EUROPEAN COMMISSION
DIRECTORATE GENERAL
ECONOMIC AND FINANCIAL AFFAIRS

Brussels, 27 February 2007
ECFIN/B4/2006/REP 57914-EN

ECONOMIC ASSESSMENT
OF THE CONVERGENCE PROGRAMME OF DENMARK
(UPDATE OF NOVEMBER 2006)

The Stability and Growth Pact requires each EU Member State to present an annual update of its medium-term fiscal programme, called "stability programme" for countries that have adopted the euro as their currency and "convergence programme" for those that have not. The most recent update of Denmark's convergence programme was submitted on 30 November 2006.

The attached technical analysis of the programme, prepared by the staff of, and under the responsibility of, the Directorate-General for Economic and Financial Affairs of the European Commission, was finalised on 19 January 2007. Comments should be sent to Ann Westman (ann.westman@ec.europa.eu). The main aim of the technical analysis is to assess the realism of the budgetary strategy presented in the programme as well as its compliance with the requirements of the Stability and Growth Pact. However, the analysis also looks at the overall macro-economic performance of the country and highlights relevant policy challenges.

Based on this technical analysis, the European Commission adopted a recommendation for a Council opinion on the programme on 24 January 2007. The ECOFIN Council is expected to adopt its opinion on the programme on 27 February 2007.

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

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

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SUMMARY AND CONCLUSIONS[1]

As part of the preventive arm of the Stability and Growth Pact, each Member State that does not use the single currency, such as Denmark, has to submit a convergence programme and annual updates thereof. The most recent programme, covering the period 2006-2010, was submitted on 30 November 2006.

Over the last ten years, the Danish economy has performed relatively well overall. Real GDP growth and inflation have developed broadly in line with the euro area. Over the same period, the functioning of the labour market has improved and has become very flexible, which has contributed to a gradual reduction of unemployment and an increase in employment. Unemployment is at an historically low level and the employment rate is the highest in the EU. Moreover, Denmark has registered sustained general government surpluses and a rapid reduction of government debt. The strong public finances can be attributed to successful economic reforms and a medium-term fiscal strategy aimed at fiscal sustainability and public expenditure control. An important element of this strategy is the tax-freeze implemented in 2001, which reduces the tax burden over time and promotes expenditure discipline. While the tax-freeze has generally served its purpose well, the fixing of some taxes in nominal terms is creating increasing distortions between different tax-bases, such as property value vis-à-vis labour income. Moreover, real public consumption growth has been reduced, but the ambitious targets set by the government continues to be exceeded, reflecting remaining problems in effectively controlling expenditure by local governments.

Against this background, while the Danish economy is overall performing well, the economy faces a few challenges in the area of economic efficiency. First, with labour supply considered a priority, the current implementation of the tax freeze does not appear optimal considering the increasing distortions between different taxable sources. Second, considering a mixed track-record in the past, further efforts appear necessary to more effectively control local government expenditure. Third, in view of the comparatively large public sector in Denmark that is financed via high tax levels, enhancing efficiency in the public sector including through stronger competition is a priority.

The macroeconomic scenario underlying the updated convergence programme envisages that real GDP growth will slow from 2.7% in 2006, to 2.0 % in 2007 and to 0.6% in 2010. Assessed against currently available information, this scenario appears to be rather cautious, in particular for the period 2008-2010 for which a technical assumption is applied in the update of a closing of a positive output gap in 2010. For 2006-2007, the outlook of GDP growth appears plausible, but is still slightly lower than estimated by the Commission services in the 2006 autumn forecast. The programme's projections for inflation appear realistic at a level somewhat below 2%.

With a negative output gap that has been diminishing and is close to zero according to Commission service's calculations; GDP growth above or close to potential; historically low unemployment; and a high rate of capital utilization, the Danish economy can

[1] The analysis takes into account (i) the Commission services' autumn 2006 forecast, (ii) the code of conduct ("Specifications on the implementation of the Stability and Growth Pact and guidelines on the format and content of stability and convergence programmes", endorsed by the ECOFIN Council of 11 October 2005) and (iii) the commonly agreed methodology for the estimation of potential output and cyclically-adjusted balances.

currently be considered to be in relatively good economic times. As growth is expected to moderate over the period, economic conditions are expected gradually to turn more neutral.

For 2006, the general government surplus is estimated at 3.2% of GDP in the Commission services' autumn 2006 forecast, against a target of 2.1% of GDP set in the previous update of the convergence programme. This reflects higher-than-expected growth as well as continued high energy prices given the importance of revenues linked to Denmark's oil and gas production.

The budgetary strategy in the updated convergence programme aims at maintaining structural surpluses (i.e. cyclically-adjusted surpluses net of one-off and other temporary measures) of between ½% and 1½% of GDP on average over the programme period, implying a marked reduction in the general government debt ratio in order to ensure fiscal sustainability in the long term. The strategy is based on expenditure restraint and on the maintenance of the tax freeze and of the requirement that local government budgets be balanced. The update foresees the surplus to narrow slightly from 3.1% of GDP in 2006 to 2.8% in 2007, and to decline further to 1.2% in 2010. The decline as from 2008 reflects the markedly cautious assumptions about GDP growth. Compared with the previous update, the general government balance is higher in 2006 to 2008 but lower towards the end of the programme period.

The structural balance calculated according to the commonly agreed methodology is projected to be around 2% of GDP or better throughout the programme period, with a slight deterioration in 2007 and a somewhat stronger improvement in 2008. The medium-term objective (MTO) for the budgetary position presented in the programme is a structural balance of between ½% and 1½% of GDP, which the programme plans to maintain by a large margin throughout the programme period. The MTO is in line with the Pact and unchanged from the previous update once account is taken of the exclusion from the new programme of the second pillar pension scheme (included in Denmark's previous programmes) in line with the Eurostat decision of 2 March 2004[2].

The budgetary outcomes could be better than projected in the programme, in particular for the years 2008 to 2010. This is essentially because of the programme's markedly cautious macroeconomic scenario, which outweighs the risk that real public consumption expenditure growth could be higher than targeted. In view of this risk assessment, the budgetary stance in the programme seems sufficient to maintain the MTO throughout the programme period, as envisaged in the programme.

Denmark appears to be at low risk with regard to the sustainability of its public finances. The long-term budgetary impact of ageing in Denmark is higher than on average in the EU; influenced notably by a relatively high increase in pension expenditure as a share of GDP over the coming decades. However, the Welfare Agreement (the "Agreement on Future Prosperity, Welfare and Investments in the Future" adopted in June 2006) aims at delaying retirement and should contribute to curb the long-term expenditure trends and thus improve public finance sustainability. Moreover, the initial budgetary position with a large structural surplus contributes significantly to ease the long-term budgetary impact of ageing. Maintaining high primary surpluses over the medium term will further contribute to reducing sustainability risks.

2 See Eurostat News Releases No 30/2004 of 2 March 2004 and No 117/2004 of 23 September 2004.

The Implementation Report of the National Reform Programme (NRP) of Denmark, provided in the context of the renewed Lisbon strategy for growth and jobs, was submitted on 16 October 2006. The NRP identifies as key challenges/priorities: ensuring fiscal sustainability, improving competition in certain sectors; enhancing public sector efficiency; developing the knowledge society; securing environmental sustainability and energy; encouraging entrepreneurship; and increasing the labour supply. The Commission's assessment of this programme (adopted as part of its December 2006 Annual Progress Report[3]) showed that Denmark is making very good progress in the implementation of its NRP. Denmark has with the June 2006 Welfare Agreement further strengthened its reform strategy in terms both of macro-economic and employment policy and has made very good progress in reaching a national consensus on reforms. Denmark has also made progress on micro-economic policies, including in the area of competition. Against the background of progress made, Denmark was encouraged to also focus on the areas of labour supply over the medium term; competition; energy interconnection supply; emission reduction policies; and education.

The updated convergence programme and the NRP seem well integrated as the programme takes into account the medium term effects on the economy and public finances of the Welfare Agreement. It reflects in particular a lower increase in labour supply in the medium term as compared with the previous programme and the setting-up of a Globalisation Fund, entailing financing of globalisation related activities such as research, education and innovation, and an increase in spending on improving health care and welfare services.

The overall conclusion is that the medium-term budgetary position is sound and the budgetary strategy provides a good example of fiscal policies conducted in compliance with the Stability and Growth Pact. The programme also to some extent addresses the challenges identified in the Commission services' assessment as regards economic efficiency.

[3] Communication from the Commission to the Spring European Council, "Implementing the renewed Lisbon strategy for growth and jobs - A year of delivery", 12.12.2006, COM(2006)816.

Comparison of key macroeconomic and budgetary projections [1]

		2005	2006	2007	2008	2009	2010
Real GDP (% change)	**CP Nov 2006[2]**	**3.6**	**2.7**	**2.0**	**0.7**	**0.7**	**0.6**
	COM Nov 2006	3.0	3.0	2.3	2.2	n.a.	n.a.
	CP Nov 2005	*2.4*	*2.4*	*1.1*	*1.6*	*n.a.*	*2.1*
HICP inflation (%)	**CP Nov 2006**	**1.7**	**2**	**1.8**	**1.7**	**1.8**	**1.7**
	COM Nov 2006	1.7	2.0	2.0	1.9	n.a.	n.a.
	CP Nov 2005	*1.6*	*2*	*1.3*	*1.9*	*n.a.*	*1.8*
Output gap (% of potential GDP)	**CP Nov 2006[3]**	**0.3**	**0.9**	**0.9**	**-0.3**	**-1.3**	**-2.3**
	COM Nov 2006[4]	-0.6	-0.2	-0.4	-0.6	n.a.	n.a.
	CP Nov 2005[2]	*-0.3*	*0.1*	*-0.7*	*-0.9*	*n.a.*	*-0.6*
General government balance (% of GDP)	**CP Nov 2006**	**4.0**	**3.1**	**2.8**	**2.5**	**1.8**	**1.2**
	COM Nov 2006	4.0	3.2	3.3	3.2	n.a.	n.a.
	CP Nov 2005	*2.7*	*2.1*	*2.2*	*1.7*	*n.a.*	*1.9*
Primary balance (% of GDP)	**CP Nov 2006**	**5.8**	**4.7**	**4.3**	**3.4**	**2.5**	**1.8**
	COM Nov 2006	5.8	4.9	4.6	4.3	n.a.	n.a.
	CP Nov 2005	*4.7*	*3.7*	*3.1*	*2.5*	*n.a.*	*2.7*
Cyclically-adjusted balance (% of GDP)	**CP Nov 2006[3]**	**3.8**	**2.5**	**2.2**	**2.7**	**2.6**	**2.7**
	COM Nov 2006	4.4	3.3	3.5	3.6	n.a.	n.a.
	CP Nov 2005[3]	*2.9*	*2*	*2.6*	*2.3*	*n.a.*	*2.3*
Structural balance[5] (% of GDP)	**CP Nov 2006[6]**	**3.5**	**2.2**	**1.9**	**2.7**	**2.6**	**2.7**
	COM Nov 2006[7]	4.1	3.0	3.2	3.6	n.a.	n.a.
	CP Nov 2005	*2.7*	*1.7*	*2.3*	*2.3*	*n.a.*	*2.3*
Government gross debt (% of GDP)	**CP Nov 2006**	**36.2**	**29.8**	**25.8**	**22.7**	**20.5**	**19.0**
	COM Nov 2006	36.2	29.7	25.7	23.2	n.a.	n.a.
	CP Nov 2005	*35.9*	*32.9*	*30.1*	*27.7*	*n.a.*	*22.7*

Notes:

[1] The budgetary projections include the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes. Excluding this impact, the general government balance would be 4.9% of GDP in 2005, 4.0% in 2006, 3.8% in 2007, 3.5% in 2008, 2.8% in 2009 and 2.2% in 2010, while government gross debt would be 35.9% of GDP in 2005, 28.6% in 2006, 24.6% in 2007, 21.5% in 2008, 19.3% in 2009 and 17.8% in 2010.

[2] The GDP growth projections in the update pertaining to 2008, 2009 and 2010 are based on a technical assumption of a closing output gap in 2010.

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

[4] Based on estimated potential growth of 2.2%, 2.6%, 2.5% and 2.5% respectively in the period 2005-2008.

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

[6] One-off and other temporary measures taken from the programme (0.3% of GDP in 2005-2007, surplus increasing).

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

Source:

Convergence programme (CP); Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

1. INTRODUCTION

The 2006 update of the Danish convergence programme, covering the period up to 2010, was adopted by the Danish government on 30 November 2006 and submitted to the Commission on the same day.[4] 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 2006 presented to Parliament on 29 August 2006. The budget bill was adopted by Parliament on 13 December. The present update is the eighth update of the original convergence programme submitted in October 1998.

The programme adheres to the code of conduct as regards the content and broadly follows the model structure for stability and convergence programmes specified in Annex 1 of the code of conduct. The programme provides all compulsory data, but not all optional data, prescribed by the code of conduct. The gaps pertain notably to the specifications of the stock-flow adjustment.[5] Annex 3 provides a detailed overview of all aspects of the compliance with the code of conduct.

2. ECONOMIC TRENDS AND POLICY CHALLENGES

This section is in five parts. The first provides a brief overview of the macroeconomic performance in terms of growth and other major macro-variables. The second part presents the results of a growth accounting exercise and tries to identify the main reasons for low or high average annual economic growth vis-à-vis the reference aggregate (euro area). The third looks at the volatility of growth and other key macroeconomic variables and the stabilising or destabilising role of macro-policies. The fourth part focuses on trends in public finances. The fifth part then identifies major economic challenges with implications for public finances.

2.1. Economic performance

Over the last decade, the Danish economy has performed relatively well (see Table 1 for an overview of key economic indicators). Real GDP growth in Denmark has averaged about 2.1 per cent and inflation has been stable, broadly in line with the euro area. At the same time, Denmark has benefited from well-managed reforms and sound fiscal policies, which have turned the fiscal deficits recorded up to the early 1990s into successive general government surpluses. The labour market has improved markedly with unemployment gradually falling from a peak at almost 10% in the early 1990s to below 5% in 2005 and the employment rate is the highest in the EU (76%). The reduction in unemployment is due in particular to improved labour market institutions and a flexible labour market, which is characterised by a low degree of employment protection legislation. Moreover, the external sector has overall been performing strongly, implying successive current account surpluses of on average about 2% of GDP over the decade.

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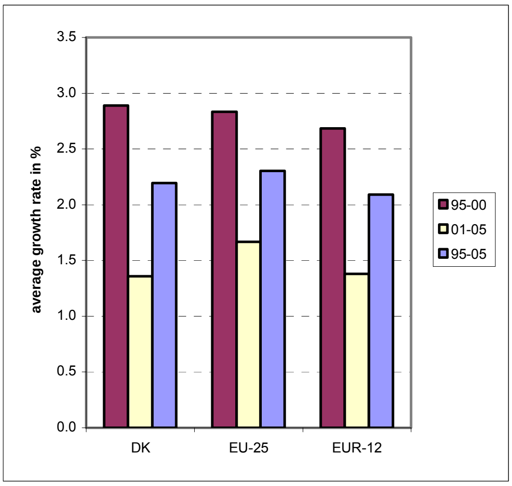
4 The English language version of the programme update was submitted on the same day, 30 November 2006.

5 General government expenditure by function, year x+3 (Table 3); Specifications of the stock-flow adjustment (differences between cash and accruals, net accumulation of financial assets (including of which privatisation proceeds, valuation effects and other); Liquid financial assets (Table 4); Cyclical budgetary component (Table 5).

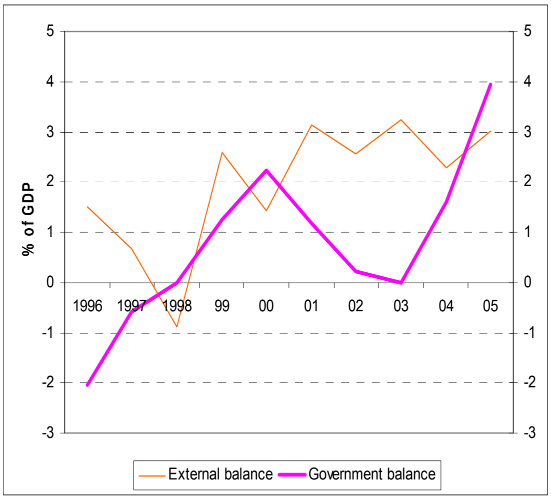
Aided by its high employment rate, Denmark performs very well in terms of GDP per capita compared with the EU average, but GDP growth developments have not been extraordinary. While growth has kept up with the rest of the EU and the euro area average during the decade, the income lead vis-à-vis countries with which Denmark is often compared, Sweden and Finland, has actually narrowed. However, the growth picture becomes somewhat more favourable if terms-of-trade developments and, hence, the effect of the changes in purchasing power of domestic income are taken into account. Due to the composition of exports and imports, Denmark has benefited from favourable terms-of-trade developments and, hence, an increase in purchasing power of domestic income. If GDP were adjusted for these developments (i.e. to produce so-called "real gross disposable income") its annual growth would on average have been about 0.4 percentage point higher per year than in the euro area.[6]

Figure 1: Average GDP growth: Denmark vs. EU25 and the euro area



Source: Commission services

Figure 2: Government and external balance



Source: Commission services

As for more recent developments, the Danish economy responded relatively early to the upturn in world economic activity in late 2003 compared with continental Europe. Since 2004 economic developments have been impressive and the economy has been growing strongly and above potential. The expansion has mainly been driven by private consumption, which has been supported by a fiscal stimulus in 2004 through tax cuts, a successive fall in unemployment, low interest rates and a booming housing market. As a consequence of strong growth in the recent period, the economy is now faced with growing capacity constraints and shortages of labour, which are set to curb growth in the short term. So far, pressures have been accommodated by strong import growth. Whereas the pick-up in wage growth is still moderate in the overall economy, inflation remains slightly lower than in the euro area.

Despite the strong cyclical position and sharp import growth, the external balance remains robust. Owing to successive external surpluses in recent years, foreign debt has

[6] Commission data and Commission service's calculations.

largely been eliminated. The existence of surpluses on the external balance is somewhat atypical currently, but Denmark has in recent years benefited from an increasing impact on the trade balance of shipping services and oil exports, which depend largely on world market conditions. In 2005, oil exports amounted to almost 3% of GDP, about four times as much as in the late 90's. At the same time about half of the trade surplus was due to net income from shipping and net oil exports represented about one quarter.[7] As the external balance have been developing rather independently from the domestic economy, the interpretation of the surplus is difficult. However, if the effects of the two sectors above were excluded, a reduction of the external surplus would be visible. This would point to a more typical relationship between domestic growth developments and the external balance.

Box 1. Monetary policy and exchange rate regime of Denmark

Fixed exchange rate regime (since the start of ERM)

The Danish krone participates in ERM II. The central rate against the euro is DKK 7.46038 and is a conversion of the central rate vis-à-vis the DEM before the third stage of EMU, which was last adjusted in January 1987. Due to its high degree of convergence, Denmark has entered into an agreement with the ECB and the euro area member states on a narrow fluctuation band of +/- 2.25 per cent around the central rate.

The strategy is to maintain a stable krone rate close to the central rate and to follow European Central Bank interest rate decisions very closely.

Denmark has an opt-out from the participation in Stage Three of EMU and has not proposed a timetable for the adoption of the euro. In September 2000, a referendum on participation in Stage Three of EMU resulted in a majority against adoption of the euro and the opt-out was retained

2.2. Anatomy of medium-term growth

Within the framework of a traditional growth accounting exercise, this section dissects the sources of medium-term economic growth as well as possible differences vis-à-vis the euro area and the EU. The growth accounting exercise is carried out on the basis of a Cobb-Douglas production function, the results of which are shown in Figures 2 and 3 for real GDP over the 1996-2005 period.

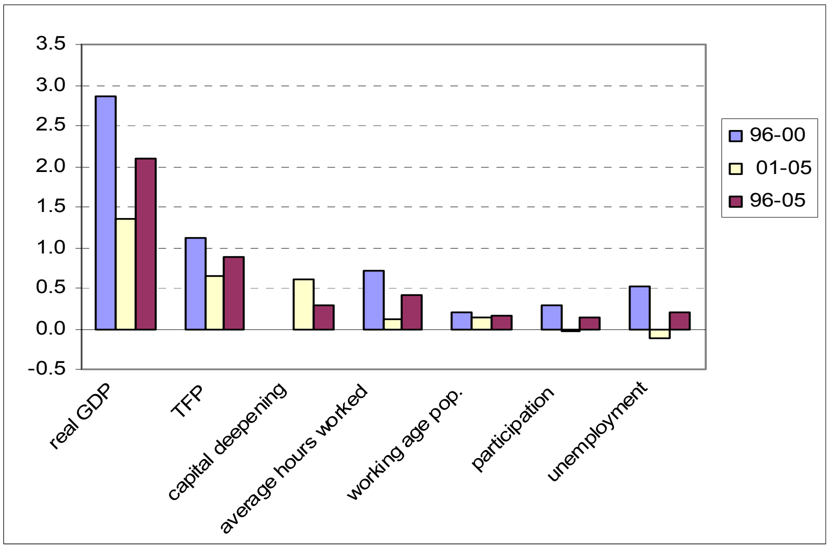
The dominant contribution to the average yearly Danish real GDP growth of 2.1% has come from total factor productivity (TFP) growth and to a rather limited extent from capital-deepening. This is largely in line with the rest of the EU, but the importance of TFP growth has gradually been increasing in relative terms over time in Denmark, which is possibly due to faster diffusion of information and communication technology in the economy, in particular in the service sector.[8] Compared with the EU average, a more

[7] OECD (2006), OECD Economic Surveys – Denmark, Paris, OECD Publishing, ISBN 92-64-02469-7.

[8] It should be noted that the distinction between TFP growth and capital deepening is not clear-cut, and notably depends on the definition of capital. Other studies made, using the concept of capital services instead of net capital stock, suggest that capital deepening may have played a much more prominent role than TFP growth as the net capital stock measure tends to underestimate capital accumulation in

important role also appear to have been played by an increase in the annual hours worked per person, in particular during the first half of the period. While the number of hours worked still remains relatively low, this reflects a gradual increase in average hours worked in Denmark at the same time as hours worked in the EU as a whole have declined. As for the impact of the other labour market variables, labour market participation and working age population, the contributions to GDP growth have been less pronounced in Denmark compared with the rest of the EU. This can partly be explained by the fact that Denmark already enjoys a high employment rate, while the rest of the EU has been catching-up. Demographic factors have also had a relatively unfavourable impact on the working age population.

Figure 3: Real GDP growth and its components



Note:

Assuming a Cobb-Douglas-production function $Y = A(L \cdot H)^{\alpha} K^{1-\alpha}$ where Y denotes the level of *GDP*, L employment, H the average hours worked per person employed, K the capital stock and α the labour share in income, real GDP can be written as $Y = \frac{Y}{H \cdot L} H \cdot L = A \cdot \left(\frac{K}{H \cdot L} \right)^{1-\alpha} H \cdot WP \cdot PART \cdot (1 - ur)$ where WP stands for working age population, $PART$ denotes the participation ratio as a share of WP and ur the rate of unemployment. In terms of growth rates g this is:

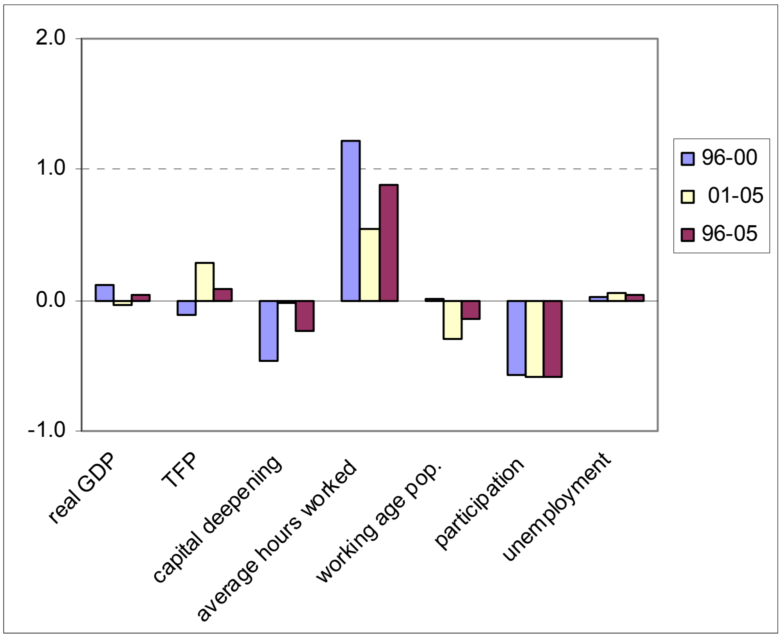
$$g_Y = g_A + (1-\alpha)(g_K - g_L - g_H) + g_H + g_{WP} + g_{PART} - g_{ur} \cdot \frac{ur}{1-ur}$$

The expression $(g_K - g_L - g_H)$ is referred to as capital deepening, i.e. the increase in the capital labour ratio.

Source:
Commission services

periods of rapid technological progress and falling prices. See for example ECB (2005), Labour productivity in the Nordic countries – a comparative overview and explanatory factors 1980-2004, by Anatoli Annenkov and Christophe Madaschi, Frankfurt am Main, Occasional Paper series No. 39.

Figure 4: Real GDP growth and its components: Difference vis-à-vis euro area



Note:
See note of Figure 3.

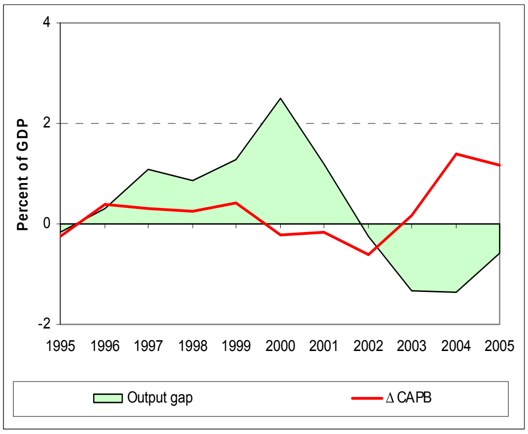
Source:
Commission services

2.3. Macro-policies against the backdrop of the economic cycle

Apart from a pronounced slowdown between 2001 and 2003, annual GDP growth has been both rather healthy and stable at a level of 2% to 3½% of GDP over the last decade. The output gap has developed largely in line with the euro area, with the difference that Denmark has been ahead of the euro area in the economic cycle. As typical for a small open economy, Denmark has also had a more pronounced business cycle.

The macroeconomic policy framework is anchored in a fixed exchange rate to the euro. Monetary conditions have therefore largely been determined by developments in the euro area, by the European Central Bank and movements in the euro vis-à-vis third currencies. Seen over the whole period, the interest rate set by the ECB has been somewhat lower but still rather close to the level suggested by a simple Taylor rule. This suggests that overall the monetary conditions have been more or less appropriate. However the interest rate prescribed by the Taylor rule started to deviate from the actual interest rate level in 2005, possibly suggesting a need for tighter fiscal policies.

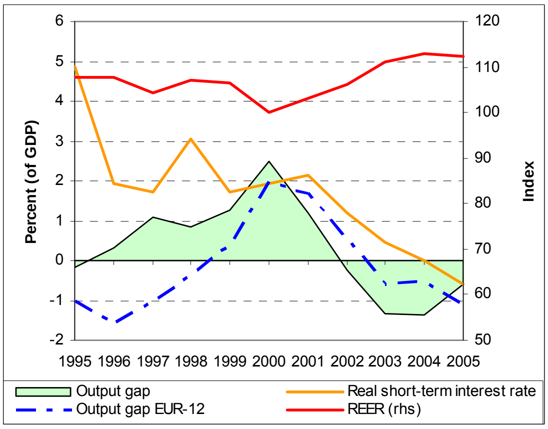
Figure 5: Output gap and fiscal stance



Note:
ΔCAPB denotes the change in the cyclically-adjusted primary budget balance.

Source: Commission services

Figure 6: Output gap and monetary conditions



Source: Commission services

While the monetary policy strategy, building on a fixed exchange rate to the euro, has served Denmark well by anchoring inflation and inflation expectations and providing conditions for healthy economic growth, the absence of a monetary policy instrument imply that fiscal and other policies play an important role with respect to macroeconomic stabilisation. In this regard, two fiscal stimulus packages, one in 1993/94 and one in 2004 (both including a tax reforms) have played an important role in providing impetus to economic recovery. Similarly, with the view to avoid overheating and in response to a deterioration of the external balance in 1998, a fiscal package ("the Whitsun Package") was implemented the same year that aimed at dampening private consumption.

Whereas an important role of fiscal policy is to contribute to short-term macroeconomic stability, the Danish fiscal strategy is mainly medium-term oriented and aimed at sustainability and expenditure discipline. Particularly given the large public sector in Denmark, a key role in the short-run macroeconomic stabilisation of the economy is therefore played by automatic stabilisers. The role played by automatic stabilisers has been highlighted in recent years with the introduction of a tax-freeze in 2001. The tax-freeze implies that no tax rate is allowed to be increased and some taxes have been frozen in nominal terms. Hence, the availability of discretionary fiscal stabilisation instruments is reduced and at the present juncture the government is essentially confined to reducing expenditure to reduce the risks of possible overheating.

Compared with in the rest of the EU, the cyclical sensitivity of government spending, mainly unemployment benefits, and taxes is however relatively high in Denmark[9] and thanks to sound fiscal policies and successive budget surpluses, room is provided for automatic stabilisers to work rather freely.

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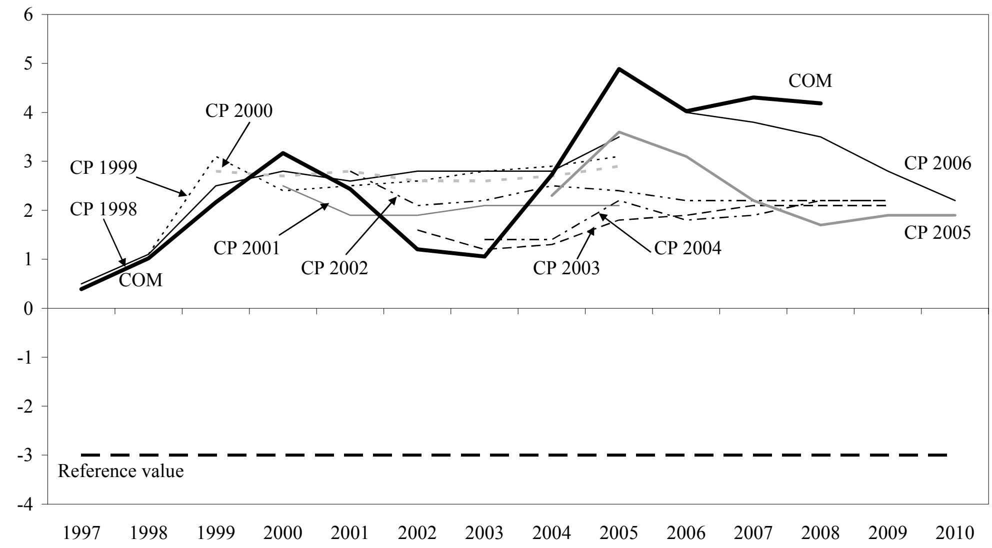
9 Country Study: Denmark – Making work pay, getting more people into work, by Directorate-General for Economic and Financial Affairs, Occasional papers No. 9 - October 2004 http://europa.eu.int/comm/economy_finance /index_en.htm

Despite the medium-term strategy and the role played by automatic stabilisers, the fiscal stance, measured as the change in the cyclically-adjusted primary balance, appears to have been pro-cyclical in recent years. Since 2003, the changes in the cyclically-adjusted primary balance point to the implementation of contractionary policies in a situation with a negative output gap. However, contrary to what the cyclically-adjusted primary balance seems to suggest, and taking into account a fiscal stimulus package in 2004, fiscal policy appear to have been largely appropriate over the decade and not to have contributed to boom-bust developments if looking at growth and external balance developments. In fact, the developments in the cyclically-adjusted balance, are not an effect of active pro-cyclical policies, but rather a reflection of certain exceptional revenue developments outside the immediate control of the government. Specifically, the decision to harmonise the tax treatment of equities and bonds yields in 2000 has increased the sensitivity of public finances to prices of equities, which are more volatile than prices of bonds; moreover, due to stock market developments in recent years, revenues from the pension yield tax have tended to be pro-cyclical. For example, in 2005 revenue from the pension yield tax amounted to about 2% of GDP and explained about half of the budget surplus, while such the revenue was largely negligible in 2001 and 2002. Similarly, high fuel prices have in recent years contributed to high revenue from the oil and gas activities in the North Sea. In 2005, the revenue from oil related activities amounted to almost 1.7% of GDP, about three times as much as in 2001 and 2002.

2.4. Public finances

Figure 7: General government balance projections in successive stability programmes (% of GDP)[1]



Note:
[1] Including revenues from the second-pillar pension scheme (ATP).

Source: Commission services and national convergence programmes

Public finances in Denmark are among the strongest in the EU. Over the last decade, Denmark has recorded successive general government surpluses of on average about 0.8% of GDP per year. Besides the extraordinary high revenues from the pension yield tax and from the activities in the North Sea in recent years, the strong public finances can mainly be attributed to successful economic reforms, in particular in the labour market, and the medium-term fiscal strategy aimed at fiscal sustainability and expenditure discipline.

In operational terms, the fiscal strategy aims at reaching a structural surplus of between ½ and 1½% of GDP a year and at reducing government debt.[10] To the extent fiscal leeway is created, the tax burden and in particular labour income taxes are to be reduced. The expenditure policy is aimed at a moderation of overall public expenditure growth and includes a target for real public consumption growth, originally of 1% a year and subsequently revised to ½% a year for 2005 and 2006. To put a constraint on consumption growth by local governments, the policy is accompanied by a requirement of balanced budgets and a tax freeze, according to which no tax rate may be increased and some taxes have been frozen in nominal terms.

The medium-term strategy has been rather successful and has contributed to improving the credibility of the macroeconomic framework. In particular, it has led to positive primary budget surpluses and a rapid reduction of the government debt ratio ahead of the government's own schedule, from a level of about 70% of GDP in 1996 to about 36% in 2005.

The surpluses are also an effect of a reduction of the primary expenditure ratio. As for the functional distribution of primary expenditure, spending on economic affairs and social protection has been reduced, while spending on education has been increased (See Section 6 for further detail). However, it should be noted that the strategy of expenditure discipline has only been partly successful, insofar as the public consumption ratio to GDP has been brought down, but the government's own targets for real consumption growth have been repeatedly exceeded. These overruns are partly associated with the fact that the target is rather ambitious and partly with problems of controlling spending by local governments in times of strong tax receipts.

On a year-to-year basis, the revenue to GDP ratio has fluctuated with the economic cycle, but has remained on a moderate downward trend on a cyclically-adjusted basis. Here the tax freeze has played an increasingly important role in recent years. It has ended the tendency by in particular local governments to increase taxes and entails a slight decline in the tax burden over time. In individual years, however, the tax burden may increase due to certain tax bases temporarily growing faster than nominal GDP.

To conclude, the overall conduct of public finances is sound and Denmark has a good record with regard to the projected budget balance. The successive convergence programmes have also been revised in line with actual economic developments and new information about future developments. Due to difficulties with forecasting certain revenues which depend on market price developments that are outside the direct control of the government, in particular revenues from the pension yield tax and the oil and gas activities in the North Sea, the actual budget balances have been significantly under-

[10] Including the impact of Eurostat decision of 2 March 2004 on the classification of funded pension schemes. The second pillar pension fund (ATP) is hence classified outside the general government sector. Excluding the impact of the mentioned decision, the MTO-range would be between 1½ % and 2½ % of GDP.

estimated in recent years and this has implied successive upward revisions as compared with initial projections.

2.5. Medium- and long-term policy challenges for public finances

Over the last decade, the Danish economy has performed relatively well overall. Real GDP growth and inflation have developed broadly in line with the euro area. At the same time, the labour market has improved and become very flexible in some dimensions, which has contributed to a gradual reduction of unemployment and to an increase in employment. Unemployment is at an historical low level and the employment rate is the highest in the EU. Moreover, Denmark has benefited from well-managed reforms and sound fiscal policies, which has led to successive general government surpluses and a rapid reduction of government debt. The strong public finances can be attributed to successful economic reforms and a medium-term fiscal strategy aimed at fiscal sustainability and expenditure discipline. An important element of this strategy is the tax-freeze which promotes expenditure discipline and reduces the tax burden over time. Denmark appears to be at low risk as regards long-term sustainability of public finances. The medium-term fiscal strategy, which focuses on creating budget surpluses and reducing government debt, has been successful in preparing the public finances for the effects of an ageing population and the entering of the so-called "Agreement on Future Prosperity, Welfare and Investments in the Future" (hereinafter "Welfare Agreement", See Section 6, Box 6) reached in June 2006, which is foreseen to increase labour supply in the long-term, has further contributed to improving the ability of Denmark to face these effects.

Due to the fixed exchange rate regime, the monetary stance is determined by developments in the euro area and by the European Central Bank. As the business cycle in Denmark may differ from economic conditions in the euro area, fiscal and other policies play an important role with respect to macroeconomic stabilisation. As the fixed exchange rate regime and the tax-freeze reduce the scope of macroeconomic stabilisation instruments, a key role has to be played by automatic stabilisers. The limited possibility of temporarily increasing taxes could present a problem in view of prospective risks of an overheating economy.

Against this background, the Danish economy faces a number of challenges in the area of economic efficiency:

i) the implementation of the tax-freeze, in particular the fixing of some taxes in nominal terms, is creating increasing distortions between different taxable sources, e.g. property value vis-à-vis labour income. With labour supply considered as a priority, a gradual reduction of tax bases such as property value does not appear optimal; ii) the tax-freeze combined with ambitious targets for real consumption spending has contributed to a reduction in the growth of public consumption expenditure. Nevertheless, actual consumption growth continues to exceed the targets set by the government, reflecting remaining problems with effectively controlling expenditure by local governments; and iii) in view of the comparatively large public sector in Denmark that is financed via high tax levels, enhancing efficiency in the public sector including stronger competition is a priority.

Table 1: Key economic indicators

	Denmark						Euro area					
	Averages			2003	2004	2005	Averages			2003	2004	2005
	'96 - '05	'96 - '00	'01 - '05				'96 - '05	'96 - '00	'01 - '05			
Economic activity												
Real GDP (% change)	2.1	2.9	1.3	0.7	1.9	3.0	2.1	2.7	1.4	0.8	2.0	1.4
Contributions to real GDP growth:												
Domestic demand	2.2	2.6	1.8	0.6	3.1	3.9	2.0	2.7	1.3	1.4	1.8	1.6
Net exports	-0.1	0.3	-0.5	0.1	-1.3	-1.0	0.1	0.1	0.1	-0.7	0.2	-0.2
Prices, costs and labour market												
HICP inflation (% change)	1.9	2.0	1.9	2.0	0.9	1.7	1.9	1.7	2.2	2.1	2.1	2.2
Labour productivity (% change)	1.6	1.8	1.4	2.2	1.9	2.2	1.2	1.5	0.8	0.8	1.6	0.9
Real unit labour costs (% change)	0.0	0.0	0.0	-0.3	-1.2	-1.6	-0.5	-0.6	-0.5	-0.1	-1.0	-0.8
Employment (% change)	0.5	1.0	0.0	-1.5	0.0	0.7	1.2	1.5	0.9	0.7	0.7	0.8
Unemployment rate (% of labour force)	5.1	5.2	5.0	5.4	5.5	4.8	9.1	9.8	8.5	8.7	8.9	8.6
Competitiveness and external position												
Real effective exchange rate (% change) (1)	0.6	-1.3	2.4	4.4	1.6	-0.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Export performance (% change) (2)	-0.7	-0.9	-0.5	-4.9	-4.7	1.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
External balance (% of GDP)	2.0	1.1	2.8	3.2	2.3	3.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public finances (3)												
General government balance (% of GDP)	0.8	0.2	1.5	0.1	1.6	4.0	-2.3	-2.1	-2.5	-3.1	-2.8	-2.4
General government debt (% of GDP)	53.3	62.1	44.6	45.7	43.8	36.2	70.9	72.5	69.3	69.3	69.8	70.8
Structural budget balance (% of GDP) (4)	n.a.	n.a.	n.a.	0.9	2.3	4.1	n.a.	n.a.	n.a.	-3.2	-2.9	-2.0
Financial indicators (5)												
Long term real interest rate (%) (6)	2.9	3.7	2.0	2.3	2.0	0.5	3.1	4.1	2.1	2.0	2.2	1.5
Household debt (% of GDP) (7)	n.a.	n.a.	n.a.	104.1	109.6	117.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt (% of GDP) (8)	n.a.	n.a.	n.a.	72.7	78.3	85.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes:

More detailed tables summarising the economic performance of the country are included in Annex 4.
(1) Unit labour costs relative to rest of a group of industrialised countries (USD): EU24 (=EU25 excl. LU), BG, RO, TR, CH, NR, US, CA, JP, AU, MX and NZ.
(2) Market performance of exports of goods and services on export weighted imports of goods and services of 35 industrial markets.
(3) Including the impact of Eurostat decision of 2 March 2004 on the classification of funded pension schemes, implying that the second-pillar pension fund (ATP) is classified outside the general government sector.
(4)Cyclically-adjusted budget balance net of one-off and other temporary measures.
(5 Data available up to 2004.
(6) Using GDP deflator.
(6) Households' and non-profit institutions serving households' debt, defined as loans and securities other than shares.
(8) Non-financial corporate sector debt, defined as loans and securities other than shares.

Source:
Commission services

3. MACROECONOMIC OUTLOOK

This section is in seven parts, six of which refer to various dimensions of the macroeconomic scenario, notably: the external assumptions, overall economic growth, the labour market, costs and prices, sectoral balances and potential output growth. The final part summarises the assessment and includes (i) an overall judgement on the plausibility of the macroeconomic scenario and (ii) an indication of whether economic conditions over the programme period can be characterised as economic 'good' or 'bad' times.

3.1. External assumptions

The external assumptions on which the programme's macroeconomic scenario is based are broadly in line with those underlying the Commission services' 2006 autumn forecast, with still robust world output growth, though at a slightly lower level. The average oil price in 2006 is assumed at a slightly higher level than by the Commission services' in 2006 and slightly lower in 2007. Over the remaining period the oil price is technically assumed to gradually fall to a level of 55 US Dollar per barrel in 2010. As for the Danish krone a constant nominal exchange rate to the euro is assumed and the nominal effective exchange rate is expected to strengthen slightly due to a weakening of the US dollar. The programme also assumes a gradual increase in Danish long-term interest rates over the projection period.

3.2. Economic activity

The update foresees real GDP growth of 2.7% in 2006 and 2.0% 2007based on the August Economic Survey. This is slightly higher than in the 2005 update, but still somewhat weaker than in the GDP growth developments projected in the Commission services' autumn 2006 forecast (Table 2). Whereas the Commission also anticipates a moderation of growth over the forecast horizon until 2008, real GDP is projected to continue to grow relatively strongly in 2006 and above the average for the last decade in 2007 and 2008. The Commission's growth forecast for 2006 is 3.0% for 2006, 2.3% for 2007 and 2.2% in 2008. As from 2008, however, the programme adopts a technical assumption that a positive output gap is closed in 2010. Hence, GDP growth is set markedly lower in 2008 compared with the Commission services' forecast and also markedly lower than in the previous update for the remaining period at 0.7% in both 2008 and 2009, and at 0.6% in 2010). In the short term, for 2006 and 2007, the update seems relatively plausible, though somewhat on the cautious side. As from 2008, however, the technical assumptions appear rather cautious, both with regard to past trends and current estimates of potential growth.[11] For this period, the programme adopts the technical assumption that a positive output gap will be closed in 2010. As a consequence, the cyclical conditions implied by the programme, as measured by the output gap recalculated by the Commission services, appear to worsen over the programme period, as a positive output gap turns negative in 2008 and increases sharply until the end of the programme.

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[11] In the Danish official forecast published on 6 December 2006, the real GDP growth projections for 2006 and 2007 are set slightly higher at 3.3% and 2.2%, respectively. For 2008 a more plausible growth rate of 1.2% is foreseen.

Table 2: Comparison of macroeconomic developments and forecasts

	2006		2007		2008		2009	2010
	COM	CP	COM	CP	COM	CP	CP	CP
Real GDP (% change)[1]	3.0	2.7	2.3	2.0	2.2	0.7	0.7	0.6
Private consumption (% change)	3.9	3.1	2.3	2.0	2.0	0.6	0.6	0.5
Gross fixed capital formation (% change)	12.0	10.6	4.4	4.0	3.2	2.0	1.5	0.6
Exports of goods and services (% change)	10.6	6.5	6.9	3.4	6.4	1.2	1.3	1.3
Imports of goods and services (% change)	14.2	10.3	7.6	3.8	6.4	1.9	1.7	1.5
Contributions to real GDP growth:								
- Final domestic demand	4.8	4.1	2.5	2.2	2.1	1.0	0.9	0.7
- Change in inventories	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0
- Net exports	-1.4	-1.6	-0.2	-0.2	0.1	-0.3	-0.2	-0.1
Output gap[2]	-0.2	0.9	-0.4	0.9	-0.6	-0.3	-1.3	-2.3
Employment (% change)	1.2	1.2	0.2	0.3	0.1	-0.3	-0.3	-0.5
Unemployment rate (%)	3.8	3.9	3.5	3.7	3.5	3.5	3.6	3.9
Labour productivity growth (%)	1.8	1.4	2.1	1.7	2.1	1.0	1.1	1.1
HICP inflation (%)	2.0	2.0	2.0	1.8	1.9	1.7	1.8	1.7
GDP deflator (% change)	3.2	2.4	2.3	2.3	2.4	2.4	2.3	2.3
Comp. of employees (per head, % change)	3.7	3.5	4.2	3.8	2.9	3.5	3.5	3.4
Real unit labour costs (% change)	-1.3	-0.4	-0.3	-0.2	-1.6	0.1	0.2	0.0
External balance (% of GDP)	2.0	1.6	2.2	1.7	2.3	1.3	1.2	1.3

Notes:
[1]The GDP growth projections in the update pertaining to 2008, 2009 and 2010 are based on a technical assumption of a closing output gap in 2010.
[2]In percent of potential GDP, with potential GDP growth as reported in Table 4 below.
Source:
Commission services' autumn 2006 economic forecasts (COM); convergence programme (CP)

Table 3: Output gap estimates in successive Commission services' forecasts and convergence programmes

(% of potential GDP)	2006		2007		2008	
	COM	CP[1]	COM	CP[1]	COM	CP[1]
CP Nov 2006	-	0.9	-	0.9	-	-0.3
Autumn 2006	-0.2	-	-0.4	-	-0.6	-
Spring 2006	0.0	-	0.1	-	0.0	-
CP Nov 2005	-	0.1	-	-0.7	-	-0.9
Autumn 2005	-0.4	-	-0.4	-	-	-
Spring 2005	-0.3	-	0.0	-	0.0	-
CP Nov 2004	-	-0.5	-	-0.4	-	-0.4

Note:
[1]Commission services' calculations according to the commonly-agreed method based on the information in the programme.

Source:
Commission services' forecasts, convergence programmes and Commission services

In the update, growth of economic activity is driven mainly by domestic demand, in particular private consumption and fixed capital formation. Private consumption is boosted by a continued significant fall in unemployment in 2006 to a historically low level, but is expected to moderate as the effect from this fall fades out and further reductions in the unemployment rate are expected to be relatively small. Exports are expected to remain strong due to a foreseen pick-up in foreign demand. However, because of growing capacity constraints in the domestic economy, imports are also expected to grow relatively strongly. Hence, the external balance in the update contributes negatively to growth, particularly in 2006.

While the overall growth assumptions appear cautious, the composition of growth described in the update is on the whole similar to the Commission services' projections. The programme does not discuss the effects of the sharp increases in real estate prices in recent years and the possible impact on growth of a correction in this market. In this regard the observed moderation in property prices increases in recent months suggests some attenuation of previously perceived risks.

3.3. Potential growth and its determinants

On the basis of the data in the programme, Table 4 presents the potential growth estimates using the commonly agreed methodology. Overall, they are lower than the estimates of the Commission services' autumn 2006 forecast and also lower than the average rate of real GDP growth over the last ten years.

As for the composition of the factors contributing to potential growth the picture is more similar. The expected contributions to potential come almost entirely from capital accumulation and total factor productivity, while the contribution of labour is rather limited. The labour contribution is also expected to diminish and turn negative towards the end of the programme period, in particular as the growth in the working-age population slows and then begins to turn negative over the medium term. The Commission services' estimates of the contribution from TFP growth is relatively larger, reflecting an increasing importance of this factor overtime in Denmark and in particular strong productivity growth in the service sector due to a high degree of technology diffusion.

Table 4: Sources of potential output growth

	2006		2007		2008		2009	2010
	COM	CP[2]	COM	CP[2]	COM	CP[2]	CP[2]	CP[2]
Potential GDP growth (%)[1]	2.6	2.1	2.5	2.0	2.5	1.9	1.7	1.6
Contributions:								
- Labour	0.3	0.3	0.1	0.1	0.1	0.1	-0.1	-0.2
- Capital accumulation	1.1	1.1	1.1	1.1	1.1	1.0	1.0	0.9
- TFP	1.2	0.7	1.2	0.7	1.3	0.8	0.8	0.9

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 convergence programme (CP).
Source:
Commission services’ autumn 2006 economic forecasts (COM); Commission services’ calculations

3.4. Labour market developments

In line with the moderation of economic activity in 2007, the programme projects employment to gradually slow and come to a halt in 2008. As a consequence, the fall in the unemployment rate to an historically low level is expected to moderate and to increase slightly towards the end of the period, back to the 2006 level of slightly below 4%. This is broadly in line with the Commission services' projections, which foresee the unemployment rate to remain relatively stable at the 2006 level until 2008.

Due to an overall already relatively high employment rate and an historically low unemployment rate, above and below respective estimated structural levels, only relatively limited further improvements are foreseen. This is in line with the estimations in the Commission services' forecast. Demographic developments are estimated to reduce the workforce and employment, an effect that is just offset by the impact of already implemented reforms. Unemployment is projected to continue to decline slightly due to the effects of the June 2006 "Welfare Agreement" (see Section 6 for further detail). Consequently, the future labour content of GDP growth is foreseen to be rather limited. The contribution from labour is also foreseen to be less than during the last decade when an increase in average hours worked, a higher participation rate and a sharp decline in unemployment all contributed markedly to GDP growth.

3.5. Costs and price developments

Both according to the programme and the Commission services' forecast inflationary pressures are expected to remain rather modest over the coming years. Owing to a gradual slowdown of the economy, inflation is expected to be reduced from around 2% in 2006 to about 1¾% as from 2007 and for the remainder of the programme horizon. According to the Commission services' forecast capacity constraints and growing wage pressures is foreseen to put an upward pressure on inflation in 2007 and in 2008. At the same time, counter-pressure from lower oil prices is foreseen to contribute to maintaining consumer price inflation at around 2%.

Wage growth of 3½% and an inflation rate of about 1¾% foreseen over the programme period are in line with recent trends. The implied increase in real wages of 1¾% are consistent with the foreseen growth of labour productivity and with the export projections presented.

3.6. Sectoral balances

Over the programme period, continued surpluses on the external balance are foreseen, notably due to an impact on the trade balance of shipping services and oil exports. However, owing to strong import growth and a lower oil price, the trade and external surpluses are projected to decline over the period. While the update projects continued high but decreasing government surpluses, the private sector deficit is expected to gradually decrease and turn to a surplus in 2010.

3.7. Assessment

The assessment of the macroeconomic outlook covers two questions: first, whether the macroeconomic scenario is plausible, and, second, whether the economy should be considered to be in economic ‘good’ or ‘bad’ times.

3.7.1. Plausibility of the macroeconomic scenario

Up to 2007, the economic growth scenario presented in the programme is broadly in line with the Commission services' forecast and also broadly in line with the Commission's estimate of potential GDP growth for the same period. Hence, the macroeconomic assumptions appears cautious but plausible until 2007. Beyond 2007, however, the macroeconomic assumptions seem markedly cautious, in particular considering the assumed low growth rates beyond 2007 that stem from the technical assumption of a gradual closing of a positive output gap by 2010.

3.7.2. Economic good vs. bad times

The Danish economy is at present performing strongly, with real GDP growing by more than 3%, a rate well above the average over the last decade. While, according to the latest Commission services' autumn forecast, the output gap is still negative, the economy is growing above potential and the gap has been diminishing since 2004 and is estimated to be close to zero in 2006. The main factor explaining the current growth developments is strong domestic demand. Private consumption has been particularly buoyant, supported by a successive fall in unemployment to a historically low level below 4%, a booming housing market, low interest rates and product innovation in the mortgage market.

As a consequence of strong growth in the recent period, the economy is now faced with growing capacity constraints, in terms of high capital utilisation and shortages of labour in certain sectors. So far, however, the pick-up in wage growth is still moderate in the overall economy. Hence, inflation remains relatively subdued and slightly lower than in the euro area. The still low rate of inflation is uncharacteristic considering the strong performance of the economy, but can be seen as an effect partly of low inflation expectations and partly of increasing globalisation. In particular, it is likely that mounting competition from the new Member States and emerging markets are playing a role, insofar as the risk of outsourcing and import of labour is having a dampening effect on wages.

In 2007 and 2008, a moderation in private demand is foreseen, as interest rates increase and wealth effects of the sharp increase in real estate prices are expected to taper off. While GDP growth is projected to remain close to potential in 2007, a gradual widening of the (negative) output gap is estimated.

Against the above, an output gap that have been diminishing and is close to zero, GDP growth above or close to potential; historically low unemployment; and a high rate of capital utilization the Danish economy can currently be considered to be in economically relatively good times. As growth is expected to moderate over the period, economic conditions are expected to gradually turn more neutral.

4. GENERAL GOVERNMENT BALANCE

This section consists of four parts. The first part discusses budgetary implementation in the year 2006 and the second presents the budgetary strategy in the new update, including the programme’s medium-term objective (MTO) for the budgetary position. The third analyses the risks attached to the budgetary targets in the programme. The final part contains the assessment of the fiscal stance and of the country’s position in relation to the budgetary objectives of the Stability and Growth Pact.

4.1. Budgetary implementation in 2006

As can be seen in Table 5, the estimated general government balance for 2006 has in the present update been revised upwards by almost 1 percentage point of GDP to 3.1% (including the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes, hence excluding the second pillar pension fund (ATP)).

compared with the 2005 programme update.[12] The programme estimate is in line with the surplus projected by the Commission Services' in the autumn forecast and is due in particular to higher GDP growth than previously expected by the government and lower cyclically-related social transfers. In the previous update the GDP growth was estimated at 2.4% of GDP, while in the current update GDP is foreseen to grow by 2.7% in 2006.[13] Fuel prices that have remained at a high level have also contributed to the upward revision as they are generating higher revenue from the oil and gas activities in the North Sea than previously projected.

Table 5: Evolution of budgetary targets in successive programmes[1]

		2005	2006	2007	2008	2009	2010
General government balance (% of GDP)	**CP Nov 2006**	**4.0**	**3.1**	**2.8**	**2.5**	**1.8**	**1.2**
	CP Nov 2005	2.7	2.1	2.2	1.7	n.a.	1.9
	CP Nov 2004	*1.3*	*0.9*	*0.9*	*n.a.*	*n.a.*	*1.2*
	COM Nov 2006	4.0	3.2	3.3	3.2	n.a.	n.a.
General government expenditure (% of GDP)	**CP Nov 2006**	**51.5**	**50.4**	**49.8**	**49.7**	**50.0**	**50.6**
	CP Nov 2005	52.3	51.3	50.8	50.5	n.a.	49.6
	CP Nov 2004	*53.0*	*53.0*	*52.8*	*n.a.*	*n.a.*	*51.9*
	COM Nov 2006	52.5	51.3	50.3	49.4	n.a.	n.a.
General government revenues (% of GDP)	**CP Nov 2006**	**55.5**	**53.5**	**52.7**	**52.1**	**51.8**	**51.7**
	CP Nov 2005	55.0	53.5	53.0	52.2	n.a.	51.5
	CP Nov 2004	*54.9*	*54.6*	*54.5*	*n.a.*	*n.a.*	*53.9*
	COM Nov 2006	56.4	54.5	53.6	52.6	n.a.	n.a.
Real GDP (% change)	**CP Nov 2006[2]**	**3.6**	**2.7**	**2.0**	**0.7**	**0.7**	**0.6**
	CP Nov 2005	2.4	2.4	1.1	1.6	n.a.	2.1
	CP Nov 2004	*2.5*	*1.3*	*1.9*	*1.8*	*1.8*	*1.8*
	COM Nov 2006	3.0	3.0	2.3	2.2	n.a.	n.a.

Notes:
[1] Including the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes, hence excluding the second pillar pension fund (ATP).
[2] The GDP growth projections in the update pertaining to 2008, 2009 and 2010 are based on a technical assumption of a closing output gap in 2010.
Source:
Convergence programmes (CP) and Commission services' autumn 2006 economic forecasts (COM)

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 programme's medium-term objective and the adjustment path towards it in structural terms.

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12 In the Danish official forecast published on 6 December 2006, the surplus on the general government balance was further revised upwards to 3.4% of GDP for 2006, 3.3% for 2007 and 3.1% for 2008 (excluding ATP).

13 Real GDP growth in 2005 also significantly exceeded the estimates in the 2005 convergence, with real GDP growing by 3.0% of GDP compared with an estimate of 2.4% of GDP.

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

The overall objectives of the medium-term budgetary strategy in the programme are economic stability and sustainable public finances in the long term perspective. In operational terms the strategy aims at general government surpluses between ½% and 1½% of GDP over the programme period so as to ensure a rapid decline in the debt ratio. In line with this strategy, the update foresees the general government surplus to narrow gradually from a peak of 4.0% in 2005[14] (driven by exceptional factors) to around 3% in 2006 and 2007 and to just above 1% in 2010 (Table 5 & 6). The time profile of the primary surplus is similar, with a successive decline in the surplus from 4.7% in 2006 to 1.8% at the end of the period, i.e. a reduction by almost 3 percentage points of GDP. Compared with the previous update, the planned path of the general government balance is higher except towards the end of the programme period. This is broadly consistent with a more favourable macroeconomic scenario and higher GDP growth in 2006 and 2007 and the technically assumed lower GDP growth rates as from 2008.

Box 2: The classification of pension schemes

There are typically different pillars within a country's pension system, such as pay-as-you-go or unfunded systems and funded systems; furthermore, pension schemes can be of the defined-benefit (DB) or defined-contribution (DC) variety.

If a pension scheme is classified in the government sector, contributions collected and benefits paid by the scheme are government revenue and expenditure and contribute to the government balance. If a pension scheme is classified in a sector other than government, its contributions and benefits do not contribute to the government balance. The ESA95 accounting rules state that pension schemes classified within government are those which are "imposed, controlled and financed by government".

On 2 March 2004, Eurostat clarified that funded DC pension schemes do not fulfil these criteria because pensions paid by such schemes (i) depend primarily on financial market performance (i.e. not under government control) and (ii) are financed by reserves that are not economically owned by government. Even if they are mandatory or if they are managed by government (for example, managed by the same government agency in charge of the pay-as-you-go pillar) or if there is some government guarantee of a minimum pension, funded DC schemes should not be classified within government (*).

A transition period, expiring in spring 2007 (first EDP notification of 2007), has been granted to implement this decision (**). Denmark is using this transition period.

(*) Eurostat News Release No 30/2004 of 2 March 2004.
(**) Eurostat News Release No 117/2004 of 23 September 2004.

Denmark is using the transition period for the implementation of the Eurostat decision of 2 March 2004, as regards the classification of funded pension schemes outside the general government. Nonetheless, the update includes and gives prominence to data including the pension reform costs. Considering the forward looking nature of the Commission assessments and the fact that the Eurostat decision will have to be implemented as from the spring 2007 EDP notification, this has allowed the Commission

[14] In November 2006, the estimated 2005 surplus was revised upwards to 4.6% of GDP, but has not been included in the update.

services to base the assessment this year on the budgetary projections in the update and the achievement of the MTO implementing the Eurostat decision.

As in previous programme updates, the medium-term strategy is based on expenditure discipline. The target for real public consumption growth has however been raised from ½% per annum in the previous programme to 1%. This increase follows from the "Welfare Agreement", notably the setting-up of a Globalisation Fund, entailing financing of globalisation related activities such as research, education and innovation, and an increase in spending on improving health care and welfare services. On the revenue side, the tax freeze that was implemented in 2001 continues to provide the foundation of tax policy. Compared with the previous programme, the new update broadly frontloads the planned path against a more favourable macroeconomic scenario.

Table 6: Composition of the budgetary adjustment

(% of GDP)	**2005[1]**	**2006**	**2007**	**2008**	**2009**	**2010**	**Change: 2010-2006**
Revenues	55.5	53.5	52.7	52.1	51.8	51.7	**-1.8**
of which:							
- Taxes & social contributions	49.7	48.0	47.5	46.9	46.6	46.4	**-1.6**
- Other (residual)	5.8	5.5	5.2	5.2	5.2	5.3	**-0.2**
Expenditure	51.5	50.4	49.8	49.7	50.0	50.6	**0.2**
of which:							
- Primary expenditure	49.7	48.8	48.3	48.8	49.3	50.0	**1.2**
of which:							
Consumption	25.8	25.5	25.4	25.6	25.8	26.0	**0.5**
Transfers other than in kind & subsidies	18.7	18.1	18.0	18.2	18.5	18.9	**0.8**
Gross fixed capital formation	1.8	1.8	1.6	1.6	1.6	1.6	**-0.2**
Other (residual)	3.4	3.4	3.3	3.4	3.4	3.5	**0.1**
- Interest expenditure	1.8	1.6	1.5	0.9	0.7	0.6	**-1.0**
General government balance (GGB)	**4.0**	**3.1**	**2.8**	**2.5**	**1.8**	**1.2**	**-1.9**
- including second-pillar pension scheme	*4.9*	*4.0*	*3.8*	*3.5*	*2.8*	*2.2*	***-1.8***
Primary balance	**5.8**	**4.7**	**4.3**	**3.4**	**2.5**	**1.8**	**-2.8**
One-offs[2]	0.3	0.3	0.3	0.0	0.0	0.0	-0.3
GGB excl. one-offs	**3.7**	**2.8**	**2.5**	**2.5**	**1.8**	**1.2**	**-1.5**

Notes:
[1] Convergence programme data.
[2] One-off and other temporary measures.
Source:
Convergence programme update; Commission services' calculations

4.2.2. The composition of the budgetary adjustment

As shown in Table 6, the medium term developments in public finances include a gradual reduction of the revenue ratio. In 2006-2008 the expenditure ratio is also reduced, but increases again slightly towards 2010 partly due to expected lower GDP growth. Substantial primary surpluses are generated, with the total expenditure ratio falling in 2006 and 2007, due to lower ratios of both primary expenditure and interest rate expenditure. In 2006 and partly also in 2007, the primary expenditure ratio is reduced due to the strong phase of the business cycle that increases GDP and reduces cyclically-related social transfers. However, as from 2008, the primary expenditure ratio is set to increase as social transfers are projected to increase again in line with the technically assumed fall in GDP growth in the update. Public consumption is also projected to increase over the programme period, notably due to the setting-up of a Globalisation Fund and increased spending on labour market initiatives in the context of the "Welfare Agreement", while interest expenditure is expected to continue to fall as share of GDP, owing to a continued reduction of public debt. On the revenue side, the tax freeze is contributing to an underlying reduction in the revenue ratio, but the ratio falls mainly due to a normalisation of revenue from corporate taxation following from an assumed decline in oil prices (see Section 2.4 above). Lower revenues from the pension yield tax also contributes to a reduction of the revenue ratio. Besides the setting up of a Globalisation Fund, the "Welfare Agreement" is also projected to have an impact on public finances, both on the revenue and the expenditure sides, in particular due to the fact that the earlier targeted employment increase of approximately 50,000 persons by 2010 has been replaced by a markedly lower target (about 13,000 persons). However, the lower increase in the medium term is compensated in the longer term by a much larger increase in employment (see Box 6).

Box 3: The budget for 2007

The draft budget for 2007 was presented by the Government on 29 August 2006 and was approved by Parliament on 13 December. The budget targets a general government surplus corresponding to 3.3% of GDP in 2007. It was 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 context of the tax freeze and consequently taxes and fees were not raised. On the revenue side, it includes cautious assumptions concerning developments in financial markets, implying that tax receipts for the pension yield tax will be below the structural estimated level. Moreover, it assumes still significant revenues from the exploitation of oil and gas in the North Sea, but lower than in 2006 due to a lower US Dollar vis-à-vis the krone. Both the revenue to GDP ratio and the tax burden (the ratio of the aggregate tax revenues to GDP) are expected to continue to be reduced in 2007.

On the expenditure side the budget takes into account the upward revision of the target for annual real growth of public consumption from ½% to 1.0% accompanying the agreement on the welfare package in June 2006. Overall, however, the expenditure to GDP ratio is foreseen to decrease further in 2007, also due to lower interest expenditure resulting from a reduction of public debt to below 25% of GDP during the year. A decrease in public investments, which were exceptionally high in 2006 as a result of government structural reform involving mergers of local and regional governments, also contributes to lowering public expenditure.

In the context of the medium-term fiscal framework up to 2010, the room for increased expenditure is set at an overall amount of DKK 30 billion (2% of GDP), excluding the effects of the June 2006 "Welfare Agreement". Within this overall envelope, the 2007 budget includes new expenditure measures amounting to DKK 5.2 billion (0.3% of GDP) for 2007.

According to the government, the 2007 budget is estimated to have a neutral effect on the economy. Whereas the fiscal effects of the "Welfare Agreement" (see Box 6) are expansionary, the decrease in public investments is estimated to compensate.

Table: Main measures in the budget for 2007

Revenue measures*	Expenditure measures**
	– Globalisation DKK 2. billion (0.1% of GDP)
	– Welfare reform , improved health and conditions for elderly and children DKK 1.78 billion (0.1% of GDP)

* Estimated impact on general government revenues.

** Estimated impact on general government expenditure.
Sources: Commission services and the Danish Ministry of Finance.

The development in public finances described in the update is overall backed by the broad measures specified in the programme. As in the 2005 update, the impact of one-off and other temporary measures is limited to 2006 and 2007 (improving the general government balance by 0.3% of GDP), linked to the suspension of the Special Pension (SP) scheme in 2004-2007, contributions to which are tax-deductible such that the suspension is surplus-increasing. For the remainder of the programme period no one-off measures are envisaged.

4.2.3. The medium-term objective (MTO) and the structural adjustment

As its medium-term objective (MTO) the update targets a structural balance, in cyclically-adjusted terms and net of one-off and other temporary measures, of between ½% and 1½% of GDP over the programme period. Taking into account the impact of the Eurostat decision as regards the accounting of second pillar funded pension systems, the MTO is unchanged compared to the previous update, when it was expressed as a range of between 1½% and 2½% of GDP.

The MTO is more demanding than implied by the debt ratio and average long-term potential growth. It has been defined on the basis of the above-mentioned medium term fiscal strategy aimed at stability and sustainability in the long term, in particular the objective of a rapid reduction of government debt. According to the government the objective also accords with the fiscal scenario given by the 2006 "Welfare Agreement" and the government's central estimates for the employment and ageing assumptions. The MTO also satisfies the condition of providing a safety margin (the most recent estimate of the minimum benchmark is a cyclically-adjusted deficit of 0.5% of GDP) and respects the lower bound of a structural deficit of 1% of GDP for euro area and ERM II countries (see Box 4).

As can be seen from Table 7, the structural balance as recalculated by the Commission services is projected to be around 2% of GDP or better throughout the programme period, i.e. better than the MTO. The structural position is projected to deteriorate slightly by ¼ percentage point of GDP between 2006 and 2007, to improve by ¾ percentage point between 2007 and 2008 and thereafter to remain stable. The structural deterioration in 2006 is largely the effect of exceptionally high revenues in 2005 from the pension yield tax. The slight deterioration between 2006 and 2007 can partly be attributed to a projected fall in the oil price in the update and, hence, lower revenue from the activities in the North Sea. However, large swings in certain revenues complicate the interpretation of conventionally calculated cyclically-adjusted balances and, hence, 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 over the whole programme period, indicating a broadly neutral fiscal stance.

Box 4: The medium-term objective (MTO) for the budgetary position

According to the Stability and Growth Pact, stability and convergence programmes must present a medium-term objective (MTO) for the budgetary position. The MTO is country-specific 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 MTO should fulfil a triple aim. First, it should provide a safety margin with respect to the 3% of GDP deficit limit. Second, it should ensure rapid progress towards sustainability. Third, taking into account the first two goals, it should allow room for budgetary manoeuvre, considering in particular the needs for public investment. The code of conduct 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 3% of GDP deficit reference value. Member States are free to set an MTO that is more demanding than strictly required by these provisions.

The MTO is defined in structural terms, i.e. it is adjusted for the cycle and one-off and other temporary measures are excluded. For countries belonging to the euro area or participating in the exchange-rate mechanism (ERM II), the MTO should be in a range between a deficit of 1% of GDP and balance or surplus (in structural terms).

Table 7: Output gaps and cyclically-adjusted and structural balances

(% of GDP)	2005		2006		2007		2008		2009	2010	Change: 2010-2006
	COM	CP[1]	COM	CP[1]	COM	CP[1]	COM	CP[1]	CP[1]	CP[1]	CP[1]
Gen. gov't balance	4.0	4.0	3.2	3.1	3.3	2.8	3.2	2.5	1.8	1.2	-1.9
One-offs[2]	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	-
Output gap[3]	-0.6	0.3	-0.2	0.9	-0.4	0.9	-0.6	-0.3	-1.3	-2.3	-
CAB[4]	4.4	3.8	3.3	2.5	3.5	2.2	3.6	2.7	2.6	2.7	0.2
change in CAB	1.7	1.6	-1.1	-1.3	0.3	-0.3	0.1	0.5	-0.1	0.1	-
CAPB[4]	6.2	5.6	5.0	4.1	4.9	3.7	4.7	3.6	3.3	3.3	-0.8
Structural balance[5]	4.1	3.5	3.0	2.2	3.2	1.9	3.6	2.7	2.6	2.7	0.5
change in struct. bal.	1.6	1.5	-1.2	-1.4	0.3	-0.3	0.4	0.8	-0.1	0.1	-
Struct. prim. balance[5]	5.9	5.3	4.7	3.8	4.6	3.4	4.7	3.6	3.3	3.3	-0.5

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. See Table 4 above.
[4]CA(P)B = cyclically-adjusted (primary) balance.
[5]Structural (primary) balance = CA(P)B excluding one-off and other temporary measures.

Source:
Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

4.3. Risk assessment

This section discusses the plausibility of the programme's budgetary projections by analysing various risk factors. For the period until 2008, Table 8 compares the detailed revenue and expenditure projections in the Commission services' autumn 2006 forecast, which are derived under a no-policy change scenario, with those in the updated programme.

As noted in Section 3.7.1 risks stemming from the macroeconomic outlook are on the positive side. Expected GDP growth is lower than in the Commission's forecast for 2006 and 2007 and markedly low in 2008-2010 due to the technical assumption of a gradually closing output gap. As a result of these lower growth assumptions, the general government surpluses are also foreseen to be lower than projected by the Commission services for 2007 and 2008 (2.8% of GDP and 2.5% of GDP in the updated, compared with 3.1% of GDP and 3.0% of GDP in the Commission services' 2006 autumn forecast).

Commission services' simulations of the cyclically-adjusted balance under the assumptions of (i) a sustained 0.5 percentage point positive deviation from the real GDP growth projections in the programme over the 2006-2010 period; (ii) trend output based on the HP-filter and (iii) no policy response (notably, the expenditure level is as in the central scenario), indicate that, by 2010, the cyclically-adjusted balance is 1 percentage point of GDP above the central scenario. Hence, in the case of persistently higher real growth, the fiscal room for manoeuvre will be around 1 percentage point of GDP more than in the path targeted in the central scenario.

Table 8: Comparison of budgetary developments and projections

(% of GDP)	**2005[1]**	**2006**		**2007**		**2008**		**2009**	**2010**
		COM	**CP**	**COM**	**CP**	**COM[2]**	**CP**	**CP**	**CP**
Revenues	56.5	54.5	53.5	53.6	52.7	52.6	52.1	51.8	51.7
of which:									
- Taxes & social contributions	47.4	48.6	48.0	48.1	47.5	47.7	46.9	46.6	46.4
- Other (residual)	9.1	5.9	5.5	5.5	5.2	4.9	5.2	5.2	5.3
Expenditure	52.5	51.3	50.4	50.3	49.8	49.4	49.7	50.0	50.6
of which:									
- Primary expenditure	50.6	49.6	48.8	49.0	48.3	48.3	48.8	49.3	50.0
of which:									
Consumption	25.9	25.3	25.5	25.1	25.4	24.9	25.6	25.8	26.0
Transfers other than in kind & subsidies	18.4	18.3	18.1	18.0	18.0	17.6	18.2	18.5	18.9
Gross fixed capital formation	1.8	1.8	1.8	1.6	1.6	1.7	1.6	1.6	1.6
Other (residual)	4.6	4.3	3.3	4.2	3.4	4.0	3.5	3.5	3.4
- Interest expenditure	1.8	1.7	1.6	1.3	1.5	1.1	0.9	0.7	0.6
General government balance (GGB)	4.0	3.2	3.1	3.3	2.8	3.2	2.5	1.8	1.2
Primary balance	5.8	4.9	4.7	4.6	4.3	4.3	3.4	2.5	1.8
One-offs[3]	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
GGB excl. one-offs	3.7	2.9	2.8	3.0	2.5	3.2	2.5	1.8	1.2

Notes:
[1] Commission services' data.
[2] On a no-policy change basis.
[3] One-off and other temporary measures.
Source:
Commission services' autumn 2006 economic forecasts (COM);convergence programme update (CP); Commission services' calculations

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 taxable pension funds. The effect is in the update estimated to reduce the general government balance by 0.5% of GDP in 2007, by 1.3% of GDP in 2008 and by 1.1% of GDP in 2009, showing the high sensitivity of public finances with respect to the interest rate. This analysis is explicit about the underlying assumptions about how revenues and expenditure are projected to react to variations in economic variables.

As already indicated in Section 4.2.2. above, the programme provides sufficient information about the measures underlying the projected budgetary targets, thus supporting the plausibility of the programme targets. The expected budgetary impact of the measures is also spelled out in the programme. Apart from the one-offs linked to the suspension of the Special Pension (SP) scheme described above, the achievement of the budgetary targets does not rely on one-off revenues.

The tax revenue projections embody cautious assumptions about the tax intensity of economic activity. Table 9 shows that the fall in tax-to GDP ratio is larger in the update than foreseen by the Commission services. Moreover, it shows that the apparent elasticities of taxes to GDP are consistently lower in the update. The low tax projections can be explained by very cautious assumptions about the link between personal income taxes and the wage sum. As can be seen in Annex 5, the elasticity of personal income tax with respect to compensation of employees is much lower in the update notably in 2008, than the elasticities assumed by the Commission services' and the ex ante elasticities provided by the OECD. The high revenues in 2005, 2006, and 2007, which to a varying degree are due to the pension yield tax and the oil and gas activities in the North Sea, are only considered as temporary effects that will wane in the following years as interest rates rise and oil prices fall. Future tax revenues are also affected by the low technical GDP growth projections that appear markedly cautious.

Table 9: Assessment of tax projections

	2007			2008			2009	2010
	CP	COM	OECD[3]	CP	COM[1]	OECD[3]	CP	CP
Change in tax-to-GDP ratio (total taxes)	-0.5	-0.3	0.0	-0.6	-0.4	0.0	-0.3	-0.2
Difference (CP – COM)	-0.2		/	-0.2		/	/	/
Of which[2]:								
- discretionary and elasticity component	-0.2		/	-0.9		/	/	/
- composition component	0.0		/	0.6		/	/	/
Difference (COM - OECD)	/	-0.3		/	-0.4		/	/
Of which[2]*:*								
- discretionary and elasticity component	/	-0.5		/	-0.2		/	/
- composition component	/	0.3		/	-0.3		/	/
p.m.: Elasticity to GDP	0.7	0.9	1.0	0.6	0.8	1.0	0.8	0.8

Notes:
[1]On a no-policy change basis.
[2]The decomposition is explained in Annex 5.
[3] Based on OECD ex-ante elasticity relative to GDP.

Source:
Commission services' autumn 2006 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)

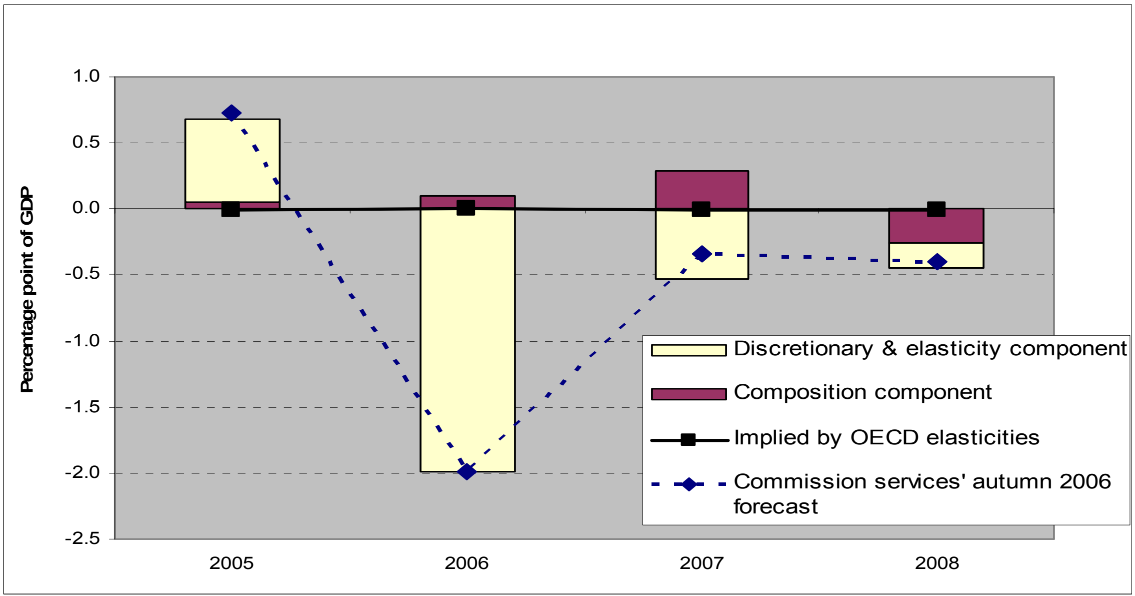
In this year's update the target for annual real consumption growth is set as 1% over the programme period, compared with the ½% target of the previous update. This increase is a consequence of the "Welfare Agreement", which allocates additional resources to strengthen research, education and innovation, as well as health care and social services.

This is possible as the agreement improves long-term sustainability and provides more room for manoeuvre in the medium term. As can be seen from Table 10, the government has demonstrated a mixed track record with regard to meeting its real consumption growth targets in the past (cf. Section 6). For 2007 the government has already announced that, on the basis of the agreement on the budget for 2007, public consumption spending is foreseen to increase by 1¼%.

Nevertheless, Denmark's overall track record when it comes to respecting its overall budgetary targets is by and large very good. From Figure 7 (cf. Section 2.4) it can be seen that targets have been set in a rather consistent manner in the successive versions of the convergence programme, often implying gradual upward revisions of the projected budgetary surpluses. Divergences between actual outcomes and targets can generally be explained by the economic cycle and, in years with good results, also by favourable oil prices and interest rate developments that increase revenue from the pension yield tax.

Overall, the balance of risks attached to the budgetary targets in the programme appears to be on the positive side. In particular, GDP growth may be higher than expected, notably in 2008, 2009 and 2010, mainly due to the technically assumed low GDP growth for these years. Oil prices that remain at a high level would also contribute to higher surpluses. This would normally imply higher revenues than planned. On the negative side and considering the past track record, real public consumption expenditure growth could be higher than targeted.

Figure 8: Changes in the tax-to-GDP ratio:
actual/projected changes vs. changes implied by OECD elasticity



Note:
The dashed line displays the change in the tax ratio in the Commission services' autumn 2006 forecast, for 2008, on a no-policy-change basis. The solid line shows the change in the tax ratio implied by the ex-ante OECD elasticity with respect to GDP. The difference between the two is explained by the bars. The composition component captures the effect of differences in the composition of aggregate demand (more tax rich or more tax poor components). The discretionary and elasticity component captures the effect of discretionary fiscal policy measures as well as variations of the yield of the tax system that may result from factors such as time lags, variations of taxable income that do not necessarily move in line with GDP e.g. capital gains. Both components may not add up to the total difference because of a residual component, which is generally small. The decomposition is explained in detail in Annex 5.

Source:
Commission services

Table 10: Experience of public consumption growth targets

	2001	2002	2003	2004	2005	2006
Real public consumption growth (%)						
Target	1.0	1.0	1.0	0.7	0.5	**0.5**
Outcome	2.2	2.1	0.2	1.5	1.3	1.2
Deviation (outcome minus target; %)	1.2	1.1	-0.8	0.8	0.8	**0.7**

Note:
The targets are the ones set in the CP update of the previous year.
Source:
Successive convergence programmes; Commission services' autumn 2006 economic forecasts; Commission services' calculations.

4.4. Assessment of the fiscal stance and budgetary strategy

The table below offers a summary assessment of the country's position relative to the budgetary requirements laid down in the Stability and Growth Pact. In order to highlight the role of the preceding analysis of the risks that are attached to the budgetary targets presented in the programme, this assessment is done in two stages: first, a preliminary assessment on the basis of the targets taken at face value is made (middle column) and, second, the final assessment that also takes into account risks (final column).

Table 11: Overview of compliance with the Stability and Growth Pact

	Based on programme[3] (with targets taken at face value)	**Assessment** (taking into account risks to targets)
a. Safety margin against breaching 3% of GDP deficit limit[1]	throughout programme period	throughout programme period
b. Achievement of the MTO	throughout programme period	throughout programme period
c. Fiscal stance in line with Pact[2]?	fully in line	fully in line

Notes:
[1]The risk of breaching the 3% of GDP deficit threshold with normal cyclical fluctuations, i.e. the existence of a safety margin, is assessed by comparing the cyclically-adjusted balance with the above mentioned minimum benchmark (estimated as a deficit of around 0.5% of GDP for Denmark). These benchmarks represent estimates and as such need to be interpreted with caution.
[2]According to the Stability and Growth Pact, countries which have already achieved their MTO should avoid pro-cyclical fiscal policies in "good times".
[3] Targets in structural terms as recalculated by Commission services on the basis of the information in the programme.
Source:
Commission services

Based on the programme Denmark satisfies the requirements of the Stability and Growth Pact, by providing a safety margin against breaching the 3% of GDP deficit limit and achieving its MTO throughout the programme period. The fiscal stance is also in line with the Stability and Growth Pact in the sense that it is not pro-cyclical in good economic times. The Commission services' assessment, which takes into account the upside risks to the budgetary targets (in particular that the budgetary outcomes for 2008-2010 could be better than expected in the update), confirms the preliminary assessment. The fiscal stance is also in line with the Stability and Growth Pact in the sense that is not pro-cyclical in good economic times in 2007, when appropriate account is taken of a moderation in revenues from oil and gas exploitation that has been exceptionally high in recent years. This is important considering the cyclical position of the economy and that Denmark currently is to be considered to be in economic relatively good times, based on an output gap that have been diminishing and is close to zero, GDP growth above or close to potential; historically low unemployment; and a high rate of capital utilization (see section 3.7.2 above). As swings in certain revenues, notably oil revenues and revenue from the pension yield tax, complicate the interpretation of conventionally calculated cyclically-adjusted balances, the stance of fiscal policy has to be interpreted with care also over the remainder of the programme period. Considering the estimated rather small changes in the cyclically-adjusted balance by the Commission, the fiscal stance therefore appears relatively neutral towards 2010.

5. GOVERNMENT DEBT AND LONG-TERM SUSTAINABILITY

Government debt is the result of the financing needs of government over the years. It corresponds primarily to an accumulation of deficits, although the build-up of financial assets and other adjustments may also play a role.[15] The reform of the Stability and Growth Pact has raised attention to the crucial importance of government debt and of sustainability in fiscal surveillance.

This section is in two parts: a first part describes recent developments and the medium-term prospects for government gross debt; it describes the convergence programme targets, compares them with the Commission services' forecasts and assesses the associated risks. A second part looks into the government debt from a longer-term perspective with the aim of assessing the long-term sustainability of public finances.

5.1. Recent debt developments and medium-term prospects

5.1.1. Debt projections in the programme

As can be seen from Figure 9 and Table 12, the gross debt ratio is already well under the Treaty reference level and according to the update should fall further, from 29.8% of GDP in 2006 to 25.8% in 2007 and to 22.7% in 2008, overall in line with the Commission services' autumn 2006 forecast.[16] The gross debt ratio was about 65% in 1997 and fell sharply until 2001 and again from 2004. Over the programme horizon, the consolidated gross debt is expected to continue falling to 19% 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 2005 to 2010 the debt ratio is projected to fall by some 18 percentage points of GDP, due mainly to large primary surpluses and to the impact of nominal GDP growth. Interest expenditure and the stock-flow adjustment, by contrast, will decelerate the reduction in the debt ratio. Although the programme provides no details, one may presume on the basis of recent trends that the positive

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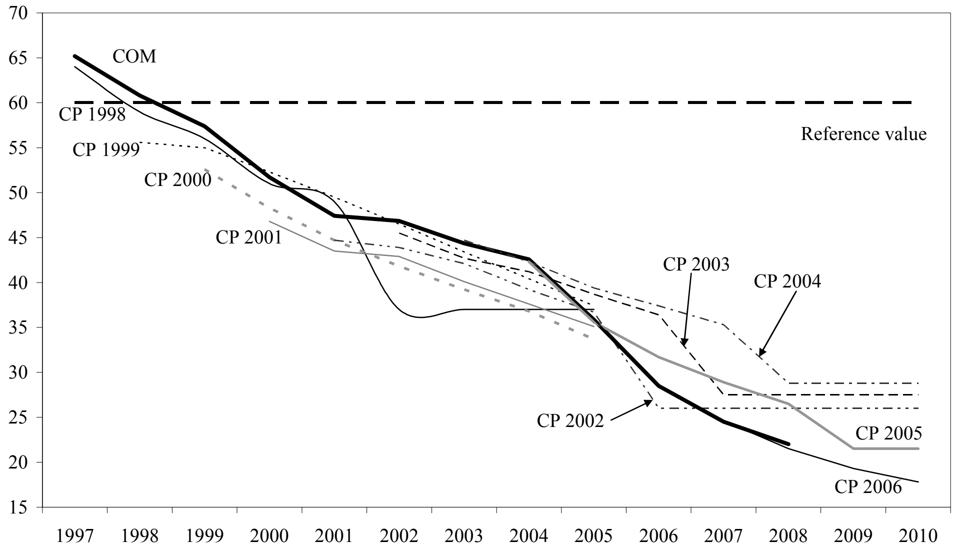
[15] On the factors other than the deficit which explain the evolution of the government debt, see "The dynamics of government debt: decomposing the stock-flow adjustment", chapter II.2.2 of *Public Finances in EMU 2005*, European Economy, N°3/2005.

[16] Debt projections quoted in the text already include the impact of the Eurostat decision of 2 March 2004 (see Eurostat News Releases No 30/2004) as regards the classification of funded pension schemes outside the general government. Excluding the impact of this decision the government debt ratio would be adjusted downwards by around 1¼ % of GDP each year.

stock-flow adjustment is mainly due to the accumulation of financial assets by social security, mainly quoted securities. In parallel to this reduction in gross debt, net debt is also being reduced and is anticipated to be close to zero in 2007/2008. In the following years a small net asset position is built up in preparation of a subsequent increase in age-related expenditure.

Figure 9: Debt projections in successive convergence programmes (% of GDP)



Note:
Including the second-pillar pension scheme (ATP).

Source:
Commission services' autumn 2006 forecast (COM) and successive convergence programmes.

Figure 9 shows that projections for debt reduction in the successive updates of the convergence programme in general have been in line with the actual outcomes. Debt reduction targets for 2005 and 2006 were plausible already in the CP 2000, 2001 and 2002, while projections more recently, as from 2003, have tended to underestimate the speed of actual debt reduction due to stronger general government surpluses.

5.1.2. Assessment

For 2007 and 2008, the development of the debt ratio foreseen in the update is roughly in line with that of the Commission’s autumn 2006 forecast. For 2008, the slightly higher debt ratio in the Commission’s forecast is because of a marginally smaller primary surplus and larger stock-flow adjustments.

Table 12: Debt dynamics

(% of GDP)	average 2000-04	2005	2006		2007		2008		2009	2010
			COM	CP	COM	CP	COM	CP	CP	CP
Gross debt ratio[1]	**43.7**	**36.2**	**29.7**	**29.8**	**25.7**	**25.8**	**23.2**	**22.7**	**20.5**	**19.0**
Change in the ratio	-2.6	-7.5	-6.5	-6.4	-4.0	-4.0	-2.5	-3.1	-2.2	-1.5
Contributions[2]:										
Primary balance	-4.8	-6.7	-4.8	-5.6	-4.6	-5.3	-4.3	-4.4	-3.5	-2.8
"Snow-ball" effect	1.1	-0.6	-0.4	-0.2	0.0	0.3	0.0	0.1	0.0	0.0
Of which:										
Interest expenditure	3.0	1.8	1.7	1.6	1.3	1.5	1.1	0.9	0.7	0.6
Growth effect	-0.7	-1.2	-1.0	-0.9	-0.7	-0.6	-0.6	-0.2	-0.2	-0.1
Inflation effect	-1.2	-1.2	-1.1	-0.8	-0.7	-0.7	-0.6	-0.6	-0.5	-0.5
Stock-flow adjustment	1.2	0.6	-1.2	-0.6	0.6	1.0	1.8	1.2	1.3	1.3
Of which:										
Cash/accruals diff.	-0.9	-1.4								
Acc. financial assets	2.2	2.1								
Privatisation	0.0	-0.1								
Val. effect & residual	-0.1	-0.1								
p.m.: Debt ratio incl. second-pillar pension scheme[3]	42.6	35.9	28.5	28.6	24.5	24.6	22.0	21.5	19.3	17.8

Notes:

[1]End of period.

[2]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 (in the table, the latter is decomposed into the growth effect, capturing real GDP growth, and the inflation effect, measured by the GDP deflator). The term in parentheses represents the "snow-ball" effect. The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.

[3]This shows general government gross debt before the implementation of 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 2006 economic forecasts (COM); Commission services' calculations

5.2. Long-term debt projections and the sustainability of public finances

The issue of long-term sustainability is a multi-faceted one. It involves avoiding imposing an excessive burden on future generations and ensuring the country's capacity to appropriately adjust budgetary policy in the medium and long run.[17]

Debt sustainability is derived from the government's *intertemporal budget constraint*. It imposes that current total liabilities of the government, i.e. the current public debt and the discounted value of future expenditure including the budgetary impact of ageing populations, should be covered by the discounted value of future government revenue. If current policies ensure that the intertemporal budget constraint is fulfilled, current policies are sustainable.

The approach adopted by the Commission services and the Ageing Working Group of the Economic Policy Committee (EPC) is to project the debt, and to calculate the associated sustainability indicators (See Box 5), on the basis of two different scenarios.

[17] For a detailed analysis of long-term sustainability issues, see "The Long Term Sustainability of Public Finances – A report by the Commission services", European Economy n°4/2006, published in October 2006 (hereinafter Sustainability Report).

The first scenario assumes that the structural primary balance will remain unchanged from 2006 through 2010, the final year of the convergence programme; it is called the "2006 scenario". Debt projections in this scenario start in 2007. The second scenario assumes that the macroeconomic and budgetary plans until 2010 provided in the convergence programme will be fully respected. This is the "programme scenario". Debt and primary balance projections in this scenario start in 2011. Both projections assume zero stock-flow adjustments. In addition to this quantitative analysis, other relevant factors are taken into account which allows to better qualify the assessment with regard to where the main risks are likely to stem from and to reach an overall assessment.

5.2.1. Sustainability indicators and long-term debt projections

Table 13 shows the evolution of government spending on pensions, healthcare, long-term care for the elderly, education and unemployment benefits according to the EPC's projections[18]. Non age-related primary expenditure and revenue are assumed to remain constant as a share of GDP.

Table 13: Long-term age-related expenditure: main projections

(% of GDP)	2004	2010	2020	2030	2040	2050	changes
Total age-related spending	26.8	27.0	28.6	30.8	32.1	31.6	4.8
Pensions	9.5	10.1	11.3	12.8	13.5	12.8	3.3
Healthcare	6.9	7.0	7.4	7.7	7.8	7.8	1.0
Long-term care	1.1	1.1	1.2	1.7	2.0	2.2	1.1
Education	7.8	7.5	7.5	7.3	7.6	7.5	-0.3
Unemployment benefits	1.5	1.2	1.2	1.2	1.2	1.2	-0.3

Note:
The convergence programme includes long-term projections which point to a much lower increase in age-related expenditure, see Section 5.2.2 and Section 6 on the implications of the recent Welfare Agreement.
Source: Economic Policy Committee and Commission services.

The projected increase in age-related spending in Denmark is above the average of the EU, rising by 4.8 percentage points of GDP between 2004 and 2050. This is particularly due to the expenditure on pensions in Denmark, projected to increase by 3.3% of GDP. The increase in health-care expenditure is projected to be 1.0 percentage point of GDP, lower than the EU average. For long-term care, the projected increase of 1.1 percentage points of GDP up to 2050 is above the average in the EU.

Based on the long-term budgetary projections, sustainability indicators can be calculated.

Table 14: Sustainability indicators and the required primary balance

[18] These assumptions cover labour productivity growth, real GDP growth, participation rates, unemployment rate, demographic developments, government spending in pensions, healthcare, long-term care for the elderly, education and unemployment benefits. See Economic Policy Committee and European Commission (DG ECFIN) (2006), "The impact of ageing on public expenditure: projections for the EU25 Member States on pensions, health-care, long-term care, education and unemployment transfers (2004-2050)", European Economy, Special Report No 1.(hereinafter Ageing Report).

	2006 scenario			Programme scenario		
	S1	S2	RPB	S1	S2	RPB
Value	-1.4	0.3	3.6	-0.9	0.8	3.6
of which:						
Initial budgetary position	-3.6	-3.6	-	-3.1	-3.1	-
Debt requirement in 2050	-0.8	-	-	-0.8	-	-
Future changes in budgetary position	3.0	3.9	-	3.0	3.9	-
Source: Commission services.						

Table 14 shows the sustainability indicators for the two scenarios. In the "2006 scenario", the sustainability gap (S1) that ensures reaching the debt ratio of 60% of GDP by 2050 is -1.4% of GDP. The sustainability gap (S2) which satisfies the intertemporal budget constraint is 0.3% of GDP. Compared with the results of the Commission's Sustainability Report, the sustainability gaps are larger in the present assessment, by around 2½ percentage points of GDP. This is mainly due to a lower estimated structural primary balance in 2006 (3.8% of GDP) compared with the structural primary balance in 2005 estimated in spring 2006 (6.2% of GDP), which was that used in the Sustainability Report.[19] Indeed, Denmark's budget surplus was exceptionally high in 2005.[20]

The strong initial budgetary position almost offsets the impact of the increase in age-related expenditure up to 2050, though the long-term budgetary impact of ageing is relatively high. The programme plans an improvement of the structural balance of 0.6 percentage points of GDP between 2006 and 2010. However, the budgetary plans in the programme imply a slight reduction of the structural primary balance, of around 0.5 percentage points of GDP, between 2006 and 2010, as government debt is planned to be reduced considerably over the medium-term and interest payments are therefore expected to fall significantly (see section 5.1.1 for further details). The estimated reduction in the structural primary balance over the programme period, though limited, has a negative impact on the sustainability gaps of the "programme scenario" showing the importance of maintaining a strong structural budgetary position to contain risks to the sustainability of public finances[21]. Nevertheless, the sustainability gap remain very small in the "programme scenario". According to both sustainability gaps, the long-term budgetary impact of ageing is relatively high.

[19] Both figures include the revenue- and surplus-reducing impact of classifying funded defined-contribution pension schemes outside the general government sector.

[20] The Sustainability Report noted that according to the Danish authorities, temporarily high pension yield tax contribute with 1.2% of GDP, corporate tax by 0.5% of GDP and North Sea revenue by 0.3% of GDP, totalling 2% of GDP in 2005.

[21] Given that the sustainability gaps are small for Denmark, the cost of a five-year delay in adjusting the budgetary position according to the S1 and S2 is negligible.

Box 5 – Sustainability indicators*

- The **sustainability gap S1** shows the permanent budgetary adjustment (often presented as an increase in the tax burden**) required to reach a debt ratio in 2050 of 60% of GDP.
- The **sustainability gap S2**, shows the permanent budgetary adjustment that guarantees the respect of the intertemporal budget constraint of the government. In order to estimate S2, the revenue and expenditure ratios (age-related and non age-related) after 2050 are assumed to remain constant at the 2050 level.
- The sustainability indicators can be decomposed into the***: (i) **Initial Budgetary Position (IBP)**; and, (ii) **Long-Term Change in the budgetary position (LTC)**;
- In addition, the **required primary balance (RPB)** can be derived from the S2 indicator. It measures the average primary balance over the first five years after the programme horizon (i.e. 2011-2015) that results from a permanent budgetary adjustment carried out to comply fully with the S2 indicator.

Summarizing the sustainability indicators

	Impact of		
	Initial budgetary position		**Long-term changes in the primary balance**
S1*=**	Gap to the debt-stabilizing primary balance	+	Additional adjustment required to finance the increase in public expenditure *up to 2050*
S2=	Gap to the debt-stabilizing primary balance	+	Additional adjustment required to finance the increase in public expenditure *over an infinite horizon*

* For a complete description of the sustainability indicators, see Annex I of the "The Long Term Sustainability of Public Finances – A report by the Commission services", European Economy n°4/2006, published in October 2006.

** Although the sustainability gap indicators (S1, S2) are usually defined as differences between revenue ratios, this does not mean that countries are asked to increase taxes to reach sustainability. There are several ways to ensure sustainability and governments typically choose a combination of budget consolidation over the medium term (either through expenditure reduction and/or tax hikes) and the implementation of structural reforms aiming at curbing long-term public spending (e.g. pension reforms).

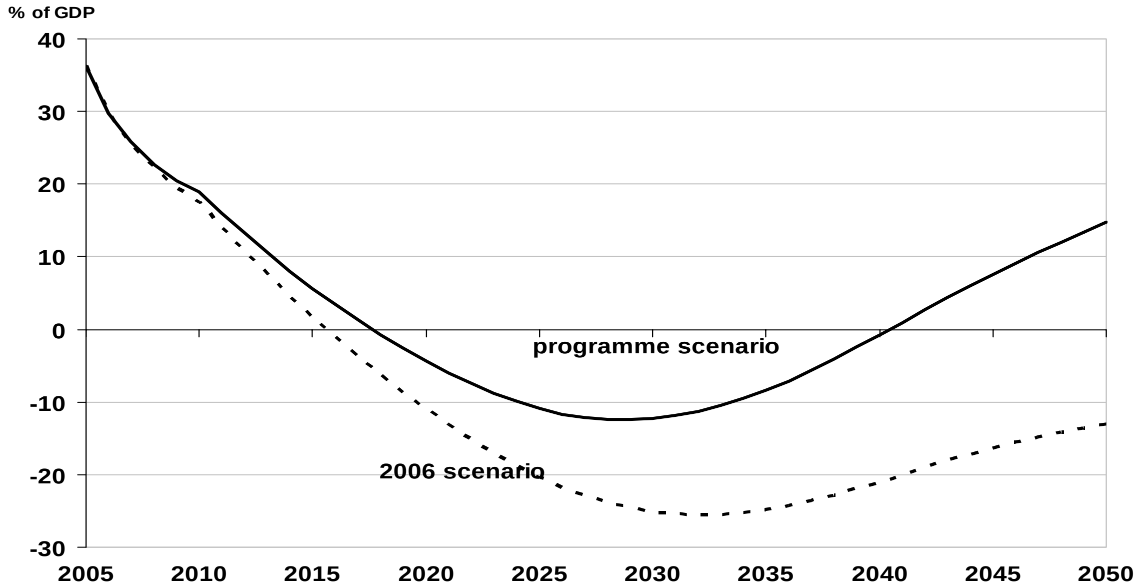
*** Moreover, in the case of S1, the decomposition also separates the impact of the debt position (60% of GDP in 2050); the debt requirement in 2050 (DR). In particular, if the current debt/GDP ratio is below 60% of GDP debt is allowed to rise and this component reduces the sustainability gap as measured by the S1 indicator, and vice versa.

In line with a very small sustainability gap S2, the required primary balance (RPB, of 3½% of GDP, is very close to the structural primary balance in the last year of the programme's period.

Another way to look at the prospects for long-term public finance sustainability is to project the debt/GDP ratio over the long-term using the same assumptions as for the calculations of S1 and S2. The long-term projections for government debt under the two scenarios are shown in Figure 10.

The gross debt ratio is currently below the 60% of GDP reference value, estimated in the programme at close to 30% of GDP in 2006. According to the "2006 scenario", the debt ratio is projected to decrease and remain very low throughout the period up to 2050. A similar picture emerges in the "programme scenario", since the budgetary position in 2010 is rather close to the one in 2006[22].

Figure 10: Long-term projections for the government debt ratio



Note:
The government debt ratio is usually compiled in gross terms, that is assets are not netted out from government liabilities. Therefore, the gross debt can never be negative. In this figure, the negative values for the debt ratio should be understood as accumulation of financial assets. The issue has no implications on the conclusions drawn from the sustainability assessment.

Source:
Commission services.

5.2.2. Additional factors

To reach an overall assessment of the sustainability of public finances, other relevant issues are taken into account which in addition allow to better qualify the assessment with regard to where the main risks are likely to stem from.

First, the long-term age-related expenditure projections in the convergence programme are not the same as those of the EPC and are not based on the underlying assumptions commonly agreed and used by the EPC.[23] These national projections are therefore not directly comparable with the common long-term projections. Moreover, they include the estimated impact over the long-term of a reform package, the "Welfare Agreement", aimed at reducing the budgetary challenge posed by an ageing population. Notably this strategy is foreseen to delay retirement and extend working life by gradually increasing the pension ages and indexing the pension age to changes to life expectancy. The total net effect on public finances of the agreement over the long-term is estimated in the programme to be 2.2% of GDP.[24] Overall, the increase in age-related expenditure in the

[22] It should be recalled, however, that being a mechanical, partial-equilibrium analysis, the long-term debt projections are bound to show highly accentuated profiles. As a consequence, the projected evolution of debt levels should not be seen as a forecast similar to the Commission services' short-term forecasts, but as an indication of the risks faced by Member States.

[23] See the Ageing Report.

programme between 2010 and 2050 is projected to be 1.4 percentage points of GDP, compared with 4.6% points of GDP in the EPC projections.

Second, according to the convergence programme, revenues related to the net pension payouts (taxes on pensions) are projected to increase by 2.8% points of GDP over the 2010-2050 period.[25] This is chiefly due to a relative increase of pensions (which are taxable) in relation to contributions to pension schemes (which are tax-exempt). In contrast, property income is projected to decrease by 1% point of GDP over the same period, including the impact of natural resources being depleted over time. The overall change in the government revenue/GDP ratio is estimated to be -0.2% points of GDP between 2010 and 2050 in the programme and would therefore have a very limited impact on public finance sustainability prospects.

Third, Denmark has one of the highest levels of taxation in the EU, suggesting that there is limited room for manoeuvre to meet expenditure increases by adjusting the budget on the revenue side. In fact, the aim of the tax-freeze is to reduce the tax-to-GDP ratio over time.

5.2.3. Assessment

The long-term budgetary impact of ageing in Denmark is higher than on average in the EU; influenced notably by a relatively high increase in pension expenditure as a share of GDP over the coming decades. However, the "Welfare Agreement" package adopted in June 2006, should contribute to curbing the long-term expenditure trends and improve the sustainability of public finances. Moreover, the initial budgetary position with a large structural surplus contributes significantly to ease the long-term budgetary impact of ageing. Maintaining high primary surpluses over the medium term will contribute to reducing risks to the sustainability of public finances.

Taking into account these developments, Denmark appears to be at low risk with regard to the sustainability of public finances.

6. STRUCTURAL REFORM, THE QUALITY OF PUBLIC FINANCES AND INSTITUTIONAL FEATURES

The 2005 update announced that a revised medium-term plan was to be presented in 2006 containing concrete targets for employment and public finances, based on the recommendations of the government-appointed "Welfare Commission" and of the "Globalisation Council". In line with this announcement, the main political parties represented in the Danish Parliament entered a "Welfare Agreement" in June 2006.

As shown in Box 6**,** this agreement includes a wide range of measures aimed first of all at increasing labour supply in the long term and ensuring sustainable public finances.

[24] The gross impact of the Welfare Agreement is 2.7% of GDP, to which the pension reforms contribute with 2.3 % of GDP and other reforms with 0.4% of GDP. Of these gross savings, 0.5% of GDP will be used to finance a Globalisation Fund that will invest in research and development (see also section 6 of this assessment)

[25] See Chapter IV.3 in the Commission's Sustainability Report.

In the medium term, however, the new strategy presented in the update does not imply an improved public finance outlook, rather the opposite appears to be the true. While the 2005 update based its medium-term growth and deficit projections upon a rise in employment by up to 50,000 persons (or almost 2% of the labour force) by 2010 due to non-specified structural initiatives, the new update only envisages an increase by 13,000 from specified measures of the Welfare Agreement (cf. Table A1.1 of the update. The overall projected increase in employment is significantly higher than earlier envisaged, but the effects on labour supply will come much later than earlier envisaged. As a consequence, the actual budget surplus now declines by 1.9 percentage points of GDP between 2006 and 2010, while in the 2005 scenario there would only have been a decline in the surplus by 0.2 percentage points during the same period. However, the cyclical position also differs as compared with the 2005 update (including for 2006), which also contributes to lower surpluses.

Box 6: The Welfare Agreement

In June 2006, the Danish government entered the "Agreement on Future Prosperity, Welfare and Investments in the Future" (the "Welfare Agreement"), which aims at ensuring long-term fiscal sustainability in view of the ageing of the population. The package was, among other things, based on the analysis presented by the Welfare Commission, an independent commission appointed by the Government, in December 2005 and was the outcome of political negotiations within the parliament. The package was agreed by a broad majority of the political parties in the parliament, representing about 85% of the votes.

The reforms in the welfare package pertain to the following five areas and include the following main measures;

- Later retirement: The public pension age will be increased by 2 years (from 65 to 67 years), to be implemented between 2024 and 2027. The early retirement age will also be increased by 2 years (from 60 to 62 years), to be implemented between 2019 and 2022. In addition, the age limits in the pension system will be indexed to changes in life expectancy as from 2025.

- Earlier completion of tertiary education: Young people that start tertiary education no later than two years after their qualifying examination will benefit from easier access to the studies. The possibilities for quicker re-examination will be improved and stricter deadlines for completing the thesis will be implemented. Moreover, the educational support to students will be improved by enhancing the guidance offered.

- Strengthened efforts to reduce unemployment: The role of the unemployment insurance agencies will be strengthened and a new model for job matching, focusing on better follow-up, will be implemented. A more systematic and regular assessment of ability-to-work will also take place. Moreover, those unemployed will have to search for jobs more actively and activation of unemployed will both become a right and an obligation after 9 months of unemployment. The duration of benefits for unemployed aged 55 or more is brought in line with the unemployment benefit duration for other age groups.

- Promoting higher employment among immigrants: The measures include targeted wage subsidies; a new agreement between employers, trade unions and central/local governments to strengthen integration in the labour market; and partnerships with individual employers to promote the hiring and training of immigrants.

- Investment in the future: The measures include the right to secondary education for all; more young people with tertiary education; life-long learning; and other investments in education and research, innovation and entrepreneurship. The ambition is that at least 95% of young people should complete secondary education and at least 50% should complete tertiary education by 2015. Furthermore, public research grants are to reach 1% of GDP in 2010 (financed from the Globalisation Fund).

As for the effects of the package, the government estimates that the proposals will raise employment by 105,000 persons by 2025 and in total by 190,000 persons in 2040, of which three-quarters is expected from later retirement and the remainder from the other measures. In the medium term the effect is foreseen to be more limited and the labour market reforms are estimated to translate in an increase of about 13,000 jobs until 2010 and to reduce unemployment by a half-percentage point.

The long-term net impact on the sustainability of public finances is foreseen to amount to an improvement of about 2¼ % of GDP in total measured in sustainability terms. The effect of later retirement is expected to correspond to an improvement of 2¼ % of GDP and the other measures are estimated to strengthen public finances by about ½% of GDP. However, the latter ½% will be used to finance a Globalisation Fund that will invest in research and education to meet the challenges of globalisation.

The reform measures announced in the context of the welfare reform package are generally well-designed and are likely to be effective. Whereas the exact effects are difficult to predict, depending on uncertainty about the assumptions on which the package is based (interest rates, life expectancy, fertility etc.), it is expected to significantly increase labour supply and to create a better balance between the number of years spent actively working and the number of years spent in education and retirement. However, the effects of the package are rather back-loaded and it still remains to be seen whether the measures will be enough to address fully the challenges facing the Danish economy.

In this context, it should also be noted that the measures falls short on a number of recommendations made by the Welfare Commission in its report. Notably, the early retirement scheme has been retained, instead of being abolished altogether. As pointed out by the OECD[26], there are no longer any viable health arguments for maintaining the early retirement scheme, as the general health status of people on early retirement is not worse than for those in the same age group who are still working. Moreover, the period for unemployment benefits was kept unchanged and the focus in the package on activation measures rather than on reducing access to unemployment benefits is expected to have an adverse effect public expenditure. Finally, the issue of reducing labour income taxation was not addressed in the package.

It should also be noted that, while an indexation of the pension age in the pension system is indeed a welcome element, the mechanism would only partly counterbalance the increase in public expenditure due to increased longevity. According to the government's own estimations the mechanism would cover the increase in expenditure relating the pension system, which corresponds to about three-quarters of the total increase, but not the higher expenditure associated with care of the elderly and health care.

The stronger decline in the surplus in the new scenario, however, is not only due to lower revenues from slower (employment) growth from 2008 onwards, but also to slightly higher expenditure in 2007 compared to the 2005 update[27]: The agreement actually foresees a higher annual rise in public consumption from 2007 to 2010 (by 1%) than projected in the previous updates (0.5% per year). In practice, the new target also results

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26 OECD (2006), OECD Economic Surveys – Denmark, Paris, OECD Publishing, ISBN 92-64-02469-7.

27 This is best seen in the two updates' calculations for the Structural Budget Balance (SBB) as calculated by the Danish authorities (Annex Table 5): While the 2005 update still projected a rise in the SBB from 1.1% of GDP in 2006 to 1.7% in 2007, the new update projects a rise by 0.1pp. to 1.5% in 2007 'only'; due to slightly divergent projections for the general government balance and output gaps, calculations based on the Commission's Autumn 2006 Forecast differ in this respect

from the creation of the "Globalisation fund"[28] and the implied spending on education and research (cf. Box 6 point 5) and on labour market initiatives (cf. Box 6 point 4) – measures which are only partially counter-financed by the cut in unemployment benefits for unemployed aged 55 or more (Box 6 point 3).

The targets for the growth of public consumption have not been fully met in the past, due to a lack of mechanisms to efficiently control consumption spending at the level of municipalities and counties, an issue whose importance has for a long time been recognized by the Danish authorities (cf. Section 4.3.).

While first figures on local public finances for 2006 as a whole will only be available in May 2007, the programme's already now foresee a slight overshooting of the new target for public consumption growth by a ¼ percentage point in 2007, again primarily due to local governments. This estimate was confirmed in the Danish official forecast published on 6 December 2006, which also predicts a slight overshooting in 2008, of 0.1 percentage point.

Furthermore, it remains to be seen whether the merger of municipalities and regions[29] will really lead to the expected economies of scale. Given current public discussions, it appears that there is a real possibility that in the case of the merger of two municipalities with different expenditure levels for public services, the merger will lead to a new (merged) municipality with an expenditure ratio similar to the municipality with the higher expenditure ratio, thereby driving overall expenditure up.

As recognized in the update itself, the existing agreement between the central government and the local government parties is "not legally binding and may thus be hard to enforce". It is up to the Danish authorities to devise an efficient mechanism to avoid the overshooting of agreed targets by local and regional administrations.

Box 7: The level and composition of government expenditure in Denmark since 1990

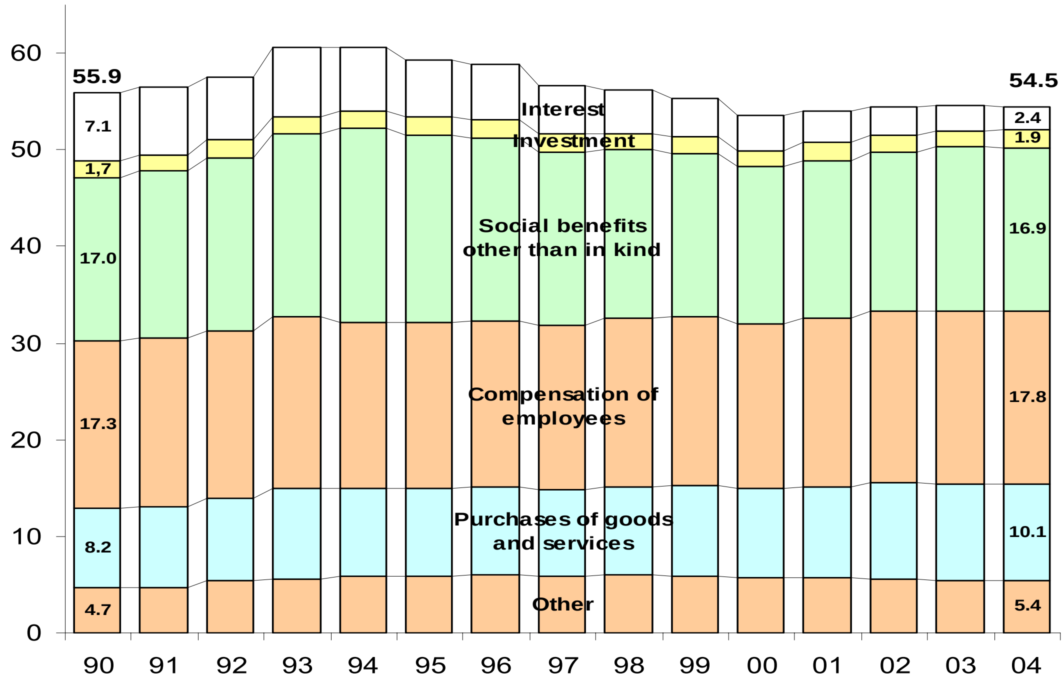
For Denmark, there has been a significant reduction in interest expenditure - in both relative and absolute terms – since 1990. In this context, the fact that the overall expenditure ratio has only declined by slightly more than 1 percentage points of GDP since then implies that most of the savings from interest expenditure has been 'recycled' as primary expenditure. The convergence programme projects an ongoing decline in interest expenditures from 1.8% of GDP in 2005 to 0.6% in 2010, thereby partially 'financing' the reduction in total taxes from 48.6% of GDP in 2005 to 45.4% of GDP in 2010.

Compared with the EU-15, the compensation of employees occupies a much higher share in Denmark than in the 'old' member states on average (10.8% of GDP in 2003), explaining to a very large extent the overall higher expenditure ratio in Denmark than in EU-15 average (47.7% of GDP in 2003).

Figure 11: The evolution of public expenditure (economic classification) (% of GDP)

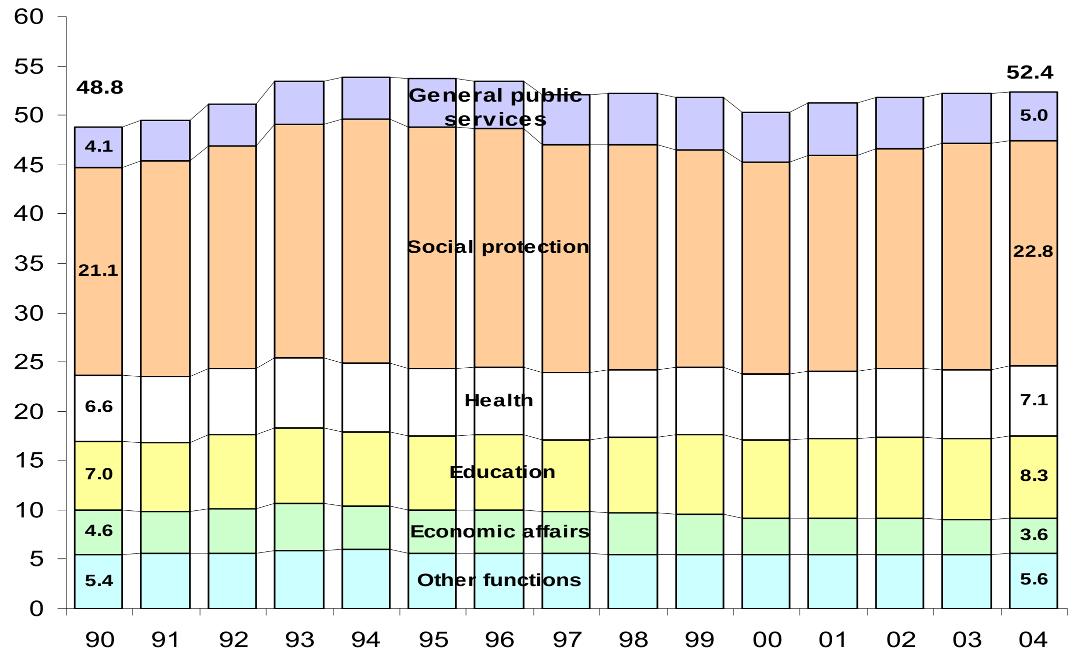
[28] The globalisation-related funding amounts to 2 billion DKK in 2007, increasing to 8 billion in 2010 and 10 billion in 2012

[29] On 1 January 2007 the existing 271 municipalities will be merged into 98 new ones and the 14 counties will be merged into 5 new regions.



Note: "Other" includes subsidies and other current and capital transfers.
Source : Commission services

Figure 12: The evolution of public expenditure (functional classification) (% of GDP)



Note: "Other functions" include general services, defence, environment, culture, public order and housing.
Source : Commission services

Compared to the EU-15 average, Denmark has traditionally a higher expenditure ratio on social protection (EU-15 average for 2003: 19.1% of GDP), health (EU-15: 6.4%) and education (EU-15: 5.3%).

Regarding the quality of service in these areas, it seems that in particular in education Denmark is one of the countries within the OECD with the highest spending, while the quality of output seems to be relatively low (cf. OECD, 2006, "Going for growth", p.56).

7. CONSISTENCY WITH THE NATIONAL REFORM PROGRAMME AND WITH THE BROAD ECONOMIC POLICY GUIDELINES

The "First Progress Report on Denmarks's National Reform Programme" ("Implementation Report") emphasizes that the "general purpose of the (welfare) reforms is to ensure the long-term fiscal sustainability". As can be deducted from Box 8, the implementation report presents a broad-based and relatively detailed strategy to reach that target (cf. also Section 5.2. on sustainability).

The measures presented in the updated convergence programme are in line with the actions foreseen in the Implementation Report in the context of the Strategy for Growth and Jobs. In contrast with the implementation report, however, the convergence programme provides systematic information on the direct budgetary costs and savings associated with the "Welfare Agreement".

Box 8: The Commission assessment of the implementation report of the National Reform Programme

The implementation report of the National Reform Programme of Denmark, provided in the context of the renewed Lisbon strategy for growth and jobs, was submitted on 16 October 2006. The Commission's assessment of this report, which was adopted on 12 December 2006 as part of its Annual Progress Report, can be summarised as follows:

Denmark is making very good progress in the implementation of its National Reform Programme, which as priorities identified: ensuring fiscal sustainability; improving competition in certain sectors; enhancing public sector efficiency; developing the knowledge society; securing environmental sustainability and energy; encouraging entrepreneurship; and increasing the labour supply. and the 2006 Spring European Council conclusions. Denmark has with the June 2006 "Welfare Agreement" further strengthened its reform strategy in terms both of macro-economic and employment policy and has made very good progress in reaching a national consensus on reforms. Denmark has also made progress on micro-economic policies, including in the area of competition.

Among the strengths of the Danish National Reform Programme and its implementation are: the comprehensive, integrated nature of the reform strategy, which is a benchmark for other Member States; the combination of a medium and long-term approach, reinforced by consistently taking into account stakeholder input; the "flexicurity" based approach to the labour market; the overall macro-economic strategy aimed at long-term fiscal sustainability, including expenditure discipline, fiscal surpluses and a rapid reduction of government debt; and the sound measures aimed at increasing labour supply in the long term, in particular the agreement to defer early retirement.

It will be important for Denmark over the period of the National Reform Programme to focus on: measures aimed at increasing labour supply over the medium term, up until 2015, including further initiatives to improve incentives to work and additional steps to integrate older workers and immigrants into the labour market; following through proposed reforms in competition law and ensuring that new competition powers are vigorously exercised by the relevant authorities; additional measures in energy interconnection supply, in order to improve the functioning of the electricity and gas markets; identifying further emission reduction policies and measures;

reinforcing existing well-targeted measures to improve primary and secondary education and increase the number of students finalising upper-secondary or tertiary education, as these may not be sufficient to reach the ambitious targets set.

Structural unemployment is projected to continue its decline from a rate of 6.5% in 2000 and 5.5% in 2005 to 4.5% in 2010, due to the newly introduced labour market measures in the framework of the "Welfare Agreement" and other measures taken earlier. In the long-term the country's growth potential should in particular benefit from better training and education, not least as a consequence of the establishment of the Globalisation Fund.

Regarding the broad economic policy guidelines, the table below provides an overview of whether the strategy and policy measures in the programme are broadly consistent with these guidelines in the area of public finances (which are included in the integrated guidelines for the period 2005-2008).

Overall, the budgetary strategy in the convergence programme is consistent with the broad economic policy guidelines. Not only does Denmark respects its MTO, but the recently agreed measures will further strengthen fiscal sustainability in the long-term and further promote a growth- and employment oriented allocation of resources.

Table 15: Consistency with the broad economic policy guidelines

Broad economic policy guidelines	Yes	Steps in right direction	No	Not applicable
1. To secure economic stability				
a. 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			
b. Member States should avoid pro-cyclical fiscal policies[2].	X			
c. Member States in excessive deficit should take effective action in order to ensure a prompt correction of excessive deficits[3].				X
d. 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 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 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

Broad economic policy guidelines	Yes	Steps in right direction	No	Not applicable
procedure. *Source:* *Commission services*				

* * *

Annex 1: Glossary

Automatic stabilisers Various features of the tax and spending regime which tend to have a dampening effect on economic fluctuations without requiring a discretionary intervention of the fiscal authorities. As a result, the budget balance in percent of GDP tends to improve in years of high growth and deteriorate during economic slowdowns. See also *cyclically-adjusted balance*, *structural balance* and *minimum benchmark*.

Broad economic policy guidelines (BEPGs) Guidelines for the economic and budgetary policies of the Member States. Together with the Employment Guidelines, they form the Integrated Guidelines, prepared by the Commission and adopted by the Council of Ministers responsible for Economic and Financial Affairs (ECOFIN). See also *Lisbon strategy*.

Budget balance The balance between total public revenue and expenditure (according to *ESA95*); with a positive balance indicating a surplus (also know as *government net lending*) and a negative balance indicating a deficit (also known as *government net borrowing*). For the monitoring of Member States' budgetary positions, the EU uses *general government* aggregates. See also *cyclically-adjusted balance*, *primary balance, structural balance* and *reference values*.

Budget constraint A basic condition applying to the public finances, according to which total public expenditure in any one year must be financed by taxation, borrowing or changes in the monetary base; the latter is prohibited in the EU. See also *stock-flow adjustment* and *long-term sustainability*.

Budgetary sensitivity The variation in the *budget balance* brought about by a change in the *output gap*. In the EU, it is estimated to be 0.5 on average, i.e. for any percentage point of GDP below or above potential, the budget-balance-to-GDP ratio deteriorates or improves by half a percentage point. The size of the budgetary sensitivity essentially reflects (i) the revenue and expenditure elasticities of the budget and (ii) the size of discretionary government expenditure. See also *cyclically-adjusted balance, structural balance* and *tax elasticity*.

Code of conduct Policy document adopted by the Economic and Financial Committee (an advisory committee gathering high-level officials from national governments, national central banks, the European Central Bank and the European Commission which prepares the meetings of the Council of Ministers responsible for Economic and Financial Affairs (ECOFIN)) and endorsed by the ECOFIN Council in October 2005, containing specifications on the implementation of the *Stability and Growth Pact* and guidelines on the format and content of *stability programmes* and *convergence programmes*.

Contingent liabilities A possible government obligation to pay, the existence of which will be confirmed by the occurrence of one or more uncertain events in the future not wholly under the control of the government. For instance, government guarantees on debt issued by private or public companies are contingent liabilities since the government obligation to pay depends on the non-ability of the original debtor to honour its obligations. See also *implicit liabilities*.

Convergence programme Medium-term budgetary strategy presented by each Member State that has not yet adopted the euro; updated annually, according to the provisions of the *Stability and Growth Pact*. See also *stability programme, code of conduct* and *medium-term objective*.

Cyclically-adjusted balance The *budget balance* adjusted for its cyclical component (which captures the part of public revenue and expenditure that is linked to the *output gap*), i.e. the budget balance that would prevail if GDP were at its potential level. See also *structural balance, budgetary sensitivity* and *output gap*.

Cyclically-adjusted primary balance The *cyclically-adjusted balance* net of interest expenditure on *general government* debt. See also *interest burden*.

Debt dynamics The evolution of *government debt* as a ratio to GDP; it depends on the primary deficit, the debt-increasing impact of interest payments, the dampening effect of GDP growth on the ratio and the *stock-flow adjustment*.

EDP notification See *notification of deficit and debt*.

ERM II Exchange rate mechanism linking some currencies of non-euro Member States to the euro, which is the centre of the mechanism. For the currency of each Member State participating in the mechanism, a central rate against the euro and a standard fluctuation band of ±15% are defined.

ESA95 European accounting standards for the compilation and reporting of macroeconomic (including budgetary) data by the EU Member States.

Excessive deficit procedure (EDP) A procedure, laid down in the EC Treaty, according to which the Commission and the Council monitor the development of national *budget balances* and *public debt* in relation to the *reference values*, in order to assess the existence (or risk) of an excessive deficit in each Member State and to ensure its correction. Its application has been further clarified in the *Stability and Growth Pact*.

Fiscal stance A measure of the thrust of discretionary fiscal policy such as, in this document, the change in the *structural balance* (or in the *structural primary balance*) relative to the preceding year. When the change is positive (negative) the fiscal stance is said to be restrictive (expansionary).

Funded pension scheme Pension system in which current pension expenditures are financed by running down assets accumulated over the years on the basis of contributions by the scheme beneficiaries. According to *ESA95*, defined-contribution funded pension schemes are not considered as part of the *general government* sector. See also *pay-as-you-go pension scheme*.

Government debt See *public debt*.

General government The focus of EU budgetary surveillance under the *Stability and Growth Pact* and the *excessive deficit procedure* is on general government aggregates, with the general government sector covering national, regional and local government, as well as social security. In principle, public enterprises are excluded.

Government net lending/borrowing See *budget balance*.

Implicit liabilities Future government expenditure which has not yet been funded, even when future expenditure is not backed by law or contractual obligations, but is simply grounded in strong expectations of the public. To be meaningful for economic analysis, implicit liabilities should be assessed net of future revenue assuming that the government will keep collecting taxes (and other non-tax revenue) at rates comparable to current levels. See also *contingent liabilities*.

Interest burden *General government* interest expenditure on *government debt* as a share of GDP.

Intertemporal budget constraint A basic condition imposing that current total liabilities of the government, i.e. the current public debt and the discounted value of future expenditure including the budgetary impact of ageing populations, be covered by the discounted value of future government revenue.

Lisbon strategy Partnership between the EU and Member States for growth and more and better jobs. Originally approved in 2000, the Lisbon Strategy was revamped in 2005. Based on the Integrated Guidelines (merger of the *broad economic policy guidelines* and the employment guidelines, dealing with macro-economic, micro-economic and employment issues) for the period 2005-2008, Member States drew up 3-year national reform programmes in autumn 2005. They reported on the implementation of the national reform programmes for the first time in autumn 2006. The Commission analyses and summarises these reports in an EU Annual Progress Report each year, in time for the Spring European Council.

Long-term sustainability A combination of *budget balance* and *public debt* that ensures that the latter does not grow without bound. While conceptually intuitive, an agreed operational definition of sustainability has proven difficult to achieve.

Maturity structure of public debt The profile of *public debt* in terms of when it is due to be paid back. Interest rate changes affect the *budget balance* directly to the extent that the *general government* sector has debt with a relatively short maturity structure. Long maturities reduce the sensitivity of the *budget balance* to changes in the prevailing interest rate. See also *interest burden*.

Medium-term objective (MTO) According to the *Stability and Growth Pact*, *stability programmes* and *convergence programmes* must present a medium-term objective for the budgetary position. It is country-specific 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, and is defined in structural terms (see *structural balance*).

Minimum benchmark Estimated budgetary position (in *cyclically-adjusted* terms) that provides a “safety margin” that is enough for the *automatic stabilisers* to operate freely during normal economic slowdowns without breaching the 3% of GDP deficit *reference value*. The minimum benchmarks are estimated by the European Commission. They do not cater for other risks such as unexpected budgetary developments and interest rate shocks.

National reform programme (NRP) See *Lisbon strategy*.

Notification of deficit and debt (EDP notification) Twice a year (by 1 April and 1 October), EU Member States have to notify their *general government* deficit and debt figures (and a number of associated data) to the Commission, the quality of which is then checked by Eurostat, the Commission department in charge of statistics. See also *budget balance* and *public debt*.

One-off and temporary measures Government transactions having a transitory budgetary effect that does not lead to a sustained change in the intertemporal budgetary position. See also *structural balance*.

Output gap The difference between actual GDP and potential GDP in any given year, usually expressed as a percent of potential GDP. Potential GDP is an unobserved variable and needs to be estimated from actual data. It is the level of real GDP in a given year that is consistent with a stable rate of inflation. If actual output rises above its potential level, then constraints on capacity begin to bind and inflationary pressures build; if output falls below potential, then resources are lying idle and inflationary pressures abate. See also *production function method*.

Pay-as-you-go pension scheme (PAYG) Pension system in which current pension expenditures are financed by the contributions of current employees. Also known as *unfunded pension scheme*. See also *funded pension scheme*.

Primary balance The *budget balance* net of interest expenditure on *general government* debt. See also *interest burden*.

Pro-cyclical fiscal policy A *fiscal stance* which amplifies the economic cycle by lowering the *structural balance* when the *output gap* is positive or improving, or by increasing the *structural balance* when the *output gap* is negative or widening, as opposed to a counter-cyclical fiscal policy stance. A neutral fiscal policy keeps the *structural balance* unchanged over the economic cycle by letting the *automatic stabilisers* work.

Production function method A method to estimate potential GDP typically based on a Cobb-Douglas production function. Potential GDP is estimated as the level of GDP consistent with a full utilisation of capital, an unemployment rate that does not accelerate inflation and factor productivity at its trend level. See also *output gap, cyclically-adjusted balance, budgetary sensitivity*.

Public debt (or government debt) Consolidated gross debt for the *general government* sector. It includes the total nominal value of all debt owed by government units, except that part of the debt which is owed to government units in the same Member State. It is a gross debt measure meaning that government financial assets on other sectors are not netted out. See also *debt dynamics* and *reference values*.

Public investment The component of total public expenditure which consists in the acquisition of durable assets and through which governments increase and improve the stock of capital employed in the production of the goods and services they provide. Also known as government gross fixed capital formation (GFCF).

Public-private partnerships (PPP) Agreements between government and corporations according to which the latter build and operate public-use infrastructure (roads, tunnels, bridges, but also hospitals, prisons, concert halls, etc.) which were traditionally directly controlled by government. In exploiting the infrastructure, the corporation receives prices paid by final users, rentals or fees from the government or both. Infrastructure built under PPPs is considered as either *public investment* or corporate investment depending on a number of specific criteria.

Quality of public finances A multi-dimensional concept which refers to the contribution that public finances make to the efficient allocation of resources in the economy and to achieving the government's strategic objectives (sustainable growth, macroeconomic stability, competitiveness, social cohesion etc.). It concerns notably the overall level of expenditure and taxation, their composition, the budgeting and control mechanisms and the institutional arrangements for deciding on public finance issues.

Reference values for public deficit and debt Respectively, a 3 percent *general government* deficit-to-GDP ratio and a 60 percent *general government* debt-to-GDP ratio. See also *excessive deficit procedure, government debt* and *budget balance*.

Sensitivity analysis An econometric or statistical simulation designed to test the robustness of an estimated economic relationship or projection to changes in the underlying assumptions.

'Snow-ball' effect The self-reinforcing effect of *public debt* accumulation or decumulation arising from a positive or negative differential between the implicit interest rate on public debt and the GDP growth rate. See also *debt dynamics*.

Stability and Growth Pact (SGP) Approved in 1997 and reformed in 2005, the SGP clarifies the provisions on budgetary surveillance in the EC Treaty. The "preventive" arm of the SGP obliges Member States to submit annual *stability programmes* or *convergence programmes*, while the "corrective" arm of the SGP clarifies and speeds up the *excessive deficit procedure*.

Stability programme Medium-term budgetary strategy presented by each Member State that has already adopted the euro; updated annually, according to the provisions of the *Stability and Growth Pact*. See also *convergence programme, code of conduct* and *medium-term objective*.

Stock-flow adjustment (SFA) The stock-flow adjustment (also known as the debt-deficit adjustment) ensures consistency between *government net borrowing*, which is a flow variable, and the variation in *government debt*, which is a stock variable. It includes differences between cash and accrual accounting, accumulation of financial assets, changes in the value of debt denominated in foreign currency and remaining statistical adjustments. See also *debt dynamics.*

Structural balance The *budget balance* in *cyclically-adjusted* terms and excluding *one-off and temporary measures*. See also *fiscal stance*.

Structural primary balance The *structural balance* net of interest expenditure on *general government* debt. See also *interest burden*.

Tax elasticity A parameter measuring the relative change in tax revenues with respect to a relative change in GDP. The tax elasticity is an input to the *budgetary sensitivity*.

Annex 2: Summary tables from the programme update

The tables below present the information provided in the programme in the format prescribed by the code of conduct (Annex 2 thereof).

Table 1a. Macroeconomic prospects

	ESA Code	2005	2005	2006	2007	2008	2009	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	1392.0	3.6	2.7	2.0	0.7	0.7	0.6
2. Nominal GDP	B1*g	1554.5	5.9	5.1	4.3	3.1	3.0	2.9
Components of real GDP								
3. Private consumption expenditure	P.3	685.8	3.8	3.1	2.0	0.6	0.6	0.5
4. Government consumption expenditure	P.3	350.4	1.2	1.1	1.0	1.0	1.0	1.0
5. Gross fixed capital formation	P.51	302.4	9.3	10.6	4.0	2.0	1.5	0.6
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	4.2	0.0	0.1	0.0	0.0	0.0	0.0
7. Exports of goods and services	P.6	716.7	8.7	6.5	3.4	1.2	1.3	1.3
8. Imports of goods and services	P.7	667.5	10.6	10.3	3.8	1.9	1.7	1.5
Contributions to real GDP growth								
9. Final domestic demand		-	4.1	4.1	2.2	1.0	0.9	0.7
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	-	0.0	0.1	0.0	0.0	0.0	0.0
11. External balance of goods and services	B.11	-	-0.5	-1.6	-0.2	-0.3	-0.2	-0.1

Table 1b. Price developments

	ESA Code	2005	2005	2006	2007	2008	2009	2010
		level	rate of change	rate of change	rate of change	rate of change	rate of change	rate of change
1. GDP deflator		111.7	2.2	2.4	2.3	2.4	2.3	2.3
2. Private consumption deflator		109.8	2.1	1.8	1.8	1.8	1.9	1.9
3. HICP[30]		100.0	1.7	2.0	1.8	1.7	1.8	1.7
4. Public consumption deflator		114.7	2.3	2.8	2.6	2.7	2.9	3.0
5. Investment deflator		105.7	0.0	2.7	2.8	2.6	2.3	2.3
6. Export price deflator (goods and services)		104.7	4.2	2.5	0.5	1.6	1.5	1.6
7. Import price deflator (goods and services)		101.1	3.2	2.5	0.4	1.3	1.5	1.5

30 Optional for Stability programmes.

Table 1c. Labour market developments

	ESA Code	2005 Level	2005 rate of change	2006 rate of change	2007 rate of change	2008 rate of change	2009 rate of change	2010 rate of change
1. Employment, persons[31]		2739.0	1.1	1.2	0.3	-0.3	-0.3	-0.5
2. Employment, hours worked[32]		4313.2	1.8	1.2	0.1	-0.6	-0.7	-0.9
3. Unemployment rate (%)[33]		4.8	4.8	3.9	3.7	3.5	3.6	3.9
4. Labour productivity, persons [34]		508.2	2.5	1.4	1.7	1.0	1.1	1.1
5. Labour productivity, hours worked[35]		322.7	1.8	1.4	1.9	1.3	1.4	1.5
6. Compensation of employees	D.1	815.2	4.3	4.7	4.1	3.2	3.2	2.9

Table 1d. Sectoral balances

% of GDP	ESA Code	2005	2006	2007	2008	2009	2010
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	3.0	1.6	1.7	1.3	1.2	1.3
of which: - Balance on goods and services		4.9	3.4	3.3	3.1	2.9	2.9
- Balance of primary incomes and transfers		-1.9	-1.8	-1.6	-1.8	-1.8	-1.6
- Capital account		0.0	0.0	0.0	0.0	0.0	0.0
2. Net lending/borrowing of the private sector	B.9/ EDP B.9	-1.0	-1.4	-1.1	-1.2	-0.6	0.1
3. Net lending/borrowing of general government	B.9	3.9	3.1	2.8	2.5	1.8	1.2
4. Statistical discrepancy		0.0	0.0	0.0	0.0	0.0	0.0

31 Occupied population, domestic concept national accounts definition.
32 National accounts definition.
33 Harmonised definition, Eurostat; levels.
34 Real GDP per person employed.
35 Real GDP per hour worked.

Table 2. General government budgetary prospects

	ESA code	2005	2005	2006	2007	2008	2009	2010
		Level	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP
Net lending (EDP B.9) by sub-sector								
1. General government	S.13	61.8	4.0	3.1	2.8	2.5	1.8	1.2
2. Central government	S.1311	66.9	4.3	3.1	2.8	2.5	1.8	1.2
3. State government	S.1312	-	-	-	-	-	-	-
4. Local government	S.1313	-5.6	-0.4	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	862.5	55.5	53.5	52.7	52.1	51.8	51.7
7. Total expenditure	TE 3	800.7	51.5	50.4	49.8	49.7	50.0	50.6
8. Net lending/borrowing	EDP B.9	61.8	4.0	3.1	2.8	2.5	1.8	1.2
9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	28.3	1.8	1.6	1.5	0.9	0.7	0.6
pm: 9a. FISIM		-	-	-	-	-	-	-
10. Primary balance	37	90.1	5.8	4.7	4.3	3.3	2.5	1.8
Selected components of revenue								
11. Total taxes (11=11a+11b+11c)		756.1	48.6	46.9	46.4	45.9	45.6	45.4
11a. Taxes on production and imports	D.2	278.0	17.9	17.9	17.6	17.4	17.3	17.1
11b. Current taxes on income, wealth, etc	D.5	474.9	30.5	28.8	28.6	28.3	28.1	28.1
11c. Capital taxes	D.91	3.2	0.2	0.2	0.2	0.2	0.2	0.2
12. Social contributions	D.61	17.1	1.1	1.1	1.1	1.0	1.0	1.0
13. Property income	D.4	28.4	1.8	1.9	1.8	1.8	1.7	1.7
14. Other (14=15-(11+12+13))		60.9	3.9	3.6	3.4	3.5	3.5	3.6
15=6. Total revenue	TR	862.5	55.5	53.5	52.7	52.1	51.8	51.7
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)[38]		773.2	49.7	48.0	47.5	46.9	46.6	46.4
Selected components of expenditure								
16. Collective consumption	P.32	120.3	7.7	7.6	7.5	7.6	7.7	7.7
17. Total social transfers	D.62 + D.63	277.5	17.8	17.3	17.2	17.4	17.7	18.3
17a. Social transfers in kind	P.31 =D.63	271.7	18.1	17.9	17.9	18.0	18.1	18.3
17b. Social transfers other than in kind	D.62	255.5	16.4	15.9	15.8	15.8	16.0	16.4
18.=9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	28.3	1.8	1.6	1.5	0.9	0.7	0.6
19. Subsidies	D.3	35.1	2.3	2.2	2.2	2.4	2.5	2.5
20. Gross fixed capital formation	P.51	26.6	1.8	1.8	1.6	1.6	1.6	1.6
21. Other (21=22-(16+17+18+19+20))		53.2	3.4	3.3	3.4	3.5	3.5	3.4
22=7. Total expenditure	TE 3	800.7	51.5	50.4	49.8	49.7	50.0	50.6
Pm: compensation of employees	D.1	268.6	17.3	17.0	16.8	17.0	17.1	17.3

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

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

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

39 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	2004	2005
1. General public services	1	7.1	6.4
2. Defence	2	1.6	1.6
3. Public order and safety	3	1	1
4. Economic affairs	4	3.8	3.9
5. Environmental protection	5	0.5	0.6
6. Housing and community amenities	6	0.7	0.6
7. Health	7	6.9	6.8
8. Recreation, culture and religion	8	1.8	1.6
9. Education	9	8.1	7.8
10. Social protection	10	22.1	21.3
11. Total expenditure (= item 7=26 in Table 2)	TE[40]	**53.6**	**51.5**

Table 4. General government debt developments

% of GDP		2005	2006	2007	2008	2009	2010
1. Gross debt[41]		35.9	28.6	24.6	21.5	19.3	17.8
2. Change in gross debt ratio		-6.7	-7.2	-4.1	-3.1	-2.2	-1.5
Contributions to changes in gross debt							
3. Primary balance[42]		-5.8	-4.7	-4.3	-3.3	-2.5	-1.8
4. Interest expenditure (incl. FISIM) [43]		**1.8**	**1.6**	**1.5**	0.9	0.7	0.6
5. Stock-flow adjustment		**-0.4**	**-2.4**	**-0.1**	0.2	0.2	0.2
of which: - Differences between cash and accruals[44]							
- Net accumulation of financial assets[45] *of which:* *- privatisation proceeds*							
- Valuation effects and other[46]							
p.m. implicit interest rate on debt[47]		**4.5**	**4.6**	**5.4**	3.6	3.2	3.2
Other relevant variables							
6. Liquid financial assets[48]							
7. Net financial debt (7=1-6)		**8.8**	**5.3**	**2.2**	-2.0	-3.7	-4.8

Table 5. Cyclical developments

% of GDP	ESA Code	2005	2006	2007	2008	2009	2010
1. Real GDP growth (%)		3.6	2.7	2.0	0.7	0.7	0.6
2. Net lending of general government	EDP B.9	4.0	3.1	2.8	2.5	1.8	1.2
3. Interest expenditure (incl. FISIM recorded as consumption)	EDP D.41 +FISIM	1.8	1.6	1.5	0.9	0.7	0.6
4. Potential GDP growth (%) (1)		1.4	2.0	1.9	1.3	1.3	1.3
contributions:							
- labour		0.3	0.0	0.0	0.2	0.1	0.0
- capital		0.7	0.8	0.9	0.8	0.8	0.8
- total factor productivity		1.3	1.1	1.1	0.4	0.4	0.5

40 Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.
41 As defined in Regulation 3605/93 (not an ESA concept).
42 Cf. item 10 in Table 2.
43 Cf. item 9 in Table 2.
44 The differences concerning interest expenditure, other expenditure and revenue could be distinguished when relevant.
45 Liquid assets, assets on third countries, government controlled enterprises and the difference between quoted and non-quoted assets could be distinguished when relevant.
46 Changes due to exchange rate movements, and operation in secondary market could be distinguished when relevant.
47 Proxied by interest expenditure (incl. FISIM recorded as consumption) divided by the debt level of the previous year.
48 AF1, AF2, AF3 (consolidated at market value), AF5 (if quoted in stock exchange; including mutual fund shares).

5. Output gap		0.9	1.6	1.6	1.1	0.6	0.0
6. Cyclical budgetary component		-0.1	-1.1	-1.2	-0.8	-0.4	0.0
7. Cyclically-adjusted balance (2-6)		1.3	1.4	1.5	1.5	1.4	1.2
8. Cyclically-adjusted primary balance (7-3)		2.5	2.4	2.2	1.9	1.3	1.0

Table 6. Divergence from previous update

	ESA Code	2005	2006	2007	2008	2009	2010
Real GDP growth (%)							
Previous update		2.4	2.4	1.1	1.6	2.0	2.1
Current update		3.6	2.7	2.0	0.7	0.7	0.6
Difference		1.2	0.3	0.9	-0.9	-1.3	-1.5
General government net lending (% of GDP)	EDP B.9						
Previous update		3.6	3.1	3.2	2.7	2.8	2.9
Current update		4.9	4.0	3.8	3.5	2.8	2.2
Difference		1.3	0.9	0.6	0.8	0.0	-0.7
General government gross debt (% of GDP)							
Previous update		35.6	31.7	28.9	26.5	24.0	21.5
Current update		35.9	28.6	24.6	21.5	19.3	17.8
Difference		0.3	-3.1	-4.3	-5.0	-4.7	-3.7

Table 7. Long-term sustainability of public finances

% of GDP	**2000**	**2005**	**2010**	**2020**	**2030**	**2050**	**2060**
Total expenditure	**53.0**	**51.6**	**50.6**	**51.8**	**52.0**	**52.9**	**52.1**
Of which: age-related expenditures	**33.6**	**34.6**	**34.7**	**35.9**	**35.9**	**36.1**	**35.0**
Pension expenditure	9.1	9.3	9.8	10.6	10.0	9.4	8.5
Social security pension	9.1	9.3	9.8	10.6	10.0	9.4	8.5
Old-age and early pensions	6.9	7.2	7.9	8.6	7.7	7.2	6.3
Other pensions (disability, survivors)	2.2	2.1	2.0	2.0	2.2	2.2	2.2
Occupational pensions (if in general government)	-	-	-	-	-	-	-
Health care	6.0	6.4	6.5	7.1	7.7	8.2	8.2
Long-term care *(this was earlier included in the health care)*	1.1	1.2	1.2	1.4	1.7	1.9	2.1
Education expenditure	5.5	5.9	6.0	6.0	5.6	5.8	5.9
Other age-related expenditures	12.0	11.8	11.1	10.9	11.0	10.9	10.3
Interest expenditure	4.3	2.6	1.3	1.0	1.1	1.4	1.8
Total revenue	55.3	**55.5**	**51.8**	**51.1**	**51.5**	**51.6**	**50.7**
Of which: property income	1.9	**1.5**	**1.5**	**1.0**	**0.7**	**0.5**	**0.3**
of which: from pensions contributions (or social contributions if appropriate)	-0.7	-1.1	-1.7	-0.9	0.2	1.1	0.9
Pension reserve fund assets	**115.9**	**135.2**	**148.7**	**194.5**	**224.4**	**238.7**	**241.0**
Of which: consolidated public pension fund assets (assets other than government liabilities)	**1.1**	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**
Assumptions							
Labour productivity growth	**3.5**	**2.1**	**1.2**	**1.8**	**1.9**	**1.6**	**1.9**
Real GDP growth	**3.3**	**3.6**	**0.6**	**2.0**	**3.2**	**2.4**	**2.7**
Participation rate males (aged 20-64)	**84.9**	**85.6**	**84.9**	**85.6**	**87.6**	**88.6**	**88.6**
Participation rates females (aged 20-64)	**75.9**	**76.5**	**75.8**	**76.7**	**78.9**	**80.7**	**80.7**
Total participation rates (aged 20-64)	**80.4**	**81.1**	**80.4**	**81.2**	**83.3**	**84.6**	**84.7**
Unemployment rate	**5.2**	**5.4**	**4.5**	**4.4**	**4.4**	**4.4**	**4.4**
Population aged 65+, 1000	**791.0**	**818.0**	**916.0**	**1137.0**	**1315.0**	**1437.0**	**1398.0**

persons							

Table 8. Basic assumptions

	2005	2006	2007	2008	2009	2010
Short-term interest rate[49] (annual average)	2.3	3.1	3.6	4.0	4.3	4.7
Long-term interest rate (annual average)	3.4	4.0	4.4	4.7	4.9	5.2
USD/€ exchange rate (annual average) (euro area and ERM II countries)	124.10	124.80	127.00	127.00	127.00	127.00
Nominal effective exchange rate	101.6	101.6	102.0	102.0	102.0	102.0
(for countries not in euro area or ERM II) exchange rate vis-à-vis the € (annual average)						
World excluding EU, GDP growth	5.3	5.1	4.8	4.0	4.0	4.0
EU GDP growth	1.6	2.4	2.2	2.4	2.4	2.4
Growth of relevant foreign markets	5.3	6.9	5.6	4.4	4.4	4.4
World import volumes, excluding EU	8.1	9.6	8.2	7.5	7.5	7.5
Oil prices, (Brent, USD/barrel)	54.4	70.0	63.0	62.2	61.3	60.5

49 If necessary, purely technical assumptions.

Annex 3: 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 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.

Guidelines in the 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		
The programme provides all optional information in these tables.	X		Few gaps: General government expenditure by function, 2009 (Table 3); Specifications of the stock-flow adjustment: Differences between cash and accruals; Net accumulation of financial assets (including of which privatisation proceeds); Valuation effects and other; Liquid financial assets (Table 4)
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	Assumptions broadly in line with Autumn forecast.
Significant divergences between the national and the Commission services' economic forecasts are explained[2].	X		
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.			Not applicable

Guidelines in the code of conduct	Yes	No	Comments
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			
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		Applying the common external assumptions
In case of "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		X	Underlying assumptions in the

Guidelines in the code of conduct	Yes	No	Comments
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.			update differs from the EPC projections.
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.

Source:
Commission services

Annex 4: Key economic indicators of past economic performance

This Annex includes two tables. The first displays key economic indicators that summarise the economic performance of the country. To put the country's performance into perspective, the second table displays the same set of indicators for the euro area.

Denmark - Key economic indicators

	Averages 1996–2005	Averages 1996–2000	Averages 2001–2005	2003	2004	2005
Economic activity						
Real GDP (% change)	2.1	2.9	1.3	0.7	1.9	3.0
Private consumption (% change)	1.8	1.5	2.1	1.6	3.4	4.1
Government consumption (% change)	2.0	2.5	1.5	0.2	1.5	1.3
Investment (% change)	4.6	6.4	2.9	2.1	4.5	9.2
Exports (% change)	5.5	7.5	3.4	-1.2	2.7	8.4
Imports (% change)	6.4	7.6	5.2	-1.7	6.4	11.8
Contributions to real GDP growth:						
Domestic demand	2.2	2.6	1.8	0.6	3.1	3.9
Net exports	-0.1	0.3	-0.5	0.1	-1.3	-1.0
Output gap (% of potential GDP)	0.4	1.2	-0.5	-1.3	-1.4	-0.6
Prices and costs						
HICP inflation (% change)	1.9	2.0	1.9	2.0	0.9	1.7
Unit labour costs (% change)	2.1	1.9	2.3	1.7	1.0	1.2
Labour productivity (% change)	1.6	1.8	1.4	2.2	1.9	2.2
Real unit labour costs (% change)	0.0	0.0	0.0	-0.3	-1.2	-1.6
Comparative price levels (EUR25=100)	131.6	131.7	131.5	133.7	132.2	132.1
Labour market						
Employment (% change)	0.5	1.0	0.0	-1.5	0.0	0.7
Employment (% of working age population)	76.9	76.5	77.3	76.7	76.6	77.0
Unemployment rate (% of labour force)	5.1	5.2	5.0	5.4	5.5	4.8
NAIRU (% of labour force)	5.1	5.6	4.5	4.6	4.4	4.1
Participation rate (% of working age population)	81.0	80.6	81.3	81.1	81.1	80.9
Working age population (% change)	0.2	0.2	0.1	0.1	0.1	0.2
Competitiveness and external position						
Real effective exchange rate (% change) (1)	0.6	-1.3	2.4	4.4	1.6	-0.2
Export performance (% change) (2)	-0.7	-0.9	-0.5	-4.9	-4.7	1.8
External balance of g & s (% of GDP)	5.0	4.4	5.6	6.1	4.9	4.7
External balance (% of GDP)	2.0	1.1	2.8	3.2	2.3	3.0
FDI inflow (% of GDP)	n.a.	n.a.	n.a.	-1.2	n.a.	1.9
Public finances						
Total expenditure (% of GDP)	55.0	56.1	54.0	54.5	54.5	52.5
Total revenue (% of GDP)	55.9	56.4	55.4	54.5	56.2	56.4
General government balance (% of GDP)	0.8	0.2	1.5	0.0	1.7	4.0
General government debt (% of GDP)	52.1	60.9	43.4	44.4	42.6	35.9
Structural budget balance (% of GDP) (3)	n.a.	n.a.	n.a.	0.9	2.4	4.1
Financial indicators (4)						
Short term real interest rate (%) (5)	1.4	2.1	0.6	0.5	0.0	-0.6
Long term real interest rate (%) (5)	2.9	3.7	2.0	2.3	2.0	0.5
Household debt (% change) (6)	n.a.	n.a.	n.a.	6.8	9.7	13.3
Corporate sector debt (% change) (7)	n.a.	n.a.	n.a.	-3.3	12.0	15.0
Household debt (% of GDP) (6)	n.a.	n.a.	n.a.	104.1	109.6	117.5
Corporate sector debt (% of GDP) (7)	n.a.	n.a.	n.a.	72.7	78.3	85.2

Notes:
(1) Unit labour costs relative to rest of a group of industrialised countries (USD): EU24 (= EU25 excl. LU), BG, RO, TR, CH, NR, US, CA, JP, AU, MX and NZ.
(2) Market performance of exports of goods and services on export weighted imports of goods and services of 35 industrial markets.
(3) Cyclically-adjusted budget balance net of one-off and other temporary measures.
(4) Data available up to 2004.
(5) Using GDP deflator.
(6) Households' and non-profit institutions serving households' debt, defined as loans and securities other than shares.
(7) Non-financial corporate sector debt, defined as loans and securities other than shares.
Source:
Commission services

Euro area - Key economic indicators

	Averages 1996 – 2005	1996 – 2000	2001 –2005	2003	2004	2005
Economic activity						
Real GDP (% change)	2.1	2.7	1.4	0.8	2.0	1.4
Private consumption (% change)	2.0	2.6	1.4	1.2	1.5	1.3
Government consumption (% change)	1.7	1.7	1.7	1.8	1.2	1.4
Investment (% change)	2.6	4.3	1.0	1.0	2.2	2.5
Exports (% change)	5.8	8.1	3.5	1.1	6.8	4.3
Imports (% change)	5.9	8.4	3.4	3.1	6.7	5.3
Contributions to real GDP growth:						
Domestic demand	2.0	2.7	1.3	1.4	1.8	1.6
Net exports	0.1	0.1	0.1	-0.7	0.2	-0.2
Output gap (% of potential GDP)	-0.1	-0.1	0.0	-0.6	-0.5	-1.1
Prices and costs						
HICP inflation (% change)	1.9	1.7	2.2	2.1	2.1	2.2
Unit labour costs (% change)	1.3	0.8	1.7	2.0	0.9	1.0
Labour productivity (% change)	1.2	1.5	0.8	0.8	1.6	0.9
Real unit labour costs (% change)	-0.5	-0.6	-0.5	-0.1	-1.0	-0.8
Comparative price levels (EUR25=100)	n.a.	n.a.	102.1	103.0	102.7	102.3
Labour market						
Employment (% change)	1.2	1.5	0.9	0.7	0.7	0.8
Employment (% of working age population)	63.7	62.0	65.4	65.4	65.6	65.8
Unemployment rate (% of labour force)	9.1	9.8	8.5	8.7	8.9	8.6
NAIRU (% of labour force)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Participation rate (% of working age population)	69.9	68.5	71.2	71.4	71.7	71.8
Working age population (% change)	0.3	0.2	0.4	0.5	0.5	0.5
Competitiveness and external position						
Real effective exchange rate (% change) (1)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Export performance (% change) (2)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
External balance of g & s (% of GDP)	1.9	1.7	2.0	2.1	2.1	1.5
External balance (% of GDP)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FDI inflow (% of GDP)	2.4	2.5	2.2	1.9	1.1	n.a.
Public finances						
Total expenditure (% of GDP)	48.2	48.7	47.7	48.2	47.6	47.6
Total revenue (% of GDP)	45.8	46.5	45.1	45.1	44.8	45.1
General government balance (% of GDP)	-2.3	-2.1	-2.5	-3.1	-2.8	-2.4
General government debt (% of GDP)	70.9	72.5	69.3	69.3	69.8	70.8
Structural budget balance (% of GDP) (3)	n.a.	n.a.	n.a.	-3.2	-2.9	-2.0
Financial indicators (4)						
Short term real interest rate (%) (5)	1.7	2.7	0.7	0.2	0.2	0.3
Long term real interest rate (%) (5)	3.1	4.1	2.1	2.0	2.2	1.5
Household debt (% change) (6)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt (% change) (7)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Household debt (% of GDP) (6)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt (% of GDP) (7)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes:
(1) Unit labour costs relative to rest of a group of industrialised countries (USD): EU24 (=EU25 excl. LU), BG, RO, TR, CH, NR, US, CA, JP, AU, MX and NZ.
(2) Market performance of exports of goods and services on export weighted imports of goods and services of 35 industrial markets.
(3) Cyclically-adjusted budget balance net of one-off and other temporary measures.
(4) Data available up to 2004.
(5) Using GDP deflator.
(6) Households' and non-profit institutions serving households' debt, defined as loans and securities other than shares.
(7) Non-financial corporate sector debt, defined as loans and securities other than shares.
Source:
Commission services

Annex 5: Assessment of tax projections

Table 9 in the main text compares the tax projections of the programme with those of the Commission services' autumn 2006 forecast and those obtained by using standard ex-ante elasticities, as estimated by the OECD. It summarises the results for the total tax-to-GDP ratio. The underlying analysis exploits information for the four major tax categories, i.e. indirect taxes, corporate and private income taxes and social contributions (see results in the table below)[50].

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:

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

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[51]. By contrast, if ε_{T_i,B_i} is the standard *ex-ante* elasticity, as estimated by the OECD, it will be net of discretionary measures.

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:

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

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

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

[50] Private and corporate income taxes are generally not provided, neither in the programme nor in the Commission services' autumn 2006 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.

[51] The observed or projected elasticity (ex-post elasticity) of the *i*-th tax also includes the effect of other factors (OF) such as discretionary measures: $\frac{\Delta T_i}{T_i} = \varepsilon_{T_i,B_i exante}\frac{dB_i}{B_i} + \frac{OF_i}{T_i} = \varepsilon_{T_i,B_i ex\,post}\frac{dB_i}{B_i}$.

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

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

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 relative to GDP of total taxes is obtained as $\varepsilon = \sum_i w_i \varepsilon_{T_t B_i} \varepsilon_{B_i Y}$ with w_i the share of the *i-th* tax in the overall tax burden.

Assessment of tax projections by major tax category

	2007			2008			2009	2010
	SP/CP	**COM**	**OECD**[1]	**SP/CP**	**COM**[2]	**OECD**[1]	**SP/CP**	**SP/CP**
Taxes on production and imports:								
Change in tax-to-GDP ratio	-0.3	-0.2	0.0	-0.2	-0.2	0.0	-0.1	-0.2
Difference SP/CP – COM	-0.2			-0.1			/	/
of which[3]*:*								
- discretionary & elasticity component	-0.2			-0.1			/	/
- composition component	0.0			-0.1			/	/
Difference COM – OECD	/	-0.2		/	-0.2		/	/
of which[3]*:*								
- discretionary & elasticity component	/	-0.1		/	0.0		/	/
- composition component	/	-0.1		/	-0.1		/	/
p.m.: Elasticity								
- of taxes to tax base[4]	0.7	0.9	1.0	0.8	0.9	1.0	1.0	0.7
- of tax base[4] to GDP	0.9	0.9	1.0	0.8	0.9	1.0	0.8	0.8
Social contributions:								
Change in tax-to-GDP ratio	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0
Difference SP/CP – COM	0.0		/	-0.1		/	/	/
of which[3]*:*								
- discretionary & elasticity component	0.0		/	-0.3		/	/	/
- composition component	0.0		/	0.1		/	/	/
Difference COM – OECD	/	0.0		/	0.0		/	/
of which[3]*:*								
- discretionary & elasticity component	/	0.0		/	0.0		/	/
- composition component	/	0.0		/	0.0		/	/
p.m.: Elasticity								
- of taxes to tax base[5]	1.0	0.8	1.0	-2.0	1.0	1.0	0.9	1.0
- of tax base[5] to GDP	1.0	0.9	0.7	1.0	0.6	0.7	1.1	1.0
Personal income tax[6]**:**								
Change in tax-to-GDP ratio	-0.2	-0.1	0.0	-0.3	-0.2	0.0	-0.2	0.0
Difference SP/CP – COM	-0.1		/	-0.1		/	/	/
of which[3]*:*								
- discretionary & elasticity component	-0.1		/	-0.5		/	/	/
- composition component	0.0		/	0.6		/	/	/
Difference COM – OECD	/	-0.1		/	-0.1		/	/
of which[3]*:*								
- discretionary & elasticity component	/	-0.4		/	-0.1		/	/
- composition component	/	0.4		/	-0.1		/	/
p.m.: Elasticity								
- of taxes to tax base[5]	0.9	1.0	1.4	0.6	1.3	1.4	0.7	1.0

- of tax base[5] to GDP	1.0	0.9	0.7	1.0	0.6	0.7	1.1	1.0
Corporate income tax[6]:								
Change in tax-to-GDP ratio	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Difference SP/CP – COM	0.0		/	0.0		/	/	/
of which[3]:								
- discretionary & elasticity component	0.0		/	0.0		/	/	/
- composition component	0.0		/	0.0		/	/	/
Difference COM – OECD	/	-0.1		/	-0.1		/	/
of which[3]:								
- discretionary & elasticity component	/	0.0		/	-0.1		/	/
- composition component	/	-0.1		/	0.0		/	/
p.m.: Elasticity								
-of taxes to tax base[7]	0.8	0.8	1.0	0.7	0.6	1.0	0.8	1.0
-of tax base[7] to GDP	1.1	1.1	0.7	1.0	1.4	0.7	0.9	1.0

Notes:

[1]Based on 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 2006 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)