the three-year medium-term budgetary framework would help to improve the control and allocation of funds.

The programme presents structural reforms in the areas of social insurance, health, and education. The most notable change is implemented in the social insurance system where the contribution rate to the public pension fund is reduced by 4% from 1 January, 2009. The payment of the overall rate of 18% is split into 10% paid by the employers and 8% - by the employees. At the same time the state becomes a third contributor paying 12% of the total insured income of all insured people for the calendar year to compensate for the drop in the contribution rate. So far, the deficit in the pension system (3¾% of GDP in 2008) has been financed through government transfers. According to the programme, this measure aims at decreasing further the employers' social insurance burden, stimulating labour demand, and reducing the gray economy. However, the change in the financing mechanism towards using general government revenues may pose risks to the long-term sustainability of the pension system, particularly during an economic downturn, when revenue windfalls may quickly vanish as tax composition of growth changes. Moreover, the pension increases next year are set at close to 20% while the envisaged off-setting measures in broadening the tax base may not be enough to limit the negative impact from the decrease in the contribution rate.

The other important measure concerns the increase of the healthcare contribution rate from 6% to 8% again from the beginning of next year. The healthcare strategy adopted in October 2008 contains useful policy intentions towards improving the overall quality of healthcare services, however, it lacks clear and concrete implementation timetable while little is envisaged with respect to optimization and restructuring of the current system. In the education sector the reform is proceeding with the implementation of next steps under the 2006 education reform strategy (e.g. establishment of delegated budgets' system, further

school network optimization, etc.) aimed at improving the overall education level, guaranteeing equal access, and lowering the school dropping-out ratio. Effective implementation of those measures would increase cost efficiency and effectiveness of government expenditure in the sector.

More generally, as outlined in the Commission's analysis on the implementation of the national reform programme under the Lisbon Strategy for Growth and Jobs, the quality of public finances in Bulgaria could further be improved by strengthening the public procurement system, enhancing the administrative capacity and improving the internal control and audit functions, reforming and streamlining the civil service, reducing the high administrative burden on the business, and effectively fighting against fraud and corruption.

7. ASSESSMENT

This section assesses the budgetary strategy, taking into account risks, in the light of (i) the adequacy of the fiscal stimulus package in response to the Commission Communication of 26 November 2008 on the European Economic Recovery Plan (EERP) as endorsed by the European Council conclusions on the European Economic Recovery Plan (EERP) on 16 December 2008 and the overall fiscal stance; (ii) the criteria for short-term action laid down in the above mentioned Commission Communication, and (iii) the objectives of the Stability and Growth Pact.

In the Commission Communication on the EERP member-countries are invited to undertake fiscal stimulus packages, in light of each country's specific circumstances, to respond to the economic crisis. The measures undertaken, among other criteria, need to be targeted, timely, and temporary. In the case of Bulgaria, despite the good starting position, reflected in a low public debt-to-GDP ratio and large primary surpluses, the government has limited fiscal space to boost domestic demand due to the constraints posed by the recent economy's overheating and large external imbalances. Therefore, the government has not adopted any particular short-term economic stimulus package in response to the downturn. The decision seems to be adequate to the current macro-economic circumstances and projected economic development and is in line with the EERP.

The update of the convergence programme states that the main priorities of the government in the medium-term are maintaining macroeconomic stability and ensuring sustainable economic growth rates. Therefore, the budgetary objectives, manifested through generation of significant surpluses of 3% of GDP over the programme period, are targeted at smoothing the business cycle, decreasing domestic demand-driven inflationary pressures, and counteracting the increasing external sector imbalances and are adequate to the macro-economic challenges facing the country.

In order to ensure the budgetary targets, the budgetary framework provides for offsetting the likely substantial drop in the budget revenue (due to automatic stabilizers working) by expenditure reducing measures, such as the disbursement of only 90 percent of budgeted allocations. The budget law provides for even lower disbursements if the underperformance in the consolidated general government budget revenues falls to a level that may lead to a general government deficit. The measure, although aiming at controlling the expenditure growth in order to meet the budgetary target, induces non-transparency in the budgetary framework and is counter to the objective of improving the efficiency and quality of public spending. Instead, the overall budget could have been based on much more realistic macro-

economic assumptions and have a clear and single headline budgetary target. In the Commission services' January 2009 interim forecast the projected deterioration in the budgetary balance is entirely due to the endogenous reaction of public finances to the economic downturn.

The net reduction in the overall social security contribution rate from the beginning of 2009 could have a certain job retention effect in the expected economic slowdown. However, it could also undermine the sustainability of the pension system as the shift in financing towards general government revenue may have not been fully offset with sufficient other budget revenue raising measures.

Related to the medium-term reform agenda and the country-specific recommendations proposed by the Commission on 28 January 2009 under the Lisbon Strategy for Growth and Jobs, the programme foresees a number of structural measures, such as those aimed at sustaining employment, enhancing business capacity to adapt to the crisis environment, improving market functioning, rendering, if needed, capital support to commercial banks, boosting lending to SMEs, promoting export performance, and improving EU funds absorption. These measures represent a timely and adequate response to the expected slowdown and aim at strengthening the economy's resilience. The update also includes a series of other structural reform measures, which are part of the longer-term strategy for improving the quality and sustainability of public finances, such as the reform in the pension system, the implementation of next steps under the education reform strategy, including through further optimization of the school network and strengthening the schools delegated budget system, and the implementation of the recently adopted healthcare strategy.

Regarding the medium-term budgetary strategy, the fiscal policy stance implied by the programme is in line with the budgetary requirements laid down in the Stability and Growth Pact, taking into account the significant risks to the budgetary targets discussed in Section 4.4. According to the programme, a structural consolidation of 1% of GDP is envisaged over the period 2008-2011 which is compatible with the need to correct the domestic and external imbalances. The programme's budgetary stance implies that the medium-term objective (MTO) set at a surplus of 1½ of GDP, although more demanding than required by the Pact, would be achieved throughout the programme period. Even if the MTO is breached as a result of much worse than expected growth developments in the forthcoming economic downturn, the cyclically-adjusted balance would remain well above the minimum benchmark of 1¾% of GDP structural deficit, thus providing a sufficient safety margin against breaching the 3% of GDP deficit threshold.

ANNEX 1. SPECIAL TOPIC: IMPROVING THE QUALITY OF PUBLIC EXPENDITURE IN BULGARIA

1. INTRODUCTION

The quality of public finances concerns the allocation of resources and their efficient and effective use in relation to identified strategic priorities, an issue which encompasses a multi-dimensional aspect. Public finances are generally viewed to be of higher quality the more they support conditions that are conducive to higher growth potential. Improving the quality of public finances has to do with the composition and efficiency of public expenditure, the size of the government, fiscal performance, the structure and efficiency of revenue and tax systems, and good governance.

The issue is particularly important for Bulgaria which has one of the fastest ageing populations and worsening demographics. As aging is putting upward pressure on public spending in Bulgaria due attention is needed not only to limit the size of the government but also to avoid possible crowding out of spending on growth-enhancing budgetary items, especially on public infrastructure, education, and R&D and innovation. Although public expenditures have decreased in the last years to around 38% of GDP in 2007 enhancing the quality and efficiency of public spending remains an important objective. In that regard, the reform of public expenditure is of key importance to the country's long-term productivity and growth prospects.

The assessment of Bulgaria's December 2007 convergence programme emphasised the importance of improving the quality and efficiency of public spending for tackling external imbalances and for sustaining Bulgaria's catching-up process. In view of the assessment, the Council opinion invited Bulgaria to undertake policy measures that further strengthen the efficiency of public spending, in particular through full implementation of programme budgeting, reinforced administrative capacity and reforms in the areas of labour market, education and healthcare.

The scene setter briefly describes the progress made by Bulgaria in the area of strengthening the efficiency of public spending over recent years and highlights remaining weaknesses and reform challenges. In particular, it addresses the following issues: (i) fiscal consolidation and pattern of public expenditure adjustment, and (ii) efficiency of public spending.

2. FISCAL CONSOLIDATION AND PUBLIC EXPENDITURE ADJUSTMENT

Bulgaria has achieved a remarkable degree of fiscal consolidation over the past several years. The general government balance has improved markedly, ranging from a position close to balance in 2002 to a surplus of over 3% of GDP in 2007. Fiscal consolidation has been both revenue and expenditure driven. While the total revenue-to-GDP ratio has been rising, expenditure as a share of GDP has been kept under control for most of the period. The improvement in the general government balance has been underpinned by buoyant revenue growth, especially as regards indirect tax revenues thanks to rapidly expanding domestic demand as well as improved tax compliance and efficiency of tax collection. Additionally, through its tax policies the government has consistently raised the share of indirect tax revenue in total, at the expense of direct taxes, shifting the tax burden from labour and companies to indirect taxation. A number of excise taxes have been increased in line with the

EU harmonization requirements. Substantial cuts in corporate and personal income tax rates as well as in social contributions appear to have led to a considerable broadening of the tax base, including through a reduction of the grey economy and a more accurate reporting of profits and wages. This sizeable reduction in direct taxes has helped in lowering tax distortions and improving the economic incentives.

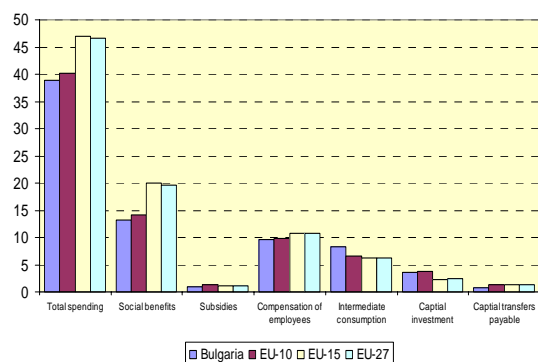
2.1. Pattern of public expenditure adjustment

Bulgaria's overall expenditure level is broadly comparable with that of the ten new EU member state⁹ (EU-10) countries from Central and Eastern Europe. The average total spending during 2002-07 amounted to 39 percent of GDP compared to an average of 40.3 percent of GDP in the EU-10 countries. With an average tax burden of around 33 percent, slightly lower than the average for the EU-10 countries, total spending in 2002-07 was thus 1¼ percentage points of GDP on average less than in the EU-10 countries and 8 percentage points of GDP less than in the advanced EU-15 economies (Figure 1). The lower spending is mainly due to lower social benefits and capital transfers and to a less extent of lower subsidies and compensation of employees. In terms of economic composition of expenditures Bulgaria has spent on average 13.3 percent of GDP on social benefits, 9.7 percent – on compensation of employees, 8.4 percent – on intermediate consumption, 3.6 percent – on investment, 1.7 percent – on interest, and 2.3 percent – on other expenditure. This does not reveal any major imbalances/differences in the structure of public expenditures relative to the other EU countries.

The public expenditure adjustment over the recent past has followed a relatively growth oriented pattern. The public expenditure to GDP ratio has declined by 2½ percentage points over 2002-07. In line with falling public debt, interest expenditures have gone down by 1¼ percent of GDP (Figure 2). Primary current spending as a share of GDP was reduced by 3½ percent with biggest cuts occurring in traditionally less flexible areas of expenditure. At the same time capital investment has increased by 2¼ percentage points, reaching 5 percent of GDP in 2007. Subsidies and social benefits, and compensation of employees, all of which tend to be rigid in the short-term, have been reduced by 1½ percent of GDP and ½ percent of GDP, respectively. Moreover, spending reductions have been concentrated in categories that represent a relatively large share of total spending such as social expenditure and wages (Figure 1). This expenditure adjustment has however been made easier by a high GDP growth rate, implying that in nominal terms expenditures have still increased, by 11 percent on average for the period. The gradual reduction in taxes that has occurred over the past several years and the relative increase in the share of less rigid spending (see section 2.3) have moderately expanded the scope to accommodate potential emerging spending pressures through possible higher tax increases or further expenditure restraint.

⁹ EU-10 countries include Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, and Slovenia.

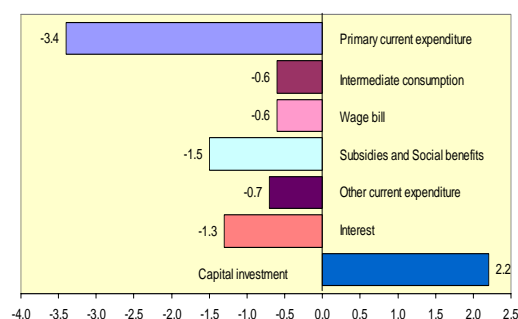
Figure 1. Average Expenditure by Economic Category, 2002-07, (As % of GDP)¹



Source: Eurostat

1/ EU-10, EU-15, and EU-27 figures for each expenditure component are calculated by taking the average of each country's average expenditure during the period 2002-07.

Figure 2. Composition of Expenditure Adjustment, 2002-07 (Change in % points of GDP)



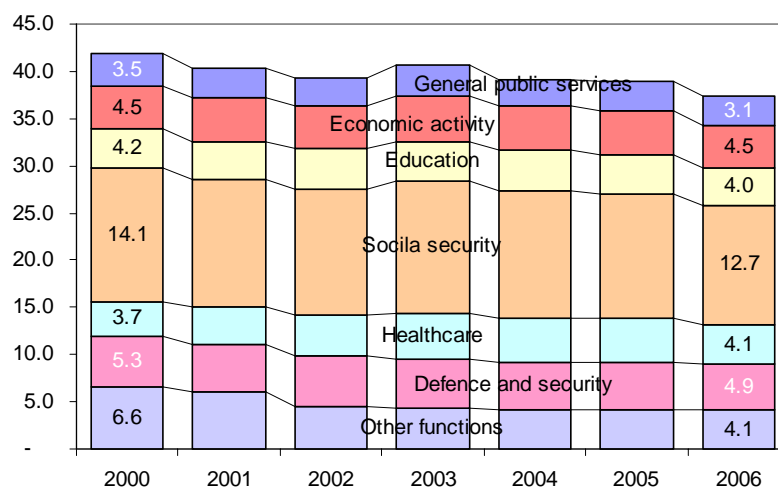
Source: Eurostat

While a certain consolidation and restructuring of public spending has thus taken place, further efforts to improve the re-allocation of public expenditures towards more growth enhancing areas are needed. For example, public expenditure in the field of R&D and innovation remains low. In 2006, public R&D expenditure represented only around ¼ percent of GDP which is far below the EU average. Also, while capital expenditures are now more or less at a comparable level with the other EU-10 countries, this masks the poor condition and the large investment needs in the area of public infrastructure. Therefore, further improvement in the composition of expenditures through re-allocation towards higher priority areas would help raise the country's economic growth potential.

2.2. Public expenditure by function compared to EU-10 and EU-15 countries

A look at the main functional categories of public expenditure shows that for the period 2000-06 Bulgaria spends on average as share of GDP 4.2 percent on education, 4.3 percent on healthcare, 5.1 percent on defence and security, 13.5 percent on social security, and 3.1 percent on general public services (Figure 3). Certain restructuring of the functional spending has also occurred whereby spending on health care has increased by 0.4 percent on GDP while in almost all other categories spending has been reduced. In terms of total spending, however, social protection and healthcare expenditure have increased mostly their shares suggesting that the main drivers of expenditure composition over the medium term are the underlying pressures related to population aging.

Figure 3. Evolution of Government Expenditure, 2000-2006
(Functional classification, % of GDP)



Source: Ministry of Finance, Bulgaria

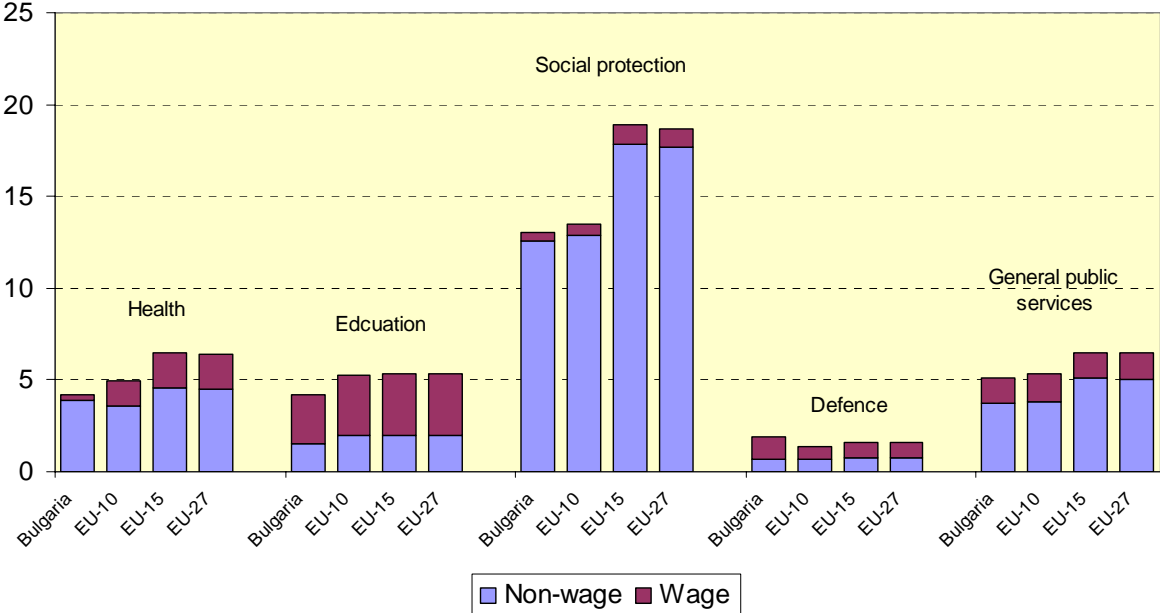
When compared to the EU-10 countries expenditure in all major functional categories, except for defence, appears lower than in other countries (Figure 4). For example, in 2004¹⁰ public spending on health and education was lower than in the EU-10 average by 0.7 and 1.1 percent of GDP, respectively, and spending on social protection and general public services – by 0.5 and 0.2 percent of GDP, respectively. At the same time defence spending was higher by 0.6 percent of GDP.

However, when looking at the division between wage and non-wage expenditure within the different functional categories, there appears to be a different pattern in some categories compared to the EU-10 countries. This different pattern points to the existence of potential inefficiencies in public spending in Bulgaria (see next section). For example, the share of compensation of employees in total health sector spending is relatively low in Bulgaria. Figure 4 illustrates that in 2004, employee compensation represented only 7 percent of health spending in Bulgaria compared to 28 and 29 percent in the EU-10 and EU-15 countries, respectively. This could suggest that average wages in the health sector might be lower or that the sector is understaffed as compared to other EU-10 countries. Another possibility, however, is that Bulgaria's non-wage spending in health (at 93 percent of total health spending versus 72 percent in the EU-10 countries) is too high which might possibly be due to spending on maintenance of excessive capacity and/or lack of adequate spending control mechanisms. Indeed, various studies have found that the number of hospitals in Bulgaria is too high relative to the size and needs of the population and maintaining those hospitals crowds out spending from raising the quality of health service provision. Completing the implementation of the IT system in the health sector, that has started some years ago with the

¹⁰ 2004 is the year with the latest available Eurostat data on functional breakdown of expenditures on a comparable cross-country basis.

help of the World Bank, will greatly enhance the control and efficiency of public health spending.

**Figure 4. Comparison of Major Functional Spending Categories, 2004
(As a % of GDP)**



Source: Eurostat

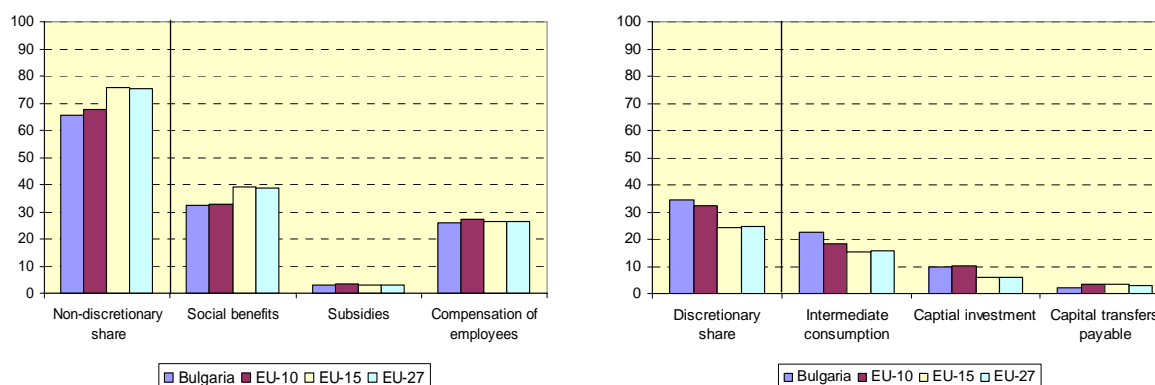
2.3. Budget flexibility¹¹

Bulgaria has managed to achieve a certain degree of fiscal flexibility by decreasing the share of its non-discretionary/more rigid spending in total spending on the account of discretionary expenditure. Non-discretionary spending includes rigid areas of expenditure due to collective agreements, legislation governing social entitlements, subsidies and interest.¹² Bulgaria’s share of non-discretionary spending at 62 percent of total spending in 2007 is 5 percent lower than in the EU-10 countries and 12 percent lower than in the EU-15 countries on average (Figure 5). As mentioned above, this has been achieved on the back of reducing the level of social benefits and compensation of employees as a share of GDP while at the same time expanding capital investment.

¹¹ For the purpose of the analysis budget flexibility is viewed as such composition of public expenditures that allows the government to respond to economic problems via within-period restraint of expenditures.

¹² Non-discretionary spending is defined as social benefits, subsidies, compensation of employees, and interest.

Figure 5. Discretionary and Non-discretionary Share of Expenditures, 2007
(As a % of total spending)



Source: Commission services calculations of spending shares are based on Eurostat data.

Source: Commission services calculations of spending shares are based on Eurostat data.

During 2002-07 public spending in Bulgaria appears slightly more variable than in the other EU-10 countries. For example, Bulgaria's total expenditure exhibits almost the same variation as the total expenditure of the EU-10 countries according to the coefficient of variation (Table 1). However, in terms of spending items Bulgaria exhibits significantly higher volatility in certain categories such as capital investment and subsidies, and to a lesser extent - in social benefits and compensation of employees. This broad pattern points to the existence of a certain degree of budget flexibility that might enlarge the scope of policy makers to adjust spending. The higher volatility in capital investment is a reflection of the strong growth of these expenditures over the past years but also of the tendency to cut public capital expenditure when fiscal tightening has been necessary.

Table 1. Variation in Key Expenditure Categories, 2002-07
(Standard deviation to the mean in %)

	Bulgaria	EU-10	EU-15	EU-27
Total spending	4.0	3.9	1.1	1.2
Social benefits	6.0	4.3	1.6	1.8
Subsidies	25.7	15.0	7.5	8.3
Compensation of employees	6.1	5.5	1.4	1.4
Intermediate consumption	3.9	6.2	2.1	2.1
Capital investment	26.3	19.3	3.5	4.8
Capital transfers payable	34.1	41.6	8.4	8.2

Source: Commission services calculations of standard deviations are based on Eurostat data.

3. EFFICIENCY OF PUBLIC SPENDING¹³

Generally, the efficiency of public spending refers to achieving a given output at the lowest possible costs as well as producing the right output from the point of view of public interest. Public expenditure is efficient, when given the amount spent; it produces the largest possible benefit for the population. With the macroeconomic constraints putting a limit on the scope of expenditure increases, the efficient use of public resources becomes key importance for economic growth and stability as well as for individual well-being.

Bulgaria faces the issue of containing the size of its government sector to counteract the rising macro-economic imbalances while at the same time responding to spending pressures due to populating ageing and large infrastructure needs. A study by Afonso *et al*, 2006, finds that in terms of total public sector performance and efficiency, Bulgaria scores below the average of the other EU-10 countries and is ranked among the worst performers. For the level of output achieved in terms of public sector performance Bulgaria could use around 54 percent less resources. Alternatively, for the level of input that Bulgaria is using, it obtains only around 56 percent of the output that it should deliver if public finances were deemed fully efficient. This shows that Bulgaria can considerably increase the efficiency of public spending by improving the outcomes, especially in sectors like health, education/human capital, social protection, and R&D, and by further restraining the use of resources.

3.1. Education

Performance indicators in the education sector suggest that educational outcomes in Bulgaria are significantly lower as compared to other new EU member states despite the fact that public spending on education is at a comparable level (WB 2006). Given the declining number of students due to negative population growth and net outward migration, expenditures per student have been rising but the quality of education and the adequacy of skills relative to market needs have not improved. The latest OECD survey (2006) of the knowledge and skills of 15-year olds ranks Bulgaria as the EU-19 worst performer in reading literacy. Over 50 percent of school children aged 15 and below are unable to read. Further, around 17 percent of pupils in obligatory school's age drop annually out of school against 10 percent EU benchmark. The education system in Bulgaria has until recently had an overcapacity in staffing and facilities with student-to-teacher ratios at different levels of education ranging between 30-50 percent below the OECD averages, although following recent reforms the ratios have started to improve.

In 2007, the government launched a reform in the primary and secondary schools through changing the school financing mechanism. The new financing mechanism shifts the focus of financing from inputs (schools, teachers) to outputs (education of students) by making the allocations on a per-student basis and is expected to create incentives for efficient management of resources. Under the education reform strategy adopted in 2006 a number of other reform measures have started to be implemented, such as the introduction of fully delegated budgets and optimisation of the school network. In 2007-08, the school network has been optimized with over 300 schools being closed as well as the number of school staff has been downsized. The associated efficiency gains would be used for upgrading the school

¹³ The section looks at how funds assigned to certain key functions are being spent rather than efficiency gains.

equipment and better training of teachers. While first steps in the education reform are thus encouraging further reform implementation including with respect to tertiary and vocational education is necessary.

3.2. Health Care

Despite attempts to rationalize the healthcare system and reform the hospital financing mechanisms in the past several years, the efficiency of public expenditure on healthcare in Bulgaria has still not improved. Health outcomes, although getting better, are still poor compared to other EU countries with similar level of public spending. Life expectancy at birth increased only by one year between 1986-2006 reaching 72.7 years, however, still showing a large gap with the EU benchmark. Infant mortality at 9.7 in 2006 remains the second highest in the EU. The healthcare system generally faces challenges with respect to its financial sustainability, quality of services and ease of access. A recent WB health survey found that 50 percent of the budget of Bulgaria's National Health Insurance Fund (NHIF) is spent on the treatment of only 5 percent of the patient population. Further, the mechanism for allocation of NHIF funds provides incentives for hospitals to increase the reported number of hospitalized patients while the needed treatment could have been provided through outpatient care. The analysis of the composition of public expenditures has shown that Bulgaria is spending too much on non-wage related activities as compared to other EU-10 countries. Overall, this could be pointing to the lack of effective monitoring and spending control mechanisms but also to the existence of excessive hospital capacity in the sector and high spending on pharmaceuticals. To address these deficiencies the authorities elaborated a healthcare strategy seeking to ensure financial sustainability and efficient and effective delivery of healthcare services covering the period 2008-13, which was finally adopted by the parliament in October 2008. The strategy contains useful policy intentions towards improving the overall quality of healthcare services, however, it lacks clear and concrete implementation timetable while little is envisaged with respect to optimization and restructuring of the current system.

3.3. Social Security

The efficiency of the social protection system has also significant room for improvement. Pensions are the largest social protection expenditure component. With one of the fastest aging populations in the region and worsening demographic trends social spending pressures are large. Currently, the public pension system is running a deficit of around 3 percent of GDP which is financed mainly with transfers from the central government. A number of important reforms have been implemented, including increasing the retirement age, tightening the eligibility criteria as well as a law on demographic reserve fund was adopted in 2008. However, a substantial risk for the long-term sustainability of the social security system cannot be excluded. Pensions were increased twice in 2007 contrary to the pension indexation rule in the law that provides for a single yearly increase. Such a discretionary ad-hoc pension increase was made in 2008 as well. At the same time the pension contribution rate has been considerably cut in the past few years. Without further reform the pension system imbalances will continue to grow and could pose a serious threat to macroeconomic sustainability, particularly in a protracted economic downturn. The social assistance system is quite fragmented with too many programmes. There is considerable scope for improvement through further consolidation, strengthening the work incentives as well as better targeting of assistance to core risk groups so that spending efficiency on poverty alleviation is increased. In this regard introducing annual monitoring and evaluation of the effectiveness of social assistance programmes will be very important.

3.4. R&D

Generally, public spending on R&D and innovation has been found to be particularly growth-enhancing. In Bulgaria, a major problem for R&D is the chronic lack of adequate and efficient distribution of funding. The level of public spending on R&D is far below the EU average and Bulgaria is the only one member state without a fixed R&D intensity target. Most public R&D expenditure is allocated for salaries and social security contributions while only 10 percent of R&D expenditure is invested in capital goods and equipment for R&D. In addition, approximately 70 percent goes for funding of research institutions which are largely unreformed and only 30 percent for programme funding. There is a lack of systematic evaluation of R&D policies, institutions, and programmes and the market orientation of research output is very poor. This shows that there is considerable scope for improving the effective allocation of public spending on R&D, including through increasing the share of funding based on competition and encouraging public-private partnerships, which would bring potentially high returns to the country's long-term productivity and economic growth.

3.5. Capital spending

As discussed above, the balance of current and capital expenditures has started to improve. This is very important with respect to addressing the dire needs of public infrastructure investment in Bulgaria. However, there has been a tendency in the past to cut public capital expenditure and spending on operations and maintenance at the expense of rationalization in other more rigid budget areas when fiscal tightening has been necessary. From the point of view of maintaining fiscal flexibility to address macroeconomic imbalances cutting public capital expenditures is a common practice. However, in Bulgaria such cuts are hardly justifiable from an efficiency-of-spending point of view as such cuts lead to serious deterioration in the quality of basic public infrastructure. This practice is detrimental to the growth prospects of Bulgaria given the poor condition of its public infrastructure and public assets. Further, it will be increasingly difficult to attract FDI flows, in particular in export-oriented sectors, if deficiencies in spending on infrastructure are not addressed.

4. CHALLENGES

Bulgaria's expenditure adjustment over the past several years has followed a relatively growth oriented pattern. Primary current expenditure as a share of GDP has been reduced. Spending on subsidies, social benefits, and compensation of employees has been curbed at the expense of increasing capital expenditure. Given the poor state of public infrastructure and the need to raise competitiveness, further expenditure consolidation and restructuring is needed by re-directing spending to more productive areas such as human capital, public infrastructure, R&D and innovation. Moreover, public expenditure need to be restrained as the buoyant revenue increase over the past several years has been associated with a revenue-rich content of economic activity. This would strengthen Bulgaria's growth potential in the medium-term and would gradually help tackling the existing macro-economic imbalances.¹⁴

¹⁴ The strong economic activity of the recent past has been accompanied with persistent and increasing macroeconomic imbalances. HICP inflation has increased to over 14% while the current account deficit has approached 25% of GDP in mid-2008.

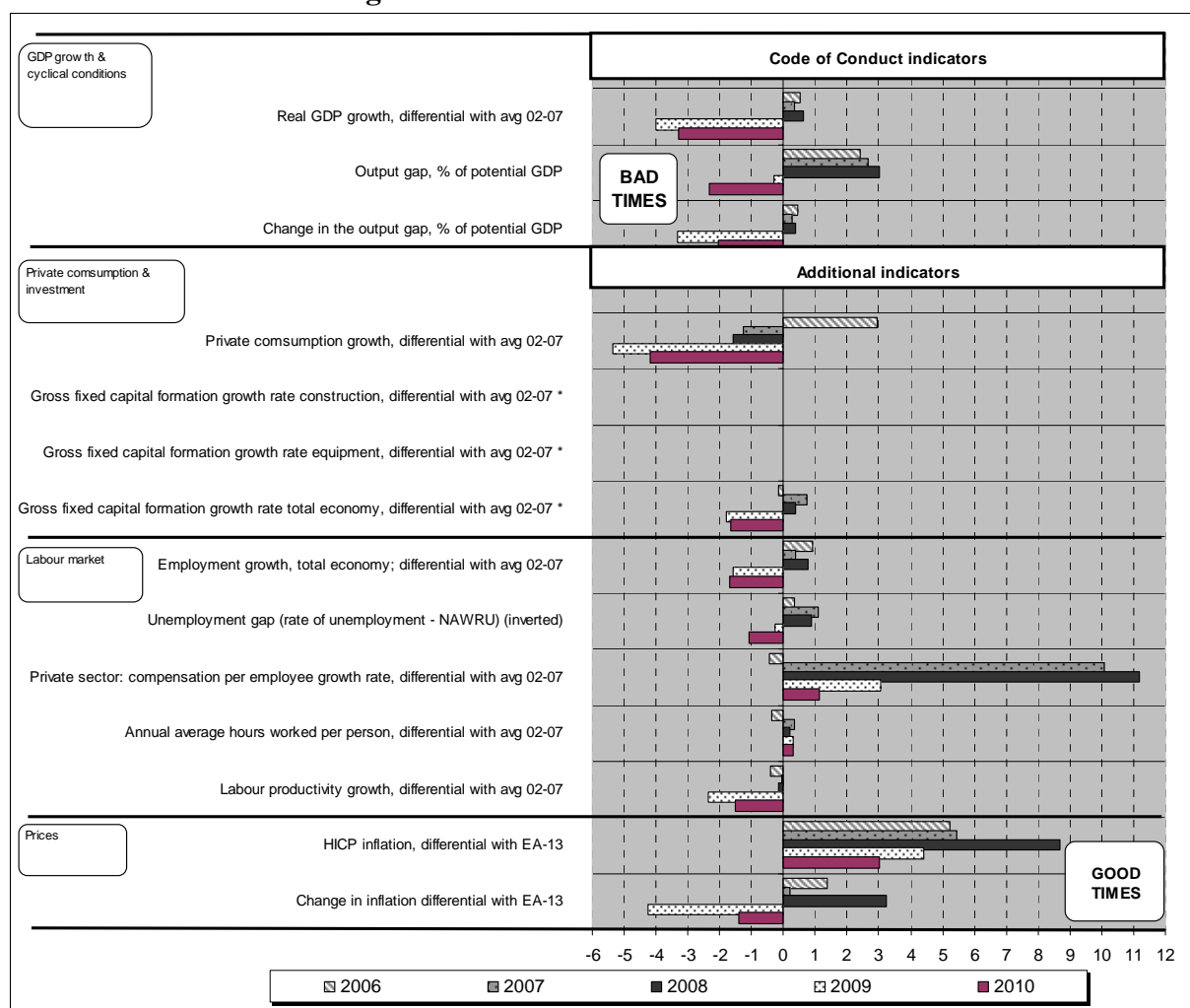
While some reforms have taken place in the education sector, through changes in the school financing mechanism on a per-student basis, the health sector continues to be largely unreformed. Stepping up the efforts to improve the quality of education at all levels of education, including higher education and vocational training, will be particularly important for tackling labour market needs and improving labour productivity. In this regard, an effective national system for assessment and control of the quality of education, including through evaluation of teachers and schools, would need to be established. The existence of excessive capacity and the lack of effective spending control mechanisms in the healthcare sector undermine the quality of medical service delivery. Effective implementation of reforms in education and health would have a lasting impact on Bulgaria's long-term potential growth.

In view to the spending pressures from the fast aging of population further reforms of the social protection system are needed to ensure sustainability of the pension system and to remove possible disincentives to work by strengthening the eligibility criteria and better targeting social assistance. The social assistance system needs to be further consolidated given its quite fragmented structure. Public spending on R&D and innovation is inadequate and lacks efficient distribution of funding. To increase the efficiency of its capital spending, the government would need to apply more consistently and vigorously a cost-benefit analysis approach in deciding which investment projects need to be financed with public money and which through public private partnerships. The financing would also need to be planned under a hard budget constraint in a medium term perspective rather than on an ad-hoc year on year basis. Discretionary cuts in public capital spending should be avoided as this leads to serious deterioration of basis public infrastructure and decreases the efficiency of resource allocations.

More generally, achieving high technical efficiency of public spending in Bulgaria requires improving the public procurement system, administrative capacity building and strengthening the internal control and audit functions, reforming and streamlining the civil service, reducing the high administrative burden on the business, and effective fight against fraud and corruption. It is generally recognized that the procurement process in Bulgaria is a major potential source of irregularity and misuse of public funds. In this regard, procurement procedures need to be improved including by strengthening the independence and enforcement powers of the Public Procurement Agency beyond the monitoring of the procurement process. Substantially cutting red tape and shortening procedural delays will improve the business environment and the delivery of efficient public services. Further, effective fight against corruption would avoid the risk of diverting budget funds towards goals that do not reflect the public interest and are thus detrimental to public expenditure efficiency. To improve the allocative efficiency of public expenditure, Bulgaria has embarked on the process of introducing programme budgeting/performance based budgeting. The aim of the reform is to improve the budgetary decision making process by providing better quality and more concrete information on the performance of agencies and programmes and thus enable the government to prioritize and allocate resources more efficiently. Further efforts are needed to fully implement programme budgeting at all levels of government as well as expand the use of performance information in the budgetary process.

ANNEX 2. ADDITIONAL TABLES AND FIGURES

Figure 1: Good and bad economic times



Source: Commission services' January 2009 forecast (COM) and successive convergence programmes

Table 1 : Budgetary implementation in 2008

	2007		2008	
	Planned	Outcome	Planned	Outcome
	CP Dec 2007	CP Dec 2008	CP Dec 2007	CP Dec 2008
Government balance (% of GDP)	3.1	0.1	3.0	3.0
Difference compared to target	-3.0		0.0	
<i>Of which</i> : due to a different starting position end 2007			1.9	
due to different revenue / expenditure growth in 2008			-2.7	
p.m. Denominator effect and residual ^{2,3}			0.4	
<i>p.m. Nominal GDP growth (planned and outcome)</i>			12.5	17.5
Revenue (% of GDP)	42.2	41.6	43.7	41.3
Revenue surprise compared to target¹	-0.6		-2.4	
<i>Of which</i> : due to a different starting position end 2007			-0.6	
due to different revenue growth in 2008			0.1	
p.m. Denominator effect ²			-1.6	
p.m. Residual ³			-0.3	
<i>p.m. Revenue growth rate (planned and outcome)</i>			16.5	16.7
Expenditure (% of GDP)	39.1	41.5	40.7	38.3
Expenditure surprise compared to target¹	-2.4		2.4	
<i>Of which</i> : due to different starting position end 2007			-2.5	
due to different expenditure growth rate in 2008			2.7	
p.m. Denominator effect ²			1.6	
p.m. Residual ³			0.6	
<i>p.m. Expenditure growth rate (planned and outcome)</i>			17.1	8.4
Notes:				
¹ A positive number implies that the outcome was better (in terms of government balance) than planned.				
² The denominator effect captures the mechanical effect that, if GDP turns out higher than planned, the ratio of revenue or expenditure to GDP will fall because of a higher denominator. Although the denominator effect can be very significant for revenue				
³ The decomposition leaves a small residual that cannot be assigned to the previous components. The residual is generally small, except in some cases where planned and actual growth rates of revenue, expenditure and GDP differ significantly.				
<i>Source: Commission services</i>				

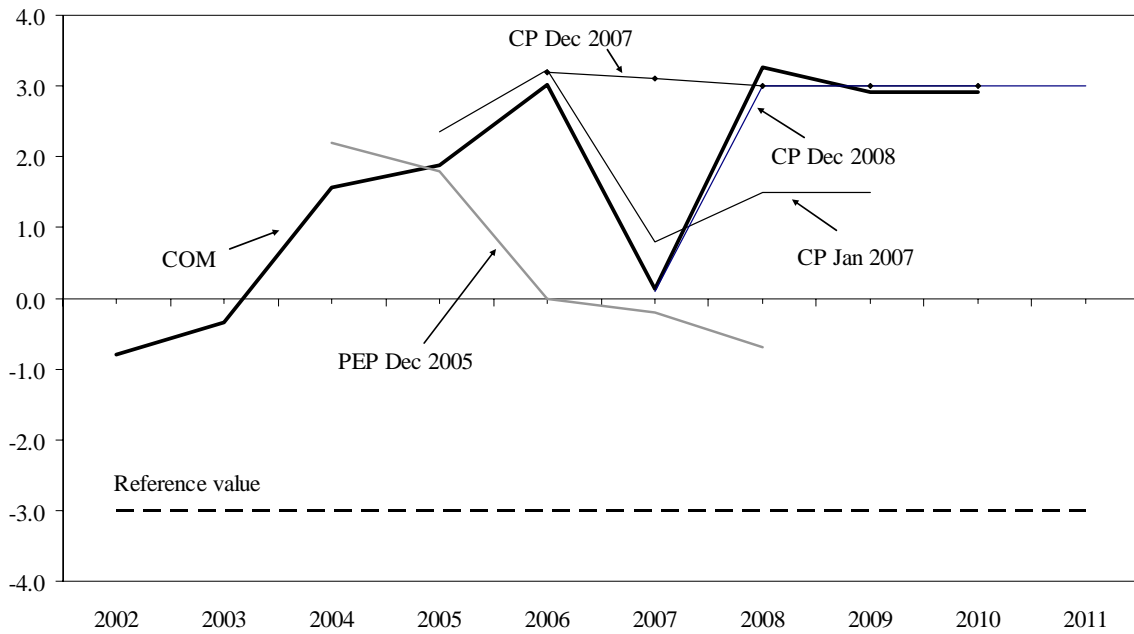
Table 2: Evolution of budgetary targets in successive programmes

		2007	2008	2009	2010	2011
General government balance (% of GDP)	CP Dec 2008	0.1	3.0	3.0	3.0	3.0
	<i>CP Dec 2007</i>	<i>3.1</i>	<i>3.0</i>	<i>3.0</i>	<i>3.0</i>	<i>n.a.</i>
	COM Jan 2009	0.1	3.2	2.0	2.0	n.a.
General government expenditure (% of GDP)	CP Dec 2008	41.5	38.3	40.4	40.4	40.7
	<i>CP Dec 2007</i>	<i>39.1</i>	<i>40.7</i>	<i>40.9</i>	<i>41.0</i>	<i>n.a.</i>
	COM Jan 2009	41.5	38.2	38.8	38.9	n.a.
General government revenue (% of GDP)	CP Dec 2008	41.6	41.3	43.4	43.4	43.7
	<i>CP Dec 2007</i>	<i>42.2</i>	<i>43.7</i>	<i>43.9</i>	<i>43.9</i>	<i>n.a.</i>
	COM Jan 2009	41.6	41.4	40.8	40.9	n.a.
Structural balance ¹ (% of GDP)	CP Dec 2008	2.9	2.6	3.2	3.6	3.6
	<i>CP Dec 2007</i>	<i>2.9</i>	<i>3.1</i>	<i>3.3</i>	<i>n.a.</i>	<i>n.a.</i>
	COM Jan 2009	2.5	2.2	2.1	2.8	n.a.
Real GDP (% change)	CP Dec 2008	6.2	6.5	4.7	5.2	5.8
	<i>CP Dec 2007</i>	<i>6.4</i>	<i>6.4</i>	<i>6.8</i>	<i>6.9</i>	<i>n.a.</i>
	COM Jan 2009	6.2	6.4	1.8	2.5	n.a.
<p><u>Note:</u></p> <p>¹Cyclically-adjusted balance excluding one-off and other temporary measures. Cyclically-adjusted balances according to the programmes as recalculated by the Commission services on the basis of the information in the programmes. The most recent programme provides no information on one-off and other temporary measures; according to the Commission services' January 2009 interim forecast, they are 3.3% of GDP(expenditure side) in 2007.</p> <p><u>Source:</u></p> <p><i>Convergence programmes (CP); Commission services' January 2009 interim forecasts (COM)</i></p>						

Table 3 Assessment of tax projections

	2007		2008	
	Planned	Outcome	Planned	Outcome
	CP Dec 2007	CP Dec 2008	CP Dec 2007	CP Dec 2008
Government balance (% of GDP)	3.1	0.1	3.0	3.0
Difference compared to target	-3.0		0.0	
<i>Of which</i> : due to a different starting position end 2007			1.9	
due to different revenue / expenditure growth in 2008			-2.7	
p.m. Denominator effect and residual ^{2,3}			0.4	
<i>p.m. Nominal GDP growth (planned and outcome)</i>			12.5	17.5
Revenue (% of GDP)	42.2	41.6	43.7	41.3
Revenue surprise compared to target¹	-0.6		-2.4	
<i>Of which</i> : due to a different starting position end 2007			-0.6	
due to different revenue growth in 2008			0.1	
p.m. Denominator effect ²			-1.6	
p.m. Residual ³			-0.3	
<i>p.m. Revenue growth rate (planned and outcome)</i>			16.5	16.7
Expenditure (% of GDP)	39.1	41.5	40.7	38.3
Expenditure surprise compared to target¹	-2.4		2.4	
<i>Of which</i> : due to different starting position end 2007			-2.5	
due to different expenditure growth rate in 2008			2.7	
p.m. Denominator effect ²			1.6	
p.m. Residual ³			0.6	
<i>p.m. Expenditure growth rate (planned and outcome)</i>			17.1	8.4
Notes:				
¹ A positive number implies that the outcome was better (in terms of government balance) than planned.				
² The denominator effect captures the mechanical effect that, if GDP turns out higher than planned, the ratio of revenue or expenditure to GDP will fall because of a higher denominator. Although the denominator effect can be very significant for revenue				
³ The decomposition leaves a small residual that cannot be assigned to the previous components. The residual is generally small, except in some cases where planned and actual growth rates of revenue, expenditure and GDP differ significantly.				
<i>Source: Commission services</i>				

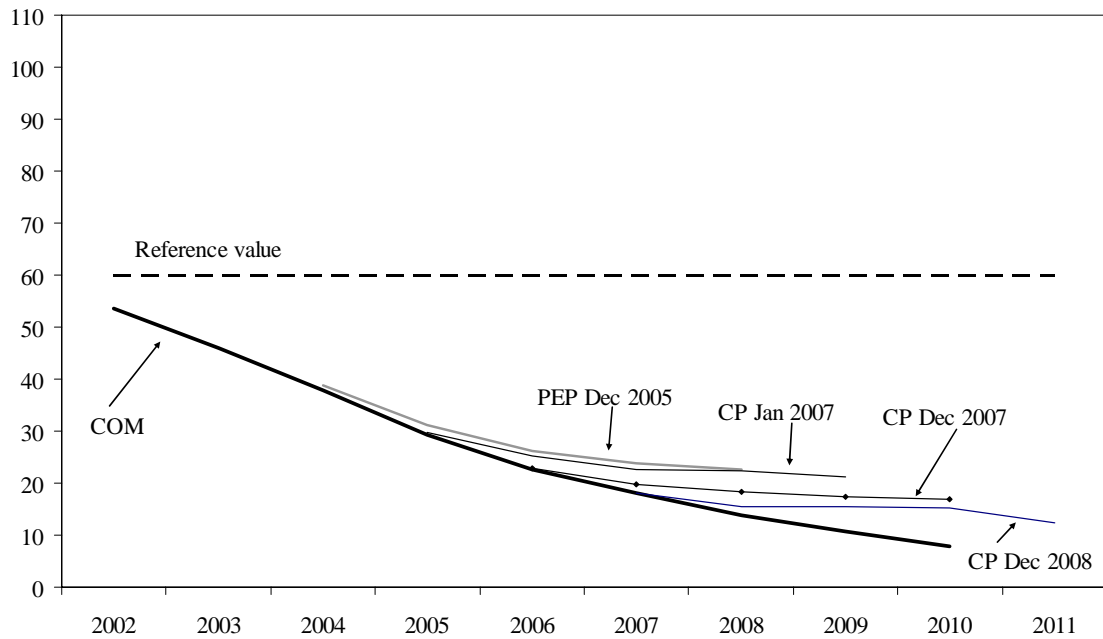
Figure 2: Government balance projections in successive programmes (% of GDP)



Note: PEP = pre-accession economic programme.

Source: Commission services' January 2009 interim forecast (COM) and successive convergence programmes

Figure 3: Debt projections in successive programmes (% of GDP)



Note: PEP = pre-accession economic programme.

Source: Commission services' January 2009 interim forecast (COM) and successive convergence programmes

Table 4: Sustainability indicators and the required primary balance

Value	2008 scenario			Programme scenario		
	S1	S2	RPB	S1	S2	RPB
Value	-3.5	-1.3	2.0	-4.4	-2.3	1.9
<i>of which:</i>						
Initial budgetary position (IBP)	-3.3	-3.2	-	-4.2	-4.1	-
Debt requirement in 2050 (DR)	-0.8	-	-	-0.8	-	-
Long-term change in the primary balance (LTC)	0.6	1.9	-	0.6	1.9	-

Source: Commission services.

Table 5: Additional factors

	Impact on risk
Debt and pension assets	+
Decline in structural balance until 2010 in COM January 2009 interim forecast	na
Significant revenues from pension taxation	na
Alternative projection of cost of ageing	na
Strong decline in benefit ratio	na
High tax burden	na
Non-age related budgetary measures with intertemporal effect	na

Note: '-': factor tends to increase the risk to sustainability, '+': factor tends to decrease the risk to sustainability.
'na': not applicable.

Alternative projections are often presented in the programmes, whose assumptions often diverge from the common method. Projections currently discussed in the Economic Policy Committee but not yet published, are for the time being also considered "unofficial".

An explanation on these factors can be found in chapter IV of: European Commission (2006), The long-term sustainability of public finances in the European Union, European Economy No. 4/2006.

Source: Commission services.

ANNEX 3. COMPLIANCE WITH THE CODE OF CONDUCT AND TABLES FROM THE PROGRAMME

The December 2008 update of the convergence programme closely follows the model structure of Annex 1 of the code of conduct and is in compliance as far as the table of contents is concerned.

As far as data requirements are concerned, the programme update provides almost all compulsory and most of the optional data prescribed by the code of conduct as amended by the September 2007 EFC. Regarding compulsory data, in Table 2 information on local government and social security funds net-lending is not included. Regarding optional data, in Table 4 no information on liquid financial assets and net financial debt is provided. In table 7, data on social security pensions, occupational pensions, long-term care, and pension reserve fund assets is missing.

The tables on the following pages show the data presented in the December 2008 update of the convergence programme, following the structure of the tables in Annex 2 of the code of conduct. Compulsory data are in bold, missing data are indicated with grey-shading.

Table 1a. Macroeconomic prospects

	ESA Code	2007	2007	2008	2009	2010	2011
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. Real GDP	B1*g	28898	6.2	6.5	4.7	5.2	5.8
2. Nominal GDP	B1*g	28898	14.5	17.5	10.7	8.9	9.3
Components of real GDP							
3. Private consumption expenditure	P.3	19982	5.3	5.0	4.1	4.1	5.0
4. Government consumption expenditure	P.3	4667	3.1	0.8	0.2	0.7	2.6
5. Gross fixed capital formation	P.51	8606	21.7	22.4	10.6	9.0	10.1
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	7.0	1.2	0.3	-0.6	-0.6	-1.2
7. Exports of goods and services	P.6	18320	5.2	5.8	6.3	7.8	8.8
8. Imports of goods and services	P.7	-24704	9.9	9.6	6.1	6.1	7.0
Contributions to real GDP growth							
9. Final domestic demand		-	9.9	10.3	6.3	5.8	7.0
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	-	1.2	0.8	-0.3	-0.3	-0.9
11. External balance of goods and services	B.11	-	-4.9	-4.5	-1.3	-0.3	-0.3

Table 1b. Price developments

	ESA Code	2007	2007	2008	2009	2010	2011
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. GDP deflator		100	7.9	10.3	5.7	3.6	3.3
2. Private consumption deflator		100	6.7	11.9	5.7	3.7	3.0
3. HICP¹		100	7.6	12.4	6.7	4.7	4.0
4. Public consumption deflator		100	8.0	13.8	7.5	5.2	4.5
5. Investment deflator		100	9.3	4.7	1.5	1.1	1.3
6. Export price deflator (goods and services)		100	6.9	12.3	3.5	3.6	3.5
7. Import price deflator (goods and services)		100	6.9	10.9	2.5	2.8	2.5

¹ Optional for stability programmes.

Table 1c. Labour market developments

	ESA Code	2007	2007	2008	2009	2010	2011
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. Employment, persons¹		3714	2.8	3.3	0.8	0.4	0.2
2. Employment, hours worked ²		6171.8	3.3	3.5	0.9	0.5	0.3
3. Unemployment rate (%)³		6.9	6.9	6.0	5.7	5.5	5.3
4. Labour productivity, persons⁴		7780.8	3.3	3.1	3.8	4.8	5.5
5. Labour productivity, hours worked ⁵		4.7	2.8	2.9	3.8	4.7	5.5
6. Compensation of employees	D.1	9982676	22.3	24.6	13.0	10.5	9.8
7. Compensation per employee		3659.7	17.9	19.9	12.0	10.0	9.5

¹Occupied population, domestic concept national accounts definition.

²National accounts definition.

³Harmonised definition, Eurostat; levels.

⁴Real GDP per person employed.

⁵Real GDP per hour worked.

Table 1d. Sectoral balances

% of GDP	ESA Code	2007	2008	2009	2010	2011
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	-20.6	-22.9	-20.7	-18.4	-16.6
<i>of which :</i>						
- Balance on goods and services		-21.4	-24.4	-23.2	-21.7	-19.9
- Balance of primary incomes and transfers		-0.4	0.4	1.0	1.0	0.8
- Capital account		1.2	1.1	1.5	2.3	2.5
2. Net lending/borrowing of the private sector	B.9	-20.7	-25.9	-23.7	-21.4	-19.6
3. Net lending/borrowing of general government	EDP B.9	0.1	3.0	3.0	3.0	3.0
4. Statistical discrepancy		n.a.	n.a.	n.a.	n.a.	n.a.

Table 2. General government budgetary prospects

	ESA Code	2007	2007	2008	2009	2010	2011
		Level	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP
Net lending (EDP B.9) by sub-sector							
1. General government	S.13	35.6	0.1	3.0	3.0	3.0	3.0
2. Central government	S.1311	8.7	0.0	3.0	3.0	3.0	3.0
3. State government	S.1312	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>
4. Local government	S.1313	-13.5	0.0	0.0	0.0	0.0	0.0
5. Social security funds	S.1314	40.3	0.1	0.0	0.0	0.0	0.0
General government (S13)							
6. Total revenue	TR	12014.7	41.6	41.3	43.4	43.4	43.7
7. Total expenditure	TE ¹	11979.1	41.5	38.3	40.4	40.4	40.7
8. Net lending/borrowing	EDP B.9	35.6	0.1	3.0	3.0	3.0	3.0
9. Interest expenditure	EDP D.41	296.5	1.0	0.9	0.9	0.9	0.9
10. Primary balance²		332.1	1.1	3.9	3.9	3.9	3.9
11. One-off and other temporary measures³		-943.6	-3.3	0.0	0.0	0.0	0.0
Selected components of revenue							
12. Total taxes (12=12a+12b+12c)		7412.7	25.7	26.0	26.5	26.4	26.6
12a. Taxes on production and imports	D.2	5344.4	18.5	18.7	18.8	18.9	18.9
12b. Current taxes on income, wealth, etc	D.5	1906.5	6.6	6.7	7.1	6.9	7.1
12c. Capital taxes	D.91	161.7	0.6	0.6	0.6	0.7	0.7
13. Social contributions	D.61	2500.4	8.7	8.0	8.2	8.2	8.3
14. Property income	D.4	431	1.5	1.4	1.2	1.0	1.0
15. Other⁴		1670.6	5.8	5.8	7.6	7.7	7.8
16=6. Total revenue	TR	12014.7	41.6	41.3	43.4	43.4	43.7
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)⁵			33.8	33.6	34.2	34.2	34.6
Selected components of expenditure							
17. Compensation of employees + intermediate consumption	D.1+P.2	4908	17.0	15.8	16.5	16.7	16.6
17a. Compensation of employees	D.1	2597.2	9.0	8.2	8.7	8.8	8.9
17b. Intermediate consumption	P.2	2310.8	8.0	7.7	7.8	7.8	7.7
18. Social payments (18=18a+18b)		3512.1	12.2	11.5	12.4	12.0	11.7
18a. Social transfers in kind supplied via market producers	D.6311, D.63121, D.63131	366.3	1.3	1.1	1.1	0.8	0.7
18b. Social transfers other than in kind	D.62	3145.8	10.9	10.5	11.4	11.2	11.0
19=9. Interest expenditure	EDP D.41	296.5	1.0	0.9	0.9	0.9	0.9
20. Subsidies	D.3	227.5	0.8	1.7	2.2	2.3	2.1
21. Gross fixed capital formation	P.51	1380.5	4.8	6.6	6.7	6.9	7.4
22. Other⁶		1654.5	5.7	1.8	1.7	1.6	2.0
23=7. Total expenditure	TE ¹	11979.1	41.5	38.3	40.4	40.4	40.7
p.m.: Government consumption (nominal)	P.3	4667.1	16.2	15.8	15.4	14.9	14.6

¹Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

²The primary balance is calculated as (EDP B.9, item 8) plus (EDP D.41, item 9).

³A plus sign means deficit-reducing one-off measures.

⁴P.11+P.12+P.131+D.39+D.7+D.9 (other than D.91).

⁵Including those collected by the EU and including an adjustment for uncollected taxes and social contributions (D.995), if appropriate.

⁶D.29+D.4 (other than D.41)+ D.5+D.7+D.9+P.52+P.53+K.2+D.8.

Table 3. General government expenditure by function

% of GDP	COFOG Code	2006	2011
1. General public services	1	4.5	4.2
2. Defence	2	1.7	1.8
3. Public order and safety	3	2.6	2.6
4. Economic affairs	4	4.6	6.9
5. Environmental protection	5	1.3	1.7
6. Housing and community amenities	6	0.7	2.1
7. Health	7	4.2	4.5
8. Recreation, culture and religion	8	0.8	0.7
9. Education	9	3.9	4.2
10. Social protection	10	12.2	12.1
11. Total expenditure (=item 7=23 in Table 2)	TE ¹	36.5	40.7

¹Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

Table 4. General government debt developments

% of GDP	ESA Code	2007	2008	2009	2010	2011
1. Gross debt¹		18.2	15.4	15.4	15.3	15.2
2. Change in gross debt ratio		-4.5	-2.8	0.0	-0.1	-0.1
Contributions to changes in gross debt						
3. Primary balance²		1.1	3.9	3.9	3.9	3.9
4. Interest expenditure³	EDP D.41	1.0	0.9	0.9	0.9	0.9
5. Stock-flow adjustment		-3.8	-4.5	-3.0	-3.5	-3.7
<i>of which:</i>						
- Differences between cash and accruals ⁴		0.0	0.0	0.0	0.0	0.0
- Net accumulation of financial assets ⁵		-3.3	-4.1	-3.3	-3.7	-3.9
<i>of which:</i>						
- privatisation proceeds		1.0	0.7	0.4	0.1	0.0
- Valuation effects and other ⁶		-0.4	-0.4	0.3	0.2	0.2
p.m.: Implicit interest rate on debt⁷		5.2	5.7	6.3	6.4	7.9
Other relevant variables						
6. Liquid financial assets ⁸		n.a.	n.a.	n.a.	n.a.	n.a.
7. Net financial debt (7=1-6)		n.a.	n.a.	n.a.	n.a.	n.a.

¹As defined in Regulation 3605/93 (not an ESA concept).

²Cf. item 10 in Table 2.

³Cf. item 9 in Table 2.

⁴The differences concerning interest expenditure, other expenditure and revenue could be distinguished when relevant.

⁵Liquid assets, assets on third countries, government controlled enterprises and the difference between quoted and non-quoted assets could be distinguished when relevant.

⁶Changes due to exchange rate movements, and operation in secondary market could be distinguished when relevant.

⁷Proxied by interest expenditure divided by the debt level of the previous year.

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

Table 5. Cyclical developments

% of GDP	ESA Code	2007	2008	2009	2010	2011
1. Real GDP growth (%)		6.2	6.5	4.7	5.2	5.8
2. Net lending of general government	EDP B.9	0.1	3.0	3.0	3.0	3.0
3. Interest expenditure	EDP D.41	1.0	0.9	0.9	0.9	0.9
4. One-off and other temporary measures¹		-3.3	0.0	0.0	0.0	0.0
5. Potential GDP growth (%)		5.0	6.3	6.0	6.0	5.9
contributions:						
- labour		1.4	1.9	1.3	1.1	0.9
- capital		2.9	3.5	3.5	3.5	3.5
- total factor productivity		0.7	0.9	1.2	1.4	1.6
6. Output gap		1.8	1.9	0.7	0.0	-0.1
7. Cyclical budgetary component		0.6	0.7	0.2	0.0	-0.1
8. Cyclically-adjusted balance (2 - 7)		-0.5	2.3	2.8	3.0	3.1
9. Cyclically-adjusted primary balance (8 + 3)		0.5	3.2	3.6	3.9	4.0
10. Structural balance (8 - 4)		3.8	3.2	3.6	3.9	4.0

¹A plus sign means deficit-reducing one-off measures.

Table 6. Divergence from previous update

	ESA Code	2007	2008	2009	2010	2011
Real GDP growth (%)						
Previous update		6.4	6.4	6.8	6.9	n.a.
Current update		6.2	6.5	4.7	5.2	5.8
Difference		-0.2	0.1	-2.1	-1.7	n.a.
General government net lending (% of GDP)	EDP B.9					
Previous update		3.1	3.0	3.0	3.0	n.a.
Current update		0.1	3.0	3.0	3.0	3.0
Difference		-3.0	0.0	0.0	0.0	n.a.
General government gross debt (% of GDP)						
Previous update		19.8	18.3	17.4	16.9	n.a.
Current update		18.2	15.4	15.4	15.3	15.2
Difference		-1.6	-2.9	-2.0	-1.6	n.a.

Table 7. Long-term sustainability of public finances

% of GDP	2000	2005	2010	2020	2030	2050
Total expenditure	42.4	39.3	40.4	39.7	40.3	44.0
Of which: age-related expenditures	10.1	9.0	17.4	16.6	17.3	21.0
Pension expenditure	9.4	8.8	9.1	8.4	8.6	10.8
Social security pension	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Old-age and early pensions	8.3	7.3	7.9	6.9	7.1	9.4
Other pensions (disability, survivors)	1.1	1.6	1.8	1.5	1.5	1.4
Occupational pensions (if in general government)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Health care	3.3	4.9	4.2	4.3	4.7	6.0
Long-term care (<i>this was earlier included in the health care</i>)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Education expenditure	4.2	4.1	4.0	3.9	4.0	4.1
Other age-related expenditures	0.7	0.2	0.1	0.1	0.1	0.1
Interest expenditure	4.0	1.7	0.9	0.9	0.9	0.9
Total revenue	41.4	41.2	43.4	43.4	43.4	43.4
Of which: property income	3.6	1.4	1.0	1.0	1.0	1.0
<i>Of which</i> : from pensions contributions (or social contributions if appropriate)	7.6	7.1	7.6	7.5	7.4	7.3
Pension reserve fund assets	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>Of which</i> : consolidated public pension fund assets (assets other than government liabilities)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Assumptions						
Labour productivity growth	9.2	3.5	4.8	3.3	2.7	1.7
Real GDP growth	5.4	6.2	5.2	2.4	1.7	0.3
Participation rate males (aged 20-64)	73.4	74.2	78.3	80.0	79.0	77.6
Participation rates females (aged 20-64)	61.0	63.1	68.5	71.2	70.4	68.9
Total participation rates (aged 20-64)	67.1	68.6	73.4	75.6	74.7	73.3
Unemployment rate	16.9	10.1	5.5	4.7	4.7	4.7
Population aged 65+ over total population	16.5	17.2	17.6	20.5	23.4	31.5

Table 8. Basic assumptions

	2007	2008	2009	2010	2011
Short-term interest rate¹ (annual average)	4.3	4.9	5.0	4.5	4.5
Short-term interest rate ¹ (annual average), 6-month USD LIBOR, %	5.3	3.1	3.3	4.0	4.5
Long-term interest rate (annual average)	4.2	4.1	4.0	4.1	4.1
USD/€ exchange rate (annual average) (euro area and ERM II countries)	1.37	1.50	1.40	1.30	1.25
Nominal effective exchange rate (for countries not in euro area or ERM II) exchange rate vis-à-vis the € (annual average)	2.0	2.0	2.0	2.0	2.0
World excluding EU, GDP growth	5.0	4.1	3.9	4.2	4.5
EU GDP growth	2.8	0.8	0.3	1.4	1.8
Growth of relevant foreign markets	8.7	5.2	2.8	4.6	5.5
World import volumes, excluding EU	7.8	6.0	3.1	4.7	4.7
Oil prices (Brent, USD/barrel)	71.1	108.0	98.0	91.0	93.8

¹If necessary, purely technical assumptions.

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