Brussels, 27 February 2007 ECFIN/G1/2007/REP 50672-EN

ECONOMIC ASSESSMENT OF THE CONVERGENCE PROGRAMME OF SWEDEN (UPDATE OF DECEMBER 2006)

The Stability and Growth Pact requires each EU Member State to present an annual update of its medium-term fiscal programme, called "stability programme" for countries that have adopted the euro as their currency and "convergence programme" for those that have not. The most recent update of Sweden's convergence programme was submitted on 7 December 2006.

The attached technical analysis of the programme, prepared by the staff of, and under the responsibility of, the Directorate-General for Economic and Financial Affairs of the European Commission, was finalised on 6 February 2007. Comments should be sent to Karl Scerri (Karl.SCERRI@ec.europa.eu). The main aim of the technical analysis is to assess the realism of the budgetary strategy presented in the programme as well as its compliance with the requirements of the Stability and Growth Pact. However, the analysis also looks at the overall macro-economic performance of the country and highlights relevant policy challenges.

Based on this technical analysis, the European Commission adopted a recommendation for a Council opinion on the programme on 13 February 2007. The ECOFIN Council adopted its opinion on the programme on 27 February 2007.

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All these documents, as well as the provisions of the Stability and Growth Pact, can be found on the following website:

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SUMMARY AND CONCLUSIONS¹

As part of the preventive arm of the Stability and Growth Pact, each Member State that does not use the single currency, such as Sweden, has to submit a convergence programme and annual updates thereof. The most recent programme, covering the period 2006-2009, was submitted on 7 December 2006.

In the last ten years Swedish economic performance has been strong overall. Real GDP growth has been higher than in the euro area. This growth performance has been characterised by strong productivity developments and growth contributions from net exports. The current account has shown a continuously growing surplus position. Unemployment rates are lower than in the euro area and have fallen, although they are still considered high by domestic standards. Labour market participation rates are relatively high. Inflation is low, reflecting a credible inflation-targeting monetary regime. As elsewhere, real and nominal interest rates have fallen. The public finance position, guided by the national rules-based framework, has been sound, showing average budget surpluses broadly in line with the national 2% surplus objective over the cycle. The general government gross debt ratio has been progressively reduced and is well below the 60% threshold.

Against this background, safeguarding the credibility of the budgetary framework and avoiding a pro-cyclical fiscal stance are important economic challenges. In addition, although the public finance pressures stemming from the ageing population are mitigated by the pension reform, the demand and expectations on the welfare system remain high. As a result, Sweden faces two key budgetary policy challenges. First, setting expenditure plans in line with expenditure ceilings and budgetary objectives will be crucial, not only to safeguard sustainability but also to allow the automatic stabilisers to function and to reduce the risk of pro-cyclical policies. This will be especially important as output gaps turn positive, inflationary pressures increase and the cyclical component of the budget turns positive. Second, while the requirements for stabilisation and sustainability call for strong surplus positions, it is also the case that Sweden has a comparatively large public sector that is financed from high taxes. In order to effectively supply the required amount of welfare services, enhancing public sector productivity will become increasingly important.

The macroeconomic scenario underlying the updated convergence programme envisages that real GDP growth will slow from 4.0% in 2006 to 3.0% on average over the rest of the programme period, although it will remain at close to potential. This scenario is based on plausible assumptions, with growth in 2006 having possibly been even higher. During 2007-2009, stronger consumption growth, driven by higher income and improved wealth positions, is expected to partly compensate for slower growth in investment spending and export activity. The underlying improvement in labour market conditions, driven by the cyclical upturn, is expected to continue during the programme horizon. Both the programme projections and the Commission services' autumn 2006 forecast expect inflationary pressures will remain subdued, but approaching the Riksbank's 2%

The analysis takes into account (i) the Commission services' autumn 2006 forecast, (ii) the code of conduct ("Specifications on the implementation of the Stability and Growth Pact and guidelines on the format and content of stability and convergence programmes", endorsed by the ECOFIN Council of 11 October 2005) and (iii) the commonly agreed methodology for the estimation of potential output and cyclically-adjusted balances.

inflation target by the end of the programme. According to the Commission services' autumn forecast, the output gap is expected to turn slightly positive in 2006 and is forecast to be increasingly so in the following years. Therefore, the Swedish economy is expected to be in good times throughout the programme period.

For 2006, the general government surplus is estimated at 2.8% of GDP in the Commission services' autumn 2006 forecast, against a projected outturn of 0.9% in the previous update of the convergence programme; the difference mainly reflects a base effect from the much higher-than-expected surplus in 2005. On the basis of available cash data it appears that, due both to lower primary expenditure and higher tax revenues, the 2006 surplus is likely to have been higher than the Commission services' forecast.

The updated programme confirms that a budget surplus of 2% of GDP on average over the cycle remains the key guiding fiscal rule, supported by multi-annual expenditure ceilings. In the spring 2007 Fiscal Policy Bill, the Government will re-evaluate the present target for the general government surplus to take into account Eurostat's decision on the classification of funded second-pillar pension schemes.² After the expiry of the transition period for implementing this decision (spring 2007), the surplus will be lower by approximately 1% of GDP each year and the gross-debt-to-GDP ratio will be revised upward by about 0.5% of GDP.

The budgetary strategy presented in the update foresees a decline in the surplus in 2007 (from 3.0% of GDP in 2006 to 2.4%) and thereafter projects a progressive recovery (to 3.1% in 2009); the primary surplus follows a similar path. Both expenditure- and revenue-to-GDP ratios are on a gradually declining trend throughout the programme period. The strategy is somewhat backloaded, with significant tax cuts in 2007 being only partially financed. Compared with the previous update, the projected path for the surplus (initial decline followed by gradual recovery) is similar, but with higher net lending positions throughout the programme period. Gross government debt is estimated to have dropped to 46.5% of GDP in 2006 and the programme projects the debt ratio will fall by 13.5 percentage points over the rest of the programme period.

As mentioned above, the medium-term objective (MTO) for the budgetary position presented in the programme remains that of a budgetary surplus of 2% of GDP on average over the business cycle (i.e. in structural terms). The MTO is in line with the Pact and significantly more demanding than implied by the debt ratio and average potential output growth in the long term. The structural surplus (i.e. the cyclically-adjusted surplus net of one-off and other temporary measures), calculated according to the commonly-agreed methodology, is projected to remain above 2% of GDP throughout the programme period.

The risks to the budgetary projections in the programme appear broadly balanced from 2007. The macroeconomic outlook and the tax revenue projections seem to reflect plausible assumptions, in spite of some uncertainty on the future performance of capital gains taxes. The expenditure targets are supported by a good track record owing to the expenditure ceilings.

In view of this risk assessment, the budgetary stance in the programme seems sufficient to maintain the MTO throughout the programme period, as envisaged in the programme.

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See Eurostat News Releases No 30/2004 of 2 March 2004 and No 117/2004 of 23 September 2004.

In addition, it provides a sufficient safety margin against breaching the 3% of GDP deficit threshold with normal macroeconomic fluctuations during the programme period. There is a risk, however, that the fiscal policy stance implied by the programme may turn out to be pro-cyclical in 2007, during which good times are expected to continue, following structural reforms aimed at encouraging greater participation in the labour market.

The long-term budgetary impact of ageing in Sweden is lower than the EU average, with pension expenditure projected to remain relatively stable as a share of GDP over the long term, influenced by the considerable expenditure-reducing impact of the reform of the pension system. The initial budgetary position with a high primary surplus contributes to the reduction of gross debt and the accumulation of assets. Maintaining sound government finances with continued surpluses, as planned, would contribute to limiting risks to the sustainability of public finances. Overall, Sweden appears to be at low risk with regard to the sustainability of public finances.

The implementation report of the National Reform Programme (NRP) of Sweden, as revised by the new government and provided in the context of the renewed Lisbon strategy for growth and jobs, was submitted on 28 November 2006. Sweden's NRP identifies as key challenges/priorities: the need for high levels of labour market participation and hours worked as well as the promotion of a knowledge-based economy with environmentally-efficient production processes. The Commission's assessment of this programme (adopted as part of its December 2006 Annual Progress Report³) is that Sweden is making very good progress in the implementation of its NRP. Against this background of progress, Sweden was encouraged to focus on the following areas: regulatory measures to increase competition, the impact assessment system, better regulation, labour supply and hours worked, the employment rate of immigrants and young people, and reintegration of people on sickness-related schemes. The convergence programme and the NRP are well-integrated. In particular, both programmes emphasise the implementation of labour market reforms.

The overall conclusion is that the medium-term budgetary position is sound and the budgetary strategy provides a good example of fiscal policies conducted in compliance with the Stability and Growth Pact. However, it will be important to ensure that a deterioration of the structural budgetary position in 2007 will not spill over to subsequent years.

Comparison of key macroeconomic	and bu	dgetary	projecti	ons ¹	
	2005	2006	2007	2008	2009

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Communication from the Commission to the Spring European Council, "Implementing the renewed Lisbon strategy for growth and jobs - A year of delivery", 12.12.2006, COM(2006)816.

Real GDP	CP Dec 2006	2.7	4.0	3.3	3.1	2.7
(% change)	COM Nov 2006	2.7	4.0	3.3	3.1	n.a.
(70 change)	CP Dec 2005	2.4	3.1	2.8	2.3	n.a.
HICP inflation ²	CP Dec 2006	1.3	1.9	2.2	1.5	1.9
(%)	COM Nov 2006	0.8	1.5	1.6	1.8	n.a.
(70)	CP Dec 2005	1.5	1.5	2.0	2.0	n.a.
Outroot a su	CP Dec 2006 ³	-0.7	0.0	0.3	0.3	0.3
Output gap (% of potential GDP)	COM Nov 2006 ⁷	-0.5	0.2	0.5	0.6	n.a.
(% of potential GDP)	<i>CP Dec</i> 2005 ³	-0.4	-0.1	0.1	-0.1	n.a.
0 1 411	CP Dec 2006	3.0	3.0	2.4	2.7	3.1
General government balance	COM Nov 2006	3.0	2.8	2.4	2.5	n.a.
(% of GDP)	CP Dec 2005	1.6	0.9	1.2	1.7	n.a.
Drimory holonos	CP Dec 2006	4.6	4.5	4.1	4.2	4.6
Primary balance (% of GDP)	COM Nov 2006	4.6	4.5	4.1	4.3	n.a.
(% of GD1)	CP Dec 2005	3.2	2.5	3.0	3.6	n.a.
Cyclically-adjusted balance	CP Dec 2006 ³	3.4	3.0	2.2	2.5	3.0
(% of GDP)	COM Nov 2006	3.3	2.7	2.1	2.1	n.a.
(% of db1)	CP Dec 2005 ³	1.8	0.9	1.1	1.7	n.a.
Structural balance ⁴	CP Dec 2006 ⁵	3.0	3.0	2.2	2.5	3.0
(% of GDP)	COM Nov 2006 ⁶	2.9	2.7	2.1	2.1	n.a.
(% 01 GDF)	CP Dec 2005	1.8	0.9	1.1	1.7	n.a.
Covernment areas debt	CP Dec 2006	50.3	46.5	41.5	37.4	33.0
Government gross debt (% of GDP)	COM Nov 2006	50.4	46.7	42.6	38.7	n.a.
(70 01 0121)	CP Dec 2005	50.9	49.4	47.8	46.0	n.a.

Notes:

¹The budgetary projections exclude the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes, which needs to be implemented by the time of the spring 2007 notification. Including this impact, the general government balance according to the updated programme would be 2.0% of GDP in 2005, 2.0% in 2006, 1.3% in 2007, 1.6% in 2008 and 2.0% in 2009, while government gross debt would be 50.9% of GDP in 2005, 47.0% in 2006, 42.0% in 2007, 37.9% in 2008 and 33.5% in 2009.

²For 2005-2006, the CP inflation figures are estimated on a year-on-year basis at the end of each year, whereas the Commission services' figures are annual averages. The programme assumes that the HICP will follow UND1X (national consumer price index excluding changes in indirect taxes, subsidies and mortgage interest expenditure) in 2008 and 2009. However, HICP is expected to be 0.5 pp. higher than UND1X inflation in 2007, thereby accentuating the programme's projected drop in HICP inflation in 2008.
³Commission services calculations on the basis of the information in the programme.

Source:

Convergence programme (CP); Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

⁴Cyclically-adjusted balance (as in the previous rows) excluding one-off and other temporary measures.

⁵One-off and other temporary measures taken from the programme (0.4% of GDP in 2005; deficit-reducing).

⁶One-off and other temporary measures taken from the Commission services' autumn 2006 forecast (0.4% of GDP in 2005; deficit-reducing).

⁷Based on estimated potential growth of 2.6%, 3.2%, 3.1% and 3.0% respectively in the period 2005-2008.

1. Introduction

The 2006 update of Swedish convergence programme, which covers the period from 2006 to 2009, was adopted by the Swedish government on 7 December 2006⁴ and presented to the Commission on the same day⁵. The programme is consistent with the Budget for 2007, approved on 21 December 2006. The programme was presented to Parliament's Standing Committee on Finance and the Committee on EU affairs. The present update is the eighth update of the original convergence programme submitted in December 1998.

The programme follows the model structure for stability and convergence programmes specified in Annex 1 of the code of conduct. The programme has gaps in the compulsory data⁶ and does not provide all optional data⁷ prescribed by the code of conduct. Annex 3 provides a detailed overview of all aspects of compliance with the new code of conduct.

2. ECONOMIC TRENDS AND POLICY CHALLENGES

The section has five parts. The first provides a brief overview of the macroeconomic performance in terms of growth and other major macro-variables. The second presents the results of a growth accounting exercise and tries to identify the main reasons for low or high average annual economic growth vis-à-vis the euro area. The third looks at the volatility of growth and other key macroeconomic variables and the stabilising or destabilising role of macro-policies. The fourth part focuses on trends in public finances. Based on the picture outlined in the first four parts, the fifth identifies major economic challenges with implications for public finances.

2.1. Economic performance

Over the last ten years Swedish economic performance has been strong overall (see Table 1 for an overview of key economic indicators). Over the 1996-2005 period, real GDP growth was 2.7% per year on average, markedly higher than the 2.1% recorded in the euro area (see Figure 1). This growth performance has been characterised by strong productivity developments and growth contributions from net exports. The external balance has been in a continuously growing surplus. Unemployment rates in 2005 were clearly below 1996 levels. Over the whole period, inflation rates have been low, and on average well below 2%. As elsewhere, interest rates, real and nominal, have come down. The public finance position has been sound showing average budget surpluses above 1% of GDP, well beyond SGP requirements. The general government gross debt ratio has

⁴ A new government took office on 6 October 2006 following a general election.

The English version was also submitted on the 7 December 2006.

⁴ Missing compulsory data are: nominal GDP – level 2005 (Table 1a); deflators for GDP, exports and imports – levels 2005 (Table 1b); compensation of employees – level 2005 (Table 1c); tax burden (D.2+D.5+D.61+D.91-D.995) (Table 2); growth of relevant foreign markets, growth of world import volumes excluding EU (Table 8).

Missing optional data are: employment (hours worked), labour productivity (hours worked) (Table 1c); deflators for private consumption, public consumption and investment (Table 1b); specifications of sectoral balances and statistical discrepancies – 2006-2009 (Table 1d); general government expenditures by function – levels 2009 (Table 3); liquid financial assets (Table 4); potential GDP growth and contributions (Table 5).

been reduced by more than 20 percentage points of GDP to reach a level well below the 60% threshold.

Box 1: Monetary policy and exchange rate regimes of SWEDEN									
Fixed exchange regime	Up to the early-1990s, the Riksbank linked the krona to a trade- weighted currency basket in which the US dollar was dominant.								
(May 1991)	On 17 May 1991 the Riksbank decided to link the krona to the ECU.								
Flexible exchange rate regime (since November1992)	In November 1992, strong market pressures forced the Riksbank to leave the fixed exchange rate regime. A price stability objective was adopted in 1993. The Riksbank specified an explicit inflation target whereby the annual change in the consumer price index (CPI) is to be 2%, with a tolerance interval of plus/minus 1 percentage point.								
	The CPI was chosen as the target variable because it represented a broad price index that was familiar to the general public. However, the Riksbank uses different measures of underlying inflation, including UND1X (CPI excluding changes in indirect taxes, subsidies and mortgage interest expenditure), to describe the trend rate of inflation and to justify monetary policy decisions.								

This very respectable economic performance could however be somewhat qualified, even though it does not change the overall picture. First, as regards growth, the starting point is relevant. Despite the high growth rates, Swedish GDP levels are not yet back to the pre- 1992/93 crises trend growth line. In connection to the crises, real growth rates turned negative, budget deficits and unemployment exploded and the Swedish krona depreciated substantially, by almost 30%, all setting the stage for a catching-up phase with a competitive export sector. However, at the same time, framework conditions for growth have benefited from the stability-oriented macro-economic framework put in place after the 1992/93 economic crises including: a floating exchange rate regime (1992), a low inflation-targeting monetary policy framework (1996), the national budgetary rules framework (1997-2000) and institutional changes in the wage formation

Analysis would suggest that Swedish GDP levels are not yet back to pre-crises trend lines (see Cerra, V. and S. C. Saxena (2005), Eurosclerosis or Financial Collapse: Why Did Swedish Incomes Fall Behind?, IMF Working Paper No. 29).

On the inflation targeting regime's influence on wage setting behaviour in Sweden, see Fregert, K. and L. Jonung (2006), Policy rule evaluation by contract makers: 100 years of wage contract length in Sweden, European Economy Economic Papers No. 270, available from: http://ec.europa.eu/economy finance/publications/economic papers/2007/ecp270en.pdf.

process (1997)¹⁰. Second, the overall growth performance may also be qualified by taking into account developments in the terms of trade¹¹ which have been on a negative trend over the period implying that real GDP figures may overestimate welfare gains¹².

The main growth contributions have come from domestic demand, but exports and net exports have also been a very important driver. The average growth contribution from net exports over the 1996-2005 period has been 0.9% of GDP per year, compared with 0.1% in the euro area. The Swedish export sector has benefited from globalisation and a good competitive position. The depreciation in connection with the crises and wage costs developing beneficially and in line with the high productivity rates have helped.

Also, Sweden has benefited from having an export portfolio well designed to benefit from the increases in world demand for imports. Overall, there has been a continuous gain of export market shares. Key sectors such as electronic, vehicles and pulp/paper can be mentioned in this context. The external balance has shown large and growing surpluses reflecting high national saving in excess of investment, in both the private and the public sectors, and investment levels well below pre-crises levels (mainly investment in housing has declined). An increasingly strong "double surplus" position has built up, i.e. a huge external balance surplus combined with strong budget surpluses.

Unemployment has come down over the period but remains at historically high levels. Unemployment increased dramatically in connection to the crises and was at 9.6% in 1996, but came down to 4.9% in 2002. However, in later years it has increased again reaching 7.8% in 2005¹³. The average employment growth has been 0.6% per year, but the distinctly weaker growth in the latter part of the period contributed to rising unemployment. Overall, compared to the pre-crises years both labour market participation rates and employment rates are distinctly lower. This partially reflects an increasing absence from work due to illness, something that in turn partially reflects disincentives to work in both tax and benefit systems¹⁴.

Inflation has been very low over the last decade despite the relatively high GDP growth, resulting in an enhanced credibility of the inflation-target regime. Especially in the last few years, high productivity growth and relatively weak labour market developments have restricted domestic labour cost growth. At the same time, import prices, excluding energy, have been low and contributed importantly to keeping inflation down. This reflects low international price increases in imported manufactured goods due to increased international competitive pressures as well as a gradual switching of Swedish import products towards lower-cost country producers.

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On the Swedish labour market institutions, see Fischer, J. (2006), The Swedish labour market model: performance under outside pressures, Ecfin Country Focus, Volume III, Issue 8.

See The National Institute of Economic Research (2004), The Swedish Economy - August 2004, Stockholm.

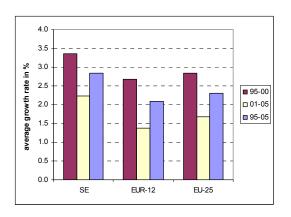
See Eckefeldt, P. and Z. Cech (2004), Too many ill Swedes?, ECFIN Country Focus, Volume I, Issue 4.

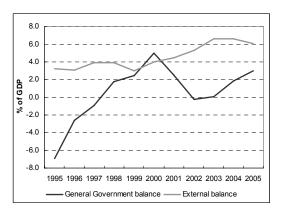
Swedish terms of trade have been on a negative trend since the early 1990's, largely reflecting higher energy import prices and lower export prices in electronics which is a key Swedish export sector. Taking 1996 as the starting point and comparing with euro area real GDP per capita developments, Swedish real GDP per capita had improved by 9% more by 2005. However, taking into account also terms of trade, the Swedish GDP per capita only grew 4% more than in the euro area. Thus, not taking terms of trade into account may slightly overestimate the welfare gains.

In 2005 some methodological changes were made in the measurement of employment/ unemployment which has implied a break in the series. For more details, see for example The National Institute of Economic Research (2005), The Swedish Economy - August 2005, Stockholm.

Figure 1: Average GDP growth: Sweden vs. EU25 and the euro area







<u>Source</u>: Commission services <u>Source</u>: Commission services

2.2. Anatomy of medium-term growth

Within the framework of a traditional growth accounting exercise, this section dissects the sources of high or low average growth as well as possible differences in average economic growth vis-à-vis the euro area. The growth accounting exercise is carried out on the basis of a Cobb-Douglas production function¹⁵, the results of which are shown in Figure 3 for real GDP per capita over the 1996-2005 period. On this basis, the dominant contribution to the average yearly Swedish real GDP growth rate of 2.7% has come from total factor productivity (TFP), while capital deepening has also contributed to some extent. However, the overall net contribution from labour inputs has been negligible. The strong TFP growth performance also stands out in comparison to the euro area (Figure 4), as do the relatively weak developments in hours worked, participation and unemployment rates.

While there is a positive cyclical component contributing to these relatively impressive Swedish productivity growth rates, especially taking into account a catching up effect after the 1992/3 crises, trend productivity rates have also increased ¹⁶. Looking across sectors, both manufacturing industry and service industry have seen increased productivity, with telecom manufacturing being particularly important over the 1996-2000 period ¹⁷. However, in later years, also the use of IT-technology and IT-induced organisational change, especially in service industries have played an important role ¹⁸. In

Similar to the commonly agreed method for the assessment of stability and convergence programmes.

See The National Institute of Economic Research, Box in "Konjunkturläget, Mars 2004".

However, there are indications that the measured high productivity rates in the telecom industry is exaggerated in the latter part of the 1990's, see Edqvist, H. (2004), The Swedish ICT miracle - myth or reality?, SSE/EFI Working Paper No. 556.

See Andersson, B. and M. Adahl (2005), The "new economy" and productivity in Sweden in 2000s, The Riksbank Economic Review 1/2005, and Annenkov, A. and C. Madashi (2005), Labour productivity in the Nordic Countries: a comparative overview and explanatory factors 1980-2004, ECB Occasional Paper No. 39.

terms of output, over the 1994-2004 period¹⁹, manufacturing industry output (+87%) has grown distinctly more than services (+45%) but the share of services in output (60%) is almost the double compared to manufacturing (30%).

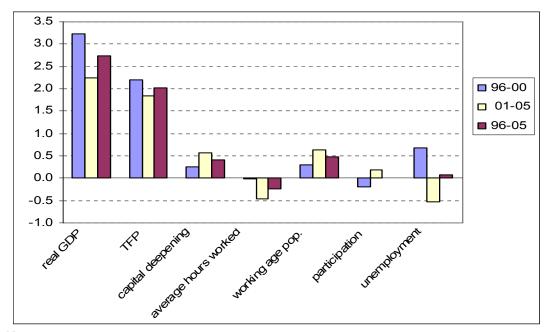


Figure 3: Real GDP growth and its components

Note:

Assuming a Cobb-Douglas-production function $Y = A(L \cdot H)^{\alpha} K^{1-\alpha}$ where Y denotes the level of GDP, L employment, H the average hours worked per person employed, K the capital stock and α the labour share in

income, real GDP can be written as
$$Y = \frac{Y}{H \cdot L} H \cdot L = A \cdot \left(\frac{K}{H \cdot L}\right)^{1-\alpha} H \cdot WP \cdot PART \cdot (1 - ur)$$
 where WP

stands for working age population, PART denotes the participation ratio as a share of WP and ur the rate of unemployment. In terms of growth rates g this is:

$$g_Y = g_A + (1 - \alpha)(g_K - g_L - g_H) + g_H + g_{WP} + g_{PART} - g_{W} \cdot \frac{ur}{1 - ur}$$

The expression $(g_K - g_L - g_H)$ is referred to as capital deepening, i.e. the increase in the capital labour ratio. *Source*:

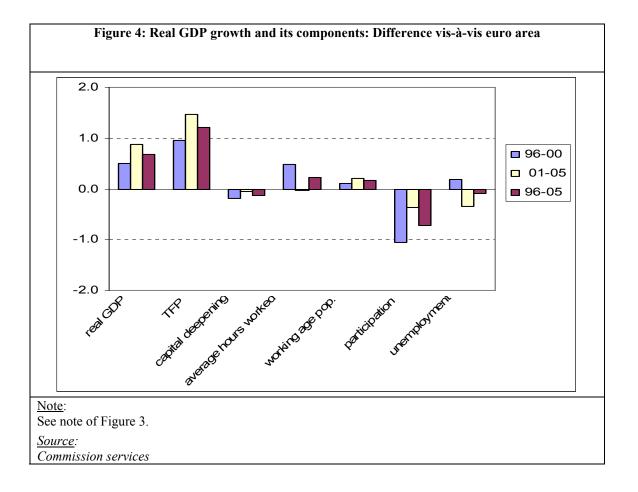
Commission services

While the contribution from labour is marginal overall, looking at sub-components illustrates some interesting diverging trends. First, it is clear that there has been a beneficial demographic situation over the period with an increasing share of the population in working-age cohorts. However, this has been counteracted by a decline in hours worked. This in turn mainly reflects the increases in absence from work due to illness mentioned above²⁰, especially over the 2000-2005 period. The developments in labour participation rates have been weak in recent years in particular in comparison to the EU and euro area. However, this also reflects the relatively strong Swedish starting position with a stronger participation of women. In this respect, the euro area is catching up.

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See Davis, J. and M. Henrekson (2006), Tillväxten och sysselsättningen i 90-tals krisens kölvatten, NBER Rapporten II, SNS 2006.

See OECD Country Survey Sweden 2005 and The National Institute of Economic Research, Box in "Konjunkturläget, August 2004".



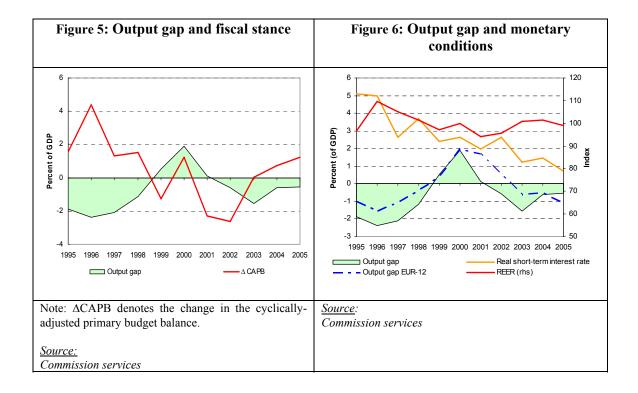
2.3. Macro-policies against the backdrop of the economic cycle

In the 1970's and 1980's the Swedish growth performance was characterised by (largely policy-induced) cycles of booms, wage inflation and loss of competitiveness, followed by busts and devaluations. After the introduction of the post-crises stability oriented macro-economic framework, with a national inflation-targeting monetary policy framework (see Box 1), stabilisation policy is foremost the responsibility of the Riksbank. Growth conditions have been more stable and the cycle has broadly followed the EU and euro-area cycles. Nevertheless, Sweden being a small open economy with a large export orientation, the cycles have, not surprisingly, tended to be somewhat more volatile²¹.

Looking more closely at sub periods, the decade can be divided into two parts. First, the 1996-2000 period which can be described as being part of the "catching-up cycle" after the crises, ending with a cyclical peak in 2000, followed by a relatively mild recession cycle over the 2001-2005 period, reaching its trough in 2003. In the first cycle, strong and increasing domestic demand dominated growth. Investment growth was high, catching up after the large decline in connection to the crises. Private consumption was strong as household wealth increased, driven by a strong stock exchange performance. Household savings rates were greatly reduced, supporting consumption growth. Also

See European Commission (2004), EMU after five years, European Economy Special Report, Nr.1 2004.

exports grew strongly, helped by good competitiveness. Over this period, the budgetary stance was quite restrictive as government expenditures were restricted by the expenditure ceilings and revenues were very dynamic. Budget surpluses increased. The monetary conditions eased. Nominal interest rates started to come down with inflation rates and the higher credibility of the low inflation framework. Overall, this contributed to reduce also real rates. The cycle peaked in late 2000 as the global fall out of export demand in 2001, the fall in stock exchange prices and burst of the IT bubble led to a mild recession.



Accordingly, over the 2001- 2003 period GDP growth was well below potential rates as domestic demand developed weakly. Net exports continued to contribute to growth but now mainly because of falling imports. In 2001 the savings rate increased again, relatively dramatically, possibly reflecting the sharp fall in household wealth as the stock exchanges fell. However, in the following years the savings rate has not come down much despite increases in wealth (driven by the increasing house prices), all in all holding back the contribution to growth from private consumption. The budgetary stance in 2001 and especially in 2002 (election year) was quite expansionary. This led to a need for a tighter stance in the following years to restore sound budgetary positions. Overall, according to the change in the cyclically-adjusted primary balance, the fiscal stance in this period was overall neutral to mildly pro-cyclical²². At the same time, monetary conditions became gradually more expansionary, thus supporting growth.

While the expenditure side is restricted by the budgetary framework, large swings in revenues (often over and beyond the average tax elasticity as estimated by the OECD and used in Commission services' calculations) led to big changes in the nominal balance and thus measured changes in the budgetary stance as captured by the change in the PCAB.

2.4. Public finances

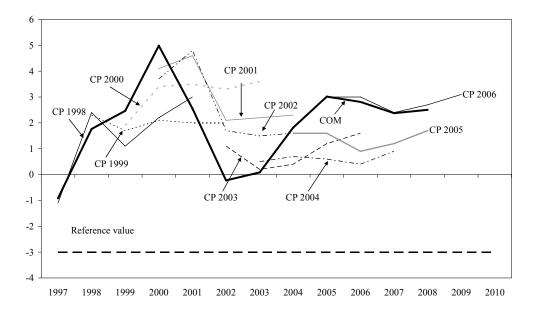
Swedish public finances are guided by the rules-based framework that was put in place over the 1997-2000 period. In 1997 the central government expenditure ceilings were introduced, complemented in 2000 by the 2% of GDP general government surplus objective and the balanced budget requirement for local governments. This framework has been instrumental to lock in the consolidation efforts taken in the aftermath of the 1992/93 public finance crises.

The average budget surplus over the 1996-2005 was 1.3% of GDP, well below the 2% objective. However, over the period 2000 (the first year in which the 2% surplus objective was operational) to 2005, the average surplus has been 1.9% of GDP. In general, there was a period of budgetary consolidation until 2001, followed by almost balanced budgets in 2002 and 2003. Since then the stance has again become more restrictive while revenues have grown rapidly leading to surplus positions more in line with the objectives. The achievement of the budgetary objectives presented in successive convergence programmes illustrates the cyclical sensitivity of the Swedish public finances. The objectives in the initial programmes were overachieved as revenue growth was generally stronger than projected ex ante. The rapid slowdown in growth in 2001 was initially budget-friendly as it was mainly export growth that fell back. However, the slowdown in combination with the very expansionary stance in the 2002 budget led to some years of underachievement. More lately, programme objectives have been overachieved again as revenues have surprised on the upside. In particular corporate taxes and capital taxes have risen strongly. Generally, the main source of fluctuation comes from the revenue side, reflecting the expenditure framework and the tax revenue volatility that to some extent may be inherent in a very open economy with a large public sector.²³

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For an overview of the swings in revenues and expenditures relative to forecasts, see Box 3 on "Forecast surprises" in the 2005 Commission technical assessment of the 2005 Swedish convergence programme.

Figure 7: General government balance projections in successive stability programmes (% of GDP)



Note: The budgetary projections exclude the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes, which needs to be implemented by the time of the spring 2007 notification. Including this impact, the general government balance according to the updated programme would be 2.0% of GDP in 2005, 2.0% in 2006, 1.3% in 2007, 1.6% in 2008 and 2.0% in 2009. *Source:*

Commission services and national convergence programmes

Restricted by the central government expenditure ceilings and helped by the relatively high GDP growth rates, expenditures have gradually declined as a share of GDP over the last decade: down from around 65% of GDP in 1996 to 56.2% of GDP in 2005. Reductions in the debt interest burden (from 6.5% of GDP in 1996 to 1.9% in 2005) have contributed to this, on account of both the fall in debt levels and the lower interest rates. However, also the primary expenditure to GDP-ratio has been reduced by around 4 percentage points over the same period, the main contribution coming from government investments (-2.3% of GDP) and social benefits (-2.4% of GDP). Following a functional classification the main contributions would come from social protection, housing, recreation and defence. Also, government revenues to GDP have been on a declining trend, however still remaining at high levels, from 62.1% of GDP in 1996 to 59.0% of GDP in 2005. To some extent, taxes on labour have been reduced while indirect taxes have been increased and also environmental taxes in a framework of a "green tax swap" strategy²⁴.

The general government gross debt ratio has been importantly reduced to levels well below 60% of GDP, reflecting the budget surplus positions and high growth rates. Nevertheless, the gross debt ratio would have been even lower had not most of the

The "green tax swap" strategy was a policy of the previous government to swap tax increases on environmentally-damaging activities against tax reductions on direct taxes, mainly directed towards labour. The programme should have run over the 2000-2010 period and, including the budget proposal for 2006, SEK17.2 bn of tax value were swapped. The new government has stated that it will not pursue this programme.

annual surpluses in the pension system (on average 2% of GDP per year) been invested in non-government financial assets, contributing to reduce net debt but not gross debt. Net debt in Sweden became negative, that is, with net assets.

2.5. Medium- and long-term policy challenges for public finances

In the last decade Sweden's economic performance has been strong overall. Real GDP growth has been higher than in the euro area. This growth performance has been characterised by strong productivity developments and growth contributions from net exports. The external balance has been in growing surplus. Unemployment rates are lower than in the euro area and have come down further, although they are still considered high by domestic standards. Labour market participation rates are relatively high. Inflation is low, reflecting a credible inflation-targeting regime. As elsewhere, interest rates, real and nominal, have come down. The public finance position, guided by the national rules-based framework, has been sound showing average budget surpluses broadly in line with the national 2% surplus objective over the cycle. The general government gross debt ratio has been continuously reduced and, well below the 60% threshold, with overall the establishment of a net asset position.

These observations lead to the identification of a number of budgetary policy challenges:

- Stabilisation. To keep setting expenditure plans in line with expenditure ceilings and budgetary objectives remains important, not only to safeguard sustainability but also to allow the automatic stabilisers to play and reduce the risk of pro-cyclical policies unhelpful for monetary policy. This will be important as output gaps turn positive, inflationary pressures increase and the cyclical component of the budget turns positive.
- Efficiency. While the requirements for stabilisation and sustainability call for strong surplus positions overall, it is also the case that Sweden has a comparatively large public sector that is financed from high taxes. To effectively supply the required amount of welfare services, work to enhance public sector productivity will become increasingly important.

Table 1: Key economic indicators

			Swe	eden			Euro area					
		Averages		2003	2004	2005		Averages		2003	2004	2005
	'96-'05	'96-'00	'01-'05	2005	2004	2003	'96-'05	'96-'00	'01-'05	2005	1 2004	2003
Economic activity					1						i !	
Real GDP (% change)	2.7	3.2	2.2	1.7	3.7	2.7	2.1	2.7	1.4	0.8	2.0	1.4
Contributions to real GDP growth:											!	
Domestic demand	1.9	2.5	1.2	1.6	1.4	2.5	2.0	2.7	1.3	1.4	1.8	1.6
Net exports	0.9	0.7	1.0	0.1	2.3	0.2	0.1	0.1	0.1	-0.7	0.2	-0.2
Prices, costs and labour market			!		!	!			!			
HICP inflation (% change)	1.4	1.1	1.8	2.3	1.0	0.8	1.9	1.7	2.2	2.1	2.1	2.2
Labour productivity (% change)	2.2	2.4	1.9	2.0	4.3	2.4	1.2	1.5	0.8	0.8	1.6	0.9
Real unit labour costs (% change)	0.6	1.1	0.1	-1.0	-1.4	0.3	-0.5	-0.6	-0.5	-0.1	-1.0	-0.8
Employment (% change)	0.6	0.8	0.3	-0.3	-0.5	0.4	1.2	1.5	0.9	0.7	0.7	0.8
Unemployment rate (% of labour force)	7.0	8.0	5.9	5.6	6.3	7.8	9.1	9.8	8.5	8.7	8.9	8.6
Competitiveness and external position											1	
Real effective exchange rate (% change) ¹	0.5	1.1	-0.1	5.1	0.6	-2.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Export performance (% change) ²	0.4	0.5	0.3	1.3	2.3	-0.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
External balance (% of GDP)	4.7	3.6	5.8	6.6	6.6	6.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public finances												
General government balance (% of GDP)	1.3	1.1	1.4	0.1	1.8	3.0	-2.3	-2.1	-2.5	-3.1	-2.8	-2.4
General government debt (% of GDP)	58.3	65.0	51.7	51.8	50.5	50.4	70.9	72.5	69.3	69.3	69.8	70.8
Structural budget balance (% of GDP) ³	1.5	1.5	1.6	0.8	1.9	3.0	n.a.	n.a.	n.a.	-3.2	-2.9	-2.0
Financial indicators			!		İ	:			Ì		i !	
Long term real interest rate (%) ⁴	3.9	4.8	3.0	2.6	3.5	2.2	3.1	4.1	2.1	2.0	2.2	1.5
Household debt (% of GDP) ⁵	54.1	48.6	59.6	59.1	62.3	66.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt (% of GDP) ⁶	94.8	86.9	102.7	103.5	98.2	104.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Notes:

More detailed tables summarising the economic performance of the country are included in Annex 4.

Source: Commission services

¹Unit labour costs relative to rest of a group of industrialised countries (USD): EU24 (=EU25 excl. LU), BG, RO, TR, CH, NR, US, CA, JP, AU, MX and NZ.

²Market performance of exports of goods and services on export weighted imports of goods and services of 35 industrial markets.

³Cyclically-adjusted budget balance net of one-off and other temporary measures.

⁴Using GDP deflator.

⁵Households' and non-profit institutions serving households' debt, defined as loans and securities other than shares.

⁶Non-financial corporate sector debt, defined as loans and securities other than shares.

3. MACROECONOMIC OUTLOOK

This section is in seven parts, six of which refer to various dimensions of the macroeconomic scenario, notably: the external assumptions, economic activity, potential output growth, the labour market, costs and prices and sectoral balances. The final part summarises the assessment and includes (i) an overall judgement on the plausibility of the macroeconomic scenario and (ii) an indication of whether economic conditions over the programme period can be characterised as economic 'good' or 'bad' times.

3.1. External assumptions

The external assumptions on which the update's macroeconomic outlook is based are broadly in line with the assumptions underlying the Commission services' autumn 2006 forecast. World GDP growth in 2007-2009 is expected to remain high, although slightly weaker than that in 2006. The upward trend in Swedish interest rates is also expected to continue. However, the update assumes that the Swedish krona will strengthen against the euro, in part as a result of the prospect of higher interest rates in Sweden and the large surpluses on the country's external balance. By contrast, the Commission services' autumn forecasts were based on the assumption of a stable real exchange rate of the Swedish krona against the euro throughout the programme horizon. In addition, the update assumes lower oil prices than the Commission services: \$58 per barrel (Commission services' forecast of \$66.3 per barrel) in 2007, \$62 (\$68) in 2008 and \$55 in 2009.

3.2. Economic activity

The updated programme's growth outlook is comparable to that envisaged in the Commission services' autumn 2006 forecasts. Projections for real GDP growth in the update are similar to those in the Commission services' autumn forecast (see Table 2). Real GDP is expected to rise by 4.0% in 2006, the highest rate of economic expansion during the last decade. National accounts' data for the third quarter of 2006 and leading information on the fourth quarter suggest that there are positive risks of an even higher growth rate for the entire year²⁵. During 2007-2009, supply-side constraints are expected to restrict the pace of economic expansion, although growth should remain high. The update's forecasts for GDP growth during this period are consistent with the Commission services' estimates of Sweden's output gap and its potential rate of GDP growth.

The updated programme's growth composition is also similar to the Commission services' autumn 2006 forecast. In both cases, the composition of growth implies a continued broad-based economic expansion driven by higher domestic demand and strong export performance. During 2007-2009 the update expects stronger consumption growth, driven by higher income and improved wealth positions, which partly compensates for slower growth in investment spending and in export activity, consistent with the scenario envisaged by the Commission services in the autumn forecast round. The projected rate of growth in consumption expenditure for 2007 is 0.7 p.p. higher than

On 1 December 2006 the Swedish national statistics office released national accounts data for the third quarter of 2006. Seasonally adjusted, Sweden's real GDP in Q3-2006 grew by 1.0% when compared to the preceding quarter, while on a yearly basis growth rose to 4.1% from 3.7% in Q2-2006. Year-on-year real GDP growth for the first three quarters of 2006 reached 4.6%.

the European Commission services' autumn forecast, reflecting differences in the anticipated impact of the tax reductions on real disposable income. Both the Commission services' forecast and the updated programme, project a significant drop in the positive contribution of net exports to GDP growth in 2007. The growth in imports should exceed the increase in exports due to buoyant domestic demand. Subsequently, the contribution of net exports is expected to recover slightly as domestic demand weakens.

Table 2: Comparison of macroeconomic developments and forecasts

20	06	20	07	20	08	2009
COM	CP	COM	CP	COM	CP	CP
4.0	4.0	3.3	3.3	3.1	3.1	2.7
3.4	3.6	3.5	4.2	3.4	3.6	3.1
7.3	7.2	4.5	3.3	3.3	3.6	3.6
8.2	8.3	6.6	6.4	6.0	6.1	5.9
7.8	7.6	7.0	7.1	5.9	6.4	6.1
3.3	3.3	2.9	3.0	2.6	2.6	2.3
-0.1	-0.2	0.1	0.1	0.0	0.1	0.0
0.8	0.9	0.3	0.2	0.5	0.4	0.4
0.2	0.0	0.5	0.3	0.6	0.3	0.3
1.6	1.7	1.4	1.5	1.0	1.0	0.6
7.3	5.6	7.4	5.8	7.1	5.0	4.3
2.4	2.7	1.9	1.8	2.1	2.1	2.2
1.5	1.9	1.6	2.2	1.8	1.5	1.9
1.7	1.8	2.3	2.9	2.1	2.0	2.2
3.5	3.3	3.8	3.8	4.0	3.9	4.0
-0.6	-0.8	-0.5	-0.9	-0.3	-0.2	-0.3
5.6	6.1	6.3	7.5	6.4	7.4	7.5
	COM 4.0 3.4 7.3 8.2 7.8 3.3 -0.1 0.8 0.2 1.6 7.3 2.4 1.5 1.7 3.5 -0.6	4.0 4.0 3.4 3.6 7.3 7.2 8.2 8.3 7.8 7.6 3.3 3.3 -0.1 -0.2 0.8 0.9 0.2 0.0 1.6 1.7 7.3 5.6 2.4 2.7 1.5 1.9 1.7 1.8 3.5 3.3 -0.6 -0.8	COM CP COM 4.0 4.0 3.3 3.4 3.6 3.5 7.3 7.2 4.5 8.2 8.3 6.6 7.8 7.6 7.0 3.3 3.3 2.9 -0.1 -0.2 0.1 0.8 0.9 0.3 0.2 0.0 0.5 1.6 1.7 1.4 7.3 5.6 7.4 2.4 2.7 1.9 1.5 1.9 1.6 1.7 1.8 2.3 3.5 3.3 3.8 -0.6 -0.8 -0.5	COM CP COM CP 4.0 4.0 3.3 3.3 3.4 3.6 3.5 4.2 7.3 7.2 4.5 3.3 8.2 8.3 6.6 6.4 7.8 7.6 7.0 7.1 3.3 3.3 2.9 3.0 -0.1 -0.2 0.1 0.1 0.8 0.9 0.3 0.2 0.2 0.0 0.5 0.3 1.6 1.7 1.4 1.5 7.3 5.6 7.4 5.8 2.4 2.7 1.9 1.8 1.5 1.9 1.6 2.2 1.7 1.8 2.3 2.9 3.5 3.3 3.8 3.8 -0.6 -0.8 -0.5 -0.9	COM CP COM CP COM 4.0 4.0 3.3 3.3 3.1 3.4 3.6 3.5 4.2 3.4 7.3 7.2 4.5 3.3 3.3 8.2 8.3 6.6 6.4 6.0 7.8 7.6 7.0 7.1 5.9 3.3 3.3 2.9 3.0 2.6 -0.1 -0.2 0.1 0.1 0.0 0.8 0.9 0.3 0.2 0.5 0.2 0.0 0.5 0.3 0.6 1.6 1.7 1.4 1.5 1.0 7.3 5.6 7.4 5.8 7.1 2.4 2.7 1.9 1.8 2.1 1.5 1.9 1.6 2.2 1.8 1.7 1.8 2.3 2.9 2.1 3.5 3.3 3.8 3.8 4.0 -0.6 -0.8	COM CP COM CP COM CP 4.0 4.0 3.3 3.3 3.1 3.1 3.4 3.6 3.5 4.2 3.4 3.6 7.3 7.2 4.5 3.3 3.3 3.6 8.2 8.3 6.6 6.4 6.0 6.1 7.8 7.6 7.0 7.1 5.9 6.4 3.3 3.3 2.9 3.0 2.6 2.6 -0.1 -0.2 0.1 0.1 0.0 0.1 0.8 0.9 0.3 0.2 0.5 0.4 0.2 0.0 0.5 0.3 0.6 0.3 1.6 1.7 1.4 1.5 1.0 1.0 7.3 5.6 7.4 5.8 7.1 5.0 2.4 2.7 1.9 1.8 2.1 2.1 1.5 1.9 1.6 2.2 1.8 1.5

Note:

¹In percent of potential GDP, with potential GDP growth as reported in Table 4 below.

Source:

Commission services' autumn 2006 economic forecast (COM); convergence programme (CP)

Table 3 presents the Commission services' calculations of Sweden's output gap according to the commonly agreed methodology, based on the information provided in the programme. The calculations of the gap for the first three years of the programme period are not significantly different from those estimated in previous forecast rounds. They confirm expectations that the Swedish economy will be operating at potential or slightly above full capacity throughout the programme's forecast horizon. ²⁶

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²The Commission figures use Eurostat definitions, while the update figures use a national definition for the unemployment rate. The difference mainly relates to the treatment of students looking for work. For comparison, the Commission figures translated in terms of the "national definition" would be 5.5% in 2006, 5.6% in 2007 and 5.3% in 2008.

³The CP inflation figures are estimated on a December-December basis, whereas the Commission figures are annual averages. This explains the difference between the Commission and HICP figures for 2005 and 2006. The programme also assumes that the HICP will follow UND1X (national consumer price index excluding changes in indirect taxes, subsidies and mortgage interest expenditure) in 2008 and 2009. However, HICP is expected to be 0.5 pp. higher than UND1X inflation in 2007, thereby accentuating the programme's projected drop in HICP inflation in 2008.

The estimates provided by the Swedish authorities support the broad view that the economy is and will continue to operate at potential level. In the update, the economy is expected to have a small amount of free resources during 2006-2008, whereas in 2009 the economy is expected to fully attain its

Table 3: Output gap estimates in successive Commission services' forecasts and convergence programmes

(% of potential GDP)	20	06	20	07	2008	
(70 of potential GDI)	COM	CP^1	COM	CP ¹	COM	CP^1
CP December 2006	-	0.0	-	0.3	-	0.3
Autumn 2006	0.2	-	0.5	-	0.6	-
Spring 2006	0.3	-	0.4	-	0.0	-
CP December 2005	-	-0.1	-	0.1	-	-0.1
Autumn 2005	-0.1	-	0.0	-	0.0	-
Spring 2005	0.1	-	0.0	-	0.0	-
CP December 2004	-	0.0	-	0.0	-	0.0

Note

¹Commission services' calculations according to the commonly agreed method based on the information in the programme.

Source.

Commission services' forecasts, convergence programmes and Commission services

In response to expectations of higher inflation, the Riksbank raised the official interest rate by 1.5 p.p. to 3% in 6 steps during 2006, although monetary policy remains accommodative.

The macroeconomic outlook for Sweden envisages a growth scenario that is better than average real GDP growth in the past ten years, but is consistent with Sweden's experience in the second half of the 1990s when the economy grew by an annual average of 3.2%. However, domestic demand is expected to account for a relatively greater share of average annual growth when compared to its contribution during 1996-2005.

3.3. Potential growth and its determinants

Table 4 presents the potential growth estimates on the basis of the Commission services' calculations according to the commonly agreed methodology, based on the information provided in the programme. The estimates are consistent with the trend growth rates observed during the last ten years and for the first three years of the programme horizon correspond very closely to the autumn 2006 forecast. Potential growth rates remain high at around 3%, although lower contributions from labour and productivity are expected to reduce the potential rate of growth in 2007 and 2009.

Table 4: Sources of potential output growth

	20	06	20	07	20	2009	
	COM	CP ²	COM	CP ²	COM	CP ²	CP ²
Potential GDP growth ¹	3.2	3.3	3.1	3.0	3.0	3.1	2.7
Contributions:							
- Labour	0.6	0.7	0.5	0.5	0.4	0.6	0.3
- Capital accumulation	0.7	0.7	0.7	0.7	0.8	0.7	0.8
- TFP	1.9	1.9	1.8	1.8	1.7	1.7	1.6

Notes:

Source

Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

3.4. Labour market developments

The underlying improvement in labour market conditions, driven by the cyclical upturn, is expected to continue during the programme horizon. Employment growth is expected to remain at historically high levels, although it is projected to slow down during 2007-2009 due to the more moderate economic expansion during that period. Meanwhile, in the Budget for 2007 the new government lowered taxes on labour and abolished a number of active labour market policy programmes. Although this reform will strengthen labour market fundamentals, it is also expected to contribute to a small increase in the unemployment rate in 2007. In 2008-2009, however, the increase in employment is expected to outpace the growth in labour supply, leading to a lower unemployment rate.

Although both the update and the Commission services' re-calculations of the output gap (according to the commonly agreed methodology) indicate that the economy will operate at close to potential in 2006, the update also notes that there remains scope for a higher level of employment.²⁷

According to the update, spare labour capacity will help alleviate supply side constraints in 2006 and 2007 and the labour content of GDP growth during these two years is expected to be relatively high. Thereafter, untapped labour resources will diminish and the labour content of GDP growth is expected to follow a downward path.

3.5. Costs and price developments

Both the programme projections and the Commission services' forecasts expect inflationary pressures will remain subdued, but approaching the Riksbank's 2% inflation target by the end of the programme. However, the Commission services forecast a gradual increase in inflation, whereas the programme expects inflation to decelerate in

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¹Based on the production function method for calculating potential output growth

²Commission services' calculations on the basis of the information in the convergence programme (CP).

²⁷ In particular, the update provides a breakdown of total resource utilisation by employment, productivity and average hours worked. Table 6 of the programme shows that an estimated negative "employment gap" in 2006 and 2007 will be offset by positive gaps in productivity and average hours worked.

2008 and to pick up again in 2009.²⁸ The difference appears to reflect the programme's forecast of a drop in import prices, in part reflecting the assumption of a stronger krona exchange rate.

Wage developments during the programme period largely depend on the outcome of a new round of wage negotiations in 2007. In view of the improved economic situation, the next wage round is expected to lead to higher wage increases than those awarded in 2004, but is expected to be coherent with preserving Swedish competitiveness in international markets. Both the Commission services and the update expect that labour productivity growth will remain relatively high and that growth in unit labour costs will be moderate.

3.6. Sectoral balances

In the updated programme the external surplus is forecast to be significantly wider than the Commission services' estimate, mainly on account of different assumptions on developments in the terms of trade during 2007. In the Commission services' autumn forecast, import and export prices are both assumed to rise by 1.1% in 2007, whereas the update expects import and export prices to fall by 3% and 1.3% respectively. Given that the Commission services and the update share similar forecasts on import and export volumes, the update's projection of an improvement in the terms of trade contributes to a higher external surplus than that forecasted by the Commission.

3.7. Assessment

The assessment of the macroeconomic outlook covers two questions: first, whether the macroeconomic scenario is plausible, and, second, whether the economy should be considered to be in economic 'good' or 'bad' times.

3.7.1. Plausibility of the macroeconomic scenario

The macroeconomic scenario presented in the programme is comparable to that envisaged in the Commission services' autumn forecast. Projections for real GDP growth in the update are similar to the autumn forecast. However, the latest national accounts' data for the third quarter of 2006 and leading information on the fourth quarter suggest that there are positive risks that GDP growth in 2006 might be even higher than projected.

Although inflationary pressures are forecast to remain low, wage developments during the period under review depend on the outcome of a new round of wage negotiations in 2007. Both the programme projections and the Commission services' forecast expect that the wage increases will not be substantially higher than those awarded in the last major wage round of 2004. The calculations of the output gap according to the commonly agreed methodology, based on the information provided in the programme for 2006-2008, are also not significantly different from those estimated in the autumn forecast round. Overall, the programme is based on plausible macroeconomic assumptions.

The programme assumes that the HICP will follow UND1X in 2008 and 2009. However, HICP inflation is expected to be 0.5 pp. higher than UND1X inflation in 2007, thereby accentuating the programme's projected drop in HICP inflation in 2008.

3.7.2. Economic good vs. bad times

According to the Commission services' autumn forecast, real GDP growth should have exceeded the potential growth rate by a substantial margin in 2006 and is projected to remain above potential in the medium term. As a result, the output gap is estimated to turn positive in 2006 and is forecast to be increasingly so in the following years. During 2007-2009, strong consumption growth, driven by higher income and improved wealth positions, should partly compensate for slower growth in investment spending and in export activity. Unutilised resources in the labour market will help alleviate supply side constraints in 2006 and 2007, but unemployment should diminish in the medium term. Therefore, the Swedish economy is expected to be in good times throughout the programme period.

4. GENERAL GOVERNMENT BALANCE

This section consists of four parts. The first part discusses budgetary implementation in the year 2006 and the second presents the budgetary strategy in the new update, including the programme's medium-term objective (MTO) for the budgetary position. The third analyses the risks attached to the budgetary targets in the programme. The final part contains the assessment of the fiscal stance and of the country's position in relation to the budgetary objectives of the Stability and Growth Pact.

4.1. Budgetary implementation in 2006

The 2006 surplus in the general government net lending is likely to have been much higher than projected in the 2005 update (0.9% of GDP). While the Commission services' autumn forecast puts the 2006 outcome at 2.8% of GDP, the programme estimates a surplus of 3.0%. Furthermore, recent information on government's cash transactions indicates that the outcome for 2006 is likely to have been even better. On the basis of these cash data, the Swedish National Financial Management Authority recently (7 December 2006) forecast a 2006 central government net lending position of 0.6% of GDP, compared to a forecast of 0.1% of GDP in the current update. Thus it appears that the 2006 surplus might be closer to $3\frac{1}{2}$ % of GDP than to 3%.

The upward revision in the forecast for the general government surplus in 2006 was underpinned by a better outturn in 2005 than had been projected. In turn, the latter was mainly due to lower than planned primary expenditure on government consumption and 'transfers other than in kind & subsidies' (cf. also Table 6). Apart from this base effect, higher than expected real GDP growth in 2006 is likely to have induced savings on 'transfers other than in kind & subsidies'. The total expenditure ratio is expected in the new update to have reached 55.2% of GDP in 2006, down by 1.9 p.p. from the projection in the previous update.

Although projections for the revenue ratio remained almost unchanged, the composition of revenue was slightly different from projections, with taxes and social security contributions exceeding targets by 0.4 p.p. of GDP in 2005 and by at least 0.6 p.p. in

2006. As already pointed out in the assessment on the previous update²⁹, the use of so called 'periodisation funds' for corporate taxes might have played an important role. Furthermore, both in 2005 and 2006 revenues from capital gains tax have performed very well.

Table 5: Evolution of budgetary targets in successive programmes¹

	<u> </u>					
		2005	2006	2007	2008	2009
Canaral gavarmmant	CP Dec 2006	3.0	3.0	2.4	2.7	3.1
General government balance	CP Nov 2005	1.6	0.9	1.2	1.7	n.a.
(% of GDP)	CP Nov 2004	0.6	0.4	0.9	n.a.	n.a.
(70 01 GD1)	COM Nov 2006	3.0	2.8	2.4	2.5	n.a.
Compand consumment	CP Dec 2006	56.0	55.2	53.7	52.9	52.2
General government expenditure	CP Nov 2005	57.3	57.1	56.6	56.0	n.a.
(% of GDP)	CP Nov 2004	54.0	53.9	53.2	n.a.	n.a.
(70 01 GD1)	COM Nov 2006	56.0	55.6	54.2	53.5	n.a.
Canaral garammant	CP Dec 2006	59.0	58.2	56.1	55.6	55.3
General government revenues	CP Nov 2005	58.9	58.0	57.8	57.7	n.a.
(% of GDP)	CP Nov 2004	54.7	54.3	54.1	n.a.	n.a.
(70 01 011)	COM Nov 2006	59.0	58.4	56.6	56.0	n.a.
	CP Dec 2006	2.7	4.0	3.3	3.1	2.7
Real GDP	CP Nov 2005	2.4	3.1	2.8	2.3	n.a.
(% change)	CP Nov 2004	3.0	2.5	2.3	n.a.	n.a.
	COM Nov 2006	2.7	4.0	3.3	3.1	n.a.

Notes:

The budgetary projections exclude the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes, which needs to be implemented by the time of the spring 2007 notification. Compliance with Eurostat's decision will lower the surplus position by around 1% of GDP each year.

Source:

Convergence programmes (CP) and Commission services' autumn 2006 economic forecasts (COM)

4.2. The programme's medium-term budgetary strategy

This section covers in turn the following aspects of the medium-term budgetary strategy outlined in the programme: (i) the main goal of the budgetary strategy; (ii) the composition of the budgetary adjustment, including the broad measures envisaged; and (iii) the programme's medium-term objective and the adjustment path towards it in structural terms.

4.2.1. The main goal of the programme's budgetary strategy

The updated programme confirms that the fiscal policy framework presented in the convergence programme for 1998 remains valid, i.e. that a budget surplus of 2% of GDP on average over the cycle remains the key guiding fiscal rule (cf. also Section 4.2.3 below). It also implies that the multi-annual expenditure ceilings on central government expenditure continue to apply and that local governments continue to be subject to the balanced budget requirement.

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http://ec.europa.eu/economy_finance/about/activities/sgp/country/commwd/se/com_se20052006.pdf. See Box 1.

In this context, Sweden uses the transition period for the implementation of the Eurostat decision of March 2004 on the classification of funded second-pillar pension schemes (see Box 1), i.e. only from the spring 2007 EDP notification onwards will funded pension systems be excluded from the general government net lending position. In the Swedish case, the implementation of this decision will reduce the general government surplus by approximately 1% of GDP (and lead to a rise in the general government consolidated debt of approximately 0.5% of GDP). The new update states that the Swedish government "will return in the 2007 Spring Fiscal Policy bill to how Eurostat's decision will affect the target for general government net lending".

Box 1: The classification of pension schemes

There are typically different pillars within a country's pension system, such as pay-as-you-go or unfunded systems and funded systems; furthermore, pension schemes can be of the defined-benefit (DB) or defined-contribution (DC) variety.

If a pension scheme is classified in the government sector, contributions collected and benefits paid by the scheme are government revenue and expenditure and contribute to the government balance. If a pension scheme is classified in a sector other than government, its contributions and benefits do not contribute to the government balance. The ESA95 accounting rules state that pension schemes classified within government are those which are "imposed, controlled and financed by government".

On 2 March 2004, Eurostat clarified that funded DC pension schemes do not fulfil these criteria because pensions paid by such schemes (i) depend primarily on financial market performance (i.e. not under government control) and (ii) are financed by reserves that are not economically owned by government. Even if they are mandatory or if they are managed by government (for example, managed by the same government agency in charge of the pay-as-you-go pillar) or if there is some government guarantee of a minimum pension, funded DC schemes should not be classified within government (*).

A transition period, expiring in spring 2007 (first EDP notification of 2007), has been granted to implement this decision (**). Sweden is using this transition period. As a consequence of the implementation of the Eurostat decision, the surplus on the general budget balance would be approximately 1pp. of GDP lower and consolidated gross debt approximately 0.5 p.p. higher.

(*) Eurostat News Release No 30/2004 of 2 March 2004.

(**) Eurostat News Release No 117/2004 of 23 September 2004.

The budgetary profile presented in the update resembles strongly that of the previous update in the sense that, departing from a better outcome than originally envisaged, the update foresees a considerable decline in the surplus in the first year following the submission of the update and projects an ongoing rise in the surplus thereafter, bringing the surplus at the end of the update's horizon back to the level reached in the year of submission. The macroeconomic outlook underlying the targets is better than that in the previous update.

The new update forecasts a decline in the nominal surplus from 3.0% of GDP in 2006 to 2.4% in 2007, followed by a rise in the surplus to 2.7% in 2008 and 3.1% at the end of the programme's horizon.

Table 6: Composition of the budgetary adjustment

(% of GDP)	2005	2006	2007	2008	2009	Change: 2009-2006
Revenues	59.0	58.2	56.1	55.6	55.3	-2.9
of which:			!		!	
- Taxes & social contributions	51.3	50.7	48.7	48.4	47.8	-2.9
- Other (residual)	7.7	7.5	7.4	7.2	7.5	0.0
Expenditure	56.0	55.2	53.7	52.9	52.2	-3.0
of which:						
- Primary expenditure	54.4	53.7	52.1	51.4	50.7	-3.0
of which:						
Consumption	27.0	26.5	26.1	26.0	25.9	-0.6
Transfers other than in kind &	18.9	18.5	17.3	16.8	16.7	-1.8
subsidies			! ! !		! ! !	
Gross fixed capital formation	3.0	3.0	3.0	2.9	2.9	-0.1
Other (residual)	5.5	5.7	5.7	5.7	5.2	-0.5
- Interest expenditure	1.6	1.5	1.6	1.5	1.5	0.0
General government balance (GGB)	3.0	3.0	2.4	2.7	3.1	0.1
- excluding second-pillar pension scheme ¹	2.0	2.0	1.3	1.6	2.0	0.0
Primary balance	4.6	4.5	4.0	4.2	4.6	0.1
One-offs ²	0.4	0.0	0.0	0.0	0.0	0.0
GGB excl. one-offs	2.6	3.0	2.4	2.7	3.1	0.1

Note:

Source

Convergence programme update; Commission services' calculations

4.2.2. The composition of the budgetary adjustment

The main difference from the preceding update lies in the development of revenue and expenditure ratios in 2007 and onwards. Both revenue- and expenditure-to-GDP ratios are now projected to decline much faster than foreseen in the 2005 update. In 2008, the end of the horizon of the 2005 update, the revenue ratio was projected to reach 57.7% of GDP compared to a projection of 55.6% in the most recent update. Similar developments are forecast on the expenditure side (cf. Table 6 above).

In the absence of one-offs from 2007 onwards, the strong decline in revenue and expenditure ratios is primarily explained by the measures approved within the framework of the 2007 budget (Box 2). The decline in the revenue-to-GDP ratio is primarily linked to the strong reduction in income taxes, with a view to reducing the high tax wedge in Sweden. The drop in the expenditure ratio is also due to the considerable cut in active labour market policies (ALMPs), some of which have been assessed as not being effective. This budgetary strategy is back-loaded in that the reduction in taxes is concentrated in 2007, while the (partially) counter-financing reduction in ALMPs is

¹This shows the general government balance as it will be after the Eurostat decision of 2 March 2004 on the classification of funded pension schemes has been implemented, which needs to be done by the time of the spring 2007 notification.

²One-off and other temporary measures.

Calmfors, L., A. Forslund and M. Hemstrom (2002), Does active labour market policy work? Lessons from the Swedish experience, Institute for Labour Market Policy Evaluation, Working Paper 2002:4. Skans, O. N. and L. Lindqvist, L. (2005), Causal effects of subsidized career breaks, Institute for Labour Market Policy Evaluation, Working Paper 2005:17.

implemented over two years.³¹ Other than this, the programme does not contain specific measures to support the budgetary targets beyond 2007 but, with the exception of the ALMP savings above, these targets correspond broadly to a no-policy change scenario and so do not require additional measures.

Against this background it is not surprising that the overall development of general government lending is projected to be driven by developments at central government level. While surpluses from the old-age pension system³² and local governments are projected to decline somewhat up to the end of the programme's horizon, rising surpluses at central government level should more than compensate.

Box 2: The budget for 2007

On 16 October 2006 the new government presented the budget proposal for 2007, entitled "Putting Sweden to work - a good deal for all." The Budget was approved by the Riksdag (Parliament) on 21 December 2006.

Based on an expected surplus of the general government balance of 2.8% of GDP in 2006, the 2007 surplus is forecast to reach 2.3% in 2007¹. The decline in the surplus is the effect both of measures already announced by the 'old' government (net effect of -0.4 % of GDP) and of additional proposals by the government (-0.2 % of GDP).

The budget is oriented to increasing both the demand for and supply of labour: To this end, it introduces a considerable reduction in income taxes and in employers' fees for younger workers.

Part of these tax reductions are financed by cuts in active labour market policies (ALMP) corresponding to around 0.3% of GDP. Other important financing measures are the rise in unemployment insurance contributions for employees (0.35% of GDP) and the cut in unemployment benefits (0.25% of GDP).

All in all, the net first-round effect of the discretionary measures announced in the 2007 Budget corresponds to a cost for the government of SEK 19 billion or 0.6% of GDP.

Table 1: Main measures in the budget for 2007

Revenue measures

Expenditure measures³

- o Taxes on labour (-1.3% of GDP)
- Unemployment insurance contributions (0.35% of GDP)
- o Taxes on capital (-0.2% of GDP)
- o Labour market measures (-0.5% of GDP)
- o Education, culture (-0.1% of GDP)
- o Illness and disability (-0.1% of GDP)

³ Estimated impact on general government expenditure.

Sources: Commission services and Swedish Ministry of Finance.

Excluding the 2006 transfer of pre-funded pension funds (cf. updated programme p. 19).

¹ The general government balance reported in the Budget, which conforms to ESA 95 definitions, is slightly lower than that reported for Stability and Growth Pact purposes due to the different treatment of swaps on interest flows and some differences in the definition of revenues and expenditures (see Update, pg. 18).

² Estimated impact on general government revenues.

According to the update, the number of people in ALMPs is going to be reduced from 3.1% of the total labour force in 2006 to 1.9% in 2007 and to 1.4% of the total labour force in 2008.

4.2.3. The medium-term objective (MTO) and the structural adjustment

The objective of a 2% of GDP surplus on average over the cycle objective remains the cornerstone of the Swedish national budget rule-based framework (cf. above). Indeed, this objective is designed to ensure sustainable public finances and to create a safety margin to allow for budgetary room of manoeuvre. Therefore, a surplus of 2% of GDP can be regarded as the medium-term objective (MTO) for the budgetary position as meant in the Stability and Growth Pact. According to the programme, the MTO will be respected throughout the programme period.

As mentioned above, the Government will re-evaluate the level of the present MTO in the spring 2007 Fiscal Policy Bill to take into account Eurostat's decision on the classification of funded second-pillar pension schemes.

The MTO target is clearly more demanding than the latest estimate of the minimum benchmark (a deficit of around 1% of GDP), which is the estimated budgetary position in cyclically-adjusted terms that provides a sufficient safety margin for automatic stabilisers to operate freely during normal economic downturns without breaching the 3% of GDP deficit reference value. The MTO is also significantly more demanding than implied by the debt ratio and the average potential output growth in the long term.

Box 3: The medium-term objective (MTO) for the budgetary position

According to the Stability and Growth Pact, stability and convergence programmes must present a medium-term objective (MTO) for the budgetary position. The MTO is country-specific to take into account the diversity of economic and budgetary positions and developments as well as of fiscal risk to the sustainability of public finances.

The MTO should fulfil a triple aim. First, it should provide a safety margin with respect to the 3% of GDP deficit limit. Second, it should ensure rapid progress towards sustainability. Third, taking into account the first two goals, it should allow room for budgetary manoeuvre, considering in particular the needs for public investment. The code of conduct further specifies that, as long as the methodology for incorporating implicit liabilities is not fully developed and agreed by the Council, the country-specific MTOs are set taking into account the current government debt ratio and potential growth (in a long-term perspective), while preserving a sufficient margin against breaching the 3% of GDP deficit reference value. Member States are free to set an MTO that is more demanding than strictly required by these provisions.

The MTO is defined in structural terms, i.e. it is adjusted for the cycle and one-off and other temporary measures are excluded. For countries belonging to the euro area or participating in the exchange-rate mechanism (ERM II), the MTO should be in a range between a deficit of 1% of GDP and balance or surplus (in structural terms).

Commission services' calculations on the basis of the information in the programme according to the commonly agreed methodology show that the fiscal policy stance in 2006 is estimated to have been close to neutral (cf. Table 7). Fiscal policy would then turn expansionary in 2007 in line with the latest budget proposals. This would be followed by a moderate tightening stance over the remainder of the programme period, underlining the slightly backloaded strategy described in the preceding section.

Due to the volatility of revenue items such as capital gains tax, however, cyclically-adjusted figures should be interpreted with caution. Although the standard sensitivities used in the Commission's calculations of the cyclical component may not fully capture the "cyclical" effects on asset prices, the reduction in the structural balance (-0.8% of GDP) in 2007 points to a relaxation of fiscal policies while the economy is still considered to be in relatively good times. Since the drop in "higher-than-average" revenue from capital gains tax is of about 0.4% of GDP, the assessment of the Commission is that there remains a risk that the fiscal stance might be pro-cyclical in 2007, after taking into account the size change in the cyclically-adjusted balance and the moderation in revenue from capital gains tax (cf. also the Commission services' assessment of the 2005 update, Box 3).

Table 7: Output gaps and cyclically-adjusted and structural balances

(% of GDP)	200	05	200)6	200	7	200	8	2009	Change: 2009-2006
	COM	CP ¹	COM	CP ¹	COM	CP ¹	COM	CP ¹	CP ¹	CP ¹
Gen. gov't balance	3.0	3.0	2.8	3.0	2.4	2.4	2.5	2.7	3.1	0.1
One-offs ²	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Output gap ³	-0.5	-0.7	0.2	0.0	0.5	0.3	0.6	0.3	0.3	-
CAB ⁴	3.3	3.4	2.7	3.0	2.1	2.2	2.1	2.5	3.0	0.0
change in CAB	1.2	1.2	-0.6	-0.4	-0.6	-0.8	0.0	0.3	0.1	-
CAPB ⁴	5.0	5.0	4.4	4.5	3.8	3.8	3.9	4.0	4.5	0.0
Structural balance ⁵	2.9	3.0	2.7	3.0	2.1	2.2	2.1	2.5	3.0	0.0
change in struct. bal.	1.2	1.3	-0.2	0.0	-0.6	-0.8	0.0	0.3	0.4	-
Struct. prim. balance ⁵	4.5	4.6	4.4	4.5	3.8	3.8	3.9	4.0	4.5	0.0

Notes:

¹Output gaps and cyclical adjustment according to the convergence programme (CP) as recalculated by Commission services on the basis of the information in the programme.

Source:

Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

4.3. Risk assessment

This section discusses the plausibility of the programme's budgetary projections by analysing various risk factors. For the period until 2008, standard Table 8 compares the detailed revenue and expenditure projections in the Commission services' autumn 2006 forecast, which are derived under a no-policy change scenario, with those in the updated programme.

As detailed in Section 3.7.1, positive risks of higher-than-expected GDP growth in 2006 could contribute to a higher general government surplus than that foreseen by the update and the Commission services' autumn forecasts (see also Section 4.1 above on the 2006 outturn). For 2007-2009, there seems to be a neutral balance of risks for the budgetary targets coming from the macroeconomic outlook.

²One-off and other temporary measures.

³In percent of potential GDP. Se Table 2 above.

⁴CA(P)B = cyclically-adjusted (primary) balance.

⁵Structural (primary) balance = CA(P)B excluding one-off and other temporary measures.

Table 8: Comparison of budgetary developments and projections

	2005 2006		2007		2008		2009	
(% of GDP)		COM	СР	СОМ	CP	COM 1	CP	CP
Revenues	59.0	58.4	58.2	56.6	56.1	56.0	55.6	55.3
of which:								
- Taxes & social contributions	51.6	50.9	50.7	49.3	48.7	48.8	48.4	47.8
- Other (residual)	7.4	7.5	7.5	7.3	7.4	7.2	7.2	7.5
Expenditure	56.0	55.6	55.2	54.2	53.7	53.5	52.9	52.2
of which:			:		:		! ! !	
- Primary expenditure	54.4	53.9	53.7	52.5	52.1	51.7	51.4	50.7
of which:			:				:	
Consumption	27.2	26.9	26.5	26.8	26.1	26.7	26.0	25.9
Transfers other than in kind &			į					
subsidies	18.9	18.4	18.5	17.5	17.3	16.9	16.8	16.7
Gross fixed capital formation	3.0	3.0	3.0	3.0	3.0	3.0	2.9	2.9
Other (residual)	5.2	5.5	5.7	5.2	5.7	5.1	5.7	5.2
- Interest expenditure	1.6	1.7	1.5	1.7	1.6	1.8	1.5	1.5
General government balance (GGB)	3.0	2.8	3.0	2.4	2.4	2.5	2.7	3.1
Primary balance	4.6	4.5	4.5	4.1	4.0	4.3	4.2	4.6
One-offs ²	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GGB excl. one-offs	2.6	2.8	3.0	2.4	2.4	2.5	2.7	3.1

Notes:

Source:

Commission services' autumn 2006 economic forecasts (COM); convergence programme update (CP); Commission services' calculations

The update includes a section on the sensitivity of public finances with respect to changes in the baseline economic scenario. Two alternative scenarios are described taking into account the impact of government policies on labour supply. In the *high growth scenario*³³, labour supply increases more, while wage and price inflation are lower than in the base scenario. The effect on public finances is via a higher tax ratio, due to higher disposable income and more private consumption, and also via a lower expenditure ratio as public wages and transfers payments are lower than in the base scenario. The net lending of general government improves by 0.3 % of GDP in 2008 and by 0.4 % of GDP in 2009.

In the *low growth scenario*³⁴, the effects of government policies are delayed due to rigidities in the labour market and in the process of wage formation. Therefore wages and, to a lesser extent, prices rise more than in the baseline. The effect on public finances is mainly through expenditure increases, as both public wages and household transfers increase more due both to higher wages and prices. Moreover, expenditure linked to unemployment benefits also rises as unemployment is higher than in the base scenario. The net lending of general government worsens by 0.2 p.p. of GDP in 2008 and by 0.6 p.p. of GDP in 2009.

Commission services' simulations of the cyclically-adjusted balance under the assumptions of (i) a sustained 0.5 p.p. deviation from the real GDP growth projections in

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¹On a no-policy change basis.

²One-off and other temporary measures.

Real GDP growth in 2007 is 0.2 p.p. higher than in the base scenario and 0.4 p.p. higher in both 2008 and 2009

³⁴ Real GDP growth in 2007 is assumed equal to the base scenario, but 0.6 p.p. and 0.8 p.p. lower in 2008 and 2009 respectively.

the programme over the 2006-2009 period; (ii) trend output based on the HP-filter and (iii) no policy response (notably, the expenditure level is as in the central scenario), reveal that, by 2009, the cyclically-adjusted balance is 0.8 p.p. of GDP below the central scenario. Hence, in the case of persistently lower real growth, additional measures of almost 1% of GDP would be necessary to keep public finances on the path targeted in the central scenario.

As indicated in Section 4.2.2 above, the programme provides sufficient information about the measures underlying the projected budgetary targets, thereby supporting the plausibility of the programme targets, which beyond 2007 broadly correspond to a nopolicy change scenario. The expected budgetary impact of the measures is also spelled out in the programme. Furthermore, the achievement of the budgetary targets does not rely on one-off revenues.

Table 9: Assessment of tax projections

	2007				2009		
	CP	COM	\mathbf{OECD}^3	CP	COM^1	$OECD^3$	CP
Change in tax-to-GDP ratio (total taxes)	-2.1	-1.8	-0.2	-0.3	-0.5	-0.2	-0.6
Difference (CP – COM) Of which ² :	-	0.4	/	().1	/	/
- discretionary and elasticity component	_1	0.3	/	(0.0	/	/
- composition component	(0.1	/	(0.1	/	/
Difference (COM - OECD) Of which ² :	/	-1.6		/	-0.3		/
- discretionary and elasticity component	-1.7		1.7	/	-0.5		/
- composition component	/	/ 0.3		/	0.3		/
p.m.: Elasticity to GDP	0.3	0.4	0.9	0.9	0.8	0.9	0.7

Notes:

Source:

Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations and OECD (N. Girouard and C. André (2005), "Measuring Cyclically-Adjusted Budget Balances for the OECD Countries", OECD Working Paper No. 434)

The tax revenue projections seem to embody on the whole plausible assumptions about the tax intensity of economic activity, though slightly more cautious in 2007 and slightly more optimistic in 2008 than in the Commission services' autumn forecast. Table 9 shows that throughout 2007-2009 the tax-to-GDP ratio falls to a larger extent than would be explained by the OECD's ex-ante elasticity, especially in 2007. The fall in the tax-to-GDP ratio reflects the tax measures introduced by the government to increase labour supply, as well as the high tax revenues from corporate profits and household capital gains in 2005 and 2006.

Expenditure ceilings are a key aspect of the fiscal policy framework in Sweden. They are an instrument for budgetary discipline, as they inhibit temporary increases in revenue from translating into permanently higher expenditure commitments. The system, which was first implemented in 1997, consists of a rolling multi-year scheme that sets central government expenditure three years in advance. As can be seen from Table 10, expenditure ceilings have been met every year, although in the past ceilings have been to

¹On a no-policy change basis.

²The decomposition is explained in Annex 5.

³Based on OECD ex-ante elasticity relative to GDP.

some degree circumvented through a variety of accounting devices, including tax expenditures that were not charged against the expenditure ceilings.

The budget for 2007 lowers the expenditures ceilings for 2007, 2008 and 2009, expressed as a percentage of GDP, to 31.2%, 30.7% and 30.2% respectively. At the same time the government proposes a reduction in tax expenditures that are close substitutes for direct expenditures. This proposal should promote greater adherence to the ceilings in the coming years and increase transparency.

Overall, the risks to the budgetary projections in the programme appear broadly balanced from 2007. The macroeconomic outlook and the tax revenue projections seem to reflect plausible assumptions, notwithstanding some uncertainty on revenues from capital gains tax. The expenditure targets are supported by a good track record owing to the abovementioned expenditure ceilings.

Table 10: Experience of expenditure ceilings

(in SEK bn.)	2001	2002	2003	2004	2005	2006
Central government expenditure (SEK						
bn.)						
Ceiling	749.0	773.0	803.0	836.0	870.0	907.0
Outcome	744.3	772.6	800.1	833.5	864.3	906.1
Deviation (ceiling minus outcome)	4.7	0.4	2.9	2.5	5.7	0.9
Central government expenditure (% of						
GDP)						
Ceiling	33.0	32.9	32.9	32.5	32.5	32.1
Outcome	32.5	32.6	32.5	32.4	32.3	32.0
Deviation (ceiling minus outcome)	0.5	0.3	0.4	0.1	0.2	0.1

Note:

Expenditure ceilings only affect central government expenditure and expenditure related to the pension system outside the central government budget.

Source.

Successive convergence programmes; Commission services' calculations; The Swedish National Financial Management Authority.

4.4. Assessment of the fiscal stance and budgetary strategy

The table below offers a summary assessment of the country's position relative to the budgetary requirements laid down in the Stability and Growth Pact. In order to highlight the role of the preceding analysis of the risks that are attached to the budgetary targets presented in the programme, this assessment is done in two stages: first, a preliminary assessment on the basis of the targets taken at face value is made (middle column) and, second, the final assessment that also takes into account risks (final column).

Table 11: Overview of compliance with the Stability and Growth Pact

	Based on programme ³ (with targets taken at face value)	Assessment (taking into account risks to targets)				
a. Safety margin against breaching 3% of GDP deficit limit ¹	throughout programme period	throughout programme period				
b. Achievement of the MTO	throughout programme period	throughout programme period				
c. Fiscal stance in line with	risk that it may not in 2007,	risk that it may not in 2007,				
Pact ² ?	thereafter fully in line	thereafter fully in line				

Notes:

Source:

Commission services

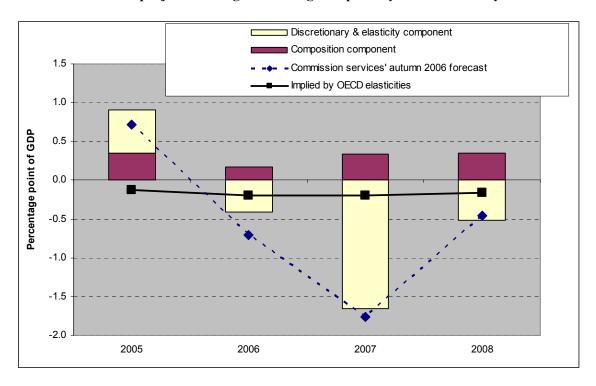
Taking into account the risks to the budgetary targets (which are broadly neutral), Sweden satisfies the requirements of the Stability and Growth Pact by providing a safety margin against breaching the 3% of GDP deficit limit and by maintaining its MTO throughout the programme period. In 2007, however, there is a risk that the structural reform measures announced by the government could contribute to a pro-cyclical fiscal stance in 2007, when the economy is expected to be in good times. At the same time, the reduction in taxes on labour services will lead to a reduction of the high tax wedge in Sweden and could considerably strengthen the economy's supply-side fundamentals.

¹The risk of breaching the 3% of GDP deficit threshold with normal cyclical fluctuations, i.e. the existence of a safety margin, is assessed by comparing the cyclically-adjusted balance with the above mentioned minimum benchmark (estimated as a deficit of around 1% of GDP for Sweden). These benchmarks represent estimates and as such need to be interpreted with caution.

²According to the Stability and Growth Pact, countries which have already achieved their MTO should avoid pro-cyclical fiscal policies in "good times".

³Targets in structural terms as recalculated by Commission services on the basis of the information in the programme.

Figure 8: Changes in the tax-to-GDP ratio: actual/projected changes vs. changes implied by OECD elasticity



Note:

The dashed line displays the change in the tax ratio in the Commission services' 2006 autumn forecast, for 2008, on a no-policy-change basis. The solid line shows the change in the tax ratio implied by the ex-ante OECD elasticity with respect to GDP. The difference between the two is explained by the bars. The composition component captures the effect of differences in the composition of aggregate demand (more tax rich or more tax poor components). The discretionary and elasticity component captures the effect of discretionary fiscal policy measures as well as variations of the yield of the tax system that may result from factors such as time lags, variations of taxable income that do not necessarily move in line with GDP e.g. capital gains. Both components may not add up to the total difference because of a residual component, which is generally small. The decomposition is explained in detail in Annex 5.

Source:

Commission services

5. GOVERNMENT DEBT AND LONG-TERM SUSTAINABILITY

Government debt is the result of the financing needs of government over the years. It corresponds primarily to an accumulation of deficits, although the build-up of financial assets and other adjustments may also play a role.³⁵ The reform of the Stability and Growth Pact has raised attention to the crucial importance of government debt and of sustainability in fiscal surveillance.

This section is in two parts: a first part describes recent developments and the medium-term prospects for government gross debt; it describes the convergence programmes targets, compares them with the Commission services' forecasts and assesses the associated risks. A second part looks into the government debt from a longer-term perspective with the aim of assessing the long-term sustainability of public finances.

On the factors other than the deficit which explain the evolution of the government debt, see "The dynamics of government debt: decomposing the stock-flow adjustment", chapter II.2.2 of *Public Finances in EMU 2005*, European Economy, N°3/2005.

5.1. Recent debt developments and medium-term prospects

5.1.1. Debt projections in the programme

As can be seen from Figure 9 and Table 12, the ratio of gross debt to GDP is already well below the Treaty reference level and the update expects it to drop further from 46.5% in 2006 to 33.0% by the end of 2009 (excluding the impact of the Eurostat decision of 2 March 2004 on the classification of funded second-pillar pension schemes), 6 closely in line with the Commission services figures on debt development in the 2006 autumn forecast. The gross debt ratio was about 70% of GDP in 1997 and fell sharply to 52.3% by 2000, as a result of strong growth and budget surpluses. Between 2001 and 2005 the debt ratio dropped moderately, but is expected to fall at a faster pace during the programme period. This also represents a marked acceleration in debt reduction when compared to that foreseen in the previous update, mainly on account of larger primary surpluses. From 2005 to 2009, the debt-to-GDP ratio is projected to fall by some 17 p.p. as a result of the positive primary balances, privatisation proceeds and the impact of nominal GDP growth. However, the stock-flow adjustment will still contribute to raising the gross debt, mainly because of the accumulation of financial assets on behalf of the funded public pension schemes.

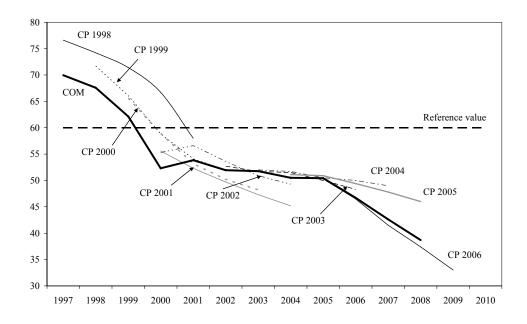


Figure 9: Debt projections in successive convergence programmes (% of GDP)

Note: The debt projections exclude the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes, which needs to be implemented by the time of the spring 2007 notification. Including this impact, government gross debt would be 50.9% of GDP in 2005, 47.0% in 2006, 42.0% in 2007, 37.9% in 2008 and 33.5% in 2009 (see Box 1).

Source:

Commission services' autumn 2006 forecast (COM) and successive convergence programmes.

Figure 9 shows that projections for debt reduction in the successive updates of the convergence programme in general have been in line with the actual outcomes. The debt

See above Box 1.

reduction targets for 2005 and 2006 that were set out in the 2003 update turned out to be realistic, whereas the projections made in 2004 and 2005 tended to underestimate the speed of actual debt reduction.

Table 12: Debt dynamics

(% of GDP)	average	2005	20	06	20	07	20	08	2009
(70 01 011)	2000-04	2003	COM	CP	COM	CP	COM	CP	CP
Gross debt ratio ¹	50.5	50.4	46.7	46.5	42.6	41.5	38.7	37.4	33.0
Change in the ratio	-2.3	-0.1	-3.7	-3.9	-4.1	-5.0	-3.9	-4.1	-4.4
Contributions ²									
Primary balance	-4.6	-4.6	-4.5	-4.5	-4.1	-4.0	-4.3	-4.2	-4.6
"Snow-ball" effect	0.5	-0.3	-1.0	-1.3	-0.8	-1.1	-0.4	-0.5	-0.2
Of which:									
Interest expenditure	2.7	1.6	1.7	1.5	1.7	1.6	1.8	1.5	1.5
Growth effect	-1.4	-1.3	-1.9	-1.9	-1.5	-1.4	-1.3	-1.2	-1.0
Inflation effect	-0.8	-0.6	-0.8	-0.9	-1.1	-1.3	-0.9	-0.8	-0.8
Stock-flow adjustment	1.7	4.8	1.8	1.8	0.8	0.1	0.7	0.6	0.4
Of which:									
Cash/accruals diff.	-0.6	1.0		0.4		-0.3		0.1	0.3
Acc. financial assets	2.7	2.8							
Privatisation	-0.1	0.0		0.0		-1.7		-1.6	-1.5
Val. effect & residual	-0.4	1.0							

Notes:
¹End of period.

²The change in the gross debt ratio can be decomposed as follows:

$$\frac{D_{t}}{Y_{t}} - \frac{D_{t-1}}{Y_{t-1}} = \frac{PD_{t}}{Y_{t}} + \left(\frac{D_{t-1}}{Y_{t-1}} * \frac{i_{t} - y_{t}}{1 + y_{t}}\right) + \frac{SF_{t}}{Y_{t}}$$

where t is a time subscript; D, PD, Y and SF are the stock of government debt, the primary deficit, nominal GDP and the stock-flow adjustment respectively, and i and y represent the average cost of debt and nominal GDP growth (in the table, the latter is decomposed into the growth effect, capturing real GDP growth, and the inflation effect, measured by the GDP deflator). The term in parentheses represents the "snow-ball" effect. The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.

Convergence programme update (CP); Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

The classification of the second-pillar funded scheme outside the general government sector as from spring 2007 will raise the debt-to-GDP ratio by around 0.5 percentage points.

5.1.2. Assessment

For 2007 and 2008, the update foresees a slightly more rapid fall of the debt ratio than in the Commission services' autumn 2006 forecast. Especially in 2007, the faster debt reduction projected by the update is largely due to a lower stock-flow adjustment as a result of the proceeds from the privatisation programme announced in the 2007 Budget and to a slightly higher "snow-ball" effect than in the Commission's forecast.

5.2. Long-term debt projections and the sustainability of public finances

The issue of long-term sustainability is a multi-faceted one. It involves avoiding imposing an excessive burden on future generations and ensuring the country's capacity appropriately to adjust budgetary policy in the medium and long run.³⁷

Debt sustainability is derived from the government's *intertemporal budget constraint*. It imposes that current total liabilities of the government, i.e. the current public debt and the discounted value of future expenditure including the budgetary impact of ageing populations, should be covered by the discounted value of future government revenue. If current policies ensure that the intertemporal budget constraint is fulfilled, current policies are sustainable.

The approach adopted by the Commission services and the Ageing Working Group of the Economic Policy Committee (EPC) is to project the debt, and to calculate the associated sustainability indicators (see Box 4), on the basis of two different scenarios. The <u>first</u> scenario assumes that the structural primary balance will remain unchanged from 2006 through 2009, the final year of the convergence programme; it is called the "2006 scenario". Debt projections in this scenario start in 2007. The <u>second</u> scenario assumes that the macroeconomic and budgetary plans until 2009 provided in the convergence programme will be fully respected. This is the "programme scenario". Debt and primary balance projections in this scenario start in 2010. Both projections assume zero stock-flow adjustment. In addition to this quantitative analysis, other relevant factors are taken into account which allows to better qualify the assessment with regard to where the main risks are likely to stem from and to reach an overall assessment.

5.2.1. Sustainability indicators and long-term debt projections

Table 13 shows the evolution of government spending on pensions, healthcare, long-term care for the elderly, education and unemployment benefits according to the EPC's projections.³⁸ Non age-related primary expenditure and revenue are assumed to remain constant as a share of GDP.

The projected increase in age-related spending in Sweden is below the average of the EU; rising by around 1 p.p. of GDP between 2004 and 2050, excluding pensions by PPM. Public expenditure on pensions is projected to slightly fall in Sweden, to a large extent explained by the comprehensive pension reform enacted in 1998, consisting of a notional defined contribution PAYG scheme and a funded-defined contribution scheme. The latter will be classified outside government from 2007 onwards (see Box 1). The increase in expenditure on health-care is projected to be 1.0 p.p. of GDP, lower than on average in the EU while for long-term care an increase of 1.7 p.p. of GDP is projected, among the highest in the EU.

For a detailed analysis of long-term sustainability issues, see "The Long Term Sustainability of Public Finances – A report by the Commission services", European Economy n°4/2006, published in October 2006 (hereinafter Sustainability Report).

These assumptions cover labour productivity growth, real GDP growth, participation rates, unemployment rate, demographic developments, government spending in pensions, healthcare, long-term care for the elderly, education and unemployment benefits. See Economic Policy Committee and European Commission (DG ECFIN) (2006), "The impact of ageing on public expenditure: projections for the EU25 Member States on pensions, health-care, long-term care, education and unemployment transfers (2004-2050)", European Economy, Special Report No 1 (hereinafter Ageing Report).

Table 13: Long-term age-related expenditure: main projections

(% of GDP)	2004	2010	2020	2030	2040	2050	Changes
Total age-related spending*	29.6	28.2	28.6	30.9	31.9	31.8	2.2
			(28.4)	(30.3)	(30.9	(30.5)	(0.9)
Pensions*	10.6	10.1	10.4	11.1	11.6	11.2	0.6
			(10.2)	(10.5)	(10.6)	(9.9)	(-0.7)
Healthcare	6.7	6.8	7.2	7.5	7.7	7.7	1.0
Long-term care	3.8	3.7	3.7	4.9	5.2	5.5	1.7
Education	7.3	6.7	6.4	6.6	6.6	6.4	-0.9
Unemployment benefits	1.1	0.9	0.9	0.9	0.9	0.9	-0.2
Source: Economic Policy Committee and Commi.	ssion servi	ces.					

^{*}The figures in brackets exclude the part of pensions that is paid by the funded defined-contribution scheme (PPM), which will be classified outside general government as of spring 2007. In the Ageing Report (2006), this scheme was included in the projections for public pensions and is projected to account for an increasing share of pensions as it matures over the coming decades.

[Note: the convergence programme includes long-term projections, see section 5.2.2.]

Based on the long-term budgetary projections, sustainability indicators can be calculated.

Table 14: Sustainability indicators and the required primary balance

20	06 scena	rio	Programme scenario		
S1	S2	RPB	S1	S2	RPB
-3.1	-1.5	2.1	-3.0	-1.4	2.1
					ļ
-3.4	-3.4	-	-3.3	-3.3	-
-1.0	-	-	-1.0	-	-
1.3	1.9	-	1.3	1.9	-
	-3.1 -3.4 -1.0	S1 S2 -3.1 -1.5 -3.4 -3.4 -1.0 -	S1 S2 RPB -3.1 -1.5 2.1 -3.4 -3.4 - -1.0 - -	S1 S2 RPB S1 -3.1 -1.5 2.1 -3.0 -3.4 -3.4 - -3.3 -1.0 - - -1.0	S1 S2 RPB S1 S2 -3.1 -1.5 2.1 -3.0 -1.4 -3.4 -3.4 - -3.3 -3.3 -1.0 - - -1.0 -

Note: Data in this table are based on PPM being classified outside general government.

Table 14 shows the sustainability indicators for the two scenarios. In the "2006 scenario", the sustainability gap (S1) that assures reaching the debt ratio of 60% of GDP by 2050 would be -3.1% of GDP. The sustainability gap (S2) which satisfies the intertemporal budget constraint would be -1.5% of GDP. The sustainability gaps are close to those of the Commission's Sustainability Report.

The initial strong budgetary position with a structural primary balance of 4.5% of GDP (3.5% of GDP, excluding PPM from general government) contributes to the reduction of gross debt and the accumulation of financial assets. The budgetary plans in the convergence programme imply that the structural balance is the same at the end of the programme period in 2009 as in 2006, which would contribute to containing the risks to the long-term sustainability of public finances.

According to both sustainability gaps, the long-term budgetary impact of ageing is relatively limited in particular thanks to the pension reform enacted in 1998. The required primary balance (RPB) is around 2% of GDP, lower than the structural primary balance over the programme period.³⁹

Given that the sustainability gans are negative for Sweden

Given that the sustainability gaps are negative for Sweden, the cost of a five-year delay in adjusting the budgetary position according to the S1 and S2 would also be negative.

Box 4 – Sustainability indicators*

- The **sustainability gap S1** shows the permanent budgetary adjustment (often presented as an increase in the tax burden**) required to reach a debt ratio in 2050 of 60% of GDP.
- The **sustainability gap S2**, shows the permanent budgetary adjustment that guarantees the respect of the intertemporal budget constraint of the government. In order to estimate S2, the revenue and expenditure ratios (age-related and non age-related) after 2050 are assumed to remain constant at the 2050 level.
- The sustainability indicators can be decomposed into the: (i) initial budgetary position (IBP); (ii) long-term Change in the budgetary position (LTC); and, (iii) debt requirement in 2050 (DR).
- In addition, the **required primary balance** (RPB) can be derived from the S2 indicator. It measures the average primary balance over the first five years after the programme horizon (i.e. 2006-2009) that results from a permanent budgetary adjustment carried out to comply fully with the S2 indicator.

Summarizing the sustainability indicators

			Impact of
	Initial budgetary position		Long-term changes in the primary balance
S1***=	Gap to the debt-stabilizing primary balance	+	Additional adjustment required to finance the increase in public expenditure <i>up to 2050</i>
S2=	Gap to the debt-stabilizing primary balance	+	Additional adjustment required to finance the increase in public expenditure over an infinite horizon

- * For a complete description of the sustainability indicators, see Annex I of the "The Long Term Sustainability of Public Finances A report by the Commission services", European Economy n°4/2006, published in October 2006.
- ** Although the sustainability gap indicators (S1, S2) are usually defined as differences between revenue ratios, this does not mean that countries are asked to increase taxes to reach sustainability. There are several ways to ensure sustainability and governments typically choose a combination of budget consolidation over the medium term (either through expenditure reduction and/or tax hikes) and the implementation of structural reforms aiming at curbing long-term public spending (e.g. pension reforms).
- *** Moreover, in the case of S1, the decomposition also separates the impact of the debt position (60% of GDP in 2050); the debt requirement in 2050 (DR). In particular, if the current debt/GDP ratio is below 60% of GDP debt is allowed to rise and this component reduces the sustainability gap as measured by the S1 indicator, and

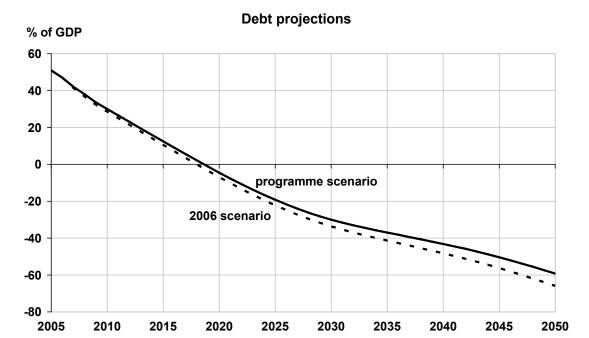
Another way to look at the prospects for long-term public finance sustainability is to project the debt/GDP ratio over the long-term using the same assumptions as for the calculations of S1 and S2. The long-term projections for government debt under the two scenarios are shown in Figure 10.

The gross debt ratio is currently below the 60% of GDP reference value, estimated in the programme at 46.5% of GDP in 2006. In both the "2006 scenario" and the "programme scenario", the debt ratio is projected to decrease over the projection period.⁴⁰

-

It should be recalled, however, that being a mechanical, partial-equilibrium analysis, the long-term debt projections are bound to show highly accentuated profiles. As a consequence, the projected evolution of debt levels should not be seen as a forecast similar to the Commission services' short-term forecasts, but as an indication of the risks faced by Member States.

Figure 10: Long-term projections for the government debt ratio



Source: Commission's services

Note: The government debt ratio is usually compiled in gross terms, that is assets are not netted out from government liabilities. Therefore, the gross debt can never be negative. In this chart, the negative values for the debt ratio should be understood as accumulation of financial assets. This issue has no implications on the conclusions drawn from the sustainability assessment.

5.2.2. Additional factors

To reach an overall assessment of the sustainability of public finances, other relevant issues are taken into account which in addition allows to better qualify the assessment with regard to from where the main risks are likely to stem.

First, the benefit ratio (i.e. average pension relative to GDP per worker) in Sweden is projected to decrease relatively markedly, by almost 25% in the period to 2050. This is explained in part by the fact that the pension projections in the Ageing Report assume no change in the retirement age in the future compared with today. However, if people chose to work longer in the future (with the pension reform, it is possible to retire later than at 65), they could increase their pension rights and, therefore, limit the decrease in the benefit ratio. By extending the working life by 2/3 of the increase in life expectancy at 65 by 2050, the replacement rate (the first pension received compared to the last wage) of an individual would remain unchanged.

Second, property income received by the general government in Sweden amounted to 2.3% of GDP in 2005, which is higher than on average in the EU. According to the analysis in the Sustainability report (Section IV.3.3), the S2 sustainability gap could be larger by about half of this amount, i.e. by some 1% of GDP.

Third, the convergence programme presents long-term projections for the whole general government in a somewhat different macroeconomic framework than in the Ageing report. Over the period 2010-2050, the update points to a very similar increase in the age-related expenditure covered by the Ageing report (3.7 p.p. of GDP compared to 3.5

p.p. in the Ageing report). In addition to those budgetary items, the update projects a decrease in primary revenue of 0.7 p.p. of GDP and a slight increase in childcare spending of 0.2 p.p. as a share of GDP over the period 2010-2050. Those deficit-increasing trends are more than offset by a decrease in non age-related primary spending of around 1.5 p.p. to which the reduction of public investment contributes most. Overall, these additional projections in the convergence programme would have a limited impact on the prospects for the long-term sustainability on public finance.⁴¹

Finally, Sweden has the highest level of taxation in the EU, suggesting that there is limited room of manoeuvre to adjust the budget on the revenue side compared with other countries.

5.2.3. Assessment

The long-term budgetary impact of ageing in Sweden is lower than the EU average, with pension expenditure projected to remain relatively stable as a share of GDP over the long term, influenced by the considerable expenditure-reducing impact of the reform of the pension system.

The initial budgetary position with a high primary surplus contributes to the reduction of gross debt and the accumulation of assets. Maintaining sound government finances with continued surpluses as planned would contribute to limiting risks to the sustainability of public finances.

Overall, Sweden appears to be at low risk with regard to the sustainability of public finances.

6. STRUCTURAL REFORM, THE QUALITY OF PUBLIC FINANCES AND INSTITUTIONAL FEATURES

As pointed out in the update, the new government intends to focus its economic policy on improving both labour supply and demand, not least with the aim of increasing the long-term sustainability of public finances. In order to increase labour supply, the government will be implementing a reduction in labour taxes, especially aimed at low and middle income earners, which will reduce income taxes by a projected SEK 40 billion, or close to 1.3% of GDP, in 2007. At the same time, the expenditure on ALMPs, some of which have been assessed as not being effective, has been strongly reduced (see Box 2). In the medium-term, these measures should raise the growth potential of the

It could be noted that the convergence programme also includes a reduction of around 1 p.p. of GDP of tax and charges between 2009 (47.4 % of GDP) and 2010 (46.3% of GDP), as it is assumed that the 2% of GDP surplus target (excluding the surplus-reducing impact of classifying the PPM scheme outside the general government sector) the is reached in 2010 and maintained until 2015. This is about 1 p.p. of GDP lower than the surplus expected in nominal and structural terms in 2009 in the programme. This technical assumption is reached by reducing household income tax. It explains partly the more adverse debt profile in the update of the Swedish convergence programme (see p.42, Table 21).

Swedish economy, thereby constituting a welcome improvement in the quality of public finances.

While the update only talks about "the repayment of central government debt resulting from the planned disinvestments of state holdings", the 2007 Budget is more explicit. In order to create better conditions for companies to grow and contribute to a positive employment development, the government considers that the state should reduce its ownership of companies. In practice, the government targets a privatisation volume of SEK 50 billion, or approximately 1.6% of GDP, per annum over the next three years, which the authorities intend to use to pay off central government debt. The current level of state ownership in the economy suggests that this is a reasonable target.

The update confirms the two pillars of Swedish budgetary policy, namely the multi-year expenditure ceilings and the (surplus) target for general government net lending. As already pointed out in section 4.2.1, the Swedish government will in the 2007 Spring Fiscal Bill present proposals on how to deal with the impact that Eurostat's decision will have on the target for general government lending.

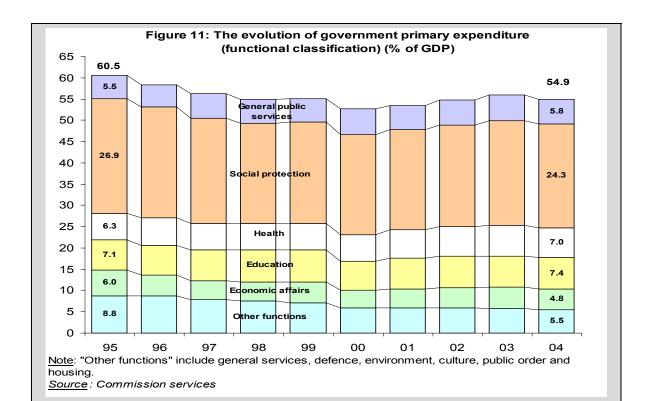
Regarding the expenditure ceilings, the update clearly states that measures such as 'tax expenditures' and 'net budgeted expenditures' have increasingly been used in the past to circumvent these ceilings. In order to raise the credibility of budgetary policy, the 2007 Budget has already reduced these tax expenditures and the government has also stated that in the 2007 Spring Fiscal Bill additional measures to increase fiscal policy transparency will be adopted.

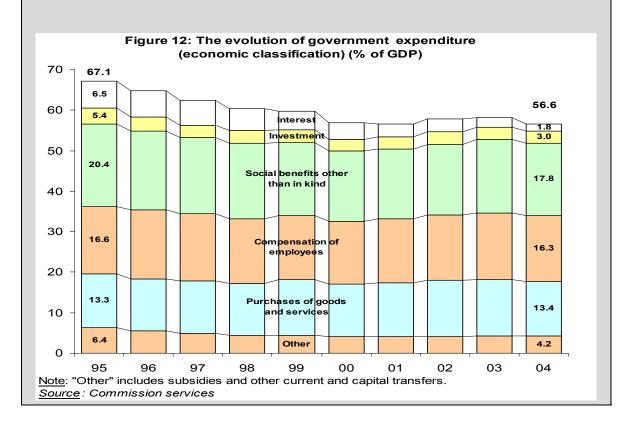
Box 5: The level and composition of government expenditure in Sweden since 1990

While government expenditure expressed as a percentage of GDP has declined strongly in Sweden since 1995, the 2004 ratio of 56.6% is still considerably higher than the EU-15 average (47.7% in 2003). The drop in the ratio of 10.5 p.p. since 1995 was primarily due to a considerable decrease in interest expenditure, down by 4.7 p.p., and a 2.6 p.p. drop in social benefits other than in kind.

The share of compensation of government employees has only declined marginally and remains high in comparison with the EU-15 average of 10.8% in 2003. Sweden also has a significantly higher expenditure ratio on social protection (24.3% of GDP in 2004 compared to the EU-15 average of 19.1% in 2003) and education (7.4% of GDP in 2004 compared to the EU-15 average of 5.3% in 2003).

The updated programme projects a further decline in the overall expenditure ratio to 52.8% of GDP in 2006 and to 49.8% at the end of the update's horizon in 2009.





7. CONSISTENCY WITH THE NATIONAL REFORM PROGRAMME AND WITH THE BROAD ECONOMIC POLICY GUIDELINES

The measures in the convergence programme as described in preceding sections are in line with the Implementation Report, which takes the form of a revised National Reform Programme (NRP) by the newly elected government. It underlines the importance of sustainable public finances over the long-term to meet the demographic challenge (cf. also section 5.2 on sustainability).

The updated convergence programme actually refers to the NRP and describes in qualitative terms the overall impact of the increase in labour supply on the public finance position at large.

The measures presented in the area of public finances in the updated convergence programme are consistent with those outlined in the Implementation Report. The programme provides systematic information on the direct budgetary costs or savings of the main reforms envisaged in the national reform programme. At the same time, the updated convergence programme seems to take account of the budgetary implications of the actions envisaged in the Implementation Report.

Box 6: The Commission assessment of the implementation report of the National Reform Programme

The implementation report of the National Reform Programme of Sweden, provided in the context of the renewed Lisbon strategy for growth and jobs, was submitted on 28 November 2006. The Commission's assessment of this report, which was adopted on 12 December 2006 as part of its Annual Progress Report, can be summarised as follows.

Sweden is making very good progress in the implementation of its National Reform Programme, which has been revised by the new government. The stability oriented macro-economic framework is appropriate and performs well. A strong effort is being made to strengthen incentives to work. Additional measures are needed to enhance competition in services.

Among the strengths of the Swedish National Reform Programme and its implementation are: the progress made on increasing public investment in R&D and in bringing forward measures to encourage innovation; the vigorous approach to encouraging entrepreneurship; Sweden's performance on encouraging the sustainable use of energy, which is among the best in the EU; progress in increasing labour supply; measures to make it simpler and more profitable to run a business by phasing out taxes and reducing administrative burdens; and proposals to enhance incentives to work, notably changes in labour taxation and benefit systems.

It will be important for Sweden over the period of the National Reform Programme to focus on: taking further regulatory measures to increase competition, notably in services; implementing rapidly planned improvements to the impact assessment system; taking a more coherent approach to better regulation, strengthening its strategy to increase labour supply and hours worked, including through the implementation of proposals to increase incentives to work, as well as stronger measures to increase the employment rate of immigrants and young people and to reintegrate people on sickness-related schemes.

The table below provides an overview of whether the strategy and policy measures in the programme are consistent with the broad economic policy guidelines in the area of public finances, which are included in the integrated guidelines for the period 2005-2008. Overall, the budgetary strategy in the convergence programme is broadly consistent with the broad economic policy guidelines.

Table 14: Consistency with the broad economic policy guidelines

Broad economic policy guidelines	Yes	Steps in right direction	No	Not applicable
1. To secure economic stability				
 Member States should respect their medium-term budgetary objectives. As long as this objective has not yet been achieved, they should take all the necessary corrective measures to achieve it¹. 	X			
 Member States should avoid pro-cyclical fiscal policies². 		X		
 Member States in excessive deficit should take effective action in order to ensure a prompt correction of excessive deficits³. 				X
 Member States posting current account deficits that risk being unsustainable should work towards (), where appropriate, contributing to their correction via fiscal policies. 				X
2. To safeguard economic and fiscal sustainability				•
In view of the projected costs of ageing populations,				
 Member States should undertake a satisfactory pace of government debt reduction to strengthen public finances. 				X
 Member States should reform and re-enforce pension, social insurance and health care systems to ensure that they are financially viable, socially adequate and accessible () 		X		
3. To promote a growth- and employment-orientated and efficient				
allocation of resources				
Member States should, without prejudice to guidelines on economic stability and sustainability, re-direct the composition of public expenditure towards growth-enhancing categories in line with the Lisbon strategy, adapt tax structures to strengthen growth potential, ensure that mechanisms are in place to assess the	X			
relationship between public spending and the achievement of policy objectives and ensure the overall coherence of reform packages.				

Notes:

<u>Source</u>:

Commission services

As further specified in the Stability and Growth Pact and the code of conduct, i.e. with an annual 0.5% of GDP minimum adjustment in structural terms for euro area and ERM II Member States.

²As further specified in the Stability and Growth Pact and the code of conduct, i.e. Member States that have already achieved the medium-term objective should avoid pro-cyclical fiscal policies in "good times". There is a risk that Sweden's fiscal policy might turn out to be pro-cyclical in 2007, but the budgetary stance is then expected to turn neutral in 2008 (Commission services' autumn forecast) and counter-cyclical in 2009 (see Table 7).

³As further specified in the country-specific Council recommendations and decisions under the excessive deficit procedure.

Annex 1: Glossary

Automatic stabilisers Various features of the tax and spending regime which tend to have a dampening effect on economic fluctuations without requiring a discretionary intervention of the fiscal authorities. As a result, the budget balance in percent of GDP tends to improve in years of high growth and deteriorate during economic slowdowns. See also *cyclically-adjusted balance*, *structural balance* and *minimum benchmark*.

Broad economic policy guidelines (BEPGs) Guidelines for the economic and budgetary policies of the Member States. Together with the Employment Guidelines, they form the Integrated Guidelines, prepared by the Commission and adopted by the Council of Ministers responsible for Economic and Financial Affairs (ECOFIN). See also *Lisbon strategy*.

Budget balance The balance between total public revenue and expenditure (according to *ESA95*); with a positive balance indicating a surplus (also know as *government net lending*) and a negative balance indicating a deficit (also known as *government net borrowing*). For the monitoring of Member States' budgetary positions, the EU uses *general government* aggregates. See also *cyclically-adjusted balance*, *primary balance*, *structural balance* and *reference values*.

Budget constraint A basic condition applying to the public finances, according to which total public expenditure in any one year must be financed by taxation, borrowing or changes in the monetary base; the latter is prohibited in the EU. See also *stock-flow adjustment* and *long-term sustainability*.

Budgetary sensitivity The variation in the *budget balance* brought about by a change in the *output gap*. In the EU, it is estimated to be 0.5 on average, i.e. for any percentage point of GDP below or above potential, the budget-balance-to-GDP ratio deteriorates or improves by half a percentage point. The size of the budgetary sensitivity essentially reflects (i) the revenue and expenditure elasticities of the budget and (ii) the size of discretionary government expenditure. See also *cyclically-adjusted balance*, *structural balance* and *tax elasticity*.

Code of conduct Policy document adopted by the Economic and Financial Committee (an advisory committee gathering high-level officials from national governments, national central banks, the European Central Bank and the European Commission which prepares the meetings of the Council of Ministers responsible for Economic and Financial Affairs (ECOFIN)) and endorsed by the ECOFIN Council in October 2005, containing specifications on the implementation of the *Stability and Growth Pact* and guidelines on the format and content of *stability programmes* and *convergence programmes*.

Contingent liabilities A possible government obligation to pay, the existence of which will be confirmed by the occurrence of one or more uncertain events in the future not wholly under the control of the government. For instance, government guarantees on debt issued by private or public companies are contingent liabilities since the government obligation to pay depends on the non-ability of the original debtor to honour its obligations. See also *implicit liabilities*.

Convergence programme Medium-term budgetary strategy presented by each Member State that has not yet adopted the euro; updated annually, according to the provisions of the *Stability and Growth Pact*. See also *stability programme*, *code of conduct* and *medium-term objective*.

Cyclically-adjusted balance The *budget balance* adjusted for its cyclical component (which captures the part of public revenue and expenditure that is linked to the *output gap*), i.e. the budget balance that would prevail if GDP were at its potential level. See also *structural balance*, *budgetary sensitivity* and *output gap*.

Cyclically-adjusted primary balance The *cyclically-adjusted balance* net of interest expenditure on *general government* debt. See also *interest burden*.

Debt dynamics The evolution of *government debt* as a ratio to GDP; it depends on the primary deficit, the debt-increasing impact of interest payments, the dampening effect of GDP growth on the ratio and the *stock-flow adjustment*.

EDP notification See notification of deficit and debt.

ERM II Exchange rate mechanism linking some currencies of non-euro Member States to the euro, which is the centre of the mechanism. For the currency of each Member State participating in the mechanism, a central rate against the euro and a standard fluctuation band of $\pm 15\%$ are defined.

ESA95 European accounting standards for the compilation and reporting of macroeconomic (including budgetary) data by the EU Member States.

Excessive deficit procedure (EDP) A procedure, laid down in the EC Treaty, according to which the Commission and the Council monitor the development of national *budget balances* and *public debt* in relation to the *reference values*, in order to assess the existence (or risk) of an excessive deficit in each Member State and to ensure its correction. Its application has been further clarified in the *Stability and Growth Pact*.

Fiscal stance A measure of the thrust of discretionary fiscal policy such as, in this document, the change in the *structural balance* (or in the *structural primary balance*) relative to the preceding year. When the change is positive (negative) the fiscal stance is said to be restrictive (expansionary).

Funded pension scheme Pension system in which current pension expenditures are financed by running down assets accumulated over the years on the basis of contributions by the scheme beneficiaries. According to *ESA95*, defined-contribution funded pension schemes are not considered as part of the *general government* sector. See also *pay-as-you-go pension scheme*.

Government debt See public debt.

General government The focus of EU budgetary surveillance under the *Stability and Growth Pact* and the *excessive deficit procedure* is on general government aggregates, with the general government sector covering national, regional and local government, as well as social security. In principle, public enterprises are excluded.

Government net lending/borrowing See budget balance.

Implicit liabilities Future government expenditure which has not yet been funded, even when future expenditure is not backed by law or contractual obligations, but is simply grounded in strong expectations of the public. To be meaningful for economic analysis, implicit liabilities should be assessed net of future revenue assuming that the government will keep collecting taxes (and other non-tax revenue) at rates comparable to current levels. See also *contingent liabilities*.

Interest burden General government interest expenditure on government debt as a share of GDP.

Intertemporal budget constraint A basic condition imposing that current total liabilities of the government, i.e. the current public debt and the discounted value of future expenditure including the budgetary impact of ageing populations, be covered by the discounted value of future government revenue.

Lisbon strategy Partnership between the EU and Member States for growth and more and better jobs. Originally approved in 2000, the Lisbon Strategy was revamped in 2005. Based on the Integrated Guidelines (merger of the *broad economic policy guidelines* and the employment guidelines, dealing with macro-economic, micro-economic and employment issues) for the period 2005-2008, Member States drew up 3-year national reform programmes in autumn 2005. They reported on the implementation of the national reform programmes for the first time in autumn 2006. The Commission analyses and summarises these reports in an EU Annual Progress Report each year, in time for the Spring European Council.

Long-term sustainability A combination of *budget balance* and *public debt* that ensures that the latter does not grow without bound. While conceptually intuitive, an agreed operational definition of sustainability has proven difficult to achieve.

Maturity structure of public debt The profile of *public debt* in terms of when it is due to be paid back. Interest rate changes affect the *budget balance* directly to the extent that the *general government* sector has debt with a relatively short maturity structure. Long maturities reduce the sensitivity of the *budget balance* to changes in the prevailing interest rate. See also *interest burden*.

Medium-term objective (MTO) According to the *Stability and Growth Pact*, *stability programmes* and *convergence programmes* must present a medium-term objective for the budgetary position. It is country-specific to take into account the diversity of economic and budgetary positions and developments as well as of fiscal risk to the sustainability of public finances, and is defined in structural terms (see *structural balance*).

Minimum benchmark Estimated budgetary position (in *cyclically-adjusted* terms) that provides a "safety margin" that is enough for the *automatic stabilisers* to operate freely during normal economic slowdowns without breaching the 3% of GDP deficit *reference value*. The minimum benchmarks are estimated by the European Commission. They do not cater for other risks such as unexpected budgetary developments and interest rate shocks.

National reform programme (NRP) See *Lisbon strategy*.

Notification of deficit and debt (EDP notification) Twice a year (by 1 April and 1 October), EU Member States have to notify their *general government* deficit and debt figures (and a number of associated data) to the Commission, the quality of which is then checked by Eurostat, the Commission department in charge of statistics. See also *budget balance* and *public debt*.

One-off and temporary measures Government transactions having a transitory budgetary effect that does not lead to a sustained change in the intertemporal budgetary position. See also *structural balance*.

Output gap The difference between actual GDP and potential GDP in any given year, usually expressed as a percent of potential GDP. Potential GDP is an unobserved variable and needs to be estimated from actual data. It is the level of real GDP in a given year that is consistent with a stable rate of inflation. If actual output rises above its potential level, then constraints on capacity begin to bind and inflationary

pressures build; if output falls below potential, then resources are lying idle and inflationary pressures abate. See also *production function method*.

Pay-as-you-go pension scheme (PAYG) Pension system in which current pension expenditures are financed by the contributions of current employees. Also known as *unfunded pension scheme*. See also *funded pension scheme*.

Primary balance The *budget balance* net of interest expenditure on *general government* debt. See also *interest burden*.

Pro-cyclical fiscal policy A *fiscal stance* which amplifies the economic cycle by lowering the *structural balance* when the *output gap* is positive or improving, or by increasing the *structural balance* when the *output gap* is negative or widening, as opposed to a counter-cyclical fiscal policy stance. A neutral fiscal policy keeps the *structural balance* unchanged over the economic cycle by letting the *automatic stabilisers* work.

Production function method A method to estimate potential GDP typically based on a Cobb-Douglas production function. Potential GDP is estimated as the level of GDP consistent with a full utilisation of capital, an unemployment rate that does not accelerate inflation and factor productivity at its trend level. See also *output gap, cyclically-adjusted balance, budgetary sensitivity*.

Public debt (or government debt) Consolidated gross debt for the *general government* sector. It includes the total nominal value of all debt owed by government units, except that part of the debt which is owed to government units in the same Member State. It is a gross debt measure meaning that government financial assets on other sectors are not netted out. See also *debt dynamics* and *reference values*.

Public investment The component of total public expenditure which consists in the acquisition of durable assets and through which governments increase and improve the stock of capital employed in the production of the goods and services they provide. Also known as government gross fixed capital formation (GFCF).

Public-private partnerships (PPP) Agreements between government and corporations according to which the latter build and operate public-use infrastructure (roads, tunnels, bridges, but also hospitals, prisons, concert halls, etc.) which were traditionally directly controlled by government. In exploiting the infrastructure, the corporation receives prices paid by final users, rentals or fees from the government or both. Infrastructure built under PPPs is considered as either *public investment* or corporate investment depending on a number of specific criteria.

Quality of public finances A multi-dimensional concept which refers to the contribution that public finances make to the efficient allocation of resources in the economy and to achieving the government's strategic objectives (sustainable growth, macroeconomic stability, competitiveness, social cohesion etc.). It concerns notably the overall level of expenditure and taxation, their composition, the budgeting and control mechanisms and the institutional arrangements for deciding on public finance issues.

Reference values for public deficit and debt Respectively, a 3 percent *general government* deficit-to-GDP ratio and a 60 percent *general government* debt-to-GDP ratio. See also *excessive deficit procedure, government debt* and *budget balance*.

Sensitivity analysis An econometric or statistical simulation designed to test the robustness of an estimated economic relationship or projection to changes in the underlying assumptions.

'Snow-ball' effect The self-reinforcing effect of *public debt* accumulation or decumulation arising from a positive or negative differential between the implicit interest rate on public debt and the GDP growth rate. See also *debt dynamics*.

Stability and Growth Pact (SGP) Approved in 1997 and reformed in 2005, the SGP clarifies the provisions on budgetary surveillance in the EC Treaty. The "preventive" arm of the SGP obliges Member States to submit annual *stability programmes* or *convergence programmes*, while the "corrective" arm of the SGP clarifies and speeds up the *excessive deficit procedure*.

Stability programme Medium-term budgetary strategy presented by each Member State that has already adopted the euro; updated annually, according to the provisions of the *Stability and Growth Pact*. See also *convergence programme, code of conduct* and *medium-term objective*.

Stock-flow adjustment (SFA) The stock-flow adjustment (also known as the debt-deficit adjustment) ensures consistency between *government net borrowing*, which is a flow variable, and the variation in *government debt*, which is a stock variable. It includes differences between cash and accrual accounting, accumulation of financial assets, changes in the value of debt denominated in foreign currency and remaining statistical adjustments. See also *debt dynamics*.

Structural balance The *budget balance* in *cyclically-adjusted* terms and excluding *one-off and temporary measures*. See also *fiscal stance*.

Structural primary balance The *structural balance* net of interest expenditure on *general government* debt. See also *interest burden*.

Tax elasticity A parameter measuring the relative change in tax revenues with respect to a relative change in GDP. The tax elasticity is an input to the *budgetary sensitivity*.

Annex 2: Summary tables from the programme update

The tables below present the information provided in the programme in the format prescribed by the code of conduct (Annex 2 thereof).

Table 1a. Macroeconomic prospects

		2005	2005	2006	2007	2008	2009		
	ESA Code	Level	rate of change						
1. Real GDP	B1*g	2673.0	2.7	4.0	3.3	3.1	2.7		
2. Nominal GDP	B1*g		3.8	5.8	6.2	5.1	4.9		
Components of real GDP									
3. Private consumption expenditure	P.3	1283	2.4	3.6	4.2	3.6	3.1		
4. Government consumption expenditure	P.3	728	0.7	1.4	1.5	1.0	0.6		
5. Gross fixed capital formation	P.51	455	8.5	7.2	3.3	3.6	3.6		
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	2	-0.2	-0.2	0.1	0.1	0.0		
7. Exports of goods and services	P.6	1299	6.4	8.3	6.4	6.1	5.9		
8. Imports of goods and services	P.7	1093	7.3	7.6	7.1	6.4	6.1		
	Contr	ibutions t	o real GDP g	rowth					
9. Final domestic demand		-	2.7	3.3	3.0	2.6	2.3		
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	-	-0.2	-0.2	0.1	0.1	0.0		
11. External balance of goods and services	B.11	-	0.2	0.9	0.2	0.4	0.4		

Table 1b. Price developments

		2005	2005	2006	2007	2008	2009
	ESA Code	level	rate of change				
1. GDP deflator			1.1	1.8	2.9	2.0	2.2
2. Private consumption deflator							
3. HICP ¹			1.3	1.9	2.2	1.5	1.9
4. Public consumption deflator							
5. Investment deflator							
6. Export price deflator (goods and services)			3.3	3.0	-1.3	-0.3	0.8
7. Import price deflator (goods and services)			4.7	3.5	-3.0	-0.3	0.8

¹ Optional for Stability programmes.

Table 1c. Labour market developments

		2005	2005	2006	2007	2008	2009
	ESA Code	Level	rate of change				
1. Employment, persons ¹			0.8	1.7	1.5	1.0	0.6
2. Employment, hours worked ²							
3. Unemployment rate (%) ³		-	6.0	5.6	5.8	5.0	4.3
4. Labour productivity, persons 4			2.0	2.7	1.8	2.1	2.2
5. Labour productivity, hours worked ⁵							
6. Compensation of employees	D.1		4.1	5.0	5.3	4.9	4.6

Occupied population, domestic concept national accounts definition.

² National accounts definition.

³ Harmonised definition, Eurostat; levels.

⁴ Real GDP per person employed. ⁵ Real GDP per hour worked.

Table 1d. Sectoral balances

% of GDP	ESA Code	2005	2006	2007	2008	2009
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	6.5	6.1	7.5	7.4	7.5
of which: - Balance on goods and services						
- Balance of primary incomes and transfers						
- Capital account						
2. Net lending/borrowing of the private sector	B.9					
3. Net lending/borrowing of general government	B.9/EDP B.9	3.0	3.0	2.4	2.7	3.1
4. Statistical discrepancy						

Table 2 General government budgetary prospects

Table 2. General government bu	agetary prosp		2005	2006	2007	2000	2000			
	ESA code	2005 Level	2005 % of GDP	2006 % of GDP	2007 % of GDP	2008 % of GDP	2009 % of GDP			
	Not land		8.9) by sub-s		% of GDP	% OF GDP	% 01 GDP			
1. General government	S.13	81.0	3.0	3.0	2.4	2.7	3.1			
2. Central government	S.1311	17.0	0.6	-0.5	0.2	0.7	1.4			
3. State government	S.1312	17.0	-	-0.3	0.2	-	-			
4. Local government	S.1313	14.0	0.5	0.7	0.5	0.4	0.3			
5. Social security funds	S.1314	50.0	1.9	2.8	1.7	1.6	1.3			
5. Social security funds			nment (S13)		1.7	1.0	1.3			
6. Total revenue	TR	1577.0	59.0	58.2	56.1	55.6	55.3			
	TE ¹	1496.0	56.0	55.2	53.7	52.9	52.2			
7. Total expenditure	EDP B.9									
8. Net lending/borrowing	EDP B.9 EDP D.41 incl.	81.0	3.0	3.0	2.4	2.7	3.1			
9. Interest expenditure (incl. FISIM)	FISIM	44.0	1.6	1.5	1.6	1.5	1.5			
pm: 9a. FISIM		-	-	-	-	-	-			
10. Primary balance	2	124.0	4.6	4.5	4.1	4.2	4.6			
	Selected components of revenue									
11. Total taxes (11=11a+11b+11c)		988.0	37.0	37.1	35.0	34.9	34.9			
11a. Taxes on production and imports	D.2	455.0	17.0	17.2	17.2	17.1	17.0			
11b. Current taxes on income, wealth, etc	D.5	532.0	19.9	19.9	17.8	17.8	17.9			
11c. Capital taxes	D.91	1.0	0.0	0.0	0.0	0.0	0.0			
12. Social contributions	D.61	383.0	14.3	13.6	13.7	13.5	12.9			
13. Property income	D.4	56.0	2.1	2.1	2.1	1.9	1.9			
14. Other (14=15-(11+12+13))		149.0	5.6	5.4	5.3	5.2	5.6			
15=6. Total revenue	TR	1577.0	59.0	58.2	56.1	55.6	55.3			
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995) ³				33.2			77.10			
· ·	Selected	componer	ts of expend	iture						
16. Collective consumption	P.32	721.0	27.0	26.5	26.1	26.0	25.9			
17. Total social transfers	D.62 + D.63	545.0	20.4	19.8	18.8	18.4	18.3			
17a. Social transfers in kind	P.31 =D.63	79.0	3.0	2.9	2.9	2.9	2.9			
17b. Social transfers other than in kind	D.62	466.0	17.4	16.9	15.9	15.5	15.4			
18.=9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	44.0	1.6	1.5	1.6	1.5	1.5			
19. Subsidies	D.3	40.0	1.5	1.6	1.4	1.3	1.3			
20. Gross fixed capital formation	P.51	80.0	3.0	3.0	3.0	2.9	2.9			
21. Other (21=22-(16+17+18+19+20))		67.0	2.5	2.9	2.7	2.7	2.5			
22=7. Total expenditure	TE ⁴	1496.0	56.0	55.2	53.7	52.9	52.2			
Pm: compensation of employees	D.1	- 1,7 0.0				1-12				
1 the compensation of employees										

¹ Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

² The primary balance is calculated as (EDP B.9, item 8) plus (EDP D.41 + FISIM recorded as intermediate consumption, item 9).

³ Including those collected by the EU and including an adjustment for uncollected taxes and social contributions (D.995), if appropriate. ⁴ Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

Table 3. General government expenditure by function

% of GDP	COFOG Code	2004	2009
General public services	1	7.6	
2. Defence	2	1.9	
3. Public order and safety	3	1.4	
4. Economic affairs	4	4.8	
5. Environmental protection	5	0.3	
6. Housing and community amenities	6	0.8	
7. Health	7	7.0	
8. Recreation, culture and religion	8	1.0	
9. Education	9	7.4	
10. Social protection	10	24.3	
11. Total expenditure (= item 7=26 in Table 2)	TE ¹	56.7	

Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.

Table 4. General government debt developments

% of GDP	ESA Code	2005	2006	2007	2008	2009			
1. Gross debt ¹		50.3	46.5	41.5	37.4	33.0			
2. Change in gross debt ratio		-0.2	-3.9	-5.0	-4.1	-4.4			
	Contributions	to changes in	ı gross debt						
3. Primary balance ²		-4.6	-4.5	-4.1	-4.2	-4.6			
4. Interest expenditure (incl. FISIM) ³		1.6	1.5	1.6	1.5	1.5			
5. Stock-flow adjustment		4.7	1.9	0.2	0.7	0.4			
of which: - Differences between cash and accruals ⁴		0.7	0.4	-0.3	0.1	0.3			
Net accumulation of financial assets ⁵ of which: - privatisation proceeds									
- Valuation effects and other ⁶									
p.m. implicit interest rate on debt ⁷		3.3	3.2	3.7	3.9	4.2			
Other relevant variables									
6. Liquid financial assets ⁸									
7. Net financial_debt (7=1-6)									

¹ As defined in Regulation 3605/93 (not an ESA concept).

Table 5. Cyclical developments

% of GDP	ESA Code	2005	2006	2007	2008	2009
1. Real GDP growth (%)		2.7	4.0	3.3	3.1	2.7
2. Net lending of general government	EDP B.9	3.0	3.0	2.4	2.7	3.1
3. Interest expenditure (incl. FISIM recorded as consumption)	EDPD.41 +FISIM	1.9	1.9	1.9	1.8	1.7
4. Potential GDP growth (%) ¹						
contributions: - labour - capital - total factor productivity						
5. Output gap		-1.0	-0.1	-0.1	-0.2	0.0
Cyclical budgetary component		0.7	0.1	0.1	0.1	0.0
7. Cyclically-adjusted balance (2-6)		2.3	2.9	2.3	2.6	3.1
8. Cyclically-adjusted primary balance (7-3)		4.2	4.8	4.2	4.4	4.8

Until an agreement on the Production Function Method is reached, Member States can use their own figures (SP)

² Cf. item 10 in Table 2.

³ Cf. item 9 in Table 2.

⁴ The differences concerning interest expenditure, other expenditure and revenue could be distinguished when relevant.

⁵ Liquid assets, assets on third countries, government controlled enterprises and the difference between quoted and non-quoted assets could be distinguished when relevant.

⁶ Changes due to exchange rate movements, and operation in secondary market could be distinguished when relevant.

⁷ Proxied by interest expenditure (incl. FISIM recorded as consumption) divided by the debt level of the previous year.

⁸ AF1, AF2, AF3 (consolidated at market value), AF5 (if quoted in stock exchange; including mutual fund shares).

Table 6. Divergence from previous update

	ESA Code	2005	2006	2007	2008	2009
Real GDP growth (%)						
Previous update		2.4	3.1	2.8	2.3	-
Current update		2.7	4.0	3.3	3.1	2.7
Difference		0.3	0.9	0.5	0.8	-
General government net lending (% of	EDP B.9					
GDP)						
Previous update		1.6	0.9	1.2	1.7	-
Current update		3.0	3.0	2.4	2.7	3.1
Difference		1.4	2.1	1.2	1.0	-
General government gross debt (% of						
GDP)						
Previous update		50.9	49.4	47.8	46.0	-
Current update		50.3	46.5	41.5	37.4	33.0
Difference		-0.6	-2.9	-6.3	-8.6	-

 $Table \ 7. \ Long-term \ sustainability \ of \ public \ finances$

% of GDP	2000	2005	2010	2020	2030	2050
Total expenditure	54.2	53.5	49.6	49.6	52.1	52.6
Of which: age-related expenditures	28.8	29.7	28.0	29.5	31.9	31.9
Pension expenditure	10.2	11.0	10.3	11.1	11.3	10.3
Social security pension	0.5	0.9	0.6	0.7	0.7	0.6
Old-age and early pensions	6.3	6.3	6.7	7.4	7.5	6.8
Other pensions (disability, survivors)	2.8	3.2	2.5	2.4	2.5	2.3
Occupational pensions (if in general government)	0.6	0.6	0.5	0.6	0.6	0.6
Health care	6.0	6.2	6.0	6.4	6.9	7.1
Long-term care (this was earlier included in the health care)	3.7	4.1	4.0	4.5	6.0	6.9
Education expenditure	5.9	5.8	5.4	5.2	5.4	5.2
Other age-related expenditures	0.0	0.0	0.0	0.0	0.0	0.0
Interest expenditure	4.0	1.9	1.6	0.8	0.8	2.3
Total revenue	59.2	56.3	51.6	51.2	51.4	50.6
Of which: property income	3.1	2.2	2.0	1.9	1.8	1.8
of which: from pensions contributions (or social contributions if appropriate)	1.5	0.8	1.0	1.1	1.0	1.0
Pension reserve fund assets	35.4	36.7	35.9	31.9	29.5	30.6
Of which: consolidated public pension fund assets (assets other than government liabilities)	20.7	31.4	31.9	30.4	28.1	29.1
		Assumptions	I .		I .	
Labour productivity growth	3.7	3.1	2.1	1.9	1.7	1.9
Real GDP growth	4.3	2.7	2.8	1.8	1.5	1.8
Participation rate males (aged 20-64)	84.0	83.8	83.2	84.4	83.7	84.2
Participation rates females (aged 20-64)	78.4	78.7	77.9	79.4	78.9	79.3
Total participation rates (aged 20-64)	81.2	81.3	80.6	81.9	81.3	81.8
Unemployment rate	5.0	6.0	4.1	3.6	3.7	3.7
Population aged 65+ over total population	17.2	17.3	18.7	21.2	22.9	23.6

Table 8. Basic assumptions

	2005	2006	2007	2008	2009
Short-term interest rate ¹ (annual average)	1.75	2.49	3.53	3.88	4.00
Long-term interest rate (annual average)	3.38	3.75	4.02	4.25	4.33
USD/€ exchange rate (annual average) (euro area and ERM II countries)	1.19	1.30	1.35	1.35	1.35
Nominal effective exchange rate	128	128	124	122	122
(for countries not in euro area or ERM II) exchange rate vis-à-vis the € (annual average)	9.44	9.20	9.00	8.90	8.90
World excluding EU, GDP growth	4.7	5.0	4.6	4.2	4.0
EU GDP growth	1.4	2.3	1.9	1.9	1.9
Growth of relevant foreign markets					
World import volumes, excluding EU					
Oil prices, (Brent, USD/barrel)	54	66	58	62	55

¹ If necessary, purely technical assumptions.

Annex 3: Compliance with the code of conduct

The table below provides a detailed assessment of whether the programme respects the requirements of Section II of the code of conduct. It is in four parts, covering compliance with (i) the window for the date of submission of the programme; (ii) the model structure (table of contents) in Annex 1 of the code; (iii) the data requirements (model tables) in Annex 2 of the code; and (iv) other information requirements.

Guidelines in the code of conduct	Yes	No	Comments
1. Submission of the programme		37	
Programme was submitted not earlier than mid-October and not later		X	A new government
than 1 December ¹ .			took office on 6
			October 2006 (see
			footnote 1).
2. Model structure			
The model structure for the programmes in Annex 1 of the code of	X		
conduct has been followed.	Λ		
Conduct has been followed.			
3. Model tables (so-called data requirements)			
The quantitative information is presented following the standardised		X	
set of tables (Annex 2 of the code of conduct).			
The programme provides all compulsory information in these tables.		X	
The programme provides all optional information in these tables.		X	
The concepts used are in line with the European system of accounts	X		
(ESA).			
4. Other information requirements			
a. Involvement of parliament			
The programme mentions its status vis-à-vis the national parliament.	X		
The programme indicates whether the Council opinion on the		X	
previous programme has been presented to the national parliament.			
b. Economic outlook			
Euro area and ERM II Member States uses the "common external			Not applicable
assumptions" on the main extra-EU variables.			
Significant divergences between the national and the Commission		X	See footnote 2
services' economic forecasts are explained ² .			
The possible upside and downside risks to the economic outlook are	X		
brought out.			
The outlook for sectoral balances and, especially for countries with a	X		
high external deficit, the external balance is analysed.			
c. Monetary/exchange rate policy			T
The convergence programme presents the medium-term monetary	X		
policy objectives and their relationship to price and exchange rate			
stability.			
d. Budgetary strategy	37		
The programme presents budgetary targets for the general	X		
government balance in relation to the MTO, and the projected path			
for the debt ratio.	v		TIC-1
In case a new government has taken office, the programme shows continuity with respect to the budgetary targets endorsed by the	X		Higher surplus
Council.			positions are targeted.
When applicable, the programme explains the reasons for possible	X		
deviations from previous targets and, in case of substantial	Λ		
deviations, whether measures are taken to rectify the situation, and			
provide information on them.			
The budgetary targets are backed by an indication of the broad	X		
measures necessary to achieve them and an assessment of their	11		
quantitative effects on the general government balance is analysed.			
quantitative effects on the general government barance is analysed.			I

Guidelines in the code of conduct	Yes	No	Comments
Information is provided on one-off and other temporary measures.	X	110	Achievements of the
information is provided on one on and other temporary measures.	21		budgetary targets do
			not rely on one-off
			revenues.
The state of implementation of the measures (enacted versus	X		Tevenues.
planned) presented in the programme is specified.	Λ		
If for a country that uses the transition period for the classification of	X		Prominence given to
second-pillar funded pension schemes, the programme presents	Λ		data excluding
information on the impact on the public finances.			pension reform costs.
e. "Major structural reforms"			pension retorm costs.
If the MTO is not yet reached or a temporary deviation is planned			Not applicable
from the achieved MTO, the programme includes comprehensive			Not applicable
information on the economic and budgetary effects of possible			
'major structural reforms' over time.			
The programme includes a quantitative cost-benefit analysis of the			Not applicable
short-term costs and long-term benefits of such reforms.			TYOU applicable
f. Sensitivity analysis			
The programme includes comprehensive sensitivity analyses and/or		X	Partial analysis.
		Λ	Partial analysis. Sensitivity of
develops alternative scenarios showing the effect on the budgetary and debt position of:			-
a) changes in the main economic assumptions			government net lending to deviations
b) different interest rate assumptions			
c) for non-participating Member States, different exchange rate			from the assumptions on the exchange rate
assumptions			and the extra-EU
d) if the common external assumptions are not used, changes in			variables are missing
assumptions for the main extra-EU variables.			variables are missing
In case of "major structural reforms", the programme provides an			Not applicable
analysis of how changes in the assumptions would affect the effects			Not applicable
on the budget and potential growth.			
g. Broad economic policy guidelines			
The programme provides information on the consistency with the	X		
broad economic policy guidelines of the budgetary objectives and	Λ		
the measures to achieve them.			
h. Quality of public finances			
The programme describes measures aimed at improving the quality	X		
of public finances on both the revenue and expenditure side (e.g. tax	Λ		
reform, value-for-money initiatives, measures to improve tax			
collection efficiency and expenditure control).			
i. Long-term sustainability			
The programme outlines the country's strategies to ensure the	X		
sustainability of public finances, especially in light of the economic	11		
and budgetary impact of ageing populations.			
Common budgetary projections by the AWG are included in the	X		
programme. The programme includes all the necessary additional	11		
information. To this end, information included in programmes			
should focus on new relevant information that is not fully reflected			
in the latest common EPC projections.			
j. Other information (optional)			I .
The programme includes information on the implementation of	X		
existing national budgetary rules (expenditure rules, etc.), as well as	11		
on other institutional features of the public finances, in particular			
budgetary procedures and public finance statistical governance.			
Notes:			l
1000.			

Notes:

Sweden's new government took office on 6 October 2006, following the general election on 16 September. On 16 October, the new government presented its Draft Budget Bill for 2007.

To the extent possible, bearing in mind the typically short time period between the publication of the

Commission services' autumn forecast and the submission of the programme.

Source:

Commission services

Annex 4: Key economic indicators of past economic performance

This Annex includes two tables. The first displays key economic indicators that summarise the economic performance of the country. To put the country's performance into perspective, the second table displays the same set of indicators for the euro area.

Sweden - Key economic indicators

		Averages		2003	2004	2005
	1996– 2005	1996– 2000	2001- 2005			
Economic activity		:				
Real GDP (% change)	2.7	3.2	2.2	1.7	3.7	2.7
Private consumption (% change)	2.4	3.2	1.6	1.8	1.8	2.4
Government consumption (% change)	0.8	0.7	0.9	0.7	0.1	0.7
Investment (% change)	3.7	5.2	2.2	1.1	5.1	8.5
Exports (% change)	6.8	9.0	4.7	4.5	10.8	6.4
Imports (% change)	5.7	8.7	2.8	5.0	6.4	7.3
Contributions to real GDP growth:		!			 - -	
Domestic demand	1.9	2.5	1.2	1.6	1.4	2.5
Net exports	0.9	0.7	1.0	0.1	2.3	0.2
Output gap (% of potential GDP)	-0.6	-0.6	-0.6	-1.5	-0.6	-0.5
Prices and costs		1	***			
HICP inflation (% change)	1.4	1.1	1.8	2.3	1.0	0.8
Unit labour costs (% change)	1.9	2.2	1.7	1.0	-0.6	1.4
Labour productivity (% change)	2.2	2.4	1.9	2.0	4.3	2.4
Real unit labour costs (% change)	0.6	1.1	0.1	-1.0	-1.4	0.3
Comparative price levels (EUR25=100)	121.2	124.4	118.0	119.4	117.8	118.7
Labour market						
Employment (% change)	0.6	0.8	0.3	-0.3	-0.5	0.4
Employment (% of working age population)	73.5	72.5	74.4	74.4	73.6	73.4
Unemployment rate (% of labour force)	7.0	8.0	5.9	5.6	6.3	7.8
NAIRU (% of labour force)	6.1	6.4	5.9	5.8	6.0	6.3
Participation rate (% of working age population)	79.0	78.8	79.2	78.9	78.6	79.7
Working age population (% change)	0.5	0.3	0.6	0.7	0.7	0.6
Competitiveness and external position						
Real effective exchange rate (% change) (1)	0.5	1.1	-0.1	5.1	0.6	-2.1
Export performance (% change) (2)	0.4	0.5	0.3	1.3	2.3	-0.5
External balance of g & s (% of GDP)	6.7	6.3	7.1	6.6	8.2	7.7
External balance (% of GDP)	4.7	3.6	5.8	6.6	6.6	6.0
FDI inflow (% of GDP)	n.a.	n.a.	n.a.	n.a.	3.6	3.8
Public finances		!				
Total expenditure (% of GDP)	58.9	60.8	57.0	58.1	56.6	56.2
Total revenue (% of GDP)	60.1	61.9	58.3	57.9	58.2	59.0
General government balance (% of GDP)	1.3	1.1	1.4	0.1	1.8	3.0
General government debt (% of GDP)	58.3	65.0	51.7	51.8	50.5	50.4
Structural budget balance (% of GDP) (3)	n.a.	n.a.	n.a.	1.0	1.7	2.9
Financial indicators (4)		1				
Short term real interest rate (%) (5)	2.4	3.3	1.6	1.2	1.4	0.7
Long term real interest rate (%) (5)	3.9	4.8	3.0	2.6	3.5	2.2
Household debt (% change) (6)	7.9	6.5	9.4	9.2	10.2	11.0
Corporate sector debt (% change) (7)	7.5	8.8	6.2	3.1	-0.7	10.8
Household debt (% of GDP) (6)	54.1	48.6	59.6	59.1	62.3	66.5
Corporate sector debt (% of GDP) (7)	94.8	86.9	102.7	103.5	98.2	104.8

Notes:

- (1) Unit labour costs relative to rest of a group of industrialised countries (USD): EU24 (= EU25 excl. LU), BG, RO, TR, CH, NR, US, CA, JP, AU, MX and NZ.
- (2) Market performance of exports of goods and services on export weighted imports of goods and services of 35 industrial markets.
- (3) Cyclically-adjusted budget balance net of one-off and other temporary measures.
- (4) Data available up to 2004.
- (5) Using GDP deflator.
- (6) Households' and non-profit institutions serving households' debt, defined as loans and securities other than shares.
- (7) Non-financial corporate sector debt, defined as loans and securities other than shares.

Source:

Commission services

Euro area - Key economic indicators

		Averages				2005
	1996 – 2005	1996 – 2000	2001 – 2005	2003	2004	
Economic activity						
Real GDP (% change)	2.1	2.7	1.4	0.8	2.0	1.4
Private consumption (% change)	2.0	2.6	1.4	1.2	1.5	1.3
Government consumption (% change)	1.7	1.7	1.7	1.8	1.2	1.4
Investment (% change)	2.6	4.3	1.0	1.0	2.2	2.5
Exports (% change)	5.8	8.1	3.5	1.1	6.8	4.3
Imports (% change)	5.9	8.4	3.4	3.1	6.7	5.3
Contributions to real GDP growth:		:	<u> </u>			
Domestic demand	2.0	2.7	1.3	1.4	1.8	1.6
Net exports	0.1	0.1	0.1	-0.7	0.2	-0.2
Output gap (% of potential GDP)	-0.1	-0.1	0.0	-0.6	-0.5	-1.1
Prices and costs	0.1	V.1	0.0	0.0	0.0	
HICP inflation (% change)	1.9	1.7	2.2	2.1	2.1	2.2
Unit labour costs (% change)	1.3	0.8	1.7	2.0	0.9	1.0
Labour productivity (% change)	1.2	1.5	0.8	0.8	1.6	0.9
Real unit labour costs (% change)	-0.5	-0.6	-0.5	-0.1	-1.0	-0.8
Comparative price levels (EUR25=100)	101.9	101.5	102.1	103.0	102.7	102.3
Labour market	101.9	101.5	102.1	105.0	102.7	102.5
Employment (% change)	1.2	1.5	0.9	0.7	0.7	0.8
Employment (% of working age population)	63.7	62.0	65.4	65.4	65.6	65.8
Unemployment rate (% of labour force)	9.1	9.8	8.5	8.7	8.9	8.6
NAIRU (% of labour force)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Participation rate (% of working age population)	69.9	68.5	71.2	71.4	71.7	71.8
Working age population (% change)	0.3	0.2	0.4	0.5	0.5	0.5
Competitiveness and external position						
Real effective exchange rate (% change) (1)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Export performance (% change) (2)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
External balance of g & s (% of GDP)	1.9	1.7	2.0	2.1	2.1	1.5
External balance (% of GDP)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FDI inflow (% of GDP)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public finances	11.00.	11.00	11.00	11.00.	11.0.	11.00.
Total expenditure (% of GDP)	48.2	48.7	47.7	48.2	47.6	47.6
Total revenue (% of GDP)	45.8	46.5	45.1	45.1	44.8	45.1
General government balance (% of GDP)	-2.3	-2.1	-2.5	-3.1	-2.8	-2.4
General government debt (% of GDP)	70.9	72.5	69.3	69.3	69.8	70.8
Structural budget balance (% of GDP) (3)	n.a.	n.a.	n.a.	-3.2	-2.9	-2.0
Financial indicators (4)	11.00.		!	3.2		
Short term real interest rate (%) (5)	1.7	2.7	0.7	0.2	0.2	0.3
Long term real interest rate (%) (5)	3.1	4.1	2.1	2.0	2.2	1.5
Household debt (% change) (6)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt (% change) (7)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Household debt (% of GDP) (6)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt (% of GDP) (7)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

- Notes:
 (1) Unit labour costs relative to rest of a group of industrialised countries (USD): EU24 (=EU25 excl. LU), BG, RO, TR, CH, NR, US, CA, JP, AU, MX and NZ.
- (2) Market performance of exports of goods and services on export weighted imports of goods and services of 35 industrial markets. (3) Cyclically-adjusted budget balance net of one-off and other temporary measures.
- (4) Data available up to 2004.
- (5) Using GDP deflator.
- (6) Households' and non-profit institutions serving households' debt, defined as loans and securities other than shares.
- (7) Non-financial corporate sector debt, defined as loans and securities other than shares.

Source:

Commission services

Annex 5: Assessment of tax projections

Table 9 in the main text compares the tax projections of the programme with those of the Commission services' autumn 2006 forecast and those obtained by using standard ex-ante elasticities, as estimated by the OECD. It summarises the results for the total tax-to-GDP ratio. The underlying analysis exploits information for the four major tax categories, i.e. indirect taxes, corporate and private income taxes and social contributions (see results in the table below)⁴².

Conceptually, the analysis draws on the definition of a semi-elasticity, which measures the change in a ratio vis-à-vis the relative change in the denominator. The semi-elasticity of the tax-to-GDP ratio of the *i-th* tax $\frac{T_i}{V}$ can be written as:

$$\eta_{i} = \frac{d\left(\frac{T_{i}}{Y}\right)}{dY}Y = \left(\frac{dT_{i}}{dY}\frac{Y}{T_{i}} - 1\right)\frac{T_{i}}{Y} = \left(\frac{dT_{i}}{dB_{i}}\frac{B_{i}}{T_{i}}\frac{dB_{i}}{dY}\frac{Y}{B_{i}} - 1\right)\frac{T_{i}}{Y} = \left(\varepsilon_{T_{i},B_{i}}\varepsilon_{B_{i},Y} - 1\right)\frac{T_{i}}{Y}$$

where \mathcal{E}_{T_i,B_i} and $\mathcal{E}_{B_i,Y}$ denote the elasticity of the *i-th* tax T_i relative to its tax base B_i and the elasticity of the tax base B_i relative to aggregate GDP Y respectively.

To the extent that ε_{T_i,B_i} is derived from observed or projected data, it will typically reflect (i) the effect of discretionary measures (including one-offs) and (ii) the tax elasticity⁴³. By contrast, if ε_{T_i,B_i} is the standard *ex-ante* elasticity, as estimated by the OECD, it will be net of discretionary measures.

The second elasticity $\mathcal{E}_{B_i,Y}$ can be used as an indicator of the tax intensity of GDP growth; for instance, a higher elasticity of consumption relative to GDP means that for the same GDP growth indirect taxes will be higher.

The definition of a semi-elasticity has two practical implications. First, any change in the tax-to-GDP ratio of the *i-th* tax can be written as the product of the semi-elasticity and GDP growth:

$$d\left(\frac{T_i}{Y}\right) = \eta_i \cdot \frac{dY}{Y}$$

and the change in the total tax-to-GDP ratio is the sum:

$$\sum_{i} d\left(\frac{T_{i}}{Y}\right) = \sum_{I} \eta_{i} \frac{dY}{Y}.$$

Second, differences between two tax projections can be decomposed into an elasticity component and a composition component:

$$d\left(\frac{T_{i}}{Y}\right)' - d\left(\frac{T_{i}}{Y}\right) \approx \left[\left(\varepsilon_{T_{i},B_{i}}'\varepsilon_{B_{i},Y}' - 1\right)\frac{T_{i}}{Y} - \left(\varepsilon_{T_{i},B_{i}}\varepsilon_{B_{i},Y} - 1\right)\frac{T_{i}}{Y}\right]\frac{dY}{Y}$$

factors (OF) such as discretionary measures: $\frac{\Delta T_i}{T_i} = \varepsilon_{T_i,B_i\text{exante}} \frac{dB_i}{B_i} + \frac{OF_i}{T_i} = \varepsilon_{T_i,B_i\text{expost}} \frac{dB_i}{B_i}.$

⁴²Private and corporate income taxes are generally not provided, neither in the programme nor in the Commission services' autumn 2006 forecast. Only the aggregate, direct income taxes, is given. For the purpose of this exercise the breakdown is obtained using the average shares over the past ten years, i.e. the composition of direct taxes is assumed to stay constant.

⁴³The observed or projected elasticity (ex-post elasticity) of the *i*-th tax also includes the effect of other

If
$$(\varepsilon_{T_i,B_i}' - \varepsilon_{T_i,B_i}) = \alpha_i$$
; $(\varepsilon_{B_i,Y}' - \varepsilon_{B_i,Y}) = \beta_i$,
then $d\left(\frac{T_i}{Y}\right)' - d\left(\frac{T_i}{Y}\right) \approx \left[\left(\alpha_i \varepsilon_{B_i,Y} + \beta_i \varepsilon_{T_i,B_i} + \alpha_i \beta_i\right) \frac{T_i}{Y}\right] \frac{dY}{Y}$

where $\alpha_i \mathcal{E}_{B_i,Y} \frac{T_i}{Y} \frac{dY}{Y}$ determines the elasticity component and $\beta_i \mathcal{E}_{T_i,B_i} \frac{T_i}{Y} \frac{dY}{Y}$ the composition component. The third component in the equation $\alpha_i \beta_i \frac{T_i}{Y} \frac{dY}{Y}$ measures the interaction of the elasticity and the composition components. It is generally small but can become important in some cases. The tax elasticity relative to GDP of total taxes is obtained as $\mathcal{E} = \sum_i w_i \mathcal{E}_{T_i B_i} \mathcal{E}_{B_i Y}$ with w_i the share of the *i-th* tax in the overall tax burden.

Assessment of tax projections by major tax category

		2007			2008			
	СР	COM	OECD ¹	CP	COM ²	OECD ¹	CP	
Taxes on production and imports:								
Change in tax-to-GDP ratio	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.1	
Difference CP – COM	(0.0			0.0			
of which ³ :								
- discretionary & elasticity component	-(0.1			-0.1			
- composition component	C	0.2			0.1			
Difference COM – OECD			0.0		-(0.1		
of which ³ :								
- discretionary & elasticity component			0.0		-(0.1		
- composition component			0.0		C	0.0		
p.m.: Elasticity								
- of taxes to tax base ⁴	0.9	1.0	1.0	0.8	0.9	1.0	0.8	
- of tax base ⁴ to GDP	1.1	1.0	1.0	1.1	1.0	1.0	1.1	
Social contributions:								
Change in tax-to-GDP ratio	0.1	0.0	-0.2	-0.2	-0.1	-0.2	-0.6	
Difference CP – COM	0	0.1		-0.1				
of which ³ :								
- discretionary & elasticity component	0	0.2		-0.1				
- composition component	-(0.1		0.0				
Difference COM – OECD			0.3	0.1				
of which ³ :								
- discretionary & elasticity component			0.1	-0.1				
- composition component			0.2	.2		0.2		
p.m.: Elasticity								
- of taxes to tax base ⁵	1.3	1.1	1.0	0.7	0.9	1.0	0.1	
- of tax base ⁵ to GDP	0.9	0.9	0.7	1.0	1.0	0.7	0.9	
Personal income tax ⁶ :								
Change in tax-to-GDP ratio	-1.9	-1.5	-0.1	0.0	-0.2	-0.1	0.1	
Difference CP – COM	-(0.4			0.2			
of which ³ :								
- discretionary & elasticity component	-(-0.4		0.2				
- composition component	0	0.0		0.0				
Difference COM – OECD		-1.4		-0.1				
of which ³ :								
- discretionary & elasticity component			-1.3	-0.3				
- composition component			0.3		C	0.3		
p.m.: Elasticity								

- of taxes to tax base ⁵	-0.9	-0.6	1.3	1.0	0.8	1.3	1.2
- of tax base ⁵ to GDP	0.9	0.9	0.7	1.0	1.0	0.7	0.9
Corporate income tax ⁶ :							
Change in tax-to-GDP ratio	-0.3	-0.2	0.1	0.0	0.0	0.1	0.0
Difference CP – COM	-(0.1			0.0		
of which ³ :							
- discretionary & elasticity component	0.0			0.0			
- composition component	0	0.0		0.0			
Difference COM – OECD		-	-0.4	-0		-0.1	
of which ³ :							
- discretionary & elasticity component		-	-0.4	-		0.1	
- composition component	-0.1		-		0.1		
p.m.: Elasticity							
- of taxes to tax base ⁷	-0.7	-0.5	1.0	1.0	0.7	1.0	1.0
- of tax base ⁷ to GDP	1.2	1.1	1.8	1.0	1.1	1.8	1.1

Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations and OECD (N. Girouard and C. André (2005), "Measuring Cyclically-Adjusted Budget Balances for the OECD Countries", OECD Working Paper No.

¹Based on OECD ex-ante elasticity relative to GDP.

²On a no-policy change basis. ³The decomposition is explained in the text above.

⁴Tax base = private consumption expenditure.

⁵Tax base = compensation of employees. ⁶Taxes on income and wealth are split into private and corporate income tax using the average tax share over the past ten years, i.e. the share is assumed to be constant over the programme period.

⁷Tax base = gross operating surplus.