



# CONVERGENCE PROGRAMME FOR DENMARK

Updated programme for the period  
2004-2010

NOVEMBER 2004

## TABLE OF CONTENTS

<b>1.</b>	<b>Introduction.....</b>	<b>2</b>
<b>2.</b>	<b>Policy framework and 2010 objectives.....</b>	<b>4</b>
2.1.	Objectives of economic policy.....	4
2.2.	Monetary and exchange rate policy.....	6
2.3.	Fiscal sustainability.....	6
2.4.	Tax and expenditure policies.....	8
2.5.	Labour and product market policies.....	11
<b>3.</b>	<b>Near-term economic outlook and projections to 2010.....</b>	<b>14</b>
3.1.	International assumptions and interest rates.....	14
3.2.	Near-term outlook.....	16
3.3.	Employment and production potential towards 2010.....	17
3.4.	Prices and wages.....	21
3.5.	External balance and foreign debt.....	22
<b>4.</b>	<b>Prospects for general government finances.....</b>	<b>23</b>
4.1.	Overview of public finances.....	23
4.2.	The fiscal stance.....	26
4.3.	Revenues.....	31
4.4.	Expenditures.....	34
4.5.	Net lending by government sub-sectors.....	35
4.6.	General government debt.....	36
<b>5.</b>	<b>Long-term projections, ageing and fiscal sustainability.....</b>	<b>38</b>
5.1.	Long-term pressures on the public finances.....	38
5.2.	Fiscal sustainability and the required public budget surplus...	39
	Appendix 1: Sensitivity analysis.....	43
	Appendix 2: Summary of Denmark's Action Plan for Employment....	51
	Appendix 3: Summary of Denmark's Action Plan to combat poverty and social exclusion .....	55
	Appendix 4: Summary of Denmark's Cardiff report.....	59
	Appendix 5: Comparison with the 2003 update.....	62
	Annex: Tables .....	67

# Updated convergence programme for Denmark

## 1. Introduction

After two years of rising unemployment triggered by the global downturn, the Danish economy has shown signs of recovering since the middle of 2003 and unemployment has eased down since the turn of the year. The current pick-up is supported by, in particular, low interest rates, stronger external demand and domestic policy stimulus, although higher oil prices may, all else equal, lessen the improvement in activity.

The government and parliament adopted the *Spring Package* in March-April 2004 with a view to strengthen the upturn and provide greater certainty that unemployment would decline, *cf. box 1.1*. The Spring Package is designed with a view to ensure that the debt reduction pace and fiscal sustainability remains largely unaffected. Unemployment is expected to decline during the remainder of 2004 and in 2005, and capacity utilization is expected to be fairly high in 2005. The relatively early return to normal capacity utilization reflects, in particular, that the preceding downturn was the mildest for the last three decades.

The emerging upswing and prospects for declining unemployment strengthen the basis for meeting the key medium-term challenges, chiefly associated with ensuring fiscal sustainability in the light of prospective expenditure pressures related to population aging. Sustainable fiscal policies require, in particular, continued limited growth in public spending and new initiatives to raise structural employment in the years ahead.

The 2004 Convergence Programme (CP04) sets out the broad fiscal policy objectives towards 2010<sup>1</sup>. Compared with CP03, the medium-term fiscal and structural requirements have been reassessed in light of

---

<sup>1</sup> The convergence programme is prepared in accordance with Council Regulation (EU) on the Stability and Growth Pact (No. 1466/97). According to this regulation, euro-area member states are required to prepare stability programmes, whereas the other countries are required to prepare convergence programmes. This updated convergence programme follows the guidelines endorsed by the ECOFIN Council meeting on July 10, 2001. The update is transmitted to the Danish parliament.

the Spring Package and a revised population projection that incorporates changes to immigration laws in 2002, etc. Overall, the projection implies that the targets and assumptions for taxation, public services and employment through 2010 are consistent with fiscal sustainability under neutral assumptions for the years after 2010, *see section 5*.

### Box 1.1. The Spring Package

The lowering of taxes on earned income, which was due to be phased in during 2004-07 under a 2003 political agreement, has been front-loaded to take full effect in 2004.

Contributions to the Special Pension scheme (SP), which for employed persons amount to 1 percent of wage income, are suspended during 2004 and 2005. Since these contributions are tax deductible, the suspension raises the tax base in 2004 and 2005, *cf. table a*. The counterpart is lower future taxable payouts from the scheme and hence lower future tax receipts for the government.

The amount set aside in 2003 for social and health purposes has been fully frontloaded to 2004 and used for a supplementary pension benefit for low-income retirees (amounting to 570 mill. Dkr. on top of the 430 mill. Dkr., which had earlier been allocated for the same purpose).

Publicly-supported housing investment is boosted, e.g. by frontloading available funds for supporting privately constructed rental housing. Public investments are brought forward e.g. for infrastructure and renovating public buildings.

A total of 250 mill. Dkr. is set aside in 2004 and 2005 for labour market initiatives, including strengthening the qualifications of low-skilled workers and targeted activation measures.

The Spring Package is estimated to boost growth by 0.3 and 0.1 percentage points in 2004 and 2005, respectively, and reduce unemployment (national definition) by some 12,500 persons in 2005 (0.4 percent of the labour force), of which 8,000 reflects higher employment and the rest enrollment in active labour market schemes. The package is essentially neutral with respect to fiscal sustainability, *cf. section 5*.

**Table a. The impact of the Spring Package on public finances and GDP growth**

Bill. Dkr.	2004	2005
Fronloading income tax reductions <sup>1)</sup>	-3.9	-2.5
Suspending SP-contributions in 2004 and 2005	3.9	3.9
Amount set aside for social and health purposes	-0.6	0.0
Public investment etc.	-0.8	-0.4
Labour market initiatives	-0.2	-0.1
Total direct budgetary impact	-1.6	0.9
Public finance impact incl. indirect effects	1.1	5.4
GDP-growth, change in percentage points	0.3	0.1

1) The tax reduction directly lowers public revenues in 2006 by 1.1 bill. Dkr.

Source: "Flere i beskæftigelse – lavere ledighed", Regeringen, March 2004

The convergence programme is based on the latest short-term forecast for 2004-05, *cf. Economic Survey, August 2004*, which incorporates the proposed fiscal bill for 2005. A new assessment of the short-term outlook, which incorporates the politically agreed fiscal bill for 2005 and final budgets for local governments is scheduled for publication by mid-December, *cf. section 3*. The growth prospects for 2004 and 2005 together are unlikely to be altered significantly compared to the August figures. Meanwhile, the forecast horizon will be extended to 2006.

## 2. Policy framework and 2010 objectives

### 2.1. Objectives of economic policy

The broad objectives of economic policy are to achieve high and stable employment, fiscal policy sustainability, and favourable conditions for growth. More specifically, the objectives of individual macro and structural policies are:

- *Monetary and exchange rate policy*: Continued price and exchange rate stability through a credible commitment to a stable exchange rate against the euro.
- *Fiscal sustainability*. A budget surplus of 1½-2½ percent of GDP *on average* through 2010<sup>2</sup>. The multi-annual target provides room to let the automatic stabilizers play over the cycle, thus helping to dampen cyclical fluctuations. The target is consistent with fiscal policy sustainability (given the assumptions underlying the projection) and entails a marked reduction in the net debt of central and local governments as a share of GDP by 2010.
- *Tax and expenditure policies*: A “tax freeze” is in effect since 2002. Income taxes have been lowered. The reductions originally scheduled for 2004-07 have been fully implemented in 2004 by virtue of the Spring Package. The growth target for real public consumption is 0.5 percent per year during 2005-10, to be allocated mainly to better public services in areas such as health, education, and social services. In addition, public services may be improved through, notably, the planned reform to create fewer and larger municipalities and regions, expanded “free choice” between public

---

<sup>2</sup> The target range concerns the surplus on a national accounts basis (including, for instance, the labour market supplementary pension fund, ATP, as hitherto).

and private providers of services, and greater efficiency in the public sector.

- *Labour and product markets:* New structural initiatives which may durably strengthen employment by 50-60,000 jobs (roughly 2 percent). Productivity growth should be strengthened through greater competition, higher openness, more favourable conditions for private initiative and risk-taking, and improved regulatory efficiency, *cf. The Danish Growth Strategy.*

In 2003, Denmark met the convergence criteria for exchange rate stability, inflation, interest rates and public finances, *cf. table 2.1 and section 2.2.*

**Table 2.1. Convergence indicators in 2003**

	Consumer price inflation (HICP)	Government bond yields (10 year)	General government budget balance	General government debt
	Per cent	Per cent	----- Per cent of GDP-----	
Danmark.....	2.0	4.3	1.4 <sup>1</sup>	44.7 <sup>1</sup>
EU25 .....	1.9	4.2	-2.8	63.2
Euro area.....	2.1	4.1	-2.7	70.7
Convergence criteria.	2.7	6.1	-3.0	60.0

- 1) Compiled in accordance with the Excessive Deficit Procedure and including ATP in the public sector. Excluding ATP, the EDP-surplus in 2003 amounted to 0.3 per cent of GDP and gross debt to 45.9 per cent of GDP.

Source: The European Commission, Statistics Denmark, and own calculations.

In *table 2.1*, the public balance and gross debt is stated according to the excessive deficit procedure (EDP) and including the labour market supplementary pension fund (ATP) in the public sector<sup>3</sup>. Based on these principles, the surplus is slightly larger than on a national accounts basis (by about 0.2 percent of GDP in 2003) owing to differences in the treatment of receipts from the sale of UMTS-licences and swap transactions, *cf. section 4*. In general, the convergence programme uses the national accounts definition, unless explicitly stated otherwise.

<sup>3</sup> In spring 2004, Eurostat took a decision on the statistical classification of pension funds. The decision implies that certain types of funds, such as ATP, in the EDP reporting of all EU-countries will be classified in the private sector. The decision will be fully implemented by the time of member states' March 2007 EDP notifications.

## 2.2. Monetary and exchange rate policies

Monetary policy is aimed at maintaining a stable exchange rate of the Danish krone against the euro. The framework for the fixed exchange rate policy is the ERM2 agreement, which stipulates a narrow fluctuation band against the euro of  $\pm 2\frac{1}{4}$  percent around the central parity against the euro. For a number of years, the exchange rate has been close to the central parity.

A wide majority in the Danish parliament supports the fixed exchange rate policy, and the government regards the commitment and the credibility of the fixed exchange rate policy as paramount. Fiscal policy's focus on stability and sustainability supports the monetary objectives.

Denmark's long-standing commitment to a fixed exchange rate policy has ensured low and stable inflation. Under the strategy, the low level of inflation in the euro area works as an anchor for Danish inflation and inflation expectations. Danish inflation has broadly matched euro-area inflation since the introduction of the euro.

Monetary policy interest rates tend to follow the ECB's refi-rate with a positive premium, which has generally fluctuated in a range of 15-50 basis points since 1999. The premium over euro-area rates, which is also reflected in longer-term interest rates, should be seen in conjunction with Denmark not having adopted the euro.

## 2.3. Fiscal sustainability

Fiscal policies and the required structural initiatives to raise employment are consistent with sustainable public finance developments. Fiscal sustainability means that the planned policies concerning taxes, social transfers and public service standards through 2010 can be sustained subsequently, under the assumptions made, with no need for further policy adjustment to prevent public debt from rising beyond bounds<sup>4</sup>. While the objective is that fiscal policies can be sustained essentially unchanged, no political decisions have been made with respect to the

---

<sup>4</sup> The projection is based on a "policy scenario" through 2010, including specific requirements for expenditure and employment policies etc., and a "policy-neutral" scenario thereafter. The neutral scenario after 2010 is based on mechanical rules of computation, in which revenue and expenditure shares of GDP are mainly affected by demographic shifts and rising tax revenues from private pension payouts, *cf. section 5*.

concrete prioritization between welfare expenditures, public services and taxes after 2010.

The operational target for fiscal policy is to maintain a public surplus of 1½-2½ percent of GDP on average through 2010. The required surplus is specified as an interval to reflect the inevitable uncertainty in determining medium and long-term sustainability requirements. The average (structural) surplus consistent with public finance sustainability is 1.7 per cent of GDP according to the present update of the calculations and thus at the lower end of the target interval.

The actual surplus may deviate from the target range as a result of, for instance, cyclical fluctuations or equity price swings affecting public revenues. In this vein, the target specification for the *average* surplus through 2010 allows room for letting the automatic stabilizers play, thus helping to dampen cyclical fluctuations. The target requires prudent fiscal policies when unemployment is low and cyclical conditions favourable, and ensures fiscal room for manoeuvre in case of severe downturns.

The surplus on the structural balance is estimated to be in the range of 1 to 1½ percent of GDP in the years 2003-05, also when correcting for the temporary strengthening of public finances in 2004 and 2005 due to the suspension of SP-contributions (of about 0.3 percent of GDP). Hence, the structural balance is around the lower end of the target interval in those years. Through 2010, the structural balance strengthens to some 2 percent of GDP due to the assumed expenditure control and employment initiatives, *cf. box 2.1*.

The medium-term fiscal targets comply with the Stability and Growth Pact rules. The target for the medium-term budgetary position is more ambitious than the “close to balance or in surplus” rule in order to “take into account the need to cater for the costs associated with population ageing” as called for in the Code of Conduct for stability and convergence programmes. Moreover, the target takes account of the “possible need to deal with adverse cyclical developments and other unforeseen risks whilst respecting the government deficit reference value [of 3 percent of GDP]”.



### Box 2.1. Target range for public surpluses

The overall objective for medium-term fiscal policy is that public surpluses (incl. ATP) *on average* through 2010 should be in the range of 1½-2½ percent of GDP.

A corresponding objective for the *actual surplus in each year* would not be appropriate. If the actual balance were to be kept inside the range at all times, the budgetary effects of cyclical fluctuations would have to be offset by fiscal tightening during downturns and loosening during upturns. Fiscal policy would then amplify cyclical fluctuations and automatic stabilizers would not be allowed to play fully. By the same token, transitory equity price movements may have substantial budgetary implications due to, in particular, the tax on pension fund investment returns, which it would not be appropriate or possible to offset by discretionary measures.

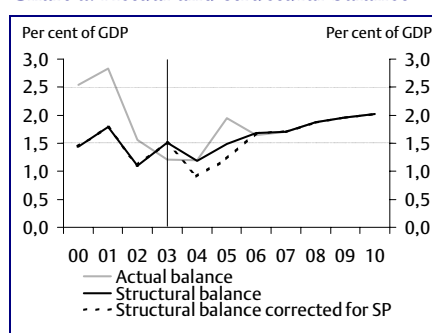
The medium-term projections are structural scenarios in the sense that they disregard possible cyclical fluctuations. Hence, in the medium-term projections the average actual surplus corresponds to the average structural surplus (aside from deviations in the short-term forecast years).

The temporary suspension of SP-contributions in 2004 and 2005 yields a positive contribution to the structural balance – as a consequence of lower tax deductions – which ends in 2006, *cf. chart a*. Lower tax deductions in 2004 and 2005 have their counterpart in lower taxable payouts from SP in the future, and thus imply a shifting forward of taxation.

The decline in the structural balance from 2003 to 2004 mainly reflects the frontloading of the tax reductions to 2004.

The structural balance strengthens in subsequent years reflecting tight expenditure control and assumed new initiatives to raise employment. Thus, fiscal policy fulfills the requirement of sustainability under the assumptions made, even though the structural balance is below the target interval during 2004-05, *see also section 5*.

Chart a. Actual and structural balance



### 2.4. Tax and expenditure policies

The government's tax policy revolves around the tax freeze introduced in November 2001, which implies that direct or indirect tax rates may not rise, whether expressed as a percentage or as an amount in Danish kroner. In addition, a cap is imposed on the nominal property value tax.

The nominal caps on excise duties and the property value tax implied by the tax freeze – technically assumed to remain in force until 2010 – reduce the total amount of taxes paid by 0.6 percent of GDP from 2003

to 2010, relative to a scenario in which taxes expressed in Danish krone value terms are actively raised in line with prices. This implies a reduction in the tax burden since taxes paid fall relative to incomes.

In addition to ending the historical tendency towards higher taxes (especially at the local and regional levels of government), the tax freeze contributes, in conjunction with the target for public surpluses, to better expenditure control.

Taxes on earned income are reduced by almost 10 bill. Dkr. in 2004 (corresponding to 0.7 percent of GDP). The tax reduction is evenly divided between an earned income tax credit (EITC) and a higher income threshold for the 6 percent middle-bracket income tax.

The EITC of 2.5 percent of earned income up to the middle-bracket income threshold raises the after-tax gain from working rather than receiving a transfer income. The income threshold for the 6-percent middle-bracket tax is raised by roughly 50,000 Dkr., notably with a view to raise the incentive for already employed persons to increase effort or hours worked. The marginal tax rate has thus been lowered by some 6 percentage points for about 750,000 persons, i.e. for more than a quarter of the workforce, *cf. also section 3.3.*

The political agreement on lowering taxes had been reached in 2003 and aimed to raise labour supply, especially for persons with relatively low potential incomes. The agreement foreshadowed, as explained in CP03, that the tax reductions would be phased in during 2004-2007. The first stage was enacted with the fiscal bill of 2004. The tax reductions scheduled for 2005-07 were subsequently frontloaded to 2004 with the Spring Package.

The tax freeze and lower taxes on earned income are financed within the constraints of the original *Denmark 2010* roadmap issued under the previous government, *cf. CP03 and Finansredegørelse 2004.*

The envisaged growth in real public consumption of ½ percent per year from 2005 to 2010 exceeds the demographic “pull” on public services, estimated on the basis of demographic projections and the distribution of individual public consumption with respect to age, gender and origin.

The estimated demographic “pull” on public services grows by roughly 0.1 percent per year from 2003 to 2010. The targeted spending growth thus allows an increase in the average real standards of public services (i.e., real resources per user) of about 0.4 percent per year through 2010. Efficiency gains in the public sector may yield an additional contribution to better public services, over and above the increase in resources.

Furthermore, the resources devoted to priority service areas may grow at an above-average pace, provided resources for other areas grow by correspondingly less. Central government consumption has not grown since the government took office in 2001, so real public spending growth has been allocated to municipalities and counties, which are largely responsible for providing services directly to citizens, such as hospital care, elderly care and primary and secondary education.

The government has parliamentary backing for a comprehensive reform of the public sector, which will lead to fewer and larger municipalities and replace the existing counties by five regions. At the same time, the division of tasks between the different levels of government will be reorganized. Larger municipalities will allow a better organization of tasks, where more can be handled directly at the local level. For private citizens and businesses, the municipalities will thus provide the key access point to the public sector. The five new regions will be responsible for health services, and also for certain development tasks and social welfare services on behalf of the municipalities. The reform is scheduled to take effect in 2007. To ensure an efficient use of resources in municipalities and counties due to be merged, a pre-authorization procedure for construction projects costing more than 1 mill. Dkr. has been introduced in connection with the Spring Package.

Initiatives have been launched to further the digitalisation of public administration (“e-government”); making greater use of public-private partnerships; and preparing the privatisation of public companies. Free choice between private and public service providers have been introduced as regards elderly care, free choice between daycare providers across municipality boundaries etc. Recently, general-purpose legislation has been proposed with a view to ensure e.g. that the municipalities continuously reassess their options for extending free choice.

## 2.5. Structural and labour market policies

A key requirement in the medium-term scenario is new structural initiatives sufficient to raise employment by 50-60,000 persons from 2003 to 2010 (i.e., by about 2 percent). Absent new structural initiatives, a fiscal adjustment of about 1 percent of GDP (or higher employment on the other side of 2010) would be required to ensure a stable public debt-to-GDP ratio in the longer run. Relative to CP03, the requirement of new structural initiatives is largely unaltered or only slightly more demanding, *cf. Appendix 5*.

Absent new structural initiatives, structural employment appears set to decline by roughly ½ percent by 2010. Seen in isolation, demographic developments could pull employment down by about 2 percent by 2010. However, already adopted initiatives and changed inflows to early retirement and disability schemes could pull employment up by 1½ percent. The latter contribution stems in particular from the reforms of the early retirement and disability schemes, the abolition of the pre-early retirement scheme, the labour market reform *More people in work* as well as the labour supply effects of lower taxes on earned income, *cf. section 3*.

Hence, assuming new structural initiatives that may raise employment by 50-60,000 jobs (about 2 percent), structural employment is projected to grow by 1½ percent, or by about 45,000 persons, from 2003 to 2010.

The employment rate in Denmark is already among the highest in the OECD and somewhat higher than the joint EU-target of 70 percent as laid down in the Lisbon strategy. To meet the employment requirement, efforts need to focus on areas where untapped potential remains. The government has announced that efforts will focus, in particular, on the following areas:

- *Improved labour market integration of immigrants.* Less than 45 percent of immigrants from less developed countries aged 15-64 are employed. The initiatives in *More people in work* are targeted at this group, among others. Passive benefits for newly arrived immigrants was reduced in 2002. Since CP03 the Spring Package has eased access to certain educations in the social and health sphere, Danish teaching has been strengthened, and municipalities are rewarded for getting immigrants into employment and achieving better Danish

test results. Committees have been established to evaluate the existing introductory programs and the potential for improved integration. This work could lead to additional rules changes in the course of 2005. Increased use of the 2002 integration agreement among the social partners – opening up for time-limited special wage- and employment conditions for immigrants (e.g. lower phasing-in wages) – can also help to raise employment among immigrants.

- *Reducing excess study times.* On average, young people spend 2.3 years longer in the education system, than if they finished their education in the normally allocated or shortest possible time. The government has announced that e.g. the optional 10th form should be targeted at those pupils with the greatest need. Further initiatives in the educational field are under consideration.
- *More flexible retirement.* The official retirement age is 65 years and the average effective retirement age 61 years. The government has launched initiatives to strengthen counselling of companies about senior policies in the workplace, and reinforce efforts to help elderly unemployed back to work through intensive job search assistance and targeted skill-enhancement. Since CP03, the possibility of receiving higher public pensions for those who postpone retirement beyond the official retirement age of 65 years has been adopted<sup>5</sup>.
- *An inclusive labour market and reduced sickness absence.* About 7 percent of the working-age population receive disability benefits. The full effects of the reform of the disability scheme, which entered into force in 2003, have not yet played out, but the reform is expected to reduce inflows to the scheme. Flex-jobs, which facilitate employment for those not fully work-ready, have become more numerous. In this connection, it is important to ensure that people are not granted rights to flex-job rights, if they could otherwise be employed on normal conditions. With respect to sickness absence, the number of workweeks lost in Denmark is in line with the EU average. The government has proposed an improved model for sickness benefit approval and follow-up, which could result in reduced sickness ab-

---

<sup>5</sup> The scheme strengthens retirement flexibility but is not expected to increase the fiscal room for manoeuvre since persons, who also under the previous rules would work longer than age 65, are now entitled to higher public pension benefits. The employment potential is limited by the many who retire before the official pension age.

sences. The changes would be fully phased in by 2007<sup>6</sup>. The proposal is not yet adopted and has not been included in the 2010-projection.

To illustrate the potential for increased labour participation, an increase in the effective retirement age of ½ year would boost the labour force by 20,000 persons, while a reduction in average study times of ½ year would add 10,000 to the labour force (when about half of the extra study time is assumed to be associated with paid employment). Moreover, the labour force will increase by almost 25,000 persons, if immigrants from less developed countries achieve the same participation rate (broken down by age and gender) as immigrants from more developed countries. Such a scenario would require a considerable effort to strengthen employment among immigrants.

Under current rules, the assumption of reaching an unemployment level of 4½ percent of the labour force by 2010 implies that unemployment would predominantly be of shorter duration and related to job turnover and institutional features such as daily cash benefits during holidays, supplementary benefits, etc. Reaching this level will pose considerable demands on the functioning of the labour market. The labour market improvements that have already been carried out, including the targeting of active labour market policies and tightened availability and eligibility requirements, would thus need to be maintained while extending them in similar directions, cf. also *More people in work*.

The employment policies are specified in more detail in *Appendix 2*, which provides a summary of the Danish action plan for employment, describing the initiatives related to the country-specific EU employment guidelines for Denmark in 2004.

Similarly, *Appendix 3* provides a summary of the Danish action plan to fight poverty and social exclusion, supplemented by certain additional initiatives related to job creation and more traditional social policies.

---

<sup>6</sup> Some 90 percent of sickness benefit recipients are counted as employed, but the proposal will strengthen public finances due to lower benefit expenditures and higher numbers of hours worked.

The Welfare Commission mentioned in CP03 is analyzing and preparing concrete proposals for reforming the Danish welfare model with a view to raise labour supply and employment, among other things. The proposals shall support the objective of fiscal sustainability. The Welfare Commission fosters debate of the key challenges and it will issue its final report before the end of 2005.

*The Danish Growth Strategy* primarily concerns product markets and the conditions for entrepreneurship and includes surveillance and benchmarking in key areas shaping growth prospects. The key reforms aimed at product markets are laid out in *Appendix 4*, which summarizes the *Danish Cardiff-report* as well as certain additional initiatives. The reforms have especially targeted increased competition, lower administrative burdens, improved conditions for research, development and education, as well as public sector reforms.

In spring 2005, the government will present a multi-annual plan for Denmark as a growth, knowledge and entrepreneurial society, based on inputs from, inter alia, a think tank on future growth established by the government, which is focusing on entrepreneurship, innovation, capital, education and competition.

### **3. Near-term economic outlook and projections to 2010**

#### **3.1. International assumptions and interest rates<sup>7</sup>**

The revival of international growth in 2004 has been stronger than assumed in last year's convergence programme, especially because of higher growth in the United States and Asia. Stronger global growth in combination with a series of supply disturbances have led to rising oil prices measured in US dollars. Due to the strengthening of the euro against the

---

<sup>7</sup> CP04 is based on the latest official forecast, cf. *Economic Survey August 2004*. The external assumptions underlying that forecast were based on the Commission's spring forecasts, updated to take account of economic data releases, financial developments and oil prices through August. The Commission's autumn projections imply slightly higher growth in the euro area and the United States in 2004 and slightly lower growth in 2005 than what underlies this programme. Trading partners' weighted import growth is about ½ percentage point higher in 2004 and similarly lower in 2005 than assumed here. The interest and exchange rate assumptions are close to those underlying the Commission's autumn projection (see table A.8).

dollar, however, the oil price measured in kroner is not higher than in autumn 2000. Real oil prices (i.e., crude oil prices in Dkr. relative to the consumer price index) remain substantially lower than in the late 1970's and early 1980's.

No further acceleration in activity growth is expected among Denmark's trading partners in the next couple of years. For 2004-2006 on average, trading partners' growth is assumed to be slightly faster than potential. As of 2006, foreign real GDP growth is assumed to proceed in line with potential growth – estimated at 2¼ percent using Danish export weights.

Owing to the growing international division of labour, world trade tends to grow faster than national outputs. The growth of partner countries' imports (and of Danish imports, for that matter) is assumed to exceed GDP growth in line with historical experience, *see table 3.1*.

**Table 3.1 Main international assumptions**

	2003	2004	2005	2006	2007	2008-10
	----- Annual growth (per cent) -----					
Trading partners, real GDP <sup>1)</sup> .....	1.3	2.8	2.9	2.2	2.2	2.2
Export market, manufacturing <sup>1)</sup> ....	4.1	7.1	7.7	4.4	4.4	4.4
	----- per cent, end-year level -----					
Germany, 10-year euro yield .....	4.1	4.3	4.8	5.2	5.6	5.6

1) Weighted growth using Danish export weights.

Source: European Commission forecasts, OECD and own calculations.

The yield on the benchmark 10-year German government bond rose from a record-low level of around 3.7 percent in mid-2003 to 4.4 percent by November 2003, but has since fallen back to below 4 percent by late October 2004. The programme assumes a gradual increase to around 5½ percent in 2007.

The yield spread between Danish and German 10-year government bonds has averaged around 0.3 percentage points since early 1999. The currently low level of international interest rates and healthy public finances in Denmark have helped to achieve the narrow yield spread.

Based on an analysis of historical relations between the yield spread, inflation differences and other relevant factors (*see Medium-Term Survey 2002*), the yield spread to Germany is assumed to widen to about 0.5



percentage points in 2007. The assumed spread is about 0.35 percentage points higher than the estimated spread in case Denmark had participated in the single currency.

### 3.2. Near-term outlook

The short-term forecast of August, which incorporates national accounts data up until the first quarter of 2004, implied a moderate recovery with activity gathering force and unemployment declining in the course of 2004 and 2005. The August forecast saw GDP growth of 2.2 per cent in 2004 and 2.5 per cent in 2005, *see table 3.2.*

**Table 3.2. Real economy indicators of the convergence programme.**

	ESA	2003	2004	2005	2006	2007	2008-10
		----- Per cent -----					
Real GDP growth .....	B1g	0.5	2.2	2.5	1.3 <sup>2)</sup>	1.9	1.8
GDP deflator .....		2.2	1.8	2.0	2.1	2.1	2.1
<i>Growth components</i>		----- Real growth, per cent -----					
Private consumption expenditure .	P3	0.8	3.6	3.0	1.7	2.5	2.5
Public consumption expenditure ..	P3	1.0	0.3	0.5	0.5	0.5	0.5
Gross fixed capital formation .....	P51	0.1	3.4	3.4	1.9	2.6	2.5
Changes in inventories, etc. <sup>1)</sup> .....	P52/3	-0.4	0.0	0.0	0.0	0.0	0.0
Exports of goods and services .....	P6	0.0	3.1	5.1	3.6	3.5	3.5
Imports of goods and services .....	P7	-0.6	4.3	5.4	4.0	3.9	3.9
<i>Growth contributions</i>		----- Real growth, per cent -----					
Final domestic demand .....		0.7	2.6	2.4	1.4	2.0	1.9
Change in inventories .....	P52/3	-0.4	0.0	0.0	0.0	0.0	0.0
Net exports .....	B11	0.3	-0.4	0.1	-0.1	-0.1	-0.1
<i>Labour market</i>		----- Per cent -----					
Employment growth .....		-0.8	0.4	0.8	-0.3	0.3	0.3
Unemployment (per cent of labour force) .....		5.9	6.0	5.3	5.2	5.0	4.5
Do, EU definition .....		5.6	5.7	5.0	4.9	4.7	4.2
Hourly productivity in the business sector .....		1.6	1.6	2.0	2.1	2.0	2.0
Productivity (GDP per employ.) ..		1.4	1.4	1.8	1.7	1.7	1.5

1) Contribution to GDP growth.

2) The low growth assumed for 2006 reflects a technical assumption that the output gap closes in the first year of the medium-term projection.

Source: Statistics Denmark and own calculations.

So far, the economy has developed broadly in line with, or slightly stronger than assumed. Updated assumptions for the international

economy, including the rise in oil prices and slightly lower interest rates, are expected to have a broadly neutral impact on growth in 2004 and 2005 combined. Denmark is a net exporter of energy and higher oil prices tend to strengthen public finances, *cf. Appendix 1*.

A revised forecast incorporating the latest available information is due by mid-December 2004. The new assessment is expected to yield broadly unchanged growth for 2004 and 2005 combined. In 2006, growth will be affected by the number of working days easing back from the high levels seen in 2004 and 2005, and by the moderate growth-dampening effect of the Spring package after 2005. The potential revisions to, *inter alia*, the public finance data are well within the bounds implied by the sensitivity analysis in Appendix 1.

Unemployment peaked in December 2003 and has fallen by some 10,000 persons (about 0.4 percent of the labour force) through September 2004. The total number of people that are either unemployed or enrolled in active labour market schemes has declined slightly faster since June than expected in the August survey, but the numbers in “activation” have risen less than anticipated. Unemployment remains relatively low in a historical perspective and compared to other countries.

The output gap is estimated to close and then turn positive in 2005. Unemployment is expected to be close to and probably slightly below the estimated structural level in 2005. As a technical assumption, the output gap is assumed to revert to zero in 2006 and real GDP growth is assumed to be in line with potential as of 2007.

### **3.3 Employment and production potential towards 2010**

For the period 2003-10, the projection assumes an average annual GDP-growth of around 1¾ percent, *cf. table 3.3*. The lower growth than in the 1995-2002 period should be seen in light of the sharp non-replicable drop in unemployment in the earlier period. In addition, average working hours are projected to decline through 2010 on account of changes in the age composition of the labour force and collective agreements providing for more special holidays (days that, if taken, are deducted in wages). Average working hours have been fairly constant since the early 1990s.

**Table 3.3. Contributions to potential production and real GDP**

	1981-03	1995-02	2003-10
	----- Annual growth, percent -----		
<i>Growth in potential production</i> .....	2.0	2.2	1.8
Of which, contribution from:			
- Hourly productivity.....	1.9	1.4	1.7
- Structural unemployment.....	0.1	0.7	0.1
- Labour force.....	0.2	0.1	0.1
- Working hours.....	-0.2	0.1	-0.2
<i>Growth in GDP</i> .....	1.9	2.3	1.7

Source: ADAM databank and own calculations.

### Employment

The projection assumes an increase in the labour force of almost 20,000 persons and 40,000 fewer unemployed from 2003 to 2010. This entails an increase in employment of roughly 60,000 jobs, of which more than 40,000 are assumed to be in the private sector and just below 20,000 in the public sector.

Unemployment in 2003 is estimated to contain a cyclical element (of about 13,000 persons), while the labour force in 2003 is estimated to be slightly below its structural level (by about 2,000 persons)<sup>8</sup>. Hence, part of the assumed increase in employment (15,000 persons) takes place as a consequence of the assumed cyclical normalization over the medium term. The remainder (45,000 persons) is of a structural nature.

Demographic trends will, *ceteris paribus*, tend to reduce labour supply. In a scenario with unchanged structural participation rates (broken down by gender, age and origin) and a structural unemployment rate as in 2003, structural employment would decline by 53,000 persons through 2010, *cf. table 3.4*<sup>9</sup>.

<sup>8</sup> The incorporation of a structural level for the labour force is new compared to earlier updates. The difference between the actual and structural labour force reflects the cyclical sensitivity of labour supply, primarily related to younger cohorts' participation rate depending on employment opportunities, *cf. Finansredogørelse 2004*.

<sup>9</sup> The demographic decline in employment is larger than in CP03. This primarily owes to the incorporation of a new demographic projection from the independent research unit DREAM, incorporating reduced immigration and hence lower growth in the number of persons in the normal working age through 2010.

**Table 3.4. Contributions to higher structural employment**

	Change 2003-10
Demographic contribution <sup>1)</sup> .....	-53
Abolition of the pre-early retirement scheme .....	10½
Disability scheme: reform and changed inflow, etc. ....	16
Reform of the early retirement scheme .....	9
Higher underlying inflow to early retirement etc. ....	-17
Increased educational attainment <sup>2)</sup> .....	13
More people in work .....	10
Earned income tax credit .....	3½
Changes to maternity leave .....	-4
Other contributions .....	-1
Structural employment (no-policy change) .....	-14
Required new structural initiatives to boost employment .....	58
2010-scenario (required policy scenario) .....	45

Note: Due to rounding, the total may deviate from the sum of contributions.

- 1) Assumes unchanged overall unemployment rate and unchanged participation rates for the individual groups (by age, gender and origin) from 2003 to 2010. A detailed description of the contributions to higher employment is in Appendix 5.
- 2) The impact of increased educational attainment is included as a decline in inflows to disability and early retirements, in addition to the contributions shown in the table for these schemes.

Source: Own calculations.

Already implemented reforms and other factors are projected to raise labour supply relative to this demographic scenario. Hence, structural employment is estimated to decline by some 14,000 persons from 2003 to 2010 in a no-policy change scenario, i.e. absent new structural initiatives to durably raise employment<sup>10</sup>.

The termination of the pre-early retirement scheme, changed inflows to disability and early retirement as well as the reforms of the disability and early retirement schemes are estimated to contribute positively to employment trends by some 20,000 persons through 2010, cf. table 3.4.

Generally rising educational attainment levels through 2010 are estimated to boost employment by 13,000 persons from 2003

<sup>10</sup> In *Danish Economy, Spring 2004*, the Economic Council projects a slightly lower demographic contribution (-63,000) and roughly similar contributions from already-enacted policies, education levels etc. (about 36,000 persons) as assumed here (about 39,000 persons).

to 2010 since labour participation is increasing in the level of education<sup>11</sup>. The higher participation primarily reflects lower inflows to disability and early retirement.

The initiatives in *More people in work* are estimated to raise employment by some 10,000 persons, of which 5,000 persons occur via a reduction in structural unemployment.

Finally, lower taxes on earned income strengthen effective labour supply. First, the introduction of the earned income tax credit strengthens incentives to work, which is estimated to raise employment by about 3,500 persons in due course. Second, the higher threshold for the 6 percent income tax is expected to raise labour supply, mainly via longer average hours worked. Together, the two measures are estimated to raise labour supply corresponding to 10-12,000 full-timers. Since longer working hours benefit public finances less than increased employment, the combined impact on fiscal sustainability corresponds to an increase in employment of about 9,000 persons.

The CP04 scenario presumes additional initiatives to raise structural employment by some 58,000 persons (about 2 percent), *cf. table 3.4*. In the projection, these contributions are technically assumed to come from an increase in the labour force of about 35,000 persons, notably stemming from better labour market participation of immigrants and faster pass-through through the education system, and a reduction of structural unemployment of about 20,000 persons, *cf. section 2.5*. The structural rate of unemployment is hence assumed to decline from 5½ percent in 2003 to 4½ percent by 2010.

### Productivity

Hourly productivity in the private non-farm business sector is assumed to grow by about 2 percent per year on average during 2003-10, which corresponds to average productivity growth since 1980. For the private

---

<sup>11</sup> The incorporation of labour supply effects of rising educational attainment is new compared to previous projections. The contribution primarily reflects a historical tendency to lower inflows to disability or early retirement for persons with higher educational attainment. To the extent this pattern owes to systematic differences in working conditions (and not personal factors) higher educational attainment will contribute to higher labour participation.

sector as a whole, hourly productivity is assumed to grow by 2¼ percent per year. Since the national accounts do not incorporate productivity improvements in the public sector, which accounts for some 30 percent of employment, total hourly productivity is assumed to grow by 1¾ percent per year, *cf. table 3.3*. The initiatives flowing from the government's *growth strategy* will contribute to realize the assumed private sector productivity growth of 2¼ percent, which is at the upper end of recent years' achievements<sup>12</sup>.

### Hours worked

Average hours worked per employee have been approximately constant since the early 1990s (after a considerable fall in the preceding decades). CP04 assumes that working hours do not fall further, apart from the decline in hours flowing from already agreed collective bargains and changes in the age composition of the labour force.

The rising share of elderly and very young persons in the labour force thus entails a reduction in average hours worked, since these groups tend to work fewer hours on average than middle-aged persons. In addition, collective bargains agreed in 2000 entail a decline in hours through 2004 due to more special holidays. The impact of lower taxes on earned income pulls in the opposite direction.

In sum, total working hours are assumed – provided agreed hours remain unchanged as of 2004 – to decline by 1 percent from 2003 to 2010. Absent lower taxes on earned income, the decline would have been some 1.3 percent.

### 3.4. Wages and prices

Since 2000, annual wage increases have been about 1 percent higher than in the euro area. To a considerable extent, the higher rate of wage increases is founded in higher productivity growth. Hence, unit labour costs in the private non-farm business sector have risen in line with unit

---

<sup>12</sup> Higher productivity is the key driver of continued progress in output and living standards. However, higher productivity growth can not – under current rules and practices – be expected to strengthen public finances. Even though tax revenues increase when productivity and hence incomes rise, the expenditures increase roughly in parallel, notably because almost all public expenditures grow in line with private sector wage increases by virtue of indexation rules and public sector wage agreements, *cf. Appendix I*.

costs in the euro area during the periods 1990-03 and 2000-03<sup>13</sup>. By the same token, core inflation in Denmark has been close to core inflation in the euro area ever since the introduction of the euro in 1999 (measured by HICP excluding energy and unprocessed foods, core inflation on annual data has been 0.1-0.2 percentage points lower in Denmark).

Wage increases are set to subside to 3½ percent in 2004, while consumer price inflation is expected to be below 1½ percent. Muted price and wage inflation reflects unemployment being above the estimated structural level and declining import prices in the wake of a stronger effective exchange rate related to the strengthening of the euro against the dollar.

**Table 3.5. Deflators and price indices**

	2003	2004	2005	2006	2007	2008-10
	----- Annual growth, pct, -----					
GDP-deflator.....	2.2	1.8	2.0	2.1	2.1	2.1
Consumption price deflator .....	1.9	1.2	1.7	1.7	1.7	1.7
Consumer price index.....	2.1	1.4	1.8	1.6	1.7	1.7
EU-harmonized HICP.....	2.0	1.2	1.7	1.6	1.7	1.6
Net price index .....	2.3	1.7	2.0	1.8	1.8	1.8
Hourly wages, private sector.....	3.7	3.5	3.8	3.8	3.8	3.8
Labour costs per employee .....	3.5	3.5	3.3	3.7	3.8	3.7
<i>Euro area</i>						
HICP.....	2.1	2.1	1.9	-	-	-
Labour costs per employee .....	2.6	2.2	2.4	-	-	-

Source: Statistics Denmark and own calculations

As of 2005, CP04 assumes annual wage increases of around 3¾ percent per year and consumer price inflation of around 1¾ percent. This entails annual real wage increases of 2 percent throughout the projection period, *cf. table 3.5*, which largely corresponds to the assumed productivity growth in the private non-farm sector. Due to the tax freeze, consumer prices rise slightly less than the net price index, *cf. table 3.5*.

### 3.5. Current account and foreign debt

The projection implies continued high financial savings in the private as well as the public sector, and a current account surplus of 3-4 percent of

<sup>13</sup> Based on OECD data. In manufacturing, unit labour costs have risen somewhat faster in Denmark than in the euro area during 2000-02.

GDP through 2010. This surplus contributes to a reduction in foreign debt which, subject to the often considerable revaluations of assets and liabilities, could turn into net foreign assets during the period 2006-10, *cf. table 3.6.*

**Table 3.6. Current account and net foreign assets**

	2003	2004	2005	2006	2007	2010
	-----Per cent of GDP -----					
Private financial saving .....	1.7	1.9	1.3	1.8	1.9	1.9
Public financial saving .....	1.2	1.2	2.0	1.6	1.7	2.0
Current account .....	2.9	3.1	3.3	3.4	3.6	3.9
Net foreign assets .....	-15.2	-10.7	-6.3	-2.0	2.1	14.2

Source: Statistics Denmark and own calculations.

## 4. The outlook for general government finances

### 4.1. Overview of public finances

In the *August 2004 survey*, the general government surplus – on a national accounts basis – was estimated at 16.9 bill. Dkr. or 1.2 percent of GDP in 2003, *cf. table 4.1.* In November, Statistics Denmark published a surplus of 14.6 bill.Dkr. or 1.0 percent of GDP in 2003. The lower surplus reflects a downward adjustment of revenues from personal taxes. This revision was to a large extent anticipated and hence included in the August projections for the public balance in 2004 and 2005 (whereas the 2003 number reproduced preliminary statistics released in June).

According to the August projection, the public surplus is estimated at 1.2 percent of GDP in 2004. Cyclical factors – including relatively high private consumption growth, rising employment and declining unemployment – contribute to a larger public surplus in 2004 than in 2003. The temporary suspension of Special Pensions contributions in 2004 and 2005 pulls in the same direction. Lower taxes on earned income – including the front-loading of the tax reductions to 2004 – pull in the opposite direction.

With the expected improvement in activity, the fiscal surplus is projected to reach 2.0 percent of GDP in 2005. Higher oil prices also improve



public finances in the short run via increased corporate tax revenues and other revenue sources associated with the North Sea oil and gas activities (profit sharing and oil pipeline duty).

**Table 4.1. Public balance and debt**

	ESA	2003	2004	2005	2006	2007	2010
Revenues .....	ESA	56.1	55.6	54.9	54.6	54.5	53.9
- of which taxes .....		48.9	48.9	48.4	47.9	47.7	47.3
Expenditures .....	ESA	54.9	54.4	53.0	53.0	52.8	51.9
Public balance (national accounts) .....	B9	1.2 <sup>1)</sup>	1.2	2.0	1.6	1.7	2.0
- of which central and local governments		0.1	0.4	1.3	0.8	0.9	1.1
Public balance (EDP-form) .....		1.4	1.4	2.2 <sup>2)</sup>	1.8 <sup>2)</sup>	1.9 <sup>2)</sup>	2.2 <sup>2)</sup>
EMU-debt .....		44.7	42.3	39.4	37.4	35.3	28.8
Public net debt .....		4.9	3.2	1.0	-0.9	2.8	-8.7
Net debt in central and local governments .....		23.7	22.3	20.1	18.6	17.0	12.0

1) In November, the total public balance was revised to 1.0 percent of GDP by Statistics Denmark, of which the central and local government balance makes up -0.1 percent of GDP. The projected balance in 2004 and 2005 incorporates this factor.

2) Technically, the public surplus on an EDP-basis is assumed to be 0.2 percent of GDP higher than the surplus on a national accounts basis through 2005-2010, cf. the difference in 2003 and 2004.

Source: Statistics Denmark and own calculations.

At the same time, the balance of central and local governments (net lending) improves from being in rough balance in 2003 to reach a surplus of 1.3 percent of GDP by 2005.

Meanwhile, gross public debt ("EMU-debt") is reduced from 44.7 percent of GDP in 2003 to 39.4 percent of GDP by 2005. In subsequent years, the assumed medium-term surpluses contribute to reducing EMU-debt to around 28.8 percent of GDP by 2010.

Compared to CP03, EMU-debt in 2003 has been revised up by 2 percent of GDP. The adjustment is primarily due to a data revision for EMU-debt during 1992-2002 undertaken by Statistics Denmark since CP03<sup>14</sup>. For 2003, this entails a technical upward adjustment to EMU-

<sup>14</sup> This technical revision of the debt level does not affect fiscal policy requirements since the net debt of the central and local governments is not affected by the revision.

debt of 1.5 percent of GDP. This level shift in the EMU-debt is continued in the estimates for 2004 and beyond. In addition, a lower central and local government surplus and lower holdings of government bonds by public funds (ATP) than assumed in CP03 contributes to the upward revision of EMU-debt in 2003.

In the original 2010-plan, EMU-debt was reduced to 23½ percent of GDP by 2010, cf. *En Holdbar Fremtid – Danmark 2010*, January 2001. The above-mentioned 28.8 percent of GDP in the CP04 projection are not directly comparable. Since the original 2010-plan, a number of technical factors – which do not affect fiscal policy requirements – have raised the EMU-debt level<sup>15</sup>. Corrected for these technical factors, the EMU debt in the CP04 projection amounts to roughly 25½ percent of GDP by 2010, which is comparable to the 23½ percent of GDP.

As part of EU budgetary procedures, Denmark reports its general government debt and budget balance to the European Commission under the Excessive Deficit Procedure, EDP.

The public balance on EDP-basis differs in some aspects from the balance according to the national accounts. This is due to the inclusion of net interest income from government interest and currency swaps, and different treatment of government revenue from the sale of UMTS-licences<sup>16</sup>. On an EDP-basis, the public surplus incl. ATP is estimated at 1.4 percent of GDP in 2003.

The European statistical office Eurostat has decided that publicly administered, fully funded defined-contribution pension schemes without public guarantees and with individually earmarked, actuarially fair benefits shall in future be categorised as private pension funds in the EDP-reporting. In the case of Denmark, this means that ATP shall be moved from the public to the private sector. The new classification is

<sup>15</sup> This concerns e.g. ATP holdings of government bonds (which are consolidated in the EMU debt), a historical revision to EMU-debt undertaken by Statistics Denmark, state lending to state-guaranteed entities, etc.

<sup>16</sup> For EDP-purposes, all government revenue from the sale of UMTS-licences is accrued to 2001. In other words, the revenue is considered a type of one-off income, even though the government *de facto* will receive revenue from this source during 2001-2011. In the national accounts, Statistics Denmark has chosen to spread the total revenue over the 20-year period, for which the licences are valid.

expected to be fully implemented in connection with the EDP-reporting of March 2007<sup>17</sup>. Statistics Denmark is expected to decide on ATP's future treatment in the national accounts during 2005.

The statistical classification of ATP has no bearing on fiscal sustainability or fiscal policy requirements. When assessing fiscal sustainability, the calculations already take account of ATP's assets being reserved for future pension payouts, see also section 5.

An altered statistical classification of ATP in the national accounts would lead to a purely technical adjustment of the target interval for the public balance. In this vein, the target for average surpluses through 2010 remains 1½-2½ percent of GDP when ATP is included in the public sector, and will correspond to roughly ½-1½ percent of GDP if and when the public balance excludes ATP.

In the medium-term projection underlying CP04, the total public surplus amounts to about 1.7 percent of GDP on average from 2003 to 2010. That is at the lower end of the target interval of 1½-2½ percent of GDP.

#### 4.2. Fiscal policy

The surplus on the structural balance<sup>18</sup> is estimated to decline from 1.5 percent of GDP in 2003 to 1.2 percent of GDP in 2004, *see table 4.2*. Corrected for the temporary suspension of SP-contributions (which

---

<sup>17</sup> Eurostat took a decision about a changed classification of pension funds in March 2004, see also footnote 3 above. In connection with Eurostat's publication of the public finance notification in September, a general possibility was given to postpone the implementation of the decision to the March 2007 reporting. The results of the September 2004 notification showed, for some countries including Denmark, the public balance excluding funds such as ATP. For Denmark, this implied a public balance on EDP-basis of 0.3 percent of GDP in 2003 and a corresponding EMU-debt of 45.9 percent of GDP. The notifications in 2005 and 2006 are expected to include ATP in the public finances.

<sup>18</sup> The calculation of the structural balance corrects the actual balance for cyclical influences and a set of special factors. The special factors cover budget items that do not systematically move with the cycle, but which may have considerable and highly variable influences on public finances from year to year. The correction for special items primarily concerns the tax on pension fund investment returns (which depends on share and bond prices and for which revenues can therefore fluctuate quite widely), corporate taxes and net interest expenditures.

implies lower tax deductions) the structural balance is estimated at 0.9 percent of GDP in 2004.

**Table 4.2. Structural public balance**

	2003	2004	2005	2006	2007	2010
	----- Per cent of GDP -----					
Actual balance (1).....	1.2	1.2	2.0	1.6	1.7	2.0
Cyclical contribution (2).....	-0.4	-0.1	0.6	0.0	0.0	0.0
Special items(3).....	0.1	0.1	-0.1	0.0	0.0	0.0
Structural budget balance (1)-(2)-(3).....	1.5	1.2	1.5	1.7	1.7	2.0
Structural budget balance corrected for the suspension of SP contributions.....	1.5	0.9	1.2	1.7	1.7	2.0
<i>Memo items</i>						
Potential GDP growth, per cent.....	1.8	1.0 <sup>1)</sup>	1.9	1.8	1.8	1.8
Real GDP growth, per cent.....	0.5	2.2	2.5	1.3	1.9	1.8
Output gap.....	-1.3	-0.2	0.4	0.0	0.0	0.0

Note: The special items primarily covers the tax on pension fund investment yields, corporate taxes, and net interest expenditures.

Source: Statistics Denmark and own calculations.

1) The applied output gap concept is closely tied to the employment gap (i.e., the deviation between actual and structural employment). With the method used, in which the gap is estimated in a state space model using the Kalman filter, short-term or erratic movements in GDP, which only partially or with some delay affect employment, do not feed fully into the measured gap. The gap estimation is considerably more robust than the traditional production function method to e.g. subsequent data releases, see *Finansredegørelse 2004*, but data uncertainties or revisions may instead feed into the estimated growth in potential GDP. The low potential growth number for 2004 reflects data uncertainty related to preliminary national accounts data for employment in the first half of 2004, which have subsequently been revised.

The lower structural surplus in 2004 is primarily due to the lowering of taxes on earned income. The assumptions about fiscal policy and employment in subsequent years entail a gradual improvement in the structural balance.

The structural balance is estimated to roughly equal the actual balance in 2004. In 2005 the actual surplus of 2.0 percent of GDP is expected to be higher than the estimated structural surplus of 1.5 percent of GDP. This is primarily because the expected cyclical improvement strengthens the actual balance by about 0.6 percent of GDP in 2005.

Fiscal policy for 2004 entails a positive growth contribution of about 0.5 percent of GDP measured by the so-called *fiscal effect*<sup>19</sup>. This primarily owes to lower taxes on earned income, the tax freeze, and lower excise duties on alcohol etc.

In addition to the activity impact of traditional fiscal policy of 0.5 percent of GDP in 2004, the suspension of SP-contributions is estimated to add 0.1 percentage point to economic growth. To this should be added the activity impact of a number of initiatives related to housing construction, some of which were introduced in connection with the Spring Package.

Fiscal plans for 2005, including the planned state budget and the framework budget agreement for local and regional governments, are set to be neutral. Hence, fiscal policy is estimated to add 0 percent of GDP to growth in 2005 according to the fiscal effect, *see table 4.3*. The neutral growth impact should be viewed in light of expectations that unemployment in 2005 may be close to and could be below the estimated structural level.

**Table 4.3. Policy impact on GDP-growth, 2001-2005**

	2001	2002	2003	2004	2005
GDP-growth.....	1.6	1.0	0.5	2.2	2.5
First-year fiscal effect.....	0.3	0.3	0.0	0.5	0.0
Implemented interest rate changes <sup>1)</sup> .....	-0.1	0.5	0.6	0.8	0.4

1) Calculated as the isolated impact on GDP growth from interest rate changes between 1993 and mid-August 2004. The interest rate level is subsequently assumed unchanged.

Source: ADAM's databank and own calculations.

The decline in interest rates over recent years is estimated to support growth substantially in both 2004 and 2005. Thus, the combined fiscal and monetary stance is clearly expansionary in 2004 and 2005. The appreciation of the euro and oil price hikes to date pull in the opposite direction.

<sup>19</sup> The fiscal effect has been calculated for a number of years and on the basis of the macromodel ADAM. Discretionary fiscal policy is evaluated relative to defined neutral paths for fiscal variables, and the overall activity impact is calculated from model-based multipliers for fairly disaggregated revenue and expenditure categories (see *Finansredogørelse 2004*).

On November 10, the government entered into a political agreement on the fiscal bill for 2005, *see box 4.1.*

#### **Box 4.1. Agreement on the fiscal bill for 2005 – key themes**

- Strengthened research efforts through a 3 bill. Dkr. capital injection to the High-Technology Development Fund (see box 4.3) and an additional 1 bill. Dkr. for the Danish Basic Research fund. Financed through one-off revenues from reallocation of government assets.
- Almost ½ bill. Dkr. during 2005-2008 for life-long learning, especially among low skilled.
- Improvements for children and families, including nationwide guarantee of the availability of child care.
- Initiatives of more than ½ bill. Dkr. in the health sector, including strengthening the fight against cancer.
- Raising the supplementary pension benefit for low-income retirees by 340 mill. Dkr.
- Targeted adjustments of excise duties within the framework of the tax freeze. E.g. lower duties on beer and wine, and higher duties on cigarettes.

The key fiscal numbers in the agreement are in line with the government's proposal put forward in August. Concretely:

- The fiscal effect – i.e., fiscal policy's impact on activity growth – is unchanged at 0 percent of GDP in 2005.
- Real growth in public consumption is unchanged at 0.5 percent in 2005.
- The central government CIL-balance (current, investment and lending account) is strengthened by about 1 bill. Dkr. In particular, one-off receipts from the reallocation of state assets are expected to reach 4 bill. Dkr., against 3 bill. Dkr. in the budget proposal.
- In itself, the agreement entails a reduction in the total public surplus of about ½ bill. Dkr. in 2005.

The central government's CIL-balance is affected by discretionary one-off revenues of about 5 bill. Dkr. or 0.3 percent of GDP in 2004 and 2005. Since most of these one-off measures are of a financial character, the public balance (net lending) is affected by less than 0.1 percent of GDP in 2004 and 2005, *see box 4.2.*

**Box 4.2. Overview of one-off revenues in 2004 and 2005.**

On modernizing the capital structure and liquidity management of the investment funds for east european and developing countries, extraordinary disbursements add 1.4 bill. Dkr. to the CIL-surplus in 2004. Since these funds form part of the public sector in the national accounts, the public balance is unaffected, *see table a.*

The agreement with the Danish Underground Consortium concerning oil and gas extraction in the North Sea replaced payments of royalties by profit sharing. In the transition year 2004, the state receives one-off cash revenues of about 2 bill. Dkr. since the previous arrangements entailed a one-year lag from accrual to payments but the new agreement does not. Statistics Denmark has been counting the revenue from royalty payments on an accrual basis all along in the national accounts. Hence, the public balance is not affected by the change.

In 2004, the government purchased Gastra A/S for 1.1 bill. Dkr. The purchase is financed through extraordinary dividends from DONG A/S. Hence, the CIL-balance is not affected. However, the public balance improves by 1.1 bill. Dkr. since purchases of financial assets are considered portfolio reallocation, which does not affect the public balance, while dividends from publicly owned companies are included in the public interest and dividend income in the national accounts.

In 2004 and 2005, extraordinary dividends from the Danish State Railways (DSB) of 0.1 bill. Dkr. and 0.5 bill. Dkr., respectively, are expected. The possibility of receiving extraordinary dividends from DSB should be viewed against the background of annual contractual payments from the government of about 4 bill. Dkr. per year.

The fiscal bill for 2004 and the proposed fiscal bill for 2005 budget receipts of 1.0 and 3.0 bill. Dkr., respectively, from reallocations of government assets. In addition, the political agreement on the fiscal bill for 2005 contains additional receipts from this source of 1.0 bill. Dkr. In 2005, the reallocation finances the establishment of the High-Technology Development Fund (3 bill. Dkr.) and the recapitalization of Denmark's Basic Research Fund (1 bill. Dkr.). The reallocations in 2004 and 2005 are expected to concern sales of financial assets etc., which do not affect the public balance. Transfers of 0.5 bill. Dkr. in 2004 and 0.4 bill. Dkr. in 2005 are expected to take place from the state-owned Hypotekbanken. The bank forms part of the state sector in the national accounts, so the transfers do not affect the public balance.

**Table a. Discretionary one-off receipts in 2004 and 2005, bill. Dkr.**

	2004		2005 <sup>1)</sup>	
	CIL	Publ.balance	CIL	Publ.balance
Disbursements from IØ and IFU	1.4	-	-	-
North Sea agreement (DUC)	2.0	-	-	-
Purchase of Gastra A/S	-1.1	-	-	-
Extraordin. dividends from DONG	1.1	1.1	-	-
Extraordin. dividends from DSB	0.1	0.1	0.5	0.5
Reallocation of state assets	1.0	-	4.0	-
Transfers from Hypotekbanken	0.5	-	0.4	-
<b>Total</b>	<b>5.0</b>	<b>1.2</b>	<b>4.9</b>	<b>0.5</b>

Note. Positive (negative) numbers reflect improvement (reduction) in the balance.

1) Based on Economic Survey, August 2004, and the 2005 budget agreement.

In spring 2004, the government entered a political agreement to establish a High-Technology Development Fund. The fund's capital is built up through annual transfers from the government during 2005-2012, financed through the reallocation of state assets etc., *see box 4.3.*

#### **Box 4.3. The High-Technology Development Fund**

The government entered a political agreement on March 31, 2004 to establish a strategic high-tech research and innovation fund, "The High-Technology Development Fund" as of January 1, 2005. The Fund is charged with strategic initiatives to further high-technology research and innovation in Denmark.

The capital of the fund is to be gradually built up through annual transfers from the state in the years 2005-12. On average, the annual transfers will be on the order of 2 bill. Dkr. financed through one-off revenues, reallocation of government assets etc., so that the fund by 2012 is intended to have a capital base of at least 16 bill. Dkr..

Public net debt and fiscal sustainability are basically not affected by the build-up of the fund.

The fund's payouts will – as a rule – be determined by the return on its capital. However, exceptional payouts from the base capital will also be possible.

Assuming that the pay-outs from the fund correspond to its return on capital, and that the payouts do not replace other public expenditures, fiscal sustainability deteriorates by 0.03 percent of GDP.

Seen in isolation, such payouts will increase public gross debt by an estimated 0.2 percent of GDP by 2010. Smaller (larger) annual payouts would entail a smaller (larger) impact on public gross debt by 2010.

Unless the research grants are targeted exclusively at private enterprises, the fund's expenditures will to an extent fall under public consumption in the national accounts. This adds to real public consumption but is not considered to materially affect the presumed real growth of 0.5 percent per year in 2005-10. Depending on the profile of payouts, however, the real growth in public consumption could in some years be 0.6 percent.

#### **4.3. Revenues**

Total public revenues are projected to decline from 56.1 percent of GDP in 2003 to 54.9 percent of GDP by 2005 and to just below 54 percent of GDP by 2010, *see table 4.4.*

The declining share of public revenues in GDP from 2003 to 2010 primarily owes to a reduction in the tax burden by around 1½ percent of GDP, *see table 4.5.*



**Table 4.4. Composition of general government finances**

	ESA	2003	2004	2005	2006	2007	2010
		----- Per cent of GDP -----					
Budget balance (N.Accts.).....	B9	1.2 <sup>1)</sup>	1.2	2.0	1.6	1.7	2.0
Government expenditures.....	ESA	54.9	54.4	53.0	53.0	52.8	51.9
- Primary expenditures.....		51.4	51.3	50.2	50.0	49.8	49.5
- Public consumption.....	P32	26.6	26.4	26.0	26.0	25.9	25.5
- Public investment.....	P51	1.7	1.7	1.7	1.7	1.7	1.7
- Social transfers.....		18.1	18.1	17.5	17.3	17.2	17.1
- Subsidies.....		2.1	2.2	2.1	2.1	2.1	2.1
- Other primary expenditures.....		2.9	2.9	2.9	2.9	2.9	2.9
- Interest payments.....		3.4	3.1	2.8	2.9	2.9	2.4
Government revenues.....	ESA	56.1	55.6	54.9	54.6	54.5	53.9
- Taxes (tax burden).....		48.9	48.9	48.4	47.9	47.7	47.3
- Personal taxes etc. <sup>2)</sup> .....		26.6	26.3	26.1	25.5	25.3	25.2
- <i>of which</i> property value tax.....		0.7	0.7	0.7	0.7	0.7	0.7
- Land taxes.....		1.2	1.2	1.2	1.2	1.2	1.2
- Tax on pens. invest. returns .		0.4	0.6	0.7	0.8	0.9	1.0
- Company taxation.....		2.8	3.0	2.9	2.9	2.8	2.6
- Compulsory contributions ...		1.7	1.6	1.6	1.6	1.5	1.5
- VAT.....		9.7	9.7	9.6	9.6	9.6	9.6
- Other indirect taxes.....		7.7	7.6	7.6	7.6	7.5	7.4
- Interest income.....	D41	2.5	2.2	2.2	2.4	2.5	2.5
- Other revenue.....		4.6	4.5	4.3	4.3	4.3	4.1

1) In November, the total public balance was revised to 1.0 percent of GDP by Statistics Denmark.

2) Personal taxes etc. cover withholding taxes, property value tax, labour market contribution tax, motor vehicle tax and other personal taxes.

Source: Statistics Denmark and own calculations.

The agreed reduction in taxes on earned income account for about half of the overall reduction. As previously mentioned, the tax reductions consist of two elements. First, the threshold for the 6 percent income tax is raised. Second, an EITC has been introduced. The tax reductions imply a direct revenue loss of just below 10 bill. Dkr. in 2004 corresponding to 0.7 percent of GDP.

The tax freeze, assumed to remain in force through 2010, contributes 0.4 percent of GDP to the reduction in measured tax pressure<sup>20</sup>.

<sup>20</sup> Two opposing effects are involved in this respect. First, the isolated effect of the tax freeze will lead to a drop in the tax burden of 0.6 per cent of GDP in 2002 terms. Second, the smaller increases in excise taxes (which are included in GDP in market prices) will dampen nominal GDP growth, thus (in technical terms) increasing the measured tax burden by about 0.2 per cent of GDP. For the same reason, this effect increases the measured share of expenditures in GDP by about 0.2 percentage points.

**Table 4.5. Contributions to the change in tax pressure**

	2003-10
	----- Percent of GDP -----
1. Enacted tax reductions .....	-1.2
1.1 Tak freeze .....	-0.4
- lower nominal GDP .....	+0.2
- tax freeze, 2002-level .....	-0.6
1.2 Lower taxes on earned income .....	-0.7
1.3 Abolition of the 24 hour rule etc. ....	-0.1
2. Other (technical) contributions. <sup>1)</sup> .....	-0.4
2.1 Tax on pension fund yields .....	+0.6
2.2 Household net interest income .....	-0.6
2.3 Social transfers .....	-0.4
2.4 Corporate taxes .....	-0.2
2.5 Other .....	0.2
3. Tax pressure (1+2) .....	-1.6

1) These contributions are technical in the sense that they do not reflect changes in the burden of taxation (i.e., mainly reflecting changes in the tax base).

Source: ADAM's databank and own calculations.

The abolition of the EU's 24 hour rule for private imports of alcohol etc. is assumed to lead to a revenue loss of slightly more than 1 bill. Dkr. (less than 0.1 percent of GDP). The concomitant reduction in Danish excise duties on spirits is estimated to be broadly revenue-neutral since lower duties per unit are made up for mainly by reduced cross-border net imports.

Higher revenues from the tax on pension investment returns are expected to pull up measured tax pressure. The sharp decline in share prices in 2001 and 2002 meant that the revenue from this source was close to 0 percent of GDP in these two years, while in 2003 it amounted to 0.4 percent of GDP. From 2004 a return to more normal rates of return is assumed. Combined with the accumulation of pension assets, the revenue should rise to 1 percent of GDP by 2010. In itself, this entails an increase in measured tax pressure of 0.6 percent of GDP from 2003 to 2010.

Based on the assumed profile for total private savings, the projection entails a decline in the free savings of households. This shows up in reduced revenues from net interest income of households, which lowers tax pressure by 0.6 percent of GDP from 2003 to 2010.

The assumed decline in the number of recipients of (tax-liable) social transfer incomes also entails declining tax payments and hence a drop in tax pressure of some 0.4 percent of GDP from 2003 to 2010.

A projected normalization of currently high corporate tax revenues contributes 0.2 per cent of GDP to the reduction in the tax burden.

#### 4.4. Public expenditures

The share of public expenditures in GDP is estimated to decline from 54.9 percent in 2003 to 53.0 percent in 2005. About one third of this decline owes to a fall in the share of social transfers in GDP of about 0.6 percentage points, mainly related to the assumed drop in unemployment. The remaining two thirds primarily reflect similar declines in the shares of interest expenditures and public consumption relative to GDP, respectively, of 0.6 percentage points from 2003 to 2005, see table 4.4.

CP03 assumed near-zero growth in real public consumption in 2003 after roughly 2 percent growth in 2002. The estimated real growth in 2003 was based on the fiscal bill and the budgets of local and regional governments. For the two years combined, the implied average real growth of about 1 percent per year was in line with agreed objectives.

The latest data from Statistics Denmark, which include accounting data for central, regional and local governments, show public consumption growth of 1.0 percent in 2003. The main reason for the excess spending is higher consumption in local and regional governments than budgeted.

The August projection assumed real public consumption growth of 0.3 percent in 2004. Based on the proposed fiscal bill and the agreement with local and regional governments, real public consumption is estimated to grow by 0.5 percent in 2005 in line with the medium-term projections. Consumption growth in 2005 is to a large extent prioritized to local and regional services, including in the health sector – especially hospitals – social services and education.

Hence, a gradual slowing of both real and nominal growth in public consumption during 2001-04 is expected, *cf. table 4.6*.

**Table 4.6. Public consumption and employment**

	2001	2002	2003	2004	2005
	----- Annual growth in percent -----				
Real public consumption .....	2.7	2.1	1.0	0.3	0.5
Nominal public consumption .	6.2	4.4	3.7	3.3	2.8

Note: National accounts data for 2001-2003. 2004 and 2005 estimates based on Economic Survey, August 2004.

From 2006 to 2010 real public consumption growth is targeted at 0.5 percent per year. The relatively modest growth implies that the share of public consumption in GDP declines from 26 percent in 2005 to 25½ percent by 2010.

Hence, public consumption contributes to the total reduction in the expenditure-to-GDP ratio from 2005 to 2010 of about 1 percent of GDP. Lower interest payments and fewer benefit recipients also contribute to the declining expenditure share through 2010.

#### 4.5. Net lending by government sub-sectors

The central government is projected to run surpluses in the entire period to 2010, *see table 4.7*. Among other things, central government finances benefit from the expected cyclical recovery in 2004-05 and from declining net interest payments on government debt. During 2006-10, the output gap is assumed to be zero. Hence, the projected surplus corresponds to the structural surplus.

**Table 4.7. General government finances**

	ESA	2003	2004	2005	2006	2007	2010
<i>Net borrowing/lending</i>		----- Per cent of GDP -----					
General government.....	S13	1.2	1.2	2.0	1.6	1.7	2.0
Of which:							
- Central government.....	S1311	0.9	0.4	1.3	0.8	0.9	1.1
- Local government .....	S1313	-0.8	0.0	0.0	0.0	0.0	0.0
- Funds (ATP etc.).....	S1314	1.1	0.8	0.7	0.8	0.8	0.9

Source: Statistics Denmark and own calculations.

The finances of municipalities and counties must in principle balance on a cash basis, so that current expenditures are financed from current revenues. In individual years, however, there may be surpluses or deficits for the sector – on a national accounts basis – of a certain magnitude.

The surplus in social security funds is projected to remain roughly unchanged in relation to GDP through 2010.

#### 4.6. General government debt

The general government consolidated gross debt ("EMU debt") is estimated to fall from about 44¾ percent of GDP in 2003 to below 39½ percent of GDP in 2005. Consolidated gross debt is projected to fall further to about 28¾ percent of GDP by the end of 2010, *see table 4.8*. Hence, EMU debt is assumed to be reduced by a total of about 16 percent of GDP from 2003 to 2010.

**Table 4.8. General government net debt and consolidated gross debt**

ESA	2003	2004	2005	2006	2007	2010	2003- 2010
	----- Per cent of GDP -----						
EMU-debt (end-year level).....	44.7	42.3	39.4	37.4	35.3	28.8	28.8
Change in EMU-debt .....	-2.6	-2.4	-2.8	-2.0	-2.1	-6.5	-15.8
<i>Contribute to change:</i>							
- Primary budget balance.....	-1.8	-1.9	-2.5	-2.1	-2.0	-8.1	-16.5
- Interest payments (net) .....	1.7	1.5	1.3	1.3	1.2	4.0	9.8
- Nominal GDP-growth.....	-1.3	-1.7	-1.9	-1.3	-1.5	-5.4	-11.6
- Financial conditions etc. <sup>1)</sup> .....	-1.2	-0.3	0.3	0.1	0.2	3.0	2.5

- 1) Financial conditions etc. reflect among others ATP's and DSP's stock of government bonds, which is deducted in the EMU-debt. To this the effect on the EMU-debt from revenues due to reorganization of government assets (privatization etc.), payment changes on the tax area, issue price losses, relending to government guaranteed units etc. should be added.

Source: ADAM's databank and own calculations.

The projected surpluses on the primary balance of the central and local governments contribute 16½ percent of GDP to the total reduction in EMU debt-to-GDP from 2003 to 2010, while net interest expenditures add almost 10 percent of GDP to the debt ratio during the same period.

The projected growth in nominal GDP implies a reduction in the debt-to-GDP ratio of about 11½ percentage points.

Finally, financial transactions etc. – which includes bond emission losses, relending to state-guaranteed entities, receipts from reallocations of state assets and ATP's holding of government bonds – add about 2½ percent of GDP to the EMU debt ratio from 2003 to 2010.

The projected EMU-debt assumes that state relending to state-guaranteed entities increases by about 3 bill. Dkr. per year. Corrected for state lending to state entities, EMU-debt is projected to decline from about 50 percent of GDP in 2000 to about 27 percent of GDP by 2010, *see table 4.9.*

**Table 4.9. Public debt concepts and trends**

	2000	2003	2005	2010
	----- Percent of GDP -----			
Public gross debt (EMU-debt) .....	50.1	44.7	39.4	28.8
- excl. lending to state entities etc.....	49.9	43.6	38.3	26.9
Public net debt .....	8.7	4.7	1.2	-8.9
- excl. social funds etc. ....	29.2	23.7	20.1	12.0

Public sector financial assets are not included in the EMU debt measure. In Statistic Denmark's national accounts-based measure of general government *net* debt, all financial assets and liabilities of the public sector, including ATP, are included. In the case of state assets, this includes e.g. lending to state-guaranteed entities and share holdings<sup>21</sup>.

In 2000, public net debt amounted to some 10 percent of GDP. The net financial asset position is projected to turn positive reaching almost 9 percent of GDP by 2010.

In assessing the sustainability of public finances, what matters is the net public debt excluding net assets in public (pension) funds. The financial assets of ATP are reserved for future pension payouts. A statistical reclassification of ATP from the public to the private sector does not impact fiscal sustainability or policy requirements in Denmark.

This debt measure is projected to decline from above 29 percent of GDP in 2000 to about 12 percent of GDP by 2010, i.e. it is more than halved between 2000 and 2010, *see table 4.9.*

<sup>21</sup> Public net debt is based on market values (as opposed to EMU-debt). Changes in net debt reflect the public balance (net lending), but are also affected by financial prices.

## 5. Long-term projections and fiscal sustainability

### 5.1. Long-term pressures on the public finances

The long-term projections are based on a “policy scenario” through 2010, and a “policy-neutral” (no-policy change) scenario thereafter. For the years after 2010, the projections are based on the following principles:

- nominal public consumption expenditures increase in line with wage growth and the estimated demographic “pull” on services;
- social transfer levels are assumed to increase in line with private sector wages;
- participation rates (and frequencies for receiving various social transfers) are assumed to remain constant for each population group broken down by gender, age and country of origin; furthermore, the total unemployment rate is assumed constant;
- Public investments, subsidies and net transfers abroad make up constant shares of GDP;
- tax rates remain unchanged and excise duties etc. are indexed to prices.

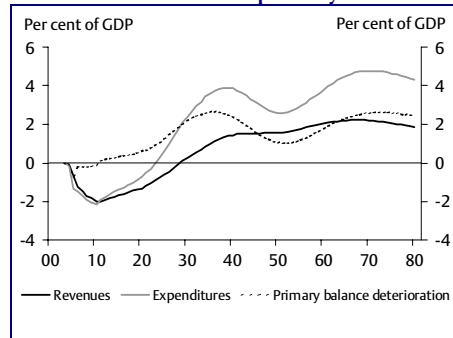
Hence, these computation rules represent an overall continuation of fiscal policies as they look in 2010. It is important to note that no concrete decisions have been made with respect to priorities post-2010, and that the rules of computation do not represent fiscal targets.

The projection implies that the structural primary balance of the central and local governments (i.e., the actual balance purged of cyclical effects and excluding net interest payments) deteriorates by 2½ percent of GDP through 2070, *see figure 5.1a*. The deterioration reflects expenditures rising by 4½ percent of GDP from 2003 to 2070, while revenues rise by just above 2 percent of GDP.

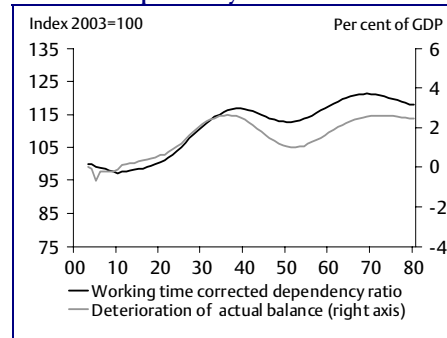
The assumed expenditure restraint through 2010 and new structural initiatives to raise employment by 50-60,000 persons dampens the prospective deterioration in the fiscal balance by about 2 percent of GDP. Lower tax on earned income and the tax freeze pull in the opposite direction.

The projected changes to the structural primary balance largely mirrors the working-time corrected dependency ratio, i.e. the ratio of persons not employed to employment measured in hours, *see figure 5.1b*.

**Figur 5.1a. Change in revenue and expenditures shares in GDP and deterioration in the structural primary balance**



**Figur 5.1b. The deterioration in the structural primary budget balance and the corrected dependency ratio**



Source: Own calculations.

## 5.2. Fiscal sustainability and the required public budget surplus

Sustainable fiscal policies are key to the medium-term projection through 2010. That means that fiscal policies can broadly be sustained after 2010, without engendering an untenable rise in the net debt of the central and local governments.

The focus on fiscal sustainability provides a test that fiscal policies are consistent over time, so that no major adjustment needs arise after 2010, based on the assumptions applied.

Underlying the projections is the principle that political assessments of the future challenges is an ongoing process, and that possible new decisions – with implications post-2010 – can easily be included in the evaluation of overall fiscal policy requirements. For instance, decisions providing greater certainty for a higher tax base after 2010 (relative to the current projection) would imply that the required surplus over the relatively near term would be correspondingly smaller.

*Table 5.1* illustrates how planned fiscal policies through 2010 – under the assumptions made – fulfill the requirement of fiscal sustainability. Essentially, the breakdown shows that the surplus on the primary balance



of central and local governments in 2003, or what is put aside for savings in 2003, suffices to finance the interest burden on public debt and the future net expenditure pressures, related (absent later changes to assumed policies etc.) to population ageing and assumed policies through 2010.

**Table 5.1. Fiscal sustainability in 2003**

	--- Percent of GDP ---
1. Central and local governments' structural primary balance ....	2.3
2. Interest burden on the public net debt .....	-0.7
3. Demographic rise in net expenditures etc. ....	-2.5
4. Tax freeze <sup>1)</sup> .....	-0.6
5. Lower taxes on earned income.....	-0.7
6. Contribution from implemented reforms .....	0.7
7. Tight expenditure control <sup>2)</sup> .....	0.5
8. Contribution from new structural initiatives .....	1.0
9. Sustainability indicator in the 2010-scenario .....	0.0

- 1) The tax freeze reduces tax revenues by  $\frac{3}{4}$  percent of GDP (2002-prices) through 2010. Converted to a fixed annual cost as of 2003, the tax freeze takes up 0.6 percent of GDP of the fiscal room for manoeuvre compared to a scenario with price indexation of excise duties etc.
- 2) Relative to a scenario in which public consumption expenditure per user as of 2004 is indexed to the wage increases.

Source: Own calculations.

In 2003, the structural primary surplus of the central and local governments is estimated at 2.3 percent of GDP, *see table 5.1* (row 1). This surplus – which is purged of cyclical effects on public finances – may be seen as the current reserve or saving needed to finance net interest expenditures and rising future net obligations for the public sector. In the medium-term projection, the surplus in each year is sufficient to meet the future spending pressures (i.e., without later adjustments to employment or assumed policies).

The net debt of the central and local governments carries an interest burden of about 0.7 percent of GDP (row 2). The burden is the share of interest payments not eroded by nominal GDP growth. The interest burden has to be financed to prevent debt from rising as a share of GDP.

The projected increase in future net public expenditures, mainly due to ageing and an assumed decline in revenues from North Sea oil and gas

activities, can be converted into a fixed annual amount (annuity), of 2.5 per cent of GDP as of 2003 (row 3).

In addition, the tax freeze through 2010 and lower taxes on earned income take up fiscal room for manoeuvre corresponding to, respectively, 0.6 and 0.7 percent of GDP (rows 4 and 5). In itself, the frontloading of the tax reductions by virtue of the Spring Package has a very limited impact on fiscal sustainability. Hence, the initiatives in the Spring Package basically leave the longer-term fiscal requirements unaltered, *see box 5.1.*

### Box 5.1. The Spring Package, public debt, and fiscal sustainability

The impact of the Spring Package on longer-term fiscal sustainability is estimated at roughly ¼ bill. Dkr., corresponding to 0.02 percent of GDP.

The frontloading in 2004 of tax reductions otherwise scheduled for 2005-2007 entails a revenue loss during 2004-06. Based on the assumptions for interest rates and growth, the revenue loss translates into a permanent additional cost of just below 200 mill. Dkr. per year, which covers the interest on higher public debt resulting from this measure. The frontloading of investments and other elements of the package translate into a sustained cost of about 35 mill. Dkr., *see table a.*

**Table a. Permanent deterioration in fiscal sustainability**

	Mill. Dkr., 2004-level
Frontloading of tax reductions.....	190
Frontloading of investment, and other outlays.....	35
Total permanent impact.....	225

Note: The impact on fiscal sustainability denotes the adjustment needed to neutralize the interest cost (in excess of nominal GDP growth) of the initiatives.

Source: Own calculations.

The temporary suspension of SP-contributions does not affect fiscal sustainability since the purely technical improvement of public finances in 2004 and 2005 – owing to lower tax deductions – is offset by reduced tax revenues from pension payouts later on.

Public gross debt (EMU definition) is estimated to be reduced by about ½ percent of GDP towards 2010 as a consequence of the Spring Package. The revenue implications of front-loaded tax reductions and other initiatives are off-set by the suspension of SP-contributions (which imply lower tax deductions in 2004 and 2005) and derived demand effects of the Spring Package. Both of these factors raise the public surplus in the short run and strengthen debt repayment. The suspension of SP-contributions entails lower taxable pension payouts in the future, so long-term debt repayment is reduced.

The rise in participation and decline in structural unemployment, which is assumed to take place based on already-implemented policies,

contributes about 0.7 percent of GDP to fiscal sustainability (row 6). This contribution includes e.g. the labour supply effect of lower taxes on earned income and the action plan *More people in work*, which together are estimated to raise structural employment by almost 20,000 persons.

The assumed real growth in public consumption exceeds the estimated demographic “pull” on public services. The resources devoted to lifting public service standards (i.e., real growth relative to the demographic pull on services) amount to about 9 bill. Dkr. in 2004-levels.

Under the assumed wage and price trends, public consumption’s share of GDP will be reduced by 0.7 percent of GDP from 2003 to 2010. Relative to a scenario in which nominal public consumption per user follows wages (entailing a decline in the public consumption share of 0.2 percent of GDP), expenditure control hence strengthens public finance sustainability by 0.5 percent of GDP (row 7).

In sum, the positive contribution from already enacted labour market measures and the assumed expenditure control roughly provides the fiscal room for manoeuvre which is taken up by the tax freeze and lower taxes on earned income.

The 2010-scenario assumes an additional increase in structural employment of 50-60,000 persons. Absent this increase in employment a fiscal adjustment of 1.0 percent of GDP would be required according to the calculations (row 8) – or initiatives that e.g. via higher employment provide a corresponding strengthening of public finances after 2010.

Overall, the medium-term projection fulfills the requirement of fiscal sustainability (row 9). The primary balance of central and local governments corrected for future net obligations – the so-called sustainability indicator – hence amounts to 0.0 percent of GDP in 2003 (and in subsequent years). The sustainability indicator denotes the permanent hypothetical fiscal adjustment which, under the assumptions made, would be required for fiscal policy to be maintained without subsequent changes in the assumed tax rates, expenditure standards etc.

## Appendix 1. Sensitivity analysis

### A1.1. Short-term cyclical risks

CP04 assumes accelerating activity in 2004 and 2005, which contributes to falling unemployment. The presumed growth-dampening in 2006 implies a closing of the output gap. Inflation is assumed to remain low and stable. In light of, e.g., higher oil prices and the uncertainty surrounding the robustness of the international recovery, the expansion could be slower than anticipated. Such a scenario could slow the reduction in unemployment as well as the reduction in public debt. This risk is balanced by the possibility that growth could turn out stronger than anticipated, e.g. in case of more buoyant private consumption, which could raise the risk of capacity pressures and higher inflation.

In a *low growth scenario* slower external growth is assumed to dampen growth in Denmark in 2005 and 2006 so that real GDP is 1 percent lower in 2006 than in the baseline. The weakening is assumed to be temporary, and activity gradually reverts to baseline in the years after 2007.

**Table A1.1. Alternative scenarios: low growth and high growth**

	2005	2006	2007
<i>Baseline</i>			
GDP growth, percent.....	2.5	1.3	1.9
Output gap, percent of GDP .....	0.4	0.0	0.0
Unemployment rate, percent.....	5.3	5.2	5.0
Public balance, percent of GDP .....	2.0	1.6	1.7
EMU-debt, percent of GDP .....	39.4	37.4	35.3
<i>Low growth (lower external growth)</i>			
GDP growth, percent.....	2.0	0.8	1.9
Output gap, percent of GDP .....	-0.1	-1.0	-1.0
Unemployment rate, percent.....	5.5	5.7	5.7
Public balance, percent of GDP .....	1.8	1.0	1.0
EMU-debt, percent of GDP .....	39.9	38.8	37.5
<i>High growth (stronger consumption)</i>			
GDP growth, percent.....	3.0	1.8	2.1
Output gap, percent of GDP .....	0.9	1.0	1.2
Unemployment rate, percent.....	5.1	4.7	4.3
Public balance, percent of GDP .....	2.3	2.3	2.7
EMU-debt, percent of GDP .....	38.8	35.8	32.4

Source: Own calculations based on the ADAM model.

Note: Public balance and debt are shown incl. ATP in the public sector.

Weaker economic activity causes higher unemployment and a deterioration in public finances, which has the surplus falling to about 1 percent of GDP in 2006 and 2007 (incl. ATP), *see table A1.1*. Fiscal policy is not changed in a discretionary manner, but the automatic stabilizers act fully.

The distance between the model-simulated public balance and the EU-treaty's 3 percent deficit limit is about 4 percent of GDP. Debt reduction continues in the low-growth scenario, even at a reduced pace, and the debt-to-GDP ratio remains well below the reference value of 60 percent of GDP. Given the current starting point, a conflict with the rules of the Stability and Growth pact would appear relatively unlikely.

In the *high-growth scenario*, consumption propensity is increased by 1½ percentage points relative to baseline during 2005 and 2006. Private consumption has been moving sideways for several years until the middle of 2003, and the high savings rate provides leeway for increased consumption. The tax reductions in combination with still low interest rates and rising house prices could boost private consumption more than anticipated.

Higher activity raises the positive output gap by ½ percent in 2005 and 1 percent in 2006, thereby reducing unemployment at a faster rate. Higher tax revenues and reduced outlays for unemployment benefits strengthens the public balance and reinforces debt reduction, *see table A1.1*. Unemployment declines to 4¾ percent in 2006 (national definition), which with current labour market structures implies risks of capacity-induced inflationary pressure.

A lasting increase in *oil prices* of 10 dollars per barrel from 2005 is estimated to reduce the GDP level by some ¼ percent in the first couple of years, *see table A1.2*, mainly as a consequence of slower external growth and reduced private consumption.

**Table A1.2. Estimated impact of higher oil prices (10 dollars pr barrel)**

	2005	2006	2007
Real GDP-level, per cent.....	-0.2	-0.3	-0.3
Unemployment rate.....	0.1	0.2	0.2
Public balance, per cent of GDP.....	0.1	0.3	0.2
Public EMU-debt, per cent of GDP.....	-0.2	-0.6	-0.8

Source: Own calculations on the basis of ADAM and OECD standard multipliers.

Lower growth and a slightly higher unemployment rate weaken public finances, *ceteris paribus*, but because of higher revenues from the taxation of North Sea-activities, the total public balance improves by 0.1-0.3 percent of GDP in the first years. Larger public surpluses contribute to faster debt reduction and declining interest payments.

The short-run *interest rate sensitivity* of public finances is illustrated in *table A1.3*. A permanent rise in foreign and domestic interest rates of 1 percentage point along the entire yield curve is estimated to worsen the public balance by just below 1 percent of GDP in the third year. Higher interest rates dampen activity both abroad and at home, and the public balance is chiefly affected by the automatic stabilizers.

**Table A1.3. Impact of 1 percent interest rate hike abroad and at home**

	2005	2006	2007
Real GDP-level, per cent.....	-0.2	-1.0	-1.4
Public balance, per cent of GDP .....	0.0	-0.5	-0.9
Primary balance, per cent of GDP.....	0.1	-0.4	-0.6
Public EMU-debt, per cent of GDP.....	0.2	1.0	2.0
Public net debt, per cent of GDP.....	0.1	0.8	1.7

Source: Own calculations on the basis of ADAM and OECD standard multipliers.

The direct impact through public net interest payments is fairly modest in light of the relatively moderate public debt level, and since the public sector also has interest receipts. In the longer run, higher interest rates may strengthen public finances, partly because the return on already accumulated private pension savings and thus the value of deferred taxes on future pension pay-outs would increase, see below.

### **A1.2. Longer-term uncertainties and fiscal sustainability**

While the budget impact of population ageing in the coming decades (subject to current rules) can be projected with a reasonable degree of certainty, since the next generation of retirees and workers already live today, the uncertainty is large for a number of related central assumptions, such as longevity and the excess real interest rate (the nominal interest rate less nominal growth or, equivalently, the real interest rate less real growth). This uncertainty implies that the future demographic expenditure pressures can be larger as well as smaller than implied by a given projection.

Especially the rise in longevity has a considerable impact on fiscal policy requirements. That applies especially at low excess real interest rates, since future expenditures induced by higher longevity thereby receive a higher weight. With a fairly high excess real interest rate, rising longevity will have a noticeably smaller impact on longer-term fiscal sustainability.

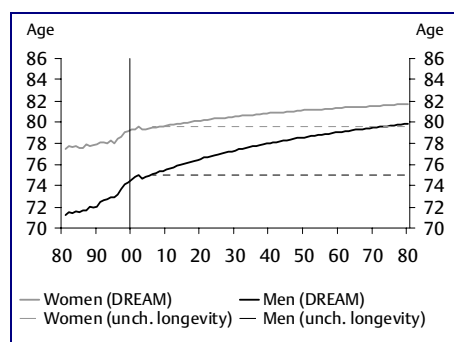
In contrast, fiscal policy requirements are largely unaffected by changes in fertility and migration, when the starting point is one in which fiscal policy is broadly sustainable.

Moreover, fiscal policy requirements and fiscal sustainability is not strengthened by higher productivity growth at a given excess real interest rate. Higher productivity growth (and an unchanged excess real interest rate) implies that the tax base and the public expenditures increase roughly in line, since public expenditures under current rules to a large extent follow private sector wages.

### Longevity (mean life expectancy)

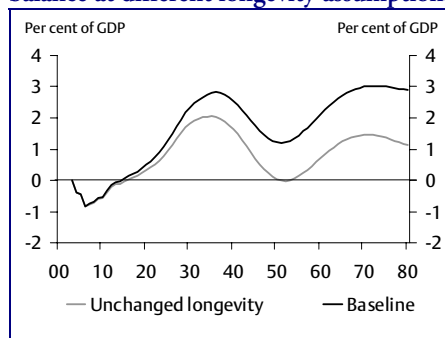
Rising numbers of elderly owes in part to the assumed gradual increase in longevity. Mean life expectancy for men is thus assumed to rise by about 5 years through 2080. Mean life expectancy for women is assumed to rise by about 2½ years through 2080, *see figure A1.1a*.

Figur A1.1a. Assumed longevity



Source: DREAM and own calculations.

Figur A1.1b. Deterioration in the primary balance at different longevity assumptions



The assumed rise in longevity explains about half of the estimated rise in public net expenditures through 2070, *see figure A1.1b*. In itself, this

factor worsens fiscal sustainability by about 0.7 percent of GDP (10 bill. Dkr.) compared to a scenario with unchanged longevity. Hence, an increase in longevity of one year in itself weakens public finances by almost 0.2 percent of GDP (given the assumptions on, e.g., the excess real interest rate).

The part of the required public surplus in 2003, which owes to rising longevity, thus corresponds to 0.7 percent of GDP. This amount can be broken down into a contribution of 0.3 percent of GDP from higher old age-related public consumption, and a contribution of 0.4 percent of GDP from higher average pensions paid out per person – over their lifetime – when residual life expectancy increases and the retirement age is assumed to remain unchanged, *see table A1.4.*

**Table A1.4. Required surplus on the public finances in 2003**

	Per cent of GDP
Required structural primary surplus .....	2.3
At unchanged longevity .....	1.6
Difference .....	0.7
- Longer pension coverage.....	0.4
- Health-expenditures etc. ....	0.3

Source: Own calculations.

Public finances would be more robust if an increase in longevity were accompanied by later retirement. An increase in the retirement age of  $\frac{1}{2}$  years, technically implemented through higher participation for 60-62 year olds, would for instance raise the labour force by about 20,000 persons and strengthen fiscal sustainability by about  $\frac{1}{4}$  percent of GDP.

In other words, the fiscal deterioration associated with an increase in longevity of one year can be neutralized by raising the average retirement age by roughly  $\frac{1}{2}$  year<sup>22</sup>.

The tendency for longevity to increase can be expected to continue, but the strength of this increase is highly uncertain. DREAM's population projection<sup>23</sup>, which is used for the projections of the Ministry of Finance,

<sup>22</sup> The exact figure depends notably on assumptions for interest rates and growth.

<sup>23</sup> DREAM (Danish Rational Economic Agents Model) is an applied general equilibrium model, developed and maintained by an independent DREAM group.



imply a cautious estimate of the increase in longevity – especially for women – compared with other projections, *see table A1.5*.

**Table A1.5. Change in longevity in different projections**

	Women	Men
	Change, 2000 to 2050, years	
DREAM (used by e.g. the MoF and DEC).....	1.8	4.0
Welfare Commission.....	4.5	4.0
Statistics Denmark.....	4.8	6.5
Eurostat.....	3.5	4.2
United Nations.....	5.6	5.6

Source: DREAM, The Welfare Commission, Statistics Denmark, Eurostat and FN.

The Welfare Commission established by the government (WFC) projects a life expectancy for women in 80 years' time that is about four years higher than the Ministry of Finance's 2010-projection. At the same time, fertility is lower in the WFC projection. On the adopted assumptions for growth and interest rates, this entails a weakening of sustainability of about 0.1 percent of GDP.

However, the impact of WFC's population projection depends strongly on interest and growth assumptions. Hence, with an excess real interest rate of 1.1 percent as in the DREAM model – and not the 2.6 percent used in the Ministry's calculations – the marginal impact of WFC's population projection corresponds to a weakening of public finances by 0.7 percent of GDP. This implies that the future costs of ageing, due to higher life expectancy, requires higher savings at low interest rates.

#### **Excess real interest rate**

The projection of the Ministry of Finance assumes a nominal interest rate of 6½ percent, corresponding to the weighted average of government bond yields over the period 1990-2003. During the same period, nominal GDP growth was 4¼ percent.

The excess real interest rate (i.e., the nominal interest rate less nominal growth) thus corresponded to about 2¼ percent on average since 1990, but with a declining tendency in recent years. Since the early 1970's, the excess real interest rate has been roughly 3 percent.

For the long-term projections, the excess real interest rate is assumed to be about 2½ percent. That is higher than the current low level, but lower than the historical average since the 1970's.

If the nominal interest rate in the projection is reduced by 1½ percentage points so that the excess real interest rate amounts to 1 percent, an additional fiscal or structural adjustment of 1.4 percent of GDP would be required on top of the 2010-scenario, *see table A1.6*.

**Table A1.6. Alternative growth and interest rate assumptions**

	----- Per cent -----				
Excess real interest rate.....	1.0	1.6	2.6	3.6	4.0
Nominal interest rate .....	4.9	5.5	6.5	7.5	7.9
Nominal growth .....	3.8	3.8	3.8	3.8	3.8
	----- Per cent of GDP -----				
Sustainability indicator .....	-1.4	-0.7	0.0	0.5	0.7
	----- Per cent -----				
Weigth given to imbalances <i>after</i> 2050....	62	47	29	18	15
Weigth given to imbalances <i>after</i> 2100....	38	21	8	3	2

Note: Permanent changes to interest rate and growth assumptions as of 2011.

Source: Own calculations.

Hence, low interest rates tend to increase the required public surplus. This is primarily because the public sector start from – and retains in coming years in the sustainable scenario – a position of net wealth, when the value of deferred taxes from future private pension payouts is included as an asset.

A low interest rate reduces the return on this wealth (measured relative to GDP) and thus requires higher savings to finance the future (primary) net expenditures. The counterpart is that the costs of postponing a necessary fiscal or structural adjustment are lower, *ceteris paribus*.

Lower interest rates imply that the distant future, about which there is relatively limited information, may weigh quite heavily in the planning of economic policy. An excess real interest rate of some 2½ percent implies that payments falling after 2050 weigh about 30 percent, while payments after 2100 weigh some 8 percent. At an excess real interest rate of 1 percent, the corresponding weights are, respectively, 60 percent and just below 40 percent.

If lower interest rates are accompanied by lower productivity growth (at an unchanged excess real interest rate) the net fiscal impact is largely neutral.

In other words, higher productivity growth cannot, given current rules, be expected to strengthen public finances. Higher productivity growth, which would raise living standards and thus remains a key objective, would result in parallel increases in public expenditures and revenues and would – unless interest rates also rise – reduce the interest burden. But this is more than offset (at a given interest rate) by lower deferred taxes of future pension payouts. In addition, higher living standards may spur increased demand for public services and more leisure.

## Appendix 2: Summary of Denmark's National Action Plan for Employment<sup>24</sup>

### Employment recommendations for Denmark 2004

Denmark was given five recommendations, namely to:

- 1) further reduce the overall fiscal pressure on labour safeguarding budgetary consolidation;
- 2) pursue a comprehensive strategy for active ageing, including the removal of incentives for early retirement where appropriate;
- 3) review tax and benefit systems to reduce marginal tax rates and raise incentives for low-income groups to work, including the unemployed and the inactive;
- 4) monitor the impact of recent reforms to integrate immigrants into the labour market, in particular of efforts to build up the necessary basic skills required to match job requirements;
- 5) monitor trends in vocational training in the light of recent increases in training fees.

### Recommendations 1 and 3:

The Government's initiatives in this area are described in sections 2.4 and 4.3 of the CP04.

The implemented tax reductions strengthen the financial incentives to work. The main element of the tax agreement is lower taxes on earned income through an increase in the limit for middle-bracket taxes and the introduction of an employment allowance of 2.5 per cent of earned incomes up to the middle-bracket tax. Marginal tax rates are reduced for 1.7 million persons with earned income. The share of full-time employees affected by progressive taxes (middle-bracket and top-bracket tax) is reduced from 88 per cent in 2003 to 64 per cent in 2004 and further 1 percentage point to about 63 per cent in 2006. This reduction covers a reduction in the share of full-time employees in the middle-bracket from 48 per cent in 2003 to 23 per cent in 2006, while the share paying top bracket income tax will continue to be about 40 per cent. The tax reductions are thus targeted at the low and middle-level income worker.

---

<sup>24</sup> NAP2004 the Danish Government: Denmark's National Action Plan for Employment 2004, *Ministry of Employment (2004)*.

The reduction in taxes on earned income is consistent with the objective of sustainable public finances, cf. the description of the medium-term economic strategy up to 2010.

**Recommendation 2:**

The Government has introduced the possibility of deferred old age pension, cf. page 12 in the CP04. The introduction of deferred pension is expected to contribute to a more nuanced and flexible attitude to labour market retirement.

Furthermore a continued strengthening of “senior policies” in the central government is under way including:

- removal of existing barriers in collective agreements in the government sector for staying active in the labour market.
- an analysis of the use of retention instruments in relation to experienced employees
- a revision of the senior policy guide
- a competence development project for experienced employees.

As a follow-up to the intentions to improve guidance of enterprises concerning senior policy and to strengthen measures to bring elderly people into employment through an intensification of placement activities and specifically targeted offers for upgrading of skills the Government has presented a number of initiatives. The focus is, among other things, on the continued development of the present senior consultant scheme and the fixing of a pool for senior policy projects.

**Recommendation 4:**

Through reforms introduced in 2002 and 2003, the Government has created a better framework for integrating immigrants in the labour market. These reforms include:

- a flexible system for teaching of the Danish language.
- simplification of activation offers.
- requirements of active job search activities and registration with the Public Employment Service, PES, for foreigners.
- earlier permanent residence permits to well-integrated foreigners.

- economic reward for municipalities when an immigrant on introduction benefit obtains ordinary employment or passes Danish language tests.
- The setting up of five regional knowledge centres for clarification of the competences of refugees and immigrants.

The most recent changes in the legislation due to these reforms have not come into operation until January 2004. From 2004, the focus will be on implementation to secure that the legislation is efficiently implemented and utilized in the municipalities and in the PES. Part of this is the setting up of an ICT-based benchmarking system that makes differences in results across municipalities and PES more visible. The benchmarking system will be accessible for all relevant decision makers and front personnel. This will strengthen the management and decision-making basis at a local level ensuring a more efficient administration of the integration policy.

Recently the Government has presented its “Action plan to promote equal treatment and diversity and combat racism” (November 2003) and “The Government strategy against ghettos” (May 2004).

#### **Recommendation 5:**

The Government has in recent years introduced a number of necessary and efficiency-enhancing reforms in the field of life-long learning, including the introduction of a unified institutional structure. The vision for these reforms has been the creation of a better targeted, flexible, simple and dynamic educational system, which will, to a higher degree, match the needs of the labour market and which is closely connected to high-quality basic programmes in the field of vocational training.

It has been important to ensure that the elements of the training programmes that give the participants actual competences are given a stronger role and that sufficient consideration is given to supply and demand as well as quality. The increase in the participation fee – which is still rather low and is not paid by a number of special groups – is an important instrument to obtain a more qualified demand in the field of education. The participation fee is an instrument to test the market and it ensures that training programmes are always relevant and needed for

the participants and enterprises. The participation fee is thus a management instrument, which is quite different from, e.g., collective employer contributions or other general taxes.

The Government is closely following developments in the field of continued training and continues to give this field a very high priority. By way of example, an amount of DKK 100 million was earmarked in the tax relief package for a strategic pool for continued training and the Finance Act for 2005 allocates DKK 400 million for strengthened efforts to raise the qualifications of individuals with a low level of education and training.

## Appendix 3: Summary of Denmark's National Action Plan to Combat Poverty and Social Exclusion<sup>25</sup> and new initiatives

### Reform of public sector structures

The Danish Government has made an agreement with effect from 2007 on a fundamental change of the public sector in Denmark. In the area of social affairs more tasks than before will be handled in the municipalities thereby ensuring that more tasks are handled closer to the citizens. The reform also entails comprehensive mergers of smaller municipalities into fewer and larger municipalities in Denmark having broader professional preconditions for solving the social tasks.

### General measures:

Beside earlier initiatives the Danish Government has in the financial bill for 2005 set aside 50 million DKK annually in the years 2005-2008 for an extra effort for the weakest and in order to ensure that more people get a job and that housing conditions are improved. Finally the Government suggest that part of the money set aside is used for debt relief.

### Specific measures:

#### 1. Long-term unemployed

In 2003 a closer analysis of persons with low affiliation with the labour market was initiated. The analysis show that a large number of long-term unemployed become self-supporting and that people at the edge of the labour market in general would like to have a job, implying that there are possibilities to build on. Many long-term unemployed are young women and a large share of these have an immigrant background.

Furthermore, the analysis show that there are big differences between employment efforts made by the municipalities and the further away from the labour market a person is the larger is the difference in the activating effort made by the municipalities. It would be preferential if the effort was more directed towards companies and designed to give help to the individual person to overcome specific problems.

---

<sup>25</sup> Update of Denmark's National Action Plan to Combat Poverty and Social Exclusion (NAPincl 2003/2005), *Ministry of Social Affairs*, September 2004.



Furthermore policies and administration of municipalities should to a larger extent focus on the weaker group of unemployed. In the autumn of 2004 additional funds were set aside to the target group:

- 40 million DKK to employment generating initiatives for weak groups on the labour market including a sum of almost 20 million DKK to special initiatives for people at the edge of the labour market (targeted activities towards long-term unemployed who are lacking social competencies, younger unemployed women with foreign ethnic background and long-term unemployed with drug abuse problems or social problems) and means for a 3-year programme to increase qualifications for weak unemployed.
- In 2005, 35 million DKK is set aside to employment generating initiatives for persons with a handicap.
- Means have been set aside to continue an arrangement with advisers with knowledge concerning immigrants in the employment service in order to strengthen ethnic minorities affiliation with the labour market.

In the Danish Government's reform of the structure of the public sector, focus will among other things be on the needs of the unemployed regardless of their income basis. Furthermore, focus will be on creating a coherent effort so that the employment effort goes hand in hand with social offers if that is needed. For all target groups it should be possible to combine social, health related and employment related offers.

## **2. Ethnic minorities**

10 million DKK has been set aside every year 2004-2006 for an increased employment effort towards family reunited, female refugees and immigrant women. A country wide campaign in order to ensure that more young people with different ethnic background gets work-experience placements has been set up.

In May 2004, the Danish Government published "The Government strategy against ghettos". It is the Government's goal that persistent tendencies towards ghettoisation must be stopped and that problems in ghetto areas are alleviated.

### **3. Children and young people with special needs**

In spring 2004, the Danish Government has made a political agreement with a broad majority of parties in the Danish Parliament on a reform of placing of children, which should strengthen the effort towards vulnerable children and young people. The reform entails that the area in total receives an extra 237 million DKK in the period 2005-2008.

In the educational area a guidance reform directed towards the groups of young who have a special need for this has been decided. Furthermore, a considerable degree of flexibility and individuality has been incorporated into vocational training, social and health educations and labour market educations i.e. out of consideration for the young who do not have the educational and personal competencies that ordinary educations rest upon.

### **4. People with drug and alcohol abuse**

In October 2003, the Government put forward a comprehensive cross-ministerial action plan "The Fight Against Drugs" – in order to increase the effort against drug abuse. The action plan sets goals and means for the achievement of concrete result concerning prevention, social treatment, medical treatment and the treatment of criminal drug abusers and international co-operation.

The Danish Government has also passed a law on guarantee for treatment of drug abusers. In 2004 supplementary means were set aside for the establishment of offers for treatment for alcohol abusers and the goal is that all alcohol abusers can receive treatment quickly.

### **5. People with mental illness**

In 2003 an extra 1 billion DKK was set-aside to the psychiatric area for the period 2003-2006. It has i.e. been implemented through projects directed towards children and young people with a double diagnosis.

### **6. Prostitutes**

Initiatives mentioned in the government's action plan to combat trafficking of women have been initiated. This comprises i.e. in drawing up of written information materials to foreign women in prostitution, increased co-operation with relevant authorities in the area, the establishment of outreaching street teams etc.

### **7. Women who are subject to violence**

A special legal basis has been established concerning women crisis centres and in that connection a government order and guidance on quality standards for such centres has been issued. On top of that, means has been granted in order to improve accessibility for women with handicaps to the women crisis centres.

Furthermore, a study of the capacity of the women crisis centres has been carried out. It showed that women from ethnic minorities are over represented in these centres.

## Appendix 4: Summary of Denmark's Cardiff<sup>26</sup> report with a few new initiatives and prioritizations concerning the product market and knowledge

### Stronger market competition

In the country-specific recommendations set out in the Broad Economic Policy Guidelines, Denmark is encouraged to intensify efforts to strengthen competition in sectors of insufficient competition, while at the same time enhancing public-sector efficiency.

In June 2004, the Government launched a new competition policy action plan designed to ensure that competition in Denmark is brought on par with that of the best-performing countries. As part of the action plan, proposals to further improve the Danish Competition Act are underway.

### Reduction of administrative burdens

The Government aims to reduce the administrative burdens of the business sector by up to 25 per cent by 2010. The burdens are to be reduced through digitalisation; simplification of rules; proactive initiatives to prevent new administrative burdens; help to enhance administrative competencies in companies; and better public-sector service and communication.

Extensive simplification initiatives have been launched. As part of these initiatives, acts and rules will be simplified and digital solutions will help enhance public-sector administration efficiency. Results and initiatives will be presented on an ongoing basis in the Government's action plan regarding simplification of rules and administrative relief.

In the action plan concerning a public sector, which operates more like the private sector the Government furthermore commits itself to setting annual targets for the administrative reductions required by individual ministries.

Administrative relief through enhanced use of digital tools is another focus area. The corporate portal Virk.dk was launched in September

---

<sup>26</sup> "Structural Reforms in the Danish Product and Capital Markets", *Ministry of Economic and Business Affairs*, November 2004.

2003. The aim is to make relevant information from all public authorities and a number of private companies available on the portal so that a significant amount of administrative tasks can be handled through the home page.

#### **Improved conditions for research, innovation and entrepreneurship**

The Government, earlier this year, entered into a political agreement to set up a high-tech research and innovation fund which – when it is fully fledged – will have assets of some DKK 16 billion (EUR 2.2 billion). The funds of the research and innovation fund will be earmarked to selected priority areas with obvious commercial interests. The 2003 entrepreneurial action plan has now to all intents and purposes been implemented. Initiatives have been taken to facilitate the access to capital of entrepreneurs and a bill is expected to be submitted in autumn 2004 to make it easier for entrepreneurs to restart a business after failure.

In 2003 a new law reformed the management of the universities. One of the objectives of the reform is to introduce university boards, which have an external majority and more competences and freedom of action. To improve the transmission of scientific results from the universities to the enterprises it has been decided to establish special tech-trans entities at the universities.

#### **Development of human capital**

Danish education and training costs account for 8½ per cent of GDP, which is among the highest in the EU. Participation rates in training and education of people in the workforce are significantly higher than the EU average – both for men and women.

In recent years, the Government has therefore launched a number of reforms designed to strengthen education and training efforts, not least with a view to ensuring higher quality in training and education. Examples are: establishment of common national targets for the educational outcome for each age group, to better prepare the upper secondary students for academic study while at the same time strengthening their competency levels, e.g. by changing course contents and introducing new forms of evaluation and assessment and new forms of exams, and to ensure better cohesion between adult vocational training courses and supplementary training courses.

Besides reforming education aiming at children and young people the Danish government also prioritises adult vocational training courses designed to ensure better cohesion between adult vocational training courses and supplementary training courses. This area does not only draw on public investments but is to a large extent also dependent on private engagement. A committee representing both the government as well as the social partners is by the end of 2005 supposed to bring forward new ideas on how they in co-operation may strengthen lifelong learning and the use of adult vocational training. These initiatives may not entail a permanent worsening of public finances.

#### **Reform of the structures of the public sector**

Political agreement has been reached on a reform, resulting in an overhaul of the structure of the public sector and its allocation of responsibilities. The reform entails that the size of Danish municipalities will be much larger than is currently the case. Today, roughly half of all Danish municipalities have less than 15,000 inhabitants. The number of municipalities is expected to be reduced from 271 to approximately 100 as a result of the reform.

Certain tasks will be transferred to the central government. Post-secondary education programmes, etc., will be transferred to the remit of the central government (previously some of these programmes were the responsibility of the counties). The central government will also assume responsibility from the counties for certain overall tasks in the fields of environment, planning and roads. On top of that, the central government will assume responsibility for the assessment of taxes and collection of outstanding debt to public authorities (previously a municipal responsibility), which is expected to lead to noticeable efficiency gains.

## Appendix 5. Comparison with the 2003 update

### A5.1. Changes to GDP-growth and public finances since CP03

Real GDP growth turned out almost 1 percent lower in 2003 than assumed in CP03, *see table A5.1*. This was primarily due to weak growth in the first half of the year. Employment declined slightly more than anticipated, but unemployment turned out as expected in CP03. In the *Economic Survey, August 2004*, which forms the basis of CP04, the fiscal surplus in 2003 was estimated at 1.2 percent of GDP in line with the CP03 estimate. Subsequently, Statistics Denmark has revised the surplus to 1.0 percent of GDP due to slightly lower revenues from personal taxes than included in the 2003 figure in August, *see section 4*.

In light of the Spring Package and faster export market growth than earlier anticipated, and against the background of relatively high activity growth since the middle of 2003, slightly higher growth rates are expected in 2004 and 2005 than in CP03. For 2006, a dampening of growth is technically assumed, which implies that the output gap is zero in 2006. The suspension of SP-contributions due to the Spring Package ends in late 2005, which tends to lower consumption growth in 2006.

**Table A5.1. Divergence from previous update**

ESA	2003	2004	2005	2006	2010
	----- Per cent of GDP -----				
<i>GDP growth</i>					
Blg					
CP 2003.....	1.4	2.3	2.2	1.9	1.7
CP 2004.....	0.5	2.2	2.5	1.3	1.8
Change.....	-0.9	-0.1	0.3	-0.6	0.1
<i>Public balance<sup>2)</sup></i>					
B9					
CP 2003.....	1.2	1.3	1.8	1.9	2.1
CP 2004.....	1.2 <sup>1)</sup>	1.2	2.0	1.6	2.0
Change.....	0.0	-0.1	0.2	-0.3	-0.1
<i>Public debt<sup>2)</sup></i>					
CP 2003.....	42.7	41.2	38.7	36.4	27.5
CP 2004.....	44.7	42.3	39.4	37.4	28.8
Change.....	1.9	1.0	0.7	1.0	1.3

Source: Own calculations.

1) Revised in November to 1.0 percent of GDP by Statistics Denmark.

2) The public balance and debt are shown incl. ATP in the public sector.

The public balance is largely unchanged in the projection years compared to CP03. The Spring package does not weaken the public balance

in 2004 and 2005, in part because the frontloading of tax reductions is offset by lower tax deductions in 2004 and 2005 because of the suspension of SP-contributions. Higher oil prices than assumed in CP03 tend to strengthen the public surplus in 2004 and especially in 2005, when the public surplus is revised upwards compared to CP03.

In 2006, the balance is weakened by the reinstatement of SP-contributions. Compared to CP03 the surplus is reduced by the earlier implementation of tax reductions, which directly lower the surplus by just below 0.1 percent of GDP in 2006. The assumptions about structural reforms and tight expenditure control imply that the public balance reaches roughly the same level in 2010 as in CP03.

Compared to CP03, gross debt in 2003 has been revised upwards by 2 percent of GDP. The adjustment is primarily due to a statistical revision of the EMU-debt level undertaken by Statistics Denmark, which amounts to about 1.5 percent of GDP for 2003<sup>27</sup>. This level shift for the EMU-debt is maintained in the estimates for 2004 and subsequent years. In addition, a lower surplus for the central and local governments and lower holdings of government bonds in ATP etc. than assumed in CP03 contribute to the revision to EMU-debt in 2003. EMU-debt remains well below the reference value of 60 percent of GDP and is projected to fall below 29 percent of GDP by 2010 (compared with 27½ percent of GDP in CP03).

#### **A5.2. Changes in medium-term assumptions through 2010**

Compared with CP03, the assumptions behind the CP04-projection include notably a new population projection and a new economic forecast, which incorporates the Spring Package, *see box A5.1*.

##### **Box A5.1. Revised assumptions compared to CP03**

- Revised population projection, cf. DREAM, October 2003.
- New data for the age-profile of individual public consumption, now broken down also by users' country of origin.
- The Spring Package of March 2004.
- New national accounts data and short-term forecasts, August 2004.
- The long-term fiscal requirements have been recalculated.

<sup>27</sup> This technical revision of the gross debt level does not affect the fiscal policy requirements since the net debt of central and local governments is unaffected.



The preliminary national accounts data for 2003, which form the basis of *Economic Survey, August 2004*, and revised methodologies imply a downward revision to the estimated structural surplus in 2003 from 2.0 percent of GDP in CP03 to 1.5 percent of GDP in CP04. This downward adjustment of the underlying fiscal position carries over to subsequent years.

On the other hand, the new population projection includes the tighter immigration law of 2002 which, seen in isolation, improves fiscal sustainability, *see Finansredegørelse 2004*. In addition, new collective agreements entail higher mandatory pension contributions, which lowers the indexation factor for social transfers and income tax brackets during 2006-08.

The revised population projection entails slower population growth, mainly as a consequence of tightened immigration rules. That means slower growth both in the number of welfare recipients and employment, and in the estimated demographic “pull” on public services. Given an unchanged objective for the growth in public consumption through 2010, the real resource growth allocated to public services relative to the number of users is thus higher than in CP2003.

Structural employment is assumed to increase by 45,000 persons from 2003 to 2010, which is 7,000 less than in CP03, *see table A5.2*. Actual employment, which includes the impact of the assumed normalization of cyclical conditions, increases by 60,000 persons, which is 6,000 less than in CP03.

Demographic trends imply (at constant participation rates broken down by age, gender and origin and with an unchanged unemployment rate) a reduction in structural employment from 2003 to 2010 that is 11,000 persons larger in CP04 than in CP03. This is attributable to two factors.

*First*, DREAM’s population projection of October 2003 implies a further reduction of almost 20,000 persons in the normally active ages from 2003 to 2010 compared to DREAM’s 2002-projection, which formed the basis of CP03. This reduces the structural labour force by about 14,000 persons more than in CP03.

*Second*, while CP03 assumed an unchanged number of unemployed, the demographic scenario in CP04 assumes an unchanged structural unemployment *rate* from 2003, which reduces unemployment by some 3,000 persons by 2010.

**Table A5.2. Contributions to structural employment, 2003-2010, 1,000 persons**

	CP03	CP04
Demographic scenario.....	-42	-53
Abolition of the pre-early retirement scheme.....	10½	10½
Disability scheme: reform and changed inflow, etc. ....	26½	16
Reform of the early retirement scheme .....	9	9
Higher underlying inflow to early retirement etc. ....	-20	-17
Increased educational attainment .....	-	13
Changes to maternity leave etc. ....	-2	-4
<i>More people in work</i> .....	10	10
Earned income tax credit .....	3½	3½
Other contributions .....	4	-1
Structural employment (no-policy change).....	-1	-14
Required new initiatives to boost participation.....	32	36
Required new initiatives to reduce structural unemployment.....	21	23
Required new structural initiatives to boost employment.....	53	58
Total increase in structural employment.....	52	45

Source: Own calculations.

The contribution from already implemented measures etc. is largely unchanged compared to CP03. The contribution from implemented measures already included in CP03 has been revised down by 15,000 persons, while the impact of rising education levels, estimated to contribute 13,000 persons, was not included in CP03. Structural employment in the no-policy change scenario thus declines by 13,000 persons more than in CP03, which largely mirrors the change in the demographic contribution.

The lower contribution from implemented measures etc. primarily reflects a smaller contribution from the disability scheme. New data allow identification of those recipients of disability benefits who are also active in the labour market. This information lowers the contribution from reduced historical inflows to the disability scheme, since part of the implied reduction in the number of recipients also implies fewer labour

market-active recipients. In addition, the inflow to special categories (e.g. flex support) is assumed to rise more than in CP03.

In contrast, the projected number of early retirees through 2010 is lowered as a result of lower inflows to early retirement in the latest data.

On balance, the requirement for new structural initiatives has increased by 5,000 persons compared with CP03. Thus, fiscal and structural policy requirements are largely unchanged or only marginally more demanding than in CP03.

Table A.1 Key figures for the Danish economy

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
	----- Real growth, percent -----										
Private consumption .....	-0.7	-0.2	0.6	0.8	3.6	3.0	1.7	2.5	2.4	2.6	2.5
Public consumption .....	0.9	2.7	2.1	1.0	0.3	0.5	0.5	0.5	0.5	0.5	0.5
Residential investment .....	7.7	-5.3	10.5	5.2	3.0	-2.0	1.8	2.4	2.2	2.4	2.4
Business investment .....	6.6	6.9	4.2	-1.1	3.4	5.0	2.0	2.8	2.5	2.6	2.4
Public investment .....	7.7	10.6	-5.0	-0.3	4.5	2.0	0.5	1.0	2.0	2.0	2.0
Stockbuilding <sup>1)</sup> .....	1.0	-0.7	0.0	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic demand .....	2.4	1.0	1.9	0.3	2.7	2.5	1.5	2.1	1.9	2.1	2.0
Exports .....	13.5	4.4	4.8	0.0	3.1	5.1	3.6	3.5	3.6	3.4	3.5
<i>of which, industry</i> .....	13.7	4.1	6.1	-3.1	4.0	5.2	4.1	4.0	4.0	3.9	4.1
Imports .....	13.5	3.5	7.3	-0.6	4.3	5.4	4.0	3.9	3.9	4.0	3.9
GDP .....	2.8	1.6	1.0	0.5	2.2	2.5	1.3	1.9	1.8	1.8	1.8
Gross value added, business sector .....	3.7	2.6	0.9	0.2	2.2	2.9	1.6	2.4	2.3	2.4	2.4
	----- Growth, percent -----										
Hourly wage costs .....	3.9	4.3	4.5	3.9	3.6	3.8	3.8	3.8	3.8	3.8	3.8
Hourly wages .....	3.6	4.2	4.2	3.7	3.5	3.8	3.8	3.8	3.8	3.8	3.8
Hourly productivity, business sector .....	0.8	2.5	2.2	1.6	1.6	2.0	2.1	2.0	2.0	2.0	2.0
Private disposable incomes .....	2.9	1.4	1.9	0.7	3.4	2.4	2.4	2.9	2.6	2.5	2.6
Export prices .....	8.0	0.6	-2.7	0.4	0.7	0.7	1.2	1.3	1.4	1.3	1.4
Import prices .....	6.8	0.4	-3.1	-1.7	-0.4	0.6	1.2	1.3	1.3	1.3	1.3
Consumer prices .....	2.9	2.4	2.4	2.1	1.4	1.8	1.6	1.7	1.7	1.7	1.7
Nominal house prices .....	6.5	5.9	3.7	3.3	5.0	2.5	2.1	2.0	2.3	2.4	2.4
	----- Percent -----										
Yield on government bonds .....	5.7	5.1	5.1	4.3	4.5	5.1	5.7	6.1	6.1	6.1	6.1
	----- Bn. DKK -----										
Current account .....	18.6	40.1	27.3	40.0	44.4	49.4	53.3	59.3	66.0	68.6	72.2
<i>of which interest payments etc...</i>	-32.9	-24.6	-26.9	-25.5	-23.0	-20.0	-16.0	-9.4	-3.4	0.7	4.7
Government balance .....	32.5	37.5	21.2	16.9 <sup>2)</sup>	17.4	29.7	25.7	28.0	31.8	34.7	37.1
<i>of which interest payments etc...</i>	23.3	18.9	18.6	12.6	13.0	9.9	8.4	6.2	3.9	1.4	-1.4
	----- Percent of GDP -----										
Current account balance .....	1.5	3.0	2.0	2.9	3.1	3.3	3.4	3.6	3.9	3.9	3.9
Government balance .....	2.5	2.8	1.6	1.2 <sup>2)</sup>	1.2	2.0	1.6	1.7	1.9	2.0	2.0
Private financial savings .....	-1.1	0.2	0.5	1.7	1.9	1.3	1.8	1.9	2.0	1.9	1.9
Tax burden, percent of GDP ....	49.6	49.9	48.9	48.9	48.9	48.4	47.9	47.7	47.5	47.4	47.3
Expenditures, percent of GDP ..	53.9	54.2	54.6	54.9	54.4	53.0	53.0	52.8	52.4	52.1	51.9
	----- 1.000 persons -----										
Total employment .....	2,736	2,746	2,741	2,720	2,732	2,753	2,744	2,751	2,760	2,769	2,779
<i>of which public</i> .....	819	824	834	836	838	840	843	845	848	850	853
<i>of which private</i> .....	1,917	1,922	1,907	1,885	1,894	1,913	1,902	1,906	1,912	1,919	1,926
Labour force .....	2,886	2,891	2,886	2,891	2,907	2,908	2,895	2,898	2,900	2,904	2,909
Registered unemployment .....	150	145	145	171	175	155	151	146	140	134	130
Percent of the labour force .....	5.2	5.0	5.0	5.9	6.0	5.3	5.2	5.0	4.8	4.6	4.5
Do. EU-definition .....	4.9	4.7	4.7	5.6	5.7	5.0	4.9	4.7	4.5	4.3	4.2

1) Contribution to growth.

2) Statistics Denmark revised the surplus to 14.6 bill. Dkr. or 1.0 percent of GDP in November 2003.

**Table A.2. Growth and associated factors**

ESA	2003	2004	2005	2006	2007	2008-10	
GDP growth at constant market prices .....	B1g	0.5	2.2	2.5	1.3	1.9	1.8
GDP level at current market prices .....	B1g	1398.3	1454.2	1519.9	1571.9	1635.4	1837.8
GDP deflator .....		2.2	1.8	2.0	2.1	2.1	2.1
HICP, change .....		2.0	1.2	1.7	1.6	1.7	1.6
Employment growth .....		-0.8	0.4	0.8	-0.3	0.3	0.3
Labour productivity growth ...		1.4	1.4	1.8	1.7	1.7	1.5
<i>Sources of growth:</i>							
----- Percentage changes at constant prices -----							
Private consumption .....	P3	0.8	3.6	3.0	1.7	2.5	2.5
Government consumption .....	P3	1.0	0.3	0.5	0.5	0.5	0.5
Gross fixed capital formation..	P51	0.1	3.4	3.4	1.9	2.6	2.5
Changes in inventories <sup>1)</sup> .....	P52+53	-0.4	0.0	0.0	0.0	0.0	0.0
Exports of goods and services	P6	0.0	3.1	5.1	3.6	3.5	3.5
Imports of goods and services	P7	-0.6	4.3	5.4	4.0	3.9	3.9
<i>Contributions to GDP growth</i>							
Final domestic demand .....		0.7	2.6	2.4	1.4	2.0	1.9
Changes in inventories <sup>1)</sup> .....	P52+53	-0.4	0.0	0.0	0.0	0.0	0.0
External balance .....	B11	0.3	-0.4	0.1	-0.1	-0.1	-0.1

1) Changes in inventories and net acquisition of valuables as a % of GDP.

**Table A.3. General government budgetary developments**

	ESA	2003	2004	2005	2006	2007	2010
		----- Percentage of GDP -----					
<i>Net lending (B9) by sub-sector</i>							
General government .....	S13	1.2	1.2	2.0	1.6	1.7	2.0
Central government .....	S1311	0.9	0.4	1.3	0.8	0.9	1.1
Local government .....	S1313	-0.8	0.0	0.0	0.0	0.0	0.0
Social security funds .....	S1314	1.1	0.8	0.7	0.8	0.8	0.9
<i>General government (S13)</i>							
Total receipts .....	ESA	56.1	55.6	54.9	54.6	54.5	53.9
Total expenditures .....	ESA	54.9	54.4	53.0	53.0	52.8	51.9
Budget balance .....	B9	1.2	1.2	2.0	1.6	1.7	2.0
Net interest payments .....		0.9	0.9	0.7	0.5	0.4	-0.1
Primary balance .....		2.1	2.1	2.6	2.2	2.1	1.9
<i>Components of revenues</i>							
Taxes .....	D2+D5	48.9	48.9	48.4	47.9	47.7	47.3
<i>Of which:</i> social contribution..	D61	1.7	1.6	1.6	1.6	1.5	1.5
Interest income .....	D41	2.5	2.2	2.2	2.4	2.5	2.5
Other .....		4.6	4.5	4.3	4.3	4.3	4.1
Total receipts .....	ESA	56.1	55.6	54.9	54.6	54.5	53.9
<i>Components of expenditures</i>							
Collective consumption .....	P32	26.6	26.4	26.0	26.0	25.9	25.6
Social income transfers .....	D63	18.1	18.1	17.5	17.3	17.2	17.1
Interest payments .....	D41	3.4	3.1	2.8	2.9	2.9	2.4
Subsidies .....	D3	2.1	2.2	2.1	2.1	2.1	2.1
Gross fixed capital formation..	P51	1.7	1.7	1.7	1.7	1.7	1.7
Other .....		2.9	2.9	2.9	2.9	2.9	2.9
Total expenditures .....	ESA	54.9	54.4	53.0	53.0	52.8	51.9

**Table A.4. General government debt developments**

	ESA	2003	2004	2005	2006	2007	2010
		----- Percentage of GDP -----					
<i>Gross debt level</i>							
Gross debt level .....		44.7	42.3	39.4	37.4	35.3	28.8
<i>Change in gross debt</i>							
Change in gross debt .....		-2.6	-2.4	-2.8	-2.0	-2.1	-6.5
<i>Contribution to change in gross debt</i>							
Primary balance .....		-1.8	-1.9	-2.5	-2.1	-2.0	-8.1
Interest payments .....	D41	1.7	1.5	1.3	1.3	1.2	4.0
Nominal GDP growth .....	B1g	-1.3	-1.7	-1.9	-1.3	-1.5	-5.4
<i>Other factors influencing the debt ratio</i>							
<i>Of which:</i> Privatisation receipts		0,0	0.0	0.0	0.0	0.0	0.0
<i>P.m. implicit interest rate on debt</i>							
<i>P.m. implicit interest rate on debt</i> .....		6.0	5.9	5.4	5.8	5.9	5.4

**Table A.5. Cyclical developments**

	ESA	2003	2004	2005	2006	2007	2010
		----- Percentage of GDP -----					
GDP growth at constant prices .....	B1g	0.5	2.2	2.5	1.3	1.9	1.8
Actual balance .....	B9	1.2	1.2	2.0	1.6	1.7	2.0
Interest payments .....	D41	3.4	3.1	2.8	2.9	2.9	2.4
Potential GDP growth .....		1.8	1.0 <sup>1)</sup>	1.9	1.8	1.8	1.8
Output gap .....		-1.3	-0.2	0.4	0.0	0.0	0.0
Cyclically-adjusted balance .....		1.5	1.2	1.5	1.7	1.7	2.0
Cyclically-adjusted primary balance .....		2.3	1.8	2.0	2.0	1.9	1.8

1) Cf. note to table 4.2.

**Table A.6. Divergence from previous update**

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

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

	2003	2005	2010	2020	2030	2040	2050	2060	2070
	Pct. of GDP	----- Change compared to 2003 -----							
Total expenditure excl. interest payments .....	51.4	-1.3	-2.0	-0.2	3.0	4.5	3.1	4.4	5.5
- Public consumption.....	26.6	-0.6	-1.0	-0.5	1.5	2.9	2.7	3.3	3.9
- Health care .....	8.3	-0.2	-0.2	0.6	2.0	2.7	2.7	2.8	2.8
- Transfer payments <sup>1)</sup> .....	18.1	-0.5	-1.0	0.3	1.5	1.5	0.4	1.1	1.5
- Old age pensions .....	4.5	0.3	0.9	2.1	3.2	4.0	3.3	3.5	4.0
Total revenue.....	56.1	-1.1	-2.2	-1.9	-0.5	0.7	0.7	1.2	1.4
<i>Of which:</i>									
Tax on net pension payments .....	-1.3	0.1	-0.2	0.4	1.4	2.5	2.9	3.1	3.0
		----- Percentage of GDP -----							
Pension fund assets .....	120	126	148	196	242	270	272	277	278
<i>Assumptions</i>		----- Percentage change -----							
Nominal GDP per employee .....	3.5	3.7	3.6	3.9	3.7	3.7	3.8	3.7	3.8
Nominal GDP .....	2.8	4.5	4.0	3.5	3.1	3.6	3.7	3.4	3.8
Real GDP growth .....	0.5	2.5	1.8	1.4	1.0	1.5	1.7	1.4	1.9
Participation rate male (age 20 - 64) .....	86.2	86.5	86.1	85.7	84.9	85.4	85.2	84.3	84.8
Participation rate female (age 20 - 64) .....	76.5	77.0	77.2	76.6	75.2	76.1	75.9	74.6	75.4
Total participation rate (age 20 - 64) .....	81.4	81.8	81.7	81.2	80.0	80.7	80.6	79.4	80.1
Unemployment rate.....	5.9	5.3	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Structural Unemployment.....	5.5	5.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5

Note: The projection implies unemployment and employment participation is held constant after 2010. The change in participation rate after 2010 is only due to changes in population composition on sex, age, and origin. Tax revenue follows the trend in GDP after 2010, but is subject to crucial assumptions among others pension savings. Expenditures on transfer payments are before tax (and hence not comparable with Figure A1.3, in which they are net of income tax and excise duties).

1) Transfers from social security funds (ATP etc.) are not included.



**Table A.8. Basic assumptions**

ESA	2003	2004	2005	2006	2007	2008 2010
	----- Percentage of GDP -----					
Short-term interest rate (annual average) .....	2.4	2.3	3.1	4.3	4.9	4.9
Long-term interest rate (annual average) .....	4.3	4.5	5.1	5.7	6.1	6.1
USA: long term (10-year government bonds) .....	4.0	4.2	4.7	5.3	5.7	6.0
USD/EUR exchange rate (annual average) .....	1.14	1.22	1.22	1.22	1.22	1.22
Exchange rate vis-à-vis the EUR (annual average), Dkr. ....	7.43	7.44	7.44	7.44	7.44	7.44
GDP growth, World excluding EU .....	4.3	5.2	4.8	-	-	-
US .....	3.0	4.3	3.3	-	-	-
Japan .....	2.5	3.9	2.8	-	-	-
EU15 GDP growth .....	0.9	2.2	2.4	2.2	2.2	2.2
Growth of relevant foreign markets .....	4.1	7.1	7.7	4.4	4.4	4.4
World import volumes, excluding EU .....	7.3	9.9	8.6	7.4	7.0	7.6
Oil prices (Brent, USD/barrel) .	28.4	36.0	35.5	34.2	32.9	30.6
Non-oil commodity prices (in USD) .....	7.1	16.8	-3.9	-	-	-