

**Ministry of Finance** 

# Update of Sweden's convergence programme

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### I Introduction

In accordance with the Council's regulation (EC) 1466/97, Sweden submitted its convergence programme in December 1998.<sup>1</sup> 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 since 1999 in November and approved early the following year. This update has been drawn up in parallel with the Government Budget Bill for 2006, which was presented to the Riksdag on 20 September 2005. The Government Budget Bill is based on an agreement between the Social Democratic government, the Green Party and Left party. The Riksdag's Standing Committee on Finance and the Committee on EU Affairs were informed about the programme on 15 and 18 November 2005.

The update of the convergence programme is based on the assessment of Sweden's economy contained in the Government Budget Bill for 2006. Forecasting was completed on 13 September 2005. This assessment involves a slightly weaker outlook for 2005 compared with the forecast in the updated convergence programme for 2004. However, in 2006, activity in the Swedish economy is estimated to pick up slightly. 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 should show a surplus of 2 per cent of GDP on average over a business cycle and that central government expenditures should not exceed the expenditure ceilings set.

### 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. Sweden's long-term conditions for growth should be improved to achieve the target of 80 per cent regular employment and a halving of dependence on social benefits.

In accordance with the Stability and Growth Pact, the member states shall aim for general government net lending which in a medium-term perspective is within the range between –1 per cent of GDP and balance or surplus.<sup>2</sup> The Riksdag has supported the government's target of a surplus in general government net lending of 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 proportion 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 through a stabilising fiscal policy.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Council Regulation (EC) 1466/97 of 7 July 1997 on the strengthening of the surveillance of budgetary positions and the surveillance and coordination of economic policies.

<sup>&</sup>lt;sup>2</sup> In accordance with Council Regulation (EC) No. 1055/2005.

<sup>&</sup>lt;sup>3</sup> In 1997, Eurostat, the official statistics body for the European Union, decided that the new Swedish pension system in its entirety was to be classified as belonging to the public sector. In 2004, Eurostat changed its decision. From 2007, the prefunded pension system is not part of general government net lending. For Sweden, this means that this figure is reduced by approximately 1 per cent of GDP and that public sector consolidated debt rises by around 0.5 per cent of GDP.

For each budget year, the Budget Bill establishes the level of general government net lending while taking into account the state of the economy as well as the current situation in relation to the overall target. In the Budget Bill for 2005, the government proposed that the 2005 target was to be set at no less than 0.5 per cent of GDP, which was also passed by the Riksdag. The surplus is now estimated to far exceed the target despite the fact that GDP growth is assessed as slower than when the target was proposed. The stronger state of finances is partly due to slower expenditure growth in the local government sector, which impacts negatively on GDP growth but positively on public sector finances. Moreover, net lending is impacted positively by lower interest expenditure and higher corporate tax revenues. Since actual net lending is forecast at 1.4 per cent of GDP, the surplus target for 2005 will clearly be managed. The expansionary fiscal policy of 2006 entails the surplus that same year being projected at 0.7 per cent of GDP. In order to avoid jeopardising the overall target, the surplus should not be allowed to fall below 0.5 per cent of GDP.





Sources: Statistics Sweden and the Ministry of Finance.

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.<sup>4</sup> The ceilings determined for the years 2006 and 2007 amount to SEK 907 and SEK 949 billion, or 32.8 and 32.7 per cent of GDP, respectively. The expenditure ceiling for 2008 will be determined no earlier than the Budget Bill for 2007, but the government believes that the economic trend will allow an expenditure ceiling of SEK 982 billion, or 32.3 per cent of GDP, for 2008. A statutory balanced budget requirement has applied to municipalities and county councils since 2000.

<sup>&</sup>lt;sup>4</sup> Appendix D provides a description of the budget process in Sweden as well as the framework of fiscal policy.

In the act regulating 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 act also stipulates that independent monetary policy decisions are to be made by an Executive Board of the Riksbank. The Riksbank has defined the target as 2 per cent inflation,  $\pm 1$ 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 that may be justified in a 1-2 year term. The result of the referendum in September 2003 on the introduction of the euro resulted in no changes in the monetary and exchange rate regime. It is fixed. In exchange rate policy, the government decides on the exchange rate system, while the Riksbank is responsible for 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 not under consideration.

# III Economic policy

# **Fiscal policy**

The proposals of the Budget Bill combined with previous decisions entail reforms totalling approximately SEK 27 billion to be implemented in 2006 (or the equivalent of 1.0 per cent of GDP), of which reforms on the expenditure side encompass around SEK 22 billion (or 0.8 per cent of GDP). A particular emphasis is placed on Swedish municipalities in order to boost employment and the standard of medical and health care, care of the elderly and preschools. Considerable resources are also being directed to the judicial system, financial security, family policy, development aid, education and research.

Between 2000 and 2002, the first three stages of a four-stage reform of income tax were implemented for households. In 2005, half of the fourth stage was implemented, and for 2006 the government proposes that the second half of the fourth stage be implemented, which is equivalent to a tax cut of some SEK 7 billion, or 0.3 per cent of GDP. This would mean that social security contributions are fully compensated for. A green tax exchange is proposed for 2006, which involves raising energy and environmental taxes, lowering income taxes through an increased basic allowance for low and middle-wage earners and lower social contributions of employers. The tax exchange scheme comprises approximately SEK 3.5 billion. The tax changes proposed in the Budget Bill involve a reduction in the central government tax levy totalling approximately SEK 7 billion. In 2005, local government tax rates were raised by 0.09 percentage points, which corresponds to SEK 1.2 billion. The overall reforms proposed for 2006, including financing, correspond to nearly SEK 27 billion, or around 1.0 per cent of GDP. Table 1 illustrates the budget impacts, in relation to the previous year, of changes in expenditure and revenue decided and announced earlier or proposed in the Budget Bill for 2006.

 Table 1: Decided and proposed expenditure and revenue reforms for 2006

 SEK billion

Revenue reforms <sup>1</sup>	6.5
Taxes on labour	7.1
Taxes on capital	-1.5
Taxes on goods and services	-3.6
Other <sup>2</sup>	4.1
Expenditure reforms	
Administration and judicial system	1.3
International development aid	3.3
Immigrants and refugees	0.6
Financial security in the event of illness and disability	1.6
Financial security for families and children	3.3
Labour market	0.7
Study allowance	0.9
Education, research and culture	3.7
Environment	0.6
Energy	0.4
Communications, including loans	1.2
Agriculture, forestry, business sector	1.8
General grants to municipalities	2.6
Other	0.4
Financing, reduced expenditure	-2.2
Increased expenditure including financing, etc.	20.2
Reforms including financing	26 7

<sup>1</sup> Net effects of rule changes, accrual accounting. This means that indirect effects of revenue reforms are also included.
<sup>2</sup> "Other" also includes reductions/crediting of the tax account.

Source: Ministry of Finance.

### Monetary policy

During 2003, the Riksbank lowered the key rate by a total of 100 basis points to 2.75 per cent in the light of weak Swedish and global economic developments and weak domestic inflationary pressure. In February 2004, the Riksbank lowered the key rate by 25 basis points and, in April, by an additional 50 basis points to 2.00 per cent. Inflation was lower than expected, partly as a result of low import prices, increased productivity and a weak labour market. In June 2005, the Riksbank lowered the key rate by 50 basis points to a historic low of 1.50 per cent based on the assessment that inflationary pressure would be weak in the next two years.



### **Diagram 2: Inflation and the Riksbank's tolerance interval** *Per cent*

### Market rates

During the autumn of 2003, signs of decreasing inflationary pressure contributed to lower market rates. This trend continued in 2004. In several euro zone countries, bond yields have continued to fall in 2005, and more so than in Sweden. In early September, Swedish 10-year government bond yields fell below 3 per cent. This meant that the decline since the beginning of 2005 amounted to more than 1 percentage point.

During the period 1997–2001, the interest rate differential between Sweden and Germany declined (see Diagram 3). The differential between Swedish and German 10-year government bond yields was around 0.5 percentage points for quite some time. Stable Swedish public finances and a narrowed differential between key rates in Sweden and the euro zone helped contribute to this development. In late 2004 and during the course of 2005, the interest rate differential narrowed further and became negative. The sharp drop in Swedish bond yields is partly due to the very low Swedish inflation rate. Swedish bond yields have also been affected by the weak GDP data for the first quarter and the sluggish growth of the labour market. Swedish bond yields are expected to rise during the second half of 2005 and next year in pace with reduced available resources in the economy and a tighter monetary policy.

**Diagram 3: Interest rates in Sweden** 



### 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, among other things, by capital flows in addition to fundamental factors such as terms of trade and relative productivity growth. Following a considerable depreciation of the krona in 2001, which can largely be explained by financial factors, the krona began to strengthen during the autumn that same year. The krona increasingly stabilised during 2002 and in 2003 and 2004 the krona developed rather strongly. In late 2004, the krona was at its strongest level since 2000, but weakened during the spring and early summer of 2005 against both the US dollar and the euro. The depreciation of the krona is very likely related to Swedish bond yields and the key rate, which are now lower than those in the euro zone (see Diagram 4).

The krona is expected to appreciate in the time ahead. Contributing factors include a continued large Swedish current account surplus and that growth in Sweden is expected to be higher in relation to the euro zone.



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

### IV Economic forecasts and estimates

### **GDP** growth

Sweden's GDP grew by 3.6 per cent in 2004 despite a significant slowdown towards the end of the year. The high rate of growth was partly a consequence of temporary factors. For example, there were far more working days in 2004 than in 2003. Adjusted for this effect, growth is estimated at 3.1 per cent. The slowdown of late 2004 had an impact on growth during 2005, which was weak in the first quarter. Since then, growth has accelerated and is estimated at 2.4 per cent for the whole year. The strong growth forecast for late 2005 is expected to continue in 2006 and amount to 3.1 per cent that year. Since the number of working days in 2006 will be fewer than in 2005, the rate of calendar-adjusted growth is calculated at 3.4 per cent for 2006. During the 2007 estimate year, the GDP gap should close, whereupon GDP should grow in pace with potential GDP. In 2007 and 2008, GDP growth is forecast at 2.8 and 2.3 per cent, respectively.

### Foreign trade and the current account

In 2004, Swedish exports rose thanks to the strong global economy. However, demand slowed in late 2004 and early 2005. World market growth is expected to pick up once again in 2006 and the competitiveness of Swedish export firms is likely to be favourable. Relatively strong demand for Swedish exports during the period 2006–2008 is thus expected to lead to sound export growth in the time ahead. Imports will rise somewhat faster than exports as a result of strong domestic demand. Altogether, this means that the contribution of foreign trade to growth will drop to 0.1 percentage points in 2005 and 0.3 percentage points in 2006.

The current account surplus as a percentage of GDP amounted to 8.3 per cent in 2004, which is an increase of 0.9 percentage points compared with 2003. This is partly because the trade surplus continued to grow. The balance of services and net investment income also made positive contributions to the current account surplus. Strong productivity growth, strong public finances, high export demand and an ageing population all contribute to the high current account surplus. In 2005, the contribution from foreign trade is expected to decrease, whereas the contribution from net investment income is forecast to grow. 2006 is expected to show a somewhat larger contribution from foreign trade than compared with the previous year in addition to continued growth in capital income. The overall current account surplus is forecast at 7.5 per cent of GDP in 2005 and 7.8 per cent of GDP in 2006.

### Table 2: Demand and output<sup>1</sup>

Annual percentage change in volume

	SEK billion 2004	2004	2005	2006	2007	2008
Household consumption expenditure	1,224	1.8	2.0	3.0	2.7	2.7
General government consumption expenditure	706	0.3	0.0	1.8	0.9	0.2
Gross fixed capital formation	407	5.5	7.9	5.0	5.2	4.8
Change in stocks <sup>2</sup>	4	-0.3	0.1	0.0	0.0	0.0
Exports	1,178	10.5	4.2	6.1	6.2	5.3
Imports	974	6.9	4.8	6.7	6.5	6.0
GDP	2,546	<b>3.6</b> <sup>3</sup>	2.4	3.1 <sup>3</sup>	2.8	2.3
Nominal GDP	2,546	4.4	3.0	5.6	5.0	4.6

<sup>1</sup> 2005 and 2006 are forecast years. The years 2007 and 2008 are calculated based on the assumption that the output gap will close in 2007, whereupon GDP will develop in line with potential GDP.

<sup>2</sup> Change as per cent of GDP previous year.

<sup>3</sup> Underlying GDP growth adjusted for the difference in working days each year is estimated at 3.1 per cent in 2004 and 3.4 per cent in 2006. The fact that actual GDP growth in 2004 was higher than the underlying growth is because the year contained more working weekdays than 2003.

Sources: Statistics Sweden and the Ministry of Finance.

### Investment

Following a relatively mild slump in total investment from 2001 to 2003, a recovery began in 2004. The service producers of the business sector contributed the most to the investment growth. 2005 is seeing goods producers taking over as the main motor of the business sector, whereas investment by service producers is growing at a slower rate than in 2004. Housing investment will continue to show strong growth in the time ahead, mainly as a result of the low interest rates. General government investment will also rise during the forecast period due to infrastructure investment and a higher level of investment by municipalities. Growth in total investment is estimated at 7.9 per cent in 2005 and 5.0 per cent in 2006 (see Table 2). Since the level of total investment in 2004 was very high, the forecast assumes a substantial gross increase in aggregate production capacity (capital stock) during the forecast period.

The medium-term scenario assumes that resource utilisation in the Swedish economy will gradually rise since actual GDP growth is assessed to be higher than the potential GDP growth. This suggests continued favourable investment growth during the period 2007–2008, which means that investment as a percentage of GDP will rise and amount to approximately 18 per cent of GDP toward the end of 2008.

#### Household consumption

During the period 2002–2004, household disposable income showed favourable growth, giving households more scope for consumption. Households' real and financial assets also appreciated and interest rates were low. Despite the favourable conditions, household consumption only grew by a modest 1.4-1.8 per cent per year. The weak labour market during this period may have resulted in increased caution by households, which continued to save a larger proportion of their income than compared with previous years.

Growth in real disposable income is estimated at 2.9 per cent in 2005 and 2.5 per cent in 2006 as a result of rising real wages, tax cuts and higher benefits. Thus, the basic conditions for higher household consumption expenditure are favourable. Also, the wealth position is stable and interest rates are low. Therefore, the slowdown in consumption in late 2004 and early 2005 appears to be over, which is suggested by the stronger growth in household consumption in the second quarter of 2005 and the subsequent indicators available.

Labour market developments will be decisive to consumption growth in the time ahead. Rising employment affects household income but has also a major impact on household confidence in the future and thus households' propensity to consume. In 2006, unemployment is forecast to drop and employment rise, which is expected to further boost household consumption expenditure.

	2004	2005	2006	2007	2008
Final domestic demand	1.9	2.2	2.8	2.4	2.2
Household consumption expenditure	0.9	1.0	1.4	1.3	1.3
General government consumption expenditure	0.1	0.0	0.5	0.2	0.0
Gross fixed capital formation	0.9	1.3	0.8	0.9	0.8
Change in stocks	-0.3	0.1	0.0	0.0	0.0
Net exports	2.0	0.1	0.3	0.3	0.1
Exports	4.6	1.9	2.9	3.0	2.7
Imports	-2.6	-1.8	-2.6	-2.6	-2.5
GDP	<b>3.6</b> <sup>1</sup>	2.4	3.1 <sup>1</sup>	2.8	2.3

#### Table 3: Contribution to GDP growth

Percentage points

Sources: Statistics Sweden and the Ministry of Finance.

<sup>1</sup> Underlying GDP growth adjusted for the difference in working days each year is estimated at 3.1 per cent in 2004 and 3.4 per cent in 2006. The fact that actual GDP growth in 2004 was higher than the underlying growth is because the year contained more working weekdays than 2003.

To sum up, household consumption expenditure is expected to rise by 2.0 per cent in 2005 and 3.0 per cent in 2006. The prerequisites for continued strong consumption growth should remain favourable in the longer term. The medium-term estimates for 2007 and 2008 assume that consumption expenditure will rise by 2.7 per cent annually.

#### Labour market

The Swedish labour market has been sluggish since the economy began to recover in late 2003. Employment fell in 2003 and 2004 but has remained stable so far this year. Open unemployment rose in 2004 and is expected to remain at 5.9 per cent in 2005.<sup>5</sup> The sluggish labour market has led to the government boosting the volumes of labour market policy programmes.

	Table	4:	Selected	statistics
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Percentage change, unless otherwise stated

	2004	2005	2006	2007	2008
CPI, DecDec.	0.3	0.7	2.0	3.1	2.3
HICP, DecDec. <sup>2</sup>	0.9	1.5	1.5	2.0	2.0
UND1X, DecDec.	0.7	1.1	1.5	2.0	2.0
Import price deflator	0.8	3.2	-0.4	1.5	1.5
Export price deflator	-0.2	1.2	0.6	1.2	1.2
GDP deflator	0.8	0.6	2.4	2.2	2.2
Increase in hourly wages <sup>3</sup>	3.3	3.3	3.4	4.0	4.0
Number of employed	-0.5	0.1	1.3	0.7	0.2
Open unemployment <sup>4</sup>	5.9	5.9	4.8	4.4	4.4
Labour market policy programmes <sup>4</sup>	2.4	2.7	3.6	3.3	2.7
Employment ratio	77.2	76.6	76.6	77.0	77.2
Labour productivity <sup>5</sup>	2.9	2.0	1.8	2.0	2.1
Current account balance <sup>6</sup>	8.3	7.5	7.8	7.6	7.3
Real disposable income	1.5	2.9	2.5	1.4	1.5
Savings ratio <sup>7</sup>	4.5	5.4	4.9	3.7	2.6

<sup>1</sup> See also Table C.1 for forecast assumptions.

<sup>2</sup> In 2007 and 2008, HICP is assumed to follow UND1X.

<sup>3</sup> Wages are on an hourly basis as according to the National Mediation Office's wage statistics. According to the National Accounts, whose definition differs from that of the National Mediation Office, short-term wages are forecast to rise by 4.3 per cent in 2007 and 2008.

<sup>4</sup> Per cent of labour force.

<sup>5</sup> Calendar adjusted.

<sup>6</sup> Per cent of GDP

Sources: The Riksbank, Statistics Sweden, the Ministry of Finance and the National Mediation Office.

There are several factors behind the sluggish labour market. One reason is that productivity growth in the Swedish economy has been robust in the past few years. Another contributory factor is that average hours worked grew during 2004 and is expected to continue doing so this year and next. During an economic upturn, it is natural for average hours worked to rise as firms initially choose to increasingly engage existing employees. Also, sick leave began to drop in 2004, meaning that the number of hours worked could rise without the need to recruit more staff.<sup>6</sup>

The labour market is expected to begin recovering during the second half of 2005. The number of hours worked rose by 0.5 per cent in the second quarter of this year compared with the first, adjusted for seasonal variations and the number of working days. On

<sup>&</sup>lt;sup>7</sup> Per cent of disposable income. Own savings, i.e. excluding saving in pension fund reserves.

<sup>&</sup>lt;sup>5</sup> As a result of the reorganisation of the Labour Force Survey (LFS), the figures reported here are not directly comparable to those reported in previous convergence programmes. The historic data reported in the convergence programme have nevertheless been adjusted to make them comparable over time.

<sup>&</sup>lt;sup>6</sup> People on sick leave are classified as employed in the Labour Force Survey.

average, the number of hours worked is expected to rise by 0.4 per cent this year and 1.1 per cent in 2006. Employment is expected to rise slightly by 0.1 per cent this year, followed by 1.3 per cent growth in 2006. In 2007 and 2008, employment is forecast to rise by 0.7 per cent and 0.2 per cent, respectively. Open unemployment is expected to amount to 5.9 per cent this year but fall to 4.8 per cent next year. This development is a result of a stronger economy and larger volumes of labour market policy programmes. In 2007 and 2008, open unemployment is forecast at 4.4 per cent.

#### Medium-term scenario

The Government Budget Bill for 2006 presents estimates for 2007 and 2008 in addition to forecasts for 2005 and 2006. There are currently available resources in the Swedish economy. The low level of resource utilisation takes, among other things, the form of high unemployment and a favourable supply of labour in most sectors. The pressure on wages and prices is also low. The low level of resource utilisation is illustrated by the fact that the GDP gap is assessed to be negative. For 2004, the GDP gap is estimated at -1.1 per cent, and is likely to remain at -1.0 per cent throughout 2005. This means that actual GDP is growing in pace with potential GDP 2005. Potential GDP is forecast to grow by nearly 2.5 per cent annually in the next few years.

#### Table 5: Resource situation

	2004	2005	2006	2007	2008
GDP gap <sup>1</sup>	-1.1	-1.0	-0.4	0.0	0.0
of which:					
Employment gap	-0.9	-1.2	-0.4	0.0	0.0
Productivity gap	0.9	0.7	0.3	0.1	0.0
Gap in average hours worked	-1.2	-0.7	-0.3	-0.1	0.0

<sup>1</sup> The gap is calculated as (actual-potential)/potential. The figures do not add up due to rounding.

Sources: Statistics Sweden and the Ministry of Finance.

The GDP gap is estimated to drop gradually in 2006, when actual GDP grows faster than potential GDP (see Table 5). The GDP gap can be divided into a productivity gap, a gap in average hours worked and an employment gap. In 2005, the GDP gap consists of an employment gap which is more negative than the GDP gap, a negative gap in average hours worked and a positive productivity gap. In other words, there seems to be more available resources in the labour market than the GDP gap indicates for 2005; at the same time, productivity is higher than what is viewed as sustainable in the long run. The employment gap will close gradually during 2005 and 2006 as a consequence of rapid employment growth. The gap in average hours worked is also gradually closing, while actual productivity is rising more slowly than potential productivity. The GDP gap is expected to close in 2007.

### V Public finances

### **Accounting principles**

Reporting of general government net lending in this section as well as by the Budget Bill for 2006 follows EU regulations for the National Accounts (ESA 95). Revenues and expenditures are reported in the established formats used by both the Ministry of Finance and the National Institute of Economic Research (NIER). This accounting principle is slightly different from the one used by the EU for surveillance of public finances in connection with "the excessive deficit procedure" ("EDP") and the Stability and Growth Pact ("STP"). These contexts include – unlike ESA 95 – the effect of swaps on interest flows in net lending. Also, revenues and expenditures are defined differently compared with the format used by the Ministry of Finance and the NIER.

As can be seen by Table 6, net lending is higher according to EDP and STP than according to ESA 95. Thus, the effect of swaps on interest flows is positive. Revenues and expenditures according to EDP and STP are larger than according to the definition used in the Budget Bill for 2006 ("BP06"). This is largely because the user's fees for public services are reported on the revenue side of EDP/STP whereas they are reported net in general government consumption expenditure in BP06.

A detailed account of general government finances in accordance with EDP is provided in Table C.2 of Appendix C.

	2004	2005	2006	2007	2008
ESA 95 and BP06					
Revenue	55.9	55.9	54.9	54.7	54.7
Expenditure	54.5	54.5	54.2	53.6	53.1
Net lending	1.4	1.4	0.7	1.1	1.6
EDP and STP					
Revenue	58.8	58.9	58.0	57.8	57.7
Expenditure	57.2	57.3	57.1	56.6	56.0
Net lending	1.6	1.6	0.9	1.2	1.7

 Table 6: General government finances according to ESA 95 and EDP

 Per cent of GDP

Sources: Statistics Sweden and the Ministry of Finance.

# The development of public finances

In 2004, the net lending deficits of the previous two years changed to a surplus amounting to 1.4 per cent of GDP.<sup>7</sup> Revenues totalled 55.9 per cent of GDP and expenditures 54.5 per cent. For 2005, revenues, expenditures and net lending as a percentage of GDP are estimated as unchanged in relation to 2004 (see Table 7). The proposals presented in the Budget Bill for 2006, including measures to combat unemployment, will contribute to net lending dropping to 0.7 per cent of GDP in 2006. In 2007 and 2008, expenditure as a

<sup>&</sup>lt;sup>7</sup> The Budget Bill for 2006 reported a surplus for 2004 corresponding to 1.0 per cent of GDP. Since then, Statistics Sweden has revised the surplus to 1.4 per cent of GDP, which was also reported within the framework of EDP.

percentage of GDP will decrease and net lending will improve to 1.6 per cent of GDP in 2008.

Table 7: General	government finances <sup>1</sup>
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Per cent of GDP

	SEK bil-lion 2004	2004	2005	2006	2007	2008
Revenue	1,423	55.9	55.9	54.9	54.7	54.7
Taxes and charges	1,289	50.6	50.4	49.6	49.5	49.5
Capital income	53	2.1	2.3	2.1	2.1	2.0
Other revenue	82	3.2	3.2	3.2	3.2	3.2
Expenditure	1,388	54.5	54.5	54.2	53.6	53.1
Transfer payments	559	22.0	21.9	21.7	21.2	20.7
Consumption	706	27.7	27.6	27.6	27.5	27.3
Investment	72	2.8	3.0	3.0	3.0	2.9
Interest expenditure	51	2.0	2.0	1.9	2.0	2.1
Net lending	35	1.4	1.4	0.7	1.1	1.6
Primary net lending	33	1.3	1.1	0.5	1.1	1.7
Consolidated gross debt	1,300	51.1	50.9	49.4	47.8	46,0
Net debt	-131	-5.2	-6.1	-6.8	-7.6	-8.9

Sources: Statistics Sweden and the Ministry of Finance.

<sup>1</sup> Compared with the Budget Bill for 2006, minor corrections of consolidated gross debt have been carried oyt.

### Allocation of net lending between sectors

In 2005, net lending is allocated between the three areas of the general government sector, so that central government shows a deficit of 0.9 per cent of GDP, while the old-age pension system shows a surplus of 2.0 per cent of GDP and the local government sector a surplus of 0.4 per cent of GDP. The central government deficit is estimated to increase to 1.5 per cent of GDP in 2006, while the pension system surplus and the local government sector surplus are expected to decrease somewhat. Central government finances will improve in 2007 and 2008, but net lending in the old-age pension system is expected to decrease somewhat. The central government sector are judged to be in line with the requirement of good financial management. The central government's budget balance generally follows central government net lending during the forecast period.

### Net financial wealth

The allocation of net lending between central government and the old-age pension system means that the improvement in the financial position takes the form of increased assets in the pension system. The central government deficit results in the liability side of the general government sector balance sheet growing during the forecast period. However, the increase in debt is not large enough to prevent central government debt and consolidated gross debt from continuing to decline as a percentage of GDP during the period 2005–2008.

At the end of 2004, financial assets exceeded liabilities by SEK 131 billion, or 5.2 per cent of GDP. The surpluses in general government net lending mean that net financial wealth will increase to nearly 9 per cent of GDP in 2008.

The development of the consolidated gross debt is illustrated in Table C.3 of Appendix C.

	2004	2005	2006	2007	2008
General government sector	1.4	1.4	0.7	1.1	1.6
Central government	-0.6	-0.9	-1.5	-1.0	-0.3
Old-age pension system	1.9	2.0	1.9	1.8	1.7
Local government sector	0.1	0.4	0.3	0.3	0.3
Central government budget balance	-2.0	-1.1	-1.3	-0.8	-0.4
Central government debt	47.6	48,0	46.5	45,0	43.3

Table 8: Net lending and the central	government budget balance <sup>1</sup>
Per cent of GDP	

Sources: Statistics Sweden and the Ministry of Finance.

<sup>1</sup> Compared with the Budget Bill for 2006, minor corrections of central government debt have been carried out.

### Structural lending and fiscal policy stance

The target of a surplus in general government net lending equivalent to 2 per cent of GDP on average over a business cycle forms together with the expenditure ceilings 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 after adjustment for temporary effects. Temporary effects mainly consist of cyclical variations in taxes and expenditure, but one-off effects may also occur.

One indicator that fiscal policy is in balance in relation to the surplus target is that 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 initial lending differs greatly from the target, or if discretionary policy is used for the purpose of stabilisation. The calculation of structural lending is based on an assessment of the economic situation through the GDP gap and on the effects of the economic situation on public finances. The GDP 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 on average in the GDP gap has an impact on general government net lending of 0.7 per cent of GDP.

According to the revised outcome from the National Accounts, general government net lending amounted to 1.4 per cent of GDP in 2004. At the same time, the size of the GDP gap is estimated at 1.1 per cent (see Table 9), which means that available resources were present in the economy. Using the above rule of thumb, structural lending is estimated at just over 2 per cent of GDP, i.e. in line with the surplus target. Resource utilisation in the economy, measured as the GDP gap, is assessed as largely unchanged between 2004 and 2005. With net lending of 1.4 per cent of GDP, structural lending is estimated at 2 per cent of GDP and therefore would in 2005 also be in line with the surplus target. As a consequence of the expansionary fiscal policy, structural lending will decline to 1 per cent in 2006. Until 2008, general government finances are expected to improve again at the same time as the GDP gap closes.



**Diagram 5: General government revenue and expenditure** *Per cent of GDP* 

Sources: Statistics Sweden and the Ministry of Finance.

# Table 9: Structural surplus in public finances

Per cent of GDP

	2004	2005	2006	2007	2008
Net lending	1.4	1.4	0.7	1.1	1.6
Adjustment for GDP gap	0.8	0.7	0.3	0.0	0.0
Structural surplus	2.1	2.1	1.0	1.1	1.6
Net capital income	0.1	0.3	0.2	0.0	-0.1
Structural primary balance	2.1	1.8	0.8	1.1	1.7
GDP gap	-1.1	-1.0	-0.4	0.0	0.0
Courses Statistics Sundan and the Ministry of Finance					

Sources: Statistics Sweden and the Ministry of Finance.

Net lending for the period 2000–2008 averages 1.4 per cent of GDP.

The annual changes in net lending may be regarded as a rough indicator of the effect of public finances on private sector income. The change can be divided into discretionary policy, automatic stabilisers and other factors.

Table 10 shows the change in general government net lending between 2004 and 2008. Fiscal policy in 2004 was contractionary as measured by the change in structural lending. The discretionary fiscal policy was expansionary, but the expansionary stance was offset by improved net lending in the local government sector and considerably lower interest expenditure. The restraint policy was strengthened by the automatic stabilisers since resource utilisation in the economy rose between 2003 and 2004. Overall, the improvement in net lending served as a contractionary impulse to the private sector.

Structural net lending is unchanged when comparing 2004 to 2005. Fiscal policy this year could thus be characterised as neutral despite the fact that the discretionary fiscal policy is strongly expansionary. The expansionary budget policy this year will also be offset by the improved net lending of local government. This is in addition to reduced sick leave, which in turn reduces transfer expenditure. Higher capital income also improves general government net lending. In 2006, fiscal policy will be expansionary as a result of a continued expansionary budget policy. The economic upturn means that the GDP gap will be reduced by more than half. As a consequence, the expansionary budget policy will be partly offset by the automatic stabilisers. Overall, public finances are estimated to deteriorate by 0.7 per cent of GDP.

In 2007 and 2008, overall net lending will improve by nearly 1.0 per cent of GDP. Only some of the improvement is the result of the automatic stabilisers, which lead to improved net lending as the GDP gap closes. Moreover, the decided or announced measures in the government budget to date mean that expenditure as a percentage of GDP will drop, whereas revenues will largely develop in pace with GDP.

	2004	2005	2006	2007	2008
General government net lending	1.5	0.0	-0.7	0.4	0.5
Automatic stabilisers	0.4	0.0	0.5	0.3	0.0
Structural net lending	1.1	0.0	-1.1	0.1	0.5
Discretionary fiscal policy	-0.4	-1.3	-1.0	-0.2	0.1
Local government net lending	0.3	0.3	-0.1	0.0	0.0
Net capital income	0.4	0.2	-0.1	-0.2	-0.1
Other factors	0.8	0.7	0.0	0.5	0.6
GDP gap, change in percentage points	0.5	0.0	0.7	0.4	0.0

### Table 10: Indicator of effects on demand

Sources: Statistics Sweden and the Ministry of Finance

Change in per cent of GDP

#### VI Alternative scenarios and comparison with the updated programme for 2004

The assessment of public finances is affected by macroeconomic conditions. To illustrate the effects of alternative assumptions, this section discusses several sensitivity analyses where macroeconomic developments as of 2006 deviate from the main forecast in some aspects. Please note that the sensitivity analyses are partial and thus do not constitute complete alternative scenarios. The estimate variations selected are stylized and do not express an assessment of uncertainty in the macroeconomic forecast. The effects are symmetrical in relation to the basic forecast.

The first sensitivity analysis assumes that GDP growth during the period 2006-2008 is 0.5 percentage points lower than in the basic forecast. Productivity growth is assumed to remain unchanged, which also means that employment growth is weaker. The lower rate of growth is equally the result of lower household consumption and less net exports, whereas general government consumption expenditure is the same as in the basic forecast. A lower level of growth and employment in the business sector weakens public finances and the surplus is on average 0.5 per cent of GDP during 2006 to 2008. (see Table 11).

In the basic forecast, both short and long term interest rates rise. In the second sensitivity analysis, rate hikes are assumed to occur one year later. Five-year bond yields will thus hold at 3.2 per cent until late 2006. Rates in 2008 are, however, expected to match those in the basic forecast. The sensitivity analysis is partial and takes only into account the immediate impact on central government interest expenditure and the interest income of the pension system. Other macroeconomic variables are assumed to be the same as in the basic forecast. The overall impact of lower market rates in 2006 and 2007 means that consolidated gross debt in 2008 is SEK 2 billion less than in the basic forecast, the equivalent of 0.1 per cent of GDP.

	2005	2006	2007	2008
Basic forecast				
GDP, per cent	2.4	3.1	2.8	2.3
CPI, per cent	0.3	1.5	2.6	2.7
Government bond yield, 5 year	3.2	3.7	4.2	4.2
TCW index	127	124	121	121
Net lending, per cent of GDP	1.4	0.7	1.1	1.6
Consolidated debt, per cent of GDP	50.9	49.4	47.8	46.0
Lower growth				
GDP, per cent	2.4	2.6	2.3	1.8
Net lending, per cent of GDP	1.4	0.3	0.4	0.6
Consolidated debt, per cent of GDP	50.9	50.0	49.2	48.5
Lower rates				
Government bond yield	3.2	3.2	3.7	4.2
Net lending, per cent of GDP	1.4	0.8	1.2	1.7
Consolidated debt, per cent of GDP	50.9	49.4	47.7	45.9
Weaker krona				
GDP, per cent	2.4	3.1	2.9	2.6
TCW index	127	125	125	125
CPI, per cent	0.3	1.5	2.7	2.8
Net lending, per cent of GDP	1.4	0.8	1.2	1.9
Consolidated debt, per cent of GDP	50.9	49.4	47.8	45.9

#### Table 11: Sensitivity analyses

Source: Ministry of Finance.

The third sensitivity analysis assumes that the appreciation of the Swedish krona will be less marked than in the basic forecast. The exchange rate will improve in 2006, but is assumed to remain unchanged thereafter. The basic forecast assumes a continued fall in the TCW index. Thus, in 2008, the krona would be just over 3 per cent weaker than in the basic forecast. The estimate assumes that foreign trade is affected through higher exports and a lower propensity to import as a result of the weaker currency. In other words, GDP growth picks up somewhat. Higher import prices are expected to impact on the CPI, but the effects on price base amounts and earnings indices are small. Interest rates are assumed to be the same as in the basic forecast. Higher growth and employment strengthen public finances, but at the same time, the weaker currency means that the proportion of central government debt in foreign currency increases. Despite the fact that the accumulated surplus in central government net lending amounts to SEK 10 billion more than in the basic forecast, gross debt in 2008 is SEK 11 billion higher. At the same time, however, nominal GDP is higher, meaning that the debt ratio is not affected to an appreciable degree.

### Comparison with the updated convergence programme for 2004

Table 12 compares the current convergence programme with the updated programme for 2004. GDP growth in 2004 was 0.1 percentage points higher than stated in the previous year's programme. The GDP growth forecast for 2005 has been revised downward by 0.6 percentage points. GDP growth for 2006 has been revised upward by 0.6 percentage points.

Net lending in 2004 was 0.7 percentage points stronger than forecast in the convergence programme for 2004. The forecast for 2005 has been revised upward by 0.8 percentage points, and the forecast for 2006 has also been revised upward, by 0.3 percentage points.

Consolidated gross debt in 2004 was 0.6 percentage points lower than forecast in the previous updated convergence programme. For 2005, gross debt is forecast to be 0.4 percentage points higher, but 0.6 percentage points lower for 2006.

Table 12. Companyon with the d	puatea co	reigenee			704
	2004	2005	2006	2007	2008
GDP, percentage change in volume					
Updated convergence programme for 2004	3.5	3.0	2.5	2.3	_
Updated convergence programme for 2005	3.6	2.4	3.1	2.8	2.3
Difference, percentage points	0.1	-0.6	0.6	0.5	-
Net lending, per cent of GDP					
Updated convergence programme for 2004	0.7	0.6	0.4	0.9	_
Updated convergence programme for 2005	1.4	1.4	0.7	1.1	1.6
Difference, percentage points	0.7	0.8	0.3	0.2	_
Consolidated gross debt, per cent of GDP					
Updated convergence programme for 2004	51.7	50.5	50.0	49.0	_
Updated convergence programme for 2005	51.1	50.9	49.4	47.8	46,0
Difference, percentage points	-0.6	0.4	-0.6	-1.2	_

 Table 12: Comparison with the updated convergence programme for 2004

Sources: Statistics Sweden and the Ministry of Finance.

### VII Structural policy and quality in public finances

In recent years, the matter of quality in public finances has been increasingly emphasised in Sweden as well as the rest of the EU. Like many other member states, Sweden has relatively high general government expenditure and finds itself in a situation where the demand for government services will rise as a result of the demographic situation. This assumes that general government expenditure is utilised productively and efficiently, but also that the joint resources created today bolster the economy for future challenges.

### Quality in public finances<sup>8</sup>

It is impossible to clearly determine how the size of the general government sector affects growth and the prerequisites for effective utilisation of resources. One reason is that the composition of general government expenditure also is of importance.

	1995	1996	1997	1998	1999	2000	2001	2002	2003	Change 1995–2003
General public administration	11.9	11.7	12.0	11.0	10.2	10.2	8.8	9.2	8.2	-3.7
of which interest	6.6	6.6	6.3	5.5	4.8	4.1	3.2	3.3	2.4	-4.3
other	5.3	5.1	5.7	5.5	5.4	6.1	5.6	5.9	5.9	0.5
Defence	2.5	2.6	2.5	2.4	2.5	2.4	2.2	2.1	2.1	-0.5
Social responsibility and judicial system	1.5	1.5	1.4	1.4	1.4	1.3	1.4	1.4	1.4	0.0
Economic issues and economic policy	6.1	4.9	4.6	4.6	4.9	4.2	4.5	4.8	5.0	-1.1
Environmental protection	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.1
Provision of housing and social planning	2.9	2.7	2.1	1.8	1.4	0.9	1.0	0.9	0.9	-2.0
Health and medical care	6.4	6.6	6.4	6.3	6.4	6.3	6.8	7.1	7.3	0.9
Leisure, culture and religion	1.9	1.9	1.8	1.8	1.8	1.1	1.1	1.1	1.1	-0.8
Education	7.1	7.1	7.2	7.5	7.6	6.9	7.3	7.4	7.4	0.3
Social security	27.2	26.2	24.9	23.7	24.0	23.7	23.7	23.9	24.9	-2.3
Total expenditure	67.7	65.3	63.0	60.7	60.3	57.3	57.0	58.4	58.7	-9.0
excluding interest	61.1	58.7	56.7	55.2	55.5	53.2	53.9	55.1	56.3	-4.8

# Table 13: General government expenditure by purpose

Percentage of GDP

Sources: Statistics Sweden and the Ministry of Finance.

Quality in general government expenditure is often defined as expenditure in areas that increase the economy's production capacity, e.g. expenditure on investment in physical and human capital and on R&D.

However, quality in public finances is a multifaceted concept, which includes not only the allocation of expenditure between different purposes, but also how allocated resources are actually used as well as the outcome of their use in relation to the objectives or priorities established. Since political decisions and priorities determine the amount, allocation and objectives of general government expenditure, quality in public finances is not just a categorisation of which expenditure is more or less "productive". The concept may also include other aspects, such as redistribution and social and environmental objectives.

In order to evaluate whether a change in the composition of general government expenditure has affected long-term growth, detailed information is required. However, the allocation of general government expenditure between different purposes and the change in allocation over time provide an indication of how different types of expenditure and purposes are prioritised.

<sup>&</sup>lt;sup>8</sup> In this section, the EU harmonised definition of general government expenditure is used, which differs to some extent from the Swedish definition. The EU definition enlarges general government expenditure through, among other things, gross accounting of revenue from sales and charges in general government activities.

Between 1995 and 2003, general government expenditure fell as a percentage of GDP by 9 percentage points from 67.7 per cent of GDP to 58.7 per cent of GDP. The large reductions included interest expenditure at 4.3 percentage points and social security at 2.3 percentage points. Increases were seen in health and medical care, education and general public administration (excluding interest) at 0.9 and 0.5 percentage points, respectively (see Table 13).

Table 14:	Distribution	of general	government	expenditure
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Per cent of total expenditure

	1995	1996	1997	1998	1999	2000	2001	2002	2003	Change 1995–2003
General public administration	17.6	17.9	19.0	18.1	16.9	17.8	15.4	15.7	14.0	-3.6
interest	9.8	10.1	10.0	9.1	7.9	7.1	5.6	5.6	4.1	-5.7
other	7.9	7.8	9.0	9.1	9.0	10.7	9.8	10.1	10.0	2.1
Defence	3.7	4.0	3.9	4.0	4.1	4.1	3.9	3.7	3.5	-0.2
Social responsibility and judicial system	2.2	2.3	2.2	2.3	2.3	2.3	2.4	2.5	2.4	0.3
Economic issues and economic policy	9.0	7.6	7.2	7.6	8.2	7.2	7.8	8.3	8.5	-0.5
Environmental protection	0.3	0.3	0.3	0.3	0.3	0.5	0.6	0.6	0.6	0.3
Provision of housing and social planning	4.2	4.1	3.3	2.9	2.2	1.7	1.7	1.5	1.5	-2.7
Health and medical care	9.4	10.1	10.2	10.4	10.6	11.0	11.9	12.1	12.4	3.0
Leisure, culture and religion	2.8	2.9	2.9	3.0	3.0	1.9	2.0	1.9	1.9	-0.9
Education	10.5	10.8	11.4	12.4	12.6	12.0	12.8	12.8	12.7	2.1
Social security	40.2	40.1	39.5	38.9	39.8	41.4	41.6	41.0	42.5	2.2
Total expenditure	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
excluding interest	90.2	89.9	90.0	90.9	92.1	92.9	94.4	94.4	95.9	5.7

Sources: Statistics Sweden and the Ministry of Finance.

### Structural reforms

The effectiveness and productivity of a welfare system are of great importance to economic growth. Several reforms have been implemented for the purpose of deregulating markets and enhancing the economy's resilience. Several government bodies are in the process of conducting follow-ups and evaluating key components of the central government's economic policy in order to improve control over its operations as well as enhance government decision-making. Appendix E describes several central government agencies and regulatory bodies as well as their missions.

Continual change is a prerequisite if governments are to successfully meet the welfare challenges of tomorrow. The current economic situation offers the opportunity to implement forward-looking reform measures to reduce unemployment and maintain a large supply of labour. It also allows scope for a further emphasis on research and development, environmental projects and education.

### Labour market

Several groups in society have difficulties entering the labour market. This situation is the most obvious for young people and immigrants, but if the government is to attain its target of 80 per cent regular employment, all groups must show a higher level of participation in the labour market. The ongoing efforts to give the active labour market

policy a more growth-oriented focus are to continue (Government Bill 2002/03:44, "Strengthening labour market policy", report 2002/03:AU8) while being enhanced through additional reforms, such as:

- Measures to sustain and increase the supply of labour
- Facilitating generation change and knowledge transfer in public services by providing job opportunities at an earlier stage in the central government sector
- A greater number of individuals in labour market training programmes directed at sectors with a labour shortage
- Investment in an increased number of public employment service staff to improve the matching process and to ensure the legitimacy of unemployment insurance

In addition a pilot project concerning "profiling" of job seekers to see whether it increases the effectiveness of the matching process will be launched.<sup>9</sup> The Swedish Labour Market Administration continually strives to ensure uniformity in the application of unemployment insurance regulations.

# Education initiatives and R&D

In order to increase the supply of skilled labour and improve competence, significant initiatives have been undertaken in the education and training sector. These efforts will continue; for example, between 2005 and 2007, the number of places at universities and university colleges will be boosted by 17,500. At the same time, funds will be made available to raise the quality of higher education in general. Teacher-training college programmes are being enhanced to increase the supply of qualified teachers as well as meet future needs.

Educational leave replacement positions have been introduced to raise competence in medical and health care; also, vocational training has been allocated additional resources.

In order to better utilise research findings, it is important to strengthen links between academia and the business sector and to promote entrepreneurialism among graduates. In 2006, a new form of support to small businesses carrying out research and development will be introduced in conjunction with 4,000 trainee places at small companies arranged for university graduates.

# Tax policy and simpler regulations

The government is striving for uniform and straightforward tax regulations for small companies and their owners. The reform of the special regulations that apply to small companies (where the shareholder is active to a significant extent in the company), i.e. the "3:12" regulations, will be fully implemented in 2006. Also, employer's contributions for sole proprietorships needing to hire additional help will be lowered.

<sup>&</sup>lt;sup>9</sup> A pilot project is being undertaken for the purpose of developing tools for Public Employment Service offices. The aim is to profile, i.e. identify at an early stage, jobless people who may face long-term unemployment. This enables the Public Employment Service to quickly initiate programmes for such unemployed persons and thus reduce the risk of long periods of joblessness.

The last stage of the compensation for employees' social security contributions has now been implemented, meaning that the average tax levy per employee will have been reduced by SEK 900 per month since 2000. The basic tax deduction will also be increased.

Fundamental structural reforms have been implemented in Sweden pertaining to taxes, pensions, wage formation and competition. High and sustainable growth demands functioning markets for capital, production and labour. The ongoing efforts to strengthen the economic and financial motives for individuals, firms, public authorities and other institutions will continue.

# The standard of living and growth in Sweden, the USA and the EU<sup>10</sup>

It may be of interest to compare the standard of living between different countries. The following analysis compares developments in Sweden, the United States and the EU15 countries during the period 1995–2004.

During analyses and comparisons of the standard of living between countries and over time, it is very common to refer to GDP growth. However, it is more relevant to study gross national income (GNI) in relation to the price of final domestic demand, i.e. consumption and investment. GNI must be seen in relation to population growth, that is, be measured by inhabitant. This measure is called "real GNI per capita".

### Table 15: GNI and GDP in Sweden, the USA and EU15 countries

Annual percentage change, mean value 1995-2004

	Sweden	USA	EU15
GDP, constant prices	2.8	3.3	2.3
GDP per capita, constant prices	2.6	2.2	2.0
Real GNI	2.7	3.6	2.4
Real GNI per capita	2.5	2.5	2.0

Source: "The Swedish Economy" of August 2005 published by the National Institute of Economic Research.

GDP growth in Sweden was lower than that of the United States during the period 1995–2004 (see Table 15). Between 1994 and 2004, GDP growth in Sweden lagged behind that of the USA by over 4 per cent. However, US population growth was higher so GDP per capita rose faster in Sweden than in the United States. At the same time, Sweden's terms of trade have deteriorated, resulting in the same average increase in real GNI per capita in Sweden and the USA during the latest ten-year period. This comparison with the United States illustrates the importance of measuring the standard of living of various countries with real GNI per capita and not simply GDP. In relation to the EU15 countries, average Swedish growth was higher as regards both GDP and real GNI per capita.

<sup>&</sup>lt;sup>10</sup> This analysis is according to the National Institute of Economic Research's report "The Swedish Economy" of August 2005.

### VIII Sustainability of public finances

In Sweden, as in most other western industrialised countries, the proportion of older people in the population will rise substantially in the next few decades. An increased number of people of non-working age in relation to those of working age will put pressure on tax-funded welfare systems. This trend is already placing demands on economic policy today. In order to retain well-developed and tax-funded welfare in the future, high net lending is required in the general government sector over the next few years; also, efforts must be made to increase the number of persons in employment.

A high level of general government net lending today is fundamentally motivated by a more even income distribution between different generations. A high level of net lending today can help the large generations of tomorrow needing medical and health care to contribute themselves to such financing. By only depending on the labour force of tomorrow to finance these services would probably entail a more unfavourable distribution of income between various age groups. This section presents a scenario illustrating how demographic trends in Sweden may impact on public finances.

### The demographic trend

Sweden's population passed the nine million mark in 2004. According to the population forecast presented by Statistics Sweden in the spring of 2005, the population will continue to grow to just over 10.5 million in 2050. The main increase is in the number of persons aged 65 and older during the next 30 years. In 2035, there will be nearly 2.4 million persons in this age group, just over 800,000 more than today. The number of persons between the ages of 20 and 64 is forecast to grow by more than 110,000 until 2015, and rise only slightly during the next 20-year period. In other words, most of the population increase will consist of persons who are not of working age (see Diagram 6).



#### Diagram 6 The population of Sweden

Sources: Statistics Sweden and the Ministry of Finance.

The demographic trend may be summarised in dependency ratios, i.e. 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 aged 65 and over per 100 persons aged 20 to 64, is estimated to rise from approximately 29 persons in 2005 to around 42 persons in 2030. The dependency ratio for young people, measured as the number of persons aged 19 and younger per 100 persons aged 20 to 64, is more stable and fluctuates around 41 persons (see Diagram 7).



Diagram 7 Demographic dependency ratios

According to Statistics Sweden's population forecast, immigration accounts for most population growth. Immigration is of particular importance for growth in the number of people of working age. Without immigrants, the number of persons in the 20-64 age group would decline (see Diagram 8). The vast majority of immigrants are persons born outside of the EU. The employment ratio of this group is currently far below the average, which is why it is crucial that such immigrants are integrated in the labour market. If this is not realised, the population growth foreseen for the 20-64 age group will result in much slower growth in the number of employed. This kind of development would seriously undermine the possibilities to sustain the quality and scope of welfare systems.

#### Diagram 8 Population in the 20-64 age group

Change compared with 2005, thousands



Sources: Statistics Sweden and the Ministry of Finance.

#### Economic development after 2008

The long-term projection of economic development is based on the estimate for the Swedish economy up to 2008 described in previous sections. Employment growth after 2008 is based partly on the anticipated population trend, and partly on assumptions concerning how the employment ratio and the number of working hours will develop for different population groups. In the short term, the change in the age structure will play a major role. The number of persons aged 20 to 29, with a relatively low labour supply, will represent the entire population growth in the 20-64 age group in the next few years, while the number of persons of other ages will drop. In the slightly longer term, the changes in structure in terms of origin will be more important. According to the population forecast, the proportion of immigrants, and particularly those born outside the EU in the 20-64 age group, will grow rapidly.

In the estimate, Swedish-born individuals are assumed to work to the same extent in future as today, while the position of immigrants in the labour market will strengthen gradually. Up to 2020, the difference in the employment ratio between Swedish-born and foreign-born individuals is assumed to decline by one-third. Residual differences are assumed to persist beyond 2020. With such a trend, the proportion of persons employed among foreign-born individuals aged 20 to 64 rises to just over 65 per cent. However, the employment ratio in total will fall below the target of 80 per cent throughout the period.

GDP growth is also affected by the average working hours per person employed. In the scenario, average hours worked are assumed to decline somewhat in the long term. Such a decline may be justified by a probable increase in the demand for leisure, as household income and consumption opportunities increase in general. However, households mainly choose to increase their consumption of goods and services. Working hours are assumed

to decline by only 0.2 per cent per year, which is equivalent to a reduction in weekly working hours of approximately 3.5 hours by 2050. The number of hours worked will thus remain virtually unchanged in 2050 compared with 2005 despite the approximately 7 per cent increase in the 20 to 64 age group. For comparison purposes, the number of hours worked in 2005 have remained more or less unchanged since 1970, while the 20 to 64 age group has grown by some 12.5 per cent.

Productivity in the business sector will rise by an average of 2.6 per cent per year during the period ending 2015. This is in line with the past few years of relatively rapid productivity growth, but is much higher than the rates of growth seen in the 1970s and 1980s.<sup>11</sup> After 2015, productivity growth in the business sector is expected to fall gradually to an average of 2.3 per cent per year. Productivity growth 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 a productivity increase in the entire economy of approximately 2.2 per cent per year initially and by 1.9 per cent thereafter. Productivity growth varies somewhat over time due to changes in the composition of private and general government sector output of goods and services.

The productivity increase, combined with the labour force growth, gives rise to GDP growing on average by 1.9 per cent per year during the period 2005–2050. GDP per capita grows on average by 1.6 per cent per year. This means that GDP will be some 60 per cent higher in 2030 than in 2005 and around 135 per cent higher in 2050, while GDP per capita will be approximately 45 per cent higher in 2030 and doubled by 2050. The most important calculation assumptions are summarised in Table 16.

<sup>&</sup>lt;sup>11</sup> For a more detailed analysis of the assumptions upon which productivity assessments are based, see "Productivity and Wages Through 2015", Occasional study No. 6, National Institute of Economic Research, May 2005.

	2000	2005	2010	2015	2020	2030	2040	2050
Percentage change <sup>1</sup>								
Population in the 20-64 age group	0.5	0.5	0.3	0.2	-0.1	0.0	0.1	0.3
Number of employed	2.2	0.1	0.5	0.2	0.2	0.0	0.2	0.3
Hours worked	1.0	0.4	0.4	0.0	-0.1	-0.2	0.0	0.1
Business sector productivity	4.0	2.4	2.6	2.6	2.5	2.3	2.3	2.3
GDP	4.1	2.4	2.4	2.2	1.9	1.5	1.8	2.0
GDP per capita	4.1	2.0	2.0	1.7	1.4	1.1	1.6	1.7
GDP productivity	3.3	2.0	2.1	2.2	2.0	1.7	1.8	1.9
GDP deflator	1.3	0.6	2.2	2.1	2.2	2.3	2.1	2.0
CPI	0.9	0.3	2.1	2.0	2.0	2.0	2.0	2.0
Hourly wage	5.1	3.2	4.2	4.4	4.3	4.2	4.1	4.0
Per cent								
Real interest rate	4.5	3.2	2.9	3.0	3.0	3.0	3.0	3.0
Labour force participation, 20–64 years	81.2	81.3	80.8	81.4	82.1	81.5	81.8	81.6
Women	78.4	78.7	78.0	78.6	79.4	78.7	78.9	78.7
Men	84.0	83.9	83.4	84.0	84.7	84.3	84.7	84.5
Open unemployment <sup>2</sup>	5.0	5.9	4.5	4.4	4.4	4.5	4.5	4.4

Table 16: Macroeconomic assumptions

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 thus entails reduced GDP productivity.

<sup>2</sup> National definition. Students looking for work are counted as unemployed in international statistics.

Sources: Statistics Sweden and the Ministry of Finance.

#### General government revenue

The long-term development of tax revenues depends to a great extent on employment growth. The majority of taxes are a direct or indirect taxation of work. These taxes account for 65 per cent of general government revenue. The development of the labour market is also of major importance to revenue from taxes on household consumption expenditure, such as VAT and selective purchase taxes. Even if the tax rates remain unchanged in relation to the respective tax base, the total tax ratio, i.e. taxes and charges in relation to GDP, will rise somewhat in the next few decades. The reason is that a number of important tax bases may be expected to grow more rapidly than GDP. This applies, for example, to household consumption expenditure and taxed transfer payments, which grow when the number of pensioners increases.

A small proportion of the costs of providing welfare services is financed through user's fees. The calculations assume that fees for childcare, etc. rise in pace with production costs. This means that the fee revenues rise at a much higher rate than if today's maximum charges are long-term, but at a slower rate than household disposable income.

### General government expenditure

The change in the population structure has major effects on public finances. The increasing number of old people in the population affects expenditure on pensions, medical care and care of the elderly. The estimate of pension expenditure is based on the demographic trend, the macroeconomic assumptions and current rules and regulations. Pension expenditure as a percentage of GDP is estimated to increase from 8.8 per cent in

<sup>&</sup>lt;sup>1</sup> For the period 2010–2050, the average percentage change from the previous period is stated.

2005 to nearly 10.9 per cent in the mid-2030s and then decline somewhat thereafter. Expenditure on medical care and care of the elderly is estimated to increase from 10.4 per cent in 2005 to 14.9 per cent of GDP in 2050. Overall, expenditure on pensions, medical care and care of the elderly will increase as a percentage of GDP by over 6 percentage points during the estimate period.

The estimates assume a standard guarantee in general government transfer payment systems. For a large proportion of transfer payments, there are rules and regulations which automatically increase benefits in line with the wage trend. This applies to pensions, which are adjusted upward in line with the earnings index, and partly to transfer payments, which compensate for loss of earnings, e.g. health and parental insurance. Transfer payments which lack this type of automatic standard guarantee, e.g. child benefit and study allowance, are assumed in the estimate to increase in line with the nominal wage trend. Such a standard guarantee offsets the erosion which would take place in the longer term if the estimate were based on strictly unchanged regulations. The standard guarantee therefore assumes that certain reforms are implemented in pace with economic growth.

Staff intensity, e.g. the number of teacher hours per student, may be regarded as a standard indicator of general government services output. In the estimates, it is assumed that these services are carried out with the same staff density as today. This means that the number of persons employed in the general government sector needs to increase by approximately 160,000 persons between 2005 and 2020 during an expansion in pace with the demographic needs. Since the average age of staff in many operations is relatively high today, the recruitment needs will be considerably larger. The number of public sector employees needs to increase by an additional 375,000 or so net between 2020 and 2050 in order to sustain the standard of welfare and for tax-funded welfare services to be produced as they are today. The considerable recruitment needs are likely to contribute to wages being driven up relative to other areas of the economy. In the estimates, it is assumed that the increase in hourly wages in municipalities and county councils will be on average 0.5 per cent more rapid per year than in other areas of the economy during the period up to 2020.

Between 2005 and 2020, primary general government expenditure, i.e. expenditure excluding interest, is estimated to fall slightly as a percentage of GDP (see Table 17). The total demographic pressure on expenditure is still limited. Fewer children and young people of school age mean that expenditure on their schooling will decline as a percentage of GDP, while the demand for medical care and care of the elderly will only rise slightly. Until around 2015, local government consumption will only need to rise by some 0.3 per cent per year on average in order for the number of services produced to rise in pace with demographic demand. During the next 15-year period, the demand for tax-funded welfare services will rise by an average of more than 1 per cent per year. This assumes that municipalities are able to contract operations in areas where demand declines. Transfer payments linked to persons under the age of 20 will also fall as a percentage of GDP in the next few years. However, pension expenditure will increase, which leads to total household transfer payments increasing slightly as a percentage of GDP until 2020.

	2005-2020	2020–2050
Primary expenditure	-0.1	2.5
Household transfer payments	0.5	0.8
General government transfer payments to firms and abroad	-0.2	0.0
General government consumption	0.5	2.8
Investment	-0.9	-1.1

### Table 17: Primary expenditure as a percentage of GDP

Change in percentage points

Sources: Statistics Sweden and the Ministry of Finance.

Between 2020 and 2030, primary expenditure increases as a percentage of GDP by a further 3 percentage points. The expenditure ratio peaks in the latter half of the 2030s. General government consumption of medical care and care of the elderly increases the most markedly, but household transfer payments in the form of pensions also grow. However, general government investment expenditure falls as a percentage of GDP throughout the period. Investment volume admittedly increases in pace with general government consumption volume, but the price of investment goods is forecast to increase more slowly than the average price trend in the economy as a whole.

### Table 18: Public finances

Per cent of GDP

	2000	2005	2010	2015	2020	2030	2040	2050
Primary revenue	56.6	53.6	53.2	53.4	53.5	54.1	54.1	53.7
Taxes and charges	53.4	50.4	50.2	50.6	51.0	51.8	52.1	51.9
Other revenue	3.2	3.2	3.1	2.8	2.6	2.3	2.0	1.8
Primary expenditure	50.6	52.5	51.2	51.6	52.5	55.4	55.7	55.0
Transfer payments	21.4	21.9	21.1	21.9	22.3	23.2	23.5	23.0
Consumption	26.6	27.6	27.3	27.3	28.1	30.5	30.9	30.9
Investment	2.6	3.0	2.8	2.4	2.1	1.7	1.3	1.0
Primary net lending	6.0	1.1	2.0	1.7	1.1	-1.3	-1.6	-1.3
Net capital income	-1.0	0.3	0.0	0.3	0.7	0.9	0.3	-0.1
Net lending	5.0	1.4	2.0	2.0	1.8	-0.4	-1.3	-1.4
Financial position								
Consolidated gross debt	52.8	50.9	43.6	36.2	29.9	29.2	38.9	48.3
Adjusted gross debt1	31.9	26.8	15.8	4.7	-4.1	-5.1	7.9	17.6
Net debt	1.2	-3.6	-11.3	-22.0	-30.8	-32.9	-20.1	-10.4

<sup>1</sup>Consolidated gross debt minus pension system assets in addition to government securities.

Sources: Statistics Sweden and the Ministry of Finance.

### Balance target and sustainable public finances

The sustainability of public finances may be defined in various ways. In the strict sense, public finances are sustainable if the present value of all future revenue and expenditure, excluding interest, is the same as the amount of debt at the beginning of the period. If this requirement is fulfilled, future revenue covers not only future expenditure, but is moreover sufficiently large to reduce the debt in the long term. The problem with this definition is that revenue and expenditure must be projected over very long time periods with all the inherent uncertainty.

An alternative sustainability criterion is that the debt situation should not deteriorate over a more foreseeable period, which is nevertheless sufficiently long to encompass the demographic structural change. If general government debt as a percentage of GDP is no larger at the end of the period than at the beginning, fiscal policy may be considered sustainable.

Diagram 9 illustrates the development of central government debt as a percentage of GDP up to 2050. In the estimate, it is assumed that tax regulations will be adapted so that public finances show a surplus of 2 per cent of GDP until 2015. The calculation results in a debt ratio in 2050 which is far lower than compared with 2000. Consequently, the development of public finances may be considered sustainable throughout the period until 2050. At the same time, the increase in the debt ratio during the latter part of the period shows that sustainability problems may arise after 2050.





Per cent of GDP

Sources: Statistics Sweden and the Ministry of Finance.

The scenario illustrates the importance of the surplus target in order to be able to maintain the standard in tax-funded welfare systems. In order to prevent central government debt as a percentage of GDP from approaching unsustainable levels and necessitating cutbacks in the long term, the debt ratio must decline rapidly in the next few years and be reduced by nearly half by the mid-2020s.

#### **Appendix A: Calculation assumptions**

The calculation methods used in the estimate of public finances during the period 2009–2050 are discussed in more detail below.

#### **Demographic assumptions**

The estimate is based on Statistics Sweden's population forecast of May 2005 shown in Table A.1.

	2000	2005	2010	2020	2030	2040	2050				
Statistics Sweden											
Birth rate	1.55	1.76	1.83	1.85	1.85	1.85	1.85				
Average life expectancy, women	82.0	82.6	83.2	84.2	85.0	85.7	86.2				
Average life expectancy, men	77.4	78.3	79.2	80.8	81.9	82.9	83.6				
Net migration, thousands	24,600	29,500	26,900	24,100	23,600	23,000	22,600				

#### Table A.1: Demographic assumptions

Sources: Statistics Sweden and Eurostat.

### Table A.2: General government taxes and charges

Per cent of GDP

	2000	2005	2010	2015	2020	2030	2040	2050
Taxes and charges	53.4	50.4	50.2	50.6	51.0	51.8	52.1	51.9
Household direct taxes and charges								
Percentage of GDP	21.6	19.2	19.3	19.3	19.5	19.9	20.1	20.0
Implicit tax rate for direct taxes	29.4	25.7	26.2	25.8	25.8	25.8	25.8	25.8
Tax base for direct taxes as percentage of GDP	63.5	63.7	63.0	64.1	64.8	66.0	66.6	66.3
Implicit tax rate for charges	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Tax base for charges as percentage of GDP	46.0	45.2	44.6	44.8	45.1	45.8	46.2	46.6
Corporate direct taxes								
Percentage of GDP	3.9	3.0	2.9	2.9	2.8	2.7	2.7	2.7
Implicit tax rate	14.6	11.8	11.4	11.4	11.4	11.4	11.4	11.4
Tax base as percentage of GDP	26.6	25.5	25.5	25.3	24.9	23.9	23.6	23.5
Indirect taxes <sup>1</sup>								
Percentage of GDP	13.7	14.2	14.0	14.4	14.6	14.9	15.0	14.7
Implicit tax rate	27.8	29.5	29.2	28.8	28.6	28.4	28.1	28.0
Tax base as percentage of GDP	49.1	48.1	48.1	50.0	50.9	52.6	53.3	52.6
Employer contributions and self-employed contributions <sup>2</sup>								
Percentage of GDP	14.3	14.0	13.9	14.0	14.0	14.2	14.4	14.5
Implicit tax rate	34.6	34.1	34.0	33.9	33.9	33.9	33.8	33.8
Tax base as percentage of GDP	41.3	41.1	41.0	41.2	41.5	42.1	42.4	42.8

<sup>1</sup> Excluding wage-dependent indirect taxes.

<sup>2</sup> Including wage-dependent indirect taxes.

Sources: Statistics Sweden and the Ministry of Finance.

#### General government revenue

A standard method for projections of general government revenue is to set taxes and charges as a constant percentage of GDP. This method means in practice that tax regulations are assumed to change if the tax bases do not grow in pace with GDP. The estimates described here are based on an assumption of constant tax rates relative to the tax bases. Consequently, the aggregate tax ratio will vary if the tax bases develop in a different way than GDP. This method reflects unchanged tax regulations. Stable tax rates over time are advantageous both on grounds of effectiveness and redistribution policy. Table A.2 shows in detail 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.

In order that the surplus target is met each individual year up to and including 2015, a small budget improvement is required in 2009. In the calculations this is added to household income tax. Tax regulations are assumed to be unchanged after 2015. Nevertheless, the tax ratio (taxes and charges as a percentage of GDP) increases by 1.5 percentage points during the period 2005–2050. The reason is that important tax bases, such as the wage bill, taxable transfer payments (including pensions) and household consumption, grow more rapidly than GDP.

### General government consumption expenditure

The estimate of general government consumption expenditure is based on age- and gender-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). All these expenditure areas are projected in volume terms by the population change in the relevant age group for women and men. Other consumption expenditure, which mainly consists of general administration, the judicial 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 the 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 (see Appendix B in the Swedish convergence programme for the previous year).

### Table A.3: General government consumption

Per cent of GDP

	2000	2005	2010	2015	2020	2030	2040	2050
Total consumption	26.6	27.6	27.3	27.3	28.1	30.5	30.9	30.9
Childcare	1.6	1.6	1.7	1.8	1.9	1.9	1.9	2.0
Primary and secondary education	3.7	3.9	3.7	3.5	3.7	3.9	3.9	3.8
Adult education	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9
Medical care	6.0	6.3	6.3	6.5	6.8	7.4	7.6	7.6
Care of the elderly	3.7	4.2	4.3	4.4	4.8	6.3	6.9	7.2
Other activities	9.6	9.7	9.4	9.2	9.1	9.0	8.7	8.4

Sources: Statistics Sweden and the Ministry of Finance.

#### **Transfer payments**

The estimates assume a certain standard guarantee in general government transfer payment systems. For a large proportion of transfer payments, there are rules and regulations which automatically increase expenditure in line with real growth in the economy. This applies to pensions, which are adjusted upward in line with the earnings index, and also partly to transfer payments, which compensate for loss of earnings, e.g. health and parental insurance. Transfer payments, which lack an automatic standard guarantee, e.g. child benefit and study allowance, are assumed to increase in line with wages. Such a standard guarantee offsets the erosion of household transfer payments which would take place if the estimate were only based on a price projection over a period of almost 50 years.

# Table A.4: General government transfer payments

Per cent of GDP

	2000	2005	2010	2015	2020	2030	2040	2050
Total transfer payments	21.4	21.9	21.1	21.9	22.3	23.2	23.5	23.0
Transfer payments to households	18.4	18.7	18.0	18.9	19.2	20.1	20.5	20.0
Old age	8.5	8.8	8.9	9.8	10.1	10.6	10.9	10.3
III health	3.9	4.4	4.3	4.2	4.2	4.4	4.4	4.5
Children/studies	2.4	2.3	2.3	2.3	2.4	2.5	2.5	2.5
Labour market	1.9	1.7	1.3	1.3	1.2	1.3	1.3	1.3
Other	1.7	1.5	1.3	1.3	1.3	1.4	1.4	1.4
Transfer payments to firms	1.8	1.6	1.4	1.4	1.4	1.4	1.4	1.4
Transfer payments abroad	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6

Note: "Old age" comprises old-age pension, survivor's pension, central government and municipal pensions as well as 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 support and study allowance. "Labour market" comprises unemployment benefit, labour market training grants and wage guarantee.

Sources: Statistics Sweden and the Ministry of Finance.

#### **Old-age pension system**

Table A5 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 increasing number of pensioners. Despite the growing expenditure, the old-age pension system has considerable assets at the end of the estimate period.

### Table A.5: Old-age pension system

Per cent of GDP

	2000	2005	2010	2015	2020	2030	2040	2050
Revenue	10.8	8.6	8.5	8.7	8.7	8.9	8.8	8.9
Charges	6.7	6.8	6.6	6.5	6.6	6.7	6.7	6.8
Premium pension funds	2.6	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Interest, dividends, etc.	1.5	0.9	1.0	1.2	1.2	1.2	1.1	1.1
Expenditure	8.6	6.6	7.0	7.7	7.8	8.2	8.4	7.9
Pensions	6.3	6.5	6.9	7.6	7.8	8.1	8.4	7.9
Other	2.3	0.1	0.1	0.1	0.1	0.1	0.0	0.0
Net lending	2.2	2.0	1.5	1.0	0.9	0.7	0.4	1.0
Net financial assets	35.6	32.1	34.2	35.2	35.5	35.8	32.8	32.9

Sources: Statistics Sweden and the Ministry of Finance.

Table A.6 presents a number of key variables from the Swedish convergence programme in the form recommended by the European Commission.

¥	2000	2005	2010	2015	2020	2030	2040	2050
Per cent of GDP								
Total expenditure	54.7	54.5	53.4	53.6	54.1	56.9	57.6	57.3
Age-related	27.1	29.0	28.9	29.9	31.1	34.1	35.1	34.9
Pensions	10.3	11.2	11.1	11.9	12.1	12.8	13.1	12.5
Guarantee pensions	0.5	0.9	0.7	0.8	0.8	0.8	0.9	0.8
Old-age pensions	6.3	6.5	6.9	7.6	7.8	8.1	8.4	7.9
Other pensions (disability and survivor)	2.9	3.3	3.0	2.9	2.9	3.1	3.1	3.1
Public pension fund reserves	0.6	0.6	0.5	0.6	0.7	0.7	0.7	0.7
Medical care	6.0	6.3	6.3	6.5	6.8	7.4	7.6	7.6
Elderly care	3.7	4.2	4.3	4.4	4.8	6.3	6.9	7.2
Education	7.2	7.3	7.3	7.1	7.3	7.6	7.6	7.5
Other age-related expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest expenditure	4.1	2.0	2.2	2.0	1.6	1.5	1.9	2.4
Total revenues	59.7	55.9	55.4	55.6	55.8	56.5	56.4	55.9
Capital income	3.1	2.3	2.1	2.3	2.3	2.4	2.2	2.2
of which the pension system	1.5	0.9	1.0	1.2	1.2	1.2	1.1	1.1
Assets in pension funds	35.8	32.3	34.3	35.3	35.6	35.8	32.3	32.1
of which other government securities	20.9	24.1	27.9	31.6	34.0	34.3	31.0	30.8
Assumptions								
Growth in work productivity, GDP level	3.7	2.0	2.0	2.1	1.9	1.7	1.8	1.9
GDP growth	4.3	2.4	2.4	2.2	1.9	1.5	1.8	2.0
Labour force participation, men 20-64 years of age	84.0	83.9	83.4	84.0	84.7	84.3	84.7	84.5
Labour force participation, women 20-64 years of age	78.4	78.7	78.0	78.6	79.4	78.7	78.9	78.7
Labour force participation, both sexes 20-64 years of age	81.2	81.3	80.8	81.4	82.1	81.5	81.8	81.6
Unemployment	5.0	5.9	4.5	4.4	4.4	4.5	4.5	4.4
Population 65 years of age and older as a percentage of the population	17.2	17.3	18.6	20.3	21.1	22.7	23.6	23.2

Table A.6: The long-term sustainability of public finances

### Appendix B Comparison with long-term projections to the Ageing Working Group

The aim of the Economic Policy Committee is to prepare long-term projections for the public finances of all 25 member states. A report with financial calculations will be presented for the spring summit of 2006. The Committee ("the EPC") has so far produced preliminary macroeconomic assumptions which are to form the basis of the projections pertaining to public finances. The estimates in this publication are nevertheless based on the information presented to the Riksdag in the Budget Bill for 2006, Appendix 1, "Sweden's Economy". This section compares several macroeconomic key figures from these two sources.

	2005	2010	2015	2020	2030	2040	2050
Population 15-64 years of age							
EPC	100	102.1	100.6	100.5	101.2	101.5	103.2
Convergence programme	100	101.4	100.2	100.6	101.7	103.4	106.4
Employed 15-64 years of age							
EPC	100	103.7	104.7	105.3	105.8	106.3	108.5
Convergence programme	100	102.5	103.3	104.1	104.1	105.9	109.2
Unemployment, per cent of labour force							
EPC	5.0	4.3	4.3	4.3	4.3	4.3	4.3
Convergence programme	5.9	4.5	4.5	4.4	4.5	4.5	4.4
Hours worked							
EPC	100	103.2	104.2	104.8	105.3	105.9	108.0
Convergence programme	100	101.9	102.0	101.7	99.5	99.3	100.2
Work productivity							
EPC	100	111.9	127.6	144.4	176.8	209.7	248.5
Convergence programme	100	110.6	122.6	134.8	159.0	190.6	230.6
GDP							
EPC	100	115.4	133.0	151.3	186.2	221.9	268.4
Convergence programme	100	112.8	125.6	138.1	160.4	192.3	233.6
GDP per capita							
EPC	100	113.2	127.8	142.4	169.3	198.8	237.0
Convergence programme	100	110.5	120.4	129.3	144.6	169.5	200.9

 Table B.1: Macroeconomic assumptions in the EPC estimates and in the Swedish convergence programme

Sources: European Commission and the Ministry of Finance.

The EPC's calculations utilise a population forecast prepared by Eurostat during the spring of 2005. It shows slightly stronger population growth for people of working age during the next decade than Statistics Sweden's forecast of May 2005. In the longer term, however, the population grows at a higher rate in Statistics Sweden's forecast. The EPC assumes that more of the working age population will be employed and that open unemployment will be slightly lower. As a result, employment growth is stronger in the EPC's projection until the latter half of the 2040s, despite the fact that the underlying population growth is weaker. The number of working hours in the EPC's projection develops on a par with employment growth, while Sweden's convergence programme assumes that average hours worked gradually declines. As a consequence, the number of hours worked remains more less unchanged in the longer term in Sweden's convergence

programme, whereas it is approximately 8 per cent higher in 2050 than in 2005 in the EPC's estimates.

Work productivity also shows somewhat stronger growth in the EPC's scenario than in the Swedish convergence programme. The difference is nevertheless relatively minor. On average, GDP per hour worked grows by 2.04 per cent annually in the EPC's estimates and by 1.87 per cent per year in the convergence programme. Stronger growth in both the labour supply and productivity will result in GDP growth rates in volume rising faster than according to the EPC's estimates. Here, total output is twice as large in 2035 compared with 2005, and nearly 170 per cent higher in 2050, while the Swedish estimates indicate a doubling of GDP compared with 2005 no sooner than 2042. Since population growth in the long run is slightly higher in the Swedish estimates, the difference in the projection of GDP per capita is smaller than for GDP. GDP per capita is around 100 per cent higher in 2050 than in 2005 according to the Swedish estimates, but approximately 137 per cent higher than 2005 in the EPC's estimate.



Diagram B.1 Differences between the CEP and the convergence programme

Diagram B.1 illustrates how the number of hours worked, work productivity, GDP and GDP per capita develop from 2005 to 2050 in the EPC's projection in relation to Sweden's convergence programme. The number of hours worked rises faster in the EPC's projection for each year during this period. Around 2025, approximately 5 per cent more hours are worked in this scenario than in the Swedish convergence programme, and in 2050 around 8 per cent more hours. Work productivity also grows faster in the EPC's projection from 2006 to around 2030, when some 10 per cent more goods and services are produced per working hour than compared with the Swedish convergence programme. After 2030, the situation is the exact opposite. Productivity rises faster in the scenario upon which the estimates in this publication are based, but the level of productivity is still significantly higher in the EPC's estimates for 2050. The number of hours worked and work productivity result in GDP and GDP per capita rising faster in the EPC's projection until around 2030. In subsequent years, the rate of growth is more or less the same in

both scenarios, but GDP is approximately 15 per cent higher in the data used for the EPC's calculations. A small variation in population growth in both scenarios leads to GDP per capita growing somewhat faster than GDP in the EPC's estimates than according to the Swedish convergence programme.

# **Appendix C Tables**

### Table C.1: Forecast assumptions

Annual average, unless otherwise stated

	2004	2005	2006	2007	2008
GDP global <sup>1</sup>	4.9	4.1	4.1	3.8	3.8
GDP EU 15 <sup>1</sup>	2.3	1.4	1.9	2.2	2.4
HICP EU <sup>1</sup>	2.1	2.0	1.9	1.9	1.8
Hourly wage in Sweden, cost 4.3 or $4.0^1$	3.3	3.3	3.4	4.0	4.0
TCW index	122	127	124	121	121
SEK/EUR <sup>2</sup>	8.98	9.20	9.10	8.90	8.90
EUR/USD <sup>2</sup>	1.34	1.25	1.35	1.40	1.40
German 10-year government bond rate, annual average	4.06	3.53	4.01	4.20	4.28
Swedish 10-year government bond rate, annual average	4.42	3.53	3.97	4.26	4.35
Swedish 6-month interest rate, annual average	2.17	1.88	2.38	3.40	4.00
Oil price, (Brent, USD/barrel)	39	53	47	42	40

<sup>1</sup> Annual percentage change. <sup>2</sup> Value at year-end. Source: Ministry of Finance.

### Table C.2: General government finances

Per cent of GDP

	Level 2004	2004	2005	2006	2007	2008
Revenue	1,498	58.8	58.9	58.0	57.8	57.7
Taxes and charges	1,296	50.9	50.7	49.9	49.8	49.8
Taxes	933	36.6	36.4	36.4	36.3	36.3
Direct taxes	499	19.6	19.3	18.8	18.9	18.9
Product and production taxes	432	17.0	17.0	17.6	17.4	17.4
Taxes on capital	3	0.1	0.0	0.0	0.0	0.0
Social security contributions	369	14.5	14.5	13.7	13.8	13.4
Capital income	49	1.9	2.1	2.0	1.9	1.8
Other revenue	147	5.8	5.9	5.9	5.9	6.3
Expenditure	1,457	57.2	57.3	57.1	56.6	56.0
Collective consumption	699	27.4	27.3	27.3	27.2	27.1
Total social security transfer payments	536	21.1	20.8	20.3	19.9	19.8
Benefits in kind	77	3.0	3.0	3.0	3.0	2.9
Transfer payments	459	18.0	17.8	17.3	17.0	16.9
Interest	41	1.6	1.6	1.6	1.7	1.9
Subsidies	37	1.4	1.5	1.5	1.4	1.3
Investment	79	3.1	3.1	3.1	3.0	3.0
Other expenditure	66	2.6	2.9	3.3	3.3	3.0
Net lending	41	1.6	1.6	0.9	1.2	1.7
Primary net lending	82	3.2	3.2	2.5	3.0	3.6
Structural surplus/deficit	60	2.4	2.4	1.2	1.2	1.7
Primary structural lending	101	4.0	4.0	2.8	2.9	3.6
Central government	-9	-0.3	-0.7	-1.3	-0.9	-0.2
Old-age pension system	48	1.9	2.0	1.9	1.8	1.7
Local government	2	0.1	0.4	0.3	0.3	0.3

Sources: Statistics Sweden and the Ministry of Finance.

# Table C.3: Consolidated gross debt

Per cent of GDP

	2004	2005	2006	2007	2008
Consolidated gross debt	51.1	50.9	49.4	47.8	46,0
Change in gross debt	-0.9	-0.2	-1.6	-1.6	-1.8
Contribution to change					
Primary deficit	-3.2	-3.2	-2.5	-3.0	-3.6
Interest (consolidated)	1.6	1.6	1.6	1.7	1.9
Stock flows	2.9	2.8	2.0	2.0	2.0
Allocation of interest and taxes	1.6	0.1	0.4	0.2	0.3
Old-age pension system investments excl. government bonds	2.0	1.9	1.8	1.7	1.6
Change in central government debt	-1.0	0.7	-0.2	0.0	0,0
Other	0.1	0.3	0.0	0.1	0.1
Nominal GDP growth	-2.2	-1.5	-2.7	-2.3	-2.1
Implicit interest	3.2	3.2	3.3	3.7	4.1

Sources: Statistics Sweden and the Ministry of Finance.

# Appendix D The budget process and the fiscal policy framework

The Swedish budget process was reformed in the mid-1990s, both with regards to the formulation of the proposed government budget and the process through which the Riksdag decides upon the central government budget. Monitoring of the execution of passed central government budgets were also improved.

A key characteristic of the budget process – both in government and parliament – is the fact that it is a top-down process. Government drafting starts from their restristrictions. The Riksdag has accepted the Government's medium-term target regarding a surplus in general government net lending of 2 per cent of GDP on average over a business cycle. The most important restriction is the rolling expenditure ceiling for central government expenditure.

The expenditure ceiling is expressed in nominal figures for each of upcoming three years. This means that the following year always has an expenditure ceiling which was decided earlier, which governs the budget process. The expenditure ceiling constitutes a restriction both during formulation of the budget and the implementation of the central government budget. As a consequence, budget monitoring are very thorough. When required, measures are taken to keep expenditure under the ceiling.

The expenditure ceiling encompasses central government expenditure and expenditure for the pension system. It covers approximately two-thirds of all consolidated general government expenditures. Cyclically sensitive expenditures, such as most expenditure for labour market policy programmes and unemployment insurance, is included. Variations in such expenditure are to be covered by the margin between the expenditure ceiling and agreed expenditure. Outside the expenditure ceiling, there are interest rates for central government debt, which the Government cannot influence in the short term. Local government and county council expenditures are not encompassed by the expenditure ceiling for central government because they are largely autonomous financially.

The target for net lending covers the entire public sector and is defined in ESA 95 terms. This target was established in 1997 and requires consolidated general government net lending to be 2 per cent of GDP on average over a business cycle.

Based on the previous expenditure ceiling and the net lending target, the government allocates the total expenditure into 27 areas based on political priorities. The expenditures are then allocated between appropriations within the respective expenditure atreas. There are a total of approximately 490 appropriation amounts. This constitutes a clear top-down procedure.

Parliament determines the expenditure ceiling for year t+3 (alternatively t+2) and the size of each of the 27 expenditure areas for year t+1. This decision includes an estimation of central government revenue for year t+1. Having been drafted by the Standing Committee on Finance, this decision determines the main outline of the central government budget. The task of the various standing committees is to allocate the funds to appropriations within the various expenditure areas. This establishes the restrictions

which parliament has decided should not be exceeded. The decision-making process is also characterised by a clear top-down procedure.

The legal framework for the budget process consists of the constitution, the Riksdag Act, Swedish law and the central government budget.

# Appendix E The quality in public finances: public authorities

Sweden has a relatively large general government sector. This means that resources must be used productively and efficiently. Auditing has been a part of the political arena for quite some time, but in the past few years, the field has grown in key policy areas.

Several relatively small public authorities monitor and evaluate central government activities. These authorities are often independent from the bodies in charge of policy. Some of the authorities are specialised in key areas of policy, for example labour market and growth policies. Others, such as Riksrevisionen, have a wider approach and their own mandate to study all central government policies.

The Riksdag and Government also have functions for the purpose of studying the outcome of policies. The most prominent of these are the standing committees, which the government tasks with the review of policies. However, these committees work for temporary periods only. An example of a more permanent institution is the Long-Term Survey (LU) of the Ministry of Finance. The Swedish Government Offices also have a council of experts for socio-economic studies, the ESS, whose work is described under "Swedish Government Offices" below. The committees of the Riksdag also initiate investigations and analyses of various political matters.

There are also research units located at the public authorities in charge of policy. They have an integrated responsibility to continually monitor their own operation and report on target attainment within their areas of responsibility.

The public authorities described below do not have a mandate to evaluate or monitor their own operations.

# ESV (The Swedish National Financial Management Authority):

The ESV develops efficient financial management for the Government, Swedish Government Offices and central government bodies and carries out analyses and makes forecasts of central government finances.

# www.esv.se

# IAF (Swedish Unemployment Insurance Board):

The IAF supervises unemployment insurance funds and ensures that related regulations are followed by individuals, the funds and the Swedish National Labour Market Administration (AMV). Its task is to create prerequisites for proactive and straightforward readjustment insurance, improve the functioning of the labour market and reduce the length of unemployment periods. www.iaf.se

# IFAU (The Institute for Labour Market Policy Evaluation):

IFAU is a research institute under the Ministry of Industry, Employment and Communications. IFAU's objective is to promote, support and carry out:

- evaluations of the effects of labour market policies
- studies of the functioning of the labour market
- evaluations of the labour market effects of measures within the educational system

Besides research, IFAU also focuses on:

- spreading knowledge about the activities of the institute through publications, seminars, courses, workshops and conferences
- creating a library of Swedish evaluational studies
- influencing the collection of data and making data easily available to researchers all over the country

# www.ifau.se

# ITPS (The Swedish Institute for Growth Policy Studies):

ITPS is a central government agency in charge of analyses, studies and certain official statistics. Its mission includes analyses of other nations' growth policies to provide decision-makers with the latest knowledge and help them initiate change. The analyses focus on developments internationally as well as in Sweden. Evaluations are conducted to learn from current and past economic and regional policies in Sweden and internationally. Statistics are produced so that the Swedish Government Offices, public authorities, researchers and investigators have access to current growth policy data. ITPS has a special responsibility for certain company statistics.

www.itps.se

# NIER:

The National Institute of Economic Research is an agency under the Ministry of Finance, whose main task is to produce forecasts as the basis of economic policy. The NIER also conducts research in the areas of macroeconomics, labour market, productivity, fiscal policy and environmental economics.

www.konj.se

# Swedish Government Offices:

Some functions conducting studies, research and follow-ups are located in the various Ministries of the Swedish Government Offices, for example, the Ministry of Industry, Employment and Communications' analysis and research secretariat as well as the Long-Term Survey (LU) under the Division of Structural Policies of the Ministry of Finance. The Swedish Government Offices also encompass a council of experts for socioeconomic studies, the ESS, whose tasks include:

- monitoring and compiling study and research findings in policy areas both nationally and internationally
- based on such compilation, indicating the policy relevance of such studies/reports and providing a first draft of policy conclusions for further drafting by the Ministry of Finance

- initiating evaluations of public and private operations
- producing documentation for re-examination of central government undertakings
- monitoring think tanks with the aim of developing policy in addition to following developments in the area
- helping to disseminate knowledge about matters related to budget policy and socio-economic issues

# www.regeringen.se

# Riksrevisionen:

Riksrevisionen's mission is the enhancement of central government use of resources and more efficient public administration through audits of overall central government operations. The agency is a body under parliamentary control and thus has an important role in the democratic system. Riksrevisionen audits public authorities and monitors the effectiveness of central government undertakings.

The independence of Riksrevisionen is guaranteed in the constitution. The three Auditors General decide upon the subject of an audit, how it is to be carried out and determine the conclusions to be drawn based on the audit.

www.riksrevisionen.se

# Socialstyrelsen (The National Board of Health and Welfare):

The National Board of Health and Welfare is the Swedish national expert and supervisory authority for social services, public health, infectious disease prevention and medical care. The Board seeks to ensure that efforts in these areas are of good quality and are distributed according to need. The work must also be cost-effective and in accordance with current legislation.

www.socialstyrelsen.se

# Statskontoret (Swedish Agency for Public Management):

The Swedish Agency for Public Management provides support to the Government and Government Offices. Its task is to promote an effective general government sector. It conducts follow-ups and evaluations at the request of Government for public administration and provides information for re-examination of general government undertakings. The Agency's reports are also intended to discuss the impact of central government measures and reforms in various policy areas.

www.statskontoret.se