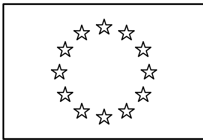

EUROPEAN COMMISSION
DIRECTORATE GENERAL
ECONOMIC AND FINANCIAL AFFAIRS

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NOVEMBER 2005 UPDATE OF THE CONVERGENCE PROGRAMME OF DENMARK (2005-2010)

AN ASSESSMENT

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SUMMARY AND CONCLUSIONS[1]

The 2005 update of the Danish convergence programme, covering the period up to 2010, was submitted to the Commission on 30 November 2005. The programme is based on the draft Budget Bill for 2006 presented to Parliament on 25 August 2005. The Budget Bill was adopted by Parliament on 14 December 2005. The programme broadly follows the model structure for stability and convergence programmes specified in the new code of conduct[2].

Over the last decade, GDP growth has averaged some 2 per cent, while inflation has broadly followed euro area inflation. Employment growth has picked up in recent years and unemployment is close to its lowest level in the last decade. The macroeconomic scenario underlying the programme envisages real GDP growth of 2.4% in 2006 and 1.6% on average over the rest of the programme period. Assessed against currently available information, this scenario appears to be cautious, in particular regarding the technically-assumed growth rates for 2007 and 2008. The programme's projections for inflation appear realistic.

On 17 February 2005, in its opinion the Council endorsed the budgetary strategy presented in the 2004 update of the convergence programme of Denmark. Regarding the 2005 budgetary implementation, the 2004 update targeted a 2.2% of GDP general government surplus for 2005 while the current update forecast a 3.6% surplus for a similar GDP growth outlook. Revenues have come in better than expected, including revenues from the pension fund yield tax as well as from oil and gas exploitation.

The budgetary strategy aims at maintaining structural surpluses between 1½% and 2½% on average over the programme period, implying a marked reduction in the general government debt ratio, in order to provide a sound basis for the ageing of the population. The strategy is based on expenditure restraint, with the objective of keeping the annual growth of real public consumption at 0.5%, maintenance of the tax freeze and of a balanced budget requirement for local governments. The update foresees the general government surplus to narrow from 3.6% of GDP in 2005 to 3.1% in 2006 and 3.2% in 2007, then declining slightly to reach 2.9% of GDP at the end of the programme period. The estimated general government surpluses in the present update are markedly higher than in the previous update while projected GDP growth is similar.

As its MTO, the programme targets a structural balance (taking into account the use of the transition period of the Eurostat decision mentioned above) of between 1½% and

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1 This technical analysis, which is based on information available up to 22 December 2005 accompanies the recommendation by the Commission for a Council opinion on the update of the convergence programme, which the College adopted on 11 January 2006. It has been carried out by the staff of and under the responsibility of the Directorate-General for Economic and Financial Affairs of the European Commission. Comments should be sent to Jens Matthiessen (jens.matthiessen@cec.eu.int). The analysis takes into account (i) the Commission services' autumn 2005 forecast, (ii) the code of conduct (Opinion of the Economic and Financial Committee on the "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), (iii) the commonly agreed methodology for the estimation of potential output and cyclically-adjusted balances and (iv) the broad economic policy guidelines for the period 2005-2008.

2 The programme has gaps in the compulsory data and does not provide all optional data prescribed by the new code of conduct (especially projected world and EU GDP growth for certain years are missing).

2½% of GDP over the programme period. In structural terms (i.e. in cyclically-adjusted terms net of one-off and other temporary measures), the surplus falls from a peak of 3.6% of GDP in 2005 to around 2¾% of GDP in 2006 before firming to 3¼% of GDP thereafter. However, the calculated easing in 2006 by 0.8 percentage point of GDP reflects a normalisation of expected tax receipts from pension funds, which were exceptionally high in 2005. Corrected for the temporary higher revenues in 2005 the structural surplus is broadly unchanged from 2005 to 2006.

As the MTO is more demanding than the minimum benchmark (estimated at a deficit of about 1/2% of GDP), its achievement should fulfil the aim of providing a safety margin against the occurrence of an excessive deficit. As regards appropriateness, the programme's MTO lies within the range indicated for euro area and ERM II Member States in the Stability and Growth Pact and the code of conduct and is significantly more demanding than implied by the debt ratio and average potential output growth in the long term. The programme explains that it is set at a more demanding level than required by the Pact to set a sound basis for long-term fiscal sustainability through a rapid debt reduction.

On balance, the risks to the budgetary projections in the update appear to be on the positive side, in particular as GDP growth may be higher than expected, mainly due to the technically-assumed low GDP growth in 2007 and 2008 stemming from a gradually closing of the output gap as estimated by Danish authorities. Hence, GDP growth and the budgetary outcome in these years could be better than projected in the programme. A negative risk is the compliance with the target of limiting the growth of real public consumption, against the background of a mixed track record in this regard.

In view of this risk assessment, the budgetary stance in the programme seems sufficient to maintain the programme's MTO throughout the programme period. In addition, it provides a sufficient safety margin against breaching the 3% of GDP deficit threshold with normal macroeconomic fluctuations in each year. The fiscal policy stance implied by the programme is also in line with the Stability and Growth Pact in the sense that it is not pro-cyclical in good economic times – appropriate account taken of the exceptionally high revenues from pension yield tax and oil and gas extraction that boost the estimated surplus for 2005 – which is important given the cyclical position of Danish economy. The reclassification of second-pillar funded pension schemes from spring 2007 (when the transition period for the implementation of the Eurostat decision of 2 March 2004 on the matter expires) will reduce the Danish surpluses by around 1% of GDP in each year but would not materially alter this assessment.

The debt ratio is estimated to have reached 36% of GDP in 2005, well below the 60% of GDP Treaty reference value. The programme projects the debt ratio to decline by around 14 percentage points over the programme period.

With regard to the sustainability of public finances, Denmark appears to be at low risk on grounds of the projected budgetary costs of an ageing population, due to its solid public finances and provided that the assumed employment increases and low government consumption growth be achieved, which requires further labour market reforms and spending restraint. The strategy of putting sustainability concerns at the heart of fiscal policy making, including containing pension expenditure and involving accumulation of assets, contributes positively to the long-term outlook for public finances. The currently favourable budgetary position contributes to the financing of the projected budgetary

impact of an ageing population and the medium-term budgetary plans are consistent with sustainable public finances[3].

The envisaged measures in the area of public finances are broadly consistent with the broad economic policy guidelines, included in the integrated guidelines for the period 2005-2010. In particular, Denmark respects its MTO. However, new measures have not been specified to achieve the assumed increase in employment of close to 2% of the labour force by 2010.

The National Reform Programme of Denmark, submitted on 26 October 2005 within the context of the renewed Lisbon strategy for growth and jobs, puts emphasis on improving labour supply to ensure the long-term sustainability of public finances and improving the efficiency of the public sector. The budgetary implications of the actions outlined in the National Reform Programme are fully reflected in the budgetary projections of the convergence programme. The measures in the area of public finances envisaged in the convergence programme are in line with the actions foreseen in the National Reform Programme.

[3] Details on long-term sustainability are provided in the technical assessment of the programme by the Commission services, to be published at the website: http://europa.eu.int/comm/economy_finance/about/activities/sgp/main_en.htm

Comparison of key macroeconomic and budgetary projections[1]

		2004	2005	2006	2007	2008	2010
Real GDP (% change)	**CP Nov 2005**	**2.0**	**2.4**	**2.4**	**1.1**	**1.6**	**2.1**
	COM Nov 2005	2.1	2.7	2.3	2.1	n.a.	n.a.
	CP Nov 2004	*2.2*	*2.5*	*1.3*	*1.9*	*1.8*	*1.8*
HICP inflation (%)	**CP Nov 2005**	**0.9**	**1.6**	**2.0**	**1.3**	**1.9**	**1.8**
	COM Nov 2005	0.9	1.7	2.0	1.9	n.a.	n.a.
	CP Nov 2004	*1.2*	*1.7*	*1.6*	*1.7*	*n.a.*	*1.6*
Output gap (% of potential GDP)	**CP Nov 2005[2]**	**-0.8**	**-0.3**	**0.1**	**-0.7**	**-0.9**	**-0.6**
	COM Nov 2005[6]	-1.3	-0.6	-0.4	-0.4	n.a.	n.a.
	CP Nov 2004[2]	*-0.6*	*-0.1*	*-0.5*	*-0.4*	*n.a.*	*-0.4*
General government balance (% of GDP)	**CP Nov 2005**	**2.3**	**3.6**	**3.1**	**3.2**	**2.7**	**2.9**
	COM Nov 2005	2.9	3.7	3.0	2.7	n.a.	n.a.
	CP Nov 2004	*1.4*	*2.2*	*1.8*	*1.9*	*2.2*	*2.2*
Primary balance (% of GDP)	**CP Nov 2005**	**4.7**	**5.6**	**4.7**	**4.1**	**3.5**	**3.7**
	COM Nov 2005	5.3	5.8	4.9	4.4	n.a.	n.a.
	CP Nov 2004	*4.5*	*4.8*	*4.5*	*4.6*	*n.a.*	*4.4*
Cyclically-adjusted balance (% of GDP)	**CP Nov 2005[2]**	**2.8**	**3.8**	**3.0**	**3.6**	**3.3**	**3.3**
	COM Nov 2005	3.8	4.1	3.3	3.0	n.a.	n.a.
	CP Nov 2004[2]	***1.7***	***2.0***	***2.0***	***2.0***	*n.a*	*2.3*
Structural balance[3] (% of GDP)	**CP Nov 2005[4]**	**2.6**	**3.6**	**2.7**	**3.3**	**3.3**	**3.3**
	COM Nov 2005[5]	3.6	3.9	3.0	2.7	n.a.	n.a.
	CP Nov 2004	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*
Government gross debt (% of GDP)	**CP Nov 2005**	**42.3**	**35.6**	**31.7**	**28.9**	**26.5**	**21.5**
	COM Nov 2005	43.2	36.0	33.0	31.5	n.a.	n.a.
	CP Nov 2004	*42.3*	*39.4*	*37.4*	*35.3*	*33.1*	*28.8*

Notes:

[1]The budgetary projections exclude the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes, which needs to be implemented by the time of the spring 2007 notification. Including this impact, the general government balance would be 1.3% of GDP in 2004, 2.7% in 2005, 2.1% in 2006, 2.2% in 2007, 1.7% in 2008 and 1.9% in 2009, while government gross debt would be 43.5% of GDP in 2004, 36.8% in 2005, 32.9% in 2006, 30.1% in 2007, 27.7% in 2008 and 22.7% in 2010.

[2]Commission services calculations on the basis of the information in the programme.

[3]Cyclically-adjusted balance (as in the previous rows) excluding one-off and other temporary measures.

[4]One-off and other temporary measures taken from the programme (0.2% of GDP in 2004 and 2005 and 0.3% in 2006 and 2007; all deficit-reducing).

[5] The one-off and other temporary measures taken from the Commission services' autumn 2005 forecast are the effects of the suspension until 2007 of the contributions to the SP pension scheme. As the contributions are tax-deductible, their suspension strengthen public finances by an estimated 0.2% of GDP in 2004 and 2005 and 0.3% in 2006 and 2007).

[6]Based on estimated potential growth of 1.9%, 2.1%, 2.1% and 2.1% respectively in the period 2004-2007.

Source:

Convergence programme (CP); Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations

1. INTRODUCTION

The 2005 update of the Danish convergence programme, covering the period up to 2010, was adopted by the Danish government on 30 November 2005 and submitted to the Commission on the same day. The update has been sent to the Danish Parliament for information. The programme is based on the economic projections in the Government's draft Budget Bill for 2005 presented to Parliament on 25 August 2005. The budget bill was adopted by Parliament on 14 December. The present update is the seventh update of the original convergence programme submitted in October 1998.

The programme broadly follows the model structure for stability and convergence programmes specified in Annex 1 of the new code of conduct. The programme has gaps in the compulsory[4] data and does not provide all optional[5] data prescribed by the new code of conduct. Annex 2 provides a detailed overview of all aspects of compliance with the new code of conduct.

2. ECONOMIC OUTLOOK

Over the last decade, GDP growth has averaged some 2 per cent. This growth performance has been characterised by strong productivity developments. Employment growth has picked up in recent years and unemployment is close to its lowest level in the last decade. Both employment and unemployment rates compare favourably with the EU15 average. Inflation has broadly been in line with developments in the euro area.

The update foresees GDP growth of 2.4% in both 2005 and 2006. For 2006, this is close to last year's update and also roughly in line with the Commission's services' autumn 2005 forecast (Table 1). However, the programme adopts a technical assumption that a positive output gap[6] is closed in 2008, with GDP growth in 2007 and 2008 set markedly lower (1.1% and 1.6%, respectively) than projected in either the previous update or (for 2007) the Commission forecast; this growth assumption appears overly cautious[7]: the Commission's growth forecast for 2007 is 2.0%. For the years 2009-2010, the update seems relatively plausible, also in comparison to potential growth rate estimates using the commonly agreed method (see Table 2). On balance, the medium-term macroeconomic scenario in the update appears cautious. Cyclical conditions implied by the programme, as measured by the output gap, appear to worsen over the programme period, as the output gap evolves from around zero to sharply negative in 2007 and remains negative until the end of the programme period on Commission services' estimates. However, this owes to the low growth projections for 2007-2008 in the programme, and, again, seems a non-central projection. In the update the Danish

4 World GDP growth (excluding EU); EU GDP growth; World import volumes (excluding EU), all for 2007 and 2008 (Table 8 in the code of conduct).

5 General government expenditure by function, for the year 2008 (Table 3 in the code of conduct); Specifications of the stock-flow adjustment: Differences between cash and accruals; Net accumulation of financial assets; Valuation effects and other; Liquid financial assets (Table 4); Cyclical budgetary component (Table 5).

6 As calculated by the national authorities; the Commission services estimate a negative gap.

7 In the Danish official forecast published on 5 December 2005, the GDP growth projection for 2006 is confirmed but for 2007 the more plausible growth rate of 2.0% is foreseen.

authorities provide output gap figures based on their own method, where the calculated output gap closes sooner than when using the commonly agreed methodology[8].

The macroeconomic scenario in the update is based on a continued healthy GDP growth in 2006. Economic activity is driven mainly by domestic demand, centred on private consumption. Household spending is boosted by substantial increases in disposable incomes due to the continued suspension of contributions to the SP pension savings scheme (until 2007) as well as by a wealth effect from strongly rising house prices. Both the update and the Commission services' autumn forecast foresee a continued strong growth in private consumption in 2006, moderating in the years after. Exports, which have been strong in spite of weak foreign demand, are expected to strengthen as export market growth accelerates in 2006. In view of the strong growth of imports accompanying the surge in domestic demand in 2005, the growth contribution of net exports was negative, expected to turn slightly positive in 2006. This scenario is on the whole similar to the Commission services' estimations. In 2007 and 2008, when economic activity is technically assumed to be low, GDP growth is driven increasingly by net exports.

The external assumptions on which the programme's macroeconomic scenario is based are in line with the Commission services' autumn forecast, with a gradual slowing of world output growth after 2006. The programme assumes a gradual increase in Danish long-term interest rates over the projection period.

Table 1: Comparison of macroeconomic developments and forecasts

	2005		2006		2007		2008	2010
	COM	CP	COM	CP	COM	CP	CP	CP
Real GDP (% change)	2.7	2.4	2.3	2.4	2.1	1.1	1.6	2.1
Contributions:								
- Final domestic demand	3.0	2.6	2.3	2.4	1.9	1.2	1.1	1.4
- Change in inventories	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- External balance on g&s	-0.1	-0.2	0.1	0.1	0.2	-0.2	0.5	0.7
Output gap[1]	-0.6	-0.3	-0.4	0.1	-0.4	-0.7	-0.9	-0.6
Employment (% change)	0.6	0.6	0.5	0.6	0.4	-0.3	0.1	0.6
Unemployment rate (%)	4.6	4.8	4.2	4.4	4.0	4.6	4.5	4.0
Labour productivity growth (%)	2.1	1.8	1.8	1.8	1.7	1.4	1.4	1.5
HICP inflation (%)	1.7	1.6	2.0	2.0	1.9	1.3	1.9	1.8
GDP deflator (% change)	2.3	2.2	2.0	2.0	1.9	2.0	2.4	2.1
Compensation of employees (% change)	3.3	3.6	3.6	4.2	3.8	3.5	3.9	4.3
External balance (% of GDP)	2.9	2.4	3.2	2.4	3.4	1.2	1.2	2.5

Note:
[1]In percent of potential GDP, with potential GDP growth as reported in Table 2 below.

Source:
Commission services' autumn 2005 economic forecasts (COM); convergence programme update (CP)

In line with the growth of economic activity, employment growth is projected to be relatively brisk in 2006. As a consequence, unemployment is set to fall gradually. In the Commission services' similar assessment, this development continues in 2007, whereas the projected slowing down of GDP growth in 2007-2008 in the update leads to a marked fall in employment and a slight rise in unemployment to 4½%. In spite of a tightening

8 In the method used in the update, the output gap concept is closely tied to the employment gap. Short-term erratic movements in GDP, which only partially or with some delay affect employment, do not fully feed into the measured gap.

labour market, the update foresees wages per employee to remain stable at 3¾% throughout the programme period.

Both the programme and the Commission forecast inflationary pressures to remain relatively subdued in the coming years, albeit rising slightly in 2006 as the labour market tightens. Nevertheless, the foreseen fall in energy prices in 2007 should pull in the opposite direction and in the Commission services' assessment leave HICP inflation around 2%[9]. The wage growth of 3½-4% and an inflation rate of 2% foreseen over the programme period are in line with recent trends. The implied real wage increases of 1½-2% are consistent with the foreseen growth of labour productivity.

Table 2: Sources of potential output growth

	2005		2006		2007		2008	2010
	COM	CP[2]	COM	CP[2]	COM	CP[2]	CP[2]	CP[2]
Potential GDP growth[1]	2.1	1.9	2.1	2.0	2.1	1.9	1.9	1.8
Contributions:								
- Labour	0.1	0.1	0.1	0.1	0.0	0.0	-0.1	-0.2
- Capital accumulation	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
- TFP	1.3	1.2	1.4	1.2	1.4	1.2	1.3	1.3

Notes:
[1]based on the production function method for calculating potential output growth
[2]Commission services' calculations on the basis of the information in the programme

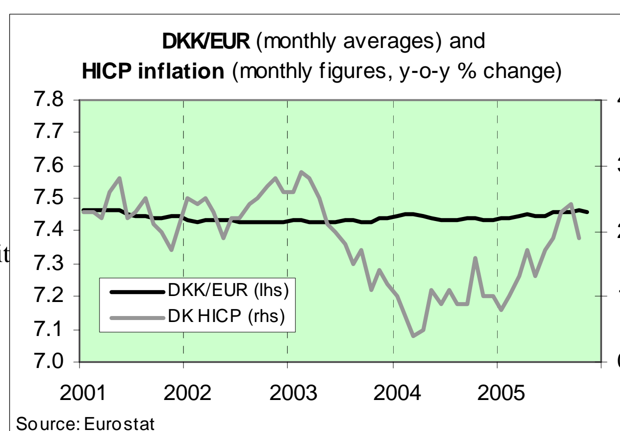
Source:
Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations

On the basis of the data in the programme, Table 2 presents the potential growth estimates using the commonly agreed methodology. Those derived from the programme are overall similar to those made on the basis of the Commission services' autumn 2005 forecast. The expected contributions to potential are almost entirely from capital accumulation and total factor productivity. The contribution to growth of labour is foreseen to change from slightly positive to negative in the course of the programme period, as the effects of the demographic changes set in over the medium term.

3. MEDIUM-TERM MONETARY POLICY OBJECTIVES AND THEIR RELATIONSHIP TO PRICE AND EXCHANGE RATE STABILITY

Denmark's monetary policy framework remains centred on price and exchange rate stability through a credible commitment to a stable exchange rate against the euro within ERM II. After the historically low inflation in 2004, with average consumer price inflation (HICP) of 0.9%, inflation picked up in 2005. This was partly due to rising energy prices, while domestic inflation remained relatively subdued. For 2005 as a whole, HICP inflation of 1¾% is foreseen.

Denmark participates in ERM II with a narrow fluctuation band of ± 2.25 percent



[9] The update's projected slowing of economic activit

to the euro. Since the inception of the mechanism on 1 January 1999, there have been no tensions affecting the exchange rate of the *krone*. Deviations in the exchange rate from the central parity have been much smaller than the official band width and the short-term interest rate differential to the euro area has continued to be small over the past year. These developments reflect the confidence in the fixed exchange rate regime, which remains a central element in Danish economic policy.

Denmark's sound public finances and credible fixed exchange rate regime continues to provide for low long-term bond yields. Over the past year, developments in Danish bond yields have been in line with trends in major bond markets. In early December 2005 the long-term interest rate in Denmark stood at 3.4 percent, compared to 3.9 percent in December 2004.

The yield differential between long-term government bonds in Denmark and lowest yields in the euro area has declined from about +40 basis points in mid-July 2004 to almost zero basis points in June 2005. Thereafter the yield spread has mainly been slightly negative – on average -2 basis points – reflecting, *inter alia*, a stable macroeconomic environment and healthy public finances. In early December 2005 the spread was almost zero basis points. In the programme update, the Danish authorities project that the positive bond yield spread relative to Germany will increase due to, inter alia, improved public finances in the euro area.

4. GENERAL GOVERNMENT BALANCE

This section is in four parts. The first briefly compares the targets for the general government balance in the new update with those presented in previous convergence programmes. It also discusses budgetary implementation in the year 2005. The second part describes the budgetary strategy in the new update, including the medium-term objective identified in the programme. The third provides the analysis of the risks attached to the budgetary targets and assesses the country's position in relation to the budgetary objectives of the Treaty and the Stability and Growth Pact. The final part discusses the results of a sensitivity analysis.

4.1. Targets in successive programmes and implementation in 2005

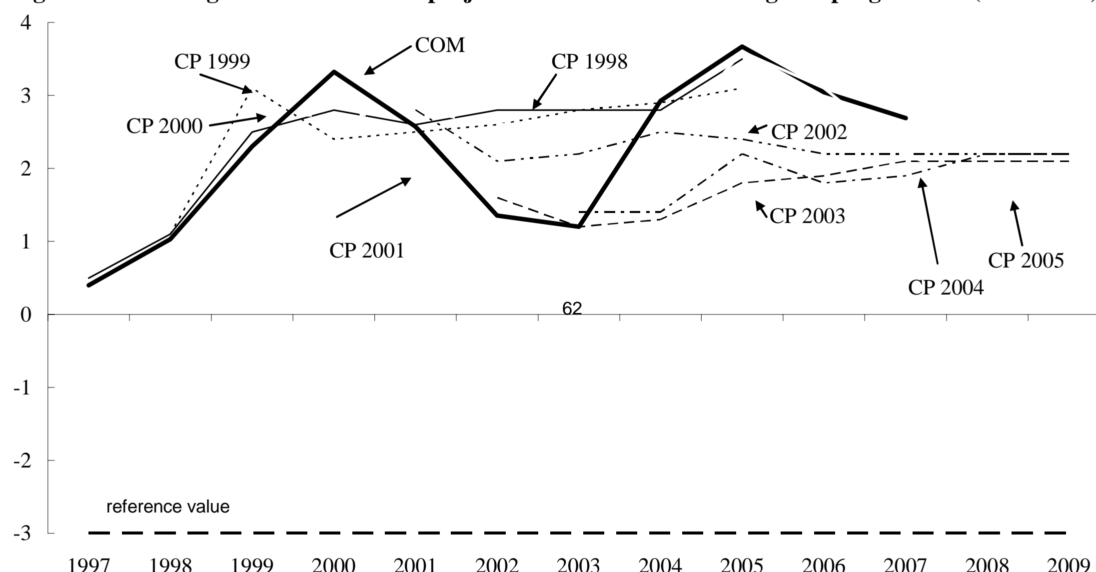
The 2005 update projects surpluses between 2006 and 2010 that are higher than in the previous two updates (Table 3). This mainly reflects developments on the expenditure side: the expenditure ratio is roughly 2 percentage points of GDP lower in each year than in previous updates, while the revenue ratio is markedly lower than in previous programmes[10]. The projected decline in the expenditure ratio is due mainly to lower primary expenditure. Public consumption is projected to grow more slowly than nominal GDP in accordance with the target set for it. The expected decline in ratio of revenues to GDP should be seen in the light of the projected normalisation of revenues from corporate tax, due to an assumed decline in oil prices, and the pension fund yield tax. In addition, the tax freeze contributes to an underlying reduction of the tax burden by around ½% of GDP by 2010.

[10] A part of the difference in the general government balance between the 2005 and 2004 updates can be attributed to methodological and data revisions.

As regards 2005, the estimated outcome for the general government surplus in the present update is 3.6% of GDP[11], markedly higher than targeted in the previous update (2.2% of GDP). While estimated GDP growth is broadly as projected, its composition is not. In particular, stronger-than-expected private consumption has contributed to higher revenues. Moreover, higher revenues from the tax on pension fund yields and North Sea oil and gas-related activities have also boosted the surplus significantly (see Box 1). The expenditure ratio is estimated to have fallen by ½ percentage point from 2004 to 2005, largely due to lower labour market-related expenditure.

For 2006 revenues are projected to be 53.5% of GDP, compared to 54.6% in the 2004 update. The difference is partly due to lower expected- revenues from the pension fund yield tax. Also expenditure is lower in the present than in the previous update, 51.3% of GDP compared to 53.0%. Here, the difference is lower expected public consumption and lower interest expenditure. Budget positions across general government sub-sectors are broadly as envisaged in the previous update, showing a substantial surplus (1.9% of GDP) for central government, while both the local government and social security sub-sectors are expected to balance their budgets.

Figure 1: General government balance projections in successive convergence programmes (% of GDP)



Source: Commission services' autumn 2005 forecast (COM) and successive convergence programmes

Table 3: Evolution of budgetary targets in successive programmes

		2004	2005	2006	2007	2008	2010
General government balance (% of GDP)	**CP Nov 2005**	**2.3**	**3.6**	**3.1**	**3.2**	**2.7**	**2.9**
	CP Nov 2004	1.4	2.2	1.8	1.9	n.a.	2.2
	CP Nov 2003	1.3	1.8	1.9	n.a.	n.a.	*2.1*
	COM Nov 2005	2.9	3.7	3.0	2.7	n.a.	n.a.
General government expenditure	**CP Nov 2005**	**53.9**	**52.3**	**51.3**	**50.8**	**50.5**	**49.6**
	CP Nov 2004[2]	54.4	53.0	53.0	52.8	n.a.	51.9

[11] The estimated surplus in the update is 2.5% of GDP, which is the National accounts figure excluding the second-pillar Arbejdsmarkedets Tillægspension (ATP) pension fund. The Commission services uses the data of Denmark's September 2005 EDP reporting, which includes ATP.

(% of GDP)	*CP Nov 2003*	53.2	52.6	52.3	n.a.	n.a.	51.8
	COM Nov 2005	56.0	54.7	54.2	53.8	n.a.	n.a.
General government revenues (% of GDP)	**CP Nov 2005**	**55.2**	**55.0**	**53.5**	**53.0**	**52.2**	**51.5**
	CP Nov 2004[2]	55.6	54.9	54.6	54.5	n.a.	53.9
	CP Nov 2003	54.5	54.4	54.2	n.a.	n.a.	53.9
	COM Nov 2005	58.7	58.2	57.1	56.3	n.a.	n.a.
Real GDP (% change)	**CP Nov 2005**	**2.0**	**2.4**	**2.4**	**1.1**	**1.6**	**2.1**
	CP Nov 2004	2.2	2.5	1.3	1.9	1.8	1.8
	CP Nov 2003	2.3	2.2	1.9	1.7	1.7	1.7
	COM Nov 2005	2.1	2.7	2.3	2.1	n.a.	n.a.

Note:
[1]The budgetary projections exclude the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes, which needs to be implemented by the time of the spring 2007 notification. See Table 4 for the quantification of this effect on the general government balance in the most recent update.
[2] General government revenues minus expenditure do not equal the general government balance as the EDP definition is used for the balances, including the inclusion of the ATP fund in the general government sector. Corresponding data for revenues and expenditure are not supplied in the update.
Source:
Convergence programmes (CP) and Commission services' autumn 2005 economic forecasts (COM)

Box 1: Tax revenue volatility in Denmark

Official estimates of Denmark's public finances have seen substantial changes in recent years. As shown in the table below, the outcome for the general government surplus in 2004 has been revised upward markedly in the 2005 update compared to the target in the previous update, while the target for the surplus in 2005 in the present update is also much higher than in the 2004 programme. The table needs to indicate the headings)

Table A: Projected GDP growth and general government balance in recent programme updates

	2004	2005
GDP growth (%)		
CP 2004	2.2	2.5
CP 2005	2.0	2.4
Budget balance (% of GDP)		
CP 2004	0.6	1.5
CP 2005	1.3	2.7

Source: 2005 update of the Danish convergence programme

These changes partly reflect changes in the expected composition of growth, in particular stronger than earlier foreseen revenue-intensive growth of private consumption, which is more revenue-intensive than other drivers of growth. But the revisions are also partly due to particular revenue items, in particular taxes related to North Sea oil and gas exploitation and the pension fund yield tax.

Regarding North Sea **oil and gas exploitation**, Denmark is a net exporter of oil and natural gas. Higher energy prices have a positive direct effect on public finances through increased revenues from corporate tax and hydrocarbon tax. In the assumptions underlying the Danish programmes, the oil price more than doubled between 2003 and 2005 and the revenues from the North Sea energy exploitation are expected to increase from 0.7% of GDP in 2003 to 1¾% in 2005. To the extent that oil prices remain at present levels, the revenues from these taxes will be permanently higher.

As regards the **pension fund yield tax**, considerable assets have been accumulated in funds of 2nd and 3rd pillar pension schemes. The application of market prices to the valuation of the taxation base implies that central-government revenue from year to year will to a greater extent match fluctuations in bond yields and share prices. Revenues from the pension fund yield tax therefore vary substantially from year to year. They have been on average around 1% of GDP, but with swings between 0 and 2% of GDP. These swings are largely due to developments on the financial markets. Part of the pension funds' holdings is in equity and stock market developments will therefore determine the returns on the funds' holdings and thus tax revenues. The fall in share prices in 2001 and 2002 contributed to revenues close to zero from this tax. The recovery of share values from 2003 contributed to a moderate rise in revenues in 2003, but the pension funds can carry over their negative tax liabilities to subsequent years. Regarding the bond holdings of the funds, relatively small changes in interest rates can have large effects on the market value of the holdings in a particular year and thus of the taxation basis and tax revenues. The swings resulting from interest rate changes are amplified by derivative instruments, which have increased the overall interest rate sensitivity of the funds' assets. The exceptionally high revenues from the pension fund yield tax in 2004 and 2005 have been due mainly to the fall in interest rates. Analogously, a rise in interest rates will lead to lower revenues. A rise in both short and long-term interest rates of 1 per cent is thus estimated to lead to a capital loss of some DKK 100 billion (6% of GDP), half of which is linked to derivatives. This translates into a reduction in tax revenues of around 1% of GDP.

The large swings in the revenues from these taxes imply that the standard sensitivities used in the calculation of the cyclically-adjusted balances are unlikely to fully capture "cyclical" effects in a broad sense, i.e. including asset price swings and oil price swings. Against this background, volatile tax revenues, such as the pension fund yield tax and corporate taxes, are eliminated in the Danish authorities' calculations of the cyclically-adjusted balance. The commonly agreed methodology to calculate cyclically-adjusted and structural balances used by the Commission services does not make such adjustments.

4.2. The programme's medium-term budgetary strategy

This section covers in turn the following aspects of the medium-term budgetary strategy outlined in the programme: (i) the main goal of the budgetary strategy; (ii) the composition of the budgetary adjustment, including the broad measures envisaged; and (iii) the medium-term objective set in the programme and the adjustment path towards it in structural terms.

4.2.1. The main goal of the programme's budgetary strategy

The update aims at general government surpluses between 1½% and 2½% of GDP throughout the programme period so as to ensure a rapid decline in the debt ratio. The update foresees the general government surplus narrowing from a peak of 3.6% of GDP in 2005 (driven by exceptional factors – see Section 4.1 above) to just over 3% in both 2006 and 2007. Thereafter, the surplus declines slightly to reach 2.9% of GDP at the end of the programme period. The time profile of the primary surplus is similar, with a decline in the surplus from 5.6% in 2005 to 3.7% at the end of the period, i.e. a reduction by 2 percentage points of GDP (1 percentage point if the exceptionally high surplus of 2005 is left out of the comparison).

The medium-term strategy is based on expenditure restraint, with the objective of keeping the annual growth of real public consumption at 0.5%. On the revenue side, the

tax freeze[12], in force since 2001, remains in force implying that taxes and fees are not raised. The tax freeze entails a slight decline in the tax burden over time. Compared with the previous programme, the planned path of the general government balance is higher in the new update against a broadly unchanged macroeconomic scenario.

Table 4: Composition of the budgetary adjustment

(% of GDP)	2004	2005	2006	2007	2008	2010	Change: 2010-2005
Revenues	55.2	55.0	53.5	53.0	52.2	51.5	**-3.5**
of which:							
- Taxes & social contributions	47.9	48.1	46.8	46.8	46.0	45.4	**-2.7**
- Other (residual)	7.3	6.9	6.7	6.2	6.2	6.1	**-0.8**
Expenditure	53.9	52.3	51.3	50.8	50.5	49.6	**-2.7**
of which:							
- Primary expenditure	51.5	50.3	49.7	49.9	49.7	48.8	**-1.5**
of which:							
Consumption	26.6	26.1	25.8	25.9	25.7	25.4	**-0.7**
Transfers other than in kind & subsidies	19.6	19.2	19.0	19.0	18.8	18.5	**-0.7**
Gross fixed capital formation	1.9	1.7	1.7	1.7	1.7	1.7	**0.0**
Other (residual)	3.4	3.3	3.2	3.3	3.5	3.2	**-0.1**
- Interest expenditure	2.4	2.0	1.6	0.9	0.8	0.8	**-1.2**
General government balance (GGB)	**2.3**	**3.6**	**3.1**	**3.2**	**2.7**	**2.9**	**-0.7**
- excluding second-pillar pension scheme[1]	*1.3*	*2.7*	*2.1*	*2.2*	*1.7*	*1.9*	**-0.8**
Primary balance	**4.7**	**5.6**	**4.7**	**4.1**	**3.5**	**3.7**	**-1.9**
One-off and other temporary measures	0.2	0.2	0.3	0.3	0.0	0.0	-0.2
GGB excl. one-off & other temporary measures	**2.1**	**3.4**	**2.8**	**2.9**	**2.7**	**2.9**	**-0.5**

Note:
[1]This shows the general government balance as it will be after the Eurostat decision of 2 March 2004 on the classification of funded pension schemes has been implemented, which needs to be done by the time of the spring 2007 notification.

Source:
Convergence programme update; Commission services' calculations

4.2.2. The composition of the budgetary adjustment in the programme

As shown in Table 4, the medium-term developments in public finances include reductions of both revenue and expenditure ratios. Substantial primary surpluses are generated, with the total expenditure ratio falling due to a decreased primary expenditure ratio and lower GDP share of interest expenditure. Primary expenditure is reduced mainly through lower transfers and as well as slower growth of public consumption. The foreseen improvement of the labour market entails lower transfer payments and the projected development of public consumption is set in line with the target mentioned above of 0.5% annual real growth in public consumption. Interest expenditure falls as a share of GDP as the debt ratio is reduced substantially over the programme period. The revenue ratio falls through tax reductions, mainly on earned income.

[12] The tax freeze implies that no direct or indirect tax may be raised, irrespective of whether it is expressed and legislated in percentage or *krone* value terms. In addition, there is a cap on nominal property value tax.

Denmark uses the transition period for the implementation of the Eurostat decision of 2 March 2004 on the classification of funded second-pillar pension schemes. The estimated impact of the classification of the second-pillar Arbejdsmarkedets Tillægspension (ATP) pension fund outside the general government is to reduce the general government balance by around 1% of GDP annually.

Box 2: The budget for 2006

The draft budget for 2006, presented on 25 August 2005, was approved with some minor amendments by Parliament on 14 December. The budget targets a general government surplus of 1.9% of GDP in 2006. It is based on an agreement between the governing Liberal and Conservative parties, with parliamentary support from the Danish People's Party.

The budget was presented in the framework of the tax freeze (mentioned above) and taxes and fees are consequently not raised.

Expenditure is restricted by the target of limiting the annual growth of public consumption in real terms to 0.5 per cent to 2010. In the context of the medium-term fiscal framework up to 2010, the room for increased expenditure is set at DKK 30 billion (2% of GDP). This spending will be chiefly directed the following areas.

- Initiatives in research, innovation and entrepreneurship: DKK 10 billion (½% of GDP), 2006-2010

- Measures to improve conditions for families with children: DKK 8 billion (½% of GDP), 2006-2010

- Measures targeting hospitals and elderly: DKK 5 billion (¼ % of GDP), 2006-2010

- Measures to improve the environment: DKK 1 billion (0.05% of GDP), 2006-2010

The expenditure measures in the budget for 2006 include measures in the above areas amounting to around DKK 4 billion (0.2% of GDP). The measures focus on social spending, but also on improving entrepreneurial conditions.

4.2.3. The programme's medium-term objective (MTO) and the adjustment path in structural terms

According to the Stability and Growth Pact, stability and convergence programmes should present a medium-term objective (MTO) for the budgetary position. The MTO should be differentiated for individual Member States, to take into account the diversity of economic and budgetary positions and developments as well as of fiscal risk to the sustainability of public finances. The country-specific MTO is defined in structural terms (i.e. cyclically-adjusted, net of one-off and other temporary measures) and should fulfil a triple aim, namely (i) provide a safety margin with respect to the 3% of GDP deficit limit; (ii) ensure rapid progress towards sustainability; and (iii), taking (i) and (ii) into account, allow room for budgetary manoeuvre, considering in particular the needs for public investment. The code of conduct (Section I) further specifies that, as long as the

methodology for incorporating implicit liabilities is not fully developed and agreed by the Council, the country-specific MTOs are set taking into account the current government debt ratio and potential growth (in a long-term perspective), while preserving a sufficient margin against breaching the deficit reference value of 3% of GDP. Member States are free to set an MTO that is more demanding than strictly required to achieve the triple aim of MTOs.

As its MTO, the update targets a structural balance (taking into account the impact of the Eurostat decision mentioned above) of between 1½% and 2½% of GDP over the programme period.

As seen in Table 5, the structural balance is projected to decline by 0.3 percentage point of GDP between 2005 and 2010, and by 0.8 percentage point between 2005 and 2006, while the output gap improves from slightly negative in 2005 to marginally positive in 2006. As noted above (Box 1), the structural deterioration in 2006 is largely the effect of exceptionally high revenues in 2005, i.e. from the pension fund yield tax and from North Sea oil exploitation, followed by an expected normalisation of these revenues in 2006. Large swings in revenues complicate the interpretation of conventionally calculated cyclically-adjusted balances and thus of the stance of fiscal policy. In the analysis presented in the update, which eliminates certain volatile tax revenues, the structural budget balance is broadly stable between 2005 and 2006. Moreover, as mentioned above, projected cyclical conditions in the programme period differ between the Commission services forecast and the outlook in the update due to the technically-assumed slowing of GDP growth in 2007-2008 projected by the latter in order to close the positive output gap in the update (see Section 2).

Table 5: Output gaps, cyclically-adjusted and structural balances

	2004		2005		2006		2007		2008	2010	Change: 2010-2005
	COM	CP[1]	COM	CP[1]	COM	CP[1]	COM	CP[1]	CP[1]	CP[1]	CP[1]
Gen. gov't balance	2.9	2.3	3.7	3.6	3.0	3.1	2.7	3.2	2.7	2.9	-0.7
One-offs[2]	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.0	0.0	-
Output gap[3]	-1.3	-0.8	-0.6	-0.3	-0.4	0.1	-0.4	-0.7	-0.9	-0.6	-
CAB[4]	3.8	2.8	4.1	3.8	3.3	3.0	3.0	3.6	3.3	3.3	-0.5
change in CAB	1.6	1.0	0.3	1.0	-0.8	-0.8	-0.3	0.6	-0.3	0.0	-
CAPB[4]	6.1	5.3	6.2	5.8	5.1	4.6	4.6	4.5	4.1	4.1	-1.7
Structural balance[5]	3.6	2.6	3.9	3.6	3.0	2.7	2.7	3.3	3.3	3.3	-0.3
change in struct. bal.	n.a.	n.a.	0.3	1.0	-0.9	-0.9	-0.3	0.6	0.0	0.0	-
Struct. prim. bal.[6]	5.9	5.1	6.0	5.6	4.8	4.3	4.3	4.2	4.1	4.1	-1.5

Notes:
[1]Output gaps and cyclical adjustment according to the convergence programme (CP) as recalculated by Commission services on the basis of the information in the programme
[2]One-off and other temporary measures
[3]In percent of potential GDP
[4]CAB = cyclically-adjusted balance; CAPB = cyclically-adjusted primary balance.
[5]CAB excluding one-off and other temporary measures
[6]Structural primary balance = CAPB excluding one-off and other temporary measures

Source:
Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations

4.3. Assessment

This assessment is in three parts. The first assesses the appropriateness of the medium-term objective identified in the programme. The second analyses risks attached to the budgetary targets and the third examines whether the budgetary strategy laid down in the programme is consistent with the budgetary objectives of the Treaty and the Stability and Growth Pact.

4.3.1. Appropriateness of the medium-term objective identified in the programme

As the medium-term objective (MTO) in the programme is more demanding than the minimum benchmark, its achievement should fulfil the aim of providing a safety margin.

As regards appropriateness in the medium term, the programme's MTO reflects considerations of the debt ratio and average potential output growth more than adequately.

The programme explains that the MTO is set at a more demanding level than required by the Stability and Growth Pact to take into account that the present demographic situation precedes a less favourable period in terms of the share of persons in working age. Section 4.2.1 refers to the budgetary strategy being geared towards a rapid reduction in the debt ratio.

4.3.2. Risks attached to the budgetary targets

The balance of risks attached to the budgetary targets in the programme appears to be on the positive side. GDP growth may be higher than expected, especially in 2007 and 2008, mainly due to the technically assumed low GDP growth for these years (Section 2). On the other hand, a negative risk is the compliance with the target of limiting the annual growth of real public consumption, where the track record has been mixed. The target for 2004 (a growth of 0.7%) was clearly exceeded.

Table 6 presents annual changes in the overall tax-to-GDP ratio and the tax elasticity relative to GDP. The difference between the changes in the tax-to-GDP ratio in the two projections is largely made up of the "elasticity component", which could imply that there are risks attached to the assumed tax elasticities. The analysis of the projections in the update implies that risks go in opposite directions in 2006 and 2007. In 2006, the update foresees lower revenues than the Commission services, while in 2007 it is the opposite. As has been noted, the large volatility in the tax revenues in Denmark's case may distort these calculations and make them difficult to interpret.

Table 6: Assessment of tax projections

	2006		2007		2008	2010	p.m.:
	COM	CP	COM[2]	CP	CP	CP	OECD[1]
Total taxes Change in tax-to-GDP ratio	-0.6	-1.4	-0.7	-0.1	-0.8	-0.5	/
Difference	-0.7		0.6		/	/	/
of which[3]: - elasticity component	-0.7		0.5		/	/	/
- composition component	0.0		0.0		/	/	/
p.m.: Observed elasticity to GDP	0.7	0.4	0.7	0.9	0.6	0.7	1.0

Notes:
[1]OECD ex-ante elasticity relative to GDP
[2]On a no-policy change basis
[3]The decomposition is explained in Annex 4

Source:
Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations and OECD (N. Girouard and C. André (2005), "Measuring Cyclically-Adjusted Budget Balances for the OECD Countries", OECD Working Paper No. 434)

Table 7: Assessment of tax elasticities

	2006		2007	
	COM (observed)	ex-ante[1]	COM[2] (observed)	ex-ante[1]
Total taxes Change in tax-to-GDP ratio	-0.6	0.0	-0.7	0.0
Difference	-0.6		-0.7	
of which[3]: - elasticity component	-1.1		-1.2	
- composition component	0.2		0.2	
p.m.: Elasticity to GDP	0.7	1.0	0.7	1.0

Notes:
[1]Tax projections obtained by applying ex-ante standard tax elasticities estimated by the OECD
[2]On a no-policy change basis
[3]The decomposition is explained in Annex 4

Source:
Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations and OECD (N. Girouard and C. André (2005), "Measuring Cyclically-Adjusted Budget Balances for the OECD Countries", OECD Working Paper No. 434)

4.3.3. Compliance with the budgetary requirements of the Treaty and the Stability and Growth Pact

Based on Commission services' calculations on the basis of the programme according to the commonly agreed methodology, the structural surplus (allowing for the transitory period for implementation of Eurostat decision on the second pillar funded pension) is 3.6% of GDP in 2005 and declines to around 2¾% of GDP in 2006 before firming to 3¼% of GDP thereafter[13].

[13] In the programme data, the structural general government balances are within the target range. The large differences between the structural balances presented in the update and those calculated by the Commission services on the data of the programme – for instance, 1% of GDP and 3.6 % of GDP respectively for 2005 - is explained by: i) the different definition of the general government balance (see previous footnote), ii) differences in the level of the output gap (see Section 2 above) and iii) different methods for calculating the structural balance, where the Danish authorities exclude volatile

Taking account of the balance of risks to the budgetary targets, the budgetary strategy outlined in the programme seems sufficient to ensure that the MTO identified therein is maintained by a large margin throughout the programme period[14]. It is also sufficient to provide a safety margin against breaching the 3% of GDP deficit reference value with normal macroeconomic fluctuations in each year.

As regards the requirement for countries that have already reached their MTO to avoid pro-cyclical fiscal policies in good times, the structural balance deteriorates by 0.3 percentage point of GDP between 2005 and 2009, with a fall of 0.8 percentage point between 2005 and 2006 when the output gap turns from slightly negative to marginally positive. Taking into account the exceptional revenues recorded in 2005which Commission services' estimates of the structural balance do not correct for, the budget package for 2006 (see Box 2) and the uncertainties attached to the calculation of the output gaps, Denmark's fiscal policy cannot be characterised as pro-cyclical.

The reclassification of the second-pillar funded pension schemes from spring 2007 (when the transition period for implementing the March 2004 Eurostat decision on the matter expires) would not materially alter this assessment of compliance with the budgetary requirements of the Treaty and the Stability and Growth Pact.

4.4. Sensitivity analysis

The programme includes a sensitivity analysis of public finances, taking into consideration two alternative, symmetric growth scenarios. The low-growth scenario entails that weak external growth would reduce baseline growth by 0.5 p.p. only in 2006 and 2007, with GDP growth thereafter reverting to trend. The high–growth scenario foresees that domestic private consumption would add 0.5 p.p. in 2006 and 2007 and 0.2 p.p. in 2007 to the central scenario. In the low-growth scenario, unemployment rises and both the general government balance and the pace of debt reduction worsen slightly, but with the two latter never conflicting with the Treaty reference levels. In the high-growth scenario, unemployment falls below the natural rate, implying a risk of bottlenecks and higher inflation, while the general government balance improves and the pace of debt reduction accelerates, both relatively more than in the low-growth case, due to higher tax revenues and lower labour market-related expenditure.

In addition, the update contains a test of the interest rate sensitivity of public finances. In addition to the effects induced by lower GDP growth, an increase in interest rates of 1 percentage point would have a markedly negative impact on public finances, largely as it entails capital losses on the bond holdings of the taxable pension funds. This effect is estimated to worsen the general government balance by 0.5% of GDP in 2006. This analysis is explicit about the underlying assumptions about how revenues and expenditure are projected to react to variations in economic variables. As the central scenario, the alternative scenarios are biased towards low growth in 2007 and 2008, but overall the analysis is plausible.

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revenue items from this calculation, such as corporate tax and pension fund yield tax (see Box 1 above).

[14] In the update the projected structural general government balances are within the MTO range, see footnote 13 above.

Commission services' simulations of the cyclically-adjusted balance under the assumptions of (i) a sustained 0.5 percentage point deviation from the real GDP growth projections in the programme over the 2005-2008 period; (ii) trend output based on the HP-filter[15] and (iii) no policy response (notably, the expenditure level is as in the central scenario[16]), indicate that, by 2008, the cyclically-adjusted balance is 0.7 percentage point of GDP below the central scenario. Hence, in the case of persistently lower real growth, additional measures of around ¾% percentage point of GDP would be necessary to keep the public finances on the path targeted in the central scenario[17].

5. GENERAL GOVERNMENT GROSS DEBT

This section is in two parts: the first describes the debt path envisaged in the programme and the second contains the assessment.

5.1. Debt developments in the programme

As can be seen from Figure 2 and Table 7, the gross debt ratio is already well under the Treaty reference level and should according to the update fall further, from 35.6% in 2005 to 31.7% in 2006 and to 28.9% in 2007, overall in line with the Commission services' figures for debt development in the 2005 autumn forecast. Over the programme horizon, the consolidated gross debt is expected to continue falling to 21½% of GDP in 2010. Mainly due to larger primary balances, this is a markedly more rapid debt reduction than foreseen in the previous update. From 2004 to 2010 the debt ratio is projected to fall by some 21 percentage points of GDP, due mainly to positive primary balances and to the impact of nominal GDP growth. Interest expenditure and the stock-flow adjustment, by contrast, will contribute positively. Although the programme provides no details, on the basis of recent trends, one may presume that the positive stock-flow adjustment is because of the accumulation of financial assets, in particular by social security. Denmark uses the transition period for the implementation of the Eurostat decision of 2 March 2004 on the classification of funded second-pillar pension schemes. The estimated impact on the government debt ratio of the classification of the second-pillar Arbejdsmarkedets Tillægspension (ATP) pension fund outside the general government is an upward adjustment of around 1¼% of GDP each year.

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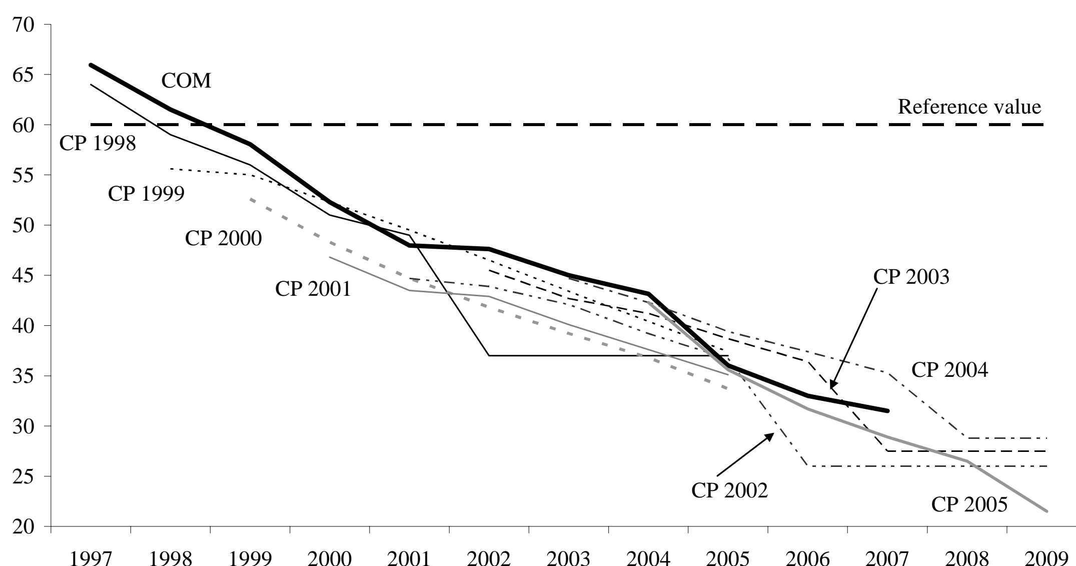
[15] In the absence of a fully-specified macroeconomic scenario that would underlie such deviations, it is obviously impossible to derive new estimates of potential growth from the agreed production function method.

[16] The effect of lower/higher growth on revenues is captured by using the conventional sensitivity parameters adopted in cyclical adjustment procedures.

[17] Unexpected changes in inflation are not assumed to affect the expenditure-to-GDP ratio as nominal expenditure should broadly move in lockstep with the price level.

Figure 2: Debt projections in successive convergence programmes (% of GDP)



Source: Commission services' autumn 2005 forecast (COM) and successive convergence programmes

Table 8: Debt dynamics

	average 2000-2004	2005		2006		2007		2008	2010
	COM	**COM**	**CP**	**COM**	**CP**	**COM**	**CP**	**CP**	**CP**
Government gross debt ratio	**47.2**	**36.0**	**35.6**	**33.0**	**31.7**	**31.5**	**28.9**	**26.5**	**21.5**
Change in debt ratio (1 = 2+3+4)	-2.5	-7.1	-7.6	-3.0	-3.9	-1.5	-2.8	-2.4	-5.0
Contributions[1]*:*									
- **Primary balance** (2)	**-4.8**	**-5.8**	**-5.6**	**-4.9**	**-4.7**	**-4.4**	**-4.1**	**-3.5**	**-3.7**
- **"Snow-ball" effect** (3)	**1.2**	**-0.1**	**0.1**	**0.3**	**0.1**	**0.4**	**-0.1**	**-0.3**	**-0.3**
- Interest expenditure	3.0	2.2	2.0	1.8	1.6	1.7	0.9	0.8	0.8
- Real GDP growth	-0.7	-1.1	-1.0	-0.8	-0.8	-0.7	-0.3	-0.4	-0.5
- Inflation (GDP deflator)	-1.1	-1.2	-0.9	-0.7	-0.7	-0.6	-0.6	-0.7	-0.6
- **Stock-flow adjustment** (4)	**1.1**	**-1.2**	**-2.0**	**1.5**	**0.7**	**2.5**	**1.4**	**1.4**	**-1.0**
- Cash/accruals	-1.2								
- Accumulation of financial assets	2.3								
of which: Privatisation proceeds	0.0								
- Valuation effects & residual adj.	0.1								
p.m.: Debt ratio excl. second-pillar pension scheme[2]	48.2	37.0	36.8	34.2	32.9	32.7	30.1	27.7	21.5

Notes:

[1]The change in the gross debt ratio can be decomposed as follows:

$$\frac{D_t}{Y_t} - \frac{D_{t-1}}{Y_{t-1}} = \frac{PD_t}{Y_t} + \left(\frac{D_{t-1}}{Y_{t-1}} * \frac{i_t - y_t}{1 + y_t} \right) + \frac{SF_t}{Y_t}$$

where t is a time subscript; D, PD, Y and SF are the stock of government debt, the primary deficit, nominal GDP and the stock-flow adjustment respectively, and i and y represent the average cost of debt and nominal GDP growth. The term in parentheses represents the "snow-ball" effect.

[2]This shows general government gross debt as it will be after the Eurostat decision of 2 March 2004 on the classification of funded pension schemes has been implemented, which needs to be done by the time of the spring 2007 notification.

Source:

Convergence programme update (CP); Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations

5.2. Assessment

For 2006 and 2007, the development of the debt ratio foreseen in the update is roughly in line with that of the Commission's autumn 2005 forecast. In 2007, where the latter is on a no-policy change basis, a lower contribution from the primary balance and higher assumed interest expenditure contributes to a somewhat higher debt ratio in the Commission's forecast.

6. Structural reform, the quality of public finances and institutional features

The programme update contains a section on recent structural policy measures. As to policies to raise labour supply, targeted areas are a better integration of immigrants, reducing excess study time, more flexible retirement and reduced sickness absence. Few new measures are referred to in the programme. The 2005 "A new chance for everyone" package aims at strengthening the labour market integration of immigrants. It includes increased activation efforts as well as a strengthening of economic incentives to work as opposed to receiving social assistance.

In Denmark there is a strong link between structural reform and medium-term public finances. An objective for structural policies remains to raise employment by some 50,000 persons (almost 2% of the labour force) by 2010 and such an increase is incorporated in the medium-term fiscal projections in the convergence programme. Further measures are needed to achieve the assumed increase in employment but additional reforms remain unspecified[18]. Even if additional reforms were adopted in the coming years, they would not have a full impact before 2010. This constitutes a certain risk for the projections in the programme update. Against this background, the present update announces that a revised medium-term plan will be presented in 2006, which will contain concrete targets for employment and public finances. The proposals will take into account the recommendations of the government-appointed Welfare Commission, made public on 7 December 2005, and of the Globalisation Council, whose recommendations are due in spring 2006.

Limiting the annual growth of public consumption to 0.5% in real terms is an important element in the fiscal strategy. Against this background, the present update would have benefited from more comments on the wide overshooting of this target in 2004 (a growth of 2.0%). In particular, the issue seems to be whether the present instruments in place are sufficient to deliver the fiscal discipline required in the local governments, over which the central government has only an indirect control. In this context, the overhaul of the municipal system of government adopted in 2004 is relevant as the aim of the reform is, inter alia, to improve efficiency. The implementation of the changes is due for 2007 and the larger municipal units should allow the exploitation of scale efficiencies.

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[18] For an analysis of Denmark's policies to enhance labour supply, see the Directorate-General for Economic and Financial Affairs Country Study on Denmark, "Making work pay, getting more people into work", European Commission, 2004. (http://europa.eu.int/comm/economy_finance/publications/occasional_papers/2004/ocp9en.pdf)

The envisaged measures in the area of public finances are broadly consistent with the broad economic policy guidelines in the area of public finances for the period 2005-2008. In particular, Denmark respects its MTO. However, new measures have not been specified to achieve the assumed increase in employment by 2010 (see also Annex 3).

The National Reform Programme of Denmark, submitted on 26 October 2005, identifies the following challenges with significant implications for public finances: (i) improving labour supply to ensure the long-term sustainability of public finances and (ii) improving the efficiency of the public sector. The budgetary implications of the actions outlined in the National Reform Programme are reflected in the budgetary projections of the convergence programme. The measures in the area of public finances envisaged in the convergence programme are in line with the actions foreseen in the National Reform Programme.

7. THE SUSTAINABILITY OF THE PUBLIC FINANCES

The assessment of the sustainability of Denmark's public finances is based on an overall judgement of the results of quantitative indicators and qualitative features. The debt projections and sustainability indicators are calculated according to two different scenarios, to take into account different budgetary developments over the medium term. The "programme" scenario assumes that the medium-term budgetary plans set up in the programme are actually achieved. The "2005" scenario assumes that the structural primary balance[19] remains unchanged at the 2005 level throughout the programme period.

On the basis of information in the programme, age-related expenditure is foreseen to increase by 2.2 percentage points of GDP between 2010 and 2050, to which health-care and long-term care contributes 1.1 percentage points of GDP each (see Table A2 in Annex 5). The Commission services' analysis is based on the set of government expenditure items covered by the common projections carried out by the Economic Policy Committee[20]. In addition to these expenditure items, the Danish programme includes a projected rise in the revenue ratio as well as projections of other government expenditure items.

The gross debt ratio is currently below 60% of GDP and is projected to remain below the reference value throughout the projection period up to 2050 (see Table A4 in Annex 5)[21].

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[19] The structural primary balance is the primary balance excluding the effect of the cycle and net of one-off and temporary measures. For countries that provide information on consolidated liquid public pension schemes, the property income due to such assets is deducted from consolidated interest payments made. Such assets in Denmark are virtually zero as they have been classified outside government in the Danish 2005 updated convergence programme.

[20] Namely, government expenditure on pension, health-care, long-term care, education and unemployment benefits. The Danish update does not specifically include expenditure on unemployment benefits; however, the unemployment rate is projected to remain unchanged over the period 2010-2050, suggesting that there should be little change in expenditure on unemployment benefits as a share of GDP over this period.

[21] It should be recalled that, being a mechanical, partial equilibrium analysis, projections are in some cases bound to show highly accentuated profiles. As a consequence, the projected evolution of debt levels should not be taken at face value.

Indeed, according to both sustainability gaps (the S1 and S2 indicators), there is no sustainability gap for Denmark, especially in the '2005' scenario but also in the 'programme' scenario. The exceptionally strong budgetary position in 2005 in fact indicates a negative sustainability gap, measured by the S2 indicator, by about 2.5% of GDP. Taking into account the medium-term budgetary plans in the programme scenario, the sustainability gap (S2) remains negative, though narrowing significantly, confirming low risks to public finance sustainability. This sustainability gap translates into a required primary balance (RPB) of about 2% of GDP, lower than the structural primary balance[22].

Table 9: Sustainability indicators and the required primary balance

	Sustainability indicators and RPB								
	2005 Scenario					Programme scenario			
	S1	S2		RPB		S1	S2		RPB
Value (of which)	**-3.6**	**-2.5**		**2.0**		**-1.8**	**-0.8**		**1.9**
initial budgetary position	*-4.5*	*-4.5*				*-2.8*	*-2.8*		
debt requirement in 2050	*-0.9*	*:*				*-0.7*	*:*		
future changes in budgetary position	*1.7*	*2.0*				*1.7*	*2.0*		

Note: The S1 indicator shows the difference, the sustainability gap, between the constant revenue ratio as a share of GDP required to reach a debt ratio in 2050 of 60% of GDP and the current revenue ratio. The S2 indicator, which shows the difference, the sustainability gap, between the constant revenue ratio as a share of GDP that guarantees the respect of the inter-temporal budget constraint of the government, i.e. that equates the actualized flow of revenues and expenses over an infinite horizon, and the current revenue ratio[23]. The Required Primary Balance (RPB) measures the average primary balance over the first five years of the projection period that results from a permanent budgetary adjustment carried out to comply fully with the inter-temporal budget constraint. See European Commission ((2005), European Economy, 'Public finances in EMU – 2005', Section II.3 for a further description.

In interpreting these results, several factors need to be taken into account.

GDP and labour productivity growth develop broadly similarly in the programme and in the EPC projections. The unemployment rate remains constant between 2010 and 2050 in the programme and in the EPC projections, though it is projected to be somewhat higher in the programme. The underlying assumptions in the programme can therefore be considered to be prudent. Nevertheless, the update assumes additional reforms; an increase in labour force participation by around 2 per cent of the labour force up to 2010 by prolonging the working life, including through the programme 'A new chance for everyone', which includes an increase over time in the employment rate among immigrants. This points to the need for a successful integration strategy as a part of the response to the ageing challenge.

Denmark has accumulated very considerable pension fund assets amounting to more than 135% of GDP in 2005 (classified outside government in the 2005 update). These assets contribute to alleviating the potential strain on public pension expenditure.

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[22] Given that there is no sustainability gap for Denmark in the period up to 2050, there is no cost of a five-year delay in adjusting the budgetary position according to the S1 and S2 (see the sensitivity test in Table A3 in the Annex).

[23] The sustainability gap indicators (S1, S2) do not necessarily suggest that taxes should be increased; strengthening the fiscal position by permanently reducing the level of non-age related primary spending could be preferable and has the same impact.

The additional national long-term projections provided in the update include a projected rise in the revenue ratio as well as in other government expenditure items up to 2050. The impact on the sustainability gap (S2) of incorporating these national projections would be to reduce it further by 0.6 percentage points of GDP[24], mainly as a result of a rising revenue ratio, thus underlining little sustainability challenges. Given the already high level of taxation and the increasing pressure and mobility of tax bases, an increase in tax rates, should the need arise at some point, may be a challenging way forward, suggesting budgetary consolidation should preferably take place on the expenditure side in such a case. This assessment remains valid when considering the update's extension of the expenditure and revenue projections up to 2070: the negative sustainability gap is broadly eliminated; the age-related expenditure ratio is projected to rise by about 2 percentage points, whereas the revenue ratio is projected to rise by about ¼% between 2050 and 2070. On the assumption that these additional national projections will materialise, they would confirm low public finance sustainability risks in Denmark. Still, the projections in the recent report by the Danish Welfare Commission[25] imply a larger adjustment required for public finance sustainability, based on an assumption of higher increases in future government expenditure.

Overall assessment. With regard to the sustainability of public finances, Denmark appears to be at low risk on grounds of the projected budgetary costs of an ageing population, due to its solid public finances and provided that the assumed employment increases and low government consumption growth be achieved, which requires further labour market reforms and spending restraint. The strategy of putting sustainability concerns at the heart of fiscal policy making, including containing pension expenditure and involving accumulation of assets, contributes positively to the long-term outlook for public finances. The currently favourable budgetary position contributes to the financing of the projected budgetary impact of an ageing population and the medium-term budgetary plans are consistent with sustainable public finances.

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[24] The impact of these additional national long-term projections over the period 2010-2050 on the S2 sustainability indicator are reported here.

[25] Available (only in Danish) at http://www.velfaerd.dk/fileadmin/template/main/files/vores_valg/Opl_g_-_Fremtidens_velf_rd_-vores_valg.pdf

Annex 1: Summary tables from the convergence programme update

Table 1a. Macroeconomic prospects

	ESA Code	2004	2004	2005	2006	2007	2008	2010
		Level	rate of change	rate of change	rate of change	rate of change	rate of change	rate of change
1. Real GDP	B1*g	1345.4	2.0	2.4	2.4	1.1	1.6	2.1
2. Nominal GDP	B1*g	1460.4	4.2	4.7	4.5	3.1	4.0	4.3
Components of real GDP								
3. Private consumption expenditure	P.3	655.7	3.9	3.6	2.5	1.4	1.2	1.9
4. Government consumption expenditure	P.3	347.3	2.0	0.3	0.5	0.5	0.5	0.5
5. Gross fixed capital formation	P.51	273.9	3.1	3.8	5.0	2.1	1.8	1.8
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	4.2	0.1	0.0	0.0	0.0	0.0	0.0
7. Exports of goods and services	P.6	666.9	3.3	3.9	4.6	1.8	3.8	5.2
8. Imports of goods and services	P.7	602.5	6.5	4.8	4.9	2.3	3.1	4.3
Contributions to real GDP growth								
9. Final domestic demand		-	3.0	2.6	2.4	1.2	1.1	1.4
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	-	0.1	0.0	0.0	0.0	0.0	0.0
11. External balance of goods and services	B.11	-	-1.2	-0.2	0.1	-0.2	0.5	0.7

Table 1b. Price developments

	ESA Code	2004	2004	2005	2006	2007	2008	2010
		level	rate of change	rate of change	rate of change	rate of change	rate of change	rate of change
1. GDP deflator		108.5	2.2	2.2	2.0	2.0	2.4	2.1
2. Private consumption deflator		108.3	1.5	1.7	2.1	1.4	1.9	1.8
3. HICP[26]		107.8	0.9	1.6	2.0	1.3	1.9	1.8
4. Public consumption deflator		111.9	2.9	2.3	2.7	3.1	3.1	3.1
5. Investment deflator		103.6	1.7	3.5	1.4	2.8	2.3	2.0
6. Export price deflator (goods and services)		100.1	1.6	3.7	3.2	0.2	1.8	1.7
7. Import price deflator (goods and services)		98.6	1.3	3.9	3.4	0.3	1.6	1.6

Table 1c. Labour market developments

	ESA Code	2004	2004	2005	2006	2007	2008	2010
		Level	rate of change	rate of change	rate of change	rate of change	rate of change	rate of change
1. Employment, persons[27]		2706.7	0.1	0.6	0.6	-0.3	0.1	0.6
2. Employment, hours worked[28]		4232.2	-0.9	0.5	0.5	-0.4	0.0	0.5
3. Unemployment rate (%)[29]		5.4	5.4	4.8	4.4	4.6	4.5	4.0
4. Labour productivity, persons [30]		497.1	1.9	1.8	1.8	1.4	1.4	1.5
5. Labour productivity, hours worked[31]		317.9	2.9	1.9	1.9	1.5	1.5	1.6
6. Compensation of employees	D.1	786.9	3.4	3.6	4.2	3.5	3.9	4.3

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[26] Optional for Stability programmes.
[27] Occupied population, domestic concept national accounts definition.
[28] National accounts definition.
[29] Harmonised definition, Eurostat; levels.
[30] Real GDP per person employed.
[31] Real GDP per hour worked.

Table 1d. Sectoral balances

% of GDP	ESA Code	2004	2005	2006	2007	2008	2010
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	2.5	2.4	2.4	1.2	1.2	2.9
of which: - Balance on goods and services		5.0	4.7	4.6	4.3	4.8	6.0
- Balance of primary incomes and transfers		-2.6	-2.3	-2.2	-3.1	-3.6	-3.2
- Capital account		0.0	0.0	0.0	0.0	0.0	0.0
2. Net lending of the private sector	B.9	1.4	-0.1	0.5	-0.8	-0.4	1.2
3. Net lending of general government	B.9	1.1	2.5	1.9	2.0	1.5	1.7
4. Statistical discrepancy		0.0	0.0	0.0	0.0	0.0	0.0

Table 2. General government budgetary prospects

	ESA code	2004 Level	2004 % of GDP	2005 % of GDP	2006 % of GDP	2007 % of GDP	2008 % of GDP	2010 % of GDP
Net lending (EDP B.9) by sub-sector								
1. General government	S.13	19.0	1.3	2.7	2.1	2.2	1.7	1.9
2. Central government	S.1311	28.9	2.0	2.7	2.1	2.2	1.7	1.9
3. State government	S.1312	-	-	-	-	-	-	-
4. Local government	S.1313	-10.4	-0.7	0.0	0.0	0.0	0.0	0.0
5. Social security funds	S.1314	0.5	0.0	0.0	0.0	0.0	0.0	0.0
General government (S13)								
6. Total revenue	TR	806.7	55.2	55.0	53.5	53.0	52.2	51.5
7. Total expenditure	TE[32]	787.6	53.9	52.3	51.3	50.8	50.5	49.6
8. Net lending/borrowing	EDP B.9	19.0	1.3	2.7	2.1	2.2	1.7	1.9
9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	35.1	2.4	2.0	1.6	0.9	0.8	0.8
pm: 9a. FISIM		0.1	0.0	0.0	0.0	0.0	0.0	0.0
10. Primary balance	[33]	54.1	3.7	4.8	3.7	3.1	2.6	2.7
Selected components of revenue								
11. Total taxes (11=11a+11b+11c)		700.2	47.9	48.1	46.8	46.8	46.0	45.4
11a. Taxes on production and imports	D.2	258.3	17.7	17.7	17.6	17.4	17.2	16.8
11b. Current taxes on income, wealth, etc	D.5	438.5	30.0	30.2	29.0	29.1	28.5	28.4
11c. Capital taxes	D.91	3.3	0.2	0.2	0.2	0.2	0.2	0.2
12. Social contributions	D.61	17.1	1.2	1.1	1.1	1.1	1.1	1.1
13. Property income	D.4	27.5	1.9	2.0	1.9	1.5	1.5	1.5
14. Other (14=15-(11+12+13))		61.9	4.2	3.8	3.7	3.7	3.6	3.6
15=6. Total revenue	TR	806.7	55.2	55.0	53.5	53.0	52.2	51.5
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)[34]		717.2	49.1	49.2	47.9	47.8	47.0	46.4
Selected components of expenditure								
16. Collective consumption	P.32	120.7	8.3	8.1	8.0	8.0	7.9	7.8
17. Total social transfers	D.62 + D.63	272.5	18.7	18.2	18.0	18.0	17.8	17.5
17a. Social transfers in kind	P.31 =D.63	20.6	1.4	1.4	1.3	1.3	1.3	1.3
17b. Social transfers other than in kind	D.62	251.9	17.2	16.9	19.7	16.7	16.5	16.2
18.=9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	35.1	2.4	2.0	1.6	0.9	0.8	0.8
19. Subsidies	D.3	34.4	2.4	2.3	2.3	2.3	2.3	2.3
20. Gross fixed capital formation	P.51	27.5	1.9	1.7	1.7	1.7	1.7	1.7
21. Other (21=22-(16+17+18+19+20))		50.0	3.4	3.3	3.3	3.3	3.3	3.3
22=7. Total expenditure	TE[353] 1	787.6	53.9	52.3	51.3	50.8	50.5	49.6
Pm: compensation of employees	D.1	260.9	17.9	17.6	17.4	17.6	17.6	17.5

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

[33] The primary balance is calculated as (EDP B.9, item 8) plus (EDP D.41 + FISIM recorded as intermediate consumption, item 9).

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

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

Table 3. General government expenditure by function

% of GDP	COFOG Code	2003	2004
1. General public services	1	7.5	7.1
2. Defence	2	1.6	1.6
3. Public order and safety	3	1.0	1.0
4. Economic affairs	4	3.6	3.7
5. Environmental protection	5	0.6	0.5
6. Housing and community amenities	6	0.8	0.8
7. Health	7	6.9	7.2
8. Recreation, culture and religion	8	1.6	1.8
9. Education	9	8.0	8.1
10. Social protection	10	22.3	22.2
11. Total expenditure (= item 7=26 in Table 2)	TE	**53.9**	**53.9**

Table 4. General government debt developments

% of GDP		2004	2005	2006	2007	2008	2010
1. Gross debt[36]		42.3	35.6	31.7	28.9	26.5	21.5
2. Change in gross debt ratio		-2.2	-6.8	-3.9	-2.8	-2.5	-5.0
Contributions to changes in gross debt							
3. Primary balance[37]		-3.7	-4.8	-3.7	-3.1	-2.6	-5.3
4. Interest expenditure (incl. FISIM) [38]		**2.4**	**2.0**	**1.6**	0.9	0.8	1.6
5. Stock-flow adjustment		**0.9**	**-2.1**	**-0.2**	0.4	0.5	0.8
of which: - Differences between cash and accruals[39]		-	-	-	-	-	-
- Net accumulation of financial assets[40] *of which:* *- privatisation proceeds*		-	-	-	-	-	-
- Valuation effects and other[41]		-	-	-	-	-	-
p.m. implicit interest rate on debt[42]		**5.3**	**4.8**	**4.4**	2.8	2.8	3.3
Other relevant variables							
6. Liquid financial assets[43]		-	-	-	-	-	-
7. Net financial debt (7=1-6)		**14.5**	**11.4**	**9.0**	6.7	4.9	1.3

Table 5. Cyclical developments

% of GDP	ESA Code	2004	2005	2006	2007	2008	2010
1. Real GDP growth (%)		2.0	2.4	2.4	1.1	1.6	2.1
2. Net lending of general government	EDP B.9	1.3	2.7	2.1	2.2	1.7	1.9
3. Interest expenditure (incl. FISIM recorded as consumption)	EDPD.41 +FISIM	2.4	2.0	1.6	0.9	0.8	0.8
4. Potential GDP growth (%) (1)		1.7	1.4	2.0	1.9	1.9	2.1
contributions:							
- labour		0.2	0.0	-0.2	0.1	0.4	0.4
- capital		0.7	0.7	0.7	0.7	0.7	0.7
- total factor productivity		0.9	0.7	1.5	1.1	0.9	1.0
5. Output gap		-0.6	0.5	0.9	0.2	0.0	0.0
6. Cyclical budgetary component							
7. Cyclically-adjusted balance (2-6)		0.6	1.2	1.1	1.7	1.6	1.7
8. Cyclically-adjusted primary balance (7-3)		2.1	2.5	2.1	2.4	1.8	1.9

(1) Until an agreement on the Production Function Method is reached, Member States can use their own figures (*SP*)

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

37 Cf. item 10 in Table 2.

38 Cf. item 9 in Table 2.

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

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

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

42 Proxied by interest expenditure (incl. FISIM recorded as consumption) divided by the debt level of the previous year.

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

Table 6. Divergence from previous update

	ESA Code	2004	2005	2006	2007	2008	2010
Real GDP growth (%)							
Previous update		2.2	2.5	1.3	1.9	1.8	1.8
Current update		2.0	2.4	2.4	1.1	1.6	2.1
Difference		-0.2	0.0	1.1	-0.8	-0.3	0.3
General government net lending (% of GDP)	EDP B.9						
Previous update		0.6	1.5	1.0	1.1	1.2	1.3
Current update		1.3	2.7	2.1	2.2	1.7	1.9
Difference		0.7	1.2	1.1	1.1	0.5	0.6
General government gross debt (% of GDP)							
Previous update		42.3	39.4	37.4	35.3	33.1	28.8
Current update		42.3	35.6	31.7	28.9	26.5	21.5
Difference		0.0	3.8	5.7	6.4	6.6	7.3

Table 7. Long-term sustainability of public finances

% of GDP	**2000**	**2005**	**2010**	**2020**	**2030**	**2050**
Total expenditure	**53.0**	**52.5**	**49.8**	**49.7**	**51.0**	**49.8**
Of which: age-related expenditures	**33.6**	**34.9**	**33.9**	**34.9**	**36.7**	**36.2**
Pension expenditure	8.9	9.4	9.8	10.7	11.3	10.2
Social security pension	8.9	9.4	9.8	10.7	11.3	10.2
Old-age and early pensions	6.9	7.4	7.8	8.7	9.3	8.2
Other pensions (disability, survivors)	2.0	2.0	2.0	2.0	2.0	2.0
Occupational pensions (if in general government)	-	-	-	-	-	-
Health care	6.1	6.4	6.4	6.9	7.4	7.5
Long-term care *(this was earlier included in the health care)*	1.7	1.8	1.8	2.0	2.4	2.9
Education expenditure	5.5	5.9	5.9	5.5	5.3	5.5
Other age-related expenditures	11.4	11.3	9.9	9.9	10.2	10.1
Interest expenditure	4.3	2.8	1.5	0.2	-0.7	-1.7
Total revenue	**55.3**	**55.0**	**51.6**	**51.4**	**52.1**	**52.6**
Of which: property income	**1.9**	**1.6**	**1.4**	**1.0**	**0.7**	**0.3**
of which: from pensions contributions (or social contributions if appropriate)	-0.7	-1.0	-1.3	-0.8	0.1	1.8
Pension reserve fund assets	**115.9**	**131.5**	**148.4**	**195.5**	**241.9**	**274.6**
Of which: consolidated public pension fund assets (assets other than government liabilities)	**1.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.0**
Assumptions						
Labour productivity growth	**3.5**	**1.5**	**1.6**	**1.8**	**1.7**	**1.8**
Real GDP growth	**3.3**	**2.4**	**2.1**	**1.6**	**1.2**	**1.7**
Participation rate males (aged 20-64)	**84.8**	**85.1**	**85.2**	**85.1**	**84.6**	**85.1**
Participation rates females (aged 20-64)	**75.6**	**75.9**	**76.7**	**76.6**	**75.5**	**76.5**
Total participation rates (aged 20-64)	**80.3**	**80.5**	**81.0**	**80.9**	**80.1**	**80.8**
Unemployment rate	**5.2**	**5.5**	**4.7**	**4.7**	**4.7**	**4.7**
Population aged 65+, 1000 persons	**791.1**	**809.8**	**880.9**	**1038.3**	**1147.8**	**1135.9**

Table 8. Basic assumptions

This table should preferably be included in the programme itself; if not, these assumptions should be transmitted to the Council and the Commission together with the programme.

	2004	2005	2006	2007	2008	2010
Short-term interest rate (annual average)	2.2	2.2	2.4	2.7	3.0	3.5
Long-term interest rate (annual average)	4.3	3.5	3.9	4.2	4.5	5.1
USD/€exchange rate (annual average) (euro area and ERM II countries)	124.3	124.4	120.8	120.8	120.8	120.8
Nominal effective exchange rate (1980=100)	102.2	101.5	101.0	101.0	101.0	101.0
(for countries not in euro area or ERM II) exchange rate vis-à-vis the €(annual average)						
World excluding EU, GDP growth	5.7	4.8	4.6	-	-	-
EU GDP growth	2.4	2.0	2.3	-	-	-
Growth of relevant foreign markets	7.5	6.1	6.5	4.6	4.4	4.4
World import volumes, excluding EU	12.8	9.1	7.7	-	-	-
Oil prices, (Brent, USD/barrel)	38.2	53.5	58.5	39.3	41.4	41.4

Annex 2: Compliance with the code of conduct

The table below provides a detailed assessment of whether the programme respects the requirements of Section II of the new code of conduct. It is in four parts, covering compliance with (i) the window for the date of submission of the programme; (ii) the model structure (table of contents) in Annex 1 of the code; (iii) the data requirements (model tables) in Annex 2 of the code; and (iv) other information requirements. In the main text, points (ii) and (iii) are grouped into the "format" requirements of the code, whereas point (iv) refers to its "content" requirements.

Guidelines in the new code of conduct	Yes	No	Comments
1. Submission of the programme			
Programme was submitted not earlier than mid-October and not later than 1 December[1].	**X**		
2. Model structure			
The model structure for the programmes in Annex 1 of the code of conduct has been followed.	X		
3. Model tables (so-called data requirements)			
The quantitative information is presented following the standardised set of tables (Annex 2 of the code of conduct).	X		
The programme provides all compulsory information in these tables.		X	Minor gaps: World GDP growth (excluding EU); EU GDP growth; World import volumes (excluding EU), all for 2007 and 2008 (Table 8 in the code of conduct).
The programme provides all optional information in these tables.		X	Few gaps: General government expenditure by function, 2008 (Table 3); Specifications of the stock-flow adjustment: Differences between cash and accruals; Net accumulation of financial assets; Valuation effects and other; Liquid financial assets (Table 4); Cyclical budgetary component (Table 5)

Guidelines in the new code of conduct	Yes	No	Comments
The concepts used are in line with the European system of accounts (ESA).	X		
4. Other information requirements			
a. Involvement of parliament	X		
The programme mentions its status vis-à-vis the national parliament.	X		
The programme indicates whether the Council opinion on the previous programme has been presented to the national parliament.		X	
b. Economic outlook			
Euro area and ERM II Member States uses the "common external assumptions" on the main extra-EU variables.	X		
Significant divergences between the national and the Commission services' economic forecasts are explained[2].			Not applicable
The possible upside and downside risks to the economic outlook are brought out.	X		
The outlook for sectoral balances and, especially for countries with a high external deficit, the external balance is analysed.		X	Not relevant
c. Monetary/exchange rate policy			
The convergence programme presents the medium-term monetary policy objectives and their relationship to price and exchange rate stability.	X		
d. Budgetary strategy			
The programme presents budgetary targets for the general government balance in relation to the MTO, and the projected path for the debt ratio.	X		
In case a new government has taken office, the programme shows continuity with respect to the budgetary targets endorsed by the Council.			Not applicable
When applicable, the programme explains the reasons for possible deviations from previous targets and, in case of substantial deviations, whether measures are taken to rectify the situation, and provide information on them.	X		
The budgetary targets are backed by an indication of the broad measures necessary to achieve them and an assessment of their quantitative effects on the general government balance is analysed.	X		
Information is provided on one-off and other temporary measures.	X		
The state of implementation of the measures (enacted versus planned) presented in the programme is specified.	X		
If for a country that uses the transition period for the classification of second-pillar funded pension schemes, the programme presents information on the impact on the public finances.	X		
e. "Major structural reforms"			
If the MTO is not yet reached or a temporary deviation is planned from the achieved MTO, the programme includes comprehensive information on the economic and budgetary effects of possible 'major structural reforms' over time.			Not applicable
The programme includes a quantitative cost-benefit analysis of the short-term costs and long-term benefits of such reforms.			Not applicable
f. Sensitivity analysis			

Guidelines in the new code of conduct	Yes	No	Comments
The programme includes comprehensive sensitivity analyses and/or develops alternative scenarios showing the effect on the budgetary and debt position of: a) changes in the main economic assumptions b) different interest rate assumptions c) for non-participating Member States, different exchange rate assumptions d) if the common external assumptions are not used, changes in assumptions for the main extra-EU variables.	X X X		
In case of such "major structural reforms", the programme provides an analysis of how changes in the assumptions would affect the effects on the budget and potential growth.			Not applicable
g. Broad economic policy guidelines			
The programme provides information on the consistency with the broad economic policy guidelines of the budgetary objectives and the measures to achieve them.	X		
h. Quality of public finances			
The programme describes measures aimed at improving the quality of public finances on both the revenue and expenditure side (e.g. tax reform, value-for-money initiatives, measures to improve tax collection efficiency and expenditure control).	X		
i. Long-term sustainability			
The programme outlines the country's strategies to ensure the sustainability of public finances, especially in light of the economic and budgetary impact of ageing populations.	X		
Common budgetary projections by the AWG are included in the programme. The programme includes all the necessary additional information. (…) To this end, information included in programmes should focus on new relevant information that is not fully reflected in the latest common EPC projections.	X		
j. Other information (optional)			
The programme includes information on the implementation of existing national budgetary rules (expenditure rules, etc.), as well as on other institutional features of the public finances, in particular budgetary procedures and public finance statistical governance.	X		
Notes: [1]The code of conduct allows for the following exceptions: (i) Ireland should be regarded as complying with the deadline in case of submission on "budget day", i.e. traditionally the first Wednesday of December, (ii) the UK should submit as close as possible to its autumn pre-budget report; and (iii) Austria and Portugal cannot comply with the deadline but will submit no later than 15 December. [2]To the extent possible, bearing in mind the typically short time period between the publication of the Commission services' autumn forecast and the submission of the programme.			

Annex 3: Consistency with the broad economic policy guidelines

The table below provides an overview of whether the strategy and policy measures in the programme are consistent with the broad economic policy guidelines in the area of public finances.

Integrated guidelines	Yes	No	Not applicable
1. To secure economic stability			
– Member States should respect their medium-term budgetary objectives. As long as this objective has not yet been achieved, they should take all the necessary corrective measures to achieve it[1].	X		
– Member States should avoid pro-cyclical fiscal policies[2].	X		
– Member States in excessive deficit should take effective action in order to ensure a prompt correction of excessive deficits[3].			X
– Member States posting current account deficits that risk being unsustainable should work towards (…), where appropriate, contributing to their correction via fiscal policies.			X
2. To safeguard economic and fiscal sustainability In view of the projected costs of ageing populations,			
– Member States should undertake a satisfactory pace of government debt reduction to strengthen public finances.			X
– Member States should reform and re-enforce pension, social insurance and health care systems to ensure that they are financially viable, socially adequate and accessible (…)	X		
3. To promote a growth- and employment-orientated and efficient allocation of resources			
Member States should, without prejudice to guidelines on economic stability and sustainability, re-direct the composition of public expenditure towards growth-enhancing categories in line with the Lisbon strategy, adapt tax structures to strengthen growth potential, ensure that mechanisms are in place to assess the relationship between public spending and the achievement of policy objectives and ensure the overall coherence of reform packages.	X		

Notes:
[1]As further specified in the Stability and Growth Pact and the new code of conduct, i.e. with an annual 0.5% of GDP minimum adjustment in structural terms for euro area and ERM II Member States.
[2]As further specified in the Stability and Growth Pact and the new code of conduct, i.e. Member States that have already achieved the medium-term objective should avoid pro-cyclical fiscal policies in “good times”.
[3]As further specified in the country-specific Council recommendations and decisions under the excessive deficit procedure.

Annex 4: Assessment of tax projections

Table 6 compares the tax projections of the programme with those of the Commission services' autumn 2005 forecast, focussing on the total tax-to-GDP ratio. The underlying analysis is carried out exploiting information for the four major tax categories, i.e. indirect taxes, corporate and private income taxes and social contributions (see Table below)[44]. Conceptually, the analysis draws on the definition of a semi-elasticity, which measures the change in a ratio vis-à-vis the relative change in the denominator.

The semi-elasticity of the tax-to-GDP ratio of the *i-th* tax $\frac{T_i}{Y}$ can be written as:

$$\eta_i = \frac{d\left(\frac{T_i}{Y}\right)}{dY} Y = \left(\frac{dT_i}{dY}\frac{Y}{T_i} - 1\right)\frac{T_i}{Y} = \left(\frac{dT_i}{dB_i}\frac{B_i}{T_i}\frac{dB_i}{dY}\frac{Y}{T_i} - 1\right)\frac{T_i}{Y} = \left(\varepsilon_{T_i,B_i}\varepsilon_{B_i,Y} - 1\right)\frac{T_i}{Y}.$$

where ε_{T_i,B_i} and $\varepsilon_{B_i,Y}$ denote the elasticity of the *i-th* tax T_i relative to its tax base B_i and the elasticity of the tax base B_i relative to aggregate GDP Y respectively.

To the extent that ε_{T_i,B_i} is derived from observed or projected data, it will typically reflect (i) the effect of discretionary measures (including one-offs) and (ii) the tax elasticity[45]. The second elasticity $\varepsilon_{B_i,Y}$ can be used as an indicator of the tax intensity of GDP growth; for instance, a higher elasticity of consumption relative to GDP means that for the same GDP growth indirect taxes will be higher.

The definition of a semi-elasticity has two practical implications. First, any change in the tax-to-GDP ratio of the *i-th* tax can be written as the product of the semi-elasticity and GDP growth:

$$d\left(\frac{T_i}{Y}\right) = \eta_i \cdot \frac{dY}{Y}$$

And the change in the total tax-to-GDP ratio is the sum

$$\sum_i d\left(\frac{T_i}{Y}\right) = \sum_I \eta_i \frac{dY}{Y}.$$

---

[44] Private and corporate income taxes are generally not provided, neither in the programme nor the Commission services' autumn 2005 forecast. Only the aggregate, direct income taxes, is given. For the purpose of this exercise the breakdown is obtained using the average shares over the past ten years, i.e. the composition of direct taxes is assumed to stay constant.

[45] The observed or projected elasticity (ex-post elasticity) also includes the effect of other factors (OF) such as discretionary measures: $\frac{\Delta T}{T} = \varepsilon_{T,B\,exante}\frac{dB}{B} + \frac{OF}{T} = \varepsilon_{T,B\,ex\,post}\frac{dB}{B}$.

Second, differences between two tax projections can be decomposed into an elasticity component and a composition component:

$$d\left(\frac{T_i}{Y}\right)' - d\left(\frac{T_i}{Y}\right) = \left[\left(\varepsilon'_{T_i,B_i}\varepsilon'_{B_i,Y} - 1\right)\frac{T_i}{Y} - \left(\varepsilon_{T_i,B_i}\varepsilon_{B_i,Y} - 1\right)\frac{T_i}{Y}\right]\frac{dY}{Y} .$$

If $(\varepsilon'_{T_i,B_i} - \varepsilon_{T_i,B_i}) = \alpha_i$; $(\varepsilon'_{B_i,Y} - \varepsilon_{B_i,Y}) = \beta_i$,

then $d\left(\frac{T_i}{Y}\right)' - d\left(\frac{T_i}{Y}\right) = \left[\left(\alpha_i\varepsilon_{B_i,Y} + \beta_i\varepsilon_{T_i,B_i} + \alpha_i\beta_i\right)\frac{T_i}{Y}\right]\frac{dY}{Y}$

where $\alpha_i\varepsilon_{B_i,Y}\frac{T_i}{Y}\frac{dY}{Y}$ determines the elasticity component and $\beta_i\varepsilon_{T_i,B_i}\frac{T_i}{Y}\frac{dY}{Y}$ the composition component. The third component in the equation $\alpha_i\beta_i\frac{T_i}{Y}\frac{dY}{Y}$ measures the interaction of the elasticity and the composition components. It is generally small but can become important in some cases. The tax elasticity of total taxes is obtained as $\varepsilon = \sum_i \varepsilon_{T_iB_i}\varepsilon_{B_iY}$.

The table below reports the results of the assessment of the tax projections presented in the programme by major tax category, which, as mentioned above, is the basis for the aggregated results reported in Table 6.

Assessment of tax projections by major tax category

	2006		2007		2008	2010	p.m.:
	COM	CP	COM[2]	CP	CP	CP	OECD[1]
Taxes on production and imports:							
Change in tax-to-GDP ratio	-0.2	-0.1	-0.2	-0.2	-0.2	-0.4	/
Difference	0.1		0.0		/	/	/
of which[3]*: - elasticity component*	0.1		0.0		/	/	/
- composition component	0.0		-0.1		/	/	/
p.m.: Observed elasticity:							
- of taxes to tax base[4]	0.7	0.8	0.7	0.7	0.9	0.5	1.0
- of tax base[4] to GDP	1.1	1.0	1.0	0.9	0.8	0.9	1.0
Social contributions:							
Change in tax-to-GDP ratio	0.0	0.0	0.0	0.0	0.0	0.0	/
Difference	0.0		0.0		/	/	/
of which[3]*: - elasticity component*	0.0		0.0		/	/	/
- composition component	0.0		0.0		/	/	/
p.m.: Observed elasticity:							
- of taxes to tax base[5]	0.7	1.1	0.7	0.9	1.0	1.0	1.0
- of tax base[5] to GDP	0.9	0.9	1.0	1.1	1.0	1.0	0.7
Personal income tax[6]:							
Change in tax-to-GDP ratio	-0.3	-1.1	-0.4	0.1	-0.6	-0.1	/
Difference	-0.8		0.5		/	/	/
of which[3]*: - elasticity component*	-0.8		0.4		/	/	/
- composition component	0.0		0.1		/	/	/
p.m.: Observed elasticity:							
- of taxes to tax base[5]	0.8	0.1	0.6	1.0	0.5	0.9	1.4
- of tax base[5] to GDP	0.9	0.9	1.0	1.1	1.0	1.0	0.7
Corporate income tax[6]:							
Change in tax-to-GDP ratio	0.0	-0.1	0.0	0.0	-0.1	0.0	/
Difference	-0.1		0.1		/	/	/
of which[3]*: - elasticity component*	-0.1		0.1		/	/	/
- composition component	0.0		0.0		/	/	/
p.m.: Observed elasticity:							
- of taxes to tax base[7]	0.7	0.1	0.7	1.3	0.5	0.9	1.0
- of tax base[7] to GDP	1.1	1.1	1.0	0.9	1.0	1.0	1.7

Notes:
[1]OECD ex-ante elasticities
[2]On a no-policy change basis
[3]The decomposition is explained in the text above
[4]Tax base = private consumption expenditure
[5]Tax base = compensation of employees
[6]Taxes on income and wealth are split into private and corporate income tax using the average tax share over the past ten years, i.e. the share is assumed to be constant over the programme period
[7]Tax base = gross operating surplus

Source:
Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations and OECD (N. Girouard and C. André (2005), "Measuring Cyclically-Adjusted Budget Balances for the OECD Countries", OECD Working Paper No. 434)

Assessment of tax elasticities by major tax category

	2006		2007	
	COM (observed)	**ex-ante**[1]	**COM**[2] **(observed)**	**ex-ante**[1]
Taxes on production and imports:				
Change in tax-to-GDP ratio	-0.2	0.0	-0.2	0.0
Difference	-0.2		-0.2	
of which[3]*: - elasticity component*	-0.3		-0.2	
- composition component	0.0		0.0	
p.m.: Observed elasticity:				
- of taxes to tax base[4]	0.7	1.0	0.7	1.0
- of tax base[4] to GDP	1.1	1.0	1.0	1.0
Social contributions:				
Change in tax-to-GDP ratio	0.0	0.0	0.0	0.0
Difference	0.0		0.0	
of which[3]*: - elasticity component*	0.0		0.0	
- composition component	0.0		0.0	
p.m.: Observed elasticity:				
- of taxes to tax base[5]	0.7	1.0	0.7	1.0
- of tax base[5] to GDP	0.9	0.7	1.0	0.7
Personal income tax[6]**:**				
Change in tax-to-GDP ratio	-0.3	0.0	-0.4	0.0
Difference	-0.3		-0.4	
of which[3]*: - elasticity component*	-0.7		-0.9	
- composition component	0.2		0.2	
p.m.: Observed elasticity:				
- of taxes to tax base[5]	0.8	1.4	0.6	1.4
- of tax base[5] to GDP	0.9	0.7	1.0	0.7
Corporate income tax[6]**:**				
Change in tax-to-GDP ratio	0.0	0.1	0.0	0.1
Difference	-0.1		-0.1	
of which[3]*: - elasticity component*	0.0		0.0	
- composition component	0.0		-0.1	
p.m.: Observed elasticity:				
- of taxes to tax base[7]	0.7	1.0	0.7	1.0
- of tax base[7] to GDP	1.1	1.7	1.0	1.7

Notes:
[1]Tax projections obtained by applying ex-ante standard tax elasticities estimated by the OECD
[2]On a no-policy change basis
[3]The decomposition is explained in the text above
[4]Tax base = private consumption expenditure
[5]Tax base = compensation of employees
[6]Taxes on income and wealth are split into private and corporate income tax using the average tax share over the past ten years, i.e. the share is assumed to be constant over the programme period
[7]Tax base = gross operating surplus

Source:
Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations and OECD (N. Girouard and C. André (2005), "Measuring Cyclically-Adjusted Budget Balances for the OECD Countries", OECD Working Paper No. 434)

Annex 5: Indicators of long-term sustainability

Table A1: Underlying assumptions compared

	2010		2020		2030		2050	
	EPC	**SCP**	**EPC**	**SCP**	**EPC**	**SCP**	**EPC**	**SCP**
Labour productivity growth	**2.1**	**1.6**	**1.8**	**1.8**	**1.7**	**1.7**	**1.7**	**1.8**
Real GDP growth	**2.1**	**2.1**	**1.7**	**1.6**	**1.1**	**1.2**	**1.8**	**1.7**
Participation rate males (aged 20-64)	**86.9**	**85.2**	**87.8**	**85.1**	**87.4**	**84.6**	**88.5**	**85.1**
Participation rates females (aged 20-64)	**77.9**	**76.7**	**78.8**	**76.6**	**78.2**	**75.5**	**79.4**	**76.5**
Total participation rates (aged 20-64)	**82.4**	**81.0**	**83.4**	**80.9**	**82.9**	**80.1**	**84.0**	**80.8**
Unemployment rate	**4.3**	**4.7**	**4.3**	**4.7**	**4.3**	**4.7**	**4.3**	**4.7**
Population aged 65+ over total population	**16.3**	**880.9**	**20.1**	**1038.3**	**22.9**	**1147.8**	**25.0**	**1135.9**

Note: SCP data for population aged 65+ are persons (in thousands).

Table A2: Long-term projections

Main assumptions - programme scenario (as % GDP)		**2010**	**2020**	**2030**	**2040**	**2050**	**changes**	**Impact on S2**
Total primary age-related spending		23.9	25.1	26.4	26.3	26.1	2.2	2.0
Pensions		9.8	10.7	11.3	10.8	10.2	0.4	0.6
Health care		6.4	6.9	7.4	7.5	7.5	1.1	1.0
Care of the elderly		1.8	2.0	2.4	2.7	2.9	1.1	0.9
Education		5.9	5.5	5.3	5.4	5.5	-0.4	-0.4
Unemployment benefits		:	:	:	:	:	:	:
Total primary non age-related spending		24.9	24.9	24.9	24.9	24.9	0.0	0.0
Total revenues		51.9	51.9	51.9	51.9	51.9	0.0	0.0

Table A3: The cost of a five-year delay in adjusting the budgetary position according to the S1 and S2

	S1	**S2**
2005 scenario	**-0.7**	**-0.2**
Programme scenario	**-0.3**	**-0.1**

Note: the cost of a delay shows the increase of the S1 and S2 indicators if they were calculated five years later.

Table A4: Debt development

Results (as % GDP)	2009	2010	2020	2030	2040	2050	changes
Programme scenario							
Gross debt	24.0	21.5	-1.9	-15.1	-25.0	-37.3	-61.3
*Gross debt, i + 1**	*0.0*	*21.5*	*-0.8*	*-14.6*	*-26.4*	*-42.3*	*-42.3*
*Gross debt, i - 1**	*0.0*	*21.5*	*-2.9*	*-15.3*	*-23.3*	*-32.6*	*-32.6*
Adjusted gross debt	23.9	21.4	-2.0	-15.3	-25.1	-37.5	-61.4
2005 Scenario							
Gross debt	19.3	14.4	-26.7	-61.2	-96.1	-135.5	-154.8
*Gross debt, i + 1**	*19.3*	*14.4*	*-27.1*	*-66.4*	*-110.9*	*-166.1*	*-185.4*
*Gross debt, i - 1**	*19.3*	*14.4*	*-26.2*	*-56.5*	*-83.5*	*-111.3*	*-130.6*
Adjusted gross debt	19.2	14.3	-26.8	-61.4	-96.2	-135.6	-154.8

* *i + 1* and *i + 1* represents the evolution of debt under the assumption of the nominal interest rate being 100 basis points higher or lower throughout the projection period.