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NOVEMBER 2004 UPDATE
OF THE CONVERGENCE PROGRAMME OF DENMARK
(2004-2010)
AN ASSESSMENT

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SUMMARY AND CONCLUSIONS¹

The 2004 update of the Danish convergence programme was adopted by the government on 29 November 2004 and submitted to the European Commission the same day. The update was sent to the Danish Parliament for information. The present update, covering the period up to 2010, is the sixth update of the Convergence Programme submitted in October 1998. The updated programme fully complies with the data requirements of the “code of conduct on the content and format of stability and convergence programmes”².

In the update, GDP growth rates of 2.2% and 2.5% are foreseen for 2004 and 2005, as domestic demand, in particular private consumption, rebounds after the slowdown in 2003. For 2006, GDP growth is set markedly lower. The labour market has so far improved only modestly but is expected to recover in the coming years. Overall, on the basis of currently available information, the macroeconomic scenario underlying the update seems relatively cautious and is broadly in line with the Commission services’ evaluation including the autumn 2004 forecast. However, for 2006 and the following years the growth assumptions appear cautious and slightly below the Commission services’ estimations of the potential growth rate in the medium term.

Inflation decelerated in late 2003 due to falling import and energy prices and annual inflation was subdued in most of 2004. Towards the end of the year inflation rose somewhat as the reduction of excise duties on several items in late 2003 fell out of the year-on-year comparison and energy prices increased; average inflation in 2004 was 1.2%. There have not been any severe tensions affecting the exchange rate of the krone. Deviations in the exchange rate from the central parity have been much narrower than the official margin and the short-term interest rate differential to the euro area has continued to be low. This reflects a strong confidence in the macroeconomic policy framework in Denmark, which also 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.

The medium-term budgetary framework includes a target range of general government surpluses of 1½-2½% of GDP on average up to 2010 and a limit on yearly real public consumption growth of 0.5% from 2005 onwards; expenditure control is reinforced through the so-called tax freeze. Both the central government sub-sector and the pension funds are expected to show stable surpluses in the programme period. Local governments are projected to balance their budgets, as required by law. The updated programme foresees surpluses of 1.2% in 2004, 2.0% in 2005 and 1.6 % of GDP in 2006. The surplus reaches 2.0% of GDP in 2010. Both expenditure and revenue ratios are on a gradually declining trend over the projection period. Adjusting for the estimated impact of the cycle using the common methodology, the cyclically-adjusted budget balance is in

¹ This technical analysis, which is based on information available up to 26 January 2005, accompanies the recommendation by the Commission for a Council opinion on the update of the convergence programme, which the College adopted on 2 February 2005. 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).

² Revised Opinion of the Economic and Financial Committee on the content and format of stability and convergence programmes, document EFC/ECFIN/404/01 - REV 1 of 27.06.2001 endorsed by the ECOFIN Council of 10.07.2001.

surplus throughout the projection period. The projected general government surplus targets are close to the 2003 update. Differences in the near term are due to revised assumptions about GDP growth as well as to the effects of recent policy measures, including the March 2004 fiscal package, which frontloaded the tax reform adopted in 2003. From 2007 the projected surpluses are slightly lower than in the previous update, due to revised demographic assumptions that have contributed to lowering the long-term fiscal requirements. Overall, the current update thus broadly confirms the strategy of the previous update against a similar macroeconomic scenario.

The risks to the budgetary projections are fairly balanced, though could be weighted towards an outcome better than projected in the first years of the programme. Over a number of years, Denmark has posted solid general government budget surpluses. This held also in 2003, when the surplus was 1.0% of GDP in spite of GDP growth of only 0.5%. Higher oil prices than assumed in the update could improve public finances as Denmark is a small net oil exporter. The composition of GDP growth in the coming years, largely based on domestic demand, should cater for sustained revenues and thus support a favourable development of public finances. Over the medium term, downside risks to the projections include any failure to restrain public expenditure to targeted growth, in particular at local government level, or to reach the medium-term targets of higher employment. In view of this risk assessment, the budgetary stance in the programmes is sufficient to maintain a medium-term budgetary position of “close to balance or in surplus” as required by the Stability and Growth Pact throughout the programme period. It also provides a sufficient safety margin against breaching the 3% of GDP deficit threshold with normal macroeconomic fluctuations.

The gross debt ratio stood at 44.7% of GDP in 2003 and is projected to reach 28¾% of GDP in 2010 in the update. The main contributions to the fall in the debt ratio come from positive primary balances and the impact of nominal GDP growth.

The 2004 update reviews the government’s structural reform programme which focuses on increasing employment and strengthening competition. In recent years a range of measures have been taken. The recent tax reform, fully implemented in 2004, aims to mitigate the negative impact of high taxation on labour supply, including the number of hours worked. Even after the reform, however, the top marginal tax rate remains among the highest in the EU and still applies to a relatively large share of full-time workers. The objective of the earned-income tax credit introduced as a part of the tax reform is to increase incentives to enter or stay in the labour market, primarily for low-wage-earners. The medium-term fiscal projections assume increases in employment through future reforms, recognised as necessary by the Danish authorities but which remain unspecified. With the mid-point of the programme’s time-frame to 2010 approaching, the picture is therefore mixed in this regard.

Denmark appears to be in a favourable position with regard to the long-term sustainability of its public finances, despite significant projected budgetary costs of an ageing population. The budgetary strategy outlined in the programme, mainly based on further debt consolidation through continued budgetary surpluses, should result in a sustainable position over time. However, achieving continued tight expenditure control and a considerable rise in employment on which the strategy also relies may prove challenging.

Overall, the economic policies outlined in the update are broadly consistent with the country-specific broad economic policy guidelines in the area of public finances.

Comparison of key macroeconomic and budgetary projections

		2004	2005	2006	2007	2010
Real GDP (% change)	CP Nov 2004	2.2	2.5	1.3	1.9	1.8
	COM Oct 2004	2.3	2.4	2.0	n.a.	n.a.
	<i>CP Nov 2003</i>	2.3	2.2	1.9	1.7	1.7
HICP inflation (%)	CP Nov 2004	1.2	1.7	1.6	1.7	1.6
	COM Oct 2004	1.1	1.9	1.6	n.a.	n.a.
	<i>CP Nov 2003</i>	1.8	1.7	1.7	1.7	1.7
General government balance (% of GDP)	CP Nov 2004	1.2	2.0	1.6	1.7	2.0
	COM Oct 2004 ²	2.0	2.6	2.8	n.a.	n.a.
	<i>CP Nov 2003</i>	1.3	1.8	1.9	2.1	2.1
Primary balance (% of GDP)	CP Nov 2004³	4.3	4.8	4.5	4.6	4.4
	COM Oct 2004	4.4	4.9	4.9	n.a.	n.a.
	<i>CP Nov 2003</i>	2.3	2.7	2.6	2.3	2.3
Cyclically-adjusted balance (% of GDP)	CP Nov 2004¹	1.7	2.0	2.0	2.0	2.3
	COM Oct 2004	2.6	2.9	3.0	n.a.	n.a.
	<i>CP Nov 2003¹</i>	1.1	1.5	1.7	1.9	2.1
Government gross debt (% of GDP)	CP Nov 2004	42.3	39.4	37.4	35.3	28.8
	COM Oct 2004	41.5	37.5	34.2	n.a.	n.a.
	<i>CP Nov 2003</i>	41.2	38.7	36.4	27.5	27.5

Notes:

¹ Commission services calculations on the basis of the information in the programme

² In the September 2004 EDP notification, Denmark presented figures for general government balance and gross debt where the ATP fund was reclassified outside of the government sector, which lowered the general government surplus by around 1 p.p. of GDP. On this basis, the Commission services' autumn 2004 forecast also excluded the ATP surplus. In this assessment, the Commission services' figures for general government balance and gross debt have been recalculated so as to include the ATP fund, as is the case in the programme update. The Commission services figures for general government balance and government debt are therefore not the same as in the autumn forecast.

³ The updated programme presents primary balances excluding net interest expenditure and not gross interest expenditure which otherwise is conventional; this table presents primary balances excluding gross interest expenditure.

Sources:

Updated Convergence Programme, November 2003 and November 2004 (CP); Commission services autumn 2004 economic forecasts (COM; see note 2 above); Commission services calculations

1. INTRODUCTION

The 2004 update of the Danish convergence programme, covering the period up to 2010, was adopted by the Danish government on 29 November 2004 and submitted to the European Commission the same day. The update was sent to the Danish Parliament for information. The programme is based on the economic projections in the Government's Budget Bill for 2005 presented to Parliament on 26 August 2004 and adopted on 15 December 2004. The present update is the sixth update of the Convergence Programme, submitted in October 1998.

The updated programme fully complies with the data requirements of the "code of conduct on the content and format of stability and convergence programmes"³. The programme provides a useful overview of alternative assumptions affecting the long-term fiscal sustainability projections. The update also includes detailed information on different areas of structural policy.

2. MACROECONOMIC DEVELOPMENTS

The update foresees GDP growth of 2.2% and 2.5% in 2004 and 2005, respectively. This is roughly in line with the previous update and also close to the Commission services' autumn 2004 forecast (Table 1). For 2006, however, the programme adopts a technical assumption that the positive output gap⁴ is closed, setting GDP growth markedly lower (1.3%) than projected in either the current official forecast (2.1%)⁵ or the Commission services' autumn 2004 forecast (2.0%). For the years 2007-2010, the update seems relatively prudent, also in comparison to potential growth rate estimates using the commonly agreed method (see Table 3). Overall, subject to the remarks concerning 2006, the medium-term macroeconomic scenario in the update appears plausible and could be on the cautious side.

The macroeconomic scenario in the update is based on a moderate recovery of economic activity in 2004 continuing in 2005, driven almost exclusively by domestic demand, centred on private consumption. In 2004, household spending was boosted by substantial increases in disposable incomes due to tax cuts, as well as the temporary suspension of contributions to the mandatory pension savings scheme. Investment growth also accelerated in 2004, while exports have been more hesitant in view of weak foreign demand and spells of appreciation of the krone vis-à-vis the dollar. Also in view of the strong growth of imports accompanying the surge in domestic demand, the growth contribution of net exports in the near term is set to be modest or negative. This scenario is on the whole similar to the Commission services' estimations. Both the programme projections and the Commission services' forecast expect inflationary pressures to

³ Revised Opinion of the Economic and Financial Committee on the content and format of stability and convergence programmes, document EFC/ECFIN/404/01 - REV 1 of 27.06.2001 endorsed by the ECOFIN Council of 10.07.2001.

⁴ As calculated by the national authorities; the Commission services estimate a negative gap: see below.

⁵ The latest Danish official forecast was published on 8 December 2004, after the release of the present convergence programme update.

remain subdued in the coming years. Similarly, in the two scenarios unemployment is set to fall gradually in line with the growth of economic activity.

The external assumptions are in line with the Commission services' autumn 2004 forecast, with the exception of oil prices where the assumption in the update is considerably lower than that of the Commission services, in particular for 2005⁶. Trading partners' output growth after 2005 is foreseen to slow to around potential rates. The programme update assumes a gradual increase in Danish long-term interest rates over the projection period.

Table 1: Comparison of macroeconomic developments and forecasts

	2004		2005		2006		2007	2010
	COM	CP	COM	CP	COM	CP	CP	CP
Real GDP (% change)	2.3	2.2	2.4	2.5	2.0	1.3	1.9	1.8
<i>Contributions:</i>								
- Final domestic demand	2.4	2.6	2.3	2.4	1.7	1.4	2.0	1.9
- Change in inventories	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- External balance on g&s	-0.1	-0.4	0.0	0.1	0.2	-0.1	-0.1	-0.1
Employment (% change)	0.4	0.4	0.6	0.8	0.3	-0.3	0.3	0.3
Unemployment rate (%)	6.4	6.0	5.9	5.3	5.5	5.2	5.0	4.8
HICP inflation (%)	1.1	1.2	1.9	1.7	1.6	1.6	1.7	1.6
GDP deflator (% change)	1.9	1.8	1.9	2.0	2.0	2.1	2.1	2.1
Current account (% of GDP)	3.2	3.1	3.5	3.3	3.9	3.4	3.6	3.9
<i>Sources:</i>								
<i>Commission services autumn 2004 economic forecasts (COM); convergence programme, 2004 (CP)</i>								

On the basis of the data in the programme, Table 2 presents the potential growth and output gap estimates using the commonly agreed methodology. The estimates, which are overall similar to those made on the basis of the Commission services' autumn 2004 forecast, suggest that a negative output gap in 2004 will narrow in 2005. Based on the Commission services' forecast, the negative gap closes further in 2006. Given the modest programme growth estimate for 2006, the negative output gap, as calculated by the Commission services, widens⁷.

⁶ The Commission services assume oil prices to be USD 10 higher in 2005 and USD 6 higher in 2006.

⁷ In the update the Danish authorities provide output gap figures based on their own method. Following this, the calculated output gaps close sooner than when using the commonly agreed methodology: in 2005 there is a positive output gap of 0.4% that closes in 2006. In this method, 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.

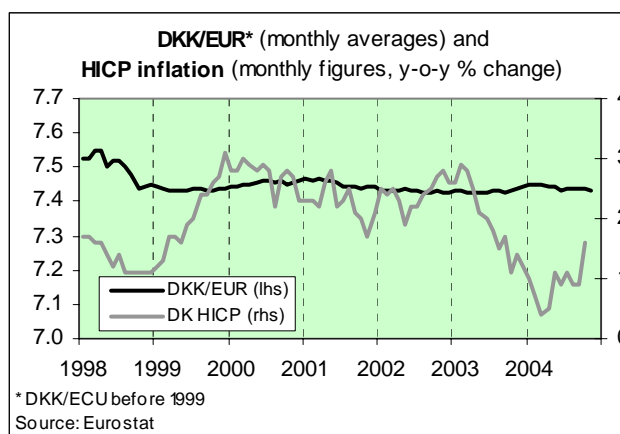
Table 2: Sources of potential output growth

	2004		2005		2006		2007	2010
	COM	CP ³	COM	CP ³	COM	CP ³	CP ³	CP ³
Potential GDP growth ¹	1.9	1.8	1.9	1.9	1.9	1.8	1.8	1.7
<i>Contributions:</i>								
- Labour	0.1	0.1	0.1	0.2	0.0	0.1	0.1	0.0
- Capital accumulation	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
- TFP	1.1	1.1	1.1	1.0	1.1	1.0	1.0	1.0
Output gap ^{1,2}	-0.7	-0.6	-0.3	-0.1	-0.2	-0.5	-0.4	-0.4
Notes: ¹ based on the production function method for calculating potential output growth ² in percent of potential GDP ³ Commission services calculations on the basis of the information in the convergence programme update (CP)								
Sources: <i>Commission services autumn 2004 economic forecasts (COM); Commission services calculations</i>								

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. Since the previous update, inflation in Denmark has remained subdued. Consumer price inflation decelerated markedly in late 2003, and annual inflation was around 1% in most of 2004. Towards the end of the year inflation rose somewhat as the reduction of excise duties on several items in late 2003 fell out of the year-on-year comparison and energy prices increased; average inflation (CPI) in 2004 was 1.2%.

Denmark participates in ERM II with a narrow fluctuation band of $\pm 2.25\%$ to the euro. Since the inception of the mechanism on 1 January 1999, there have not been any severe 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.



The macroeconomic policy framework in Denmark, with sound public finances and a credible fixed exchange rate regime, continue to be supportive of low long-term bond yields. Over the past year, developments in Danish bond yields have been in line with trends in major bond markets. At the end of December 2004, long-term interest rates in Denmark and the euro area stood at 3.8 percent and 3.7 percent, respectively, down from 4.5 percent and 4.4 percent in December 2003⁸.

⁸ EMU convergence criterion bond yields.

The positive yield differential between long-term government bonds in Denmark and the euro area is a cost Denmark incurs by not having joined the euro area, reflecting mainly the exchange rate risk premia. In the programme update, the authorities project that the bond yield spread to Germany increases from around 20 basis points in 2004 to about 50 basis points by 2007. The Danish authorities estimate that this spread is about 35 basis points above that projected had Denmark been a member of the euro area.

4. BUDGETARY IMPLEMENTATION IN 2004

The estimated general government surplus for 2004 in the present update is 1.2% of GDP based on GDP growth of 2.2%, similar to that of the previous update. The Commission services estimate a surplus of 2.0% of GDP in 2004 based on GDP growth of 2.3%⁹.

The largely unchanged surplus in 2004 compared to the target in the 2003 update masks factors pulling in different directions. Pulling the expected surplus downwards in relation to the previous update is a slightly lower estimated GDP growth as well as the frontloading of tax reductions in the March 2004 fiscal package. This package was launched to support the recovery mainly through a boost to private consumption. In addition to the tax cuts, the mandatory contributions to the special pension savings scheme were suspended in 2004 and 2005. As these contributions are tax deductible, this measure temporarily strengthened public revenues (while lowering future revenues from taxation of pension pay-outs). Revenues are thus estimated to be 55.6% of GDP in 2004, compared to 54.5% in the 2003 update. The difference is due to higher total tax revenues, but also to “other” (including oil-related) revenues. Also expenditure is higher in 2004 in the present update, 54.4% of GDP compared to 53.2%. Here, the difference is slightly higher public consumption and significantly higher other expenditure. Budget positions across general government sub-sectors are broadly as envisaged in the previous update, showing a modest surplus (0.4% of GDP) for central government, balance in the local government sub-sector and a 0.8% of GDP surplus in the social security sub-sector.

5. BUDGETARY TARGETS AND THE MEDIUM-TERM PATH OF THE PUBLIC FINANCES

5.1. Evolution of budgetary targets in successive programmes

Maintaining sound and sustainable public finances is a key element in Denmark’s economic policy, while at the same time creating room for a lowering of the tax burden. Within this framework, general government surpluses have been recorded since 1998 and continued surpluses to 2010 are foreseen in the present programme.

⁹ In the September 2004 EDP notification, the figures for general government balance and gross debt were notified, in light of Eurostat’s spring 2004 decision concerning the statistical classification of pension funds, with the ATP fund reclassified outside of the government sector, which lowered the general government surplus by around 1 p.p. of GDP. On this basis, the Commission services’ autumn 2004 forecast also excluded the ATP surplus. However, in light of the derogations subsequently adopted for a number of Member States, including Denmark, the latest update of the convergence programme follows the practice of the earlier updates and includes the ATP fund within general government. In this assessment, the Commission services’ figures for the general government balance, primary balance and gross debt have been recalculated so as to include the ATP fund, as is the case in the programme update, and therefore differ from the figures in the Commission services’ autumn 2004 forecast. In the assessment the Commission services’ figures for general government balance are on an EDP basis, which in 2003 implied a 0.2 p.p. of GDP higher surplus than the ESA95 data used in the update.

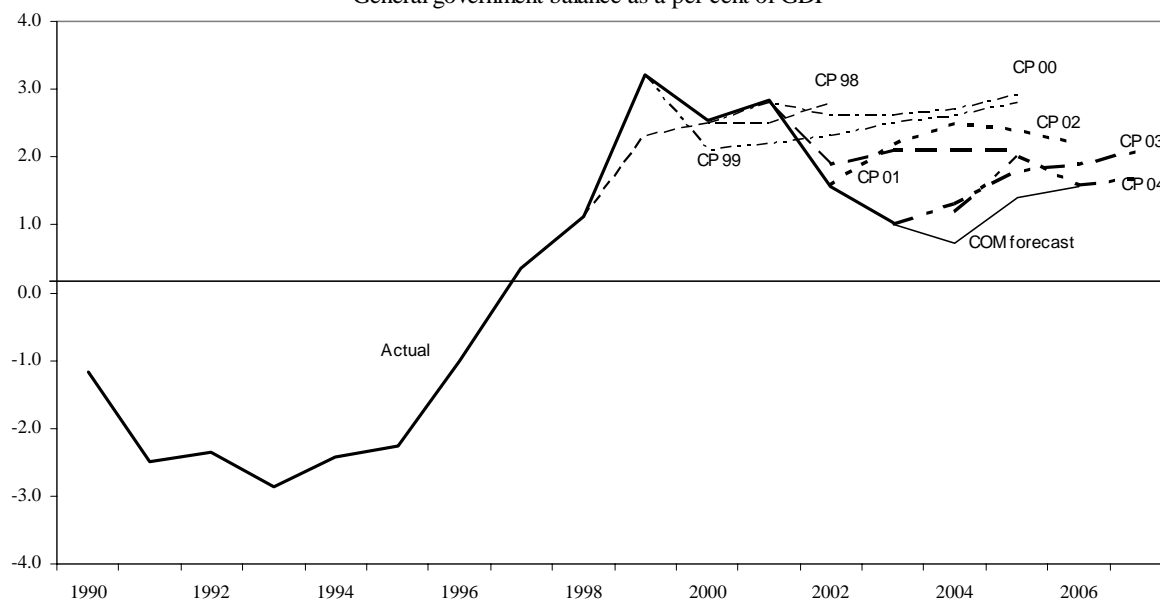
As shown in Table 3, the projected general government surplus projections are similar to those of the 2003 update. Differences in the near term are due to revised assumptions about GDP growth as well as to the effects of recent policy measures such as the March 2004 fiscal package.

Table 3: Evolution of budgetary targets in successive programmes

		2003	2004	2005	2006	2007
General government balance (% of GDP)	CP Nov 2004	1.2	1.2	2.0	1.6	1.7
	CP Nov 2003	1.2	1.3	1.8	1.9	2.1
	CP Nov 2002	2.2	2.5	2.4	2.2	2.2
General government expenditure (% of GDP)	CP Nov 2004	54.9	54.4	53.0	53.0	52.8
	CP Nov 2003	54.0	53.2	52.6	52.3	51.8
	CP Nov 2002	52.1	52.0	51.8	51.0	51.0
General government revenues (% of GDP)	CP Nov 2004	56.1	55.6	54.9	54.6	54.5
	CP Nov 2003	55.2	54.5	54.4	54.2	53.9
	CP Nov 2002	54.3	54.5	54.2	53.2	53.2
Real GDP (% change)	CP Nov 2004	0.5	2.2	2.5	1.3	1.9
	CP Nov 2003	1.4	2.3	2.2	1.9	1.7
	CP Nov 2002	2.2	1.8	1.7	1.8	1.8
<i>Sources:</i> <i>Updated convergence programmes (CP), November 2002, November 2003 and November 2004</i>						

As illustrated in the graph below, the projected surpluses are slightly lower than in the previous update towards 2010. This is in part due to revised demographic assumptions, which include new projections for the inflow of immigrants against the background of new legislation. These assumptions have lowered the required long-term fiscal balance, now estimated to be an average surplus of 1.7% of GDP.

Figure 1: Eliminating deficits: moving targets in the convergence programme
General government balance as a per cent of GDP



Source: Commission services autumn 2004 economic forecast (COM), Statistics Denmark, convergence programmes (CP)

5.2. Budgetary targets in the updated programme

General government finances are foreseen to remain in healthy surplus in the programme period. The present update confirms the strategy of previous years of maintaining general government surpluses of 1½-2½% of GDP on average to 2010 while reducing both the revenue and expenditure ratios. The general government surplus was 1.2% of GDP in 2004. In part due to the full implementation of the income tax reductions in the tax reform, the surplus did not increase from 2003, in spite of the pick up in economic activity. On the basis of expected above-trend GDP growth and high oil prices, the surplus is expected to reach 2.0% of GDP in 2005. From 1.6% in 2006, due to assumed weaker economic activity, the surplus gradually recovers to reach 2.0% of GDP in 2010, as a result of lower interest payments, but also of lower expenditure supported by an assumed fall in the structural unemployment. In parallel, the primary balance rises from 4.3% of GDP in 2004 to 4.6% in 2007¹⁰.

Table 4: Composition of the budgetary adjustment

(% of GDP)	2003	2004	2005	2006	2007	Change: 2007-2004
Revenues	56.1	55.6	54.9	54.6	54.5	-1.1
<i>of which:</i>						
- Taxes & social security contributions	48.9	48.9	48.4	47.9	47.7	-1.2
- Other (residual)	7.2	6.7	6.5	6.7	6.8	0.1
Expenditure	54.9	54.4	53.0	53.0	52.8	-1.6
<i>of which:</i>						
- Primary expenditure	51.5	51.3	50.2	50.1	49.9	-1.4
<i>of which:</i>						
Gross fixed capital formation	1.7	1.7	1.7	1.7	1.7	0.0
Collective consumption	26.6	26.4	26.0	26.0	25.9	-0.5
Transfers & subsidies	20.2	20.3	19.6	19.4	19.3	-1.0
Other (residual)	3.0	2.9	2.9	3.0	3.0	0.1
- Interest payments	3.4	3.1	2.8	2.9	2.9	-0.2
Budget balance	1.2	1.2	2.0	1.6	1.7	0.5
Primary balance¹	4.6	4.3	4.8	4.6	4.6	0.3
Notes: ¹ The Danish authorities' provide primary balances excluding net interest expenditure and not gross interest expenditure, which is otherwise the convention in stability and convergence programmes. However, in the table, primary balances are given excluding gross interest expenditure, as calculated by the Commission services.						
Sources: <i>Updated Convergence Programme, November 2004 (CP); Commission services calculations</i>						

Applying the Commission services calculations according to the commonly agreed methodology, the cyclically-adjusted surplus is estimated to have weakened somewhat in 2004 to 1.7% (linked to the income tax reductions) but is set to recover in 2005 to 2.0%. The cyclically-adjusted balance is thereafter set to remain stable in 2006 and 2007¹¹ (Table 5).

¹⁰ Recalculated figures, see note 1 to table 4.

¹¹ It should be noted that several factors affecting Denmark's public finances, including revenues from the pension fund yield tax (and from oil activities) are not necessarily linked to the economic cycle and may therefore distort the analysis of cyclically-adjusted balances. In addition, the numbers for

Table 5: Output gaps and cyclically adjusted (primary) balances (CA(P)B)

	2003		2004		2005		2006		2007	Change: 2007-2004
	COM	CP ¹	COM	CP ¹	COM	CP ¹	COM	CP ¹	CP ¹	CP ¹
Budget balance ²	1.4	1.2	2.0	1.2	2.6	2.0	2.8	1.6	1.7	0.5
Output gap ^{1,3}	-1.1	-1.0	-0.7	-0.6	-0.3	-0.1	-0.2	-0.5	-0.4	0.2
CAB ^{1,2}	2.3	2.0	2.6	1.7	2.9	2.0	3.0	2.0	2.0	0.3
CAPB ^{1,2}	4.9	5.4	4.9	4.8	5.1	4.8	5.0	5.0	4.9	0.1
Notes: ¹ Commission services calculations on the basis of the information in the convergence programme (CP) ² in percent of GDP ³ in percent of potential GDP Sources: <i>Commission services autumn 2004 economic forecasts (COM); Commission services calculations</i>										

As shown in table 4 above, the medium-term adjustments in public finances are composed of a reduction 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 to some extent interest payments. Primary expenditure is lowered mainly through lower transfers and subsidies as well as slower growth of public consumption. The revenue ratio falls through tax reductions, mainly on earned income, lowering the tax burden moderately. The main measures of the 2005 Budget are presented in Box 1 below.

2004 and 2005 are affected by the suspension in 2004 and 2005 of the (tax deductible) contributions to the special pension savings scheme. Corrected for the impact of this measure, the cyclically adjusted surplus would according to the Danish authorities be 0.3 p.p. of GDP lower:

Box 1: The Budget for 2005

The Danish Budget Bill for 2005, presented on 26 August, was adopted on 15 December 2004. It is based on an agreement between the governing Liberal and Conservative parties, with parliamentary support from the Danish People's Party.

The central government surplus in 2005 is estimated at DKK 19.1 billion (1.3% of GDP). The budget was presented in the framework of the tax freeze and taxes and fees were consequently not raised. A targeted adjustment of excise duties, which included an increase in duties on cigarettes, was considered to be compatible with the tax freeze.

The main measures in the budget for 2005 are the following.

- Setting up of a high technology fund (injection of DKK 3 billion in 2005, 0.2% of GDP) and an additional 1 billion to strengthen the Danish Basic Research Fund.
- Targeted increases in pension and health spending (DKK 550 million, 0.04% of GDP)
- Measures to upgrade qualifications of the low-skilled (DKK 400 million 2005-2008, 0.03% of GDP)
- Strengthening education in natural sciences (DKK 800 million 2005-2008, 0.05% of GDP)
- Measures to improve conditions for families, including a nationwide guarantee of availability of child care (DKK 400 million 2005-2008, 0.03% of GDP)
- Measures to reinforce police, justice and intelligence services, including increased capacities of jails (DKK 350 million, 0.02% of GDP)
- Reduction of fees on "green" fuels (DKK 500 million 2005-2008, 0.04% of GDP)

Looking across sub-sectors of government, local authorities are under the obligation to balance revenue and expenditure, which is reflected in the update¹². Both the central government and the social security sector are expected to show stable surpluses over the programme period, averaging around 1% of GDP for the central government and ¾% of GDP for the social security funds.

Overall, the risks to the budgetary projections in the programme appear balanced, with some risk of stronger surpluses stemming from higher oil prices than assumed in the update as Denmark is net oil exporter. Compared with the Commission services' autumn 2004 forecast, the projections in the update seem relatively cautious. The macroeconomic scenario is overall in line with the Commission services' forecast and projected GDP growth rates towards the end of the period are cautious in relation to the potential growth rate as calculated by the Commission services. Moreover, Denmark has a good track record of achieving the budget targets, even when economic growth has been weaker. The targets for real public consumption growth for the coming years may, however, be

¹² In individual years there may be positive or negative changes in local governments' liquid funds.

ambitious in view of past performance, where in some years targets have been breached (see Box 2). Potential risks for the medium-term projections are thus a failure to achieve the strict yearly targets for real public consumption growth and the assumed medium-term increase in employment (see section 7).

Applying the common methodology to the projections in the update, the fiscal stance tightens in 2005 after some expansion in 2004 and is thereafter neutral (Table 5 above). A negative output gap remains in 2007 as the projected trend growth is lower than the potential output growth estimated by the Commission services. The Commission services' projections would imply a tightening fiscal stance in the period 2004-2005, followed by an overall neutral stance in 2006.

In the light of this risk assessment, the budgetary stance in the programme seems sufficient to maintain the close-to-balance-or-surplus requirement of the Stability and Growth Pact throughout the programme period. Furthermore, there is a sufficient safety margin against breaching the 3% of GDP deficit threshold with normal macroeconomic fluctuations¹³. This is relevant as the surplus target plays a key role in the strategy to reduce debt to prepare for ageing (see section 8 below). In the calculations of the Danish authorities, which are adjusted for certain revenues not linked to the cycle, the cyclically-adjusted balance is below the target in 2004. However, policy permits the actual surplus to deviate from the target range in individual years as a result of cyclical conditions or special factors.

5.3. Sensitivity analysis

The programme includes a sensitivity analysis of public finances, taking into consideration two alternative, symmetric growth scenarios. One with low growth, where weak external growth would reduce baseline growth by 0.5 p.p. only in 2005 and 2006, thereafter reverting to trend; and another one with high growth, where domestic private consumption would add 0.5 p.p. in 2005 and 2006 and 0.2 p.p. in 2007 to the central scenario. In the low-growth scenario, unemployment rises and both the public 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 public 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. Furthermore, the programme analyses the sensitivity of public finances and the debt-to GDP ratio to higher oil prices and to higher foreign and domestic interest rates, finding a somewhat neutral effect as a result of opposing forces.

Commission services simulations of the cyclically adjusted balances under the assumptions of (i) a sustained 0.5 percentage points deviation from the growth targets in the programme over the 2004-2007 period; (ii) trend output based on the HP-filter¹⁴ and

¹³ To assess the size of the cyclical safety margin needed to withstand business cycle fluctuations without infringing the 3% of GDP deficit limit a minimum benchmark can be calculated, defined as the difference between the 3% of GDP reference value and the calculated cyclical safety margin. The minimum benchmark for Denmark is estimated by the Commission services to be -0.3% of GDP, cf Public Finance Report 2002

¹⁴ In the absence of a fully-specified macro-economic scenario that would underlie such deviations, it is impossible to derive new estimates of potential growth from the agreed production function method.

(iii) no policy response (notably, the expenditure level is as in the central scenario¹⁵), indicate that, by 2007, the cyclically adjusted balance would be 1.2% of GDP. Hence, in the case of persistently lower growth, additional measures of around 0.7% of GDP would be necessary to keep the public finances on the path targeted in the central scenario. These calculations suggest that even if economic growth were weaker than expected, a fiscal position close to balance or in surplus in the medium term would still be achieved. Overall, taking into account that the risks to the macroeconomic framework are well-balanced and considering that the Commission services' growth projections are on the whole much in line with the central growth scenario, the achievement of the budgetary targets in the programme are feasible without requiring any special fiscal effort.

6. EVOLUTION OF THE DEBT RATIO

As can be seen from Table 6, the gross debt ratio is already well under the Treaty reference level and should fall further in the short term, from 42.3% in 2004 to 39.4% in 2005 and to 37.4% in 2006, overall in line with the Commission services' figures for debt development in the 2004 autumn forecast¹⁶. Medium-term prospects show that the consolidated gross debt will continue falling to below 35½% of GDP in 2007 and further to around 28¾% in 2010.

From 2003 to 2010 the debt ratio will fall by about 15¾ percentage points of GDP due mainly to positive primary balances, which will contribute by more than 16½ percentage points to the fall, and to the impact of nominal GDP growth, with a contribution of more than 11½ percentage points. Net interest payments and the stock-flow adjustment, by contrast, will contribute positively by almost 10 and 2½ percentage points, respectively.

¹⁵ The effect of lower/higher growth on revenues is captured by using the conventional sensitivity parameters adopted in cyclical adjustment procedures.

¹⁶ Compared with the 2003 update, debt ratios have been revised upwards, mostly because of data revisions for the period 1992-2002 that raised the debt ratio 2.0 p.p. of GDP for 2003. This level shift in 2003 modifies the projections for subsequent years. Primary balances have also been revised downwards both for central and local governments compared with the 2003 update.

Table 6: Debt dynamics

	average 2000-2003	2004		2005		2006		2007	2010
	COM	COM	CP	COM	CP	COM	CP	CP	CP
Government gross debt ratio	48.2	41.5	42.3	37.5	39.4	34.2	37.4	35.3	28.8
Change in debt ratio (1 = 2+3+4)	-3.1	-3.3	-2.5	-4.0	-2.9	-3.2	-2.0	-2.1	-6.5
<i>Contributions:</i>									
- Primary balance (2)	-4.3	-4.3	-4.5	-4.8	-5.0	-4.9	-4.7	-4.8	-4.6
- “Snow-ball” effect (3)	1.2	0.5	1.4	0.5	1.0	0.6	1.6	1.4	-1.5
- Interest expenditure	3.1	2.3	3.1	2.2	2.8	2.1	2.9	2.9	2.4
- Real GDP growth	-0.8	-1.0	-0.9	-0.9	-1.0	-0.7	-0.5	-0.7	-0.6
- Inflation – GDP deflator	-1.1	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-3.3
- Stock-flow adjustment (4)	0.1	0.5	0.6	0.3	1.1	1.0	1.1	1.3	-0.4
- Cash/accruals									
- Accumulation of financial assets									
<i>of which: Privatisation proceeds</i>									
- Valuation effects & residual adj.									
<p>Notes:</p> <p>The convergence programme update data for the primary balance are on an EDP basis.</p> <p>The change in the gross debt ratio can be decomposed as follows:</p> $\frac{D_t}{Y_t} - \frac{D_{t-1}}{Y_{t-1}} = \frac{PD_t}{Y_t} + \left(\frac{D_{t-1}}{Y_{t-1}} * \frac{i_t - y_t}{1 + y_t} \right) + \frac{SF_t}{Y_t}$ <p>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.</p> <p>Sources:</p> <p>Updated Convergence Programme, November 2004 (CP); Commission services autumn 2004 economic forecasts (COM); Commission services calculations</p>									

7. STRUCTURAL REFORM AND THE QUALITY OF PUBLIC FINANCES

The programme update contains an overview of recent structural policy measures. Detailed information is provided regarding measures taken in the areas of the labour market and competition policies. 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. Since the last update, the possibility of receiving a higher pension for those who postpone retirement beyond the official retirement age of 65 years has been adopted; however, as recognised in the update, the expected impact of this measure is limited¹⁷.

As noted above, in Denmark there is an evident link between structural reform and medium-term public finances. An objective for structural policies is therefore to raise employment by some 50-60,000 persons (around 2% of the labour force) from 2003 to 2010, as such an increase is assumed in the medium-term fiscal projections. The recent tax reform lowers marginal taxes by raising the threshold for the middle tax bracket,

¹⁷ Only relatively few persons work longer than 65 years and those who would have done so also under the previous rules will now be entitled to higher pensions.

which should raise the incentives to work more hours. In addition, an earned income tax credit was introduced to enhance incentives for low-wage earners to stay in or enter the labour market. Even after the recent reform, however, the top marginal rate of 63% still applies to around 40% of full time workers. Moreover, while potentially contributing to raising labour supply, the tax cuts are not fully self-financing and thus do not *per se* improve long-term fiscal sustainability.

As the Danish authorities recognise, further measures are needed to achieve the assumed increase in employment but additional reforms remain unspecified. The update is limited to references to future rule changes which could open up for time limited special wage and employment conditions for immigrants to stimulate their employment. To reduce sickness absence, a revised model for sickness benefit approval and follow-up has been proposed by the government but not yet adopted.

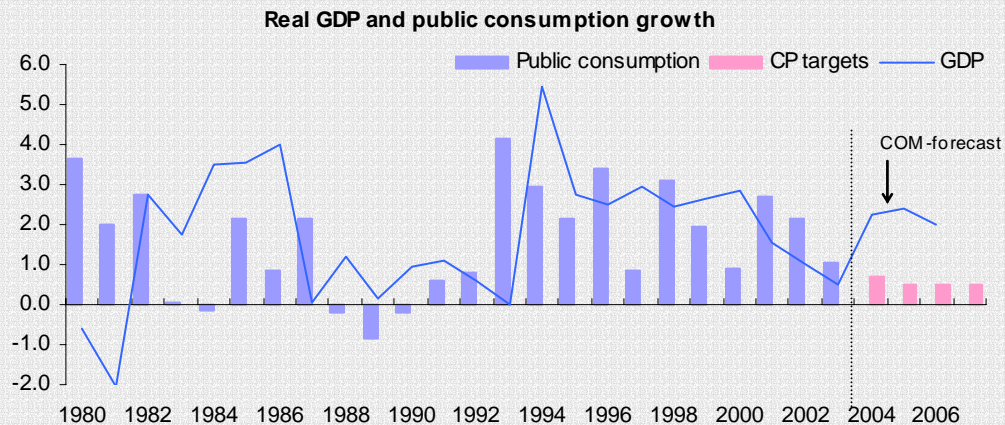
Even if structural reforms were adopted in the coming years, they may not have a full impact before 2010. If the medium-term employment targets are not reached, additional fiscal savings may be needed to ensure long-term sustainability (section 8). With the target date of 2010 approaching, the picture is therefore mixed in this regard¹⁸.

As noted, limiting the growth of public consumption is an important element in the fiscal strategy. 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. Overall, the economic policies outlined in the update are broadly consistent with the country-specific broad economic policy guidelines in the area of public finances, which invite Denmark to: *ensure expenditure control at all levels of government so that the multi-annual targets for public consumption growth are respected*. However, achieving continued tight expenditure control on which the fiscal strategy relies may prove challenging (see Box 2).

¹⁸ For an analysis of Denmark's policies to enhance labour supply, see the DG ECFIN 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)

Box 2: Targets for real public consumption growth

Public consumption represents around a quarter of GDP and its development therefore has a large impact on public finances. Average yearly real public consumption growth since 1980 is some 1.6%. This is only slightly less than real GDP growth (1.7%). The present targets are a growth of 0.7% in 2004 and 0.5% a year on average to 2010. As seen in the figure below, the targeted growth of public consumption is markedly lower than the projected growth of the economy.



Source: *Convergence programme, Commission services*

The largest share of public consumption is the responsibility of local governments, with autonomous taxing powers. As borrowing by local governments is restricted, the tax freeze implies a stricter prioritisation of expenditures. Apart from preventing tax increases, the tax freeze is also intended as a discipline in achieving the objective of modest growth in public consumption. However, the tax freeze is an indirect instrument and does not legally bind individual local governments. A sanction mechanism implies that local governments and counties could be penalised if they fail to respect the tax freeze. Payments from the central government to local governments can be postponed in cases of non-compliance with agreements. Overall, compliance with the agreements across government levels seems to have improved.

The projected modest real growth rate of public consumption is a key target variable in Denmark's fiscal strategy and a failure to comply with the targets could compromise the strategy, including the fiscal leeway for implementing tax reductions. Real consumption growth has been on a downward trend in recent years, but in view of past trends the targets for the coming years are ambitious. Restraining the growth of public consumption so much below the growth of income and overall standard of living may prove challenging.

Increased efficiency in public services could alleviate the pressure on public spending. In this vein, a reform of Denmark's public sector structure has been adopted and will be implemented in 2007. The number of municipalities will be reduced from 271 to some 100 and the number of counties from 13 to 5. While this reform has the potential to improve efficiency in the medium-term, it cannot be excluded that spending in the transition phase rises as the result of an end-game situation.

8. THE SUSTAINABILITY OF THE PUBLIC FINANCES

The assessment of the sustainability of Danish public finances is based on an overall judgement of the results of quantitative indicators and qualitative features. The quantitative indicators project debt development according to two different scenarios, to take into account different budgetary developments over the medium term. The “programme” scenario (baseline) assumes that the medium-term objective set up in the programme is actually achieved, while the “2004” scenario assumes that the underlying primary balance remains throughout the programme period at the 2004 level.

The graph below presents the gross debt development according to the two different scenarios. On the basis of the programme, age-related expenditure is foreseen to increase by 6.4% of GDP between 2011 and 2050 (see Annex 2 for a breakdown of different age-related expenditures). Gross debt is projected to decrease significantly over the next 20 years, and turn negative, as a consequence of continued budgetary surpluses. The impact of ageing on expenditures gradually increases and it peaks around 2040, leading to a limited rise in the gross debt ratio from 2030. However, the Danish debt consolidation strategy helps keeping the gross debt ratio at prudent levels over the long term¹⁹.

On the basis of the debt projections, it is possible to calculate a set of sustainability indicators to measure the gap between the current policies and a sustainable one. The S1 indicator shows the permanent change in the primary balance in order to have a debt to GDP ratio in line with the Maastricht Treaty reference value in the very long run (year 2050)²⁰. S2 shows the gap between the current tax policies and those that would ensure respect of the inter-temporal budget constraint given the future impact of ageing on public expenditure, namely the change in the tax ratio that would equate the present discounted value of future primary balances to the current stock of gross debt. According to the latter indicator, Denmark’s tax ratio is in line to that required. This would lead to a sustainable debt ratio of about 25% by the middle of the century²¹. The budgetary effort over the first 5 years of the projections (i.e. after the end of the programme period) to respect the inter-temporal budget constraint requires a primary surplus of 3.5% of GDP on average, almost one percentage point lower than the one projected for the last year of the programme period (measured in underlying terms).

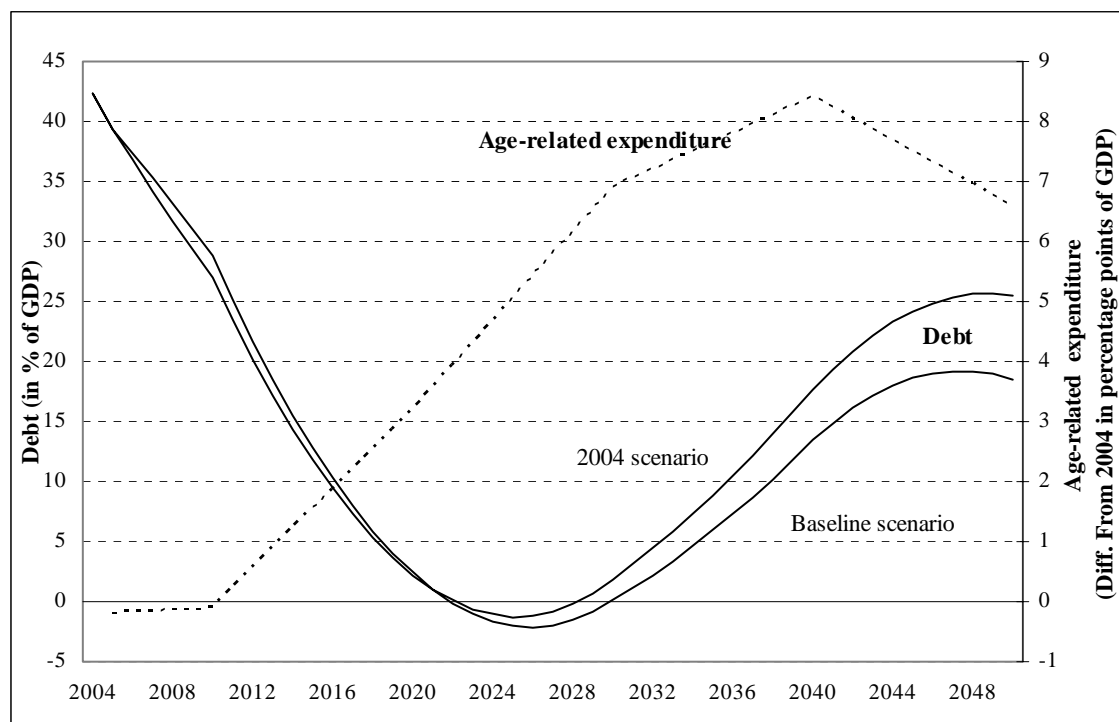
These results are broadly in line with the ones presented in the programme where a sustainable position in the long term is reached with the implementation of the budgetary strategy up to 2010.

¹⁹ 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 is not a forecast of likely outcomes and should not be taken at face value.

²⁰ The respect of the underlying debt path does not ensure sustainability over an infinite horizon, but only that the debt ratio remains below 60% up to 2050. In most cases, this would imply an increasing trend and possible unbalances after the end of the projection period.

²¹ The debt ratio of 25% in 2050 according to the S2 indicator illustrates that the tax gap is negligible and that planned policies should ensure a sustainable evolution of gross debt beyond 2050, while the S1 tax gap (being negative), illustrates that current policies are compatible with the 60% reference value in 2050.

Long-term sustainability: summary results



Sustainability indicators

	S1*	S2**	RPB***
Baseline scenario	-0.7	-0.1	3.5
2004 scenario	-0.6	0.0	3.5

Notes:

* It indicates the required change in tax revenues as a share of GDP over the projection period that guarantees to reach debt to GDP ratio of 60% of GDP in 2050.

** It indicates the change in tax revenues as a share of GDP that guarantees the respect of the intertemporal budget constraint of the government, i.e., that equates the actualized flow of revenues and expenses over an infinite horizon to the debt as existing at the outset of the projection period; p.m. debt to GDP ratio in 2050: 24.5%

*** Based on S2, the Required Primary Balance (RPB) indicates the average minimum required cyclically adjusted primary balance as a share of GDP over the first five years of the projection period that guarantees the respect of the intertemporal budget constraint of the government for this period.

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

First, public pension funds in general government hold liquid assets of almost 20% of GDP. This leads to a current adjusted gross debt ratio of close to 25% that helps in coping with the future cost of ageing (see Annex 2)²².

However, the programme projections hinge on assumptions of strict expenditure control. Although measures taken seem to have brought expenditure growth at local government level in line with targets at present, as noted above, these targets imply a growth of public consumption markedly below the growth of the economy and therefore remain challenging.

²² The sustainability indicators in the box above are calculated on a gross debt basis. In the case of Denmark, it should be calculated on the basis of adjusted gross debt – using consistent debt and budget balance concepts. On an adjusted gross debt basis, the S2 tax gap (baseline scenario) would be somewhat smaller at about -0.5.

In addition, the projections furthermore assume an increase in employment, for which concrete measures have yet to be put forward. Time is becoming short for such future reforms to have a substantial impact by 2010. The Danish authorities estimate the “fiscal gap” implied by this assumed enlarged tax base in the form of higher employment to be 1% of GDP. The updated programme discusses alternative projections²³ based on different assumptions regarding *inter alia* longevity, growth and interest rates. A larger increase in longevity, in particular in combination with a smaller differential between interest rates and growth, would substantially increase the fiscal adjustment required to ensure sustainability.

Fourth, despite a fall in the tax ratio during the programme period, the projections rely on a very high tax burden and further increases might not be desirable, as illustrated by the Danish tax freeze policy. The expected level of taxation will appear high relative to other industrialised countries and future pressures to reduce it cannot be excluded.

Denmark appears to be in a favourable position with regard to the long-term sustainability of its public finances, despite important projected budgetary costs of an ageing population. The budgetary strategy outlined in the programme, mainly based on further debt consolidation through continued budgetary surpluses, should result in a sustainable position over time. However, achieving continued tight expenditure control and a considerable rise in employment on which the Danish strategy also relies may prove challenging. Moreover, an increase in longevity beyond the one assumed in the update would add to the challenge posed by ageing populations.

²³ E.g. projections by the Danish Welfare Commission.

Annex 1: Summary tables from the convergence programme update

Table 1. Growth and associated factors

	ESA Code	2003	2004	2005	2006	2007	2008-10
GDP growth at constant market prices (7+8+9)	B1g	0.5	2.2	2.5	1.3	1.9	1.8
GDP level at current market prices	B1g	1398.3	1454.2	1519.9	1571.9	1635.4	1837.8
GDP deflator		2.2	1.8	2.0	2.1	2.1	2.1
HICP change		2.0	1.2	1.7	1.6	1.7	1.6
Employment growth		-0.8	0.4	0.8	-0.3	0.3	0.3
Labour productivity growth ²⁴		1.4	1.4	1.8	1.7	1.7	1.5
Sources of growth: percentage changes at constant prices							
1. Private consumption expenditure	P3	0.8	3.6	3.0	1.7	2.5	2.5
2. Government consumption expenditure	P3	1.0	0.3	0.5	0.5	0.5	0.5
3. Gross fixed capital formation	P51	0.1	3.4	3.4	1.9	2.6	2.5
4. Changes in inventories and net acquisition of valuables as a % of GDP	P52 + P53	-0.4	0.0	0.0	0.0	0.0	0.0
5. Exports of goods and services	P6	0.0	3.1	5.1	3.6	3.5	3.5
6. Imports of goods and services	P7	-0.6	4.3	5.4	4.0	3.9	3.9
Contribution to GDP growth							
7. Final domestic demand (1+2+3)		0.7	2.6	2.4	1.4	2.0	1.9
8. Change in inventories and net acquisition of valuables (=4)	P52 + P53	-0.4	0.0	0.0	0.0	0.0	0.0
9. External balance of goods and services (5-6)	B11	0.3	-0.4	0.1	-0.1	-0.1	-0.1

²⁴ Growth of GDP at market prices per person employed at constant prices

Table 2. General government budgetary developments

% of GDP	ESA code	2003	2004	2005	2006	2007	2010
Net lending (B9) by sub-sectors							
1. General government	S13	1.2	1.2	2.0	1.6	1.7	2.0
2. Central government	S1311	0.9	0.4	1.3	0.8	0.9	1.1
3. State government	S1312	--	--	--	--	--	--
4. Local government	S1313	-0.8	0.0	0.0	0.0	0.0	0.0
5. Social security funds	S1314	1.1	0.8	0.7	0.8	0.8	0.9
General government (S13)							
6. Total receipts	ESA	56.1	55.6	54.9	54.6	54.5	53.9
7. Total expenditures	ESA	54.9	54.4	53.0	53.0	52.8	51.9
8. Budget balance	B9	1.2	1.2	2.0	1.6	1.7	2.0
9. Net interest expenditure		0.9	0.9	0.7	0.5	0.4	-0.1
10. Primary balance		2.1	2.1	2.6	2.2	2.1	1.9
Components of revenues							
11. Taxes	D2+D5	48.9	48.9	48.4	47.9	47.7	47.3
12. Social contributions	D61	1.7	1.6	1.6	1.6	1.5	1.5
13. Interest income	D41	2.5	2.2	2.2	2.4	2.5	2.5
14. Other		4.6	4.5	4.3	4.3	4.3	4.1
15. Total receipts	ESA	56.1	55.6	54.9	54.6	54.5	53.9
Components of expenditures							
16. Consumption expenditure	P32	26.6	26.4	26.0	26.0	25.9	25.6
17. Social transfers in kind	D63	18.1	18.1	17.5	17.3	17.2	17.1
18. Social transfers other than in kind	D62	-	-	-	-	-	-
19. Interest expenditure	D41	3.4	3.1	2.8	2.9	2.9	2.4
20. Subsidies	D3	2.1	2.2	2.1	2.1	2.1	2.1
21. Gross fixed capital formation	P51	1.7	1.7	1.7	1.7	1.7	1.7
22. Other		2.9	2.9	2.9	2.9	2.9	2.9
23. Total expenditures	ESA	54.9	54.4	53.0	53.0	52.8	51.9

Table 3. General government debt developments

% of GDP	ESA code	2003	2004	2005	2006	2007	2010
Gross debt level		44.7	42.3	39.4	37.4	35.3	28.8
Change in gross debt		-2.6	-2.4	-2.8	-2.0	-2.1	-6.5
Contributions to change in gross debt							
Primary balance		-1.8	-1.9	-2.5	-2.1	-2.0	-8.1
Interest payments	D41	1.7	1.5	1.3	1.3	1.2	4.0
Nominal GDP growth	B1g	-1.3	-1.7	-1.9	-1.3	-1.5	-5.4
<i>Other factors influencing the debt ratio</i>		-1.2	-0.3	0.3	0.1	0.2	3.0
<i>Of which: Privatisation receipts</i>		0.0	0.0	0.0	0.0	0.0	0.0
<i>p.m. implicit interest rate on debt</i>		6.0	5.9	5.4	5.8	5.9	5.4

Table 4. Cyclical developments

% of GDP	ESA Code	2003	2004	2005	2006	2007	2010
1. GDP growth at constant prices	B1g	0.5	2.2	2.5	1.3	1.9	1.8
2. Actual balance	B9	1.2	1.2	2.0	1.6	1.7	2.0
3. Interest payments	D41	3.4	3.1	2.8	2.9	2.9	2.4
4. Potential GDP growth		1.8	1.0	1.9	1.8	1.8	1.8
5. Output gap		-1.3	-0.2	0.4	0.0	0.0	0.0
6. Cyclical budgetary component		-0.4	-0.1	0.6	0.0	0.0	0.0
7. Cyclically-adjusted balance (2-6)		1.5	1.2	1.5	1.7	1.7	2.0
8. Cyclically-adjusted primary balance (7-3)		2.3	1.8	2.0	2.0	1.9	1.8

Table 5. Divergence from previous update

% of GDP	ESA Code	2003	2004	2005	2006	2007	2010
GDP growth	B1g						
previous update		1.4	2.3	2.2	1.9	1.9	1.7
latest update		0.5	2.2	2.5	1.3	1.9	1.8
Difference		-0.9	-0.1	0.3	-0.6	0.0	0.1
Actual budget balance	B9						
previous update		1.2	1.3	1.8	1.9	2.0	2.1
latest update		1.2	1.2	2.0	1.6	1.7	2.0
Difference		0.0	-0.1	0.2	-0.3	-0.3	-0.1
Gross debt levels							
previous update		42.7	41.2	38.7	36.4	34.1	27.5
latest update		44.7	42.3	39.4	37.4	35.3	28.8
Difference		1.9	1.0	0.7	1.0	1.2	1.3

Table 6. Long-term sustainability of public finances

% of GDP	2003	2005	2010	2020	2030	2040	2050
	Pct. of GDP	Change compared to 2003					
Total expenditure	51.4	-1.3	-2.0	-0.2	3.0	4.5	3.1
Old age pensions	4.5	0.3	0.9	2.1	3.2	4.0	3.3
Health care (including care for the elderly)	8.3	-0.2	-0.2	0.6	2.0	2.7	2.7
Interest payments	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total revenues	56.1	-1.1	-2.2	-1.9	-0.5	0.7	0.7
<i>of which:</i> from pensions contributions	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Percentage of GDP						
National pension fund assets (if any)	120	126	148	196	242	270	272
Assumptions	Percentage change						
Labour productivity growth ¹	3.5	3.7	3.6	3.9	3.7	3.7	3.8
Real GDP growth	0.5	2.5	1.8	1.4	1.0	1.5	1.7
Participation rate males (aged 20-64)	86.2	86.5	86.1	85.7	84.9	85.4	85.2
Participation rates females (aged 20-64)	76.5	77.0	77.2	76.6	75.2	76.1	75.9
Total participation rates (aged 20-64)	81.4	81.8	81.7	81.2	80.0	80.7	80.6
Unemployment rate	5.9	5.3	4.5	4.5	4.5	4.5	4.5
Notes:							
¹ Nominal GDP per employee growth.							

Table 7. Basic assumptions

		2003	2004	2005	2006	2007	2008-2010
Short-term interest rate ²⁵ (annual average)		2.4	2.3	3.1	4.3	4.9	4.9
Long-term interest rate ³ (annual average)		4.3	4.5	5.1	5.7	6.1	6.1
USA: short-term (3-month money market)		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
USA: long term (10-year government bonds)		4.0	4.2	4.7	5.3	5.7	6.0
USD/€exchange rate ³ (annual average)		1.14	1.22	1.22	1.22	1.22	1.22
Nominal effective exchange rate (euro area)		-	-	-	-	-	-
Nominal effective exchange rate (EU) (for non-euro countries) exchange rate vis-à-vis the €(annual average) ³		-	-	-	-	-	-
World excluding EU,GDP growth		4.3	5.2	4.8	n.a.	n.a.	n.a.
US		3.0	4.3	3.3	n.a.	n.a.	n.a.
Japan		2.5	3.9	2.8	n.a.	n.a.	n.a.
EU-15 GDP growth		0.9	2.2	2.4	2.2	2.2	2.2
Growth of relevant foreign markets		4.1	7.1	7.7	4.4	4.4	4.4
World import volumes, excluding EU		7.3	9.9	8.6	7.4	7.0	7.6
World import prices, (goods, in USD)		-	-	-	-	-	-
Oil prices, (Brent, USD/barrel)		28.4	36.0	35.5	34.2	32.9	30.6
Non-oil commodity prices (in USD)		7.1	16.8	-3.9	n.a.	n.a.	n.a.

²⁵ Purely technical assumptions

Annex 2: Long-term sustainability of public finances in Denmark – quantitative scenarios

Main assumptions - baseline scenario (as % GDP)	2011	2020	2030	2040	2050	changes
Total age-related spending	39.7	42.4	45.9	47.5	45.7	6.1
Pensions	5.5	6.6	7.7	8.5	7.8	2.3
Health care	8.2	8.9	10.3	11.0	11.0	2.8
Transfer payments	17.2	18.4	19.6	19.6	18.5	1.3
Education*	8.8	8.5	8.3	8.4	8.4	-0.3
Total primary non age-related spending**	10.1					
Total revenues	54.0	54.5	55.5	56.6	57.0	3.0

* EPC projections

** constant

Results (as % GDP)	2011	2020	2030	2040	2050	changes
Baseline scenario						
Gross debt	25.1	1.0	-5.8	1.2	-0.1	-25.2
i + 0.5*	25.3	1.8	-5.0	2.2	1.2	-24.1
Adjusted gross debt**	5.8	-21.9	-34.0	-33.5	-41.7	-47.5
2004 scenario						
Gross debt	23.5	2.5	-4.0	5.5	6.9	-16.5
i + 0.5*	23.6	1.6	-3.2	6.5	8.6	-15.0
Adjusted gross debt**	4.2	-19.9	-32.2	-29.3	-34.7	-38.8

* i + 0.5 represents the evolution of debt under the assumption of the nominal interest rate being 50 basis points higher throughout the projection period.

** Adjusted gross debt equals Gross debt (Maastricht) net of consolidated public pension fund assets in the general government sector accumulated for the strict purpose of covering pension-related expenditure.

