FINANSMINISTERIET

DANISH CONVERGENCE PROGRAMME

Update for the period 2001-2005

JANUARY 2002

Updated convergence programme for Denmark

1. Introduction

Denmark hereby presents an update of its convergence programme of December 2000[1].

The parliamentary situation in Denmark has changed since the general election on November 20, 2001. The formation of a new coalition government by the Liberal Party and the Conservative Party has meant that the fiscal bill presented by the previous government in August 2001 has lapsed. The fiscal bill prepared by the new government was presented on January 29, 2002.

The convergence programme is based on an assessment of the economic conditions in Denmark for the years 2001-2003, which was prepared in January 2002 and incorporates the new fiscal bill. Projections for the years 2004-05 are based on a gradual adjustment to a structural path for the Danish economy, with specific requirements for the effect of economic policy as outlined primarily in the government programme.

The convergence programme is thus in agreement with the government's overall macroeconomic targets for the economy in the medium term:

- Fixed exchange rate vis-à-vis the euro
- Tax freeze
- Solid surpluses on general government finances that ensures sustainability of fiscal policy and a reduction in general government debt from almost 47 per cent of GPD in 2000 to just above 24 per cent of GDP in 2010

[1] The convergence programme is prepared in accordance with Council Regulation (EU) on the Stability and Growth Pact (No. 1466/97). According to this regulation, Euro area member states are required to prepare stability programmes, whereas the other countries are required to prepare convergence programmes. This updated convergence programme follows the guidelines adopted at the ECOFIN Council meeting on July 10, 2001. The update of Denmark's convergence programme is sent to the Danish parliament.

- Increased employment through higher participation rates and lower unemployment
- Lower tax on earned income
- Real growth in public consumption of 1 per cent a year on average during the years 2002-2005
- Outsourcing and improved efficiency in the public sector
- Low and stable inflation of just below 2 per cent a year
- Favourable conditions for private savings, which, in conjunction with the surplus on general government finances, pave the way for gradual repayment of foreign debt

The economic-political strategy and the economic targets meet the requirements of the Stability and Growth Pact and follow the economic policy guidelines recommended by the European Commission. Denmark meets all four convergence criteria by a broad margin.

The Danish parliament firmly supports the fixed exchange rate policy, and the government regards it as paramount that credibility in this policy is maintained. Following the Danish referendum on the euro in September 2000, the commitment to the fixed exchange rate policy within a narrow fluctuation band of ±2¼ per cent as stipulated in the ERM2 agreement has been undiminished. In fact, the deviations in the exchange rate from central parity have been much smaller than the bandwidth. The interest rate spread vis-à-vis German interest rates is not wider than before the referendum was called, but it is a little wider than would be expected in case of a Yes to the single currency.

The fixed exchange rate policy is an important tool for ensuring low inflation. The strategy implies that the low level of inflation in the euro area works as an anchor for Danish inflationary expectations and that the level of interest rates is predominantly determined by the ECB. Low and stable inflation and interest rates are important conditions if the transactions of companies and households are to be undertaken efficiently.

The fiscal bill for 2002 is the new government’s first budget proposal. The bill is in line with the objective to maintain a stable economic development and a reduction in general government debt and by this it also supports the fixed exchange rate policy.

Compared to the fiscal bill of August 2001 prepared by the previous government, the new fiscal bill contains a significant change in priorities, and a number of planned tax increases have been left out. The main elements of the bill are an effective freeze on tax increases, greater freedom of choice between suppliers of public services and more resources for health care and care for the elderly. The funding is mainly provided through noticeable reductions of temporary funds for specific programs/purposes, subsidies and a number of administrative functions in the various ministries, including councils and boards. Moreover, Danish development aid will be trimmed, although Denmark will remain the biggest contributor in the world in terms of per cent of GDP.

Structural policy measures

The Danish tax system and labour market policies have been reformed substantially over the past 15 years. Accordingly Denmark, to a great extent, has done away with inexpedient structures that have contributed to a less stable economic development. It has also meant that general government finances rest on a more solid foundation.

Changes to the tax regime have led to lower marginal tax rates on earned income, a lower taxable value of negative investment income, lower corporation tax, larger tax bases and higher and new green taxes.

In the labour market, active labour market policy, with a right and obligation to job activation, has been extended and advanced, benefit periods have been reduced and various schemes of early retirement have been reformed or abolished.

Reforms to improve structures are still needed in various areas. In terms of taxation, the government intends to lower the tax on earned income. This may help to meet the aim of a rise in effective labour supply.

Active labour market policy is set to be more efficient, with greater focus on activation directly qualifying a person for a job and more people receiving private job training. The mediation of jobs will be made more efficient. Furthermore, the successful special youth initiatives aimed at young people will be extended to people aged 25-29. Committee work is intended to identify additional initiatives to boost the labour force and form part of a forthcoming action plan “More people in work”.

Freedom of choice will be increased in terms of choosing between public and private suppliers of services, which traditionally has been supplied by the public sector, in order to improve the efficiency of and secure healthy competition in a number of service areas.

In addition, the government regards continued structural reforms in the product and capital markets as important to stimulate growth in the private business sector.

Already in 2002 a number of initiatives aimed at alleviating administrative burdens, promoting the entrepreneurial culture, lowering statutory costs and encouraging the use of new schemes of payment will be proposed. A slightly longer-term aim for the government is to further advance the liberalisation of the power and gas market to reduce costs for households and businesses.

The government has appointed a number of committees to draw up proposals for how to implement the measures outlined in practice.

2. Medium-term objectives

The overall medium-term objectives of fiscal policy are a tax freeze and a sustainable development in general government debt.

The tax freeze implies that no direct or indirect tax rates, whether expressed as a percentage or as an amount in Danish kroner, are allowed to rise. Moreover, a ceiling will be imposed on nominal property value tax. The nominal principle for specific taxes and property value tax imlies that the revenue from these sources increases at a lower rate than GDP and general government expenditures, which, given the existing rules and practices, automatically increase, when wages and prices increase. The cumulative loss of revenue can be estimated to approx. 0.3 per cent of GDP (2000-level) until 2005, a figure that can be encompassed in the medium term strategy while maintaining fiscal sustainability.

Changes in direct and indirect taxes already determined are not altered by the tax freeze, just as the agreements for local government finances for 2002 will not be affected. Changes to the tax regime can be made within the framework of the tax freeze insofar as they result from external decisions, including EU rules, such as the abolishment of the so-called

24-hour rule, but the requirement is that such changes do not result in higher net tax revenue.

The objective of sustainable general government finances implies that future additional obligations for the public sector can be financed without imposing a subsequent need for tightenings to ensure that the development in public debt is under control.

The demographic prospects implying a reduction in the number of people in working ages and a substantial increase in the number of older people will, in the long run, put strong pressures on general government finances if the present level of public service is to be maintained. This pressure is countered by running a surplus of 2-3 per cent of GDP on average until 2010 with the existing arrangement of the Special Pension Savings Scheme. This implies more explicitly that fiscal policy will be on a sustainable path, and that the new government will be aiming at the same strength of debt repayment as the previous government.

The government's proposal to rearrange the Special Pension Savings Scheme from a redistributive tax scheme into a compulsory, individual (actuarily neutral) scheme lowers the level and the requirement of general government finances by ½ per cent of GDP from 2001 onwards. The medium term target range for public finances is thus set to 1½-2½ per cent of GDP instead of the previous target of 2-3 per cent of GDP. This modification is merely a technical adjustment, which has no implications at all for fiscal policy requirements (see section 4.2). The adjustment does however imply lower marginal and average tax levels.

The government's target is an increase in total employment of 50,000 persons until year 2005, mainly stemming from higher participation rates, and thus a growing labour force. Viewed separately, demographic prospects in fact suggest a declining labour force if participation rates remain unchanged. Furthermore, any major contributions cannot be expected from a further reduction in unemployment, which is at a 25-year low[2].

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[2] Compared with the 1960s and early 1970s, registered unemployment is affected by the introduction of, for example, the right to unemployment benefits for self-employed people and graduates and the possibility of receiving supplementary unemployment benefits and holiday allowances. Even if the labour market situation were the same,

A significant proportion of the contribution to higher participation rates can be attributed to the future effects from the reforms of, for instance, the pre-early retirement scheme, the early-retirement benefit scheme and the disability pension scheme. However, additional structural improvements in the labour market are likely to be required to reach this goal. For example, the government programme aims to increase efficiency of active labour market policy also giving higher priority to on-the-job training in the private sector. Also the mediation of jobs should be more efficient. Furthermore, the special youth initiatives will be extended to persons in the ages of 25-29 years and the effort to integrate immigrants in the labour market will be improved.

Within the framework of a tax freeze and a sustainable development of public debt, the rise in employment secures additional fiscal leeway, which in the projection has been earmarked for lower tax on earned income as from 2004 and a relatively limited increase in real public consumption expenditures.

Provided the necessary room for manoeuvre can be found, the government will reduce taxes on earned income as from 2004. The projection implies, as a temporary technical assumption, a lower tax on earned income of around (net) ¼ per cent of GDP from 2004 onwards. The possible size and composition of such a reduction in personal taxes will be examined in more detail.

Furthermore, the fiscal room for manoeuvre created by higher employment rates in the projection is spent on public services, especially health care and care for the elderly, allowing expenditures to increase in line with demographic needs as well as generating some growth in standards and degrees of coverage. An annual growth rate of 1 per cent on average in real public consumption expenditures is assumed until 2005[3].

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unemployment figures would still be much higher today. Further, the lower registered unemployment level in the end of the 1960'es was probably somewhat lower than the (sustainable) level consistent with stable inflation.

[3] The national accounts' subsequent breakdown of growth in public consumption expenditures by growth in prices and volumes may, technically speaking, prove different than anticipated, although this is of no significance to general government finances and public debt as such. The projection implies that public consumption in current prices will rise more or less in tandem with GDP. This is the essential condition in this area.

In a historical perspective, this is rather low and it calls for tight expenditure control and a more stringent order of priority. Real growth in public consumption of 1 per cent up to 2005 is unchanged compared with the targets of the previous government.

The tax freeze plays an important role in meeting the target as it implies a strict prioritisation of expenditures, which helps curb the historical tendency towards a rise in real expenditures compared with the budgets. Also, with the objective of maintaining fiscal sustainability the tax freeze implies, that downside deviations from the underlying assumptions translate into lower expenditures and not higher taxes.

As already mentioned, priorities are set to be stringent in the public sector. Hence, the fiscal bill contains enhanced measures in regional and local government areas such as health care and care for the elderly, including greater freedom of choice, while central government areas will experience a reduction of temporary funds for specific programmes/purposes, subsidies and various administrative functions in relation to councils and boards, etc.

The government also intends to target and enhance the efficiency of the public sector. Some of the means are greater digitalisation, greater public-private interaction and greater freedom of choice for consumers in a number of public services. Moreover, the process of privatising public and quasi-public companies will be strengthened, the liberalisation of the network industries will be speeded up, while the policy of taxation and subsidisation of the corporate sector will be reviewed to secure a more efficient structure.

3. Economic outlook until 2005

Denmark met all four convergence criteria in 2000. In terms of three of the criteria – interest rates, general government budget balance and debt – the margin was relatively broad, while the 2.7 per cent rise in Danish consumer prices was close to the convergence criterion of 2.8 per cent (see table 3.1)

Table 3.1. Convergence situation in 2000.

	Consumer price[1] inflation	Long-term interest rates[2]	General government budget balance	General government debt (end of period)
	Per cent	Per cent, p.a.	-------- Per cent of GDP	--------
Denmark	2.7	5.6	2.5	46.8
EU	2.1	5.4	1.1	64.4
Euro area	2.4	5.5	0.3	70.2
Convergence criteria .	2.8	7.4	-3.0	60.0

1) EU Harmonised Index of Consumer Prices (HICP).
2) 10-year government bonds.
Source: The European Commission's autumn 2001 forecast and Statistics Denmark.

Inflation fell sharper in Denmark in 2001 than in the eurozone, the primary reason being that energy and food prices did not rise as steeply as in the eurozone[4]. This means that Denmark has clearly been meeting the inflation convergence criterion for the past six months. The latest 3-month period (Oct.-Dec.), covered by statistics on both the EU and Denmark, has seen a rate of inflation of 2.3[5] per cent in Denmark, while the convergence criterion was 3.3 per cent.

The Danish economy is likely to meet the convergence criteria by a broad margin also in the coming years.

3.1. International assumptions

Following strong growth – particularly in 2000 – international growth is likely to slow down in 2001 and 2002. The setback was visible already prior to the terrorist attacks on September 11, 2001.

International growth is expected to fall from just above 3½ per cent in 2000 to just below 1½ per cent in both 2001 and 2002 (see table 3.2). The estimate covers expectations of relatively poor economic indicators for the first six months of 2002, as the effects of greater uncertainty may enhance the adverse effects on demand, e.g. in the form of a postponement of consumption and investments. On the other hand, the

[4] The impact of climbing oil prices etc. fed through earlier to Danish consumer price increases than was the case in other countries. This is the main explanation for the relatively high inflation in 2000 and the subsequent relative fall compared with the EU as a whole.

[5] Calculated using the same methodology as the convergence criterion.

very significant relaxation of economic policy seen in recent quarters must be expected to generate stronger growth more than six months ahead, also supported by low oil prices. Particularly the USA has pursued a highly expansionary policy, the effect of which may materialise earlier and be stronger than estimated in the assessment of economic conditions.

The year 2003 should see fairly strong growth in the USA and the EU and total international growth of just over 2¾ per cent. Growth is then assumed to decline until 2005.

Table 3.2. Main international assumptions.

	2000	2001	2002	2003	2004	2005
	------------------ Growth, per cent ------------------					
Real GDP abroad (weighted by Danish export shares)...........................	3.5	1.4	1.3	2.8	2.3	2.1
Real export market growth (manufactured products)	11.9	1.0	2.0	7.7	4.6	4.2
Hourly wages abroad (weighted by Danish export shares)...........................	3.3	3.5	3.2	3.2	3.8	3.8
10-year euro yield (per cent p.a.), Germany	5.3	4.8	4.8	5.2	5.4	5.5

Source: The European Commission's autumn 2001 forecast, OECD and own calculations.

Notoriously, international trade increase faster than production in individual countries due to the effect of greater division of labour internationally. It has therefore been assumed that export market growth is stronger than growth in production (GDP) abroad. As a result Danish imports are assumed to grow faster than Danish GDP.

In light of recent monetary easing, the yield on German 10-year government bonds is expected to stay at 4¾ per cent in 2002, while it is likely to rise to about 5¼ per cent in 2003 due to expectations of stronger growth. A further rise to 5½ per cent has been assumed for the remaining period until 2005.

The yield spread between Danish and German 10-year government bonds has averaged around 0.30 percentage points since the autumn of 2000. This is about 0.15 percentage points higher than anticipated if Denmark had participated in the single currency. The yield spread is estimated to widen to about 0.60 percentage points until 2005, corresponding to an additional yield of about half a percentage point in excess of the estimate in case of participation in the single currency. The medium-term yield spread has been determined on the basis of historical relation between yield spreads, inflation differences and other aspects of importance since 1982 (see the Medium Term Economic Survey 2000).

3.2. Outlook until 2005

GDP growth is expected to stand at 1.1 per cent and 1.4 per cent, respectively, for 2001 and 2002 (see table 3.3). These moderate growth rates should be seen in light of the international recession and a very buoyant 2000. Slower growth is likely to trigger a small rise in unemployment in 2002 from the current very low level.

Compared to the October economic report[6], growth in the Danish economy in 2002 has been revised slightly downwards, but not as much as abroad. This mainly reflects high domestic capacity utilisation putting substantial pressure on the labour market and a favourable composition of exports that is considered rather robust vis-à-vis the international recession. Moreover, the possibility of funding house purchases by means of short-term adjustable-rate loans implies that private consumption and the housing market probably responds more vehemently to monetary relaxation than has previously been the case. Finally, private consumption in Denmark has already been going through a downward adjustment during recent years, which seem to remain in some other countries.

[6] Ministry of Economic Affairs, *Redegørelse om den økonomiske situation*, October 2001.

Table 3.3. Economic indicators of the convergence programme.

	ESA	2000	2001	2002	2003	2004	2005
		---------- Per cent ----------					
Real GDP growth	B1g	3.0	1.1	1.4	2.4	1.9	1.9
Nominal GDP (DKK billion).......	B1g	1,296	1,348	1,391	1,450	1,507	1,567
GDP deflator...............................		3.7	2.8	1.8	1.8	2.0	2.1
Labour market		---------- Per cent ----------					
Employment growth....................		0.8	0.5	0.2	0.6	0.2	0.4
Unemployment (per cent of labour force)		5.3	5.0	5.2	5.0	5.2	5.2
Do, EU definition		4.7	4.5	4.6	4.5	4.6	4.6
Hourly productivity in the business sector		4.0	1.1	1.7	2.3	2.0	2.0
Productivity (GDP per employ.)...		2.2	0.6	1.2	1.8	1.6	1.5
Growth components		------- Real growth, per cent -------					
Private consumption expenditure..	P3	-0.3	1.1	1.5	2.3	2.5	2.5
Public consumption expenditure...	P3	0.6	1.7	1.3	0.7	1.0	1.0
Gross fixed capital formation	P51	10.7	-3.9	1.6	4.5	2.1	2.1
Changes in inventories, etc.[1]	P52/3	0.2	0.3	-0.1	0.0	0.0	0.0
Exports of goods and services........	P6	11.5	3.0	2.4	5.3	3.4	3.1
Imports of goods and services........	P7	11.2	1.4	2.3	5.6	4.0	3.7
Growth contributions		------- Real growth, per cent -------					
Final domestic demand................		2.3	0.0	1.4	2.3	1.9	2.0
Change in inventories..................	P52/3	0.2	0.3	-0.1	0.0	0.0	0.0
External balance of goods and services (net exports)....................	B11	0.6	0.8	0.2	0.1	-0.1	-0.1
Balances and debt		------- Per cent of GDP -------					
General government budget balance[2].......................................		2.5	1.9	1.9	2.1	2.1	2.1
Do, structural[2].............................		2.2	1.8	1.9	1.9	2.0	2.1
Public EMU debt (end of period)		46.8	43.5	42.9	40,1	37.6	35,1
Current account balance..............		1.6	2.9	2.9	3.2	3.4	3.5
Net foreign debt (end of period)...		13.7	14.1	10.7	7.1	3.5	-0.1
Prices, wages and interest rates		---------- Per cent ----------					
Consumer price index (HICP)......		2.7	2.3	1.6	1.9	1.6	1.6
Hourly wages (private sector)........		3.6	4.3	3.8	3.9	3.8	3.8
Interest rates p.a. (10-year gov. bonds)		5.6	5.1	5.2	5.6	5.9	6.1

1) Contribution to GDP growth.
2) From 2001 onwards, the public-sector budget balance are lowered by half a per cent of GDP as a result of the change of the Special Pension Savings Scheme.
Source: Statistics Denmark and own calculations.

The sharp cuts in interest rates and the expected international recovery are likely to raise Danish GDP growth to 2.4 per cent in 2003. This is lower than for the EU as a whole, mainly reflecting that the already low level of unemployment and the prospects of only a modest rise in the labour force limit the future growth potential in Denmark. Hence, the growth estimate for 2003 is probably slightly higher than the medium-term growth potential (see box 3.1).

The growth forecast for 2003 implies a widening of the so-called output gap. The output gap is assumed to close during the period until 2005, implying that GDP and unemployment correspond to the estimated potential.

For the period from 2001 to 2005 as a whole, GDP growth more or less corresponds to the estimated potential, i.e. the underlying productivity growth, the increase in the effective labour force and a modest further reduction in the level of structural unemployment. Hence, both structural and actual unemployment are assumed to correspond to just above 4½ per cent of the labour force in 2005 (EU definition).

Compared to the October economic report, the public-sector budget balance has been revised downwards by 0.1 percentage points in 2001. This primarily reflects the technical effect of the proposed change of the Special Pension Savings Scheme (see section 4), which is partly offset by a pronounced upward revision of corporation tax revenues.

The surplus on the general government finances should be constant at 1.9 per cent of GDP in 2002. Higher expenditures as a result of the rise in unemployment, lower corporation tax revenues and the effect of the final phasing-in of the tax adjustments commonly known as the Whitsun Package is offset by a rise in revenue from tax on pension investment returns.

In 2003, the recovery is believed to lift the surplus to 2.1 per cent of GDP, and the surplus is set to be of the same magnitude the following years. The surplus on the general government finances implies that total general government gross debt is likely to fall to just above 35 per cent of GDP in 2005, down from just below 47 per cent of GDP in 2001.

Box 3.1. GDP growth and production potential.

GDP growth will probably be slower during the period until 2005 than has been the case over the past eight years, mainly reflecting that structural unemployment can no longer be expected to fall as sharply and that hourly productivity growth for the period 1993-2000 has been somewhat above the historical average due to an unusual large increase in 1994 (see table a).

GDP growth for the period 2001-2005 is slightly weaker than the forecasted increase in the production potential. The reason is that the level of actual unemployment in 2001 is estimated to be a trifle lower than the level of structural unemployment. Labour market conditions strengthen the growth potential through higher participation rates and a sustained fall in structural unemployment. A fall in average working hours pulls in the opposite direction. The reduction is due to agreements for more extra days off and a change in the age composition of the labour force.

Table a. Contributions to average growth in production potential and GDP.

	1993-2000	2001-2005	2004-2005
	------- Annual real growth, per cent -----		
Growth in production potential	*2.6*	*1.9*	*2.0*
Of which contribution from			
- Hourly productivity	2.4	1.7	1.7
- Structural unemployment	0.6	0.1	0.2
- Labour force..	-0.1	0.4	0.4
- Working hours......................................	-0.3	-0.3	-0.3
GDP growth	*2.7*	*1.7*	*1.9*
Of which contribution from			
- Domestic demand.................................	2.9	1.5	2.0
- Stock changes..	0.0	0.0	0.0
- Net exports	-0.2	0.2	-0.1

Average productivity growth in the entire economy stands at 1.7 per cent a year for the period under review. Productivity growth for the whole economy is slower than in the private sector, because – statistically – productivity increases in the public sector are not registered. The forecasted productivity growth in private business sector of some 2 per cent a year corresponds to the average growth rate since 1980.

Productivity growth in the private sector does not in itself alleviate government finances, although productivity growth does generate higher income and thus higher general government revenues in the form of direct and indirect taxes. The explanation is that practically all transfer rates and wages in the public sector are adjusted to wage developments in the private sector by virtue of indexation rules and public collective agreements. Stronger productivity growth in the private sector can therefore not be expected to finance long-term increases in expenditure on pensions and care for the elderly in the Danish case.

The surplus on the current account is projected at just below 3 per cent of GDP in 2002 – the same as in 2001. The surplus for the following years is just above 3 per cent of GDP. The significant current account surpluses will – depending on exchange rate developments and other revaluations of foreign debt in addition to the estimated upward revision by DKK 50bn in 2001 – result in foreign debt being repaid by 2005.

As already mentioned, the level of unemployment will only shift slightly, and the labour market will therefore remain influenced by some pressure. Hence, unemployment in 2003 is expected to be about 0.4 percentage points below the estimated level of structural unemployment.

This being the case, hourly wages in Denmark are expected to rise slightly faster than abroad during the period from 2001 to 2003. This would be a continuation of the development seen in recent years when exchange rate alignments – one reason being movements in the EUR-USD rate – have neutralised the effects on wage competitiveness. This is unlikely to be the case during the next couple of years. In fact the euro is expected to strengthen slightly against the US dollar.

At a more general level, Denmark's competitiveness is considered to be sustainable. This is supported by the combination of high employment, low unemployment and considerable current account surpluses. It has thus been possible to overcome a series of years during which wage increases were slightly higher than abroad without undermining the favourable macroeconomic conditions. Most important has been the success in preventing a rise in inflation, and thus the risk of a wage-price spiral.

At 4.3 per cent in 2001, wage increases were relatively high in Denmark. Wage increases should be more moderate during the period until 2005, supported by declining inflation. Wage increases are assumed to correspond to 3¾ per cent in 2004 and 2005, which is in line with the forecast for other countries and a gradual closing of the output gap.

The rate of increase in consumer prices (HICP) is set to fall to 1.6 per cent in 2002, following a rate of 2.3 per cent in 2001 and 2.7 per cent in 2000. The fall in inflation in 2002 is in particular attributable to negative inflation contributions from energy and food prices. In addition, the tax freeze helps to curb inflation compared to a scenario with unchanged real indirect taxes.

The increase in consumer prices is projected at 1.9 per cent in 2003 as the negative inflation contribution from energy prices will be eliminated, and prices of oil and other international commodities, are likely to climb in 2003 on account of the international recovery. For calculation purposes, commodity prices are assumed to be approx. constant in 2004 and 2005. This means that the tax freeze contributes to lowering the rate of increase in consumer prices to 1.6 per cent, while net prices rise by 1.9 per cent (see table 3.4).

Table 3.4. Deflators and price indices.

	2000	2001	2002	2003	2004	2005
	---------------------- Per cent --- --------------------					
GDP deflator......................................	3.7	2.8	1.8	1.8	2.0	2.1
Private consumption deflator	3.0	2.7	1.7	2.0	1.5	1.6
Consumer price index	3.0	2.4	1.6	1.9	1.6	1.6
Do, EU harmonised index (HICP).....	2.7	2.3	1.6	1.9	1.6	1.6
Index of net retail prices......................	3.2	2.4	1.6	2.1	1.9	1.9
Euro area (HICP)...............................	2.4	2.6	1.8	1.8	-	-

Source: Statistics Denmark and own calculations.

4. Fiscal-policy activity impacts and general government finances

4.1. Fiscal-policy activity impacts

The new fiscal bill is estimated to generate a first-year growth effect of about 0.2 per cent of GDP (fiscal effect). Fiscal policy is thus set to provide a small positive growth contribution in 2002. This should be seen in the context of the lagged effects of dampening measures such as those contained in the Whitsun Package encouraging private savings. On balance, general economic policy will be approx. neutral in terms of activity in 2002 (see table 4.1). The effects of fiscal policy in 2003 and the following years are technically assumed to remain more or less neutral.

Table 4.1. GDP growth contribution breakdown.

	1996	1997	1998	1999	2000	2001	2002	2003
	Per cent							
GDP growth	2.5	3.0	2.5	2.3	3.0	1.1	1.4	2.4
First-year fiscal effects	0.7	-0.5	0.1	0.3	-0.1	0.2	0.2	-
Multi-annual effects, of which:	Per cent							
Economic policy	0.4	-0.7	-1.3	-1.3	-1.1	-0.5	-0.2	-
- Multi-annual fiscal effects	0.4	-0.7	-0.7	-0.4	-0.5	-0.2	-0.2	-
- Savings effects, etc.	0.0	0.0	-0.4	-0.6	-0.5	-0.4	-0.1	-
Historical interest rate changes[1]	0.1	0.5	0.7	0.8	0.2	-0.4	0.1	0.4
Other factors	2.0	3.2	3.1	2.8	3.9	2.0	1.5	2.0[2]

1) The effects of historical interest rate changes have been calculated as the isolated effects on growth from interest rate changes in the period from 1993 until the end of 2001. The effect of a rising share of short-term adjustable-rate loans is not included. If such an effect is included, the positive contributions in 2002 and 2003 would be higher.

2) Including economic policy.

Note: Multi-annual fiscal effects are the effects of fiscal decisions in both the year in question and the preceding years on overall growth. From 1997 to 2002, multi-annual fiscal effects are larger and have a stronger dampening impact on growth than the one-year fiscal effects. The reason is the lagged effect of tax increases introduced during this period.

Source: Own calculations.

Fiscal policy is thus considered to be well balanced despite the downward revision of growth prospects for 2002. This assessment is taking into account the continued capacity pressure, as mentioned above, and the relatively high Danish wage increases. Furthermore, any fiscal easing in 2002 and 2003 would coincide with the impact of the considerable relaxation of international monetary policy and a more uncertain positive contribution stemming from the postponement of consumption and investment during the last part of 2001.

In 2003, the fall in interest rates, if seen in isolation, provide an appreciable growth contribution, off set neither by the activity contributions from fiscal policy in previous years nor by the estimated effects of reducing the tax deduction of interest payments introduced by the Whitsun Package from 1998, the purpose of which was to boost savings. If the international slowdown is longer than expected, interest rates are likely to continue to be low in 2003, while the rise in exports will be smaller than anticipated. The immediate impact will be seen in the balance of payments and in the composition of growth, while the projected increase in growth from 2002 to 2003 is believed to be relatively certain.

Since 1997, economic policy has generally dampened activity and has thus offset the relatively large growth contributions from interest rate changes and other factors, including oil price changes, growth in export markets and the repercussions of the hurricane that raged through Denmark in December 1999. Particularly during 1998 and 2000, growth in demand – and the concomitant pressure on wage and price increases – would have been considerably larger if economic policy had not contributed to dampening activity.

The Danish economy is fundamentally healthy and robust and is therefore well prepared to face the economic prospects. The balance of payments shows a large surplus, thus providing room for adjustments. General government finances also show a solid surplus, allowing automatic stabilisers – that is, lower tax receipts and higher expenditure on unemployment benefits, etc., in the event of lower growth – to take effect.

Yet surpluses on public finances are not larger than the average surplus needed over the economic cycle to ensure the long-term sustainability of fiscal policy (see section 6). Fiscal measures aimed solely at strengthening activity should therefore be reserved for periods of economic recession when unemployment is high and rising while inflation is low. It must also be taken into account, whether Denmark is in phase with the the rest of the Euro-area, i.e. whether a weak business cycle is met by monetary easing and interest rate reductions, as is the case in the current situation.

4.2. General government finances

Average surpluses on general government finances are estimated to amount to 2 per cent of GDP during the period from 2001 to 2005 (see table 4.2). This figure is within the range of 1½ to 2½ per cent of GDP that is considered to be consistent with a sustainable development in central government debt.

Table 4.2. General government finances.

	ESA	2000	2001	2002	2003	2004	2005
Net lending		Per cent of GDP					
General government[1]	S13	2.5	1.9	1.9	2.1	2.1	2.1
Of which:							
- Central government	S1311	1.1	0.9	1.0	1.4	1.3	1.4
- Local government	S1313	0.0	0.0	0.0	0.0	0.0	0.0
- Social security funds	S1314	1.4	1.0	0.9	0.7	0.7	0.7
General government reciepts[1]	ESA	55.7	54.9	54.5	54.0	53.7	53.3
- Of which taxes		48.8	48.0	47.9	47.6	47.4	47.1
General government expenditures	ESA	53.2	52.9	52.6	51.9	51.6	51.2
General government budget balance[1]	B9	2.5	1.9	1.9	2.1	2.1	2.1
Net interest payments		-1.8	-1.4	-1.3	-1.2	-1.1	-1.0
Primary budget balance[1]		4.3	3.3	3.2	3.3	3.2	3.1

1) As from 2001, the figures are lowered by half a per cent of GDP due to the change of the Special Pension Savings Scheme.

Source: Statistics Denmark and own calculations.

Local authorities are under the obligation to balance their revenue and expenditure approximately, while central government and social security funds are likely to generate surpluses during the entire period.

The permanent drop in social security fund surpluses of about half a per cent of GDP from 2001 is attributable to the proposed change of the Special Pension Savings Scheme from a redistributive tax scheme into a compulsory, individual (actuarily neutral) scheme. This change will reduce the surplus on general government finances by half a per cent of GDP from 2001 onwards because these savings, following the change, will be considered as private rather than public savings in the national accounts. The calculated tax burden is also reduced by half a per cent of GDP because contributions under the scheme will no longer be considered a tax. Similarly, benefits under the scheme will not be considered general government expenditure. The decrease in the tax burden is real, while the effect on general government finances is purely technical, as benefits will no longer be recorded as government outlays.

The change has relevance neither to central government debt nor to the long-term fiscal-policy requirements. The development in the EMU debt will, however, be affected slightly, but only because social security funds' holdings of government bonds are included in EMU debt (see box 4.1).

Box 4.1. Effects of rearranging the Special Pension Savings Scheme.

Changing the Special Pension Savings Scheme from a tax scheme with a substantially redistributive nature into a compulsory, individual scheme based on actuarial principles is estimated to have only marginal effects on savings and consumption. The effects of the change are shown in *table a*.

Table a. Isolated consequences of the suggested change of the Special Pension Savings Scheme.

	2000	2003	2005
	------------- Per cent of GDP ------------		
Tax burden	0.0	-0.5	-0.5
General government finances	0.0	-0.5	-0.5
Central government finances................	0.0	0.0	0.0
Primary general government budget balance, excluding funds	0.0	0.3	0.0
General government gross debt (EMU).	0.0	0.1	0.4
Central government debt	0.0	0.0	0.0
Fiscal sustainability	0.0	0.0	0.0

Note: The calculations have been made on the assumption that the change has no net effect on private savings and thus on consumption.

As mentioned above, the general government budget balance will be reduced by half a per cent of GDP, which is reflected by an equivalent rise in private savings. The tax burden will also fall correspondingly, while the primary general government budget balance, excluding social security funds, and thus central government debt, will remain unaffected.

Long-term fiscal-policy requirements will also remain unchanged. The reason is that any subsequent benefits under the scheme will not be included as general government expenditure (but will be included as use of private savings).

General government debt (EMU definition) will be affected slightly by the change because the assets of social security funds – and thus their holdings of government bonds – will grow at a slower pace (as the future portfolio mix is assumed to remain unchanged). The explanation is that social security fund holdings of government bonds are deducted from general government debt when the EMU debt is calculated. Note that this debt measure is a gross concept that has no clear-cut interpretation in relation to long-term real-economic requirements for fiscal policy.

Short-term movements in share prices have a very limited impact on private consumption in Denmark because a large part of the shares in Danish hands are owned by pension funds. General government finances are, however, strongly sensitive to changes in share prices. The reason is that the rate of tax on pension fund returns on shares was raised from 5 to

15 per cent in 2000, while the rate of tax on returns on bonds, which are far more stable, was reduced from 25 to 15 per cent.

The sharp drops in share prices since 2000 have therefore weakened general government finances by approximately DKK 11bn in 2001 and DKK 6½bn in 2002. This estimate assumes that the level of share prices has changed permanently and that share prices will follow a more normal path during the remainder of the period of projection. The declining share prices will thus lift the level of general government debt compared to at scenario of "normal" increases in share prices[7], corresponding to a fixed annual reduction in public revenues of 0.1 to 0.2 per cent of GDP.

A rough estimate based on historical experience shows that revenues from tax on pension investment returns will fluctuate by slightly more than 1 per cent of GDP on average under the new rules. This reflects the fact that returns on bonds are relatively stable, while changes in share prices cause tax revenues to fluctuate substantially.

By way of comparison, the annual fluctuations in total general government finances have stood at an average of 1½ per cent of GDP during the past 25 years and have been lower than 1 per cent of GDP since 1990. Tax on returns on shares may thus more than double fluctuations in the overall general government budget balance, and changes are very difficult to predict.

The large fluctuations from year to year in revenues from tax on pension investment returns do not affect the long-term sustainability of general government finances, and compensation should not be made through changes in fiscal policy, which would then become very unstable. Yet the fluctuations may increase the importance of average surpluses on general government finances so that random fluctuations do not give rise to speculation about the sustainability of fiscal policy.

The annual fluctuations in revenue from different types of taxes, such as tax on pension investment returns, also implies that the technically calculated tax burden (tax receipts as a percentage of GDP) may fall or rise considerably during individual years in spite of the tax freeze.

[7] During an average normal period, share price increases are assumed to be 7 per cent p.a.

In the autumn of 2001, the Danish UMTS licences were sold at an auction yielding a total of about DKK 3.8bn. Twenty-five per cent of this amount is due for payment in 2001, while the remainder will be paid in equal instalments over the next ten years. The balance on the central government's current, investment and lending accounts will be affected similarly. Statistics Denmark has chosen to include the revenue in the measure of general government finances in the National Account as an annuity of approx. DKK 253m year over the next 20 years[8].

The surpluses on general government finances during the period under review cause the ratio of interest expenditure to GDP to drop during the years up to 2005. Net interest expenditure will thus fall by just above ¾ per cent of GDP from 1.8 per cent of GDP in 2000 to 1.0 per cent in 2005. The calculated surpluses on general government finances also imply that general government debt will decrease from nearly 47 per cent of GDP in 2000 to slightly more than 35 per cent of GDP in 2005 (see table 4.3).

The general government budget balance is relatively sensitive to economic fluctuations. An increase in GDP and employment of 1 per cent above trend – or a widening of the output gap of 1 percentage point – is estimated to improve general government finances by about 0.8 per cent of GDP. The so-called structural budget balance can be calculated for the purpose of adjusting for such cyclical dependency.

[8] The method chosen is according to Statistics Denmark consistent with SNA93. The method deviates however from the guidelines of Eurostat.

Table 4.3. Breakdown of change in general government debt.

	ESA	2000	2001	2002	2003	2004	2005
		------------- Per cent of GDP -------------					
General government debt....................		46.8	43.5	42.9	40.1	37.6	35.1
Change in general government debt.....		-5.9	-3.3	-0.6	-2.8	-2.5	-2.5
Contribution to change in debt							
- General government budget balance[1]		-2.5	-1.9	-1.9	-2.1	-2.1	-2.1
- Of which primary budget balance[1]		-4.3	-3.3	-3.2	-3.3	-3.2	-3.1
- Of which net interest expenditure	D41	1.8	1.4	1.3	1.2	1.1	1.0
- Social security funds balance		1.4	1.0	0.9	0.7	0.7	0.7
- Change in funds share of government bonds.		-0.7	-0.4	0.2	-0.1	-0.1	-0.1
- Financial items, etc.[2]........................		-0.8	-0.1	1.5	0.5	0.5	0.5
- Growth contribution	B1g	-3.4	-1.8	-1.4	-1.7	-1.5	-1.5

1) As from 2001, the figures are lowered by half a per cent of GDP due to the change of the Special Pension Savings Scheme.

2) This item includes receipts from the sale of government assets (privatisation, reduction of the assets of the Social Pension Fund, etc.), payment shifts in the taxation area, capital losses on issues of securities, etc.

Source: Statistics Denmark and own calculations.

The structural budget balance – providing an estimate of general government finances adjusted for cyclical effects and special items such as fluctuations in share prices – is likely to fall, in technical terms, by half a per cent of GDP from 2000 to 2001 due to the change of the Special Pension Savings Scheme. The general government budget balance in 2003 and 2004 is expected to be slightly higher than the structural budget balance, while it is forecasted to return to its structural level in 2005 (see table 4.4).

Table 4.4. Fiscal policy 2000-2005.

	2000	2001	2002	2003	2004	2005
	----------------- Per cent of GDP					------------------
GDP, real growth in per cent..............	3.0	1.1	1.4	2.4	1.9	1.9
Public-sector balance[1] (1)	2.5	1.9	1.9	2.1	2.1	2.1
Interest payments................................	-1.8	-1.4	-1.3	-1.2	-1.1	-1.0
Potential GDP, real growth, per cent ...	3.2	1.2	1.7	2.0	1.5	1.6
Output gap...	0.8	0.6	0.3	0.7	0.3	0.0
Cyclical contributions (2)	0.6	0.5	0.3	0.5	0.2	0.0
Contributions from special items (3)....	-0.3	-0.4	-0.3	-0.3	-0.1	0.0
Structural budget balance[1] (1)-(2)-(3)...	2.2	1.8	1.9	1.9	2.0	2.1

1) As from 2001, the figures are lowered by half a per cent of GDP due to the change of the Special Pension Savings Scheme.

Note: The special items mainly account for the deviation of net interest expenditure from trends and fluctuations in the tax revenue on pension investment returns.

Source: Statistics Denmark and own calculations.

The calculated tax burden (taxes paid as a per cent of GDP) is expected to fall by almost 1¾ percentage points from 2000 to 2005 (see table 4.5). The suggested change of the Special Pension Savings Scheme alone will reduce the tax burden by half a percentage point.

Moreover, the projected tax cuts in 2004 and 2005, included in personal taxes, will contribute to a drop in the tax burden of 0.1-0.2 percentage points. Freezing the property value tax and excise duties (in Danish kroner) will, in isolated terms, lower the tax burden by almost 0.2 percentage points in 2005[9]. On the other hand, lifting the 24-hour rule and the resulting reductions in indirect taxes on articles sensitive to cross-border shopping is assumed to be financed, as this is an adjustment, which is caused by external events.

[9] The effects on the tax burden – the ratio of total taxes to GDP – are influenced by the fact that smaller increases in excise taxes also dampen growth in GDP. The effect on the tax burden is thus just below 0.2 per cent, while the remaining effect on public finances (of 0.1 per cent of GDP) shows up as an increase in the ratio of expenditure to GDP (due to technically lower GDP). Disregarding the technical contribution to GDP, the principle of a nominal freeze of certain taxes and duties will reduce the tax burden by approx. 0.3 percentage points.

Table 4.5. Composition of general government finances.

	ESA	2000	2001	2002	2003	2004	2005
		Per cent of GDP					
General gov. budget balance[1]	B9	2.5	1.9	1.9	2.1	2.1	2.1
General government expenditure (burden of costs)	ESA	53.2	52.9	52.6	51.9	51.6	51.2
- Primary expenditure		49.0	49.1	49.1	48.6	48.5	48.2
- Public consumption	P32	25.1	25.4	25.5	25.3	25.4	25.4
- General government investment	P51	1.7	1.8	1.8	1.8	1.8	1.8
- Transfer payments		17.1	17.0	16.9	16.7	16.6	16.3
- Interest expenditure		4.2	3.8	3.5	3.3	3.2	3.0
General government revenue[1]	ESA	55.7	54.9	54.5	54.0	53.7	53.3
- Taxes (tax burden)		48.8	48.0	47.9	47.6	47.4	47.1
- Personal taxes and labour-market contributions		26.3	26.2	26.0	26.0	25.8	25.7
- Of which property value taxes		0.7	0.7	0.8	0.7	0.7	0.7
- Land taxes		1.0	1.1	1.1	1.1	1.1	1.1
- Taxes on pension investment returns		0.7	0.1	0.4	0.7	0.9	0.9
- Corporation taxes		2.4	3.2	2.9	2.6	2.4	2.3
- Compulsory contributions		2.2	1.6	1.6	1.6	1.6	1.6
- Indirect taxes		16.1	15.8	15.7	15.6	15.6	15.5
- Interest revenue	D41	2.4	2.4	2.2	2.1	2.1	2.0
- Other revenue		4.5	4.5	4.4	4.3	4.3	4.3

1) As from 2001, the figures are lowered by half a per cent of GDP due to the change of the Special Pension Savings Scheme.

Source: Statistics Denmark and own calculations

5. Risk, sensitivity and changes in estimates

The uncertainty surrounding the economic development in the fortscoming years centres particularly on international conditions.

The impact of macroeconomic measures particularly in the form of interest rate cuts and the announced tax reductions in the USA are not unlikely to be stronger than expected, both in terms of speed and effect. The international recovery may therefore come sooner than forecasted. Furthermore, the stock adjustments must be considered completed, just as lower oil prices will stimulate demand in most countries.

Many economies including Denmark have also undergone structural improvements over the past few years and are currently in a fundamentally healthy condition as regards general government finances and the balance of payments, and they also maintain low inflation.

Yet other factors may pull down growth. The uncertainty surrounding the combat against terrorism and any derived impact on commodity prices is not as evident as it has been, but remains significant. At the same time, a number of low-income/middle-income countries are currently experiencing financing problems, to which should be added the current economic crisis in Argentina. Finally, Japan's financial sector is suffering from structural problems.

However, the assessment is that the Danish economy, due to a strong initial position and the composition of exports, is relatively well prepared to face any further slowdown in the international economy. Yet a downturn in international demand will inevitably affect the outlook for output and domestic employment negatively. Still, in these circumstances, factors such as lower commodity and oil prices and possibly also lower interest rates would pull in the opposite direction.

Despite its openness, the Danish economy may therefore prove reasonably robust to withstand a prolonged slowdown in international growth. An estimated correlation between international growth and interest rates (the Taylor rule) shows that a reduction in growth of 1 per cent in 2003 compared to the forecast would only have an effect of 0.2 per cent on growth in Denmark, while general government finances and the balance of payments would weaken by 0.1 and 0.3 per cent of GDP, respectively. The effects on growth are inherently amplified if the pronounced international downturn is followed or caused by increases in commodity prices that weaken the possibilities of international monetary adjustments (see box 5.1).

Box 5.1. Sensitivity analysis of a change in export market growth.

The Medium Term Economic Survey for 2000 estimates a reaction function (a so-called Taylor rule) for the US and EU central banks, showing that a widening of the output gap of 1 percentage point typically triggers a rise in interest rates of about 0.3 percentage points in both the USA and in the eurozone. Because of the fixed rate of the Danish krone, this will lead to a similar decrease in Danish interest rates. This decrease will lift private consumption as well as investments and thereby partly offset the effect of slower export market growth on exports (see table a).

Table a. Change in assumptions for international growth and Danish economic indicators.

	2002	2003	2004	2005
Assumptions for international growth	----------------------	Per cent	----------------------	
Foreign GDP level.	0.0	-1.0	-0.5	0.0
Interest rates...	-0.15	-0.23	-0.08	-0.00
Danish economic indicators				
GDP level	0.0	-0.2	-0.1	0.1
Balance of payments, per cent of GDP ..	-0.1	-0.3	-0.2	0.0
General government finances,				
per cent of GDP....................................	0.0	-0.1	-0.1	0.0

Note: Long-term interest rates are assumed to change in tandem with short-term interest rates. The central banks of Denmark's other trading partners are also assumed to copy actions taken by the US Fed and the ECB. An elasticity factor of 2 is used for export market growth in industrial goods, while that used for other export components is 1.

The forecasts assume that the foreign output gap will subsequently return to its former level. Accordingly, the cut in interest rates will only be temporary.

On balance, lower cyclical growth in foreign GDP – followed by lower interest rates – thus has a limited effect on GDP growth in Denmark. The growth composition will, however, change towards smaller contributions from net exports and higher contributions from domestic demand, and thus reduce the surplus on the current account.

If central-bank reactions – and thus interest rate cuts – are to be excluded from the sensitivity analysis, the effect on GDP would be almost twice as large, while the effect on the balance of payments (as a percentage of GDP) would be nearly halved.

If the current slowdown in growth turns out to last longer than anticipated, the effect on general government finances, etc., will inherently be larger. If growth in Denmark and abroad is half a percentage point lower than expected from 2002 to 2005 and the level of interest rates remains unaffected, general government finances in 2005 will weaken by about 1¼ per cent of GDP and general government debt will be almost 4½ per cent of GDP higher than expected. Since domestic demand will be considerably subdued in such a situation, the balance of payments will improve slightly despite lower exports (see table 5.1).

Table 5.1. Effect of GDP growth falling by half a percentage point in Denmark and abroad.

	2002	2003	2004	2005
	Per cent of GDP			
Balance of payments	0.1	0.2	0.3	0.4
General government finances...........	-0.2	-0.6	-0.9	-1.2
General government debt.................	0.5	1.4	2.7	4.4

Note: The reduction in Danish growth has been calibrated by exogenously adjusting private consumption and investments.
Source: Own calculations.

Table 5.2 shows an overall estimate of the interest rate sensitivity of general government finances. It appears that a permanent (externally triggered) increase in interest rates in Denmark and abroad of 1 per cent (assuming an unchanged yield curve) will weaken general government finances by about 1 per cent of GDP over a period of four to five years. The overall sustainability of fiscal policy is only affected to a small extent because higher interest rates also result in larger pensions funds in the long run due to higher investment returns. This implies that the future tax value of pension payments increases as well, thus improving public finances in the long run[10].

Table 5.2. Effect of a fall in interest rates of 1 percentage point.

	2002	2003	2004	2005
	Per cent of GDP			
General government finances...........	0.1	0.5	0.9	1.1
General government debt.................	-0.1	-1.0	-2.0	-3.2

Source: Own calculations.

[10] It should be pointed out that the effects have been calculated on the assumption of a parallel increase in Danish and foreign interest rates. If only Danish interest rates (the interest rate spread) rise, the effects are clearly negative. The interest rate balance of the private sector will generally worsen, thus lowering tax receipts. In this case, only the rate of interest on Denmark's gross liabilities will increase – not that affecting gross assets.

On balance, it is the assessment that Denmark will continue to meet the convergence criteria, even if important assumptions for the forecasts change.

Changes in projections

The slowdown in the international economy and the tragic events of September 11, 2001, have induced a downward revision of short-term economic forecasts compared to the convergence programme of December 2000.

Changes in the medium term will be insignificant, though. The main reasons are that the duration of the international slowdown is expected to be relatively short and that the Danish economy is already close to its production potential.

According to the latest calculation of the national accounts, GDP grew by 3.0 per cent in 2000. This is more than half a percentage point higher than forecasted in the previous convergence programme (see table 5.3). The reason is substantially higher growth in machinery investment and net exports than expected. Higher growth partly explains the deviation in the estimate of general government debt as a percentage of GDP, but the main causes are deviations in the timing of corporate tax payments. On the other hand, the public sector budget surplus was smaller than expected. This covers deviations in both revenues and expenditures, including lower-than-expected taxes on pension investment returns in particular.

In 2001 and 2002, growth in GDP has been reduced by 0.7 and 0.3 percentage points, respectively. The downward revision in 2001 was triggered by lower growth in foreign and domestic demand, mainly in investment. In 2002, the downward revision is attributable to a smaller growth contribution from net exports and a higher drain on stocks. The convergence programme from December 2000 was based, as from 2003, on a structurally balanced growth path, implying an increase in GDP of almost 1¾ per cent. Presently, GDP growth in 2003 is estimated at 2.4 per cent, based on expectations of lower interest rates and a stronger international economic climate.

The estimate of consumer price inflation is also influenced by the slowdown in growth. Moreover, the tax freeze in itself leads to lower inflation, as indirect taxes (in Danish kroner) are no longer assumed to be adjusted in line with price developments.

Table 5.3. Changes in central estimates since the previous convergence programme.

	2000	2001	2002	2003	2004	2005
	Per cent					
GDP growth						
- CP, December 2000	2.4	1.8	1.7	1.7	1.6	1.7
- CP, January 2002	3.0	1.1	1.4	2.4	1.9	1.9
- Change	0.6	-0.7	-0.3	0.6	0.3	0.1
Price inflation (consumer price index)						
- CP, December 2000	2.9	2.5	1.8	2.0	2.0	2.0
- CP, January 2002	3.0	2.4	1.6	1.9	1.6	1.6
- Change	0.1	-0.1	-0.2	-0.1	-0.4	-0.4
General government budget balance[1]	Per cent of GDP					
- CP, December 2000	2.7	2.8	2.6	2.6	2.7	2.9
- CP, January 2002	2.5	1.9	1.9	2.1	2.1	2.1
- Change	-0.2	-0.9	-0.7	-0.5	-0.6	-0.7
General government debt	Per cent of GDP					
- CP, December 2000	48.3	44.7	41.8	39.2	36.8	33.7
- CP, January 2002	46.8	43.5	42.9	40.1	37.6	35.1
- Change	-1.5	-1.2	1.0	0.9	0.8	1.4

1) General government finances are lower in the new projection since the net changes are largely attributable to the technical effects of the change of the Special Pension Savings Scheme.

In addition to the change of the Special Pension Savings Scheme, lower revenue from tax on pension investment returns in the wake of the fall in equity prices contributes to slightly weaker general government finances in both 2001 and 2002. Higher-than-expected corporation tax revenue pulls in the opposite direction.

6. Fiscal sustainability

An essential element in the long-term strategy is to maintain a surplus in general government finances between 1½ and 2½ per cent of GDP on average up to 2010. General government debt will thus be reduced and contribute to ensuring robustness towards the ageing of the population during the next 30-40 years.

Not until around 2010 will the number of elderly people start to rise dramatically. To be able to counter the future pressures on expenditures on old-age pensions, care for the elderly, etc., it is crucial that general government debt is reduced substantially in the coming decade.

Thus, the size of present general government surpluses must be assessed in the light of the public sector's future obligations.

The requirement for general government finances has been recalculated on the basis of the most recent assessment of economic conditions and a new demographic projection. The calculation supports, that, overall, the aim should be to achieve a surplus of 1½-2½ per cent of GDP up to 2010, taking into consideration the change of the Special Pension Savings Scheme (see table 6.1).

The requirement for general government finances can be divided into two components. One component is the growth in future net obligations in the form of future additional expenditure on care for the elderly, old age pensions, etc., which is only partly met by additional revenues concerning the taxation of rising pension payments, etc. The growth in future net obligations can be converted into a fixed annual expenditure of 1.7 per cent of GDP in 2002[11]. In addition, the requirement allows for the fact that the part of the general government surplus accruing from social security funds (of 0.9 per cent of GDP in 2002) has been earmarked for higher pension payments to households in the long term.

Viewed in isolation, the change of the Special Pension Savings Scheme implies a downward adjustment of the surplus in the social security funds and in the general government finances of exactly the same size (½ per cent of GDP). Compared to previous statements, the requirement for general government finances is consequently reduced by ½ per cent of GDP. But since the surplus in general government finances is reduced correspondingly, the fiscal policy requirements will, seen as a whole, remain unchanged. Technically, however, the target range for general government finances has to be changed to between 1½ and 2½ per cent of GDP, while the previous range was 2-3 per cent of GDP.

[11] Individual contributions to future net obligations have basically been calculated as an annuity on the basis of the net additional expenditure in relation to the base year (see note to table 6.1).

Table 6.1. Long-term requirements for general government finances, per cent of GDP.

	New basis 2002	New basis 2003	Average (2002-10)[1]
Increase in future net obligations	1.7	1.6	1.4
Balance in social security funds	0.9	0.7	0.8
Projected requirement for general government budget balance incl. social security funds	2.5	2.3	2.1
Target for general government budget bal..		1½-2½	
Actual budget balance...............................	1.9	2.1	2.1
Structural budget balance..........................	1.9	1.9	2.1
Adjusted general government budget bal.[2] .	-0.7	-0.2	0.0
General government budget balance adjusted for cyclical fluctuations	-0.7	-0.4	0.0

Note: The rise in future net obligations has been calculated as the net present value, computed as an annuity, of the following flows: 1) The purely demographic consequences for future general government expenditures and revenues, including rising expenditures on the elderly and changes in employment based on expected future demographic changes. 2) The consequences of a shift in the private pension sector from net payments received to net payments made. 3) The current general government debt, and 4) Declining revenues from corporation tax because of the current high level and falling production of oil and natural gas in the long term. The calculation is based on this assessment of economic conditions and the most recent population projection from Statistics Denmark, which, seen in isolation, increases future net obligations by some 1 per cent of GDP compared to earlier estimates. Two technical improvements in the method of calculation pull in the opposite direction by approximately the same magnitude. They comprise the inclusion of anticipated additional revenues from indirect taxes out of rising transfers (as they increase compared to GDP) and an adjustment for the estimate that the expected increase in life expectancy will reduce the age-specific drain on health-related public services such as nursing homes, home help and the Health Service. The development for the private pension sector has been recalculated on the basis of a new pension model.

1) The average calculation represents a sustainable scenario for general government finances starting in 2002.

2) The adjusted general government budget balance shows the requirement to adjust fiscal policy to ensure sustainability if this adjustment is made immediately, i.e. the gap between the current general government budget balance excluding the surplus in social security funds and projected future net obligations. If the adjusted general government budget balance is exactly zero, then the public sectors intertemporal budget constraint is met and general government net debt in per cent of GDP will remain stable in the long run, given assumed rules and practices governing public expenditures and receipts. Hence, fiscal policy will be sustainable.

Towards 2010 the sustainable general government budget balance is calculated to approx. 2 per cent of GDP on average. This supports the medium term target for the government budget. The target has been set as an interval due to the general uncertainties related to this kind of calculation.

The fiscal bill for 2002 anticipates a surplus in general government finances of just below 2 per cent of GDP in 2002, both before and after adjustment is made for cyclical fluctuations, etc. This figure lies within the target range, and fiscal policy for 2002 is consequently in line with the medium-term targets (which means that it is considered to be sustainable). In 2003, a general government surplus is expected, which also lies within the interval.

The projected requirement for general government surplus is based on a scenario with constant unemployment and participation rates compared to the baseline year as well as a constant tax revenue – in per cent of GDP – except for certain technical contributions, mainly related to demographic developments and increasing pension payments.

This implies, that the increase in participation rates and the reduction in unemployment in the main forecast create fiscal room for manoeuvre – without jeopardizing sustainability. Within the framework of a tax freeze, these gains finances a reduction in earned income taxes as from 2004 and improvements in the standards and coverage of public services[12].

Future net obligations

Provided that employment rates remain unchanged – corresponding to the assumption in the sustainability calculations – it is, with the revenue and expenditure rules applied, estimated that expenditures related to general government transfers and public consumption will increase by 7.4 per cent of GDP up to 2035. Rising expenditures on old age pensions and health-related general government expenditures represent the main part, with an increase of 5.4 percent of GDP (see table 6.2). The rise in general government expenditures caused by demographic changes will peak around 2035, following which the pressures on expenditures will stabilise at some 5½-6 per cent of GDP.

[12] After 2010, tax revenues are technically assumed to follow the trend in GDP and employment rates – divided to age, gender and origin – are kept constant.

Table 6.2. Long-term sustainability of public finances, baseline scenario, per cent of GDP.

	2002	2005	2010	2020	2030	2035	2050
	Level	--- Changes compared to 2002, per cent -					
Total expenditure, excl. net interest payment	51.3	0.0	1.1	3.0	6.4	7.4	5.5
- Public consumption	25.5	-0.1	0.0	0.7	2.6	3.4	2.9
- Health care	7.4	-0.1	0.0	0.6	1.6	2.0	1.8
- Transfers[1)]	16.6	0.0	1.0	2.3	3.7	4.0	2.6
- Old age pensions	4.4	0.2	1.1	2.1	3.0	3.4	2.5
Total revenues	54.5	-0.5	-0.1	0.9	2.3	2.8	2.1
- Pensions contributions	-	-0.1	0.1	0.9	1.9	2.4	2.4
National pension fund asset[2)] (per cent of GDP)	112	126	153	193	226	233	227
Assumptions	------------------------- Per cent ---------------------						
Nominal GDP per employed person	3.0	3.6	3.7	3.9	3.7	3.7	3.8
Nominal GDP	3.2	3.3	3.6	3.6	3.3	3.5	3.9
Particip. rate, males (aged 20-64)	85.8	84.9	83.6	82.9	81.7	81.7	81.8
Particip. rate, female (aged 20-64)	75.6	74.5	73.2	72.0	70.2	70.3	70.7
Total participation rate (aged 20-64)	80.7	79.7	78.5	77.5	76.0	76.0	76.3
Unemployment (per cent of labour force)	5.2	5.2	5.2	5.2	5.2	5.2	5.2

Note: The projection is based on the baseline scenario used in the sustainability calculation, where unemployment as well as participation rates divided by age, gender and origin is held constant. Changes in participation rates in the table reflect changes in the composition of the population regarding age, gender and origin. The underlying tax revenues are assumed to be constant in per cent of GDP.

1) Transfer from supplementary pension funds (ATP etc.) is not included.

2) Total pension asset including private and supplementary pension funds (ATP, LD etc.)

Source: Own calculations.

Taxes deriving from rising pension sector net payments will finance part of the future demographic pressure on expenditures. The net revenue from such taxes will gradually increase up to 2040, after which it will make up approx. 2½ per cent of GDP. In addition, higher tax revenues will offset the rising expenditures on public transfers. Lower revenues from corporation taxes and from oil and gas extraction in the North Sea pull in the opposite direction. Overall, the baseline projection suggests that total net additional expenditures in 2035 will peak at some 4¾ per cent of GDP compared to 2002.

If the future net additional expenditures are converted into a hypothetic annual provision, which should be set aside to finance these net additional expenditures, provisions in the order of 1.7 per cent of GDP must be made. This also takes into account the fact that the continued rise in production and the price level erodes public sector debt. This permanent need for savings is also found in the projected requirement for general government finances in table 6.1.

As mentioned above, the main projection assumes a small further reduction in unemployment and higher participation rates. This means that GDP will increase compared to the baseline scenario on which the sustainability projection is based. Moreover, the drain on transfers will be curbed. Inclusion of these contributions implies that the calculated increase in future net obligations will be reduced. In particular, public consumption expenditures and transfers will only increase by 4¾ per cent of GDP up to 2035, while the rise in total net expenditures will fall from the previously mentioned 4¾ per cent to 2 per cent of GDP. In the main projection the fiscal gains due to higher employment rates are earmarked to lower taxes on earned income and some growth in public service standards and degrees of coverage.

Appendix. Main assumptions

B1. Basic assumptions.

	2000	2001	2002	2003	2004	2005
Short term interest rate	4.7	4.6	3.6	4.1	4.5	4.8
Long term interest rate (10-year government bonds)	5.6	5.1	5.2	5.6	5.9	6.1
USA: short term (3-month money market)	5.3	4.8	4.8	5.2	5.4	5.5
USA: long term (10-year government bonds)	6.1	5.1	5.0	5.6	5.8	5.9
USD/EUR exchange rate	0.92	0.90	0.92	0.94	-	-
DKK/EUR exchange rate	7.45	7.45	7.46	7.46	7.46	7.46
USA, GDP growth	4.2	0.9	0.5	3.4	-	-
Japan, GDP growth	1.5	-0.6	-0.9	0.5	-	-
EU-15, GDP growth	3.3	1.7	1.4	2.9	-	-
Growth of relevant foreign markets	11.9	1.0	2.0	7.7	4.6	4.2
Oil prices, (Brent USD/barrel)	28.3	24.5	20.0	22.0	22.5	23.0