Denmark's Convergence Programme 2006

November 2006

The Danish Government

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1. Denmark's Convergence Programme 2006[1]

1.1 Introduction

In June 2006, a broad majority in the Danish Parliament (Folketinget) entered an *Agreement on Future Prosperity, Welfare and Investments in the Future* (The Welfare Agreement). The agreement entails substantial reforms of retirement, labour market and integration policies as well as increased focus on education and research. The reforms aim to ensure sustainable public finances, increased prosperity and high employment in the coming decades.

The legislation implementing the Welfare Agreement is partly before Parliament and due to be adopted in the course of 2006 and spring 2007. The parties behind the Welfare Agreement agree on the concrete implementation.

The Welfare Agreement provides markedly higher assurance against substantial financial imbalances developing over the longer run as life expectancy and the number of elderly citizens is set to increase. In particular, this assurance stems from the agreed adjustments of the age limits for the early retirement and public pension schemes and the subsequent indexation of those age limits to the life expectancy for 60-year olds. The indexation mechanism makes public finances more robust with respect to future increases in life expectancy, which are not easy to predict.

Furthermore, the Welfare Agreement provides funding for a strengthening of research and education. Strengthened research and education will underpin medium and long-term growth. Better education may also help to ensure that all groups in society benefit from the progress resulting from globalisation and new technologies.

Based on the Welfare Agreement and other recent information, the projections presented in this convergence programme imply that fiscal policy essentially fulfils the requirement of sustainable public finances.

In the baseline scenario, the so-called sustainability indicator is calculated at -0.2 per cent of GDP even though the updated population projection entails a considerably larger increase in life expectancy and the number of elderly than earlier projections. Given the assumptions made, the projections also indicate that there is no scope for an easier policy stance overall than assumed in this convergence programme, if the sustainability requirement is to be met.

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[1] The convergence programme is prepared in accordance with the Stability and Growth Pact (Council Regulation (EU) No. 1466/97 as amended by Council Regulation No. 1055/2005) and the new Code of Conduct adopted by ECOFIN on October 11, 2005. According to the regulations, euro-area member states are required to prepare stability programmes, whereas the other countries are required to prepare convergence programmes. The Council issues an opinion on each national programme based on a recommendations from the Commission and after a discussion in the Economic and Financial Committee (EFC). The convergence programme and the Council's opinion are transmitted to the Danish parliament.

Hence, for the first time a scenario is presented, which essentially fulfils the requirement of policy sustainability without requiring further – not yet decided – labour market initiatives. The scenario includes real public consumption growth of 1 per cent on average from 2007 to 2010, which is ½ percentage point more than in earlier 2010-plans. The additional funds are essentially allocated to education and research.

The sustainable scenario requires that the large public surpluses achieved in these years are used to reduce public debt. This will lower future interest payments and thus help finance the projected increase in health expenditures and long-term care as the number of elderly citizens goes up. Spending for health care and long-term care will remain a major fiscal policy challenge even though the Welfare Agreement guards against increasing pension expenditures in the long run and strengthens the revenue base through higher employment. In addition to demographic factors, the demand for health services is affected, in particular, by the ongoing development of new types of treatment and health care technologies as well as rising incomes.

The public balance (based on national account principles) showed a record high surplus of 4.6 per cent of GDP in 2005 benefiting, in particular, from a strong cyclical position and unusually high revenues from the taxation of North Sea oil and gas activities as well as the tax on financial returns on pension savings.[2] In 2006 and 2007 the surpluses are also larger than might be expected under normal conditions.

In the convergence programme, the budget surplus gradually approaches a structural level just above 1 per cent of GDP by 2010 as contributions from the present cyclical strength and other transitory factors wane. The structural balance is in line with the medium-term objective (MTO) requiring surpluses between ½ and 1½ per cent of GDP from 2005 to 2010. The MTO is unchanged compared to the 2005 Convergence Programme. The objective also corresponds to the target set out in the original 2010-plan, *cf. A sustainable future – Denmark 2010, January 2001 (available in Danish only).*

Moreover, the reduction in *gross* debt (EMU debt) is ahead of schedule compared to the original 2010-plan, while public *net* debt is expected to reach zero before 2010.

Allocating the current, large budget surpluses for debt reduction is important in view of the long-run fiscal policy challenges, but also in view of the cyclical situation.

The Danish economy is experiencing a vigorous upturn with strong growth in demand and falling unemployment. Unemployment has declined by almost 70,000 persons since the end of 2003 and reached 4.2 per cent of the labour force by September 2006 (3½ per cent based on the EU-definition). This level is the lowest in 30 years, and among the lowest in the OECD. Meanwhile, employment is record-high and expected to climb slightly further in 2007.

[2] Based on Statistics Denmark's latest data from November 2006, where the public surplus amounts to 71.8 billion DKK corresponding to 4.6 per cent of GDP in 2005. In the August economic survey the public surplus amounted to 61.2 billion DKK or 3.9 per cent of GDP in 2005 based on earlier data from Statistics Denmark.

Unemployment is currently below the estimated structural level. Shortages of labour are rather widespread in both private and public sector areas, and labour market pressures may increase. At the same time, there have been signs of higher wage inflation, notably in the construction sector. It is of key importance that the wage negotiations in the coming spring lead to a balanced result so as to avoid building up to a subsequent phase characterised by undue increases in unemployment and reduced employment possibilities for weak groups in society.

The high level of activity and the risk of further pressure on wages and prices require prudence in fiscal policy. Moreover, it is key that the structural reforms adopted in the last years deliver the expected positive effects on labour supply and employment. Together with gradually higher international interest rates this should contribute to a soft landing, where the widespread lack of labour is gradually reduced reflecting easing demand. Based on the agreement reached in November on the Fiscal Bill for 2007, fiscal policy is estimated to have a neutral impact on economic activity in 2007. This requires, in particular, that municipalities and regions keep to their budgets.

The convergence programme is based on the short-term economic forecast for 2006 and 2007 presented in *Economic Survey, August 2006*, which incorporates the budget proposal for 2007 and the agreements reached in June 2006 on the local governments' finances for 2007. A new assessment of the short-term outlook, which incorporates the politically agreed fiscal bill for 2007, is scheduled for publication by early December. The growth prospects for 2006 and 2007 taken together are expected to be somewhat higher than in the August figures. Meanwhile, the forecast horizon will be extended to 2008 in the December survey.

The convergence programme for 2006 should be seen in conjunction with *Denmark's National Reform Programme, October 2006*. The reform programme presents the Danish government's strategy on structural reform, while the convergence programme primarily focuses on the development in public finances – including the impact of structural reform on public finance sustainability.

The Welfare Agreement is described in *chapter 2*. The overall policy framework and the short and medium term outlook for the Danish economy are presented in *chapters 3 and 4,* respectively. Public finance developments towards 2010 are described in *chapter 5*, which also deals with institutional features and the quality of public expenditures. A more detailed treatment of long term fiscal sustainability is in *chapter 6*.

The initiatives in the Welfare Agreement are listed in *Appendix 1*. Changes since last year's Convergence Programme and sensitivity analyses, including in relation to the common external assumptions based on the EU autumn forecasts, are contained in *Appendices 2 and 3*.

2. Agreement on Future Prosperity, Welfare and Investments in the Future

2.1 Introduction

Like most other EU countries, Denmark is facing a number of challenges in coming decades. With a high degree of certainty, demographics will lead to increasing numbers of elderly citizens, who can expect to live longer, and fewer in the age groups that have traditionally been the most active in the labour market. At the same time, globalization and technological progress bring new opportunities and challenges, with implications for policies. Another central challenge is to strengthen labour supply in the short run and foster employment among immigrants and descendants.

Against this background, the government proposed a series of reforms of the Danish welfare systems in April 2006. The proposals drew, among other things, on work that had been launched earlier (see also the 2005 Convergence Programme):

1. The Welfare Commission's analysis and proposals concerning changes in the Danish welfare system, and the debate fostered by the Commission's work.
2. The government's globalisation strategy, encompassing a total of 350 concrete initiatives and building on the work of the Globalisation Council.
3. The work of the Tripartite Committee on life-long learning concerning retraining and adult education for all on the labour market.

On the basis of the reform proposals, parties representing a large majority in the Parliament reached an *Agreement on Future Prosperity, Welfare and Investments in the Future* (The Welfare Agreement) in June 2006.[1] The cornerstone of the Welfare Agreement is long-term sustainability of public finances.

The Welfare Agreement provides markedly higher assurance against fiscal imbalances developing over the longer run as ageing proceeds. This is primarily due to the adjustments in the age thresholds for voluntary early retirement pension (VERP) and public old-age pension taking effect from 2019 and the agreed principle of indexation, which implies that the age thresholds for VERP and public pension over time will increase in line with life expectancy for 60 year olds.

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[1] The entire Welfare Agreement can be found in Danish at www.fm.dk. The basis for the Welfare Agreement's reforms was comprehensive analysis in three different fora: 1) The independent experts of the *Welfare Commission*, who presented their final report in the beginning of 2006 regarding the development and the potential financing of future welfare payments as seen in light of demographic changes, cf. www.velfaerd.dk, 2) the advisory *Globalisation Council,* which finalised its work on growth, knowledge and entrepreneurship in spring 2006, cf. www.globalisering.dk, 3) the *Tripartite Committee for lifelong qualification and education,* composed of the social partners and the Government, presented its report in February 2006, cf. www.fm.dk.

The principle of indexation ensures that higher life expectancy does not automatically result in more years with VERP and public old-age pension for the individual, and the principle thereby removes an otherwise certain source of imbalances in the long run.

The legislation implementing the reforms has been or will be presented to Parliament in autumn 2006 and spring 2007. The draft legislation on later retirement has been presented and is expected to be adopted before the end of 2006. The rest of the legislative proposals will be presented with a view to adoption in the first quarter of 2007. The political parties behind the Welfare Agreement agree on the concrete implementation.

The Welfare Agreement substantially strengthens employment and public finances in the long run. It underpins fiscal sustainability, while at the same time creating fiscal scope for an increase in globalisation-related spending initiatives amounting to ½ per cent of GDP. These expenditures are phased in gradually towards 2012 and are consistent with continued and necessary general government surpluses.

The funds for globalisation-related initiatives are intended to strengthen notably education, research and innovation, thereby strengthening growth potential in the slightly longer run and contributing to high employment and low unemployment. The funds are implemented in the 2007 budget by the political parties behind the Welfare Agreement, *cf. Agreement on the implementation of the globalisation funds, November 2006* (only available in Danish).

2.2 The Welfare Agreement's main elements and employment effects

The main elements of the Welfare Agreement are:

- Later retirement from the labour market – making public finances more robust with respect to increasing life expectancy.
- Enhanced labour market policies to increase labour supply in the shorter run.
- Targeted efforts to strengthen employment among immigrants and descendants.
- Earlier study completion.
- Investments in the future: secondary education for all, more young people with tertiary education, strengthened adult retraining and education, more resources for research and development as well as strengthened innovation and entrepreneurship.

The main elements are described briefly in *box 2.1* and in greater detail in *appendix 1*.

Box 2.1

Agreement on Future Prosperity and Welfare and Investments in the Future: Main elements

On 20 June 2006, The Danish Government concluded the *Welfare Agreement* with the Social Democrats, the Danish People's Party and the Social-Liberal Party. Thus, 158 of the Danish Parliament's 179 mandates are behind the agreement. The main elements are:

- *Later retirement from the labour market.* The voluntary early retirement pension (VERP) age is raised from 60 to 62 years from 2019 to 2022 and the public old-age pension age is raised from 65 to 67 years between 2024 and 2027. As of 2025, the age thresholds in the retirement system are indexed to the mean life expectancy of 60 year olds, so that the combined period with VERP and public old-age pension will be around 19½ years in the long run. If life expectancy does not change, the early retirement age stays at 62 years and the pension age at 67. The VERP scheme is made more flexible and contributions to the scheme will have to be paid for 30 years, as against 25 years today. Several initiatives are taken to strengthen employment among elderly workers and prevent attrition.

- *Strengthened efforts to reduce unemployment.* Labour market policies are adjusted for example by bringing forward activation to take place after 9 months of unemployment and introducing an intensive activation effort after 2½ years. Among a host of initiatives, the role for the unemployment insurance agencies in job matching procedures is strengthened and systematic assessments of availability-for-work of the unemployed every third month are introduced.

- *Higher employment among immigrants and descendants*. Among other things, the agreement introduces a targeted wage subsidy and additional designated consultants in job agencies. Employment opportunities are supported by a renewed "four partite agreement" among employers, trade unions, central and local governments on strengthened integration, partnerships with individual employers etc.

- *Earlier study completion.* The admission system should favour young people who start education no more than 2 years after the qualifying degree by upgrading their average grade. The financing and organization of universities should to a greater extent support earlier study completion, including through deadlines for completing the final thesis, strengthened study guidance, new financing structures for universities with a view to bring actual study times better in line with scheduled study times etc.

- *Youth education for all.* A special effort is made to ensure that young unemployed aged between 25-29 have stronger incentives to find a job or complete education, along with efforts to strengthen guidance and follow-up, provide more vocational on-the-job training etc.

- *Investments in the future*. Funds are set aside for "globalization initiatives" with a view to strengthening investments in research and development, adult vocational training, youth education, tertiary education, innovation and entrepreneurship. The funds are phased in gradually, reaching approximately DKK 10 billion by 2012 (2007 prices). The main targets are, among other things, to lift public research grants to 1 per cent of GDP from 2010 and to ensure that at least 85 per cent of young people complete a secondary education by 2010, increasing to 95 per cent by 2015, and that at least 50 per cent of all young people complete a tertiary education by 2015.

- *Strengthened adult education and retraining*. Enhanced reading, writing and math courses for adults, as well as additional adult apprenticeships, an expanded job rotation scheme etc, will be implemented. A fund amounting to DKK 1 billion (2008-2010) will be set aside for work-oriented adult education and retraining. The disbursement of the funds is contingent on the social partners' increased future financing contribution for strengthened life-long learning.

The reforms contained in the Welfare Agreement are estimated to raise employment by roughly 105,000 persons (4 per cent) in 2025 and by around 190,000 persons (7½ per cent) in 2040, *cf. table 2.1*. This assessment is surrounded by uncertainty.[2]

In the long term, the reforms of the retirement system clearly yield the largest contribution to increasing employment, corresponding to around 90,000 persons in 2025 (3¼ per cent) and approximately 165,000 persons in 2040 (6½ per cent). In the medium term, the employment effects of these reforms are relatively limited and stem primarily from bringing the duration of benefits for unemployed aged 55 or more in line with unemployment benefit duration for other age groups.

Table 2.1

Increase in employment, 2010-2040, thousand persons

	2010	2015	2025	2040
Labour market and integration	13	13	14	14
Education etc.	-2	-5	4	10
Later retirement etc.	2	4	89	167
Total	13	12	106	190
Total (per cent of employment)	½	½	4	7½

Note: Due to rounding off the total may deviate from the sum of the components.

The other initiatives in the Welfare Agreement also contribute to higher (structural) employment in the shorter run and thereby help to sustain the economic upturn. The agreed initiatives in the areas of labour market and integration policies are estimated to increase structural employment by around 13,000 persons (½ per cent) by 2010, *cf. table 2.1 and appendix 1*. The initiatives aim, in particular, at raising employment for those having difficulty gaining a foothold on the labour market, including some immigrants and descendants.

In conjunction with the Welfare Agreement, the government and the Danish People's Party concluded an agreement on future immigration, which may also strengthen effective labour supply in the short run. In particular, the agreement introduces a so-called green card, which gives well-qualified foreigners better opportunities to seek employment in Denmark. At the same time the existing job card scheme is broadened so that more job types may qualify workers for a residence permit. Furthermore, concrete job offers paying above a certain annual wage will qualify non-residents for a residence permit. The agreement also tightens rules in some areas, including by introducing an integration exam with requirements of previous employment as a precondition for obtaining certain rights concerning social cash benefits and permanent residence in Denmark, *cf. appendix 1*.

[2] The estimates of the effects of the Welfare Agreement presented in CP06 are based on the most recent information, including the latest demographic projections. Moreover, the calculations include the information presented in *Economic Survey, August 2006*. Consequently, the impact assessments are different from those presented in the Welfare Agreement, June 2006. No effects are assumed from a targeting of the primary school's 10th form.

Finally, the Welfare Agreement includes initiatives aimed at raising educational attainment levels among the young and strengthening incentives to complete an education. The objective is that at least 95 percent of young people should complete secondary education in 2015 against 80 per cent today, and that at least 50 percent should complete tertiary education by 2015 against close to 45 per cent today. At the same time adult training is strengthened. The funds for globalisation-related initiatives provide financing for these objectives.

The investments in the education system are supported by initiatives to induce young people to complete their studies earlier than they do today. With earlier study completion, the resulting qualifications can be used actively for more years in the labour market. This raises the private and public return from the investments in education.

The initiatives concerning education (and related areas) are taken to yield a net gain in employment of approximately 5,000 persons by 2025 and 10,000 persons by 2040. These estimates are uncertain and the gains will ultimately depend on, in particular, to what extent the educational objectives are achieved.

2.3 Balanced finances in the long run and financing investments in the future

The Welfare Agreement underpins fiscal sustainability, as detailed in *chapter 6*.[3] Overall, the strategy for long-term fiscal sustainability in view of ageing has three parts:

1. Rapid debt reduction in these years, in which the age structure of the population is favourable with relatively many in the traditional working age, and revenues from oil and gas activities in the North Sea are relatively high.

2. Moderate growth in public consumption compared to earlier decades.

3. The reformed retirement system, which ensures a better balance between the number of active years spent on the labour market and the number of years in retirement. The reform strengthens robustness with respect to increasing life expectancy due to the lifting of age thresholds for VERP and public old-age pension from 2019 and the subsequent indexation with longevity.

The Welfare Agreement offsets the contraction in the labour force that would otherwise result from prospective changes in the age structure of the population, *cf. figure 2.1a*. Essentially because of the retirement reform, a labour force contraction of, on average, 7,500 persons per year from 2020 to 2040 is averted.

[3] Based on the latest demographic projections, the fiscal sustainability indicator equals approximately -0.2 per cent of GDP. Future trends in life expectancy are highly uncertain and an alternative set of demographic projections, where the increase in life expectancy is slower, is also available. Based on this alternative demographic projection, the fiscal sustainability indicator equals approximately 0.0 per cent of GDP, *cf. appendix 2*.

Figure 2.1a
The impact of the Welfare Agreement on employment

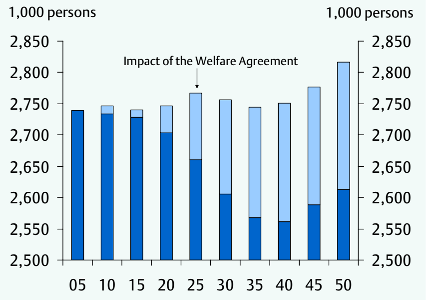


Figure 2.1b
Marginal impact of the Welfare Agreement on primary budget balance

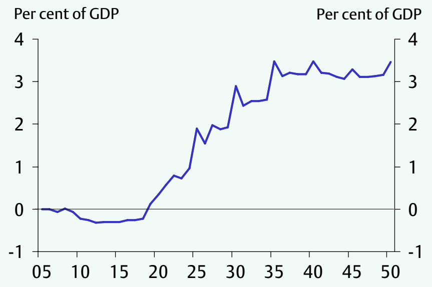


Figure 2.1c
Share of life in employment

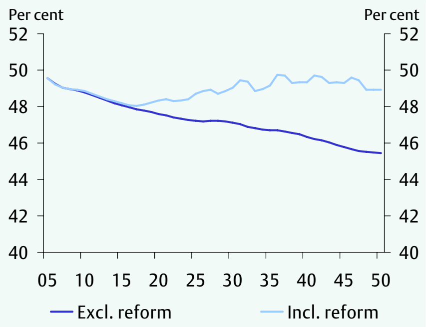


Figure 2.1d
Average number of years on early retirement scheme, public old-age pension etc.[1)]

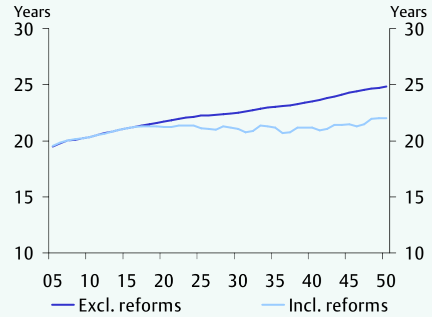


Figure 2.1e
The impact of the Welfare Agreement on GDP pr. capita

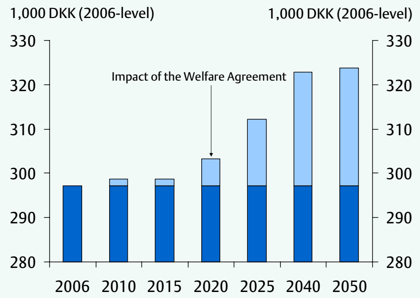
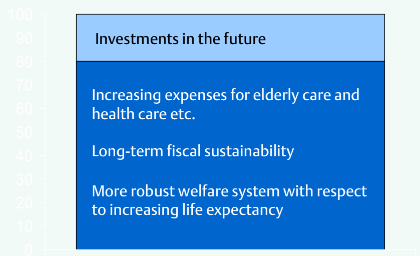


Figure 2.1f
Use of the room of manoeuvre created by the Welfare Agreement



1) The average number of years on early retirement scheme and public old-age pension etc. is calculated as the difference between life expectancy of a 60 year-old and the average retirement age for a 50 year-old and thereby also includes periods spent on other types of early retirement than the voluntary early retirement scheme, i.e. primarily disability benefits.

Source: Own calculations.

Figure 2.1b shows the estimated marginal impact of the initiatives in the Welfare Agreement on the primary budget balance. In the longer run, public finances are improved gradually and substantially, primarily reflecting the employment effects of the retirement reforms after 2019. In the period until 2010 (and 2012), the phasing-in of globalisation initiatives, which are part of the Welfare Agreement, is less than fully offset by the increase in employment stemming from labour market (and other) initiatives, thereby reducing the primary budget balance. However, as explained in *chapter 5*, the general government balance continues to show structural surpluses of 1 per cent of GDP or more towards 2010.

The reform of the retirement system prevents higher life expectancy from more or less automatically resulting in more years in retirement. Thus, due to the reform, the part of life which on average is spent on the labour market is expected to be broadly constant, *cf. figure 2.1c.* In a scenario with no reforms, the share of life, in which people (on average) are active in the labour market, would gradually diminish and the share of life, in which individuals typically receive public benefits, would increase.

The agreed indexation of the age thresholds for VERP and public old-age pension is designed to ensure that the expected average period with VERP and public old-age pension in the long run is kept broadly constant at 19½ years.[4] The effective (average) retirement age increases considerably less than the adjustment of the formal age thresholds, in part because some people withdraw from the labour market before the VERP and public pension ages. For instance, persons with reduced working capacity have the possibility of retiring with disability benefits. All in all, the total number of years in retirement is estimated to increase slightly in the coming decades, *cf. figure 2.1d.* For persons who retire at the VERP or public pension age thresholds, the period in retirement will, on average, be more or less constant after 2025.

The Welfare Agreement is estimated to raise GDP per capita by 9 per cent or more than 25,000 DKK in 2050 (measured in 2006 level, i.e. growth and inflation-corrected GDP), *cf. figure 2.1e.* The estimate takes into account the employment effect of the Welfare Agreement, but does not include possible spill-overs and productivity effects from enhanced education and research. Furthermore, in the no-reform scenario, the calculations abstract from negative impact on labour supply of tax-hikes that might have been necessary, had the retirement system not been reformed.

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[4] This applies to persons who have earned VERP rights and retires at the earliest formal VERP age and who have a life expectancy equal to the average for 60 year olds.

All in all, the initiatives in the Welfare Agreement – including, notably, the retirement reforms – strengthen public finances by approximately 2¾ per cent of GDP, when the effects over time are converted to a permanent income stream (an annuity).[5] This holds given the assumptions made concerning interest rates, life expectancy etc. Overall, this strengthening of public finances is reserved for two purposes:

- About ½ per cent of GDP is used to finance investments in globalisation-related initiatives, especially research and education, *cf. figure 2.1f.* The higher investments in research and education etc. are gradually phased in with approximately 2 billion DKK (2007-prices) a year until 2010 and 1 billion DKK a year in 2011 and 2012. By 2012, the additional funds for globalisation initiatives will thus amount to 10 billion DKK. When the objectives concerning research and education have been reached, activity stays at the new higher levels.

- The remaining gains from reform help to finance the welfare system in the future – including notably the increase in long-term care and health care expenditures, which are assumed in the projection as a consequence of ageing. The retirement reforms also make public finances more robust with respect to changes in life expectancy due to the agreed indexation mechanism, *cf. box 2.2*. The indexation mechanism does not solve the entire fiscal challenge related to higher life expectancy. Increasing life expectancy for 60-year olds is expected to result in larger public spending on elderly care and health care also when gradually better health among the elderly is taken into consideration.[6]

[5] At the time of the Welfare Agreement, the reforms were estimated to strengthen public finances by approximately 2 per cent of GDP. The higher estimated effect reflects the new demographic projections and should be seen in the context of an increased long-term challenge.
[6] Decreasing mortality rates in the age groups before 60 will also lead to more elderly but do not change the age thresholds related to the indexation. As mentioned in box 2.2 the average (or effective) retirement age also increases less than the adjustment of the age thresholds.

Box 2.2

Indexation of age limits in the pension system in line with life expectancy

The Welfare Agreement introduces a principle of indexation to help ensure that longer life expectancy and better health also leads to more active years in the labour market.

As mentioned, the Welfare Agreement implies that the age threshold for voluntary early retirement pension (VERP) is gradually raised from 60 to 62 years in the period 2019-2022. The threshold for public old-age pension age is gradually raised from 65 to 67 years in the period 2024-2027.

If life expectancy does not increase relative to 2004/2005 these new age limits will remain in force. If life expectancy increases, the age threshold for VERP will in the long run increase in line with life expectancy for 60-year olds. The first adjustment takes effect in 2025 (for the VERP age) but will be decided 10 years in advance in order for people to have time to adapt to changes. The first adjustment will thus be decided in 2015 and after that every five years.

The principle of indexation implies that the total period of voluntary early retirement pension and public pension – understood as the mean life expectancy for 60-year olds less the early retirement age – is maintained around 19½ years over the longer term. That is the same as in 1995. From the introduction of the voluntary early retirement scheme in 1979 to 1995, the average remaining lifespan for 60-year olds was fairly stable around 19½ years. The public pension age will be adjusted in line with the age of voluntary early retirement pension, taking effect 5 years later, i.e. the first time in 2030.

The average retirement age is estimated to increase by approximately half as much as the adjustment of these age thresholds, partly because some people are assumed to retire with disability benefits. Thus, the adjustment of the age limit for voluntary early retirement pension and public pension in line with longer life expectancy implies a broadly unchanged balance between the average number of years spent actively on the labour market, and the average number of years spent with early retirement and public pensions etc.

Later retirement increases the labour force, reduces the number of benefit recipients and in that way supports fiscal sustainability. With the agreed indexation, public finances will also become more robust with respect to how fast life expectancy is increasing.

3. Policy framework and 2010 objectives

3.1 Medium-term strategy

The overall objectives for fiscal policy are economic stability and sustainable public finances. Sustainable fiscal policies require a marked reduction of public debt (in per cent of GDP) in these years, since demographic factors, in particular, are favourable with relatively many in traditional working age.

Since the beginning of 2001, fiscal policy has been set on the basis of fiscal objectives and requirements laid out in the so-called 2010-plan, which has been consistently updated e.g. in the annual Convergence Programmes for Denmark.

Denmark's Convergence Programme for 2006 (CP06) is an update of the 2010-projection which incorporates the effects of the Welfare Agreement and additional new information – in particular the latest population projection, which implies a substantial upward adjustment of future increases in life expectancy and the number of elderly.

CP06 incorporates politically agreed fiscal priorities through 2010, after which the projections are based on technical assumptions and the estimated effects of the Welfare Agreement.

In 2007, the government will present a new multi-annual economic programme, which will extend at least to 2015. The new economic programme will contain targets for, inter alia, employment, public finances and debt.

3.2 Objectives of economic policy

Overall, economic policies aim at ensuring high and stable employment, sustainable public finances and good framework conditions for growth. Central objectives for individual policy areas include:

- *Monetary and exchange rate policies*: Continued stable exchange rate and inflation developments by virtue of the stable krone exchange rate vis-à-vis the euro.
- *Fiscal policy*: Focus on stability and sustainable public finances in a long term perspective. The operational target is to ensure structural general government surpluses of between ½ and 1½ per cent of GDP through 2010.[1] The medium-term objective (MTO) accords with a sustainable scenario given the Welfare Agreement, central estimates for developments in employment and the assumptions used with respect to interest rates, life expectancy, etc.
- *Tax policies*: The tax freeze is the cornerstone of tax policy. Taxes on labour income were reduced as of 2004 by virtue of, notably, the Spring Package.

[1] The target applies to the fiscal balance on a national accounts basis.

Furthermore the government coalition agreement states that, provided fiscal room for manoeuvre is achieved, the government intends to lower taxes on labour income further.

- *Expenditure policies*: The target for real public consumption growth is approximately 1 per cent on average for the period 2007-2010. Resources are allocated primarily to strengthen research, education and innovation, as well as health care and social services (services for the elderly and families with children). Extra focus is directed towards the possibilities to improve the quality of public services within spending limits. Therefore, a major project on public sector quality reform has been initiated, and the strategy is expected to be launched by mid-2007.
- *Structural and labour market policies*: The employment initiatives in the Welfare Agreement focus notably on later retirement, stronger labour market participation among immigrants and their descendants, and an overall strengthening of labour market policies including, in particular, activation efforts and availability-for-work, *cf. chapter 2*. In addition, the parts of the Welfare Agreement which concern education, research and innovation underpin potential growth in the longer term. Productivity growth should also be strengthened through increased competition and reduced administrative burdens.

Denmark continues to fulfil the convergence criteria for stable exchange rates, inflation, interest rates and public finances and debt, *cf. table 3.1*.

Table 3.1
Convergence criteria in 2005

	Consumer price inflation (HICP)[1]	Government bond yields (10 year)	General government budget balance (EDP-form)	General government debt (EMU-debt)
	Per cent	Per cent	Per cent of GDP	
Denmark	1.7[1]	3.4[1]	4.9	35.9
EU25	2.2[1]	3.8[1]	-2.3	63.2
Euro area	2.2[1]	3.4[1]	-2.4	70.8
Convergence criteria	2.5[1]	5.4[2]	-3.0	60.0

1) As of December 2005.
2) Annual average for 2005.
Source: EU Commission, Statistics Denmark and own calculations.

In table 3.1 the general government surplus of 4.9 per cent of GDP in 2005 is reported in accordance with the EDP-definition of the fiscal balance (Excessive Deficit Procedure). In particular, it includes the surplus in the Labour Market Supplementary Pension Fund, ATP. Correspondingly, the gross debt ("EMU debt") definition includes a deduction for ATP holdings of government bonds.

Starting from the next EDP-reporting in April 2007, public finances will exclude ATP, and the EMU-debt will be reported without deducting ATP holdings of government bonds. The statistical treatment of ATP has no influence on the assessment of fiscal sustainability, since ATP's assets have always been reserved for future ATP pension payments, *cf. Convergence Programme for Denmark 2005, November 2005.*

In the August economic survey, the general government budget surplus amounted to 3.9 per cent of GDP in 2005 – according to Statistics Denmark and based on national account principles, implying that ATP is not included in the public sector.[2] The strong surplus should be viewed in light of a favourable cyclical position and extraordinary revenues from the pension yield tax and the oil and gas activities in the North Sea. The structural budget balance – where corrections are made for both cyclical effects and other temporary factors obtain a measure of the underlying position of public finances – is estimated at 1.3 per cent of GDP in 2005, *cf. section 5.2.*

In November, Statistics Denmark published revised data for public finances based on national account principles. According to the new data, the 2005-surplus has been revised up from 61 billion DKK (3.9 per cent of BNP) to 72 billion DKK (4.6 per cent of GDP). The revision primarily reflects higher revenues from pension yield and corporate taxes, both of which may fluctuate substantially. The revision is estimated to only slightly increase the structural budget balance. The revision should – all else equal – lead to an upwards adjustment of the public surplus on EDP-basis (incl. ATP) from 4.9 per cent of GDP to 5.6 per cent of GDP in 2005.

3.3 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 stable exchange rate policy is the ERM II-agreement, which stipulates a narrow fluctuation band against the euro of ±2¼ per cent around the central parity. For a number of years, the exchange rate has been close to the central parity, *cf. figure 3.1a.* Since the introduction of the euro in January 1999 the largest (absolute) difference from the central parity has been around ½ per cent. Since mid-2005 the exchange rate has been very close to the central parity.

A large 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. The focus of fiscal policy on stability and long term sustainability supports the fixed exchange rate policy.

The commitment to a fixed exchange rate policy has ensured low and stable inflation for a number of years. With a fixed exchange rate vis-à-vis the euro, the low level of inflation in the euro-area serves as an anchor for Danish inflation and inflation expectations. Since the early 1990's Danish inflation has essentially been in line with the ECB's definition of price stability.

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[2] The general government budget surplus is larger on an EDP-basis than on the national accounts basis. The primary cause for the difference of 1.0 per cent of GDP in 2005 is exactly, that ATP's surplus is included in the budget balance on EDP-basis (up to and including 2006), while ATP is a part of the private sector in the national accounts.

Figure 3.1a
Krone exchange rate vis-à-vis euro

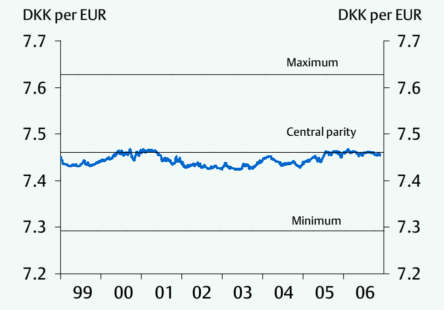
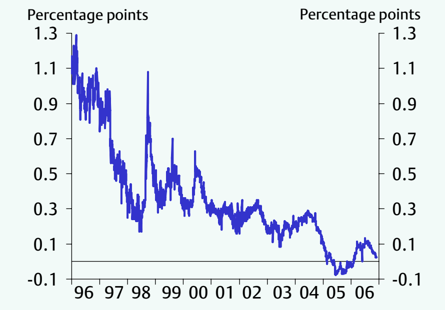


Figure 3.1b
10-year yield differential vis-à-vis Germany



Source: Denmark's Nationalbank.

The Danish Nationalbank's lending rate tends to follow ECB's minimum bid rate with a premium which ensures that the exchange rate is stable. The premium has typically fluctuated in a range of 15-50 basis points since mid-2001. Historically, the interest differential has also been visible in longer-term interest rates, *cf. figure 3.1b*, showing the interest differential between Denmark and Germany with respect to 10-year central government bonds. Normally, the interest differential is positive which should be seen in conjunction with Denmark not having adopted the euro.

For certain periods in 2005 and early 2006, the long-term interest differential has been negative (but small). This is partly due to relatively favourable developments in Denmark with solid general government budget surpluses and declining public debt.

Furthermore, the interest differential tends to be smaller when interest rates are low. Among other things, this may reflect that the demand for long-term DKK-bonds from pension and life insurance companies tends to increase when interest rates decline, since these companies may need to make higher provisions to cover future pension obligations when yields decline.

In conjunction with recent increases in interest rates and the improved cyclical position in the Euro area, the interest differential has widened a little. Thus the interest differential has been 0-10 basis points since spring 2006.

3.4 Fiscal policy

As mentioned earlier, *fiscal policy* aims to support economic stability and ensure sustainable public finances. A sustainable fiscal policy requires, among other things, a marked reduction in public debt in these years before the ageing of the population really sets in.

The operational target for fiscal policy is to maintain structural general government surpluses of ½-1½ per cent of GDP on average through 2010. The operational target is specified as a range to reflect the uncertainty notably in determining long-term fiscal policy challenges. The target range applies to the fiscal balance based on national account principles, i.e. excluding ATP.

The target for structural surpluses through 2010 allows scope for the automatic stabilizers to play, thus helping to dampen cyclical fluctuations. The target requires prudent fiscal policies when cyclical conditions are favourable and unemployment low, and provides fiscal room for manoeuvre in case of severe downturns with evident imbalances.

Compared to CP05, the target range has not been changed.[3] Thus, the calculated public surplus requirement in a scenario which exactly meets the sustainability requirement lies within these limits. This reflects that the Welfare Agreement – which improves public finances significantly in the longer term – reduces the required (or sustainable level of) public savings towards 2010, while higher life expectancy compared to CP05 tends to increase required savings.[4]

In this Convergence Programme, the estimated structural surpluses declines from almost 1½ per cent of GDP in 2006 to slightly above 1 per cent of GDP in 2010, *cf. table 3.2*. Thus the structural budget balance is within the target range.

Table 3.2
Public finances, 2005-2010

	2005	2006	2007	2008	2009	2010
Per cent of GDP						
Actual balance (EDP-basis)	4.9	4.1	3.8	3.5	2.8	2.2
Actual balance (national account)	3.9[1)]	3.1	2.8	2.5	1.8	1.2
Structural balance (national account)	1.3	1.4	1.5	1.5	1.4	1.2

Note: The structural budget balance is corrected for the suspension of contributions to the Special Pension (SP) scheme in the period 2004-2007. SP is a non-redistributive pension scheme.
1) In November the surplus on national account basis was revised upwards to 4.6 per cent of GDP in 2005. The revision implies a corresponding upwards adjustment of the budget balance on EDP basis to 5.6 per cent of GDP in 2005, while the structural surplus is assessed to be almost unchanged.
Source: Statistics Denmark and Finance Ministry calculations.

Compared to CP05, the structural surplus in 2010 is reduced by approximately ½ per cent of GDP. This reflects, in particular, that public consumption growth has been raised by virtue of the Welfare Agreement (especially due to globalization and labour

[3] The target range is also *de facto* unchanged compared to the original 2010-plan, cf. *A sustainable future – Denmark 2010, January 2001* (only available in Danish). Actually, in the original 2010-plan a target range for (structural) public surpluses of 2-3 per cent of GDP was introduced. But at that time ATP's surplus (approximately 1 per cent of GDP) and the contributions to the Special Pension (SP) scheme (approximately ½ per cent of GDP) was included in the general government budget balance. This is not the case anymore. Since neither the changed treatment of ATP in the national accounts nor the changed treatment of SP contributions has any impact on fiscal policy requirements, the target range for (structural) public surpluses of 2-3 per cent of GDP in the original 2010-plan corresponds to the current target range of ½-1½ per cent of GDP. The difference reflects changed accounting principles only.
[4] Furthermore, in the Convergence Programme for 2005 the calculated sustainable budget surpluses through 2010 were at the high end of the target range.

market initiatives), and that the required (not yet decided) initiatives, which in CP05 were assumed to increase employment markedly towards 2010, are no longer included.

As mentioned, the counterpart is that the Welfare Agreement substantially improves public finances over the longer term, mainly because the retirement reforms strengthen employment. The implication is that the Welfare Agreement meets the employment objective incorporated in CP05, since this objective was included to ensure fiscal sustainability. At the same time, the reforms broadly finance the increase in expenditure growth through 2010 and the inclusion in CP06 of a larger increase in life expectancy than previously.

When calculating the structural budget balance, it is crucial – besides cyclical effects on public finances – also to correct for other temporary factors – e.g. variations in the revenues from both pension yield tax and the oil and gas activities in the North Sea, *cf. also chapter 5*. These revenues show some rather dramatic fluctuations, which are not necessarily correlated with the cycle. For instance revenues from the pension yield tax increased from 0.4 per cent of GDP in 2003 to 2.0 per cent of GDP in 2005, while rather modest revenues of 0.1 per cent of GDP are expected for 2006. These fluctuations are mainly caused by developments in financial markets.

A correction is also made for the effect of suspending (tax deductible) contributions to the Special Pension (SP) scheme in 2004-2007. All else equal the suspension of SP-contributions improves the general government budget balance by some 0.3 per cent of GDP. On the other hand, the suspension implies that future taxable payouts from the SP-scheme will be lower, which in the long-term reduces the budget balance. Thus the suspension of SP-contributions mainly brings tax-payments forward in time and does not imply an increase in taxation. In broad terms, the suspension of SP-contributions does not affect fiscal sustainability.

The reformed Stability and Growth Pact maintains the basic objective requiring a medium-term budget balance of "close to balance or in surplus". As a new feature, the reformed pact also contains differentiated objectives, so that the structural budget balance should exhibit a deficit of no more than 1 per cent of GDP for countries with low public debt and high potential growth, and be closer to balance or in surplus for countries with high public debt and low potential growth.

In addition, the pact contains a triple aim of securing sufficient safety margins with respect to the 3 per cent deficit limit for the actual budget deficit, rapid progress towards fiscal sustainability, and budgetary room for manoeuvre.

According to the sufficient safety margin requirement, Denmark should as a minimum have a structural budget position which is in balance or a deficit of no more than ½ per cent of GDP.

Thus Denmark's medium term objective (MTO) stating structural public surpluses between ½-1½ per cent of GDP through 2010 fulfils the requirements of the Stability and Growth Pact.

3.5 Tax policy

The tax freeze introduced in November 2001 is the cornerstone of *tax policy*. The tax freeze implies that direct or indirect tax rates, whether expressed as a percentage or as an amount in Danish kroner, can not be raised. In addition, a nominal cap is imposed on the property value tax. Due to these nominal caps the tax freeze implies a gradual reduction of the tax burden.

It is estimated that the tax freeze has reduced tax revenues by some 15 billion DKK (almost 1 per cent of GDP) in 2007 compared to a hypothetical scenario, in which excise duties and the property value tax had been increased in line with price developments.

Even though the tax freeze tends to reduce the tax burden, it does not guarantee that taxes paid as a share of GDP will drop every year.

In spite of the tax freeze and implemented tax reductions, the share of taxes in GDP increased from 47¾ per cent in 2003 to 49¾ per cent in 2005. The higher ratio of taxes paid relative to GDP does not imply an increased burden of taxation. Rather, it reflects more rapid growth in certain tax bases than in GDP.[5]

As mentioned, this is the case for the tax on pension funds' returns, with revenues increasing sharply from 0.4 per cent of GDP in 2003 to 2.0 per cent of GDP in 2005. At the same time, tax revenues from oil and gas activities in the North Sea (especially corporate taxes and the specific tax on hydrocarbon-producing companies) increased from 0.5 per cent of GDP in 2003 to 1.2 per cent of GDP in 2005.[6] Furthermore, the motor vehicle registration tax revenues have also been growing fast due to strong growth in car sales. The same holds for VAT revenues due to relatively high growth in private consumption.

Taxes on earned income were reduced by around 10 billion DKK in 2004 corresponding to 0.7 per cent of GDP. The tax reduction is evenly divided between an earned income tax credit (EITC) and a higher income threshold for the 6 per cent middle-bracket income tax. The tax reduction increases incentives to take a job and to work more hours. All in all, the tax reduction is estimated to increase effective labour supply equivalent to around 10,000 full-time employees.

[5] In other words, taxes paid as a share of GDP is not a good indicator of policy-induced changes in the tax burden. The direct revenue effects of discretionary changes in the tax rules provide a more adequate picture.
[6] In addition, public revenues from oil and gas activities also include surplus-sharing, which is not categorised as a tax in national accounts (but as property income). These revenues rose from 0.2 per cent of GDP in 2003 to 0.5 per cent of GDP in 2005. Under the surplus-sharing arrangement, that the state receives an amount corresponding to 20 per cent of the North Sea companies' surplus before tax and before net interest payments.

As mentioned earlier, the government coalition agreement states that provided the fiscal room for manoeuvre is achieved, the government intends to lower taxes on earned income further.

3.6 Expenditure policies

Expenditure policies are aimed at moderate growth in overall public expenditure. In real terms, public consumption spending is presumed to increase by some 1 per cent on average in the period 2007-2010.

Compared to CP05, the target for public consumption growth has been raised. This should be seen in light of the Welfare Agreement, which – as mentioned – contributes to a marked long-term improvement of public finances. All else equal, this implies a larger room for manoeuvre for economic policy in the shorter term.

In the earlier 2010-projections, a real growth in public consumption of ½ per cent for the period 2007-2010 was assumed. Beyond this the effect of the Welfare Agreement – in particular, spending related to globalization and labour market initiatives – is also assumed to correspond to a real annual consumption growth of ½ per cent on average for the period 2007-2010.

The globalization-related spending is gradually phased in by 2 billion DKK (2007-prices) per year during 2007-2010, and by further 1 billion DKK per year in 2011 and 2012. The globalization-related spending contributes to achieve the following objectives:

- Public R&D expenditures are increased so that as of 2010 they amount to 1 percent of GDP.
- By 2010, at least 85 percent of young people should complete secondary education, and by 2015 at least 95 percent.
- By 2015, at least 50 percent of all young people should complete tertiary education.
- Strengthened life-long learning.
- Strengthened innovation and business entrepreneurship.

When the objectives concerning R&D and education are reached, the new higher level of activity is maintained.

An annual public consumption growth of about 1 per cent in real terms through 2010 implies a somewhat lower real growth than during the period 2002-2005, and at the same time a significantly lower growth compared to the 1990's, where public consumption grew by approximately 2 per cent per year on average.

In addition to growth in the resources allocated, ongoing efficiency and productivity gains in the provision of public services may yield an additional contribution to improved public services. In recent years a number of reforms and initiatives have been implemented, which should contribute to support such a development:

- A comprehensive reform of the local government structure and division of tasks between the different levels of government. The reform takes effect from January 2007.
- Strengthening of digitalisation of public administration.
- Greater use of public-private partnerships.
- Free choice concerning e.g. elderly care and health care.

In the wake of the Welfare Agreement, extra focus has been placed on the possibilities to improve the quality of public services within the given spending limits. A government committee has been set up to prepare a basis for ongoing improvements in public services primarily in three areas: services for the elderly, childcare and health care. The committee's work is expected to result in a quality reform strategy to be published by mid-2007.

Efforts with respect to structural and labour market policies are – besides the initiatives by virtue of the Welfare Agreement, *cf. chapter 2* – described in greater detail in *Denmark's National Reform Programme, October 2006*.

4. Short-term outlook and prospects to 2010

4.1 International economy and financial variables[1]

The expansion of the global economy remains strong. Global GDP growth is expected to be around 4½ per cent in 2006 and 2007. This is about the same as in 2005.

Compared to CP05, global growth estimates have been revised upwards slightly in 2006 and 2007, mainly due to stronger growth prospects in the euro area, China and Japan. Conversely, expected GDP growth in the United States is somewhat lower than in CP05.

Overall, the growth in the international economy is expected to remain above potential growth in 2006-07. This is in line with the information that has become available since the August survey. As of 2008, foreign GDP growth is assumed to be in line with potential growth, which – using Danish export market weights – is estimated to be around 2¼ per cent annually.

World trade growth in volumes typically exceeds the growth in GDP due to, in particular, growing international division of labour. This tendency is maintained in the projections. Hence, export market growth (as well as Danish import growth) exceeds GDP growth, *cf. table 4.1*.

Table 4.1
Assumptions about the international economy

	2005	2006	2007	2008	2009	2010
Annual growth, per cent						
Real GDP[1)]	2.2	2.9	2.5	2.2	2.2	2.2
Real market growth[2)]	5.3	6.9	5.6	4.4	4.4	4.4
Per cent, end-year level						
Germany, 10-year bond yield	3.4	3.9	4.3	4.6	4.9	5.1

1) Trade-weighted.
2) Market growth is for manufactured products.
Source: European Commission spring forecasts 2006, OECD and own calculations.

[1] The historical data and projections in Convergence Programme 2006 are based on the latest published short-term outlook, *cf. Economic Survey, August 2006*. The assumptions on the international economy are partly based on the European Commission's spring forecasts adjusted for subsequent information on, e.g., economic statistics, interest rates and exchange rates. The external assumptions (cf. Annex table A.8) are broadly in line with the Commission's autumn forecasts and the common external assumptions that the member countries (in particular the euro and ERMII countries) are invited to adopt in their Stability and Convergence Programmes. Appendix 2 contains sensitivity analyses, which presents estimated effects of changed assumptions about interest rates and foreign GDP growth, among other things.

Oil prices remain at fairly high levels, notwithstanding the decline in the price on crude oil from 75 $ per barrel in July to around 57 $ per barrel in November 2006. Strong international demand, a rather limited expansion of productive capacity since the late 1990s, and a series of disruptions on the supply side have contributed to the currently high oil prices. Oil prices are above marginal production costs, and a combination of expanding capacity and adoption of energy-saving technologies is assumed to pull oil prices down in the medium-term. The average oil price is assumed to be 70 $ per barrel in 2006 and 63 $ per barrel in 2007. Subsequently, and in line with the recent oil price projections of the International Energy Agency, the oil price is technically assumed to fall gradually to around 55 $ per barrel in 2010 (measured in 2005-price level).[2]

Oil prices measured in real terms and relative to wages remain considerably below the level during the oil crisis in the early 1980s, and the energy-intensity of both production and consumption has declined markedly since that period. These factors have reduced the impact of oil price fluctuations on activity and employment.

The Fed funds rate in the United States has been raised gradually since the summer of 2004 to the current level of 5¼ per cent. Until the end of 2005, the ECB kept its refinancing rate at a historical low of 2 per cent. Since then, the rate has been raised gradually to the current level of 3 per cent. Denmark's Nationalbank has followed the interest rate increases of the ECB, reflecting the stable exchange rate policy.

The development in interest rates since 2002 is estimated to have stimulated economic growth in Denmark by approximately 1 percentage point in 2005 and a bit less than ½ percentage point in 2006, while the calculated contribution to economic growth in 2007 is negative. In recent years, the expansion of the Danish economy has exceeded that of the euro area, and the monetary stance of the ECB continues to appear relatively easy for Danish cyclical conditions in spite of the recent increases in the policy rates of the ECB.

Further increases in monetary policy interest rates in the euro area are expected to take place over the course of 2006 and 2007. In CP06 the short-term interest rate is assumed to increase gradually from around 3 per cent in 2006 to around 4½ per cent in 2010.

Since early 1999, the spread between German and Danish 10-year government bonds has averaged 0.3 percentage points. Recently, the very low international rates and Danish fiscal surplus have contributed to a low – and at times negative – yield spread. A positive spread is assumed to re-emerge in line with the assumed general

[2] The assumption about the oil price in the longer term corresponds to the recent projections of the International Energy Agency (IEA), *cf. World Energy Outlook, November 2006*. The expansion of productive capacity is assumed to pull the oil price down to around 51 $ per barrel in 2015 (measured in 2005-price level). According to the projections of the IEA, the fundamental scarcity of oil resources together with increasing world demand will lead to an increase in the oil price in the longer run. The oil price is assumed to stabilize around 59 $ per barrel in 2030 (measured in 2005-price level).

increase in interest rates. In CP06, bond yields are assumed to increase from around 4 per cent in 2006 to around 5 per cent in 2010.[3]

4.2 Short-term outlook for the Danish economy

Based on the August Economic Survey, the outlook is for relatively good growth in activity and employment, declining unemployment and sizeable surpluses on both the public finances and the external balance in 2006 and 2007. GDP growth has been estimated at 2.7 per cent in 2006 and 2.0 per cent in 2007, *cf. table 4.2*.

Since the August survey, Statistics Denmark has published quarterly national account data up to and including the second quarter of 2006. Furthermore, new information has become available for a range of other business cycle indicators. In broad terms, the more recent information points to somewhat higher domestic demand in 2006 than expected. This is reflected in higher imports as well as higher GDP growth. Employment growth has been in line with the projections, while unemployment has declined more than expected. These developments also point to a higher fiscal surplus in 2006 and a tighter labour market than estimated in August.

Registered unemployment peaked in December 2003, and by September 2006 it had fallen by close to 70,000 persons. In 2007, unemployment is projected to decline to 120,000 persons or 4.1 per cent of the labour force (national definition). Unemployment is low both in a historical perspective and in an international comparison. According to the international definition, the unemployment rate (at 3½ per cent) is the lowest among the EU countries.

Unemployment is expected to be below the structural level, which is estimated at around 5½ per cent (national definition) with a statistical uncertainty of around ±½ percentage point.[4] The output gap is estimated to be positive and growing through 2006, reaching more than 1½ per cent of GDP in 2007. These estimates are supported by information from employers and regional labour market councils indicating rather wide-spread lack of labour – especially in the construction sector, but also in private industry and services as well as in the public sector. Labour market pressures raise the risk of an upward drift in wage increases through 2008.

As a technical assumption, cyclical conditions revert to normal from 2008 to 2010[5]. This implies that labour market pressures are assumed to ease gradually and that the output gap is gradually closed through 2010, *cf. figure 4.1a*.

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[3] In the longer term (beyond 2015) average bond yields are assumed to stabilize around 6½ per cent, as in previous convergence programmes.

[4] The estimated 95 per cent confidence interval of ±½ percentage point assumes that the statistical model applied in the estimation of the structural unemployment rate is adequate and correct. Including model uncertainty, the uncertainty is higher, perhaps ±1 percentage points.

[5] No short-term forecast is available for the years after 2007. The next economic survey, which includes the most recent information, will be published in early December and the forecast horizon will extend to 2008.

Table 4.2
Key figures

	ESA	Short-term outlook 2005	2006	2007	Technical projections 2008	2009	2010
Per cent							
Gross value added (fixed prices)[1)]		3.2	2.5	1.9	1.0	0.8	0.7
GDP growth (fixed prices)[1)]	B1g	3.6	2.7	2.0	0.7	0.7	0.6
GDP deflator		2.2	2.4	2.3	2.4	2.3	2.3
Growth components, real growth in per cent							
Private consumption[2)]	P3	3.8	3.1	2.0	0.6	0.6	0.5
Public consumption[2)]	P3	1.2	1.1	1.0	1.0	1.0	1.0
Fixed gross investment	P51	9.3	10.6	4.0	2.0	1.5	0.6
Changes in stocks[3)]	P52/3	0.0	0.1	0.0	0.0	0.0	0.0
Exports	P6	8.7	6.5	3.4	1.2	1.3	1.3
Imports	P7	10.6	10.3	3.8	1.9	1.7	1.5
Contribution to GDP growth, percentage points							
Final domestic demand		4.1	4.1	2.2	1.0	0.9	0.7
Changes in stocks	P52/3	0.0	0.1	0.0	0.0	0.0	0.0
Net exports	B11	-0.5	-1.6	-0.2	-0.3	-0.2	-0.1
Labour market indicators, per cent per year							
Employment[4)]		1.1	1.2	0.3	-0.3	-0.4	-0.5
Structural unemployment rate (per cent)[5)]		5.5	5.4	5.3	4.7	4.5	4.5
Unemployment rate (percent of workforce)[5)]		5.4	4.4	4.1	3.9	4.1	4.5
Do, EU definition[5)]		4.8	3.8	3.5	3.3	3.5	3.9
Hourly productivity in private sector[6)]		1.9	1.2	2.1	2.0	2.0	2.0
Productivity (gross value added per employee)		2.1	1.3	1.7	1.3	1.2	1.2

Note: The figures for 2005 correspond to those published in the August survey. On October 12th 2006, Statistics Denmark published revised national account data for 2005.
1) The relatively low growth rates in 2008-10 reflect a technical closing of the positive output gap, which takes places gradually from 2007 to 2010.
2) Real growth in public consumption as measured in the national accounts reflects growth in the consumption of resources – not improvements in services offered – mainly because productivity growth in the public sector cannot be measured. Hence, a direct comparison of real growth in private and public consumption is not necessarily meaningful.
3) Contribution to GDP growth.
4) It is technically assumed that the estimated increase in the number of people in (certain) activation schemes due to the Welfare Agreement does not affect employment.
5) Including the estimated reduction in unemployment that follows from the increase in the number of people in (certain) activation schemes due to the Welfare Agreement.
6) Excluding agriculture, energy extraction and maritime services.

Source: Statistics Denmark and own calculations.

Following high GDP growth and declining unemployment in 2004 to 2007, the technical projections imply that GDP growth is about ½ percentage point below the medium-term growth potential of around 1½ per cent through 2010, while unemployment gradually approaches the structural level. The structural level of unemployment is assumed to decrease by about ½ percentage point due to elements in the

Welfare Agreement, which are expected to enhance job search. In addition, the activation measures are assumed technically reduce the unemployment rate by another ½ percentage points (unemployed in labour market activation programmes are not registered as unemployed). Hence, the structural unemployment rate is assumed to decline from 5.5 per cent in 2005 to about 4.5 per cent of the work force in 2010 (national definition), mainly due to elements in the Welfare Agreement, *cf. figure 4.1b*.

Figure 4.1a
Output gap, 1990-2010

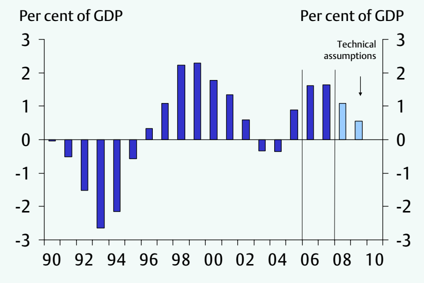
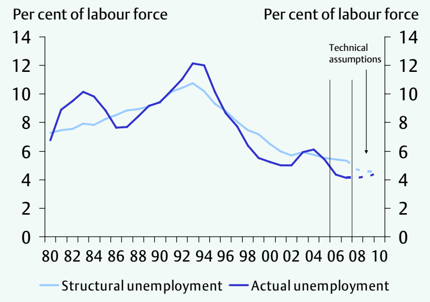


Figure 4.1b
Unemployment and structural unemployment, 1980-2010



As mentioned, the structural unemployment level is difficult to assess, and the estimates are uncertain. The effects of reform measures already taken and increased competition from abroad may have a larger impact than reckoned at this point. Increased focus on the availability-for-work of the unemployed in the current situation with low unemployment (and vacant positions) may also increase job search.

In a scenario with unchanged unemployment from 2007 to 2010 due to lower structural unemployment in 2010 than assumed, GDP growth could be close to the underlying growth potential of about 1½ per cent per year to 2010. Conversely, if the structural level of unemployment is higher than estimated, GDP growth may be subdued or competitiveness in the tradables sector may deteriorate further.

Higher than expected productivity (or longer working hours) may strengthen GDP growth towards 2010 without weakening competitiveness in the tradables sector.

4.3 Assumptions regarding employment and productivity through 2010

Given the short-term outlook for 2006-07 and the technical assumptions for 2008-10, GDP growth is assumed to average about 1½ per cent per year in 2006-10, *cf. table 4.3*. The slower growth than in 1991-05 reflects, in particular, that the strong decline in unemployment from 1995 to 2002 cannot be replicated and that a reduction in average working hours is included through 2010 due to a changing age profile of the labour force. Average working hours have risen since the early 1990s, mainly due to an increase in the share of women working full-time rather than part-time.

Table 4.3
Contributions to production potential and real GDP

	1991-05	2006-10
Annual growth, per cent		
Growth in production potential	1.9	1.4
Of which:		
- Hourly productivity	1.5	1.6
- Structural unemployment	0.3	0.1 [1)]
- Labour force	0.0	-0.1 [1)]
- Average working hours	0.2	-0.2
Growth in GDP	2.0	1.3

1) The change in employment, unemployment and labour force do not include the estimated increase in the number of people in (certain) activation schemes due to the Welfare Agreement.
Source: ADAM databank and own calculations.

The projection implies an increase in employment of some 8,000 persons from 2005 to 2010[6], *cf. table 4.4*. This reflects a decline in unemployment of about 12,000 persons, mainly due to structural changes caused by the Welfare Agreement, and a reduction of the labour force amounting to approximately 4,000 persons.

Table 4.4
Contributions to the increase in employment

	Change 2005-10
1,000 persons	
1. Demographic factors[1)]	-18
2. Assumed contribution from already-implemented reforms	17
3. Structural employment, excl. effects of the Welfare Agreement (1+2)	-1
4. Effects of the Welfare Agreement	13
5. Cyclical contribution[2)]	-4
6. Change in employment (3+4+5)	8
- of which change in unemployment[2)]	-12
- of which change in labour force[2)]	-4

1) Assumes an unchanged aggregate unemployment rate and unchanged participation rates broken down by gender, age and origin from 2005 to 2010. The calculation incorporates higher participation rates for more-educated groups and changes to the average residence period for immigrants.
2) The change in employment, unemployment and labour force do not include the estimated increase in the number of people in (certain) activation schemes due to the Welfare Agreement.
Source: Own calculations.

Demographic developments are estimated to reduce the work force. Other things equal, this tends to lower employment by 18,000 persons by 2010. The negative contribution from demographic factors is roughly offset by an estimated contribution of 17,000 persons from already-implemented reforms. These initiatives include earlier reforms of the VERP scheme (1998) and disability, abolition of the pre-early retire-

[6] The changes in employment, unemployment and labour force in table 4.3 do not include an increased number of people in (certain) activation schemes due to the Welfare Agreement.

ment for long-term unemployed elderly, and initiatives to raise employment among immigrants *En ny chance for alle* (“*A new chance for everyone” – available in Danish only).*

Furthermore, the Welfare Agreement is estimated to strengthen structural employment through 2010 by some 13,000 persons. This reflects, in particular, the labour market initiatives – including the effects on job search of initiatives to bring forward activation, intensify activation efforts after 2½ years of unemployment, strengthen job matching procedures and availability-for-work criteria – and targeted efforts to strengthen employment among immigrants and descendants. The structural unemployment rate is assumed to drop from 5½ per cent in 2005 to 4½ per cent of the work force in 2010 (including also the increased number of people in activation), mainly due the initiatives in the Welfare Agreement.

Overall, structural employment is estimated to grow by 12,000 from 2005 to 2010.

Actual employment in 2005 was just above the estimated structural level (in contrast to 2006 where employment is substantially above the structural level). Unemployment in 2005 was slightly below the estimated structural level (about 2,000 persons), while the work force was slightly above the estimated structural level (about 2,000 persons). The assumed normalization of the business cycle from 2005 to 2010 is thus projected to reduce total employment growth by around 4,000 persons.

Hourly productivity in the private sector (excluding agriculture, energy extraction and maritime services) is assumed to grow on average by some 2 per cent per year in the period 2005-10. For the private sector as a whole, hourly productivity is assumed to grow by about 2¼ per cent annually. Since the national accounts do not incorporate productivity improvements in the public sector, which employs some 30 per cent of all employees, economy-wide productivity growth is assumed to be about 1½-1¾ per cent per year, *cf. table 4.3*.

Average annual working hours have risen somewhat since the early 1990s (after a considerable decline in previous decades). The rising share of elderly and very young in the labour force implies a reduction in average working hours of 0.2 per cent per year from 2005 to 2010, because these groups on average work fewer hours than employees in the middle age groups. Hence, gross value added per employee grows as a whole by around 1½ per cent per year.

4.4 Wages and prices

As a technical assumption reflecting the August survey, prospective wage increases in 2006 and 2007 are somewhat higher than in the euro area, reducing competitiveness in the tradables sector. Since 2000, wage increases per employee have on average been about 1 per cent higher than in the euro area, which partly reflects higher productivity growth.

Consumer prices are projected to increase by 2.0 per cent in 2006 and 1.8 per cent in 2007 (exclusive of energy prices the profile is increasing).

The technical scenario through 2010 entails annual wage increases of about 3½ per cent per employee annually and consumer price inflation of around 1¾ per cent per year, *cf. table 4.5*. Real wage growth is slightly less than 2 per cent per year through 2010, which largely corresponds to the assumed productivity growth in the private sector. As a result of the tax freeze, consumer prices rise slightly less than the net price index (i.e., consumer prices excluding indirect taxes).

Table 4.5
Price indices and deflators

	2005	2006	2007	2008	2009	2010
Annual growth, per cent						
GDP-deflator	2.2	2.4	2.3	2.4	2.3	2.3
Private consumption deflator	2.1	1.8	1.8	1.8	1.9	1.9
Consumer price index	1.8	2.0	1.8	1.6	1.9	1.8
Do. EU-harmonized HICP	1.7	2.0	1.8	1.7	1.8	1.7
Net price index	2.0	2.1	1.9	1.7	2,0	1.9
Wage costs, per employee	3.2	3.5	3.7	3.5	3.5	3.5
The euro area						
HICP	2.2	2.4	2.2	-	-	-
Compensation per employee	2,1	2.2	3.2	-	-	-

Source: Statistics Denmark and own calculations.

4.5 Current account and net foreign assets

The projections point to continued high, but decreasing financial savings in the public sector. The financial savings deficit in the private sector is gradually turned around to a savings surplus. The external surplus is projected at around 1½ per cent of GDP on average in the period 2006-10. Subject to often quite substantial changes in the valuations of external assets and liabilities, net foreign assets are expected to accumulate gradually through 2010, *cf. table 4.6*.

Table 4.6
Current account and net foreign assets

	2005	2006	2007	2008	2009	2010
Per cent of GDP						
Private financial savings	-0.9	-1.3	-1.0	-1.1	-0.5	0.2
Public financial assets	3.9	3.1	2.8	2.5	1.8	1.2
Current account	3.0	1.6	1.7	1.3	1.2	1.3
Net foreign assets	1.6	4.5	6.1	7.5	8.6	9.7

Source: Statistics Denmark and own calculations.

5. Outlook for public finances to 2010

5.1 Overview of public finances

Based on the economic outlook and policy assumptions in the August Economic Survey, the general government budget surplus in 2006 is estimated at around 50 billion DKK or 3.1 pct. of GDP, *cf. table 5.1*. In August, Statistics Denmark estimated the 2005-surplus at 3.9 pct. of GDP. The net lending figures are based on national accounts principles, where ATP is included in the private sector.[1] The EDP-reporting in September was based on the data from the August projection.

The key reason for the decline in the expected public surplus from 2005 to 2006 is lower expected revenues from the pension yield tax. Larger revenues from the North Sea oil and gas exploration activities, on the other hand, tend to increase the surplus in 2006.

Table 5.1
Public finances and debt

	ESA	2005	2006	2007	2008	2009	2010
Per cent of GDP							
Revenues	ESA	55.5	53.5	52.7	52.1	51.8	51.8
- of which taxes		49.7	48.0	47.5	46.9	46.6	46.4
Expenditures	ESA	51.6	50.5	49.9	49.7	50.1	50.6
Public balance (national accounts)	B9	3.9 1)	3.1	2.8	2.5	1.8	1.2
- of which central and local governments		3.9 1)	3.0	2.8	2.5	1.8	1.2
Public balance (EDP-basis excl. ATP) 2)	B9 EDP	4.0	3.1	2.8	2.5	1.8	1.2
Public balance (EDP-basis incl. ATP) 2)	B9 EDP	4.9	4.0	3.8	3.5	2.8	2.2
Public gross debt (EU-definition)		35.9	28.6	24.6	21.5	19.3	17.8
Public net debt		8.8	5.3	2.2	-2.0	-3.7	-4.8
Net debt in central and local governments		8.9	5.4	2.3	-1.9	-3.7	-4.7

1) In November the general government budget surplus was revised to 4.6 per cent of GDP.
2) Up to and including the second EDP-reporting in 2006 public finances for Denmark has been incl. ATP. Thereafter, i.e. from the first EDP-reporting in April 2007 public finances will be excl. ATP. For the period 2008-2010 it is assumed that the difference between the public surplus on an EDP-basis (excluding ATP) and the surplus on national account basis (which also excludes ATP) corresponds to the difference in 2007. In 2007-2010 a total surplus of 1.0 per cent of GDP is assumed for the ATP-fund.
Source: Statistics Denmark and own calculations.

The public surplus is expected to decrease to approximately 47¾ billion DKK or 2.8 pct. of GDP in 2007. The decrease in the public surplus from 2006 to 2007 mainly reflects lower expected revenues from the North Sea activities in light of an anticipated decline in oil prices.

[1] Unless otherwise mentioned, the public finance data below are based on the national account principles.

The relatively large general government budget surpluses in 2005-2007 exceed the estimated structural balance, which measures the actual surplus adjusted for the cyclical position and a number of special items, *cf. section 5.3*. This applies especially in 2005, where revenues from pension yield taxation were particularly large. Large revenues from the North Sea activities contribute to the large actual surpluses in all three years.[2] The present strong cyclical position also contributes to the public surpluses.

The estimated general government budget surpluses in 2006 and 2007 are subject to uncertainty. In particularly, some relatively important revenues are very sensitive to changes in oil prices and developments in financial markets – including changes in interest rates and stock prices.

The starting point in the August Survey was a general government budget surplus – based on national account principles – of 61.2 billion DKK or 3.9 per cent of GDP in 2005. In November, Statistics Denmark published revised figures for public finances for the period 2003-2005. According to the most recent figures the surplus was 71.8 billion DKK corresponding to 4.6 per cent of GDP in 2005.

The upward revision of the budget balance – by approximately 10½ billion DKK (0.7 per cent of GDP) – is mainly due to higher tax revenues, as revenues from the pension yield tax and corporate taxes are approximately 5½ billion DKK (0.4 per cent of GDP) and 3 billion DKK (0.2 per cent of GDP) higher, respectively. A number of other revisions – including to income taxes – increase the budget surplus by some 2 billion DKK (0.1 per cent of GDP). The estimated structural balance is only slightly affected by the revised budget surplus in 2005.

As part of the Stability and Growth Pact, Denmark reports its general government budget balance and debt ("EMU debt") 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. As mentioned earlier, this is primarily because the public balance on the EDP-basis for the moment still includes the surplus of the ATP fund of around 1 per cent of GDP[3]. It also includes net interest income from central government interest rate and currency swaps, and a different treatment of central government revenues from the sale of UMTS-licenses.[4] Finally, the general government

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[2] Rising oil prices have a positive direct effect on public finances in Denmark, in contrast with most other EU countries. Rising oil prices imply higher public revenues from the taxation of oil and gas activities in the North Sea (mainly corporate tax and hydro carbon tax). Based on the August Survey, the revenues from the North Sea activities in 2005 amounted to 1.7 per cent of GDP. With some uncertainty, it is estimated that a permanent increase in oil prices of 10 $ per barrel improves long-term fiscal sustainability by less than 0.1 per cent of GDP.
[3] The ATP-fund's surplus can vary somewhat from year to year. This is due to the fact that the ATP-fund's pension yield tax payments to the central government can fluctuate rather much from year to year depending on developments in financial markets.
[4] For EDP purposes, all government revenue from the sale of UMTS licenses 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

surplus on the EDP-basis corrects for so-called infrastructure investment, which includes among other things the deficit in BaneDanmark.[5]

The general government surplus on the EDP-basis is higher than on the national accounts basis. In the August *Economic Survey,* the public surplus amounted to 3.9 per cent of GDP in 2005 based on national accounts and 4.9 per cent on EDP-basis. The surplus in the ATP-fund of 0.9 per cent of GDP in 2005 is the primary cause. The correction regarding swap-related flows etc. is counterbalanced by the corrections for UMTS-licenses and infrastructure investments. In a similar fashion, the public surplus for 2006 is estimated at 4.0 pct. of GDP on the EDP-basis against 3.1 pct. of GDP on the national accounts basis.

The upward revision of the public surplus in 2005 – by 0.7 per cent of GDP – is estimated to increase the general government balance on EDP-basis correspondingly, i.e. from 4.9 per cent of GDP to approximately 5.6 per cent of GDP.

EMU debt is expected to be reduced from around 36 per cent of GDP in 2005 to 24½ per cent of GDP in 2007. Public debt is brought down faster than targeted in the original 2010-plan, *cf. En holdbar fremtid – Danmark 2010, January 2001*. The assumed medium-term public surpluses contribute to reduce EMU debt to some 17¾ per cent of GDP by 2010.

Up to and including the second EDP reporting in 2006, the EMU debt has included a deduction for ATP holdings of government bonds. In 2005 the deduction of 0.3 per cent of GDP was extraordinarily low, compared to the average deduction of slightly above 1½ per cent of GDP in the years 1995-2005. From the next EDP-reporting in April 2007, EMU debt and general government budget balance on EDP-basis are defined excluding ATP.

5.2 Structural budget balance

The estimated structural surplus is 1.3 per cent of GDP in 2005, when the structural balance is corrected for the suspension of special pension (SP) contributions.[6] In 2006 and 2007 the structural budget surplus increases to 1.4 and 1.5 per cent of GDP, respectively, *cf. table 5.2*.

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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 licenses are valid.

[5] These corrections have only marginal effects on the general government balance. The treatment of central government interest rate and currency swaps increases the budget balance on EDP-basis by about 0.2 per cent of GDP, while the corrections regarding capital expenditure to certain central government corporations and revenues from the sale of UMTS licenses reduce the general government balance by some 0.2 per cent of GDP.

[6] The calculation of the structural budget balance follows the method of the Danish Ministry of Finance and the starting point is the actual budget balance based on national account principles, where ATP is part of the private sector.

The structural budget surplus diminishes to slightly above 1 cent of GDP towards 2010. This reflects an anticipated decline in oil prices from 2007 to 2010 (which reduces the estimated trend level of revenues from the North Sea activities), increased public spending on globalizations-related initiatives and the nominal principle of the tax freeze. Declining net interest payments and an increase in structural employment due to the initiatives in the Welfare Agreement pull in the opposite direction.

Table 5.2
Structural budget balance

	2005	2006	2007	2008	2009	2010
Per cent of GDP						
1. Actual balance	3.9	3.1	2.8	2.5	1.8	1.2
2. Cyclical adjustment	-0.1	-1.1	-1.2	-0.8	-0.4	0.0
3. Special items	-2.2	-0.3	0.2	-0.2	0.0	0.0
Hereof						
Corporate tax[1)]	*-0.5*	*-0.3*	*-0.2*	*0.0*	*0.0*	*0.0*
Pension yield tax	*-1.2*	*0.9*	*0.6*	*0.0*	*0.0*	*0.0*
Net interest payments	*-0.1*	*-0.1*	*0.0*	*-0.3*	*-0.1*	*0.0*
Revenues from the North Sea[2)]	*-0.3*	*-0.9*	*-0.4*	*0.1*	*0.0*	*0.0*
Special items[3)]	*-0.1*	*0.1*	*0.2*	*0.1*	*0.0*	*0.0*
4. Structural budget balance (1-2-3)	1.6	1.7	1.8	1.5	1.4	1.2
5. Structural budget balance corrected for the suspension of SP contributions	1.3[4)]	1.4[4)]	1.5[4)]	1.5	1.4	1.2
Memo items						
Potential GDP growth, per cent	1.4	2.0	1.9	1.3	1.3	1.3
Real GDP growth, per cent	3.6	2.7	2.0	0.7	0.7	0.6
Output gap	0.9	1.6	1.6[5)]	1.1	0.6	0.0
Employment gap	0.2	1.4	1.6[5)]	1.1	0.5	0.0

1) Excl. hydro carbon tax and corporate taxes from corporations liable to carbon tax payments.
2) Hydro carbon tax, corporate taxes from corporations liable to carbon tax payments, excise tax on oil pipelines and profit sharing.
3) Including net current and capital transfers, e.g. EU-contributions, foreign aid expenditures, block grants to the Faroe Islands and Greenland, buy and sale of land and rights. These special items can vary somewhat from year to year.
4) The contributions to the Special Pension scheme are suspended for the period 2004-2007. The correction made amounts to almost 0.3 per cent of GDP and contributes to a higher degree of comparability over time.
5) Technically it is assumed, that the positive output gap in 2007 is closed gradually towards 2010.
Source: Statistics Denmark and own calculations.

The estimated structural budget surpluses are within the target interval of structural surpluses (MTO) of ½-1½ per cent of GDP towards 2010.

In Convergence Programme 2006 the structural budget surplus in 2010 is approximately ½ per cent of GDP lower than in CP 2005.[7] This reflects higher public con-

[7] In Convergence Programme 2005 the estimated structural budget balance surplus increased from 1.0 per cent of GDP in 2005 to 1.7 per cent of GDP in 2010 based on a moderate real growth of public consumption of ½ per cent and a permanent increase in employment of approximately 50.000 persons towards 2010.

sumption growth (notably the globalization funds and the labour market initiatives in the Welfare Agreement) and the fact that the required employment increase of approximately 50.000 persons towards 2010 is no longer included – instead the implemented contribution of 13.000 persons from the initiatives in the Welfare Agreement is included. At the same time the Welfare Agreement implies higher employment and improved public finances in the longer term – especially as a result of the retirement reform.

For the period 2005-2007 the estimated structural budget surpluses are lower than the actual surpluses. In 2005 this reflects revenues from the pension yield tax and corporate taxes that are 1.2 and 0.5 per cent of GDP above their estimated structural levels, respectively. Mainly as a result of high oil prices, the revenues from the North Sea activities are also estimated to be larger than the estimated trend revenue.

In 2006 and 2007 the cyclical position is estimated to improve public finances by 1.1 and 1.2 per cent of GDP, respectively. Continued large expected revenues from the North Sea activities also contribute to raise the actual budget balance above the estimated structural surplus.[8] In addition, the revenue from corporate taxes is expected to exceed the assumed structural level.[9] The revenue from the tax on pension fund returns, on the other hand, is estimated to be 0.9 and 0.6 per cent of GDP lower than the estimated trend level in 2006 and 2007.[10]

From 2008 to 2010 the cyclical position is technically assumed to revert to neutral implying an output gap and employment gap of zero in 2010. At the same time the correction for special items is assumed to wane reaching zero in 2010. As a consequence the actual budget surplus is gradually approaching and equals the structural budget balance in 2010, where the surplus amounts to slightly above 1 per cent of GDP.

The estimated structural budget balance in 2005-2007 is based on public finance data from the August economic outlook. The mentioned upward revision of the actual budget surplus in 2005 is estimated to raise the estimated structural budget surplus only slightly. While the upward revision of the actual budget balance amounts to approximately 0.7 per cent of GDP, the upward revision of the estimated structural budget balance in 2005 is on the order of 0.1-0.2 per cent of GDP.

The agreement on the fiscal bill for 2007 on the other hand, tends to reduce the structural budget balance in 2007 slightly, cf. below.

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[8] The trend level of revenues from the North Sea activities is estimated as a 7 year moving average of actual and projected revenues. The estimated structural revenues from the North Sea activities are thus influenced by the present relatively high oil prices.

[9] The estimated structural budget balance is based on an estimated trend level of corporate taxes (excl. hydro carbon taxes and corporate taxes related to the North Sea activities) of 2.1 per cent of GDP.

[10] The trend level of revenues from tax on pension fund returns is estimated to about 0.8-1.0 per cent of GDP in 2005-2007.

5.3 Fiscal policy stance

In 2007 the impact on economic activity from fiscal policy – measured by the so-called first-year fiscal effect – is estimated at approximately -0.1 per cent of GDP, *cf. table 5.3*. This estimate is based on the central government budget proposal for 2007 (from August 2006) and the agreements on the economy of municipalities and regions in 2007 (from June 2006). The slightly dampening fiscal policy in 2007 reflects an assumed decrease in public investments, following extraordinarily high local government investment expenditure in 2006.

The agreement on the fiscal bill entered on November 7th 2006 and new information on the economy in local governments does not change the impact on economic activity of fiscal policy in 2007 much, *cf. box 5.1*. Measured by the fiscal effect, the agreed fiscal bill etc. implies a neutral stance of fiscal policy in 2007. The neutral fiscal stance requires that public investments are reduced by 10 per cent in 2007, which is supported by local government budgets.

Table 5.3
Policy impact on economic activity – base on the August Survey

	2003	2004	2005	2006	2007
Per cent					
GDP-growth	0.7	1.8	3.6	2.7	2.0
First-year fiscal effect	-0.4	0.6	0.1	0.2	-0.1
Percentage points					
Multi-annual effects:					
- multi-annual fiscal effect	-0.3	0.5	0.2	0.3	-0.1
- impact on savings[1)]	0.0	0.1	0.1	0.0	0.0
- investment initiatives etc.[2)]	0.3	0.1	-0.1	-0.1	-0.1
- implemented interest rate changes[3)]	0.8	1.2	1.0	0.4	-0.3

1) The impacts on savings cover the suspension of the SP-contribution.
2) Excl. the impacts on activity of public subsidies in the housing market, as these are included in the fiscal policy contribution to economic activity.
3) Based on the partial effect on GDP growth of interest rate changes between 2002 and the beginning of August 2006. Thereafter, the interest rate is assumed unchanged.
Source: Statistics Denmark and own calculations.

Fiscal policy changes since 2002 have had a more or less neutral impact on GDP growth in 2007[11], *cf. table 5.3*. Fiscal policy, however, is seen to contribute to a higher GDP-level compared to a situation with a neutral fiscal policy stance in each year since 2002. This is primarily due to the fiscal policy expansion in 2004 through the tax reductions on labour income and other initiatives in the Spring Package.

[11] The multi-annual fiscal effects take into account the lagged effects that fiscal policy in a given year may have on economic activity in the following years. Here, the multi-annual fiscal effect takes fiscal policy since 2002 into account. The figures in table 5.3 are based on the August economic outlook – i.e. the budget proposal for 2007 and the agreements on the economy of local governments. The effects of the fiscal bill for 2007 and the local government budgets are thus not included.

Interest rate developments from the beginning of 2002 to August 2006 are also estimated to have contributed to a higher level of GDP. In light of the recent increase in interest rates, interest rate developments are, however, estimated to dampen GDP growth in 2007.

Box 5.1

Agreement on the fiscal bill and local government budgets for 2007

Based on the budget proposal, the government entered on November 7th 2006 an agreement on the fiscal bill. The agreement on the fiscal bill contained improvements in various key areas:

- The globalization funding of 2 bill. DKK in 2007 is allocated to research, education and innovation.
- 9 bill. DKK to improve railways and roads for the period 2007-2014.
- Another ½ bill. DKK to health services in 2007.
- Rise in certain early pension benefits amounting to 0.4 bill. DKK annually.
- Improved day care for children of 0.6 bill. DKK over 2007-2009 and lower day care fees from 2007.
- 2 bill. DKK is allocated to the police in the course of 2007-2010.
- New environment and nature initiatives for 0.5 bill. DKK in 2007-2009.

The result of local government budgeting for 2007 is also available. The budgets of the new regions are in line with the agreements from June. The budgeting in the municipalities reflects net service expenditures that are ¾ bill. DKK above the agreed level in June. This is mainly due to agreed additional expenditures of approximately 0.4 bill. DKK following expected higher expenditure on social services, which municipalities take over from the counties on January 1st 2007. In addition expenditures of approximately 0.3 bill. DKK are explained by one off costs related to the local government reform. Investment expenditure is on the other hand around 0.3 bill. DKK less than the agreed level from June.

Compared to the key fiscal numbers put forward in August, the agreement on the fiscal bill for 2007 and local government budgets for 2007 imply that:

- Real growth in public consumption is revised upwards from 1 per cent to around 1¼ per cent in 2007.
- The total public surplus (net lending) is at the same time estimated to be reduced by approximately 1½ bill. DKK in 2007 (0.1 per cent of GDP).
- The estimated fiscal effect in 2007 is revised from -0.1 per cent of GDP based on the August Survey to 0.0 per cent of GDP in 2007. The impact of fiscal policy on economic growth is thus neutral.

The slightly higher growth of public consumption in 2007 mainly reflects the additional expenditure associated with the local government budgets. Those elements in the agreement on the fiscal bill concerning health and elderly care expenditures also contribute to a slightly higher than planned growth in public consumption.

The impact of discretionary one-off measures on the central government CIL-balance and total public finances (net lending) is outlined in *box 5.2*. While the one-off improvements of the CIL-balance are of some magnitude, the impact on total public finances (net lending) is very modest.

Box 5.2

Discretionary one-off measures in 2006 og 2007

In 2006, the total impact on the central government CIL-balance of discretionary one-off measures is estimated at approximately 2.2 bill. DKK, *cf. table a*. In particular, the reallocation of central government assets by 2.3 bill. DKK improves the CIL-account in 2006, while central government one-off expenditures of 0.7 bill. DKK related to the local government structural reform tend to reduce the CIL-balance.

The budget balance is estimated to be reduced by approximately 0.5 bill. DKK in 2006 due to discretionary one-off measures etc. This mainly follows one-off expenditures related to the local government structural reform.

In 2007 discretionary one-off measures etc. is estimated to improve the central government CIL-account by approximately 2.3 bill. DKK. This is mainly due to reallocation of central government assets.

Discretionary one-off measures etc. are estimated to improve the public balance slightly by approximately 0.2 bill. DKK in 2007.

Table a

Discretionary one-off measures in 2006 and 2007

	CIL-balance	Public balance
Bill. DKK		
Reallocation of central government assets	2.3	
Transfers from Hypotekbanken	0.1	
Disbursements from IØ and IFU	0.3	
Sale of buildings and land	0.1	0.1
Extraordinary dividends	0.1	0.1
One-off spending related to the local government structural reform	-0.7	-0.7
2006 total	**2.2**	**-0.5**
Reallocation of central government assets	2.0	
Disbursements from IØ and IFU	0.2	
Extraordinary dividends	0.4	0.4
One-year funds	-0.3	-0.2
2007 total[1]	**2.3**	**0.2**

1) Based on Economic Survey, August 2006 and the 2007 budget bill.
Note: Positive (negative) numbers reflect improvement (reduction) in the balance.

In light of the present high economic activity and the risk of growing pressures on wages and prices, it is important that fiscal policy is not contributing to increase demand in 2007 and that recent years' structural reforms have the anticipated impact on labour supply. In combination with an expected increase in interest rates, this could contribute to a normalization of the cyclical position, reducing the risk of a subsequent period with unnecessarily high unemployment.

At the same time the necessary prudence in fiscal policy requires that the agreed public budgets are adhered to. This applies in particular to municipalities and counties/regions, where there has been a historical record of deviations between budgets and actual spending. Concerning 2006, legislation was adopted, which commits the municipalities as a whole to the budgets for 2006. If realized social service expenditures for municipalities as a whole exceed the budget, the local government block grant for 2007 will be reduced correspondingly.

5.4 Revenues

Based on the August economic outlook total public revenues are projected to decline from 55½ per cent of GDP in 2005 to 52.7 per cent of GDP in 2007. Towards 2010 public revenues are assumed to decrease further to approximately 51¾ per cent of GDP, *cf. table 5.4*.

Table 5.4
Composition of general government finances

	ESA	2005	2006	2007	2008	2009	2010
Per cent of GDP							
Budget balance (national accounts)	B9	3.9[1)]	3.1	2.8	2.5	1.8	1.2
Expenditures		51.6	50.5	49.9	49.7	50.1	50.6
- Primary expenditures		49.0	48.2	47.7	48.1	48.7	49.3
- Public consumption	P3	25.9	25.6	25.4	25.6	25.8	26.0
- Public investment		1.8	1.9	1.6	1.6	1.6	1.7
- Social transfers	D62	16.4	15.9	15.8	15.8	16.0	16.4
- Subsidies	D3	2.3	2.2	2.2	2.4	2.5	2.5
- Other primary expenditures		2.7	2.7	2.7	2.8	2.8	2.8
- Interest payments	D41	2.6	2.3	2.1	1.5	1.3	1.3
Revenues		55.5	53.5	52.7	52.1	51.8	51.8
- Taxes (tax burden)		49.7	48.0	47.5	46.9	46.6	46.4
- Personal taxes etc.[2)]		20.8	20.7	20.6	20.3	20.1	20.1
- of which property value tax		0.7	0.7	0.7	0.7	0.7	0.7
- Labour market contribution tax		4.3	4.3	4.3	4.3	4.3	4.3
- Tax on pension fund returns		2.0	0.1	0.4	0.7	0.8	0.9
- Corporate taxation		3.6	3.8	3.5	3.1	3.0	2.9
- VAT		10.0	10.1	10.1	10.1	10.1	10.0
- Land tax etc.		1.1	1.1	1.1	1.2	1.2	1.2
- Excise duties etc.		6.8	6.7	6.4	6.1	6.0	5.9
- Social contributions		1.1	1.1	1.1	1.0	1.0	1.0
- Interest income	D41	1.3	1.3	1.2	1.3	1.3	1.3
- Other revenues		4.4	4.3	4.0	4.0	4.0	4.0

1) In November, the total public balance was revised to 4.6 per cent of GDP in 2005 by Statistics Denmark.
2) Personal taxes etc. cover withholding taxes (including property value tax), annual motor vehicle fees paid by households, inheritance tax and other personal taxes.
Source: Statistics Denmark and own calculations.

The decrease in public revenues as a percentage of GDP from 2005 to 2010 mainly reflects a reduction in the tax-to-GDP ratio by approximately 3¼ per cent of GDP. The declining tax-to-GDP ratio should be seen in light of a normalisation of the corporate tax revenue primarily due to an assumed decline in oil prices from the present high levels. A normalisation of revenues from the pension yield tax also pulls down the tax-to-GDP ratio. Furthermore, the nominal principle of the tax freeze contributes to an underlying reduction in the tax-to-GDP ratio.

5.5 Expenditures

Based on the August economic outlook, the share of public expenditures in GDP declines from 51.6 per cent of GDP in 2005 to 49.9 per cent of GDP in 2007. More than two thirds of this decline owes to a reduction of primary expenditures as a percentage of GDP, reflecting the buoyant business cycle that reduces social transfer expenditures and increases GDP. A little less than a third of the decline in public expenditures - as a share of GDP - reflects lower interest payments related to the projected debt reduction.

From 2005 to 2010 the projected expenditure-to-GDP ratio declines by around 1 per cent of GDP, *cf. table 5.4*. The most important driver being declining interest expenditures due to the reduction of public debt.

The annual real growth rate of public consumption is assumed to be 1 per cent from 2007 to 2010. In the original 2010-plan the average real growth rate of public consumption amounted to ½ per cent annually in the period 2007-2010, *cf. Convergence Programme 2005*. The effects on public consumption resulting from the Welfare Agreement – e.g. the globalization funds and labour market initiatives add another ½ per cent to the real public consumption growth on average in 2007-2010.

Public consumption relative to GDP is roughly unchanged from 2005 to 2010. From 2005 to 2007 public consumption declines as a share of GDP by approximately 0.5 percentage points. This reflects a relatively high nominal GDP growth, while real growth of public consumption is estimated at 1.1 per cent in 2006 and 1 per cent in 2007. From 2007 to 2010 cyclical conditions are technically assumed to normalize, and combined with a real growth rate of public consumption of 1 per cent per year this causes public consumption to revert roughly to the same share in GDP in 2010 as in 2005.

During 2002-2005 average real growth of public consumption was 1.3 per cent per year, while in 2002-2007 the average growth rate is estimated at 1.2 per cent per year.

The annual growth rate of public consumption of 1.3 per cent on average during 2002-2005 exceeds the assumed real growth rate of 0.8 per cent according to the

2010-plan.[12] This implies an additional growth of 0.5 per cent per year on average compared to the assumed path, which reflects additional expenditures in local governments.

The overall consumption growth from 2002 to 2005 is explained by the growth in counties and municipalities, while central government consumption expenditure has declined from 2002 to 2005 in real terms.

In the years since 2001 resources have especially been allocated to public services provided by counties and municipalities. Based on the budget proposal from August and the agreements on the economy of local governments from June, the increase in public consumption amounts to approximately 31 bill. DKK from 2001 to 2007 (2007-price level), *cf. figure 5.1a*. Most of this increase is accounted for by expenditures related to health, social services and education.

The areas of social services, health and education – i.e. elderly care, child care, hospitals, schools etc. – account for more than two thirds of the public consumption of approximately 400 bill. DKK in 2005, *cf. figure 5.1b*.

Figure 5.1a
Real growth of public consumption divided into key areas, 2001-2007

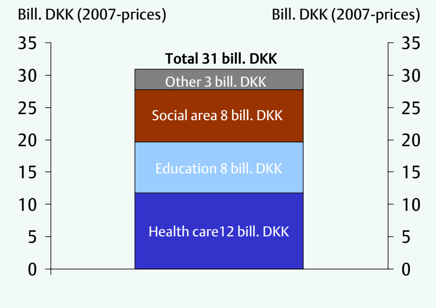
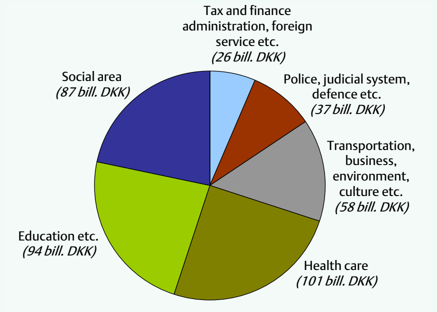


Figure 5.1b
Public consumption divided into areas, 2005



Source: Statistics Denmark and own calculations.

Preliminary quarterly national account figures for the first three quarters of 2006, published by Statistics Denmark on November 30, 2006, show an annual real growth rate of public consumption of 1.0 percent. This is broadly in line with the estimated growth of 1.1 per cent for 2006 as a whole. The quarterly national account figures for public consumption are associated with considerable uncertainty.

As mentioned, the fiscal bill and the local government budgets imply a slightly higher consumption growth of approximately 1¼ per cent in 2007 compared to the esti-

[12] In the original 2010-plan (January 2001) an annual real growth rate of 1 per cent was assumed for the years 2002-2005. Following the agreement on lower taxes on labour income (April 2003) a real growth rate of 0.8 per cent on average was assumed in the same time period.

mated 1 per cent growth rate based on the August economic outlook. The target is still a realized annual real growth rate of public consumption of approximately 1 per cent on average in 2007-2010.

New estimates for public consumption growth in 2006 and 2007 will appear in the coming *Economic Survey, December 2006* (English summary will be available). The new estimates will be based on the latest information concerning expenditure developments in 2006 and the agreement on the fiscal bill for 2007.

The share of social transfer expenditures in GDP is roughly unchanged from 2005 to 2010. An expected reduction in unemployment reduces social transfer expenditures, while increasing pension expenditures tend to increase social transfer expenditures.

5.6 Net lending by sub-sectors

The central government is projected to run surpluses in the entire period to 2010, while local governments' finances are assumed to be in balance in the projection period, *cf. table 5.6*. The central government budget balance (net lending) declines from 4.3 per cent of GDP in 2005 to 1¼ per cent of GDP in 2010. The reduction of the budget surplus follows the gradual waning of the transitory factors that contribute to the present relatively large surpluses.

Table 5.6
Public finances by sub-sectors

	ESA	2005	2006	2007	2008	2009	2010
Per cent of GDP							
General government budget balance	S13	3.9[1)]	3.1	2.8	2.5	1.8	1.2
Of which:							
Central government	S1311	4.3[1)]	3.0	2.8	2.5	1.8	1.2
Local governments	S1313	-0.4[1)]	0.0	0.0	0.0	0.0	0.0
Social funds	S1314	0.0[1)]	0.0	0.0	0.0	0.0	0.0

Note: It is technically assumed that net lending is balanced with respect to the local government sector as a whole for the period 2006-2010.
1) In November the general government budget surplus was revised to 4.6 per cent of GDP by Statistics Denmark. The central government surplus amounts to 4.9 per cent of GDP, while the local governments' deficit on national accounts basis was revised down from 0.4 per cent of GDP to 0.3 per cent of GDP. For social funds, net lending still amounts to 0.0 per cent of GDP in 2005.
Source: Statistics Denmark and own calculations.

The finances of local governments should in principle balance on a cash basis. The annual agreements on local government finances ensure full financing of the agreed expenditure growth through the local government block grant. This is done within the tax freeze, which applies for municipalities as a whole, and counties as a whole, respectively.[13]

[13] Following the local government structural reform and considerations related to economic stability and complying with the tax freeze, a ceiling on the tax percentage exceptionally applies in every municipality in 2007.

In individual years there may be local government surpluses or deficits – on a national accounts basis (net lending) – of a certain magnitude. Statistics Denmark's latest figures for public finances in 2005 (published on November 1st 2006) implied a deficit on national accounts basis (net lending) in local governments of 5.2 billion DKK or 0.3 per cent of GDP.

The *social funds* include the unemployment funds and the employees' wage guarantee fund (LG). Net lending in social funds is 0.0 per cent of GDP in all the years 2005-2010.

5.7 Public debt

The expected government surpluses contribute to an estimated decline in the general government consolidated gross debt (EMU-debt) from 35.9 per cent of GDP in 2005 to 24.6 per cent of GDP in 2007. The projection implies a further reduction of the EMU-debt to around 17¾ per cent of GDP in 2010, *cf. table 5.7*.

Table 5.7
General government gross debt (EMU-debt)

	2005	2006	2007	2008	2009	2010	2005-10
Per cent of GDP							
EMU-debt (end-year level)	35.9	28.7	24.6	21.5	19.3	17.8	
Change in debt ratio		-7.2	-4.1	-3.1	-2.2	-1.5	-18.1
Contributions to change in debt ratio:							
- Primary budget balance		-3.9	-3.6	-2.6	-1.7	-1.0	-12.7
- Interest payments (net)		0.8	0.8	0.1	-0.1	-0.2	1.5
- Nominal GDP growth		-1.5	-1.1	-0.7	0.0	-0.6	-3.8
- Financial conditions etc. 1)		-2.7	-0.2	0.1	-0.4	0.2	-3.1

1) Financial conditions etc. reflect e.g. ATP's and The Social Pension Fund's (Den Sociale Pensionsfond) stock of government bonds, which are deducted in the EMU-debt. To this the effect on the EMU-debt from revenues due to reallocation of government assets (privatization etc.), payment changes on the tax area, issue price losses, relending to state guaranteed entities etc. should be added.
Source: ADAM's databank and own calculations.

In total, EMU-debt is assumed to be reduced by more than 18 per cent of GDP from 2005 to 2010. The EMU-debt is thus brought down faster than in the path set out in the former government's original 2010-plan, *cf. En holdbar fremtid – Danmark 2010, January 2001* (not available in English) *and figure 5.2a*.

Figure 5.2a
EMU-debt compared to the assumed path set out in the original Plan 2010

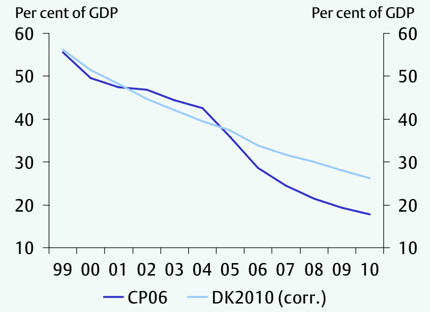
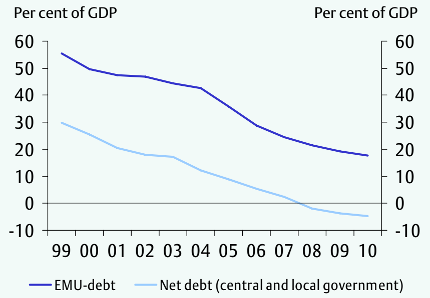


Figure 5.2b
EMU-debt and public net debt



Note: Since the completion of the original 2010-plan a number of technical factors – having no effect on public finances and the fiscal policy requirements – have affected the level of the EMU-debt. These factors include among other things ATP's holding of government bonds (which is deducted in the calculation of the EMU-debt), a historical upward revision of EMU-debt by Statistics Denmark and the size of re-lending to state guaranteed entities etc. In addition, the debt burden is affected by the higher level of GDP due to Statistics Denmark's revision of national accounts methods. In figure 5.2a the EMU-debt in the originally 2010-plan has been corrected for these factors, cf. DK2010 (corr.)

Source: Statistics Denmark and own calculations.

The faster decline in EMU-debt than originally planned does not imply scope for an easing of fiscal policy. The assessment that fiscal policy is broadly sustainable takes the faster debt reduction into account. The challenges due to ageing are also larger than earlier estimated, as the longevity is expected to increase more than in previous projections.

The projected surpluses on the primary balance of the central and local governments contribute approximately 12¾ per cent of GDP to the total reduction of the EMU-debt ratio from 2005 to 2010, while central and local governments' cumulated net interest expenditures amount to 1½ per cent of GDP during the same period, cf. table 5.7.

Next, the projected growth in nominal GDP implies a reduction in the EMU-debt ratio of approximately 3¾ percentage points.

Finally, financial transactions etc. – which includes bond emission losses, re-lending to state guaranteed entities, revenues from reallocations of state assets and ATP's holding of government bonds – reduces EMU-debt by around 3 per cent of GDP from 2005 to 2010.

Public sector financial assets are not included in the EMU-debt measure. Statistics Denmark's national accounts-based general government net debt includes all public financial assets and liabilities in state, counties, municipalities and social funds. Thus, for instance state assets related to re-lending to state-guaranteed entities and share holdings are included.[14]

In 2000, public net debt amounted to almost 25 per cent of GDP. According to the projection, public net debt will be close to zero in 2007/08, *cf. table 5.8*. In the following years a minor net asset position is built up. The background is that age-related expenditure will be particularly large for a number of years, as the large post war generations retire from the labour market.

Table 5.8
Different public debt concepts and trends, end-year

	2000	2005	2006	2007	2008	2009	2010
Per cent of GDP							
EMU-debt	49.6	35.9	28.6	24.6	21.5	19.3	17.8
Public net debt[1)]	24.5	8.8	5.3	2.2	-2.0	-3.7	-4.8
Net debt of central government and local governments[2)]	25.6	8.9	5.4	2.3	-1.9	-3.7	-4.7

1) Technically projected in light of the general government budget balance.
2) Technically projected in light of the budget balance of central government and local governments.
Source: Statistics Denmark and own calculations.

Net wealth in the social funds (i.e. the unemployment funds and the employees' wage guarantee fund) amounts to less than 0.1 per cent of GDP for the years 2005-2007. Thus, there is only a marginal difference between the national account figures for total public net debt and net debt of central government and local governments.

Contrary to public net debt, the EMU gross debt measure does not take into account financial assets in the state and local governments. Net debt is the most suitable debt measure when assessing the sustainability of public finances.[15] It can be noted, that even a very large extra reduction of debt (in excess of what is required to meet the sustainability requirement) of, say, 10 per cent of GDP (corresponding to approximately 170 bill. DKK at 2007-level) would only allow permanent additional expenditures/less revenues of approximately ¼ per cent of GDP (corresponding to approximately 4 bill. DKK at 2007-level).

[14] Public net debt is based on market values (as opposed to EMU-debt). Changes in net debt reflect the public finances (net lending) in national accounts, but are also affected by prices on financial assets and liabilities.
[15] The definitions concerning public net debt are consistent with those concerning net lending in the national accounts.

5.8 Institutional set-up

The key guidelines for the planning of public finances and fiscal policy are:

- *Fiscal policy*: Should contribute to economic stability – including by focusing on the fiscal impact on economic activity as measured by the fiscal effect – and a sustainable development in public finances in the longer term. The medium term objective is structural balance surpluses of ½-1½ per cent of GDP towards 2010.
- *Expenditure policy*: The scope for real public consumption growth is 1 per cent per year in 2007-2010.
- *Tax policy*: The tax freeze is the focal point of tax policy.

Fiscal policy objectives are based on the national account specification of public expenditures and revenues, whereas the concrete implementation of fiscal policy is based on the fiscal bill and local government budgets that are specified according to other accounting principles, classifications etc. than the national accounts. To be able to compare the actual budgeting to the fiscal policy objectives, Statistics Denmark elaborates a detailed specification of public budgets on national account basis.

The budgeting process in central government and the agreements on the economy in local governments

The annual process of budgeting in the central government begins in early spring, as the government determines the overall allocation of real public consumption growth to expenditure areas, including the scope of local government public consumption. On this basis, expenditure ceilings are reported to the individual ministries.

The individual ministries divide the reported expenditure ceilings between government administrations and institutions etc., who draw up a budget complying with the assigned expenditure levels. The budget proposal is subsequently composed from the individual contributions from the ministries.

A part of the central government cost-budget rests on fixed expenditure frames. This applies for central government current expenses and some grants. The fixed expenditure frames imply that the individual ministries are to a large extent allowed to make reallocations within the determined expenditure ceiling. The fixed expenditure frames do not apply for cyclical expenditures, statutory transfer expenditures, interest expenditures on central government debt and EU-contributions.

In June the central government and the local governments agree on the overall expenditure and tax levels and guidelines for political and economic priorities. The agreements are collective and apply for all municipalities and all regions as a whole, respectively. The agreement is not legally binding and may thus be hard to enforce. The system of the agreement is described briefly in *box 5.3*.

The government presents the budget proposal for the coming year in August.[16] After this, the budget proposal is subject to political reading in the Danish Parliament. Usually, a political agreement on the fiscal bill is reached between the government and one or more political parties in November, and the fiscal bill is thus normally adopted in December.
During the fiscal year the ministries are responsible for monitoring expenditure developments. The ministries are obliged to seek to finance any additional expenditure through savings elsewhere. The ministries are also obliged to inform The Ministry of Finance and the Danish Parliament about changes in the assumptions/premises for example in relation to cyclical expenditures. During the fiscal year the ministries prepare two or three reports on expenditure developments to the Ministry of Finance.

The Ministry of Finance therefore has the means to monitor developments in total central government expenditures. Expenditure developments are reported to the Danish Parliament in Budget Outlooks published in May, August and December. The public accounts are usually available in April, i.e. about 4 months after the end of the fiscal year.

Box 5.3

Agreements on the economy in local governments

The local government budgeting is indirectly influenced by the government, partly through legislation and rules determining the span of local government activities in different areas, partly via a yearly agreement on the economy in local governments.

With one exception, every year in June since 1989 the government and each of the two local government organisations Local government Denmark and the Association of County Councils have reached an agreement. The agreements include agreement on the size of the local government block grant and other grants to local governments plus the rules applying for local government lending. Local government organisations, on the other hand, promise to recommend to their members (i.e. individual municipalities and counties/regions) to comply with the agreed expenditure limits regarding current expenses and capital expenses.

The legislation does not contain general rules for sanctions, if the agreements are not adhered to. Every year the government decides whether or not the agreements have been kept and whether or not to react to overruns of the agreements and/or the budgets. The individual municipalities and counties/regions adopt their budgets for the following year in October, while the accounts for the previous year are usually available in May. In 2007 the Association of County Councils is replaced by Danish Regions.

Cost accounting reform and local government structural reform

In 2007 the central government system of appropriations is transformed from expenditure based budget and accounting principles to cost based principles. Appropriations to infrastructure, national property and defence still follow the expenditure based principles and the accounts are also specified according to expenditures. As a part of the cost accounting reform central government institutions have the possibility of financing investments up to a certain determined level through lending. The

[16] The fiscal year follows the calendar year.

new systems of appropriations are intended to imply a more cost effective use of resources, e.g. increased flexibility in the financing of economic profitable investments, incentives to an improved administration of assets and maintenance of central government installations and also incentives to a running adjustment of capital.

In the cost based system, expenditures can exceed appropriations in certain years, since only depreciation and interest expenditures connected to investments are booked. In the expenditure based system, the entire investment expenditure is booked.

The central government cost reform has no implications for the specification of public finances as calculated by Statistics Denmark, since this specification continues to be based on national account principles and depreciation rules. The transition to cost based budgets and accounts in principle implies that public accounts and national accounts are to a larger extent consistent.

On January 1st 2007 a local government structural reform is implemented, where 271 municipalities are merged into 98 new municipalities. The 14 counties will be merged into 5 new regions. As part of the local government reform a number of tasks have been moved from counties to municipalities or the central government. The new regions mainly manage the health sector and do not have tax collection rights. The health sector is primarily to be financed by a new health contribution, which is collected by the central government and transferred to the regions. Municipalities also contribute to the financing of health expenditures in the regions through a population-dependent basic contribution and an activity based contribution.

6. Long-term projections and fiscal sustainability

6.1 The Welfare Agreement counteracts long-term pressures on public finances

The Welfare Agreement provides markedly higher assurance against substantial financial imbalances developing over the longer run as life expectancy and the number of elderly citizens is set to increase.

The long-term projection underlying Convergence Programme 2006 incorporates already-decided economic policy initiatives, including the Welfare Agreement, which reaches far into the future. No political decisions have yet been made with respect to fiscal priorities after 2010. The projections after 2010 are based on technical calculation principles and also include the estimated effects of the Welfare Agreement.

Towards 2010, the scenario includes:

- Real growth in public consumption of 1 per cent per year in the period 2007-2010. Of this, the resources for globalisation-related initiatives etc. amount to around 0.5 percentage points per year from 2007 to 2010.
- The tax freeze.
- The estimated effects of already-decided labour market reforms, including the Welfare Agreement.

After 2010, the following calculation principles are applied:

- Nominal public consumption expenditures increase in line with wage growth and the estimated demographically induced demand for public services.[1] Public sector wages grow in line with private wages, and net purchases of goods and services from the private sector are set to be a constant share of public consumption expenditures. These principles imply that an unchanged number of employees "per user of public services" can be maintained in the projection.
- Social transfers (per recipient) are assumed to increase in line with private (and public) sector wages.
- Public investments, subsidies and net foreign transfers stay constant relative to GDP.
- Tax rates remain unchanged and excise duties etc. are indexed to prices.
- For each population group broken down by age, gender and country of origin, labour participation rates and the rate of take-up of various social income transfers are assumed to remain constant. Furthermore, the total unemployment rate is assumed constant.[2]

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[1] On top of this is, additional resources are set aside for globalisation purposes in 2011 and 2012, where the funding is increased by 1 bill. DKK (2007-prices) per year.

[2] In addition, the calculations incorporate a positive contribution to employment following an increase in the educational level and, for immigrants, also a contribution from increasing average duration of stay in Denmark.

- The estimated effects of the initiatives in the Welfare Agreement beyond 2010. This primarily concerns the pension reforms, including the agreed indexation of the age thresholds in the voluntary early retirement pension (VERP) and public old-age pension in line with longevity, and the initiatives regarding education.

The projections imply a deterioration in the structural primary balance of the central and local governments (i.e., the actual balance purged of cyclical and transitory factors and excluding net interest payments) by 2 per cent of GDP between 2005 and 2070, *cf. figure 6.1a*. Changes in the primary balance as a share of GDP are – aside from the effects of the Welfare Agreement – caused mainly by increases in expenditures on health and elderly care related to demographics, higher tax revenue from private sector pension payments, and lower revenues from North Sea activities as oil and gas reserves are depleted.

Without the initiatives in the Welfare Agreement the deterioration in the primary balance through 2070 would be several times larger, *cf. figure 6.1b*. This primarily reflects higher pension expenditures and lower employment in the absence of the Welfare Agreement.

Figure 6.1a

Change in revenues and expenditures and deterioration of structural primary balance

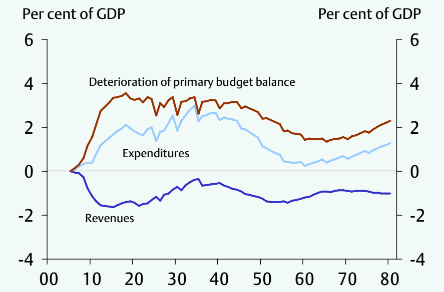
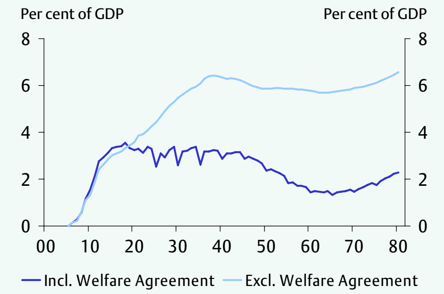


Figure 6.1b

Deterioration of structural primary balance with and without the Welfare Agreement



Source: Finance Ministry calculations.

The underlying deterioration in the structural primary balance without the reforms in the Welfare Agreement is considerably larger than Convergence Programme 2005[3], *cf. figure 6.2a*. The main reason is the updated population projection, where especially the increase in longevity is stronger than in the previous projection, *cf. figure 6.2b*. The population forecasts underlying the long-term projections in the Convergence Programme are provided by the independent research institute DREAM. With the upward adjustment of longevity, the assessment in DREAM's latest projection is more in line with other institutions including e.g. Statistics Denmark and the UN, and also with the population scenario applied in the EU Commission's evaluation of long-

[3] In a scenario excluding an increase in employment towards 2010 of 50,000 persons requiring further reforms.

term sustainability (*The Long-term Sustainability of Public Finances in the European Union, European Commission, 2006*).

In the earlier population projections from DREAM, the increase in longevity reflected average growth from around 1900 and until today. This method implied that the substantial increase in longevity since 1995 only had a marginal impact on future longevity trends. In the new projection, developments since 1995 are to a higher extent assumed to represent a structural change (in line with the change that has been seen earlier in, for instance, Sweden and Norway[4]).

Figure 6.2a

Deterioration of structural primary balance in the absence of the Welfare Agreement, new and old population projection

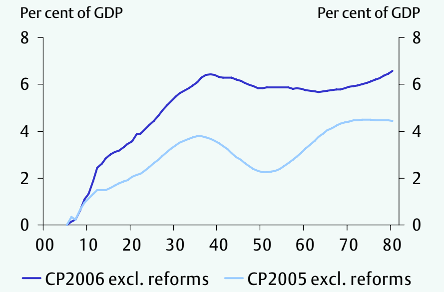
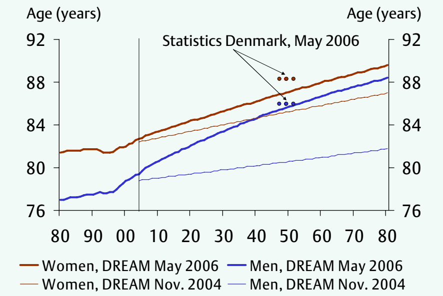


Figure 6.2b

Longevity for 60 year olds in the new and the old population projection



Source: Finance Ministry calculations.

The Welfare Agreement counteracts the deterioration of public finances that would otherwise result mainly from demographic changes. At the same time, the indexation mechanism ensures greater robustness of public finances with regard to changes in longevity, which is hard to predict. The bulk of the deterioration in public finances that may result from increasing longevity of 60 year olds is thus offset by the agreed indexation of the age thresholds for the VERP and public old-age pension.

The main reason why the indexation mechanism does not solve the entire challenge stemming from longer life expectancy is that ageing also implies higher public health and elderly care expenditures etc., even when corrected for better health in line with the increase in longevity.[5] Increasing longevity of 60 year olds thus puts upward pressure on public finances – even though the indexation of the age thresholds in the

[4] The growth in longevity set in earlier in Sweden and Norway than in Denmark. This has implied that longevity of 60 year olds in Denmark is at present 2½ years lower than in Sweden and Norway.

[5] Danish register based data show that individuals' use of health related public expenditures rise significantly in the years preceding the time of death. The connection between remaining years of life and the need for health and elderly care indicates that a large part of the health related expenditures depends on the remaining years of life/the probability of survival and not just on the age as such. The connection is confirmed by international studies and are included in the calculations of the expenditures for health and elderly care etc. in the Convergence Programme. Increased longevity thus partly reflects better health for the elderly.

VERP and public old-age pension guards against increasing pension expenditures and ensures higher employment.[6]

6.2 Fiscal sustainability and the required public surplus

A key objective is to secure fiscal sustainability given the technical assumptions with respect to e.g. the interest rate and the ongoing increase in life expectancy etc. This means that fiscal policies – including the level of taxation – can be sustained after 2010 without engendering an untenable rise in the net debt of central and local governments.

The sustainability calculation provides a test that fiscal policies are consistent over time, so that – given the underlying assumptions – no major adjustment needs arise after 2010. The computational principles after 2010 do not represent fiscal targets. No political decisions have been made with respect to fiscal priorities after 2010.

Table 6.1 illustrates that fiscal policies – under the assumptions made – roughly meet the requirement of fiscal sustainability.

Table 6.1
Fiscal sustainability in 2005

	Per cent of GDP
1. Central and local government primary budget balance	2.5
2. Interest burden on public net debt	-0.3
3. Increase in net expenditures etc. without the Welfare Agreement	-4.9
3.a) of which increasing expenditure on health and elderly care	-2.2
3.b) of which increasing net pension expenditures	-2.0
3.c) of which assumed lower revenues from North Sea activities	-0.9
3.d) of which tax on net pension payouts (deferred taxes)	1.3
3.e) of which other changes in income and expenditure	-1.1
4. Tax freeze[1)]	-0.4
5. Contribution from earlier implemented reforms	0.3
6. Contribution from growth in public consumption excluding the globalisation funding[2)]	0.4
7. Contribution from the globalisation funding	-0.5
8. Contribution from the Welfare Agreement reforms (excl. globalisation funding)	2.7
8.a) of which reforms regarding labour market integration and education	0.4
8.b) of which pension reforms	2.3
8. Sustainability indicator (1+2+3+4+5+6+7+8)	**-0.2**

1) Relative to a scenario with price indexation of excise duties etc.
2) Relative to a scenario in which public consumption per user as of 2006 is indexed to the overall wage increases.
Source: Own calculations.

Essentially, the breakdown in table 6.1 shows that the primary surplus of central and local governments in 2005 roughly corresponds to the necessary – or sustainable –

[6] Increasing probability of survival for people younger than 60 will also lead to a higher number of elderly but does not change the age thresholds according to the indexation rule. Furthermore, as mentioned in box 2.2 the average age of retirement rises less than the increase in the age thresholds.

level of savings required to finance the interest burden on public debt and future net obligations that result from population ageing and other factors (including the Welfare Agreement and in the absence of future policy changes).[7]

Altogether the updated economic forecast and fiscal policy basis implies that the sustainability indicator is -0.2 per cent of GDP.

In 2005, the structural primary surplus of the central and local governments is estimated at 2.5 per cent of GDP, *cf. table 5.1* (row 1). This surplus – which excludes e.g. cyclical effects on public finances – may be seen as the current surplus needed to finance net interest expenditures and rising future net obligations for the public sector.

The net debt of central and local governments carries an interest burden of about 0.3 per cent of GDP (row 2). The burden consists of the part of interest expenditures not eroded by nominal GDP growth. The interest burden has to be financed to prevent public debt from rising as a share of GDP.

The future net obligations of the public sector can be converted into a fixed annual amount (annuity) of around 5 per cent of GDP in 2005, when the effects of the Welfare Agreement are *not* taken into account (row 3). Compared to last year's Convergence Programme this figure has been raised considerably, primarily due to the new population projection and the fact that the calculations no longer include a required increase in employment of 50,000 persons by 2010, *cf. appendix 3*.

The future net obligations of the public sector without the Welfare Agreement reflect mainly increasing expenditures for health and elderly care and public pensions due to ageing, and an assumed decline in revenues from North Sea oil and gas activities (row 3a-c). However, the increasing tax revenue from net pension payouts (deferred taxes) pulls in the opposite direction as the taxable payouts from labour market and private pension schemes exceed the tax deductible contributions (row 3.d). The counterpart of these deferred taxes is lower public revenue – and thereby a lower public balance – today, since the pension contributions are tax deductible and the pension system is still being built up.[8]

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[7] The calculated sustainability indicator basically corresponds to the s2-indikator in the EU Commission's calculations of fiscal sustainability, but with the Ministry of Finance's calculation model and –principles. The calculation principles deviates from the ones used in *The Long-term Sustainability of Public Finances in the European Union, European Commission, 2006* on a number of points. This primarily concerns: a) the calculation of the structural balance in the base year 2005 is based upon the Ministry of Finance's method, which among other things corrects for temporarily high revenues from the tax on pension yield and on activities in the North Sea (corrections for special items, that combined amounts to 2.2 per cent of GDP in 2005, *cf. chapter 5*); b) includes the effects of the Welfare Agreement, which is decided policy; c) takes account of tax revenues from rising future net pension payouts; d) uses the population projection provided by DREAM (instead of the EU projection); and e) applies a different interest rate assumption in the long term. In addition, there are differences with regard to e.g. the time horizon of the calculations, the applied debt and primary budget balance definitions etc.

[8] To get a correct picture of fiscal sustainability in Denmark and other countries with similar rules for taxation of pension savings, it is important to take the value of deferred taxes into account.

In addition, the tax freeze through 2010 reduces tax revenues by 0.4 per cent of GDP relative to a scenario with price indexation of excise duties etc. (row 4).
The rise in participation and decline in structural unemployment, which is estimated to take place in the absence of new labour market initiatives, contributes some 0.3 per cent of GDP to fiscal sustainability (row 5). This contribution includes mainly positive structural effects stemming from the earlier reforms of the VERP (1999) and disability pension (2003) and the agreement in the area of integration "*A new chance for everyone*" (2005, only available in Danish). Earlier implemented reforms are in total estimated to raise effective employment by approximately 20,000 persons from 2005 and onwards.

Given the assumed trends in GDP, wages, prices etc., public consumption's share of GDP will be approximately unchanged from 2005 to 2010.

In the previous 2010-projections, real growth of public consumption of 0.5 per cent per year was assumed. Relative to a scenario in which nominal public consumption per user follows wages, a yearly real growth of 0.5 per cent strengthens public finance sustainability by around 0.4 per cent of GDP (row 6).

With the Welfare Agreement, resources were set aside to raise investments in research and education etc. The globalisation-related funding amounts to 2 bill DKK in 2007, increasing to 8 bill. DKK in 2010 and 10 bill DKK in 2012. The expenditures associated with the globalisation funding weakens (ceteris paribus) fiscal sustainability by around 0.5 per cent of GDP (row 7).

Overall, the other initiatives in the Welfare Agreement strengthen public finances corresponding to a permanent increase of around 2¾ per cent of GDP from today and onwards (row 8). The largest contribution stems from the agreed rise in the age thresholds in the VERP and public old-age pension and the indexation of the age thresholds in the retirement system in line with longevity from 2025 and onwards. These initiatives are estimated to increase the sustainability indicator by around 2¼ per cent of GDP (row 8.a). In addition, the initiatives regarding labour market reforms, integration of immigrants and education are estimated to give a contribution of almost ½ per cent of GDP (row 8.a) – excluding the expenditures associated with raising the educational level, which are part of the globalisation funding.

Overall, the medium-term projection broadly meets the requirement of fiscal sustainability (row 9). The primary budget balance for central and local governments corrected for future net obligations – the so-called sustainability indicator – hence amounts to -0.2 per cent of GDP in 2005. The sustainability indicator denotes the permanent hypothetical fiscal adjustment which, under the assumptions made, would be necessary for fiscal policy to be sustained without subsequent changes in tax rates, expenditure standards etc.

Appendix 1. The Welfare Agreement: Overview of initiatives

A1.1 Initiatives in *Future Prosperity, Welfare and Investments in the Future*

The agreement was entered into in June 2006 between the government (the Liberal Party and the Conservatives) and the Social Democrats, the Danish People's Party and the Social-Liberal Party.

For further reference, see *Opfølgning på velfærdsaftalen ("Implementing the Welfare Agreement"* – available in Danish only*)* and *Aftale om udmøntning af globaliseringspuljen, ("Agreement on implementing globalisation-related initiatives"* – in Danish only*), November 2006.*

Later retirement

- Gradually higher age thresholds in the voluntary early retirement scheme and the official public pension age.
  - a) The early retirement age is gradually lifted from 60 to 62 years in ½ year increments from 2019 to 2022, while the public pension age is gradually lifted from 65 to 67 years between 2024 and 2027.
  - b) The maximum voluntary early retirement period thus remains 5 years.
  - c) As of 2025, the age limits in the retirement system are indexed to the mean life expectancy of 60 year olds, so that the combined period with early retirement and public pension will be around 19½ years in future. If life expectancy does not change, the early retirement age stays at 62 years and the pension age at 67.
  - d) The decision to adjust the age limits, cf. c), is made every five years on the basis of the observed life expectancy for 60-year-olds in the two preceding years. The age limits are changed in ½ or 1 year increments. The changes are implemented at a 10 years notice for the voluntary early retirement scheme and a 15 years notice for the public pension age.
- More flexible early retirement scheme.
  - a) Contributions towards the early retirement scheme will have to be paid for 30 years, as against 25 years today, and payments have to be commenced at the latest at the age of 30.
  - b) Persons with many active years in the labour market, i.e. who have been working since a relatively young age, are given a possibility to opt-in to the scheme until 15 years before the early retirement age, but will receive correspondingly lower benefits when taking early retirement (and lower premiums when not exercising the option for early retirement).
  - c) The possibility to supplement early retirement benefits with labour income is expanded for persons with relatively low hourly wages.
- Adjustments related to higher early retirement and public pension age.
  - a) A number of age limits in social, labour market and tax legislation are raised in line with the early retirement and public pension age limits.

b) Retirement ages for certain civil servants, ministers etc. are adjusted in line with other changes.
c) The special scheme for part-time retirement before the public pension age ("delpension"), which is used by a very limited number of persons, is abolished for persons who are below 48 years at the end of 2006.

- Strengthened job opportunities for older workers.
  a) The duration of the unemployment benefit period and activation rules for elderly workers are harmonized with those for other age groups.
  b) Special wage subsidy scheme for unemployed workers older than 55 years for up to 6 months. The scheme runs for 5 years.
  c) Those over 55 years of age, who exhaust their unemployment benefit right, are given a possibility of being hired in a "job for seniors" scheme at normal wages (as agreed in collective bargaining arrangements). This may increase public service standards in certain areas, where there is a need. The take-up is estimated at 1,500 persons. If this limit is exceeded, the parties will discuss the arrangement again.
  d) Strengthened "senior policies" in the public sector.
- Prevention of attrition and workplace health and safety standards
  a) A fund to prevent physical and mental attrition through specific projects at public and private workplaces is established with an initial injection of 3 bill. DKK. Disbursements may reach up to 200 mill. DKK in 2007 and up to 350 mill. DKK per year thereafter.
  b) Initiatives to strengthen health and safety standards in sectors with a particularly high risk of attrition.
- Abolition of age-discriminating barriers in the labour market.
  a) The age limit in the law on differential treatment is raised from 65 to 70 years.
  b) Mandatory retirement ages for certain civil servants should be abolished. The issue subject to collective bargaining.

Strengthened efforts to reduce unemployment

- New model for job matching with more intensive follow-up on non-successful job matching.
- A strengthened role for the unemployment insurance agencies in job matching procedures.
- Systematic assessments of availability-for-work of the unemployed every 3rd month with a view to strengthen availability for work.
- Every week, the unemployed must search for jobs at jobnet.dk. Increased follow-up on non-filled vacancies.
- Simplification of procedures and sanctions when the unemployed do not show up for job search talks.
- Increased efforts to combat non-official employment, including through more workplace controls.

- The right and duty of activation is brought forward to after 9 months.
- Intensive activation after 2½ years for unemployment benefit recipients based on an individual assessment of job opportunities.
- Extension of the option for offering education courses of longer duration.
- More flexible financial control procedures for ALMP. E.g., abolishing requirements on the share of activation measures in the form of jobs with wage subsidies.
- Strengthened incentives for local governments to set up jobs with wage subsidies.
- Certain groups, where the contact procedures may be less relevant, may be relieved from contact procedures.

Higher employment among immigrants and descendants

- Targeted wage subsidies for hiring by private employers of welfare recipients that have received public benefits 90 per cent of the time within the last 3 years.
- Renewed agreement among employers, trade unions, the central and local government for strengthened integration (including through use of the possibility for hiring at initially below standard wages).
- Partnerships with individual employers to promote hiring, training etc. of immigrants.
- More designated job consultants with a special view to help immigrants into employment in municipalities with many unemployed immigrants.
- Everyone should have equal rights of activation.
- Performance standards with respect to meeting the activation rights of the unemployed.
- Possibility of active offers for persons outside the labour force who do not receive social transfers.

Earlier study completion

- Young persons, who start tertiary education no later than 2 years after their qualifying exam (typically high school), will have their grade average multiplied by a factor of 1.08 and will thus have easier access to studies where the number of study places are limited by *numerus clausus*.
- University studies should be organized so that they support the possibilities for earlier graduation than today, including through:
  a) A more transparent structure of semesters,
  b) Possibility of quick re-examination,
  c) Deadlines for completing the final thesis,
- In addition:
  a) Strengthened study guidance,
  b) New financing structures for universities with a view to bring actual study times better in line with scheduled study times,

    c) New financing structures for university graduate courses so that part of the public financing is paid out when students complete the exams.

Secondary education for all

- Strengthening the responsibility of local governments for all young people starting and completing a secondary education.
    a) The local governments must follow up in relation to young people who have not started or have stopped a secondary education.
    b) An early effort in primary school and establishment of mentor arrangements for particularly exposed young people.
    c) Targeting the activity of the "production schools" at more qualifying education.
    d) The local governments are obliged to offer "basic vocational training to young people who are not able to manage to complete a standard vocational training. Strengthening the effort to get young unemployed persons in the age of 25-29 years into employment or education.
- Renewal of the secondary vocational educations, by
    a) introduction of contact teacher and mentor arrangements,
    b) strengthening the companies' economic initiative to provide training places, if developments in the number of training places are not sufficient,
    c) increasing the number of training places in the public sector,
    d) supplying means to raise the quality at the vocational training, including supplementary education of teachers.

Strengthening life-long learning

- Enhanced courses in reading, writing and calculus for adults.
- Setting aside 1 bill. DKK for job-oriented adult education and retraining.
- More adult apprentices and increased access to this arrangement.
- Simplified and permanent job rotation arrangement.
- Better supervision and counselling for employers and employees. Funds will be set aside with a view to implementation in 2007.
- Increased formal recognition of competences obtained outside the public educational system.
- Improved special programs for students from immigrant families.
- Broader range of advanced adult education.

Investments in the future (key objectives)

- Public research appropriations are increased to 1 per cent of GDP by 2010 and thereafter.
- At least 85 percent of all young people should complete a secondary education in 2010, and at least 95 percent in 2015.

- At least 50 percent of all young people should complete a tertiary education by 2015, while the average age when graduating should be reduced.
- Strengthened effort regarding innovation and business entrepreneurship.
- Strengthening life-long learning.

A1.2 Initiatives in the *Agreement on future immigration*

The agreement was reached in June 2006 by the government (the Liberal Party and the Conservatives) and the Danish People's Party.

For further reference, see *Opfølgning på aftale om fremtidig indvandring, november 2006 ("Follow-up on Agreement on future immigration"* – available in Danish only).

Integration exam

- An integration exam is introduced for immigrants and refugees, with the purpose of strengthening work incentives. The integration exam implies further requirements for permanent residence permit and social assistance in addition to the rules already in effect. These include:
  a) Requirement for ordinary full-time employment for 2 years and 6 months in Denmark in order to attain a permanent residence permit and the right to social assistance instead of starting allowance.
  b) Requirement for a passed exam in Danish 2, or a passed exam in Danish 1 along with a passed exam in English, corresponding to the level of the Danish 2, to receive a permanent residence permit.

Immigration exam in Danish and Danish society

- Inspired by the Dutch model, an immigration exam in Danish and Danish society is introduced for foreigners that apply for family reunification in Denmark, and for religious preachers that apply for a residence permit in Denmark:
  a) The immigration exam will be designed so that applicants will be able to pass by way of ordinary preparation in the country of origin.
  b) The immigration exam must be passed prior to the application for a residence permit. The exam can be administered at a Danish representation in the country of origin or in Denmark if the applicant has a visa or if the applicant is in Denmark without needing a visa.
  c) The immigration exam does not apply for EU/EEC-citizens, family-members that have a right by international conventions to family reunification in Denmark, and family-members of foreigners that enter Denmark with the purpose of employment.

Expansion of job card scheme

- A residence permit is awarded to persons with concrete job offers – also in sectors with no labour shortage – provided that the annual salary is above 450,000 DKK and that the job offer has been attained on ordinary terms.
- The present job card scheme is expanded so that more job types are included. The list of job types will be updated continuously in line with developments in the labour market, including the degree of bottlenecks in different sectors.

Green card scheme

- A green card scheme is established, awarding a job-search visa to particularly well-qualified foreigners for up to 6 months with the purpose of seeking employment in Denmark.
- The Green card scheme is designed as a point system, in which points are awarded on the basis of education, language skills, work experience, and age.
- Foreign students that complete advanced studies in Denmark have the opportunity to stay in Denmark for a period of 6 months with the purpose of seeking employment.

A1.3 Employment impact of the initiatives in the Welfare Agreement

The estimated effects of the key initiatives in the Welfare Agreement on employment toward 2040 are presented in *table A1.1*.

The initiatives concerning the labour market and integration are estimated to increase employment by approximately 14,000 persons toward 2040. The greatest single contribution is estimated to come from intensive activation after 2½ years of unemployment, activation after 9 months, and changes to ensure availability-for-work.

The initiatives for earlier study completion – including e.g. deadlines for master's theses and the grade-average multiplication model for admission to higher education – are estimated to increase employment by approximately 4,000 persons in 2040.

Achieving the goals for education tends to dampen employment in the short term as more young people study rather than work. Conversely, a positive contribution of approximately 7,000 persons is estimated for 2040 as the level of education is heightened and some gain a stronger foothold on the labour market. The effect is estimated to increase to approximately 12,000 persons by 2060. The estimates are associated with uncertainty.

The largest contribution to employment stems from later retirement. The estimated effect on employment is approximately 165,000 persons toward 2040. Toward 2015, the harmonization of rules for unemployment benefits and activation etc. for unemployed above 55 years of age also contribute to higher employment. Employment is increased by approximately 50,000 persons from 2019 as a result of the gradual lifting of the age thresholds for early retirement and public pension. Toward 2040, employment is increased by approximately 113,000 persons due to the indexation of the age thresholds for early retirement and public pension to longevity for 60-year-olds.

Table A1.1
Effect on employment, 1,000 persons

	2010	2015	2025	2040
Labour market and integration	13	13	14	14
- Full time activation after 2½ years of employment	*4*	*4*	*4*	*4*
- Advancement of activation to after 9 months	*3*	*3*	*3*	*3*
- increased availability-for-work	*2*	*2*	*2*	*2*
- targeted wage subsidies, youth efforts etc.	*4*	*4*	*5*	*5*
Earlier study completion	0	3	4	4
Fulfilment of education objectives	-2	-9	0	6
- more people in education	*-4*	*-16*	*-15*	*-15*
- labour participation effect	*2*	*7*	*15*	*21*
Later retirement from labour market etc.	2	4	89	167
- harmonization of rules for unemployment benefits, activation etc.	*2*	*4*	*4*	*4*
- Age thresholds for early retirement and public pension increased by 2 years	*0*	*0*	*52*	*49*
- Increased age thresholds for early retirement and public pensions according to life expectancy from 2025	*0*	*0*	*33*	*114*
Total	**13**	**12**	**106**	**190**

Appendix 2: Sensitivity analysis

A2.1 Alternative population projection

The new population projection (DREAM 2006) implies a considerably stronger increase in life expectancy than the previous projection from 2004. To illustrate the uncertainty with regard to future trends in life expectancy, DREAM provides an alternative scenario (DREAM 2006 alternative scenario) with a slower growth in life expectancy. In the alternative scenario, life expectancy for 60-year-olds (measured as a simple average of men and women) rises about 2¼ years less than in the main scenario towards 2080, *cf. figure A2.1a*.

However, life expectancy of 60-year-olds of 1¾ years towards 2080 is still higher than in the previous projection.

Figur e A2.1a

Life expectancy for 60 year olds – new and alternative scenario

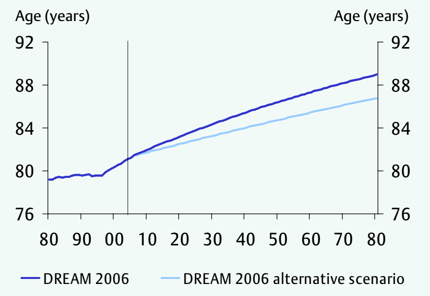
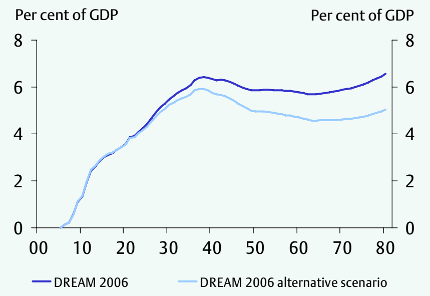


Figure A2.1b

Deterioration in structural primary balance without reforms – new and alternative scenario



Note: In figure A2.1a the life expectancy of 60 year olds equals 60 years plus the remaining life expectancy for 60 year olds. The life expectancy is calculated as a simple average of men and women.
Source: Own calculations and DREAM.

The alternative population projection implies that the long-term challenge in the absence of the initiatives in the *Welfare Agreement* is smaller than in the main scenario, *cf. figure A2.1b*. This primarily reflects lower public expenditures for pensions, health and elderly care. In the main scenario, the long-term challenge *in the absence of the Welfare Agreement* is found to be around 2.3 per cent of GDP. In the alternative population scenario, this challenge is reduced to 1.7 per cent of GDP, *cf. table A2.1*.

Table A2.1
Sustainability with and without the *Welfare Agreement* in the two population projections

	Without *Welfare Agreement*	Effect of *Welfare Agreement*	With *Welfare Agreement*
DREAM 2006 (main scenario)	-2.3	2.2	-0.2
DREAM 2006 (alternative scenario)	-1.7	1.8	0.0
Effect of alternative scenario	**0.6**	**-0.4**	**0.2**

Note: As a consequence of rounding off, the sustainability indicator in the scenario with the Welfare Agreement can deviate from the sum of the scenario without the Agreement and the effect of the Agreement.

With a slower increase in life expectancy, the age thresholds in the early retirement and public pension schemes are regulated at a slower rate. Thus, the contribution to employment and public finances from the indexation of age limits is smaller (other things equal). The impact on fiscal sustainability of the *Welfare Agreement* (including the globalisation-related spending) is thus reduced from 2.2 per cent of GDP in the main scenario to 1.8 per cent of GDP in the alternative scenario.

In sum, the sustainability indicator, including the *Welfare Agreement*, is estimated at around 0.2 per cent of GDP higher in the alternative scenario than in the main scenario. The difference primarily reflects lower expenditures on health care and elderly care relative to GDP, while the expenditures for public pensions are approximately unchanged. This is due to the indexation of the age limits for early retirement and public pension, which ensures robustness, because the number of old age pensioners is largely unchanged under different assumptions about life expectancy.

In the alternative scenario, the sustainability indicator, including the effect of the *Welfare Agreement*, can thus be estimated at 0.0 per cent of GDP. This supports the overall assessment that fiscal policy is approximately sustainable.

A2.2 Sensitivity to changes in foreign growth, interest rate etc.

External assumptions

The CP06 projection is based on the latest published *Economic Survey* from August 2006. The assumptions regarding the international economy are partly based on the spring forecast of the Commission, adjusted for new information up until the beginning of August. The external assumptions (see appendix table B.8) are quite close to those of the Commission's autumn projections and of the common external assumptions, which the member states (especially Euro area and ERM II members) are invited to adopt in their Stability and Convergence Programmes.

The autumn forecasts of the European Commission and the common external assumptions deviate from the external assumptions in the CP in the following areas, *see also table A2.2a*:

- The export market growth for industrial goods is respectively 1.3 and 0.3 percentage points higher in 2006 and 2007. This is partly due to higher expected growth in Germany and Sweden.
- The Brent oil price is assumed to be 65.6 and 66.3 USD per barrel in 2006 and 2007, respectively. In the August *Economic Survey*, the oil price was assumed to be, respectively, 70 and 63 USD per barrel.
- Short-term interest rates are 0.1 and 0.2 percentage points higher in 2006 and 2007, respectively, than in the August survey.

Table A2.2a
External assumptions

	2006		2007	
	Aug.	Based on EU fall projection	Aug.	Based on EU fall projection
Export market growth[1)]	6.9	8.2	5.6	5.9
Brent Oil price, USD per barrel	70.0	65.6	63.0	66.3
Short-term interest rates		+0.1		+0.2

1) Export market growth for manufactures, real annual growth rate in percent.

Furthermore, the local government budgets for 2007 and the agreement on the budget bill for 2007 imply that government consumption is higher than assumed in the August *Economic Survey*, while public investment is lower, *cf. Ch. 5*.

Model simulations, which take into account the common external assumptions and new data on public consumption and investment in 2007, imply that GDP growth increases from 2.7 to 2.8 percent in 2006 and is unchanged at 2.0 per cent in 2007, *cf. table A2.2b*.

The estimated higher growth in 2006 is primarily due to higher export market growth and lower oil prices. The positive effect on GDP growth in 2007 of higher export market growth and larger public expenditure is counteracted by the negative effect from higher short-term interest rates and oil prices, and leaves GDP growth unchanged.

The calculations only show the isolated impact of the common external assumptions etc. compared to the assumptions in the August projection. It should be noted that the quarterly national accounts and other new information point to somewhat higher growth in 2006 than anticipated in August.

Somewhat higher government spending in 2007 than expected in August gives rise to real growth in public expenditures of 1¼ per cent next year. The government budget balance in 2006 is reduced marginally because of the lower oil prices, while the effects of higher export market growth and higher oil prices improve the budget balance in 2007.

The balance of payments is strengthened due to higher export market growth.

In sum, the differences in the external assumptions, public consumption and investment give rise to only marginal changes in GDP growth and public finances.

Table A 2.2b
Effects of new assumptions

	2006		2007	
	Aug. 06	Aug. 06 + EU assumptions	Aug. 06	Aug. 06 + EU assumptions
GDP growth, per cent	2,7	2,8	2,0	2,0
Per cent of GDP				
Government budget balance	3,1	3,0	2,8	3,0
Balance of payments	1,6	1,7	1,7	1,8

Source: Own calculations on the ADAM-model.

Interest sensitivity of public finances

The short-term *interest rate sensitivity* of public finances is illustrated in *table A2.2c*. 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 approximately 0.5 per cent of GDP in 2007, 1.3 per cent of BNP in 2008 and 1.1 per cent of GDP in 2009. Thus, the interest rate sensitivity of the public balance is rather pronounced.

The worsening of the public balance in 2007 and 2008 is caused, in particular, by the increase in interest rates from 2006 to 2007, which reduces the revenue from the tax on pension fund returns.[1] Rising interest rates leads to capital losses on the bond holdings of tax-liable pension funds, which are taxed on an accrual basis, including non-realized capital gains. In the short run, this reduces the tax base for the pension yield tax considerably. In the August *Economic Survey* revenue from the pension yield tax amounted to 0.4 per cent of GDP in 2007. If the interest rate level increases by 1 percentage point, this revenue can be expected to drop to zero. In fact, the tax base would be negative in 2007, but the pension funds can carry forward their losses (and

[1] The lower revenue from the pension yield tax in the short-term largely reflects a deference of tax revenue. In the longer term, higher yields will increase government revenue from the tax on pension fund returns. In net present value terms, higher interest rates actually strengthen revenue from pension yield taxation.

negative tax liability) to the subsequent years.[2] In 2008, revenue from the pension yield tax is estimated to be reduced by 0.6 per cent of GDP (compared to the baseline scenario). This is mainly due to the carry-forward of negative tax liabilities mentioned above.

Furthermore, the increase in interest rates dampens domestic and foreign activity. This weakens the public balance through the automatic stabilizers.

Table A2.2

Estimated impact of a permanent 1 percentage point interest rate increase at home and abroad

	2007	2008	2009
Real GDP level, per cent	-0.3	-1.1	-1.4
Public balance[1)], per cent of GDP	-0.5	-1.3	-1.1
Primary balance[2)], per cent of GDP	-0.4	-1.1	-0.8
Public EMU-debt, per cent of GDP	0.7	2.3	3.5
Public net debt, per cent of GDP	0.6	1.9	3.0

1) Based on national account principles, i.e. excl. ATP.
2) Defined as public balance excluding net interest payments.
Source: Own calculations on the basis of ADAM and OECD standard multipliers.

The direct impact of higher interest rates on public net interest payments is relatively modest in the years 2007-2009. In particular, this is because public debt is moderate and because the public sector also has interest receipts.

It should be noted that a higher interest rate level in the longer term tends to strengthen public finances, especially due to higher return on private pension savings. Thus, the value of deferred tax revenues related to future pension benefits increase. The long-term sensitivity of public finances with respect to changes in life expectancy, interest rates etc. was illustrated in *Convergence Programme 2004* (appendix 1.2).

[2] The estimated normal pension yield tax revenue presently amounts to about 1 per cent of GDP. The primary reason for normal revenue in 2007 is that an increase in interest rates from 2006 to 2007 is already assumed in *Economic Survey, August 2006*.

Appendix 3: Comparison with Convergence Programme 2005

A3.1 The Welfare Agreement and the Convergence Programme for 2005

The 2010-projection underlying the *Convergence Programme 2005, November 2005* (CP05) assumed a permanent increase in employment sufficient to improve public finances by almost 1 per cent of GDP. This requirement corresponded to a structural increase in employment of 50,000 persons by 2010.[1]

By comparison, the employment impact of the Welfare Agreement is about 13,000 between now and 2010. The smaller increase in (structural) employment on the road to 2010 has its counterpart in a significantly larger increase in employment in the longer term by virtue of the Welfare Agreement.

Thus, the Welfare Agreement improves public finances substantially over the longer term compared to CP05. This reflects, in particular, the reform of the retirement system, which makes public finances more robust with respect to rising life expectancy (which cannot be predicted with much precision over longer time horizons). The improvement in public finances is sufficient to meet the objectives concerning fiscal sustainability, which in CP05 required a rather ambitious increase in employment by 2010, whilst spending limits for public consumption are raised from ½ to now 1 per cent per year on average during 2007-2010.

Thus, compared to CP05 the (primary) budget surpluses are lower in 2010, but on the other hand somewhat larger in the longer term, as the retirement reform gradually takes effect.

In CP05, the assumed employment increase through 2010 ensured that debt reduction was relatively strong for a number of years after 2010. Thus, public savings were sufficient to ensure financing of the prospective increase in pension expenditures as individuals would receive pension for more years as life expectancy went up. In this respect, the 2010-plan could be characterized as a "pre-funding" or "savings" strategy, while the underlying causes of the future imbalances were not directly addressed.

In contrast, by virtue of the Welfare Agreement – which can be seen to meet the employment requirements contained in earlier Convergence Programmes – the number of years in which the individual may receive (early retirement and) pension benefits does not increase as life expectancy goes up in the longer term. This means that the rules are adjusted so that the underlying cause of the long-term imbalances does not arise. In this vein, there is fiscal scope for investments in namely education

[1] In the government coalition agreement *Nye Mål, februar 2005 ("New Goals"* – available in Danish only), the objective is specified as "a permanent increase in employment of such a magnitude that public finances are improved by about 1 per cent of GDP."

and research in the shorter term, while the risk of future imbalances is significantly reduced.

A3.2 Changes to GDP-growth and public finances since CP05

According to still preliminary national accounts data, real GDP growth was 3.6 per cent in 2005 – considerably higher than expected in CP05, *cf. table A3.1*. The somewhat higher growth has been broadly based. Especially exports and investments – but also private and public consumption – have grown faster than expected in CP05.

Based on preliminary data, the general government budget surplus – using the EDP-definition including ATP – amounts to 4.9 per cent o GDP in 2005, while a surplus of 2.7 per cent of GDP was estimated in CP05. The stronger cyclical position is part of the explanation, but higher revenues from the pension yield tax (0.8 per cent of GDP larger than estimated in CP05) also had an effect.

Table A3.1
Comparison with CP05

	ESA	2005	2006	2007	2008	2009	2010
GDP growth (per cent)	B1*g						
CP05		2.4	2.4	1.1	1.6	2.0	2.1
CP06		3.6	2.7	2.0	0.7	0.7	0.6
Change		1.2	0.3	0.9	-0.9	-1.3	-1.5
Public balance (per cent of GDP)[1)]	EDP B.9						
CP05		3.6	3.1	3.2	2.7	2.8	2.9
CP06		4.9	4.0	3.8	3.5	2.8	2.2
Change		1.3	0.9	0.6	0.8	0.0	-0.7
Public debt (per cent of GDP)							
CP05		35.6	31.7	28.9	26.5	24.0	21.5
CP06		35.9	28.6	24.6	21.5	19.3	17.8
Change		0.3	-3.1	-4.3	-5.0	-4.7	-3.7

1) Including ATP.
Source: Own calculations.

In 2006, GDP growth is also expected to be higher than in CP05. Higher activity contributes to an increase in the estimated 2006 budget surplus of almost 1 per cent of GDP compared to CP05. Revenues from North Sea oil and gas activities are also seen higher by about ½ per cent of GDP.

CP05 assumed a relatively subdued GDP growth in 2007 (the first medium-term projection year) since the estimated output gap of nearly 1 per cent of GDP in 2006 (the last forecast year) was technically assumed to be closed by 2008.

In CP06 a somewhat higher growth is expected in 2007 on the basis of the August forecast, and stronger activity contributes to a higher expected public surplus in 2007 than in CP05. Higher oil prices also contribute to larger revenues in 2007 corresponding to about ¾ per cent of GDP. On the other hand, lower estimated revenues from the pension yield tax – by almost ½ per of GDP – due to the assumed increase in interest rates pull down the surplus in 2007 compared to CP05.

For the years 2008-2010, CP06 assumes modest GDP growth rates of close to 1 per cent per year, reflecting a technical assumption that the estimated positive output gap of almost 1¾ per cent of GDP in 2007 is gradually closed by 2010. The positive output gap in 2007 reflects, in particular, a forecast unemployment rate at just above 4 per cent of the labour force (national definition), whereas structural unemployment is estimated to be around 5¼ per cent in 2007, *cf. chapter 4*.

The scenario in CP06 implies a somewhat larger reduction in EMU debt up to 2010 than CP05 (measured in per cent of GDP and deducting ATP's holdings of central government bonds). Thus, in CP05 the debt ratio amounted to some 21½ per cent in 2010 while the EMU debt in CP06 is assumed to be reduced to about 17¾ per cent of GDP by the end of 2010.

EMU debt is more or less the same in 2005 as in CP05. While the higher fiscal surplus contributed to a lower debt ratio, ATP's holdings of government bonds were lower than expected in CP05, which pulled up EMU debt.

Reflecting higher budget surpluses in 2006 and 2007, significantly faster debt reduction is now anticipated by end-2007. Thus, CP06 projects the debt ratio at 24½ per cent by the end of 2007, against 29 per cent of GDP in CP05.

For the years 2008-2010, CP06 assumes a less pronounced debt reduction than CP05. Compared to CP05, the present scenario including the Welfare Agreement entails lower public surpluses in the medium term, while public finances are significantly stronger in the longer term.

A3.3 Changes to the medium-term assumptions up to 2010

The key changes in the CP06-projection (compared to CP05) include an updated short-term forecast, new population projections and the Welfare Agreement, *cf. box A3.1*.

Box A3.1

Revised assumptions compared to CP05

- New national accounts data and short-term forecasts up to 2007, *cf. Economic Survey, August 2006*.
- Revised population projection, *cf. DREAM, June 2006.*
- The initiatives in the Welfare Agreement.
- Revised labour force data, *cf. Statistics Denmark*.
- Revised data for the age-profile of individual public consumption and transfers
- Revised estimates for revenues from oil and gas activities in the North Sea
- The long-term fiscal policy requirements have been recalculated.

Employment is assumed to increase by 8,000 persons from 2005 to 2010 compared to 44,000 persons in CP05[2]*, see table A3.2*. The difference of 36,000 is essentially explained by two factors. On the one hand, CP05 assumed an increase in employment of 50,000 owing to not-yet-adopted initiatives (whereas CP06 only includes already-decided measures). On the other hand, the initiatives in the Welfare Agreement are estimated to increase employment by 13,000 persons through 2010.

Table A3.2

Contributions to the increase in employment

	CP05	CP06
Change 2005-2010, 1,000 persons		
1. Demographic factors	-20	-18
2. Earlier implemented initiatives	14	17
3. Structural employment incl. earlier initiatives (1+2)	**-6**	**-1**
4. Cyclical contribution	0	-4
5. Actual employment incl. earlier initiatives (3+4)	**-6**	**-5**
6. Required new structural initiatives	50	-
7. Initiatives due to Welfare Agreement	-	13
8. Baseline scenario (5+6+7)	**44**	**8**

Note: The base year is changed from 2004 to 2005. The data for CP05 can therefore not be found in Convergence Programme 2005.
Source: Own calculations.

The sustainability indicator

The updated forecast implies an improvement in the underlying structural balance of about 0.3 per cent of GDP in 2005. In addition, public net debt has been revised downwards considerably in 2005, which seen in isolation has improved the sustainability of public finances by about 0.1 per cent of GDP, *see table A3.3*.

[2] The base year is changed from 2004 to 2005. Therefore, the CP05 figures cited here cannot be found directly in Convergence Programme 2005, November 2005.

Table A3.3
Revisions to the fiscal sustainability indicator

	2005
Per cent of GDP	
1. Convergence Programme 2005	**0.0**[1)]
2. Total revision of the sustainability indicator (2.1+2.2-2.3)	-0.2
2.1 Revision of the primary budget balance in 2005	0.3
2.2 Revision of the interest burden on net debt in 2005	0.1
2.3 Higher future net obligations	0.6
Of which contribution from revisions of:	
- Population projection	1.6
- No requirement of 50,000 persons into employment towards 2010	0.9
- Welfare Agreement	-2.2
- Rest	0.3
3. Convergence Programme 2006 (1+2)	**-0.2**

1) The sustainability indicator in CP05 was calculated on the basis of 2004 in stead of 2005. Assuming a sustainable path for public finances, the choice of base year however does not affect the level of the sustainability indicator.
Source: ADAM databank and own calculations.

The estimated future increase in public net obligations has been revised up by around ½ per cent of GDP since CP05. This is the result of large opposite changes.

First of all, the updated population projection including a larger increase in longevity would *in the absence of the Welfare Agreement* increase future obligations by around 1.6 per cent of GDP (all else equal), cf. also chapter 6. The impact on fiscal sustainability is sensitive to the assumed interest rate-growth differential, for which the assumption is unchanged at about 2½ per cent in the long run.

Conversely, the initiatives in the Welfare Agreement (including the funding for globalization initiatives) reduce future obligations by 2.2 per cent of GDP– especially due to the pension reforms. By virtue of the Welfare Agreement, the projection no longer includes additional (non-implemented) requirements for 50,000 more employed by 2010. Without this assumed increase, future obligations go up by 0.8-0.9 per cent of GDP.

The other revisions imply a further reduction in the sustainability indicator of around 0.3 per cent of GDP. In part, this is because some of the improvement in the structural primary balance in 2005 reflect factors that do not necessarily result in equally higher structural revenues in the long term such as, for instance, strong revenues from motor vehicle registration taxes and a higher trend revenue from North Sea activities on the basis of the calculation principle applied (moving average of actual and projected revenues, *cf. chapter 5*).

Overall, the revisions result in a sustainability indicator of -0.2 per cent of GDP, which is slightly lower than in CP05, *see table A3.3*.

Annex: Tables

Table 1a
Macroeconomic prospects

	ESA	2005	2005	2006	2007	2008	2009	2010
		Bill. DKK	Rate of change, per cent					
Real GDP	B1g	1392.0[1]	3.6	2.7	2.0	0.7	0.7	0.6
Nominal GDP	B1g	1554.5	5.9	5.1	4.3	3.1	3.0	2.9
Components of real GDP								
Private consumption	P.3	685.8[1]	3.8	3.1	2.0	0.6	0.6	0.5
Government consumption	P.3	350.4[1]	1.2	1.1	1.0	1.0	1.0	1.0
Gross fixed capital formation	P.51	302.4[1]	9.3	10.6	4.0	2.0	1.5	0.6
Changes in inventories[1]	P.52 +P.53	4.2[1]	0.0	0.1	0.0	0.0	0.0	0.0
Exports of goods and services	P.6	716.7[1]	8.7	6.5	3.4	1.2	1.3	1.3
Imports of goods and services	P.7	667.5[1]	10.6	10.3	3.8	1.9	1.7	1.5
Contributions to real GDP growth			Percentage points					
Final domestic demand		-	4.1	4.1	2.2	1.0	0.9	0.7
Changes in inventories[2]	P.52 +P.53	-	0.0	0.1	0.0	0.0	0.0	0.0
External balance of goods and services	B.11	-	-0.5	-1.6	-0.2	-0.3	-0.2	-0.1

1) Based on constant 2000-prices. Growth rates are also in 2000-prices, i.e. not based on chain indices.
2) Contribution of stock changes to GDP growth.
Source: Statistics Denmark and own calculations.

Table 1b
Price developments

	ESA	2005	2005	2006	2007	2008	2009	2010
		Level	Rate of change, per cent					
GDP-deflator		111.7	2.2	2.4	2.3	2.4	2.3	2.3
Private consumption deflator		109.8	2.1	1.8	1.8	1.8	1.9	1.9
Consumer price index		110.2	1.8	2.0	1.8	1.6	1.9	1.8
HICP		100.0	1.7	2.0	1.8	1.7	1.8	1.7
Net price index		111.0	2.0	2.1	1.9	1.7	2.0	1.9
Public consumption deflator		114.7	2.3	2.8	2.6	2.7	2.9	3.0
Investment deflator		105.7	0.0	2.7	2.8	2.6	2.3	2.3
Export price deflator		104.7	4.2	2.5	0.5	1.6	1.5	1.6
Import price deflator		101.1	3.2	2.5	0.4	1.3	1.5	1.5

Note: For all price indices 2000=100.
Source: Statistics Denmark and own calculations.

Table 1c
Labour market developments

	ESA	2005	2005	2006	2007	2008	2009	2010
		Level	Rate of change, per cent					
Employment, 1,000 persons		2739.0	1.1	1.2	0.3	-0.3	-0.3	-0.5
Employment, hours worked (mill. hours)		4313.2	1.8	1.2	0.1	-0.6	-0.7	-0.9
Unemployment rate (per cent)[1)]		4.8	4.8	3.9	3.7	3.5	3.6	3.9
Labour productivity, persons (1,000 DKK)[2)]		508.2	2.5	1.4	1.7	1.0	1.1	1.1
Labour productivity, hours worked (DKK)[3)]		322.7	1.8	1.4	1.9	1.3	1.4	1.5
Compensation of employees (bill. DKK)[4)]	D.1	815.2	4.3	4.7	4.1	3.2	3.2	2.9

1) Harmonised definition, Eurostat, levels.
2) Calculated as real GDP per person employed, where GDP is based on constant 2000-prices.
3) Calculated as real GDP per hour worked, where GDP is based on constant 2000-prices.
4) Based on current prices, i.e. growth rates are in nominal terms.
Source: Statistics Denmark and own calculations.

Table 1d
Sectoral balances

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

1) Public balance (net lending) is based on national accounts.
Source: Statistics Denmark and own calculations.

Table 2

General government budgetary prospects

	ESA	2005	2005	2006	2007	2008	2009	2010
		Bill. DKK			Per cent of GDP			
Net lending (EDP B.9) by sub-sector								
General government[1)]	S13	61.8	4.0	3.1	2.8	2.5	1.8	1.2
Central government	S1311	66.9	4.3	3.1	2.8	2.5	1.8	1.2
Local government	S1313	-5.6	-0.4	0.0	0.0	0.0	0.0	0.0
Social security funds	S1314	0.5	0.0	0.0	0.0	0.0	0.0	0.0
General government (S13)								
Total revenue[2)]	TR	862.5	55.5	53.5	52.7	52.1	51.8	51.7
Total expenditure[3)]	TE	800.7	51.5	50.4	49.8	49.7	50.0	50.6
Net lending[1)]	EDP B9	61.8	4.0	3.1	2.8	2.5	1.8	1.2
Interest expenditure	EDP D41	28.3	1.8	1.6	1.5	0.9	0.7	0.6
Primary balance[4)]		90.1	5.8	4.7	4.3	3.3	2.5	1.8
Selected components of revenue								
Total taxes[5)]		756.1	48.6	46.9	46.4	45.9	45.6	45.4
Taxes on production and imports	D.2	278.0	17.9	17.9	17.6	17.4	17.3	17.1
Current taxes on income, wealth, etc.	D.5	474.9	30.5	28.8	28.6	28.3	28.1	28.1
Capital taxes	D.91	3.2	0.2	0.2	0.2	0.2	0.2	0.2
Social contributions[6)]	D.61	17.1	1.1	1.1	1.1	1.0	1.0	1.0
Property income[7)]	D.4	28.4	1.8	1.9	1.8	1.8	1.7	1.7
Other (residual)		60.9	3.9	3.6	3.4	3.5	3.5	3.6
Total revenue[2)]	TR	862.5	55.5	53.5	52.7	52.1	51.8	51.7
p.m: Tax burden[8)]		773.2	49.7	48.0	47.5	46.9	46.6	46.4

Table 2 (continued)

General government budgetary prospects

	ESA	2005	2005	2006	2007	2008	2009	2010
		Bill. DKK			Per cent of GDP			
Selected components of expenditure								
Collective consumption[9)]	P32	120.3	7.7	7.6	7.5	7.6	7.7	7.7
Individual consumption (excl. social transfers in kind)[9)]		259.7	16.7	16.5	16.5	16.4	16.4	16.4
Total social transfers	D62+ D63	277.5	17.8	17.3	17.2	17.4	17.7	18.3
- Social transfers in kind[9)]	P31	22.0	1.4	1.4	1.4	1.6	1.7	1.9
- Other than in kind	D62	255.5	16.4	15.9	15.8	15.8	16.0	16.4
Interest expenditure[9)]	EDP D41	28.3	1.8	1.6	1.5	0.9	0.7	0.6
Subsidies	D3	35.1	2.3	2.2	2.2	2.4	2.5	2.5
Gross fixed capital formation	P51	26.6	1.8	1.8	1.6	1.6	1.6	1.6
Other (residual)		53.2	3.4	3.3	3.4	3.5	3.5	3.4
Total expenditure[3)]	TE	800.7	51.5	50.4	49.8	49.7	50.0	50.6
Pm: compensation of employees	D1	268.6	17.3	17.0	16.8	17.0	17.1	17.3

Note: Public balance figures are on EDP-basis excl. ATP.

1) Up to and including the second EDP-reporting in 2006 public finances for Denmark will be incl. ATP. The public balance on EDP-basis incl. ATP is for the moment estimated at 4.9 per cent of GDP in 2005, 4.0 per cent of GDP in 2006, 3.8 per cent of GDP in 2007, 3.5 per cent of GDP in 2008, 2.8 per cent of GDP in 2009 and 2.2 per cent of GDP in 2010.

2) Excl. central government revenues from sale of UMTS-licenses.

3) Adjusted for swap-related flows and spending on infrastructure investments.

4) Defined as EDP B.9 plus EDP D.41.

5) Defined as the sum of taxes on production and imports, current taxes on income, wealth etc., and capital taxes.
Does not include compulsory social contributions, which are traditionally included in the tax burden.

6) Does not include voluntary and imputed social contributions, since these are not included in the tax burden.

7) Incl. interest income and dividends and land rent etc.

8) Defined as the sum of taxes on production and imports (incl. those collected by the EU), current taxes on income, wealth etc., and capital taxes and compulsory social contributions.

9) The sum of collective and individual consumption equals total public consumption. Both short-term and long-term projections focus on total public consumption. Social transfers in kind are a part of individual public consumption.

Source: Statistics Denmark and own calculations.

Table 3
General government expenditure by function

	COFOG	2004	2005
		Per cent of GDP	
General public services	1	7.1	6.4
Defence	2	1.6	1.6
Public order and safety	3	1.0	1.0
Economic affairs	4	3.8	3.9
Environmental protection	5	0.5	0.6
Housing and community amenities	6	0.7	0.6
Health	7	6.9	6.8
Recreation, culture and religion	8	1.8	1.6
Education	9	8.1	7.8
Social protection	10	22.1	21.3
Total expenditure	TE	53.6	51.5

Note: Short-term and longer-term projections do not include general government expenditures by function. The focus of both short-term and longer-term projections is public expenditures by type of transaction.
1) Adjusted for swap-related flows and spending on infrastructure , i.e. comparable to expenditures in table 2.
Source: Statistics Denmark and own calculations.

Table 4
General government debt developments

	2005	2006	2007	2008	2009	2010
			Per cent of GDP			
Gross debt	35.9	28.6	24.6	21.5	19.3	17.8
Change in gross debt ratio[1)]	-6.7	-7.2	-4.1	-3.1	-2.2	-1.5
Change in gross debt[2)]	-4.3	-5.5	-2.9	-2.3	-1.6	-1.0
Contributions to changes in gross debt						
Primary balance[3)]	-5.8	-4.7	-4.3	-3.3	-2.5	-1.8
Interest expenditure[4)]	1.8	1.6	1.5	0.9	0.7	0.6
Stock-flow adjustment	-0.4	-2.4	-0.1	0.2	0.2	0.2
p.m. implicit interest rate on debt[5)]	4.5	4.6	5.4	3.6	3.2	3.2
Other relevant variables						
Public net debt	8.8	5.3	2.2	-2.0	-3.7	-4.8
Net debt in central and local governments	8.9	5.4	2.3	-1.9	-3.7	-4.7

1) Change in gross debt ratio is defined as $D_t/GDP_t - D_{t-1}/GDP_{t-1}$, where D is public debt measured in nominal terms (DKK).
2) Change in gross debt is defined as $D_t/GDP_t - D_{t-1}/GDP_t$, where D is public debt measured in nominal terms (DKK).
3) As defined in table 2.
4) As defined in table 2.
5) Proxied by interest expenditures divided by the debt level of the previous year.
Source: Statistics Denmark and own calculations.

Table 5
Structural balance and cyclical adjustment

	ESA	2005	2006	2007	2008	2009	2010
				Per cent			
Real GDP growth		3.6	2.7	2.0	0.7	0.7	0.6
				Per cent of GDP			
General government balance	EDP B9	4.0	3.1	2.8	2.5	1.8	1.2
Interest expenditure	EDP D41	1.8	1.6	1.5	0.9	0.7	0.6
				Per cent			
Potential GDP growth		1.4	2.0	1.9	1.3	1.3	1.3
Of which, contribution from:				Percentage points			
- Labour		0.3	0.0	0.0	0.2	0.1	0.0
- Of which labour force		0.2	-0.1	-0.1	-0.3	0.0	0.0
- Capital		0.7	0.8	0.9	0.8	0.8	0.8
- Total factor productivity		1.3	1.1	1.1	0.4	0.4	0.5
				Per cent of GDP			
Output gap		0.9	1.6	1.6[2)]	1.1	0.6	0.0
Structural budget balance[1)]		1.3[3)]	1.4[3)]	1.5[3)]	1.5	1.4	1.2
Primary structural balance[1)]		2.5	2.4	2.2	1.9	1.3	1.0

1) The structural budget balance is *not* calculated on EDP-basis. The calculations of structural budget balance are based on public finances according to national account principles, cf. also table 5.2. The primary structural budget balance is based on an actual primary balance defined via net interest expenditures and *not* gross interest expenditures.
2) Technically it is assumed, that the positive output gap in 2007 is closed gradually towards 2010.
3) Corrected for the suspension of SP contributions. The correction made amounts to almost 0.3 per cent of GDP.

Source: Statistics Denmark and own calculations.

Table 6
Changes since previous update

	ESA	2005	2006	2007	2008	2009	2010
				Rate of change, per cent			
Real GDP growth							
- Previous update		2.4	2.4	1.1	1.6	2.0	2.1
- Current update		3.6	2.7	2.0	0.7	0.7	0.6
- Difference		1.2	0.3	0.9	-0.9	-1.3	-1.5
				Per cent of GDP			
Actual budget balance[1]	EDP B.9						
- Previous update		3.6	3.1	3.2	2.7	2.8	2.9
- Current update		4.9	4.0	3.8	3.5	2.8	2.2
- Difference		1.3	0.9	0.6	0.8	0.0	-0.7
Gross debt level							
- Previous update		35.6	31.7	28.9	26.5	24.0	21.5
- Current update		35.9	28.6	24.6	21.5	19.3	17.8
- Difference		0.3	-3.1	-4.3	-5.0	-4.7	-3.7

1) Incl. ATP.
Source: Statistics Denmark and own calculations.

Table 7
Long-term sustainability of public finances

	2000	2005	2010	2020	2030	2050	2060	2070
				Per cent of GDP				
Total expenditure	53.0	51.6	50.6	51.8	52.0	52.9	52.1	51.2
Of which:								
- Age-related expenditure	33.6	34.6	34.7	35.9	35.9	36.1	35.0	34.5
- Pension expenditure	9.1	9.3	9.8	10.6	10.0	9.4	8.5	8.0
- Social security pension	9.1	9.3	9.8	10.6	10.0	9.4	8.5	8.0
- Old-age and early pensions	6.9	7.2	7.9	8.6	7.7	7.2	6.3	5.5
- Other pensions	2.2	2.1	2.0	2.0	2.2	2.2	2.2	2.5
- Occupational pensions	-	-	-	-	-	-	-	-
- Health care	6.0	6.4	6.5	7.1	7.7	8.2	8.2	8.3
- Long-term care	1.1	1.2	1.2	1.4	1.7	1.9	2.1	2.0
- Education expenditure	5.5	5.9	6.0	6.0	5.6	5.8	5.9	5.9
- Other age-related expenditures	12.0	11.8	11.1	10.9	11.0	10.9	10.3	10.3
- Interest expenditure	4.3	2.6	1.3	1.0	1.1	1.4	1.8	1.5
Total Revenue	55.3	55.5	51.8	51.1	51.5	51.6	50.7	50.9
Of which:								
- Property income[1)]	1.9	1.5	1.5	1.0	0.7	0.5	0.3	0.1
- Revenue from pension payouts net	-0.7	-1.1	-1.7	-0.9	0.2	1.1	0.9	1.6
Pension reserve fund assets	115.9	135.2	148.7	194.5	224.4	238.7	241.0	243.2
Of which:								
-Public pension fund assets[2)]	1.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Assumptions	**Per cent**							
Labour productivity growth	3.5	2.1	1.2	1.8	1.9	1.6	1.9	1.5
Real GDP growth	3.3	3.6	0.6	2.0	3.2	2.4	2.7	2.2
Participation rate males (aged 20-64)	84.9	85.6	84.9	85.6	87.6	88.6	88.6	88.7
Participation rate females (aged 20-64)	75.9	76.5	75.8	76.7	78.9	80.7	80.7	80.7
Total participation rate (aged 20-64)	80.4	81.1	80.4	81.2	83.3	84.6	84.7	84.7
Unemployment rate	5.2	5.4	4.5	4.4	4.4	4.4	4.4	4.4
Structural unemployment	6.5	5.5	4.5	4.4	4.4	4.4	4.4	4.4
Population aged 65+, 1,000 persons	791	818	916	1,137	1,315	1,437	1,398	1,495

Note: Figures are based on national account principles, i.e. not on EDP-basis.
1) Includes public revenues from interest income and dividends.
2) Public funds assets is adjusted downward by almost DKK 300 billion (20 per cent of GDP) in 2005 due to the changed classification of the ATP fund due to the revision of national accounts.
Source: Statistics Denmark and own calculations.

Table 8
Basic assumptions

	2005	2006	2007	2008	2009	2010
Short-term interest rate (annual average)	2.3	3.1	3.6	4.0	4.3	4.7
Long-term interest rate (annual average)	3.4	4.0	4.4	4.7	4.9	5.2
Exchange rate USD/EUR (annual average)	124.1	124.8	127.0	127.0	127.0	127.0
Nominal effective exchange rate (1980=100)	101.6	101.6	102.0	102.0	102.0	102.0
World excluding EU, GDP growth	5.3	5.1	4.8	4.0	4.0	4.0
EU GDP growth	1.6	2.4	2.2	2.4	2.4	2.4
Growth of relevant foreign markets	5.3	6.9	5.6	4.4	4.4	4.4
World import volumes, excluding EU	8.1	9.6	8.2	7.5	7.5	7.5
Oil prices, (Brent, USD/barrel)	54.4	70.0	63.0	62.2	61.3	60.5

Source: ADAM databank, European Commission Spring forecasts, April 2006 and own calculations.