



REGERINGSKANSLIET

Ministry of Finance

Updated Swedish Convergence Program

November 2002

I Introduction

In accordance with the Council's regulation (EC) 1466/97, Sweden submitted its convergence programme in December 1998. The programme was evaluated and approved by the Council during the spring of 1999. In accordance with the Council's regulation, an update of the convergence programme is to be submitted annually. Updates were submitted in November 1999, 2000 and 2001 and approved early the following year. This update has been drawn up in parallel with the Government Budget Bill for 2003, which was presented to the Riksdag on 8 October 2002. The Government Budget Bill is based on an agreement between the Social Democratic government and the Left Party. The Green Party has, in a Parliamentary Bill together with the Social Democratic government and the Left Party, joined the agreement concerning guidelines for economic policy and expenditure and revenue for 2003.

The update of the convergence programme is based on the assessment of Sweden's economy contained in the Government Budget Bill for 2003. This assessment involves only a marginally weaker outlook for 2002, compared with the forecast in the updated programme for 2001, despite considerably weaker global developments. The expansionary fiscal policy makes an important contribution to the relatively favourable development. The assessment for 2003 involves slightly increased growth. The economic policy stance and the budget policy targets presented in the convergence programme for 1998 remain unchanged. This means, among other things, that public finances must show a surplus of 2 per cent of GDP on average over a business cycle and that central government expenditure must not exceed the expenditure ceilings set.

Estimates for 2005 are not included in the Government Budget Bill for 2003. Neither has the government proposed an expenditure ceiling for 2005. Chapter VIII "Sustainability of public finances" includes a projection up to 2005, which is based on GDP reaching the long-term sustainable output level. The surplus in public finances is then assumed to be 2 per cent of GDP.

II Economic policy framework and targets

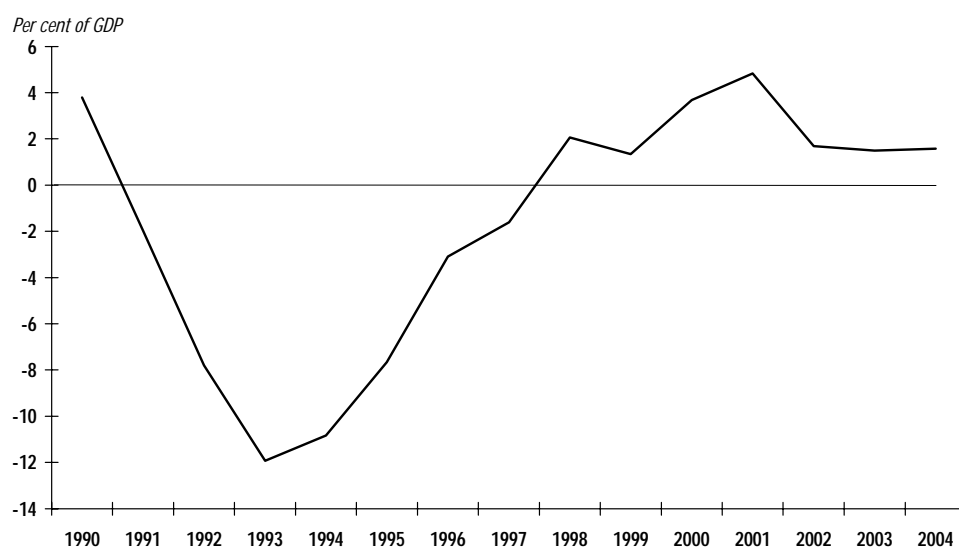
Economic policy continues to focus on full employment and increased prosperity through good, sustainable growth. Stable prices and sound public finances are a precondition for achieving this. The target of a 2 per cent surplus in public finances over a business cycle remains unchanged and the expenditure ceilings set shall be maintained. The target of a maximum of 4 per cent open unemployment was achieved in 2000. Unemployment has since then been on average below 4 per cent. The employment target is now being focused on. In 2004, 80 per cent of persons aged 20 to 64 shall be in regular employment. Moreover, the government has set the targets of halving the number of persons receiving social benefits between 1999 and 2004 and halving the number of sick leave days by 2008.

The crisis in public finances in the early 1990s indicated in a drastic way the need for guidelines and a framework for fiscal policy. A fiscal policy focused on medium-term

budget targets has significantly contributed to the consolidation of public finances and to the favourable development of growth and employment during the past few years.

In accordance with the Stability and Growth Pact, Member States shall aim for public finances, which are close to balance or in surplus in a medium-term perspective. The Riksdag has supported the government's target of a surplus in general government net lending equivalent to 2 per cent of GDP on average over a business cycle. Such a surplus provides a stable basis for the challenges resulting from the sharp increase in the percentage of older people in the population in the future. The surplus also provides a safety margin in public finances, making it possible to counter a recession with a countercyclical fiscal policy.

Diagram 1: General government net lending



Since 1997, a new budget process has been applied, which includes three-year nominal ceilings determined by the Riksdag for central government expenditure, including expenditure on old-age pensions. The ceilings determined for 2003 and 2004 are SEK 818 billion and SEK 852 billion respectively¹ The general election has resulted in insufficient preparation time to decide on long-term budgetary policy. The government will therefore return in the Spring Fiscal Policy Bill for 2003 with an assessment of appropriate expenditure ceilings for both 2005 and 2006. Proposals for expenditure ceilings will be submitted in the Government Budget Bill for 2004. As from 2000, a balanced budget requirement applies to municipalities and county councils.

In 2002–2004, the surplus in public finances is estimated at just over 1.5 per cent of GDP. Taxes are not fully allocated in the National Accounts. As a result, the net lending reported for individual years is affected by the deferred collection of tax on capital income in particular. Over a number of years, general government surpluses are, however, not affected. In 2003 and 2004, there are still expected to be unutilised resources in the economy. The actual output level is expected to be below the potential level. The

¹ Due to technical adjustments, the expenditure ceilings for 2003 and 2004 are reduced by SEK 26 billion, compared with the ceilings stated in the previous programme.

structural surplus, which is equivalent to the surplus achievable on full resource utilisation, is therefore expected to be higher than the reported surplus in both years. In view of both the incomplete allocation of tax revenues in the National Accounts and the gap between actual and potential output, the structural surpluses in public finances in 2002–2004 are, however, expected to be in line with the medium-term target of 2 per cent of GDP.

In the legislation concerning the status of the Riksbank, which came into force in 1999, it is laid down that the objective of monetary policy is to maintain price stability. The legislation also means that independent monetary policy decisions are made by an Executive Board of the Riksbank. The Riksbank has defined the target as 2 per cent inflation, ± 1 percentage point, measured by the consumer price index (CPI). The Riksbank has clarified when there may be reason to deviate from this rule. This may apply if the CPI is affected by temporary factors, which are not expected to have a permanent impact on inflation, or if major deviations occur and a rapid return to the target would be associated with large real economic costs. In such situations, the Riksbank makes clear in advance how large a deviation from the inflation target may be justified in a 1–2 year term. In framing monetary policy, the Riksbank normally disregards the effects on inflation of changes in indirect taxes, subsidies and interest expenses for owner-occupied dwellings by taking into account the underlying inflation measured by UNDI1X.

In exchange rate policy, the government decides on the exchange rate system, while the Riksbank is responsible for the practical application, e.g. which central rate applies in a fixed exchange rate system. Sweden's experiences of the current monetary policy regime, with an inflation target and a floating exchange rate, are favourable. Pegging the Swedish krona to ERM2 is currently not under consideration.

III Economic policy

Fiscal policy

The consolidation of public finances in the 1990s has provided scope for increased expenditure in prioritised areas. Together with the reforms proposed in the Government Budget Bill and decisions previously made, expenditure reforms of approximately SEK 20 billion will take effect in 2003, which is equivalent to 0.9 per cent of GDP. Major initiatives will be taken in health and medical care, partly through increases in the general grants to local government, as well as in pensions, international development aid and the labour market. In 2003, savings will also be made and programmes phased out equivalent to approximately SEK 7 billion (0.3 per cent of GDP).

During the period 2000–2002, the first three stages of a reform of household income tax have been implemented. The central government financial situation permitting, the government will later in its mandate period 2003–2006 propose implementation of the final stage of the tax reform. A “green” tax change is proposed for 2003, which involves raising energy taxes and lowering income taxes correspondingly by raising the basic

allowance. The tax changes proposed in the Government Budget Bill involve a reduction in the total tax levy of approximately SEK 2 billion compared with 2002.

Overall, reforms including financing equivalent to approximately SEK 15 billion or 0.6 per cent of GDP are proposed for 2003.

Table 1: Proposed expenditure and revenue reforms in 2003

SEK billion

Revenue reforms		
	Household income taxes	-2.6
	VAT, construction services	-0.4
	Energy taxes	2.1
	Other	-1.0
Total revenue reforms¹		-2.0
Expenditure reforms		
U0 ² 1	Administration and legal system	0.5
U0 7	International development aid	1.6
U0 9	Health and medical care	1.2
U0 10	Economic security in case of illness and disability	1.5
U0 11	Pensions	2.8
U0 12	Economic security for families and children	1.1
U0 13	Labour market	1.7
U0 15	Study allowance	0.8
U0 16	Education, training and research	1.7
U0 18	Housing	0.4
U0 19	IT infrastructure	0.2
U0 20	Environment	0.2
U0 21	Energy	0.4
U0 25	General grants to municipalities	3.7
	Infrastructure	1.5
	Other	0.5
Total expenditure reforms		19.8
	Financing, reduced expenditure	6.9
Increased expenditure including financing etc.		12.9
Reforms including financing		14.8

Note: An agreement of principle between the Social Democratic Party, the Left Party and the Green Party in a joint Parliamentary Bill involves minor changes in expenditures. Furthermore the "green" tax change will be expanded by increases in energy taxes and lower income taxes comprising SEK 0.4 billions compared to the figures in the table.

¹ Gross effects of rule changes, accrual accounting.

² Expenditure area.

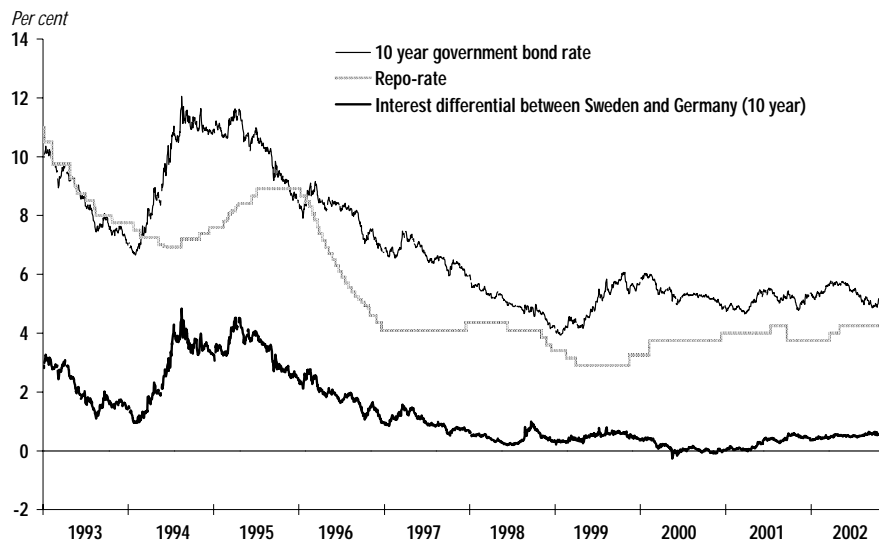
Source: Ministry of Finance.

Monetary policy

In the early summer of 2001, the Swedish krona weakened from an already low level and, together with relatively high resource utilisation and unexpectedly rapid price rises, this contributed to an increased risk of rising inflation expectations. The Riksbank therefore decided to intervene on the foreign exchange market. In July 2001, the inflation risks remained for the same reasons as when the intervention was carried out and the repo rate

was raised from 4 per cent to 4.25 per cent. Following the terrorist attacks of September 11, central banks in the USA and a number of other countries lowered their key rates. Since there was considered to be an increased risk that inflation would be below the target in two years' time, the Riksbank elected to lower the repo rate to 3.75 per cent. In early 2002, inflation had increased more than forecast, which was partly due to temporary supply problems. But even excluding these price increases, inflation had increased and resource utilisation was considered to be higher than expected. In the light of high domestic inflation and high inflation expectations, the Riksbank implemented two rate increases totalling 0.5 percentage points to 4.25 per cent in the spring of 2002. During the summer and early autumn, inflationary pressure declined, partly due to more balanced global developments, falling stock markets and increasing nervousness regarding earnings growth following a number of accounting scandals in the USA. Wage formation and other factors related to domestic resource utilisation were, however, still considered to pose certain increased risks of inflation. Overall, in view of the risk scenario, inflation was expected in the inflation report in October 2002 to be more or less in line with the target, though slightly on the low side, in one to two years' time. The repo rate was left unchanged at 4.25 per cent, but the Riksbank signalled increased vigilance in view of developments on the financial markets.

Diagram 2: Interest rates in Sweden



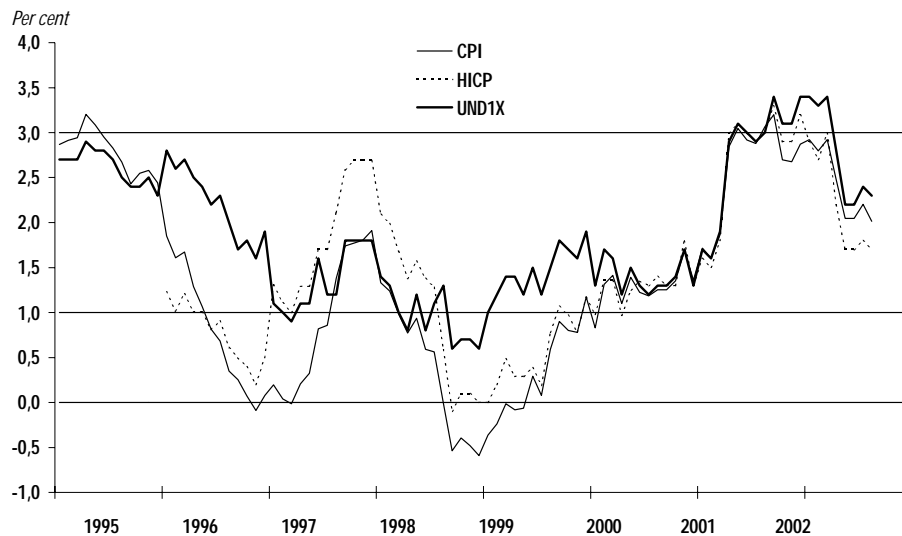
Source: EcoWin.

Inflation

Inflation was low during the years 1998 to 2000 and fell short of the Riksbank's inflation target. In 2001, inflation rose and was slightly above 3 per cent during the autumn. The increase in inflation was largely due to a number of supply problems and other circumstances that only had a temporary impact on inflation. A small part of the increase was, however, probably due to rising domestic inflationary pressure in consumer-related service sectors, where wages rose rapidly and productivity growth was relatively weak. Domestic inflationary pressure is now expected to decline as the rate of wage increase in the service sectors appears to be falling, while service sector productivity is increasing substantially. During the spring and summer of 2002, inflation fell towards 2 per cent and

was 1.9 per cent in September 2002, measured by both the consumer price index (CPI) and UNDI_X.

Diagram 3: Inflation and the Riksbank's tolerance interval



Source: EcoWin.

Market rates

Increased macroeconomic stability with lower inflation and stronger public finances were the basis of falling Swedish bond yields in the 1990s. The economic upturn in the late 1990s led to rising long-term rates in 1999 and early 2000. In 2000, growth expectations slowed, share prices declined and interest rates fell. There were an increasing number of negative economic signals in 2001 and financial uncertainty grew following the terrorist attacks of September 11 in the United States. The year 2002 has been marked by increased nervousness on financial markets as well as continued stock market falls and widespread uncertainty regarding the strength of the economic recovery. Swedish market rates have fallen in line with global interest rates. During the period 1997–2001, there was a reduction in the long-term rate differential trend between Sweden and Germany. Rising inflation and inflation expectations in Sweden relative to the rest of the world combined with increased nervousness on financial markets in the second half of 2001 led to the long-term rate differential between Sweden and Germany rising again. Over the past year, the Swedish 10-year government bond rate has been approximately 50 points above the equivalent German rate. The implicit interest rate differential continues, however, to be low in the long term.² The interest rate differential between Sweden and Germany is expected to decline in the future.

The Swedish krona

Since November 1992, Sweden has had a floating exchange rate, which means that the exchange rate is not a target variable for monetary policy. With an explicit inflation target and a floating exchange rate, the value of the krona is determined by capital flows in

² Implicit swap rate differential between Sweden and EMU in 5 years' time, i.e. the 5-year rate in 5 years' time.

addition to fundamental factors such as terms of trade and relative productivity growth. In 2001, the krona reached very weak levels. The weakening of the krona between June 2000 and September 2001 may be explained, among other things, by financial factors, such as the weak stock market trend and the increased diversification of institutional investors' portfolios. Weak developments in the telecoms sector have also contributed to the depreciation of the krona. The krona began to strengthen in the autumn of 2001. During the spring and summer of 2002, the krona weakened temporarily, probably as a result of the weak stock market trend and the nervousness on financial markets. The krona then continued to strengthen during the autumn. Much indicates that the krona is still undervalued in a medium-term perspective, though to a lesser extent than previously estimated.

Diagram 4: The krona against a trade-weighted index, TCW



IV Economic development and forecasts

The Swedish economy developed favourably during the first half of 2002. Following very weak growth in 2001, household consumption expenditure is again increasing at a good rate and Swedish industrial activity is strong, compared with the subdued global economic situation. Employment is consequently maintained at a good level. Two factors in particular contribute to the development. Firstly, Swedish export firms have a favourable competitive position, which is expected to result in rising market shares in 2002. Productivity growth is also expected to increase in most sectors in 2002, particularly in industry. Secondly, the expansionary fiscal policy leads to a marked strengthening of domestic demand. The fiscal policy measures in 2002 have mostly been targeted at households whose real disposable income is estimated to rise by 4.8 per cent, partly as a result of tax cuts.

In the medium-term perspective, the key rate is assumed to be 4.7 per cent (2004). The exchange rate is assumed to strengthen, so that the TCW index is at 131 in December 2002 and 127 in December 2003 and 2004.

Despite weak global developments over the past year and the substantial downturn in the ICT sector, which is important for Swedish output and exports, demand has held up well in 2002. GDP is expected to increase by 2.1 per cent, which is only 0.3 percentage points lower than the forecast in the updated convergence programme a year ago.³ Swedish economic activity is expected to further increase somewhat in 2003 and GDP is estimated to increase by 2.5 per cent. A decisive prerequisite is that the global economy strengthens. Market growth for Swedish exports is estimated at 2.1 per cent in 2002 and 7.4 per cent in 2003.

Table 2: Demand and output¹

Annual percentage change in volume

	2000	2001	2002	2003	2004
Household consumption expenditure	3.6 ²	0.2	2.0	2.6	2.5
General government consumption expenditure	1.0 ²	1.4	1.7	0.8	0.3
Gross fixed capital formation	5.0	1.5	-1.5	4.6	5.1
Change in stocks ³	0.5	-0.5	-0.4	0.4	0.0
Exports	10.3	-1.4	3.8	6.3	6.2
Imports	11.5	-3.9	1.0	7.8	6.6
GDP	3.6	1.2	2.1	2.5	2.5
GDP level, SEK billion current prices	2 098	2 167	2 249	2 366	2 484

¹ The years 2002–2003 are forecast years. 2004 is calculated on the assumption that the output gap closes in 2005.

² Excluding the effect of the transfer of the Church of Sweden from the local government sector to the household sector in the National Accounts on 1 January 2000. Including this effect, the corresponding figures for 2000 are 4.6 per cent for household consumption expenditure and -0.9 per cent for general government consumption expenditure.

³ Change as per cent of GDP the previous year.

Sources: Statistics Sweden and Ministry of Finance.

Swedish export firms are favoured by good competitiveness in 2002 and exports of goods are therefore estimated to rise by 5.5 per cent, i.e. considerably faster than global market growth. Swedish export industry, with its relatively large emphasis on investment goods, is expected to encounter a favourable composition of demand in 2003, since investment requirements in the rest of the world will then be larger. In 2003, exports of goods are forecast to rise by 6.4 per cent, despite some weakening of competitiveness as a result of a stronger krona. Imports of goods fell in 2001. The increase in exports of goods in 2002 will contribute to an increase in imports of goods. The ongoing destocking in industry and trade will in 2002 limit imports of goods, which are only estimated to rise by 2.3 per cent. In 2003, imports will increase as a result of destocking being replaced by stockbuilding and the assumed strengthening of the krona. The net services balance is expected to be weakly positive in 2002 and weakly negative in 2003. Net exports of goods and services are overall expected to make a positive contribution to growth in 2002 and a negative contribution in 2003.

³ The forecast for last year's updated convergence programme was completed just before the terrorist attacks of September 11 2001.

Investment is expected to remain weak in most sectors in 2002, with the exception of housing investment. Overall, investment is estimated to decline by approximately 1.5 per cent. In 2003, investment is expected to rise by almost 5 per cent. There is still estimated to be available capacity in industry in 2002, resulting in a reduction in investment. In 2003, industrial output is forecast to have strengthened to such an extent that there is a need to increase capacity, and industrial investment is therefore expected to rise by 6 per cent. Investment in the service sectors will decline in 2002 following some very good years. In 2003, investment in the service sector is expected to make a weak recovery. Investment growth in the post and telecommunications sector has been revised downward substantially compared with previous forecasts. In 2002 and 2003, only modest investment growth is forecast in this sector. Housing investment is expected to rise by 5 per cent in 2002. The construction of apartment buildings in particular is increasing at a rapid rate, while the construction of single-family dwellings has been more subdued. In 2003, housing investment is estimated to rise by 12 per cent. However, the increase takes place from historically low levels. Good household income growth, low interest rates and rising prices on the second-hand market for single-family dwellings are positive underlying factors. The shortage of undeveloped land with planning permission and the sharp rise in construction costs are restraining factors.

Growth in output in the Swedish economy was restrained during the first half of 2002 by demand being met by considerable destocking in trade and industry. Change in stocks is forecast to make a negative contribution to GDP growth of 0.4 percentage points for the full year 2002 and to make a positive contribution of an equivalent amount in 2003.

Table 3: Contribution to GDP growth

Percentage points

	2000	2001	2002	2003	2004
Final domestic demand	2.9	0.7	1.2	2.3	2.2
Household consumption expenditure	2.3	0.1	1.0	1.3	1.2
General government consumption expenditure	-0.3	0.4	0.5	0.2	0.1
Gross fixed capital formation	0.9	0.3	-0.3	0.8	0.9
Change in stocks	0.5	-0.5	-0.4	0.4	0.0
Net exports	0.2	1.0	1.3	-0.2	0.3
Exports	4.5	-0.7	1.8	3.0	3.0
Imports	-4.3	1.6	-0.4	-3.1	-2.8
GDP	3.6	1.2	2.1	2.5	2.5

Sources: Statistics Sweden and Ministry of Finance.

Private consumption is estimated to rise by 2 per cent in 2002, which is slightly weaker than the assessment in the previous updated convergence programme. Household disposable income is expected to rise by almost 5 per cent in 2002, partly due to income tax cuts. As a result, there is scope for households to increase both saving and consumption. The National Accounts indicate relatively strong consumption growth, particularly during the second quarter of 2002. Rising prices for single-family dwellings and tenant-owned apartments mean that the wealth position of households continues to

be favourable, despite falling stock markets having weakened their financial position. In 2003, household real disposable income is expected to rise by 2.1 per cent and the total wealth position is expected to continue to be relatively favourable. Household consumption expenditure is therefore estimated to rise by approximately 2.5 per cent in 2003.

To sum up, the increase in GDP growth from 1.2 per cent in 2001 to a forecast 2.1 per cent in 2002 is largely explained by the increase in exports and the recovery in household consumption expenditure. The rise in consumption in 2003 will result in a further increase in the contribution to growth. Important driving forces underlying growth in 2003 are that both gross fixed capital formation and change in stocks are forecast to make positive contributions to growth.

Following four years of a very substantial rise in employment, employment growth slowed in the middle of 2001. Since then, employment has developed weakly. In industry, employment has fallen sharply since the beginning of 2001. However, the service sector, which accounted for a very large proportion of the previous rise in employment, still shows positive growth. Employment has also risen in the general government sector. Total employment as an annual average is expected to remain unchanged in 2002 compared with 2001. Next year, some strengthening of general demand is forecast and employment is estimated to rise by 0.2 per cent. The regular employment ratio for persons aged 20 to 64, which according to the government's target should be 80 per cent in 2004, is estimated to rise from 75.9 per cent in 1999 to just over 78 per cent in 2002.

Table 4: Selected statistics¹

Percentage change, unless otherwise stated

	2000	2001	2002	2003	2004
CPI, Dec-Dec	1.4	2.9	2.2	2.4	2.0
HICP, Dec-Dec	1.3	3.2	1.4	2.1	–
UND1X, Dec-Dec	1.3	3.4	1.9	1.9	–
GDP deflator	1.0	2.0	1.7	2.6	2.4
Increase in hourly wages	3.7	4.3	3.7	3.5	3.5
Number of employed	2.2	1.9	0.0	0.2	0.5
Open unemployment ²	4.7	4.0	3.9	3.8	3.8
Labour market policy programmes ²	2.6	2.5	2.6	2.2	2.0
Work productivity	2.4	0.6	2.6	2.0	1.8
Current account balance ³	3.3	3.2	3.2	3.6	3.4
Disposable income ⁴	2.9	3.0	4.8	2.1	1.7
Savings ratio ⁵	–2.0	0.8	3.5	3.0	2.2

¹ See also Table B.1 for forecast assumptions.

² Per cent of labour force.

³ Per cent of GDP.

⁴ Real change. The figure for 2000 is calculated excluding the effect of the transfer of the Church of Sweden to the household sector.

⁵ Per cent of disposable income. Excluding saving in pension fund reserves.

Source: Ministry of Finance.

Inflation is expected to be in line with the Riksbank's inflation target in both 2002 and 2003. At the end of 2003, the consumer price index is expected to be slightly above 2 per cent, while UND1X is expected to be slightly below 2 per cent. On the one hand, trade is

forecast to need to raise margins, causing upward pressure on prices. On the other hand, this is expected to be offset by a forecast fall in import prices and an anticipated slowing in the increase in unit labour cost in the service sector.

Medium-term scenario

The Government Budget Bill for 2003 contains forecasts for 2002 and 2003 and an estimate for 2004. In 2003, there are estimated to be available resources in the economy. The so-called GDP gap is estimated at approximately 0.5 per cent of GDP. In 2004, growth is expected to be 2.5 per cent, slightly exceeding the estimated long-term growth rate of approximately 2 per cent. Chapter VIII, "Sustainability of public finances", contains a long-term estimate for the years after 2004, which assumes, among other things, that the GDP gap closes in 2005.

V Public finances

Public finances and consequences of the Government Budget Bill for 2003

The surplus in general government net lending is estimated to fall from the high level of 2001. The surpluses for 2002–2004 are expected to be just over 1.5 per cent of GDP. Tax revenue as a percentage of GDP will fall sharply between 2001 and 2002. This is partly due to tax cuts, and partly to the exceptionally high tax revenues from corporate profits and capital gains in 2000 not being reported in the National Accounts until 2001. Expenditure as a percentage of GDP has fallen continuously since 1994 and the expenditure ratio was 54.4 per cent in 2001, which is the lowest level since 1976. In 2002, the expenditure ratio is expected to rise somewhat. In 2003, both revenue and expenditure are forecast to fall as a percentage of GDP, despite the fact that the change to a taxed guaranteed pension will lead to an increase in both taxes and expenditure of 0.5 per cent of GDP. The fall in revenue and expenditure is expected to continue in 2004.

Table 5: General government finances¹

Per cent of GDP

	2000	2001	2002	2003	2004
Revenue	58.4	59.2	56.5	55.9	55.4
Taxes and charges	51.9	53.5	50.8	50.4	49.9
Capital income	3.2	2.3	2.3	2.3	2.3
Other revenue	3.3	3.4	3.4	3.3	3.2
Expenditure	54.7	54.4	54.8	54.5	53.8
Transfer payments	22.2	22.0	22.1	22.3	22.2
Consumption	26.2	26.7	27.2	26.8	26.4
Investment	2.2	2.3	2.5	2.5	2.5
Interest expenditure	4.2	3.4	3.0	2.8	2.8
Net lending	3.7	4.8	1.7	1.5	1.6
Primary net lending	4.7	6.0	2.3	2.0	2.1
Consolidated gross debt	55.3	56.6	53.6	50.9	49.3
Net debt	1.8	-0.2	-1.5	-3.5	-4.9

¹ A more detailed breakdown is presented in Table B.2.
Sources: Statistics Sweden and Ministry of Finance.

The high net lending 2001 was partly due to the incomplete allocation of taxes in the National Accounts, which strengthened reported net lending by 2.5 per cent of GDP, see Table 6. The accounting practice with tax revenue arises primarily as a result of variations in corporate profits and capital gains. Tax on these is reported in the National Accounts with a one-year time lag. With accrual taxes, which give a truer and fairer view of the development, net lending is estimated to fall gradually from 4.7 per cent of GDP in the boom year 2000 to 1.2 per cent of GDP in 2002. This development reflects the consequences of the economic downturn as well as tax cuts and other reforms.

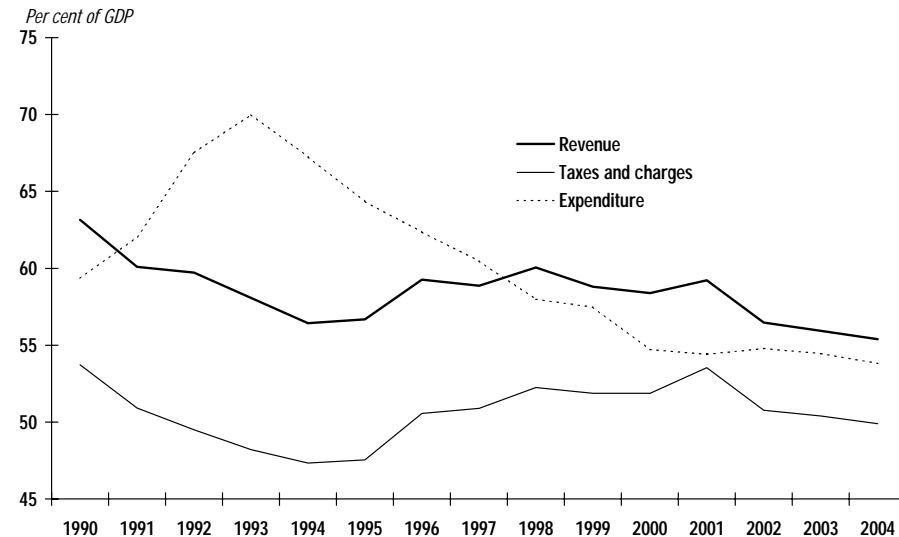
Table 6: General government net lending

Per cent of GDP

	2000	2001	2002	2003	2004
Net lending according to ENS-95	3.7	4.8	1.7	1.5	1.6
Periodization of taxes	1.0	-2.5	-0.5	0.1	0.2
Net lending with accrual taxes	4.7	2.3	1.2	1.6	1.4

Sources: Statistics Sweden and Ministry of Finance.

Diagram 5: General government revenue and expenditure



Sources: Statistics Sweden and Ministry of Finance.

Structural surpluses and fiscal impact

The target of a surplus in general government net lending equivalent to 2 per cent of GDP on average over a business cycle forms the anchor of fiscal policy. In order to assess whether the surplus target is met in individual years, an indicator is used, which reflects the structural level of the surplus, adjusted for temporary effects. Temporary effects mainly consist of cyclical variations in taxes and expenditure, but one-off effects of a different type may also occur, such as one-off tax revenues and the accounting practice with tax revenue.

Fiscal policy is in balance in relation to the surplus target when the structural surplus in public finances is in the region of 2 per cent of GDP. A higher or lower structural surplus may, however, be necessary if the initial balance differs greatly from the surplus target or if discretionary policy is used for the purpose of stabilisation. The calculation of the

cyclically-adjusted balance is based on an assessment of the economic situation, via the output gap, as well as on the effects of the economic situation on public finances. The output gap is estimated on the basis of an overall assessment of a number of indicators of output, the labour market and price and wage formation. The Ministry of Finance's assessment is that a 1 per cent change in output has on average an impact on the general government balance of 0.70 per cent of GDP.⁴

In the Government Budget Bill for 2002, the government made the assessment that the surplus target should be maintained at 2 per cent of GDP. In the bill, it was also stated that a lower surplus would be accepted if the economic situation developed less favourably than expected. Economic growth is now expected to be slightly weaker than forecast in the Government Budget Bill for 2002. GDP growth for 2002 has been revised downward from 2.4 per cent to 2.1 per cent. The surplus in general government finances is estimated at 1.7 per cent of GDP. In the light of the downward revision of growth, this deviation is considered to be acceptable.

Table 7: Structural surplus in public finances

Per cent of GDP

	2000	2001	2002	2003	2004
Net lending	3.7	4.8	1.7	1.5	1.6
Periodization of taxes	1.0	-2.5	-0.5	0.1	0.2
Net lending with accrual taxes	4.7	2.3	1.2	1.6	1.7
Adjustment for GDP gap	-0.2	0.5	0.6	0.4	0.1
One-off effects	-0.5	0.0	0.0	0.0	0.0
Structural net lending	4.0	2.8	1.8	2.0	1.8
<i>GDP gap</i>	0.3	-0.8	-0.9	-0.5	-0.2

Sources: Statistics Sweden and Ministry of Finance.

The estimate for 2003 and 2004 shows that the surplus is less than 2 per cent of GDP. Taking account of accounting practice with tax revenue, the deviation from 2 per cent is, however, slightly smaller. Moreover, it is estimated that the GDP gap will still be negative for these years, which means that the structural surplus will be higher than both the recorded surplus and the surplus with accrual taxes.

To sum up, the structural deficit is in line with the medium-term target in the years 2002–2004.

Taking account of accounting practice with tax revenue, the annual changes in general government net lending may be regarded as a rough indicator of the effects of public finances on demand. The effect can be divided into discretionary policy, automatic stabilisers and other factors.

Table 8 shows the change in general government net lending for 2002–2004. It can be seen from the table that accounting practice with tax revenue substantially weakened

⁴ In various external estimates, sensitivity is estimated to be on average in the interval 0.65–0.9. Budget sensitivity varies between years, however, depending on the development of GDP components and of employment.

public finances between 2001 and 2002. Discretionary fiscal policy is highly expansionary in 2002 and makes a contribution of 1.9 per cent of GDP to the weakening of the surplus in public finances. Tax cuts and expenditure reforms are overall estimated to increase household disposable income by 1.4 per cent of GDP. Since GDP growth is only marginally weaker than the potential growth rate in 2002, the automatic stabilisers only have a weak expansionary effect. Other factors affecting the balance have a tightening effect. The improved net capital income is the most important item among them. On the basis of the change in the surplus with accrual taxes, the overall effect of the development of public finances on the economy is assessed to be expansionary in 2002.

Table 8: Indicator of effects on demand

Change in per cent of GDP

	2001	2002	2003	2004
General government net lending	1.1	-3.1	-0.2	0.1
Periodization of taxes	-3.5	2.0	0.6	0.0
Net lending with accrual taxes	-2.3	-1.2	0.4	0.1
Automatic stabilisers	-0.7	-0.1	0.2	0.3
Discretionary fiscal policy	-1.7	-1.9	-0.6	-0.3
Other factors	0.0	0.9	0.9	0.1
<i>GDP gap, change in percentage points</i>	-1.0	-0.2	0.3	0.4

Sources: Statistics Sweden and Ministry of Finance.

Between 2002 and 2003, the reported surplus in public finances will fall somewhat. If accounting practice with tax revenue is taken into account, public finances will, however, have a tightening effect on the economy in 2003. The tightening corresponds partly to the effect of the automatic stabilisers. Announced reforms will result in a reduction in the surplus of 0.6 per cent of GDP, which will not compensate for the tightening arising through a continued improvement in net capital income and other factors. Among the latter, the contribution from the anticipated fall in sick leave figures is a significant factor. The number of sick leave days is expected to fall by 10 per cent between 2002 and 2003 as a result of the measures implemented.

For 2004, the effects of public finances can be regarded as neutral. The tightening effect of the automatic stabilisers will be offset by a discretionary fiscal policy that is slightly expansionary. Other factors affecting the balance are largely neutral.

The structural surplus is expected to be in line with the medium-term target throughout the period 2002–2004. Fiscal policy is thus pursued within the scope of long-term sustainable public finances. In these circumstances, fiscal policy is considered to be well balanced in the economic situation forecast. In 2002, there are estimated to be some available resources in the economy. However, these will decline in the next few years and the output gap is expected to close in 2005. In these circumstances, it is reasonable that fiscal policy changes stance and is slightly tightening or neutral in the next few years. Fiscal policy will thus help monetary policy to continue to be pursued with low interest rates. The overall stabilisation policy will thus contribute to favourable growth and high employment.

Net financial wealth and gross debt

General government net financial wealth amounted to over SEK 100 billion in 1990. During the severe crisis of the early 1990s, the financial position deteriorated rapidly. Net wealth was replaced by net debt of SEK 467 billion or almost 27 per cent of GDP in 1996. Since 1996, the financial position has improved and net debt was replaced by positive net wealth in 2001. The surpluses in general government net lending result in an improvement in the financial position. Since the surplus will be in the old-age pension system from 2002 onwards, wealth will grow through the accumulation of financial assets both in the income-related part of the system and in the premium pension system. Table 9 shows the contribution of the different factors to the development of gross debt. Consolidated gross debt was 56.6 per cent of GDP at the end of 2001, which is below the EU reference value of 60 per cent of GDP. However, gross debt exceeds the forecast in the convergence programme 2001. The reason is the National Pension Fund's unexpectedly large reallocation of assets from treasury bonds to shares, which contributed to an increase in gross debt of almost 9 percentage points as a percentage of GDP.

Table 9: Consolidated gross debt

Per cent of GDP

	2001	2002	2003	2004
Consolidated gross debt	56.6	53.6	50.9	49.3
Change in gross debt, compared with previous year	1.3	-2.9	-2.7	-1.6
<i>contribution to change</i>				
Net lending, excl. interest	-8.0	-4.5	-4.1	-4.1
Interest (consolidated)	3.2	2.8	2.6	2.5
Consolidation	8.8	-0.1	-0.2	-0.2
Nominal GDP growth	-1.9	-2.0	-2.7	-2.5
Other factors	-0.8	0.9	1.6	2.6

Note: Consolidated interest is calculated by the Ministry of Finance on the assumption that interest on the consolidated debt is as large as on the gross debt.

Sources: Statistics Sweden and Ministry of Finance.

The reduction in central government debt in 2002 and 2003 is expected to result in an equivalent reduction in consolidated gross debt. When central government debt increases in 2004, consolidated debt will also rise. However, the increase in debt is not sufficient to prevent consolidated gross debt from continuing to fall as a percentage of GDP. Net lending, excluding interest, and nominal GDP growth are expected to reduce consolidated gross debt each year during the period 2001–2004. Interest and the consolidation of the National Pension Funds in 2001 increase gross debt. Overall, consolidated gross debt is expected to fall by 7.3 per cent of GDP during the period.

Allocation of net lending between sectors

The allocation of net lending between central government and the old-age pension system was affected in 2001 by the large reallocation from the National Pension Funds to central government, which is part of the phasing-in of the reformed old-age pension system. As from 2002, when the phasing-in is complete, central government net lending is estimated to show a structural deficit of 0.5 – 1.0 per cent of GDP. The surplus in the general government sector arises instead in the old-age pension system, the net lending of which

is estimated to be between 2.0 and 2.5 per cent of GDP in these years. The balanced budget requirement for the local government sector means that the sector as a whole is expected to show net lending slightly above zero.

Table 10: Net lending and central government budget balance

Per cent of GDP

	2001	2002	2003	2004
General government sector	4.8	1.7	1.5	1.6
Central government	9.5	-0.4	-1.1	-1.0
Old-age pension system	-4.7	2.1	2.4	2.4
Local government sector	0.1	0.0	0.2	0.1
Central government budget balance	1.8	0.4	-0.6	-0.9
Central government debt	53.3	50.0	47.6	46.1

Sources: Statistics Sweden and Ministry of Finance.

VI Alternative scenarios and comparison with previous programme

Low-growth scenario

In the low-growth scenario, the global recovery is assumed to slow in 2002 and cease entirely in 2003. Swedish exports are hit relatively hard by the global economic weakening. Swedish exports comprise a relatively high proportion of investment goods, which are more cyclical than consumer goods. The fall in demand is, however, offset to some extent by a weakening of the krona.

A global recession of this magnitude is expected to have fairly major repercussions on domestic demand. As employment develops more weakly and unemployment rises, the deterioration in the economic situation will become more evident to households. GDP growth is overall 2.8 percentage points lower over the three years than in the base scenario. In 2004, the number of persons employed is 75,000 less than in the base scenario and open unemployment is 5.0 per cent.

The deterioration in the economic outlook has a negative impact on public finances. Lower growth and a more balanced wage trend result in tax bases developing more weakly. General government expenditure is also affected by higher payments of unemployment benefit. The effect on expenditure is dampened somewhat by lower wages and prices than in the base scenario. The negative effect on total general government net lending is mitigated to some extent by the fact that local government is assumed to restrict expenditure growth to meet the balanced budget requirement. This is not very desirable from a stabilisation policy viewpoint, since such an adjustment tends, if anything, to strengthen the economic downturn.

Overall, public finances deteriorate by just over 1 per cent of GDP per year in 2003 and 2004. Since the weaker growth is mainly cyclical, such a development does not result in the balance target being disregarded. The target refers to the average surplus over a business cycle, which means that the surplus can be less than 2 per cent in a recession, provided that it exceeds 2 per cent in a boom. There is thus no reason to resort to

expenditure cuts or tax increases to compensate for the cyclical weakening of public finances. Such measures would on the contrary exacerbate the economic downturn.

The projection illustrates that a surplus target in the region of 2 per cent of GDP means that the risk is small that in a normal recession public finances would be weakened so substantially as to come into conflict with the 3 per cent deficit limit in the Stability and Growth Pact. Despite subdued growth, the projection results in a surplus in public finances. There would thus be some scope for stimulation measures to mitigate the downturn. However, a prerequisite is that in this case these are withdrawn when economic activity improves. No such measures have, however, been included in the estimate. The active stabilisation policy is assumed to wholly rest with monetary policy, while fiscal policy contributes through the automatic stabilisers.

Table 11: Alternative scenarios

Per cent of GDP, unless otherwise stated

	2001	2002	2003	2004
GDP growth				
Base	1.2	2.1	2.5	2.5
Low	1.2	1.8	0.7	1.9
High	1.2	2.3	3.9	3.7
GDP gap				
Base	-0.8	-0.9	-0.5	-0.2
Low	-0.8	-1.1	-2.5	-2.6
High	-2.7	-2.7	-1.2	0.0
Employment ratio¹				
Base	78.2	78.1	78.0	78.0
Low	78.2	78.0	77.0	76.7
High	78.2	78.2	79.1	80.0
Net lending				
Base	4.8	1.7	1.5	1.6
Low	4.8	1.6	0.5	0.3
High	4.8	1.9	2.3	2.8

¹ Number of persons employed aged 20-64, excluding those employed in cyclical labour market policy programmes, as a percentage of the population aged 20-64.

Sources: Statistics Sweden and Ministry of Finance.

High-growth scenario

In the high-growth scenario, the government's target of an employment ratio of 80 per cent is achieved in 2004. In order to meet the target, growth, employment and the labour supply must be considerably higher than in the base scenario. In this scenario, the resource situation is assumed to be more favourable at the beginning of the period, which allows stronger GDP growth and employment growth, without higher wages and prices than in the base scenario. The age structure of the population is unfavourable in the coming years from an employment viewpoint. The percentage of persons aged 60 to 64 and aged 16 to 19 is rising. Labour force participation is lower in these age groups than the average. In order that employment increases to a sufficient extent, the number of persons in labour market policy programmes and adult education is therefore assumed to be less than in the base scenario. The unemployment level is also assumed to be lower in

2004. It is assumed that the government's target of halving the number of sick leave days by 2008 is achieved, resulting in fewer disability pensions.

Higher growth in the economy contributes to a marked improvement in public finances. Compared with the base scenario, the surplus is estimated to strengthen by just over 1 per cent of GDP towards the end of the period. Not only higher tax bases in the form of wages and private consumption, but also lower unemployment, are contributory factors.

The improvement in the operation of the labour market is assumed to be of a structural nature. As a result, the improvement in public finances is lasting. The financial scope arising in excess of the surplus target can therefore be utilised for reforms. The rate at which the scope for reform is utilised must be balanced against the economic situation to avoid too substantial a stimulation of private demand. In this projection, it is assumed that some of the scope is utilised by the local government sector. Higher tax bases strengthen the financial situation of municipalities and county councils. The increased revenue arising is assumed to be utilised for both increased expenditure and tax cuts compared with the base scenario. In the final year, the volume of consumption in the local government sector is 1.5 per cent higher than in the base scenario. The increase in the local government tax levy of SEK 0.25 in 2003 can, moreover, be withdrawn in 2004, without the balanced budget requirement being disregarded. In addition, there is scope for some consolidation of the balance sheets.

Comparison with updated programme for 2001

Table 12 compares this programme with the updated programme 2001. Growth in 2001 was 0.5 percentage points lower than stated in programme 2001. The forecast GDP increase for 2002 has been revised downward by 0.3 percentage points, compared with the programme for 2001. The GDP increase for 2003 is largely unchanged.

Table 12: Comparison with updated convergence programme 2001

	2001	2002	2003	2004
GDP, percentage change in volume				
Updated convergence programme for 2001	1.7	2.4	2.6	2.3
Updated convergence programme for 2002	1.2	2.1	2.5	2.5
Difference, percentage points	-0.5	-0.3	-0.1	0.2
Net lending, per cent of GDP				
Updated convergence programme for 2001	4.6	2.1	2.2	2.3
Updated convergence programme for 2002	4.8	1.7	1.5	1.6
Difference, percentage points	0.2	-0.4	-0.7	-0.7
Consolidated gross debt, per cent of GDP				
Updated convergence programme for 2001	52.3	49.7	47.3	45.2
Updated convergence programme for 2002	56.6	53.6	50.9	49.3
Difference, percentage points	4.3	3.9	3.3	3.9

Sources: Statistics Sweden and Ministry of Finance.

Net lending in 2001 was slightly better than expected in the updated convergence programme for 2001, despite the lower than forecast GDP increase. The forecast for

2002–2004 has, however, been revised downward. The downward revision is mainly due to higher expenditure, particularly for local government consumption.

Consolidated gross debt in 2001 was 4.3 percentage points higher than forecast in the previous updated programme. This is largely due to the National Pension Fund's unexpectedly large reallocation of assets from treasury bonds to shares. For the years 2002 and 2003, the slightly lower surpluses in net lending are also a contributory factor.

VII Structural policy and the quality of public finances

Since the mid-1990s, general government sector expenditure has fallen as a percentage of GDP from almost 68 to 58 per cent, see Diagram 2. The tax ratio has also fallen, though not to the same extent. It is impossible to clearly state how the size of the general government sector and the taxes used to finance general government expenditure affect growth and the prerequisites for effective resource use. One reason is that the composition of general government expenditure is probably just as important as the total level. In order to assess the quality of public finances, information is required on the purpose of the expenditure and how the composition has changed over time. In general, a high proportion of investment in physical capital, human capital and R&D may be assumed to contribute to growth and employment.⁵

In line with the economic policy targets, reforms for increased employment, sustainable growth and justice have been in progress over the past few years. The reforms concern both the revenue and expenditure side and have resulted in some change in the composition of general government expenditure. As can be seen from Table 2, expenditure reforms of approximately SEK 20 billion are proposed for 2003 (0.9 per cent of GDP). The areas in which major initiatives have already been approved or are proposed by the government in the Government Budget Bill for 2003 are discussed below.

Labour market measures

As unemployment has declined and the emphasis has shifted to the employment target, labour market policy has changed. Today, labour market policy is focused on mitigating bottlenecks and intensifying efforts to help those with most difficulty in finding work, while breaking the vicious circle of labour market policy programmes and unemployment benefit. A review of the measures taken in the past few years is found in the updated programme for 2001. Unemployment benefit levels were raised in 2001 and 2002. At the same time, the requirements for active job seeking were clarified and on 1 July 2003 a new authority will be set up with the task of coordinating the control and supervision of unemployment insurance. In order to increase the effectiveness of labour market policy measures, these are subject to continuous review. An authority with special responsibility for evaluating the effects of labour market policy (IFAU) was established in 1997.

⁵ For a more detailed discussion, see the Commission (2002), "Public Finances in EMU" or Agell (1999) in "Tillväxt och ekonomisk politik" [Growth and economic policy], Calmfors & Persson (ed.).

Structural education and training initiatives

In order to raise competence and increase the supply of skilled labour, significant initiatives have been taken in the education and training sector in the past few years. Between 1997 and 2003, approximately 100,000 new places will be created in higher education and there is now at least one institution of higher education in each county. The reasons for decentralising higher education are an ambition to broaden recruitment and that the new institutions of higher education should contribute to increased regional growth. As part of the initiatives for lifelong learning, a new central government grant is being introduced for municipal adult education and folk high schools, which is equivalent to 47,000 and 7,000 full-time equivalent places respectively for the period 2003–2005.

Central government grants for basic research and postgraduate studies will increase by almost SEK 1.5 billion or just under 0.1 per cent of GDP during the period 2000 to 2004.

The quality of education received in the early years is probably of considerable importance for long-term conditions for growth. In order to improve the quality of teaching, a special central government grant, which gradually rises to SEK 5 billion over a five-year period, was introduced in 2001 to increase staffing levels in schools and after-school centres.

Fiscal and family policy

The income tax reform, the first three stages of which were implemented in the years 2000–2002, aims to reduce marginal taxes for low-wage and middle-wage earners through gradual compensation for social security contributions and to gradually reduce the percentage of wage earners paying central government tax. The reform has so far resulted in a reduction in marginal tax of almost 4 percentage points for wage earners not paying central government income tax. The maximum childcare charge introduced in 2002 is a further part of the efforts to reduce marginal effects and thus stimulate the labour supply. The maximum charge is voluntary, but municipalities that have introduced the maximum charge receive compensation from central government for the cost of the reform. In January 2002, 287 out of 289 municipalities had introduced the maximum charge. The last stage of the maximum charge reform will be implemented in 2003 with the introduction of pre-school education for 4–5-year-olds. All children will thus be entitled to free pre-school education for three hours a day.

The structure of the pension system has an impact on the labour supply. In order to stimulate older people to remain longer in working life, a new pension system was introduced in 1999 with a clear link between pension payments and lifetime earnings. A number of initiatives have also been implemented to increase the welfare of old-age pensioners. Pensions and supplementary housing benefit have been raised, while tax has been reduced. Moreover, a maximum charge and an allowance have been introduced in the care of the elderly as well as new improved protection against high costs in dental care for older people. These initiatives will continue in 2003, while a new old-age maintenance allowance will be introduced for those who are not entitled to a national basic pension and are currently dependent on social benefits.

Health and medical care sector

The sharp increase in the number of persons in receipt of a disability pension and on sick leave entails considerable costs for the state, the individual and society in general. In the Government Budget Bill for 2002, the government presented an 11-point action programme to improve occupational health. The programme comprises measures in three main areas: an improved work environment, clearer employer responsibility for a rapid return to work in case of ill health as well as more research and improved statistics. In the Government Budget Bill for 2003, the government proposes a target of halving the number of sick leave days by 2008, while reducing the number of new disability pensions. It is further proposed that as from 2003, disability pensions should be granted for a maximum of three years, after which there is an opportunity for extension or reassessment. The individual's right to rehabilitation should be improved through an increased duty on the employer to submit rehabilitation documentation within 60 days. It is proposed to introduce financial incentives for employers in 2003. The social insurance office will receive additional funds to improve rehabilitation work, while part of the expenditure on sickness benefit will be able to be used for cooperation between various authorities in the rehabilitation area. The special healthcare initiative, which the Riksdag has approved for the period 2001–2004, is to be fully implemented and additional resources invested in reducing waiting times in the healthcare sector.

Summary

Overall, the reforms described have a strong focus on promoting increased employment, higher education and increased welfare. Expenditure in the education and training sector and expenditure in the care sector have increased as a percentage of total general government expenditure, while interest payments have declined as a percentage. In order to assess how a change in the composition affects the quality of public finances with regard to their effects on growth and resource allocation, more detailed analyses of the effectiveness of individual measures and programmes are, however, required.

Table 13: General government expenditure in 1995 and 2000 by purpose

Percentage of total expenditure

	1995	2000	Growth 1995–2000
Health and medical care	9.4	11.0	1.6
Education, leisure, culture and religion	13.0	13.8	0.8
Social security	41.1	42.5	1.4
Other	26.3	25.3	–1.0
Total expenditure, excluding interest	89.8	92.6	2.8
Interest	10.2	7.3	–2.9
Total expenditure, including interest	100.0	100.0	

Sources: Statistics Sweden and Ministry of Finance.

VIII Sustainability of public finances

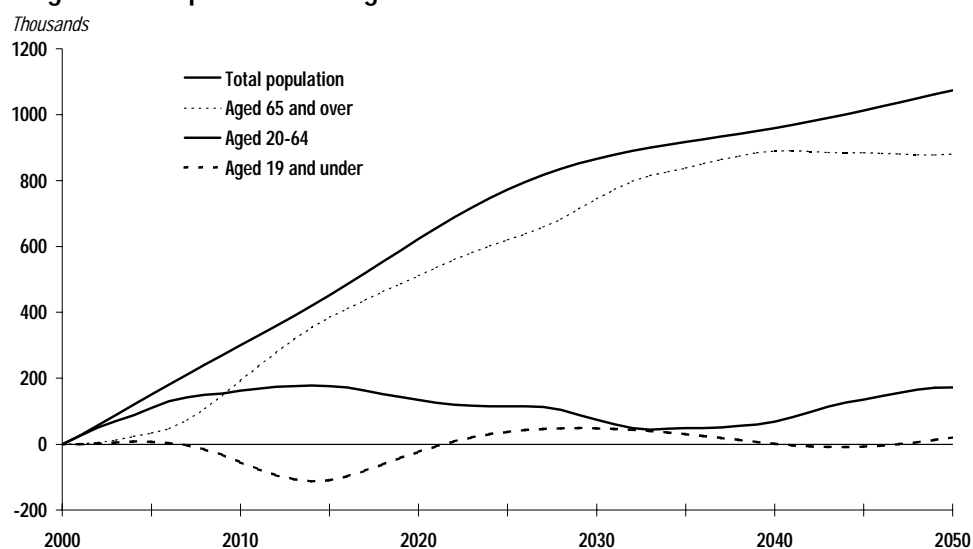
During the first half of this century, the percentage of older people in the population is expected to increase markedly, which will have a major impact on public finances. A

scenario for the development of public finances in a long-term perspective is discussed below.

Demographics

Sweden's population, which was 8.9 million at the turn of the century, is estimated to rise to 10 million by 2050, according to Statistics Sweden's latest forecast. The main increase is in the number of persons over the age of 64. This group rises by 0.9 million during the period, see Diagram 6. The number of persons aged 0 to 19 is largely unchanged in 2050, compared with 2000, while the number of persons of working age, i.e. aged 20 to 64, rises by 0.2 million during the period. The sharp increase in older people combined with the weak increase in persons aged 20 to 64 leads to a substantially increased dependency burden on the working-age population. Development in the future results in fewer and fewer people supporting more and more people.

Diagram 6: Population changes

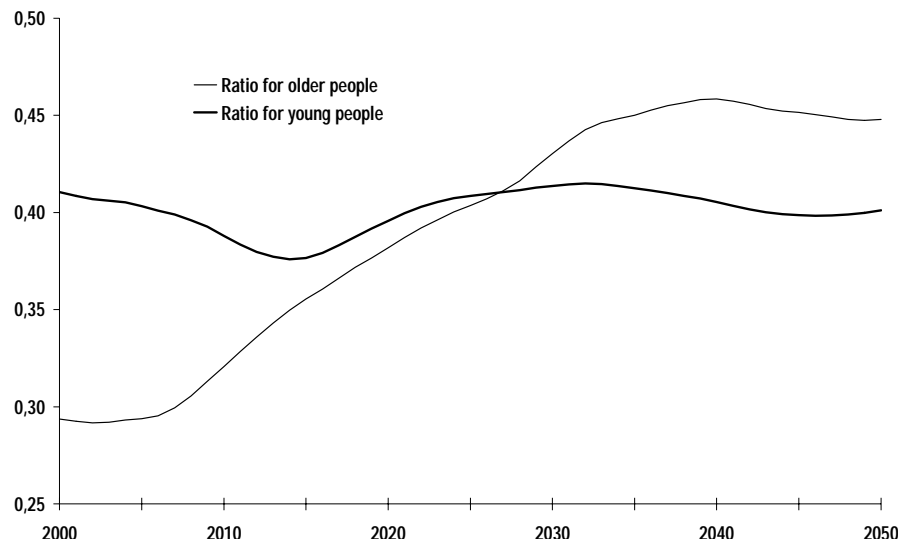


Source: Statistics Sweden.

A rough measure of the dependency burden consists of the ratio between the number of persons of non-working age and the number of persons of working age. The dependency ratio for older people, measured as the number of persons over the age of 64 in relation to the number of persons aged 20 to 64, is estimated to rise from 0.29 to 0.45 between 2000 and 2050, which is an increase of just over 50 per cent, see Diagram 7. During the same period, the dependency ratio for young people, measured as the number of persons under the age of 20 in relation to persons aged 20 to 64, fluctuates in the region of 0.4. In the shorter perspective, up to 2010, the rising ratio for older people and the falling ratio for young people cancel each other out, leaving the total dependency burden unchanged. The increase arising after that is mainly due to a sharply rising dependency ratio for older people.

Statistics Sweden's population forecast differs in certain respects from Eurostat's population forecast, which formed the basis for estimates of the demographic effects on public finances for the EU Economic Policy Committee⁶.

Diagram 7: Dependency ratios



Source: Statistics Sweden.

Economic development

The long-term projections are based on the forecast in Chapter IV. The economic assumptions underlying the projections for the period 2005–2050 are shown in Table 14. Labour force participation after 2004 is based on Statistics Sweden's population forecast and on the assumption that labour force participation and average hours worked for all age groups are unchanged during the estimate period. Variations in the total labour force arise due to changes in the population structure. The average total labour force participation for persons aged 20 to 64 is estimated at approximately 81 per cent. Open unemployment is assumed to be 3.7 per cent⁷, leading to an employment ratio of just under 78 per cent for persons aged 20 to 64. Annual productivity growth in the business sector is further assumed to be 2.2 per cent. Productivity growth for labour in the general government sector is assumed to be zero, in accordance with the calculation methods used in the National Accounts. Overall, this leads to an average annual increase in productivity in the whole economy of approximately 1.7 per cent per year. Productivity growth and employment growth lead overall to average annual GDP growth of approximately 1.7 per cent during the estimate period. During the latter part of the period, productivity growth falls, since a growing proportion of total employment is to be found in the general government sector, such as the care sector, where productivity growth is assumed by definition to be zero. The real interest rate is assumed to be 3 per cent and the inflation rate 2 per cent.

⁶ Budgetary challenges posed by an ageing population: the impact on public spending on pensions, health and long-term care for the elderly and possible indicators of the long-term sustainability of public finances, EPC/ECFIN/655/01-EN final, Brussels 24 October 2001.

⁷ National definition. Students looking for work are counted as employed in the national definition but as unemployed in international statistics. This group is estimated to account for 1.1 percentage points.

Table 14: Macroeconomic assumptions

	2000	2005	2010	2015	2020	2030	2040	2050
Percentage change ¹								
GDP	3.6	2.3	2.1	1.9	1.6	1.4	1.8	1.8
Labour productivity	2.2	1.8	1.9	1.9	1.7	1.6	1.7	1.7
GDP deflator	1.0	1.5	2.3	2.3	2.3	2.4	2.3	2.3
CPI	1.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Hourly wage	3.7	3.5	4.2	4.2	4.2	4.2	4.2	4.2
Per cent								
Real interest rate	4.1	3.2	3.0	3.0	3.0	3.0	3.0	3.0
Labour force participation, aged 20–64	81.2	81.0	80.6	80.9	81.2	80.7	81.0	80.6
Women	78.4	78.4	77.9	78.3	78.5	78.1	78.4	77.9
Men	84.0	83.6	83.2	83.5	83.8	83.3	83.6	83.2
Open unemployment ²	4.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7

¹ For the period 2010–2050, the average percentage change from the previous period is stated.

² National definition. Students looking for work are counted as employed in the national definition but as unemployed in international statistics.

Note: In the estimate of GDP growth it is assumed, in accordance with the convention in the Swedish National Accounts, that productivity growth in the general government sector is zero. An increased percentage of general government consumption entails reduced GDP productivity. Moreover, the working-age population will decline.

Sources: Statistics Sweden and Ministry of Finance.

Surplus target

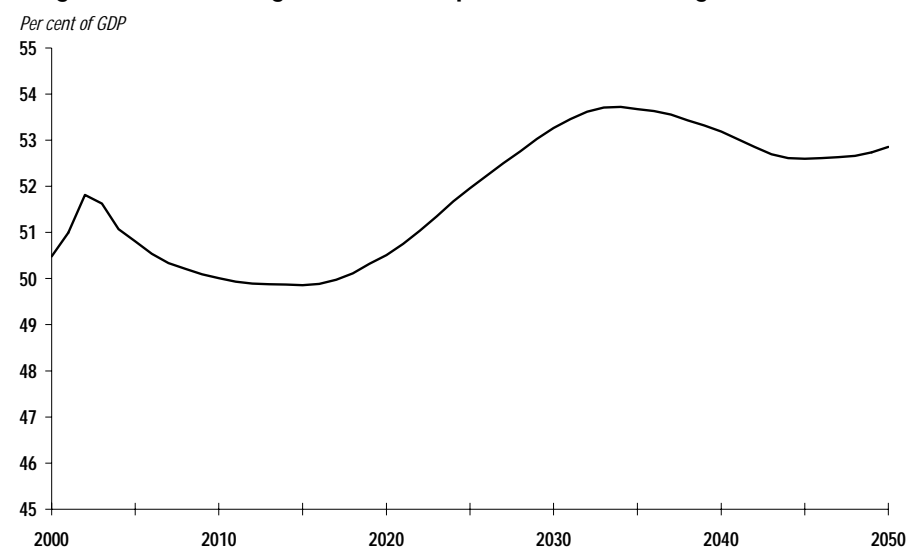
The change in the population structure has major effects on public finances. In order to ensure the long-term stability of public finances, medium-term fiscal policy is focused on maintaining a surplus in public finances of 2 per cent of GDP. As a result, general government net debt is reduced and net interest improves, creating scope for the anticipated increase in expenditure. As a consequence of the pension reform, assets are currently being built up in the old-age pension system, the yield of which contributes to financing future pension expenditure.

General government expenditure

The increased percentage of older people in the population has an impact on general government expenditure. A certain standard guarantee in general government expenditure systems is assumed in this estimate. Transfer payments, such as child benefit and study allowance, are assumed to follow the price trend with a supplement equivalent to 75 per cent of real wage growth. The standard guarantee offsets the erosion of household transfer payments that would take place if the estimate were solely based on a price projection over such a long term as almost 50 years. The standard of general government consumption is further assumed to increase by approximately 1/3 per cent per year. This increase in standard has been chosen so that the total consumption (private and public) for persons over the age of 64 develops on a par with the total consumption for persons of working age. Roughly speaking, this results in the current distribution of welfare between old-age pensioners and the gainfully employed remaining unchanged during the estimate period. The standard guarantee means that part of a potential scope for reform is used to raise the standard of existing systems when the economy grows. The estimate of pension expenditure is based on the demographic trend, macroeconomic assumptions and current regulations.

The increased percentage of older people in the population has an impact on public finances mainly through increased expenditure on pensions, medical care and care of the elderly. In the next few years, up to and including 2015, primary general government expenditure, i.e. expenditure excluding interest, is estimated, however, to fall as a percentage of GDP, see Diagram 8. The main reason is that general government consumption declines as a percentage of GDP. The demographically related increase in expenditure on medical care and care of the elderly is relatively moderate during this period, while expenditure linked to persons under the age of 20 is expected to decline. A prerequisite for this development is that municipalities adjust expenditure in operating areas, such as primary and secondary education and childcare, as the number of children and young people falls. Transfer payments linked to persons under the age of 20 also fall somewhat as a percentage of GDP. However, pension expenditure increases as a percentage of GDP.

Diagram 8: General government expenditure excluding interest



Sources: Statistics Sweden and Ministry of Finance.

Between 2015 and 2050, the primary expenditure ratio is estimated to increase by 3 percentage points, as a result of the rising percentage of older people. In the mid-2030s, expenditure peaks. Consumption expenditure mainly in the form of medical care and care of the elderly increases, but household transfer payments in the form of pensions also grow. However, general government investment as a percentage of GDP falls, since the price of investment is assumed to follow the consumer price index, which develops more slowly than the GDP deflator. General government investment volume is assumed to develop at the same rate as general government consumption volume.

Public finances

While the primary expenditure ratio falls by just over 1 percentage point during the period 2004–2015, the primary income ratio increases by 1 percentage point if tax regulations remain unchanged, due to the tax bases developing at a more rapid rate than GDP (see Appendix A Table A.1). In this scenario, it has been assumed that the surplus target of 2 per cent of GDP is maintained up to the end of 2015. The surpluses during the period lead to capital income as a percentage of GDP strengthening by 2 percentage

points between 2004 and 2015, see Table 15. Within the framework of the surplus target, this results overall in a scope for tax cuts or expenditure reforms totalling approximately 4 per cent of GDP during the period 2005–2015. In this estimate, it is assumed that the scope for reform is utilised so that the surplus in public finances is 2 per cent of GDP. From 2015 onwards, the rules and regulations for general government revenue and expenditure remain unchanged.

Table 15: Public finances

Per cent of GDP

	2000	2004	2005	2010	2015	2020	2030	2040	2050
Primary revenue	55.2	53.1	53.1	53.6	54.1	54.5	55.3	55.6	55.6
Taxes and charges	51.9	49.9	49.9	50.5	51.1	51.6	52.5	53.0	53.2
Other revenue	3.3	3.2	3.2	3.1	2.9	2.9	2.8	2.6	2.5
Primary expenditure	50.5	51.1	50.8	50.0	49.8	50.5	53.3	53.2	52.8
Transfer payments	22.2	22.2	22.1	22.1	22.4	22.6	23.4	23.2	22.7
Consumption	26.2	26.4	26.3	25.7	25.3	25.9	28.0	28.4	28.8
Investment	2.2	2.5	2.5	2.3	2.1	2.0	1.8	1.6	1.4
Primary net lending	4.7	2.1	2.3	3.6	4.2	4.0	2.0	2.4	2.8
Scope for reform ¹	–	–	–	2.9	1.0	0.0	0.0	0.0	0.0
Primary net lending, after reforms	4.7	2.1	2.3	0.8	0.5	0.2	–1.9	–1.5	–1.1
Net capital income	–1.0	–0.5	–0.3	1.2	1.5	1.8	1.8	1.1	0.9
Net lending	3.7	1.6	2.0	2.0	2.0	2.0	–0.1	–0.3	–0.2
Financial position									
Consolidated gross debt	55.3	49.3	48.0	42.4	37.0	30.9	29.2	30.8	25.1
Adjusted gross debt ²	22.2	21.7	19.2	5.9	–2.4	–9.7	–9.8	1.0	4.3
Net debt	1.8	–4.9	–6.6	–18.1	–23.9	–29.2	–26.9	–13.9	–9.3

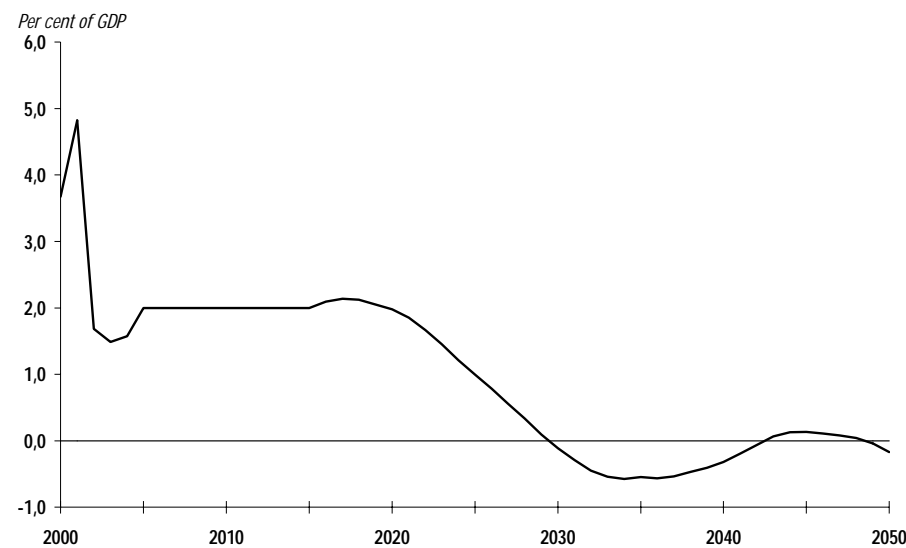
¹ The scope for reform for 2010 is the total scope for reform for the period 2005–2010. The scope for reform for 2015 is correspondingly the scope for reform for the period 2011–2015.

² Consolidated gross debt minus pension system assets in addition to government securities.

Sources: Statistics Sweden and Ministry of Finance.

Net capital income is negative in 2004, but is positive during the estimate period, since net debt is replaced by net assets.

Diagram 9: General government net lending

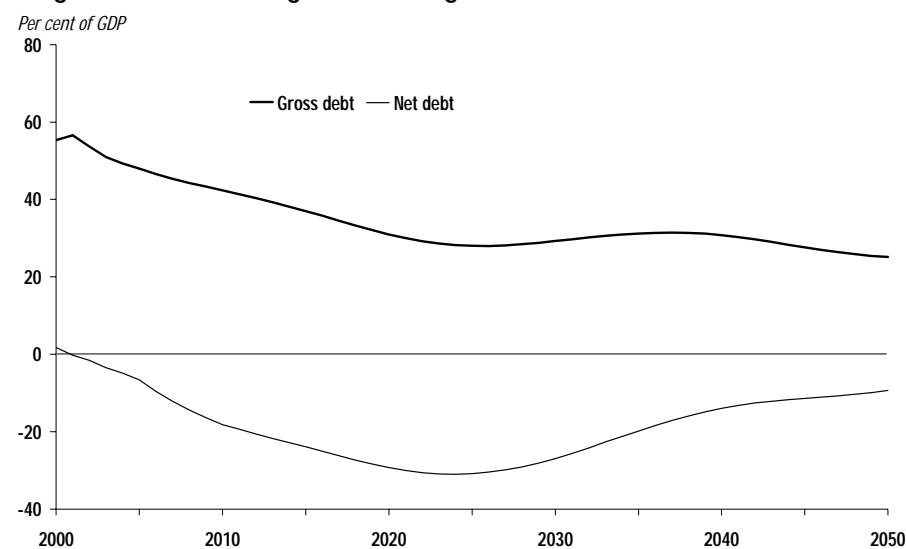


Source: Statistics Sweden and Ministry of Finance.

After 2020, general government net lending deteriorates as the demographic pressure on expenditure increases and is in the region of zero after 2030, see Diagram 9.

General government gross debt and net debt fall at the beginning of the estimate period, when public finances show a surplus, see Diagram 10. After that, gross debt stabilises at approximately 30 per cent of GDP, providing a safe margin to the reference value in the EU's Stability and Growth Pact. Net debt is negative during the estimate period, which means that the general government sector is estimated to have net financial assets in the long term. Developments in the scenario indicate that public finances are sustainable in the long term.

Diagram 10: General government gross debt and net debt



Sources: Statistics Sweden and Ministry of Finance.

Gross debt is shown in Table 15, in accordance with the Maastricht definition. The table also shows adjusted gross debt, in which pension system assets in addition to government securities have been consolidated. The development of adjusted gross debt follows the development of net debt.

Sweden's net lending was considerably stronger in the EU estimates than in the above scenario. The reason is that in this estimate, the surplus in excess of 2 per cent of GDP is utilised for permanent reforms or alternatively tax cuts up to the end of 2015. This has an effect on the development of both gross debt and net debt, which is expected to be weaker in the above estimate than in the EU estimates.

Appendix A: Appendix to Chapter VIII, calculation methods

The calculation methods used in the estimate of public finances during the period 2005–2050 are discussed in more detail below.

Taxes and charges

Long-term estimates of general government taxes and charges can be structured in various ways. A standard method is to set taxes and charges as a constant percentage of GDP during the estimate period. However, this method results in practice in a change in the tax regulations, unless the tax bases grow in pace with GDP. For example, if the wage bill increases relative to GDP, the tax rate must be lowered so that tax revenue is constant as a percentage of GDP. Another method is to keep tax rates unchanged relative to the respective tax base. The advantage of this method is that it better reflects unchanged tax regulations. If the tax bases change relative to GDP, the aggregated tax ratio will also change.

Table A1: General government taxes and charges

Per cent of GDP

	2000	2005	2010	2015	2020	2030	2040	2050
Taxes and charges, per cent of GDP	51.9	49.9	50.5	51.1	51.6	52.5	53.0	53.2
Household direct taxes and charges								
Percentage of GDP	22.2	19.7	19.7	19.9	20.1	20.6	20.7	20.8
Implicit tax rate for direct taxes	29.6	26.2	26.2	26.2	26.2	26.2	26.2	26.2
Tax base for direct taxes as percentage of GDP	64.8	64.2	64.3	64.8	65.5	67.3	67.7	67.7
Implicit tax rate for charges	6.3	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Tax base for charges as percentage of GDP	48.1	47.3	47.1	47.0	47.2	48.0	48.3	48.8
Corporate direct taxes								
Percentage of GDP	3.1	3.1	3.0	3.0	2.9	2.8	2.7	2.7
Implicit tax rate	11.5	11.7	11.7	11.7	11.7	11.7	11.7	11.7
Tax base as percentage of GDP	27.5	26.1	25.8	25.5	25.0	23.9	23.3	22.8
Indirect taxes¹								
Percentage of GDP	11.9	12.1	12.7	13.3	13.5	13.8	14.1	14.1
Implicit tax rate	23.5	24.4	24.4	24.4	24.4	24.4	24.4	24.4
Tax base as percentage of GDP	50.5	49.5	52.2	54.4	55.5	56.5	57.9	58.0
Employer contributions and self-employed contributions²								
Percentage of GDP	14.6	15.0	15.0	15.0	15.1	15.3	15.4	15.6
Implicit tax rate	33.8	34.7	34.7	34.7	34.7	34.7	34.7	34.7
Tax base as percentage of GDP	43.2	43.4	43.2	43.2	43.4	44.2	44.5	45.0

¹ Excluding wage-dependent indirect taxes.

² Including wage-dependent indirect taxes.

Sources: Statistics Sweden and Ministry of Finance.

Table A.1 shows general government taxes and charges as a percentage of GDP and as a percentage of the respective tax base (implicit tax rate) as well as the tax base as a percentage of GDP. Household direct taxes are related to household taxable income, approximately 65 per cent of which consists of wages. The remainder consists of taxable transfer payments (e.g. pensions) and self-employed earnings. Household charges consist of the national pension contribution, which households pay to the reformed pension system, and are related to the charge base for pensions, which consists of wages, self-

employed earnings and taxable transfer payments excluding pensions. Corporate direct taxes are related to gross operating surpluses in the corporate sector, which is the reason why the implicit tax rate is as low as just under 12 per cent. The corporation tax rate is 28 per cent of taxable profit. Indirect taxes, where VAT amounts to just over half, follow private consumption. Employer contributions and self-employed contributions are linked to the wage bill.

The tax ratio (taxes and charges as a percentage of GDP) increases by 3.3 percentage points during the period 2005–2050. The increase is mainly explained by the more rapid growth in the wage bill and private consumption than GDP. Around one-quarter of total general government taxes and charges are raised on private consumption. Private consumption is estimated to increase by 8.5 percentage points as a percentage of GDP during the period. An ageing population is expected to result in an increase in private consumption relative to output. The increase in private consumption leads to indirect taxes being 2 percentage points higher as a percentage of GDP in 2050, compared with 2005. The wage bill also increases as a percentage of GDP, due to increased demand for labour-intensive services output, such as healthcare and care of the elderly. Over half of general government taxes and charges are raised on the wage bill. As a result, household direct taxes and charges are 1.1 percentage points higher as a percentage of GDP in 2050, compared with 2005. For the same reason, employer contributions and self-employed contributions are expected to increase by 0.6 percentage points as a percentage of GDP. Gross operating surpluses are assumed to decline in relation to GDP, resulting in corporate direct taxes falling by 0.4 percentage points as a percentage of GDP during the estimate period.

General government consumption

The estimate of general government consumption is based on age-distributed unit costs for childcare, primary and secondary education (compulsory school and upper secondary school), adult education (municipal adult education and higher education), medical care (outpatient and inpatient care) and care of the elderly (home help service and sheltered accommodation). In total, these activities currently account for approximately 65 per cent of general government consumption expenditure. All these expenditure areas are projected in volume terms by the change in the relevant age group. In addition, there is the standard guarantee of 1/3 per cent per year (see Chapter VIII). Other consumption expenditure, which mainly consists of general administration, the legal system and defence, is assumed to follow the change in the total population. The price trend in general government consumption is a weighting of the wage trend and price trend, with weights reflecting the composition of consumption in the respective operating area. It is assumed in the estimates that productivity growth in all general government activities is zero, which results in the price of general government consumption growing approximately 1.5 percentage points more rapidly than the consumer price index per year.

Table A.2: General government consumption*Per cent of GDP*

	2000	2005	2010	2015	2020	2030	2040	2050
Total consumption	26.2	26.3	25.7	25.3	25.9	28.0	28.4	28.8
Childcare	1.6	1.5	1.5	1.6	1.7	1.7	1.7	1.8
Primary and secondary education	3.8	3.9	3.5	3.2	3.4	3.6	3.5	3.4
Adult education	2.0	1.9	2.0	2.0	1.8	1.8	1.8	1.8
Medical care	5.9	5.9	6.0	6.1	6.4	6.9	7.1	7.3
Care of the elderly	3.7	3.9	3.9	4.0	4.4	5.9	6.5	7.1
Other activities	9.2	9.2	8.8	8.4	8.3	8.2	7.7	7.5

Sources: Statistics Sweden and Ministry of Finance.

General government transfer payments

In the case of household transfer payments, an assessment has been made of which age groups receive specific transfer payments. Age-related transfer payments are projected in volume terms by the change in the relevant age group and 75 per cent of real wage growth. The price trend for these transfer payments follows the growth in the consumer price index. Non-age-related household transfer payments are mainly assumed to be unchanged in volume terms. For example, sick leave days are assumed to remain at the 2004 level. Their price trend follows the wage trend in cases where they are wage dependent, otherwise it follows the growth in the consumer price index. The development of household transfer payments as a percentage of GDP reflects demographic changes to a great extent, see Table A.3. General government transfer payments to firms and abroad are mainly assumed to amount to a constant percentage of GDP during the estimate period.

Table A.3: General government transfer payments*Per cent of GDP*

	2000	2005	2010	2015	2020	2030	2040	2050
Total transfer payments	22.2	22.1	22.1	22.4	22.6	23.4	23.2	22.7
Transfer payments to households	19.0	18.9	18.9	19.2	19.4	20.2	20.0	19.5
Old age	8.9	9.1	9.3	10.0	10.4	11.1	11.4	10.9
Ill health	4.0	4.7	4.6	4.5	4.5	4.5	4.3	4.4
Children/studies	2.5	2.4	2.4	2.3	2.2	2.3	2.2	2.2
Labour market	2.0	1.1	1.1	1.0	1.0	1.0	0.9	0.9
Other	1.5	1.5	1.4	1.4	1.3	1.3	1.2	1.1
Transfer payments to firms	2.0	1.8	1.8	1.8	1.8	1.8	1.7	1.8
Transfer payments abroad	1.2	1.4	1.4	1.4	1.4	1.4	1.4	1.4

Note: Old age comprises old-age pension, survivor's pension, central government and municipal pensions and supplementary housing benefit to pensioners. Ill health comprises health insurance, occupational injury insurance, disability pension and carer's allowance. Children/studies comprises child benefit, parental insurance, maintenance allowance and study allowance. Labour market comprises unemployment benefit, labour market training grant and wage guarantee.

Sources: Statistics Sweden and Ministry of Finance.

Old-age pension system

Table A.4 shows the old-age pension system's revenue and expenditure and its financial position. Net lending deteriorates as pension expenditure increases as a result of the ageing population. Nevertheless, the old-age pension system holds considerable assets at the end of the estimate period.

Table A.4: Old-age pension system*Per cent of GDP*

	2000	2005	2010	2015	2020	2030	2040	2050
Revenue	11.2	9.1	9.9	10.1	10.3	10.4	9.9	9.5
Charges	7.0	7.0	7.0	7.0	7.0	7.1	7.2	7.2
Premium pension funds	2.7	0.9	1.0	1.0	1.0	1.0	1.0	1.1
Interest, dividends etc.	1.6	1.2	1.9	2.1	2.2	2.2	1.7	1.2
Expenditure	9.0	6.6	7.1	7.9	8.4	9.3	9.7	9.5
Pensions	6.6	6.5	7.0	7.8	8.3	9.2	9.6	9.4
Other	2.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Net lending	2.3	2.5	2.8	2.2	1.9	1.1	0.2	0.0
Net financial assets	37.3	32.6	41.2	44.5	45.9	44.1	33.7	23.5

Sources: Statistics Sweden and Ministry of Finance.

Demographic assumptions

The demographic assumptions underlying the population forecast in this estimate are based on Statistics Sweden's latest forecast and are shown in Table A.5 together with the assumptions for Sweden stated by Eurostat in the EU estimates. The birth rate rises at a more rapid rate in Statistics Sweden's forecast, but both Statistics Sweden and Eurostat assume a birth rate of 1.8 children per woman in the long term. With regard to average life expectancy, Statistics Sweden is slightly more optimistic than Eurostat. Net migration is currently higher in Sweden than Eurostat forecast for the year 2000, but both Statistics Sweden and Eurostat assume net migration of 20,000 persons per year in the long term. Overall, the differences in the assumptions lead to the population increasing at a more rapid rate in Statistics Sweden's forecast and exceeding Eurostat's forecast by almost 0.8 million persons in 2050. The number of persons of working age is 0.4 million higher in 2050 in Statistics Sweden's forecast. The number of persons under the age of 20 is just under 0.3 million higher and the number of persons over the age of 64 is 0.1 million higher in 2050.

Table A.5: Demographic assumptions

	2000	2005	2010	2020	2030	2040	2050
Statistics Sweden							
Birth rate	1.55	1.73	1.80	1.80	1.80	1.80	1.80
Average life expectancy, women	82.0	82.5	83.0	83.9	84.8	85.6	86.1
Average life expectancy, men	77.4	78.4	79.2	80.4	81.4	82.4	83.0
Net migration	24 600	25 600	21 500	20 000	20 000	20 000	20 000
Eurostat							
Birth rate	1.50	1.56	1.61	1.70	1.77	1.80	1.80
Average life expectancy, women	82.0	82.4	82.8	83.5	84.3	85.1	86.0
Average life expectancy, men	77.3	77.7	78.2	79.1	80.0	81.0	82.0
Net migration	15 200	17 600	20 000	20 000	20 000	20 000	20 000

Sources: Statistics Sweden and Eurostat.

Appendix B: Table appendix

Table B.1: Forecast assumptions

Annual average, unless otherwise stated

	2001	2002	2003	2004
GDP global ¹	2.3	2.7	3.6	4.1
GDP global, excluding EU ¹	2.6	3.2	3.9	4.3
GDP EU-15 ¹	1.6	1.0	2.3	2.9
HICP EU ¹	2.3	2.1	1.9	1.8
Hourly wage in Sweden, cost ¹	4.3	3.7	3.5	3.5
TCW index	136.0	133.8	128.8	127.0
German 10-year government bond rate, annual average	4.8	4.9	4.9	5.1
Swedish 10-year government bond rate, annual average	5.1	5.4	5.3	5.3
Swedish 6-month interest rate, annual average	4.1	4.4	4.7	4.7
Oil price, (Brent, USD/barrel)	24.5	25.3	26.0	–
World market growth global, excl. EU ¹	0.8	4.4	7.3	7.8

¹Annual percentage change.

Source: Ministry of Finance.

Table B.2: General government finances

Per cent of GDP

	2001	2002	2003	2004
Revenue	59.2	56.5	55.9	55.4
Taxes and charges	53.5	50.8	50.4	49.9
Direct taxes	23.4	19.9	19.8	19.7
Product and production taxes	14.6	15.2	15.3	15.2
Social security contributions	15.4	15.5	15.1	15.0
Capital income	2.3	2.3	2.3	2.3
Other revenue	3.4	3.4	3.3	3.2
Expenditure	54.4	54.8	54.5	53.8
Transfer payments	22.0	22.1	22.3	22.2
Households	19.0	19.2	19.4	19.0
Business sector	1.8	1.7	1.6	1.7
International	1.2	1.2	1.4	1.5
Consumption	26.7	27.2	26.8	26.4
Investment etc.	2.3	2.5	2.5	2.5
Investments and stocks	2.6	2.6	2.6	2.6
Purchase and sale of land and properties, net	–0.2	–0.1	–0.1	–0.1
Interest expenditure	3.4	3.0	2.8	2.8
Net lending	4.8	1.7	1.5	1.6
Primary net lending	6.0	2.3	2.0	2.1
Fixed capital consumption and capital transfers, net	2.2	2.2	2.2	2.1
Fixed capital formation	2.3	2.5	2.5	2.5
Lending, net	5.0	2.0	1.8	1.9
Consolidated gross debt	56.6	53.6	50.9	49.3
Net debt	–0.2	–1.5	–3.5	–4.9

Sources: Statistics Sweden and Ministry of Finance.