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NOVEMBER 2005 UPDATE OF THE CONVERGENCE PROGRAMME OF SWEDEN (2005-2008)

AN ASSESSMENT

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Summary and conclusions[1]

The sixth updated Swedish convergence programme was sent to the Commission on 24 November and covers the period 2005 to 2008. The programme is based on the Budget Bill for 2006 adopted by Parliament on 16 December 2005. The programme broadly follows the model structure and data provision requirements for stability and convergence programmes specified in the new code of conduct[2].

Over the last decade, annual real GDP growth in Sweden has been slightly below 3% on average. This growth performance has been characterised by strong productivity developments and positive net export contributions. However, over the last few years employment growth has been weak and employment rates reduced while unemployment has increased. Inflation developments have stayed at the lower range of the Riksbank's target of 2% plus or minus one percentage point. Real GDP growth in the update is forecast to be 2.4% in 2005, then to pick up to 3.1% in 2006, 2.8% in 2007 and 2.3% in 2008. Employment growth is expected to recover in the coming years. Overall, the macroeconomic scenario underlying the update seems plausible and is broadly in line with the Commission services' evaluation including the autumn 2005 forecast. Calculations using the commonly agreed method on the basis of the update figures indicate that potential GDP growth rates remain relatively high but on a slightly declining trend in the medium term. There is a small amount of free resources in the economy in 2005 but already in 2006 the output gap is closing. Inflationary pressures are expected to remain subdued and gradually approach the Riksbank 2% target over the programme horizon. The programme's projections for inflation appear realistic.

The krona has been relatively stable vis-à-vis the euro in 2002-2004 but has depreciated recently despite Sweden's stable macroeconomic environment, solid growth outlook and current account surpluses, probably reflecting the relatively low repo rates. The yield differential between long-term government bonds in Sweden and the euro area, standing at around 50 basis points in the start of 2004, has declined to almost zero.

On 18 January 2005, in its opinion the Council endorsed the budgetary strategy presented in the 2004 update of the convergence programme of Sweden. Regarding the 2005 budgetary implementation, the 2004 update targeted a 0.6% of GDP general government surplus for 2005 while the current update forecast a 1.6% surplus despite a downward revision of 2005 growth. Overall, revenues have come in better than expected, partially explained by some one-off corporate taxes, but also expenditures have developed in a contained way.

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[1]This technical analysis, which is based on information available up to 22 December 2005, accompanies the recommendation by the Commission for a Council opinion on the update of the convergence programme, which the College adopted on 11 January 2005. It has been carried out by the staff of and under the responsibility of the Directorate-General for Economic and Financial Affairs of the European Commission. Comments should be sent to Jonas Fischer (jonas.fischer@cec.eu.int). The analysis takes into account (i) the Commission services' autumn 2005 forecast, (ii) the code of conduct (Opinion of the Economic and Financial Committee on the "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), (iii) the commonly agreed methodology for the estimation of potential output and cyclically-adjusted balances and (iv) the broad economic policy guidelines for the period 2005-2008.

[2] The programme has gaps in the compulsory and optional data prescribed by the new code of conduct (especially compensation of employees is missing).

The budgetary framework in Sweden is geared at maintaining sound public finances in the context of full employment and sustainable growth. To this end it includes a general government surplus objective of 2% of GDP on average over the cycle, multi-annual nominal ceilings for central government expenditures and a balanced budget requirement for local governments. This update foresees a general government surplus of 1.6% in 2005, 0.9% in 2006, 1.2% in 2007 and 1.7% in the final year, 2008. Both expenditure and revenue ratios are on a gradually declining trend over the projection period. However, while the reduction in the revenue ratio is front-loaded, the reduction in the expenditure ratio is back-loaded. While the pension system and the local government sub-sector are expected to show stable surpluses, the central government deficit is driving the changes in the general government position. Sweden currently uses the transition period until spring 2007 for the implementation of the March 2004 Eurostat decision on the classification of second-pillar funded pension schemes. The effect on the general government balance of the implementation of this decision would be a downward adjustment of around 1 % of GDP each year. Overall, compared with the previous programme, the new update broadly confirms the planned adjustment against a slightly more favourable macroeconomic scenario.

Based on Commission services' calculations on the basis of the programme, according to the commonly agreed methodology, the estimated CAB net of one-offs is around 1% of GDP in 2006, reduced from around 1 ¾ % in 2005. Thus, the fiscal expansion planned for 2006 takes place against a closing output gap and improving cyclical conditions. The CAB then gradually improves towards 1½-2% in 2007-2008.

The programme presents the national surplus objective of 2% on average over the cycle as the guiding medium-term reference in the update strategy. It is also the cornerstone in the Swedish national budgetary rule-based framework. Therefore, 2% of GDP can be regarded as the programme's MTO.

As the MTO implied in the programme is more demanding than the minimum benchmark (estimated at a deficit of about 1/2% of GDP), its achievement should fulfil the aim of providing a safety margin against the occurrence of an excessive deficit. As regards appropriateness, the programme's MTO is significantly more demanding than implied by the debt ratio and the average potential output growth. However, its achievement remains central for ensuring long-term sustainability.

On balance, the risks to the budgetary projections in the programme appear to be on the positive side. This is because recent national accounts data point to 2005 growth having been higher than forecast in the programme. Moreover, recent cash data indicate that tax revenues have been substantially stronger towards the end of 2005 than those included in the update budget figures. Hence, the budgetary outcome could be better than projected in the programme.

In view of this risk assessment, the budgetary stance outlined in the programme seems broadly sufficient to ensure that the programme's MTO will be reached by the end of the programme period. Nevertheless, the expansionary budget for 2006 makes the budget position diverge from the MTO by roughly 1% of GDP in 2006 and 2007, putting at risk the achievement of the MTO within the programme period. Moreover, there is a concern that the strong expansionary fiscal stance in 2006 (with the CAB deteriorating by almost 1 percentage point) may not be fully appropriate in the sense that this period may qualify as "good times". However, as stated above the programme's MTO is significantly more demanding than required by the Stability and Growth Pact. In particular, over the whole programme period there is a sufficient safety margin against breaching the 3% of GDP threshold for the deficit with normal cyclical fluctuations. This assessment would also seem be robust to the reclassification in 2007 of the second-pillar funded pension schemes outside the general government accounts, as required by Eurostat. Overall, the budgetary position is sound and the budgetary strategy provides an example of fiscal policies run in compliance with the pact.

The gross debt ratio is projected to continue to decline and reach 46% of GDP in 2008. Debt is mainly issued by the central government sector - which runs budget deficits - and the surplus in the pension system is mainly invested in non-government assets, thus slowing the reduction in the gross debt ratio. The debt ratio net of financial assets is negative implying that the general government sector has a net asset position. This is projected to improve from some -6% of GDP in 2004 to close to -9% in 2008. These projections seem plausible.

With regard to the sustainability of public finances, Sweden appears to be at low risk on grounds of the projected budgetary costs of ageing populations. The level of gross debt is currently comfortably below the 60% reference value and is projected to remain below the reference value throughout most of the programme period. The Swedish strategy of putting sustainability concerns at the heart of fiscal policy making, including the pension system reform, which contains pension expenditure and involves accumulation of assets, contributes positively to the outlook for the public finances. The currently favourable budgetary position contributes to limit the projected budgetary impact of ageing populations while the planned consolidation towards the 2% MTO at the end of the programme period contributes to improve sustainability.

The envisaged measures are broadly consistent with the broad economic policy guidelines in the area of public finances, included in the integrated guidelines for the period 2005-2008. While a sufficiently strong medium-term budgetary position is planned to be maintained, the departure from the MTO in 2006-2007 may risk being pro-cyclical and also puts at risk the achievement of the MTO at the end of the programme period.

– Sweden’s National Reform Programme (NRP), submitted on 21 October 2005 within the context of the renewed Lisbon strategy for growth and jobs, put great emphasis on sustainable development and emphasises that the achievement and maintenance of high labour market participation and hours worked are important challenges, and will have a significant impact on public finances in the long term. The NRP incorporates the 2006 budget on which also the programme update is based and in this sense the two documents are consistent.

Comparison of key macroeconomic and budgetary projections[1]

		2004	2005	2006	2007	2008
Real GDP (% change)	**CP Nov 2005**	**3.6**	**2.4**	**3.1**	**2.8**	**2.3**
	COM Nov 2005	3.6	2.5	3.0	2.8	n.a.
	CP Nov 2004	*3.5*	*3.0*	*2.5*	*2.3*	*n.a.*
HICP inflation (%)	**CP Nov 2005**	**0.9**	**1.5**	**1.5**	**2.0**	**2.0**
	COM Nov 2005	1.0	0.7	1.4	1.8	n.a.
	CP Nov 2004	*1.3*	*1.5*	*n.a.*	*n.a.*	*n.a.*
Output gap (% of potential GDP)	**CP Nov 2005**[2]	**-0.3**	**-0.4**	**-0.1**	**0.1**	**-0.1**
	COM Nov 2005[6]	-0.3	-0.4	-0.1	0.0	n.a.
	CP Nov 2004[2]	*-0.1*	*0.1*	*-0.2*	*-0.4*	*n.a.*
General government balance (% of GDP)	**CP Nov 2005**	**1.6**	**1.6**	**0.9**	**1.2**	**1.7**
	COM Nov 2005	1.6	1.4	0.8	1.1	n.a.
	CP Nov 2004	*0.7*	*0.6*	*0.4*	*0.9*	*n.a.*
Primary balance (% of GDP)	**CP Nov 2005**	**3.2**	**3.2**	**2.5**	**3.0**	**3.6**
	COM Nov 2005	3.4	3.2	2.6	2.9	n.a.
	CP Nov 2004	*2.8*	*2.8*	*2.7*	*3.3*	*n.a.*
Cyclically-adjusted balance (% of GDP)	**CP Nov 2005**[2]	**1.7**	**1.8**	**0.9**	**1.1**	**1.7**
	COM Nov 2005	1.8	1.6	0.9	1.1	n.a.
	CP Nov 2004[2]	*0.8*	*0.5*	*0.5*	*1.2*	*n.a.*
Structural balance[3] (% of GDP)	**CP Nov 2005**[4]	**1.1**	**1.6**	**0.9**	**1.1**	**1.7**
	COM Nov 2005[5]	1.2	1.4	0.9	1.1	n.a.
	CP Nov 2004	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*
Government gross debt (% of GDP)	**CP Nov 2005**	**51.1**	**50.9**	**49.4**	**47.8**	**46.0**
	COM Nov 2005	51.1	50.6	49.4	47.8	n.a.
	CP Nov 2004	*51.7*	*50.5*	*50.0*	*49.0*	*n.a.*

Notes:

[1]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 would be 0.6% in 2005, -0.1% in 2006, 0.2% in 2007 and 0.7% in 2008, while government gross debt would be 51.4% in 2005, 49.9% in 2006, 48.3% in 2007 and 46.5% in 2008.

[2]Commission services calculations on the basis of the information in the programme

[3]Cyclically-adjusted balance (as in the previous rows) excluding one-off and other temporary measures

[4] The programme provides no explicit information on one-off and other temporary measures. However, the Swedish Ministry of Finance has provided an estimate of one-offs of 0.6% of GDP in 2004 and 0.2% of GDP in 2005.

[5]One-off and other temporary measures taken from the Commission services' autumn 2005 forecast (0.6% of GDP in 2004 and 0.2% of GDP in 2005; deficit-reducing)

[6]Based on estimated potential growth of 2.5%, 2.6%, 2.8% and 2.7% respectively in the period 2004-2007.

Source:

Convergence programme (CP); Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations

1. INTRODUCTION

The 2005 update of the Swedish convergence programme, covering the period 2005 to 2008, was adopted by the Swedish government on 24 November 2005 and submitted to the Commission the same day[3]. The programme is based on the economic projections in the government's budget for 2006 presented to the parliament on 20 September 2005 and adopted on 16 December 2005. The programme has been presented and discussed in Parliament subcommittees for financial affairs and EU affairs.

The programme broadly follows the model structure for stability and convergence programmes specified in the new code of conduct. The programme has gaps in the compulsory[4] data and does not provide all optional[5] data prescribed by the new code of conduct (especially compensation of employees is missing). The analysis of the long-term sustainability of public finances is elaborate and extensive. Annex 2 provides a detailed overview of all aspects of compliance with the new code of conduct.

2. Economic outlook

Over the last decade, annual real GDP growth in Sweden has been slightly below 3% on average, higher than in the EU15 (2.8% and 2.3% respectively over 1995-2004). This growth performance has been characterised by strong productivity developments and positive net export contributions. Both employment and unemployment rates have improved since 2004 and compares beneficially with the EU15 average. However, over the last few years employment growth has been weak and employment rates reduced while unemployment has increased. Inflation developments have stayed at the lower range of the Riksbank's target of 2% plus or minus one percentage point.

Real GDP growth in the update is forecast to be 2.4% in 2005, then to pick up to 3.1% in 2006 and 2.8% in 2007. For this period, the growth outlook is similar to the Commission services autumn 2005 forecast (see Table 1). The release of third quarter data for 2005 indicates that growth may come out stronger than in the update[6]. For 2008, the update projects growth of 2.3% which seems relatively prudent, in particular in comparison to potential growth rate estimates of the Commission services on the basis of the commonly agreed methodology (see Table 2). Overall, the growth assumptions in the update are plausible.

The output gap based on the Commission services' calculations on the basis of the programme according to the commonly agreed methodology, suggest that there currently is a small negative output gap but that it will close already next year and remain closed to the programme horizon. This picture seems broadly consistent with inflation gradually approaching the Riksbank's 2% target level and unemployment approaching NAIRU levels. In the update the Swedish authorities provide output gap figures based on their

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[3] The English version was delivered the same day.

[4] Missing compulsory data are: Compensation of employees (labour market, table 1c); Statistical discrepancy year x-1 (sectoral balances, table 1d); Growth of relevant foreign markets, world import volumes, excluding EU (basic assumptions, table 8)

[5] Missing optional data are: Private consumption-, public consumption-, and investment deflators (Table 1b), employment hours worked, labour productivity hours worked (table 1c), specifications of sectoral balances and statistical discrepancies x to x+3 (table 1d), compensation of employees in general government (table 2), general government expenditures by function for x+3 (table 3), liquid financial assets (table 4), potential growth rates used (table 5).

[6] On 6 December the Swedish national statistical office released national accounts data for 2005 Q3. The figures showed a 1% quarterly growth in Q3 (implying a yearly rate of 3.4%) clearly above what was implied in the Commission autumn forecast.

national method[7]. The Swedish authorities' figures paint a similar picture albeit with a relatively larger amount of free resources in 2005 and 2006. In particular, the update refers to free resources in the labour market as an explanation for the negative gaps in 2005 and 2006.

Table 1: Comparison of macroeconomic developments and forecasts

	2005		2006		2007		2008
	COM	**CP**	**COM**	**CP**	**COM**	**CP**	**CP**
Real GDP (% change)	2.5	2.4	3.0	3.1	2.8	2.8	2.3
Contributions:							
- Final domestic demand	2.5	2.2	2.9	2.8	2.5	2.4	2.2
- Change in inventories	0.0	0.1	0.1	0.0	0.0	0.0	0.0
- External balance on g&s	0.0	0.1	0.0	0.3	0.3	0.3	0.1
Output gap[1]	-0.4	-0.4	-0.1	-0.1	0.0	0.1	-0.1
Employment (% change)	0.5	0.1	1.1	1.3	0.7	0.7	0.2
Unemployment rate (%)[2]	6.8	5.9	5.9	4.8	5.6	4.4	4.4
Labour productivity growth (%)	1.9	2.0	1.9	1.8	1.9	2.0	2.1
HICP inflation (%)[3]	0.7	1.5	1.4	1.5	1.8	2.0	2.0
GDP deflator (% change)	1.2	0.6	1.8	2.4	2.2	2.2	2.2
Compensation of employees (% change)	3.5	n.a.	3.5	n.a.	4.0	n.a.	n.a.
External balance (% of GDP)	7.0	7.5	6.3	7.8	6.1	7.6	7.3

Note:
[1]In percent of potential GDP, with potential GDP growth as reported in Table 2 below.

[2]The Commission figures use Eurostat definitions while the update figures use national definition. The difference mainly relate to the accounting of students looking for work. For comparison, the Commission figures translated to "national definition" are 6.0% in 2005, 5.1% in 2006 and 4.8% in 2007.

[3]The CP inflation figures are on December-December basis while the Commission figures are annual averages. This explains the difference between the CP and Commission HICP figures for 2005.

Source: Commission services' autumn 2005 economic forecasts (COM); convergence programme update (CP)

The composition of growth in the update implies a continued broadly based recovery in domestic demand and a continuing robust export performance. The update expects private consumption to grow at healthy rates across the programme horizon backed by good growth in real disposable income (especially in 2005-06), a gradual fall in the household savings ratio (from a high level), a gradually improving situation in the labour market and continued low capital costs. In 2006, public consumption will also make a significant contribution to growth given the measures in the 2006 budget (see Box 2). As resource utilisation in the industry increases, investments are expected to continue to grow at relatively high but gradually declining rates. Export is also expected to continue to grow at relatively high rates as will imports given the strong domestic demand. This composition of growth is similar to the Commission services' autumn forecast even if the update takes a slightly more optimistic view on the growth contribution from net exports in 2006 and 2007.

The external assumptions are in line with the Commission services autumn forecast with a gradual small decline of world output growth. However, the update assumes a strengthening of the Swedish krona against the euro as compared to the technical assumption of constant real effective exchange rate used in the Commission forecast

7 In the programme, the Swedish authorities estimate, using their own method, the output gap to be -1.1% in 2004, -1.0% in 2005, -0.4% in 2006, 0.0% in 2007 and 2008.

(implying in the case of Sweden a small nominal depreciation against the euro 2006-2007). As regards Swedish long-term interest rates, the programme assumes an increase over the projection period in line with an assumed increase in euro area rates.

Both the programme projections and the Commission services' forecast expect inflationary pressures to remain subdued but to approach the 2% target by the programme horizon. This is backed by moderate real wage increases in line with labour productivity developments. Despite good economic growth in 2004 and 2005, employment growth has been negative or weak but is expected to recover over the 2006-2008 period. In 2006, employment will grow substantially, to a large extent due to the substantive increase in the volume of active labour market measures introduced in the 2006 budget. Unemployment is expected to be reduced during the programme period but at a slightly higher pace in the update as compared to the Commission autumn forecast.

Table 2 presents the potential growth estimates on the basis of the Commission services calculations according to the commonly agreed methodology, based on the information in the programme. The estimates are close to identical to those made on the basis of the Commission services autumn forecast. Potential growth rates remain high at around 2.5% and are boosted in the short term by the increase in employment and continued high investment. However, in the medium term potential growth is on a slightly declining trend driven by gradually lower contributions from labour and total factor productivity.

Table 2: Sources of potential output growth

	2005		2006		2007		2008
	COM	CP[2]	COM	CP[2]	COM	CP[2]	CP[2]
Potential GDP growth[1]	2.6	2.6	2.8	2.8	2.7	2.6	2.4
Contributions:							
- Labour	0.2	0.2	0.5	0.4	0.4	0.3	0.2
- Capital accumulation	0.6	0.6	0.7	0.6	0.7	0.7	0.7
- TFP	1.7	1.8	1.7	1.7	1.6	1.6	1.5

Notes:
[1]based on the production function method for calculating potential output growth
[2]Commission services' calculations on the basis of the information in the programme

Source:
Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations

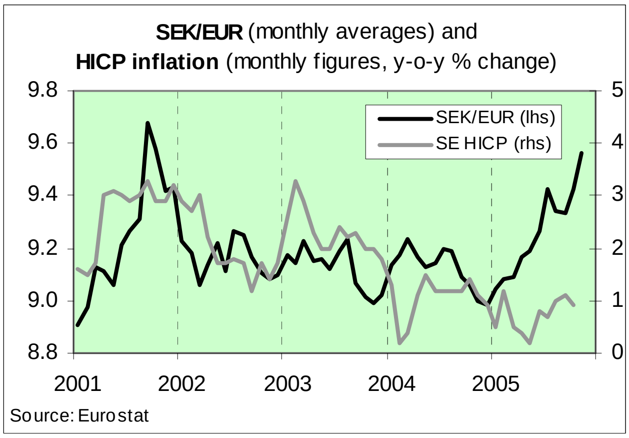
3. MEDIUM-TERM MONETARY POLICY OBJECTIVES AND THEIR RELATIONSHIP TO PRICE AND EXCHANGE RATE STABILITY

The rejection of euro area membership in the September 2003 referendum meant that the exchange rate policy regime remained unchanged. The Riksbank has continued to conduct monetary policy on the basis of a national inflation target of 2 percent, with a tolerated deviation interval of plus/minus one percentage point. The updated convergence programme reiterates that ERM II membership is not under consideration.

Inflation in Sweden has fallen gradually since the beginning of 2003 and is currently clearly below the 2% target level. In November 2005 yearly HICP inflation was 1.2%, underlying inflation (UND1X) was 1.1% and CPI inflation was 0.8%. According to survey results reported in the Riksbank's latest Inflation Report (December 2005), inflation expectations one year ahead are slightly below 2% while they remain close to

2% on a two to five years horizon. Wage increases have remained moderate against the background of the weak labour market developments.

The krona has been relatively stable vis-à-vis the euro between 2002 and 2004, fluctuating between SEK 8.98 and 9.27 per euro, with an average of SEK 9.14 per euro. In early 2005 the krona began to depreciate vis-à-vis the euro and reached about SEK 9.63 per euro in mid November, its weakest level since mid-October 2001. The depreciation of the krona vis-à-vis the euro reflects, inter alia, market expectations of relatively lower inflation rates and policy rates in the course of 2006. The inflation rate has so far in 2005 been 1.5 pp lower in Sweden than in the euro area. In early December the krona stood at about SEK 9.42 per euro.



The macroeconomic policy framework in Sweden, with sound public finances and low and stable inflation continues to provide for low long-term government bond yields. Over the past year, developments in Swedish bond yields have been in line with trends in major bond markets. In early December 2005 the long-term interest rate in Sweden stood at 3.4 percent, compared to 3.9 percent in December 2004. In the programme update, the authorities expect that Swedish bond yields rise to 4.0 percent in 2006 in pace with reduced available resources in the economy and a tighter monetary policy.

The yield differential between long-term government bonds in Sweden and the lowest yield in the euro area has declined from about +50 basis points in early January 2004 to almost zero at the end of April 2005. Since mid-May 2005 the yield spread vis-à-vis the euro area has been negative – on average -10 basis points – reflecting, inter alia, a stable macroeconomic environment and comparatively healthy public finances. In early December 2005 the spread returned almost to zero. In the update, the authorities project that the bond yield spread to Germany increases to about +4 basis points in 2006.

4. General government balance

This section is in four parts. The first briefly compares the targets for the general government balance in the new update with those presented in previous convergence programmes. It also discusses budgetary implementation in the year 2005. The second part describes the budgetary strategy in the new update, including the programme's medium-term objective. The third provides the analysis of the risks attached to the budgetary targets and assesses the country's position in relation to the budgetary objectives of the Treaty and the Stability and Growth Pact. The final part discusses the results of a sensitivity analysis.

4.1. Targets in successive programmes and implementation in 2005

The update foresees a U-shaped budget path with an substantial lowering of the budget surplus between 2005 and 2006, explained by the measures proposed in the 2006 budget (see section Box 2), before the surplus is targeted to gradually improve again and to basically to return to its 2005 ratio in 2008. As compared to the budgetary targets in the last programme, the new update represents an upward revision, explained both by the level effects from a better 2004 outcome than projected a year ago and the expected 2005 outcome, and the better growth prospects for 2006-2008. Developments on the revenue side have been stronger than previously expected. Indeed, looking back to the 2004 update and the downward revision of the budgetary path as compared to the 2003 update that then took place, one key reason was that forecast tax revenues were revised down in line with the experience at the time. This is now to a large extent reversed.

Looking at the 2005 budgetary implementation, the 2004 update targeted a 0.6% of GDP general government surplus based on a 3.0% output growth assumption. In the current update the forecast for 2005 is a 1.6% surplus with 2.4% GDP growth. The Commission services autumn forecast projected a 1.4% surplus with 2.4% growth. Thus, the target set in the previous update is expected to be clearly overachieved despite the weaker growth. Furthermore, recent cash information on the borrowing requirement indicates that the outcome will be even better than put forward in the update and the Commission autumn forecast (see section 4.3.2). On the basis of this information, the Swedish National Financial Management Authority recently (9 December) forecasted the 2005 central government net lending to be -0.2% of GDP. This figure can be compared with the -0.9% central government budget balance in the update. Thus, overall, it does not seem unlikely that, in the end, the 2005 surplus may be closer to 2% than 1.5%.

As said above, in 2005 revenues have come in better than expected but also expenditures have developed in a contained way. The revenue-to-GDP ratio is roughly 1 percentage point better than indicated in the previous update. This is to a large extent explained by higher corporate tax revenues as corporate profits have been high in recent years. In addition, there have been sizable one-off revenues in 2004 and 2005 relating to additional corporate tax payments stemming from the decision of companies to liquidate their tax periodisation funds following the government decision to introduce a interest charge on the implicit tax credit (see Box 1). On the basis of information received from the Swedish Ministry of Finance and for the purpose of this assessment, it is estimated that the one-off impact on the budget balance is 14 bn SEK in 2004 (0.6% of GDP) and 5 bn SEK in 2005 (0.2% of GDP). Also, other tax revenues such as VAT look better than forecast last year. As regards expenditures, developments have been on track compared with the budget. The central government expenditure ceilings for 2005 are most likely going to be met with a margin. In nominal terms, general government expenditures are lower than projected in the previous update, which is partially explained by lower interest expenditures and lower consumption at the local government level. However, in combination with the revised-down 2005 GDP growth, this still implies that the expenditure-to-GDP ratio now is 0.5 percentage point higher than indicated in the previous update.

The stronger-than-budgeted central government performance essentially explains the improvement in the general government balance for 2005. The surplus position at local government level is now slightly better, off-set by a slightly lower surplus in the social security sector.

Table 3: Evolution of budgetary targets in successive programmes[1]

	2004	2005	2006	2007	2008

General government balance (% of GDP)	**CP Nov 2005**	**1.6**	**1.6**	**0.9**	**1.2**	**1.7**
	CP Nov 2004	0.7	0.6	0.4	0.9	n.a.
	CP Nov 2003	0.6	1.4	1.9	n.a.	n.a.
	COM Nov 2005	1.6	1.4	0.8	1.1	n.a.
General government expenditure (% of GDP)	**CP Nov 2005**	**57.2**	**57.3**	**57.1**	**56.6**	**56.0**
	CP Nov 2005[2]	*54.5*	*54.5*	*54.2*	*53.6*	*53.1*
	CP Nov 2004	54.8	54.0	53.9	53.2	n.a.
	CP Nov 2003	56.0	54.9	54.3	n.a.	n.a.
	COM Nov 2005	57.3	57.1	56.9	56.4	n.a.
General government revenues (% of GDP)	**CP Nov 2005**	**58.8**	**58.9**	**58.0**	**57.8**	**57.7**
	CP Nov 2005[2]	*55.9*	*55.9*	*54.9*	*54.7*	*54.7*
	CP Nov 2004	55.5	54.7	54.3	54.1	n.a.
	CP Nov 2003	56.4	56.1	56.0	n.a.	n.a.
	COM Nov 2005	58.7	58.2	57.6	57.4	n.a.
Real GDP (% change)	**CP Nov 2005**	**3.6**	**2.4**	**3.1**	**2.8**	**2.3**
	CP Nov 2004	3.5	3.0	2.5	2.3	n.a.
	CP Nov 2003	2.0	2.6	2.5	n.a.	n.a.
	COM Nov 2005	3.6	2.5	3.0	2.8	n.a.

Note:

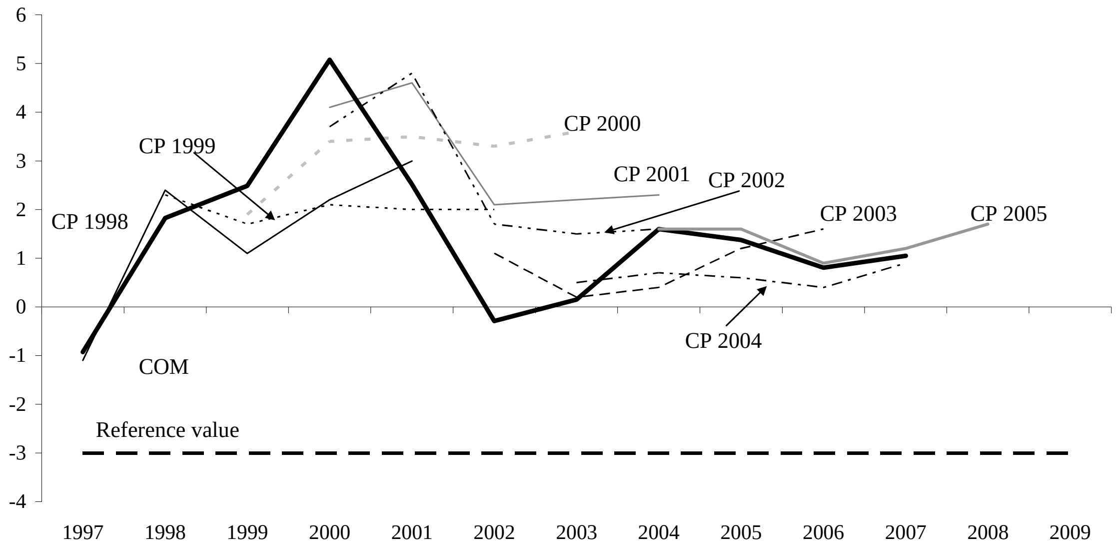
[1]The budgetary projections exclude the impact of the Eurostat decision of 2 March 2004 on the classification of funded pension schemes, which needs to be implemented by the time of the spring 2007 notification. See Table 4 for the quantification of this effect on the general government balance in the most recent update.

[2]Sweden provides total expenditure and revenue ratios both according to ESA standards and national definition. The national definition is some 3%-points lower than according to ESA standards. The difference reflects greater netting in the Swedish data: balances are not affected.

Source:

Convergence programmes (CP) and Commission services' autumn 2005 economic forecasts (COM)

Figure 1: General government balance projections in successive convergence programmes (% of GDP)



Source: Commission services' autumn 2005 forecast (COM) and successive convergence programmes

Box 1: Corporate taxes and periodisation funds

In Sweden, companies have the possibility to smooth corporate tax payments across years by setting aside part of annual taxable profits in so called "periodisation funds". The set aside profits must be brought back for taxation within a period of six years. The free tax credit this implies has worked as an incentive to use the system.

However, the government has decided that as from January 1 2005 interest will be charged on the volume of the tax credit. The interest rate to be applied is the government borrowing rate in year t-1. Since interest rate levels have been substantially reduced over the last couple of years, implying that current rates are much below the rates two years ago, it is has been preferable for many companies (depending on their capital cost) to liquidate these funds and bring out deferred profits for immediate taxation.

This brings two effects on government corporate tax receipts.

- First, as regards 2004 and 2005, one-off positive effects as set-aside profits are brought out for immediate taxation (at the expense of lower corporate taxes in future years).

- Second, as regards 2005 and beyond, as there will be less use of the periodisation funds, it can be expected that a smaller share of overall corporate profits will be set-aside and accordingly less tax deferred. Given the current high level of corporate profits, this effect should have a positive impact on corporate tax receipts in the short term, i.e. 2005 and 2006. However, should there be a steep increase in interest rates in the coming years companies may again start to increase their allocation into the funds.

As regards the impact on the government accounts it is not yet straightforward to make a fully reliable estimate. While it is known corporate tax receipts have been high in cash terms both in 2004 and 2005, it is not straightforward how to translate this information into national accounts terms. For example, it is not evident how to disentangle much of the increase in receipts that is due to the liquidation of the periodisation funds (one-off) and what is the impact of a the high level of corporate profits in general. In addition, it is not clear yet how to allocate taxes paid between 2004 or 2005 in the national accounts. The Swedish Statistical office recently revised 2004 tax revenues upwards, 0.4% mainly due to the liquidation impact.

For the assessment of the convergence programme, on the basis of information received from the Swedish Ministry of Finance, it is estimated that the one-off impact on the budget balance is 14 bn SEK in 2004 (0.6% of GDP) and 5 bn SEK in 2005 (0.2% of GDP).

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

In the context of achieving full employment and sustainable growth, maintaining sound public finances is a key objective in Swedish economic policy. The update confirms that a budget surplus of 2% of GDP on average over the cycle remains the key guiding fiscal rule. This objective is formulated with a view to addressing the expected budgetary impact of the ageing of the population and ensuring the sustainability of public finances in the long term. The update also argues that a surplus gives a safety margin providing the room for stabilising fiscal policies. The 2% of GDP surplus on average over the cycle rule is supported by two key budgetary instruments. First, central government expenditure ceilings are set three years ahead (however, currently only two years ahead) in nominal terms and constrain expenditures not to rise faster than nominal GDP. Secondly, a balanced budget requirement as stipulated by law has applied to local governments since 2000 (see also Box 4).

The general government budget has been balanced or in surplus in most years since 1998. The present update plans for continued surpluses over the programme period where the general government surplus to be reduced from 1.6% of GDP in 2005 to 0.9% of GDP in 2006 but to recover gradually thereafter, to 1.7% of GDP in 2008. The time profile of the primary surplus is similar, with an improvement from 3.2% in 2005 to 3.6% at the end of the period.

Compared with the previous programme, starting from a relatively stronger 2005 position, the new update broadly confirms the planned adjustment path for the coming years with a broadly more favourable macroeconomic scenario over the 2006-2008 period compensating for the negative impact of the 2006 budget.

Table 4: Composition of the budgetary adjustment

(% of GDP)	2004	2005	2006	2007	2008	Change: 2008-2005
Revenues	58.8	58.9	58.0	57.8	57.7	**-1.2**
of which:						
- Taxes & social contributions	51.1	50.9	50.1	50.1	49.7	**-1.2**
- Other (residual)	7.7	8.0	7.9	7.7	8.0	**0.0**
Expenditure	57.2	57.3	57.1	56.6	56.0	**-1.3**
of which:						
- Primary expenditure	55.6	55.7	55.5	54.9	54.1	**-1.6**
of which:						
Consumption	30.4	30.3	30.3	30.2	30.0	**-0.3**
Transfers other than in kind & subsidies	21.1	20.8	20.3	19.9	19.8	**-1.0**
Gross fixed capital formation	3.1	3.1	3.1	3.0	3.0	**-0.1**
Other (residual)	1.0	1.5	1.8	1.8	1.3	**-0.2**
- Interest expenditure	1.6	1.6	1.6	1.7	1.9	**0.3**
General government balance (GGB)	**1.6**	**1.6**	**0.9**	**1.2**	**1.7**	**0.1**
- excluding second-pillar pension scheme[1]	*0.6*	*0.6*	*-0.1*	*0.2*	*0.7*	*0.1*
Primary balance	**3.2**	**3.2**	**2.5**	**3.0**	**3.6**	**0.4**
One-off and other temporary measures	0.6	0.2	0.0	0.0	0.0	-0.2
GGB excl. one-off & other temporary measures	**1.0**	**1.4**	**0.9**	**1.2**	**1.7**	**0.3**

Note:
[1]This 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.

Source:
Convergence programme update; Commission services' calculations

4.2.2. The composition of the budgetary adjustment in the programme

The update indicates that for 2006, as compared to 2005, proposed measures weaken the central government budget by about 1% of GDP with a, to a large extent, permanent impact for future years. Both the general government expenditure and revenue ratio are set to decline over the programme period. However, while tax reductions is front-loaded to take place in 2006 on the basis of decisions already taken, a large part of the reduction in the expenditure ratio is back-loaded and assumed to take place only in 2007-2008. The reduction in the expenditure ratio is to a large extent cyclically based and indirectly related to the forecast improvement in the labour market.

Across sub-sectors of government, it is mainly the changes in the central government deficit that drives the changes in the general government position. The update indicates that the pension system will continue to show surpluses, however declining from 2.0% to 1.7% towards the end of the period. Over the last few years, central government transfers to support local government consumption have been substantially increased but local governments also have had to gradually increase income taxes to address their financial imbalances. This process now seems to have stabilised and the financial stress at local government is reduced as revenue growth strengthens and growth in expenditures moderates. Hence, local governments are expected to show surpluses of about 0.3% over the programme period.

It should be noted that Sweden uses the transition period for the implementation of the Eurostat decision of 2 March 2004 on the classification of funded second-pillar pension schemes. The estimated impact on the general government balance of the classification of the second-pillar funded scheme outside the general government sector (which has to be implemented by the time of the spring 2007 notification) will in the case of Sweden be to reduce the general government budget surplus by roughly 1% of GDP per year.

Box 2: The budget for 2006

The Budget Bill for 2006 was presented by the government on 20 September and adopted by Parliament on 16 December. It complements the measures for 2006 already advertised in the 2005 Spring Bill (presented on 7 April and adopted by Parliament in June).

According to the 2006 budget, new and previously proposed expenditure and revenue measures for 2006 weaken the central government budget by 27bn SEK (1.0% of GDP) compared to 2005. New measures in the 2006 budget are estimated to weaken the budget position by 24 bn SEK in 2006, 28 bn SEK in 2007 and 24 bn SEK in 2008. On a national accounts basis, the central government deficit in 2006 is expected by the authorities to be 1.3% of GDP. The budget sets a target for the 2006 general government surplus of 0.5% of GDP (thus below the forecast for 2006 in the budget and this update of a 0.9% surplus).

- Main measures on the *expenditure side* (0.7% of GDP in total) are focused on labour market measures (providing a potential 55 000 places, 1.2% of the labour force, in programmes and education). Examples here are 20 000 “bonus jobs” in the public sector (these are quality enhancing jobs for long-term unemployed supposedly otherwise not carried) and 10 000 educational-leave positions in health care (worth about 0.2% of GDP together). Other measures, financed on the expenditure side, is 17 500 new places in higher education, 3000 apprenticeships for young people and 4000 trainee positions in small businesses for unemployed graduates.

- In addition, child allowance is increased (0.1% of GDP) as is the ceiling for compensation in the illness at work insurance (<0.1% of GDP).

- On the *revenue side*, the second half of the fourth and last step of the income tax reform is carried out in 2006. This implies an increase in the tax reduction linked to pension contributions as a compensation for earlier increases in social security charges. The effect on revenues from this measure is estimated to be -0.3% of GDP.

- Further steps are taken in the “green tax swap” strategy. Energy taxes are increased to finance higher basic tax allowances for low and middle income earners (the overall size of this swap is valued at 0.15% of GDP).

It can also be remarked that the budget proposes new increases in budget expenditures under the ceilings for 2006 equal to 13 bn SEK (0.5% of GDP) while the overall expenditures under the ceiling remains the same as estimated in the Spring Budget Bill. Additional room under the ceiling is provided from lower expenditures than previously estimated on illness at work and a continued partial freeze of authorities’ budget appropriations. In addition, about 0.2% of GDP of new expenditures (in national accounts terms) is instead made on the revenue side of the budget through tax expenditures and is therefore not restricted by the ceilings.

As concerns the central government expenditure ceilings, the 2006 budget makes proposals only for 2006 and 2007 while not yet for 2008 (this is postponed to the 2007 budget). The ceiling for 2007 has been revised upwards by 6 bn SEK due to an assumption of higher nominal potential GDP. Even so, according to the budget, the proposed ceilings imply a decline in the GDP-share of central government expenditures, from 33.2% of GDP in 2005 to 32.7% in 2007. It currently looks like expenditures in 2005 will remain under the ceiling but the forecast contingency margins under the ceiling will remain narrow, especially in 2006, should there be unforeseen negative developments. As in previous years, the government has committed itself to respect the ceilings, taking measures if necessary.

4.2.3. The programme's medium-term objective (MTO) and the adjustment path in structural terms

According to the Stability and Growth Pact, stability and convergence programmes should present a medium-term objective (MTO) for the budgetary position. The MTO should be differentiated for individual Member States, 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 country-specific MTO is defined in structural terms (i.e. cyclically-adjusted, net of one-off and other temporary measures) and should fulfil a triple aim, namely (i) provide a safety margin with respect to the 3% of GDP deficit limit; (ii) ensure rapid progress towards sustainability; and (iii), taking (i) and (ii) into account, allow room for budgetary manoeuvre, considering in particular the needs for public investment. The code of conduct (Section I) 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 deficit reference value of 3% of GDP. Member States are free to set an MTO that is more demanding than strictly required to achieve the triple aim of MTOs.

The 2% on average over the cycle objective is a cornerstone in the Swedish national budget rule based framework. Indeed, the 2% objective is designed with a view to ensure sustainable public finances and to create a safety margin to allow for budgetary room of manoeuvre. Therefore, 2% of GDP can be regarded as the programme's MTO.

Based on Commission services' calculations on the basis of the programme, according to the commonly agreed methodology, the impact of the cycle on the budget is limited over the period (as output gaps are small throughout). The estimated cyclically-adjusted budget balance (CAB) net of one-off and other temporary measures about 1% of GDP in 2006, reduced from about 1.5% in 2005 (CAB about 2%). The CAB net of one-off and other temporary measure gradually improves towards about 1½-2% % of GDP in 2008. Given the uncertainty in the measurement of CABs and the positive risks to the 2005 outcome (see section 4.3.2), it can be considered that the programme meets the 2% MTO in years 2005 and 2008 but not in 2006-2007.

The fiscal stance is estimated to have been relatively tight in 2005. The fiscal expansion planned in the programme is as indicated concentrated to 2006, when the programme envisages an output gap close to zero but with cyclical conditions estimated to improve compared to the previous year (see 4.3.3). This is followed by a light tightening stance again over the remainder of the programme period.

Looking ahead, an issue in this context is how the Swedish 2% surplus objective will be affected by the changing classification of the funded second-pillar pension schemes. While this is not elaborated upon in the programme, the 2006 budget mentions that the government intends to make proposals on how to deal with this issue.

Table 5: Output gaps, cyclically-adjusted and structural balances

% of GDP	2004		2005		2006		2007		2008	Change: 2008-2005
	COM	CP[1]	COM	CP[1]	COM	CP[1]	COM	CP[1]	CP[1]	CP[1]
Gen. gov't balance	1.6	1.6	1.4	1.6	0.8	0.9	1.1	1.2	1.7	0.1
One-offs[2]	0.6	0.6	0.2	0.2	0.0	0.0	0.0	0.0	0.0	-
Output gap[3]	-0.3	-0.2	-0.4	-0.4	-0.1	-0.1	0.0	0.1	0.0	-
CAB[4]	1.8	1.7	1.6	1.8	0.9	0.9	1.1	1.1	1.7	-0.1
change in CAB	*0.8*	*0.8*	*-0.2*	*0.1*	*-0.7*	*-0.9*	*0.2*	*0.2*	*0.6*	-
CAPB[4]	3.5	3.5	3.4	3.8	2.7	2.8	2.9	3.1	3.8	0.0
Structural balance[5]	1.2	1.1	1.4	1.6	0.9	0.9	1.1	1.1	1.7	0.1
change in struct. bal.	*n.a.*	*n.a.*	*0.2*	*0.5*	*-0.5*	*-0.7*	*0.2*	*0.2*	*0.6*	-
Struct. prim. bal.[6]	2.9	2.9	3.2	3.6	2.7	2.8	2.9	3.1	3.8	0.2

Notes:
[1]Output gaps and cyclical adjustment according to the convergence programme (CP) as recalculated by Commission services on the basis of the information in the programme
[2]One-off and other temporary measures
[3]In percent of potential GDP. See Table 1 above.
[4]CAB = cyclically-adjusted balance; CAPB = cyclically-adjusted primary balance.
[5]CAB excluding one-off and other temporary measures
[6]Structural primary balance = CAPB excluding one-off and other temporary measures

Source:
Commission services' autumn 2005 economic forecasts (COM); Commission services' calculations

4.3. Assessment

This assessment is in three parts. The first assesses the appropriateness of the programme's medium-term objective. The second analyses risks attached to the budgetary targets and the third examines whether the budgetary strategy laid down in the programme is consistent with the budgetary objectives of the Treaty and the Stability and Growth Pact.

4.3.1. Appropriateness of the programme's medium-term objective

As the medium-term objective (MTO) identified in the programme is more demanding than the minimum benchmark, its achievement should fulfil the aim of providing a safety margin.

As regards appropriateness in the medium term, the programme's MTO is significantly more demanding than implied by the debt ratio and the average potential output growth. However, its achievement remains central for ensuring long-term sustainability.

4.3.2. Risks attached to the budgetary targets

Overall, the risks to the budgetary projections in the programme appear on balance to be on the positive side.

As a point of reference, compared with the Commission services' autumn forecast, the targets appear plausible. The macroeconomic scenario is in line with the Commission services forecast and is below estimated potential growth rates at the end of the programme period. Moreover, Sweden has a very good track record in not exceeding central government expenditure ceilings. As the financial situation at local government level is improving from a previous troublesome situation, the budgetary risk from this source is clearly reduced.

However, recent information points to some positive risks. Recent national accounts for the Q3 points to an upward revision of 2005 growth and possibly also 2006 growth (see footnote 6). More importantly, and as already discussed in section 4.1, cash data indicates that 2005 tax revenues may be substantially stronger in 2005 than included in the update figures. While it is still difficult to assess the magnitude of this in national accounts terms and its permanent impact on 2006-08 revenue figures, it is still likely to be positive.

As regards negative risks, the update scenario builds on a gradual recovery in the labour market which could prove not to be fully realised (see Table 1). A slower recovery would imply higher transfers and lower tax revenues. Also, as regards revenues, taxes have been quite volatile over the last few years (see Box 3) and the surprises could now show to be on the negative side, especially as regards corporate taxes. Even so, Table 6 presents annual changes in the overall tax-to-GDP ratio and the tax elasticity relative to GDP. As can be seen, the assumptions about the tax intensity of economic activity on which the update is based are roughly in line with those in the Commission services autumn 2005 forecasts. The assumed tax elasticities in the update do not seem to constitute any main risk for the budgetary projections. In addition, for 2007-08 the update's central government expenditure projections imply a 0.6% of GDP contingency margin to the level of the nominal expenditure ceilings. If this margin is used in coming budgets to increase expenditures, as has been the case in previous years, it would mean that expenditures will be 0.6% of GDP higher 2007-08 and thus the surplus equally lower everything else equal.

Table 6: Assessment of tax projections

	2006		2007		2008	p.m.:
	COM	**CP**	**COM[2]**	**CP**	**CP**	**OECD[1]**
Total taxes						
Change in tax-to-GDP ratio	-0.6	-0.7	-0.1	0.0	0.0	/
Difference	-0.2		0.1		/	/
of which[3]: - elasticity component	0.0		0.3		/	/
- composition component	-0.2		-0.1		/	/
p.m.: Observed elasticity to GDP	0.8	0.7	1.0	1.0	0.8	0.94

Notes:
[1]OECD ex-ante elasticity relative to GDP
[2]On a no-policy change basis
[3]The decomposition is explained in Annex 4

Source:
Commission services' autumn 2005 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)

Box 3: Forecast surprises

Looking back since the start of the Stability and Growth Pact in 1999 and across the different generations of Swedish convergence programme (CP) updates, it is a striking feature how volatile budgetary outcomes for the coming budgetary year have been in relation to the CP forecast. In addition, over the last few years surprises have mostly been on the positive side.

As an illustration, Table A compares the forecast (for real GDP growth, net lending, revenues, primary expenditures and interest expenditures) made in the programme of year t for the coming budgetary year t+1 with the outcomes as measured in the programme of year t+1 (still a forecast at this point but made towards the end of the year) and year t+2. This choice of time frame is explained in the context of the following year's budget polices being set taking account of the perceived situation at the time of the budget formulation, not the "true" situation as assessed several years later. It also follows that the "surprises" would generally not be explained by new policies as most would be included in the budget. However, the figures should still be interpreted with caution as they do not control for possible methodological accounting changes (however, changes in figures between accounting standards from ESA79 to ESA95 have been considered).

Table A. Short-term forecast surprises in Swedish convergence programmes

Forecast year (t+1):	2000		2001		2002		2003		2004		2005	
Difference outturn in CP t+1/t+2 from forecast in CPt	CP 2000	CP 2001	CP 2001	CP 2002	CP 2002	CP 2003	CP 2003	CP 2004	CP 2004	CP 2005	CP 2005	*n.a.*
GDP	0.9	0.6	-1.8	-2.3	-0.3	-0.5	-1.1	-0.9	1.5	1.6	-0.6	*n.a.*
Net lending	**1.3**	**2.0**	**1.1**	**1.3**	**-0.4**	**-1.0**	**-1.3**	**-1.0**	**0.3**	**1.0**	**0.8**	*n.a.*
Revenues	0.6	1.2	1.9	2.0	0.2	0.5	0.5	0.2	-0.9	-0.5	1.2	*n.a.*
Primary exp.	-0.4	-0.6	0.9	0.8	0.8	1.6	2.0	1.7	-0.7	-0.9	0.7	*n.a.*
Interest exp.	-0.3	-0.2	-0.1	-0.1	-0.2	0.0	-0.2	-0.6	-0.5	-0.6	-0.2	*n.a.*

Source: Swedish convergence programmes and Commission technical assessments 1998/99-2005/06.

Looking at net lending, three periods stand out; 2000-2001 with positive surprises; 2002-2003 with negative surprises and 2004-2005 again with positive surprises. It is interesting to see that in most cases the "surprise element" increases when more final data is available towards the end of t+1.

Very broadly, different factors can help explain the "surprise" elements. In 2000, the reason was mainly economic growth, in that the upswing was substantially more powerful than believed, leading both to higher revenues and lower expenditures. In 2001, the growth upswing was abruptly halted as external demand faltered and household consumption grew more weakly than expected (trends that were further reinforced by the 9 September events). Nevertheless, tax payments grew more than expected due to high household sector capital gains and corporate profits in 2000, taxes which were paid and accounted for in 2001. In addition, employment grew better than expected. In 2002 and 2003 the net lending surprises were on the negative side. Explanatory factors were a continuously weaker cycle than foreseen and the downturn of the ICT sector. Nevertheless, the budgetary impact and persistence of the very expansionary budget for 2002 (an election year) was underestimated. In 2004, growth was substantially higher than forecast, driven by a surprisingly strong export performance. While the budget balance outcome measured at the end of 2004 was better than expected in 2003 it was not much better. This was explained by the low tax content of the export-driven growth and weak labour market developments. According to the current CP, the surplus will be even higher, now largely explained by the one-off corporate tax revenues from the liquidation of corporate tax allocation funds (see Box 1). For 2005, corporate tax developments, largely depending on the 2004 profit levels and also to some extent the liquidation of the tax periodisation funds are again explanatory factors (see Box 1). In addition, for the later years the impact on interest expenditures from the surprisingly large and rapid reduction of inflation and interest rates shows..

Overall, the "surprise element" is substantial and illustrates the uncertainty in short-term budgetary forecasting. It may be that this uncertainty is larger in smaller export-oriented open economies with large public sectors such as Sweden and Denmark. The developments of corporate profits and tax payments as well as gains in capital markets are not linearly linked to the cycle. In addition, employment growth (the main determinant of the main tax base of employment income) does not either always follow linearly the cycle as labour productivity partially seems to work as a cyclical buffer. This should be taken into account when assessing cyclical and non-cyclical impacts on budgetary variables. In the end, it may be that the dynamic effects of expansionary fiscal polices, especially on the tax side, are often under or over estimated, especially when the cyclical position of the economy changes quickly. This is a consideration when the analysis horizon is short and the cycle to a large extent is measured with annual smoothing parameters.

4.3.3. *Compliance with the budgetary requirements of the Treaty and the Stability and Growth Pact*

- Taking into account the risk assessment above, the budgetary strategy outlined in the programme seems broadly sufficient to ensure that the programme's MTO will be reached again by the end of the programme period. However, the expansionary budget for 2006 makes the budget position diverge from the MTO by roughly 1% of GDP in 2006 and 2007 which increase the risk that this will take a somewhat longer time.

- However, as said in section 4.3.1, the programme's MTO is significantly more demanding than required by the Stability and Growth Pact. Therefore, taking into account risks to the projections, the budgetary strategy seems sufficient to achieve a budgetary position in structural terms that can be considered as appropriate under the Pact. In particular, as the cyclical-adjusted balance is clearly better than the "minimal benchmark" (which in the case of Sweden is -0.6% of GDP) over the whole programme period there is a sufficient safety margin against breaching the 3% of GDP threshold for the deficit with normal cyclical fluctuations. This assessment would also be robust to the implications of taking into account the move in 2007 to exclude second-pillar funded pension schemes from the general government accounts.

However, there is a concern that the expansionary fiscal stance in 2006 may be pro-cyclical. This is evidenced by the fact that the output gap is only slightly negative in 2005 and is expected to close in 2006. Overall, this could qualify as "good times" using the terminology of the revised SGP. As discussed in section 2, there are signs that the labour market is starting to improve and that growth will be revised upwards. Other indications that the output gap is closing are that the Riksbank in its December 2005 inflation report gave clear signals that the next monetary policy move would be to tighten the current expansionary stance. In this context, the strong focus in the budget of increases in the volume of active labour market programmes should be managed carefully. It should also be mentioned that the programme does not foresee any change in the government investment to GDP ratio explaining the deterioration in the budget surplus.

Overall, the programme is broadly consistent with the broad economic policy guidelines regarding economic stability and sustainability. While a sufficiently strong medium-term budgetary position is planned to be maintained, the departure from the MTO in 2006-2007 may however risk being pro-cyclical and also puts at risk the achievement of the MTO at the end of the programme period.

Table 7: Assessment of tax elasticities[8]

	2006		2007	
	COM (observed)	**ex-ante**[1]	**COM**[2] **(observed)**	**ex-ante**[1]
Total taxes Change in tax-to-GDP ratio	-0.6	-0.2	-0.1	-0.2
Difference	-0.4		0.1	
of which[3]*: - elasticity component*	-0.7		-0.2	
- composition component	0.1		0.2	
p.m.: Elasticity to GDP	0.8	0.9	1.0	0.9

Notes:
[1]Tax projections obtained by applying ex-ante standard tax elasticities estimated by the OECD
[2]On a no-policy change basis
[3]The decomposition is explained in Annex 4

Source:
Commission services' autumn 2005 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)

4.4. Sensitivity analysis

The update includes a section on the sensitivity of the public finances with respect to changes in economic activity to the basic scenario. Three alternative scenarios are described taking into account; (i) lower growth by 0.5% per year; (ii) a later start in the interest rate hike cycle; and (iii) a relatively weaker krona, i.e. no appreciation. All the calculations are partial.

Compared to the baseline scenario, based on lower net exports through higher oil prices and lower world demand, the low growth scenario assumes 0.5% lower growth each year over the 2006-2008 period based on a balanced composition of the reduction in growth. The scenario indicates that the budget balance would then be at 0.6% of GDP in 2008, 1%-point lower than in the base scenario. This result is broadly in line with those obtained from using standard elasticities of revenues and expenditure to GDP. It can of course be remarked that in 2008, given the expected 1% of GDP negative impact from the change in the classification of second-pillar funded pension schemes, this would imply a 0.4% of GDP deficit. In the other tests assuming a less rapid interest hike cycle and a weaker krona the budget position in 2008 is slightly better than in the base case scenario as would be expected.

Commission services' simulations of the cyclically-adjusted balance under the assumptions of (i) a sustained 0.5 percentage point deviation from the real GDP growth projections in the programme over the 2005-2008 period; (ii) trend output based on the

[8] The calculations are based on tax developments in the Commission autumn forecast including discretionary tax measures. For this purpose, in the assessment of the figures in Table 7 for 2006, roughly 9 bn SEK of cuts in direct taxes and 3.5 bn SEK of increases in indirect taxes should be taken into account. This explains most of the difference between the Commission figures and the "ex ante" figures for 2006.

HP-filter[9] and (iii) no policy response (notably, the expenditure level is as in the central scenario[10]), reveal that, by 2008, the cyclically-adjusted balance is 0.7 percentage point of GDP below the central scenario. Hence, in the case of persistently lower real growth, additional measures of around 0.7 percentage point of GDP would be necessary to keep the public finances on the path targeted in the central scenario.[11] These calculations suggest that even if economic growth were weaker than expected, there would be a sufficient safety margin towards the 3% deficit limit, including the impact from excluding second-pillar funded pension schemes from the general government accounts.

5. GENERAL GOVERNMENT GROSS DEBT

This section is in two parts: the first describes the debt path envisaged in the programme and the second contains the assessment.

5.1. Debt developments in the programme

The update projects that the debt-to-GDP ratio is reduced progressively over the projection period to reach 46.0% of GDP in 2008, down from 50.9% in 2005.

Since debt is mainly issued by the central government – which runs budget deficits – and the social security surplus is mainly invested in non-government assets, gross debt increases over the period in nominal terms but at a slower pace than nominal GDP, thus ensuring that the debt ratio continue to decline. This explains the fairly large debt increasing stock-flow adjustments in Sweden. According to the update the net debt ratio (i.e. the gross debt less financial assets owned by government) is projected to stand at -8.9% of GDP in 2008.

Sweden currently uses the transition period until spring 2007 for the implementation of the March 2004 Eurostat decision on the classification of second-pillar funded pension schemes. The effect on general government debt of the implementation of this decision would be an upward adjustment of around 0.5% of GDP each year from 2007. This effect stem from the accumulation of government bonds by the second pillar funded pension schemes.

5.2. Assessment

The analysis above indicates that Sweden would further reduce its debt ratio below the Treaty reference level. This debt trajectory described in the update is very similar to that in the Commission services autumn forecast. Indeed, the projected pace of debt reduction is somewhat more rapid as compared with the previous update, reflecting both stronger central government balances and growth prospects. This is of relevance to the strategy for preparing for the budgetary impact of the ageing population (further analysed in section 7).

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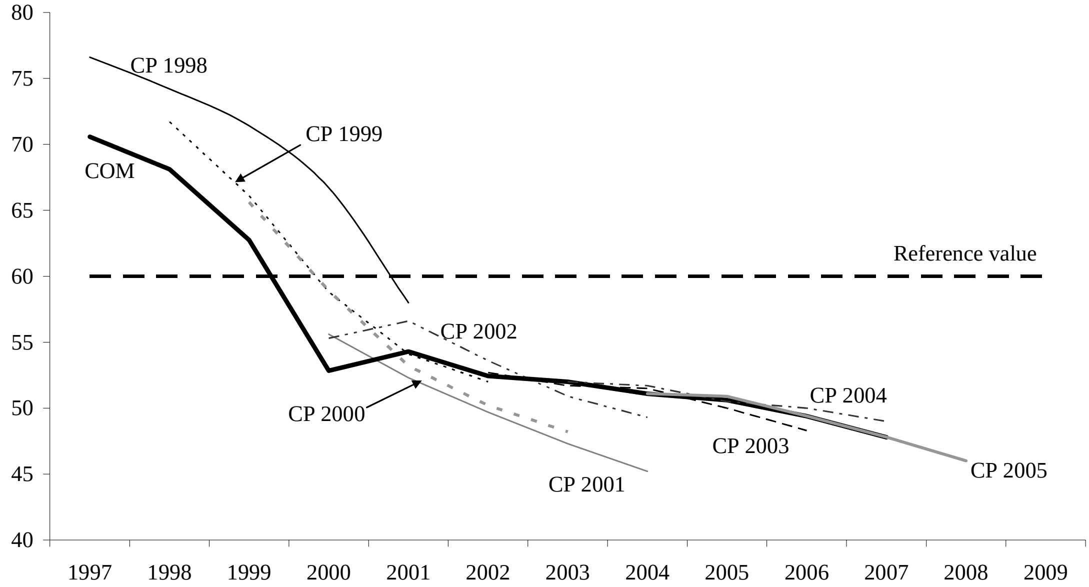
[9]In the absence of a fully-specified macroeconomic scenario that would underlie such deviations, it is obviously impossible to derive new estimates of potential growth from the agreed production function method.

[10]The effect of lower/higher growth on revenues is captured by using the conventional sensitivity parameters adopted in cyclical adjustment procedures.

[11]Unexpected changes in inflation are not assumed to affect the expenditure-to-GDP ratio as nominal expenditure should broadly move in lockstep with the price level.

Figure 2: Debt projections in successive convergence programmes (% of GDP)



Source: Commission services' autumn 2005 forecast (COM) and successive convergence programmes

Table 8: Debt dynamics

	average 2000-2004	2005		2006		2007		2008
	COM	**COM**	**CP**	**COM**	**CP**	**COM**	**CP**	**CP**
Government gross debt ratio	**52.5**	**50.6**	**50.9**	**49.4**	**49.4**	**47.8**	**47.8**	**46.0**
Change in debt ratio (1 = 2+3+4)	-2.3	-0.5	-0.2	-1.2	-1.5	-1.6	-1.6	-1.8
Contributions[1]*:*								
- **Primary balance** (2)	**-4.6**	**-3.2**	**-3.2**	**-2.6**	**-2.5**	**-2.9**	**-2.9**	**-3.6**
- **“Snow-ball” effect** (3)	**0.6**	**0.0**	**0.1**	**-0.6**	**-1.1**	**-0.5**	**-0.7**	**-0.2**
- Interest expenditure	2.8	1.8	1.6	1.8	1.6	1.9	1.7	1.9
- Real GDP growth	-1.3	-1.2	-1.2	-1.5	-1.5	-1.3	-1.3	-1.1
- Inflation (GDP deflator)	-0.9	-0.6	-0.3	-0.9	-1.2	-1.1	-1.0	-1.1
- **Stock-flow adjustment** (4)	**1.7**	**2.7**	**2.9**	**2.0**	**2.1**	**1.8**	**2.0**	**2.0**
- Cash/accruals	-0.6		0.1		0.4		0.2	0.3
- Accumulation of financial	2.7		1.6		1.3		1.1	1.0
assets	-0.1		0.3	0.0	0.5	0.0	0.5	0.5
of which: Privatisation proceeds	-0.4		1.3		0.3		0.7	0.7
- Valuation effects & residual adj.								
p.m.: Debt ratio excl. second-pillar pension scheme[2]	*53.0*	*51.1*	*51.5*	*49.9*	*49.9*	*48.2*	*48.2*	*46.5*

Notes:

[1]The 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. The term in parentheses represents the “snow-ball” effect.

[2]This shows general government gross debt 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.

Source*: Convergence programme update (CP); Commission services’ autumn 2005 economic forecasts (COM); Commission services’ calculations*

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

The update provides an overview of the quality of public finances and recent structural policies being pursued to improve the functioning of the supply side of the economy. However, the programme does not provide a chapter on institutional features of public finances even though some aspects are elaborated in annexes (see Box 4).

As regards the quality of public finances, the update looks at the developments across expenditure categories over the 1995-2003 period. The analysis indicates that over this period expenditure ratios have been reduced by about 9 percentage points of GDP with main contributions from reductions in interest expenditures and social transfers. However there is no similar analysis covering the programme period. The update projections nevertheless indicate that the expenditure-to-GDP ratio will continue to be reduced, driven by reduced shares of government transfers and consumption expenditures. The government investment share, however, remains constant. This reduced expenditure ratio is used to provide room for a reduction in the tax ratio in a context of continued surpluses.

As regards structural reform, the areas which are described in the update are (i) the labour market, (ii) education initiatives and R&D, (iii) tax policy and simpler regulations. At the centre of all described reforms stands the labour market strategy which is a crucial aspect given the goal of containing the public expenditure pressures from ageing (see section 7). Indeed, Sweden's National Reform Programme (NRP), submitted on 21 October 2005 within the context of the Lisbon strategy, put great emphasis on sustainable development and emphasises that the achievement and maintenance of high labour market participation and hours worked are important challenges, and will have a significant impact on public finances in the long term. The government objective to reach an 80% employment rate remains pertinent. In addition, the objective of halving the number of sick leave days by 2008 is important also in a public finance perspective. On training there has been an important expansion of places in labour market programmes (see Box 2). These measures contribute to reduce unemployment in the short term. Indeed, reforms to increase labour supply and to further increase labour market participation are a key aspect in the Swedish agenda under the Lisbon process.

On tax policy, the tax programme initiated in 2000 with the objective to compensate households for previous increases in pension fees has now been finalised, which implies a lowering of taxes on labour. Also, there has been some easing of labour taxation in the framework of the 'green tax swap' strategy[12]. However, local government tax rates have been increased, especially in 2003 and 2004, partially off-setting the impact of these measures. Also, some social transfers have been increased such as the ceiling for compensation in the illness at work insurance. In general, the issue of the incentives to work stemming from tax and benefit systems remains important.

[12] The "green tax swap" strategy is a government plan, together with the supporting parties, to swap tax increases on environmentally damaging activities against tax reductions on direct taxes, mainly directed towards labour. The programme has a planned volume of 30 bn SEK in total and runs over the 2000-2010 period. Including the budget proposal for 2006, 17.2 bn SEK of tax value has been swapped so far.

Overall, the policy intentions described, in combination with further efforts to improve auditing, monitoring and evaluation of government policies[13] are broadly consistent with the broad economic policy guidelines in the area of public finances in these areas. In addition, Sweden's National Reform Programme (submitted on 21 October 2005) incorporates the 2006 budget on which also the programme update is based and in this sense the two documents are consistent.

Box 4: Developments in the national budgetary framework

The Swedish national budgetary rule based framework (see also section 4.2.1 and Annex D in the update), i.e. the 2% objective over the cycle, the nominal expenditure ceilings and the balance requirement at local level, remains intact from previous years.

The update argues that the structural budget position in 2005 (calculated with a national method) was in line with the 2% objective. This assessment is broadly supported by calculations of the cyclically-adjusted budgetary position applying the common methodology. However, the update also acknowledges that the budget position in 2006 and 2007 is not in line with the national objective given the expansionary budget for 2006, mainly aiming at addressing the perceived slack in the labour market. It can also be remarked that the average nominal balance in the period from 2000 (which has been one assessment criteria used by the Swedish authorities in previous years) remains below 2% of GDP when taking 2008 as the end-year. As highlighted in last year's assessment, it remains relatively unclear how to assess compliance with the 2% objective in the short term and what a perceived departure from it implies in terms of policy. Looking ahead, an issue in this context is how the Swedish 2% surplus objective will be affected by the changing classification of the funded second-pillar pension schemes. While this is not elaborated upon in the programme, the 2006 budget mentions that the government intends to make proposals on how to deal with this issue.

The expenditure ceilings will most certainly be respected with a margin in 2005, while the forecast margin for 2006 is expected to remains narrow (see also Box 2). For 2007-2008, current expenditure plans imply a 0.6% of GDP margin to the ceilings. However, looking at the previous experience, it is not unlikely that these margins will ultimately be used for additional expenditure reforms. Moreover, , as also the case in previous years, some expenditures normally budgeted on the expenditure side are instead made on the revenue side through tax reductions ("tax expenditures"). For 2006, the amount of tax expenditures is roughly 0.2% of GDP with such expenditures mainly relating to the financing of additional labour market initiatives at local government level. As has been pointed out in earlier assessments, a large use of tax expenditures as a budget technique to lower the pressure on the ceilings may in the end risk having negative effects on their credibility. The ceilings should normally be set three years ahead and in line with nominal potential GDP growth. However, as has been the case for some years now, the actual period set is shorter, this time being two years. The government is expected next year to propose a ceiling for 2008. As regards the guiding principle of setting new ceilings in line with the increase in nominal potential GDP growth, the government has previously assumed that potential nominal GDP growth to be 4% and potential real GDP to be 2%. However, building on a report by the National Institute of Economic Research (NIER, Occasional Study No 6, 2005, Productivity and Wages Through 2015), the assumed nominal potential GDP has now been revised upwards by the government to 4.6% of GDP. Assuming a 2% inflation rate this seems broadly in line with the potential growth estimates on the basis of the Commission services calculations according to the commonly agreed methodology (see Table 2). The ceiling for 2007 has been revised on this basis and is now SEK 6bn higher than indicated in the 2005 Spring Budget Bill. Nevertheless, the expenditure ceiling as a share of GDP is expected to continue to decline marginally.

[13] In appendix E of the programme, an useful overview of the public authorities involved in the auditing, monitoring and evaluation of public policies are described.

The financial position of local governments is improving. Central government transfers have increased substantially, especially in 2005. Local governments have continued to increase their own tax rates, but only by about 0.1% percentage points in 2005 as compared with a full percentage point over 2003-2004. With the improved revenue situation, local government consumption can grow more strongly while the sector retains a surplus position as projected in the update over the whole programme period. Overall, the tight stance in local government consumption (and tax increases) in the previous years when economic developments was less good and the increasing growth in consumption (and no tax increases) in the current more beneficial cycle, illustrate the pro-cyclical aspects of the balance requirement at local level.

7. THE SUSTAINABILITY OF THE PUBLIC FINANCES

The assessment of the sustainability of Sweden's public finances is based on an overall judgement of the results of quantitative indicators and qualitative features. The debt projections and sustainability indicators are calculated according to two different scenarios, to take into account different budgetary developments over the medium term. The "programme" scenario assumes that the medium-term budgetary plans set up in the programme are actually achieved. The "2005" scenario assumes that the structural primary balance[14] remains unchanged at the 2005 level throughout the programme period.

On the basis of information in the programme, age-related expenditure is foreseen to increase by 5.3 percentage points of GDP between 2008 and 2050, to which long-term care contributes most by 2.9 percentage points of GDP (see table A2 in the Annex). The Commission's analysis is based on the set of government expenditure items covered by the common projections carried out by the Economic Policy Committee[15]. In addition to these expenditure items, the Swedish programme includes a projected rise in the revenue/GDP ratio as well as a fall in other government expenditure items.

The gross debt-to-GDP ratio is projected to remain below 60% of GDP throughout the projection period[16]. Moreover, by taking into account the assets accumulated by the social security sector in public pension schemes the adjusted gross debt /GDP ratio is projected to be lower throughout the projection period (see Table A4 in the Annex) [17].

Indeed, according to the S1 indicator, there is no sustainability gap for Sweden, regardless of whether the '2005' or the 'programme' scenario is considered. The projected future budgetary impact of ageing populations up to 2050 is more than offset by the positive initial budgetary position, the low current level of gross debt and the assets held by the public pension funds. However, S1 only takes into account changes in the primary balance up to 2050, which underestimates the cost of ageing.

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14 The primary balance where the effect of the cycle and any one-off or temporary measures have been netted out.

15 Namely, government expenditure on pension, health-care, long-term care, education and unemployment benefits. Other expenditure items and revenues are assumed to remain constant as a share of GDP over the projection period.

16 It should be recalled that, being a mechanical, partial equilibrium analysis, projections are in some cases bound to show highly accentuated profiles. As a consequence, the projected evolution of debt levels should not be taken at face value.

17 Liquid consolidated assets in public pension schemes are classified in general government in Sweden. In 2004, they amounted to 23% of GDP, which is deducted from gross debt (at 51.1% of GDP in 2004).

A more demanding measure is the government's inter-temporal budget constraint, captured by the S2 indicator, according to which a sustainability gap of about 1½% of GDP emerges in the '2005' scenario. The initial budgetary position is not sufficiently high to fully offset the future budgetary impact of ageing. In the 'programme' scenario, the sustainability gap is reduced somewhat, indicating that a part of the budgetary challenge posed by ageing populations can be dealt with by sticking to the medium-term budgetary plans as set down in the convergence programme. This sustainability gap translates into a required primary balance (RPB) of about 4¾% of GDP, higher than the structural primary balance of about 3½% of GDP of the last year of the programme period.

Moreover, the sustainability gap, as measured by the S2 indicator, would increase by around 0.1% GDP if the (budgetary or structural) adjustment was to be postponed by 5 years (see table A3 in the Annex).

Table 9: Sustainability indicators and the required primary balance

	Sustainability indicators and RPB						
	2005 Scenario				Programme scenario		
	S1	S2	RPB		S1	S2	RPB
Value (of which)	**-0.7**	**1.5**	**4.7**		**-0.8**	**1.2**	**4.8**
initial budgetary position	*-3.1*	*-3.1*			*-3.4*	*-3.4*	
debt requirement in 2050	*-0.9*	*:*			*-0.7*	*:*	
future changes in budgetary position	*3.2*	*4.6*			*3.2*	*4.6*	

Note: The S1 indicator shows the difference, the sustainability gap, between the constant revenue ratio as a share of GDP required to reach a debt ratio in 2050 of 60% of GDP and the current revenue ratio. The S2 indicator, which shows the difference, the sustainability gap, between the constant revenue ratio as a share of GDP that guarantees the respect of the inter-temporal budget constraint of the government, i.e. that equates the actualized flow of revenues and expenses over an infinite horizon, and the current revenue ratio[18]. The Required Primary Balance (RPB) measures the average primary balance over the first five years of the projection period that results from a permanent budgetary adjustment carried out to comply fully with the inter-temporal budget constraint. See the European Commission ((2005), European Economy, 'Public finances in EMU – 2005, Section II.3 for a further description.

In interpreting these results, several factors need to be taken into account.

GDP and labour productivity grows somewhat faster in the EPC projections up to the 2020s than in the programme and thereafter develop broadly in line. The underlying assumptions in the programme can therefore be considered to be prudent. Nevertheless, the update points to the importance of relatively high immigration for the growth of the working-age population over the coming decades. A key assumption is that the employment rate among immigrants will increase substantially over time, pointing to the need for a successful integration strategy as an integral part of the response to the ageing challenge.

The additional national long-term projections provided in the update include a projected rise in the revenue/GDP ratio as well as a fall in other government expenditure items. The impact on the S2 indicator of incorporating these national projections would reduce it by 1.9 percentage points of GDP[19], suggesting no sustainability challenges. This

[18] The sustainability gap indicators (S1, S2) do not necessarily suggest that taxes should be increased; strengthening the fiscal position by permanently reducing the level of non-age related primary spending could be preferable and has the same impact.

[19] The impact of these additional national long-term projections over the period 2010-2050 was calculated.

reduction comes mainly from a projected fall in the government investment/GDP ratio and to some extent from the rising revenue/GDP ratio. On the assumption that these additional national projections will materialise, they would imply lower sustainability risks. However, given the already high level of taxation and the increasing pressure and mobility of tax bases this may be a challenging way forward, suggesting budgetary consolidation should preferably take place on the expenditure side.

The programme projections for long-term care rise significantly up to 2050, by 2.9 percentage points, more than double than in the EPC projections made in 2001. This is due to an assumption in the programme's projections of higher wage costs in the public long-term care sector than in the rest of the economy over the coming two decades. By assuming that the wage increases in this sector would be the same as in the rest of the economy, the projected costs for long-term care would be lower.

7.1. Overall assessment

With regard to the sustainability of public finances, Sweden appears to be at low risk on grounds of the projected budgetary costs of ageing populations. The level of gross debt is currently comfortably below the 60% reference value and is projected to remain below the reference value throughout most of the projection period. The Swedish strategy of putting sustainability concerns at the heart of fiscal policy making, including the pension system reform, which contains pension expenditure and involves accumulation of assets, contributes positively to the outlook for the public finances. The currently favourable budgetary position contributes to limit the projected budgetary impact of ageing populations. While, the planned consolidation towards the 2% MTO at the end of the programme period contributes to improve sustainability, an additional strengthening of the budgetary position would reduce sustainability risks further.

* * *

Annex 1: Summary tables from the convergence programme update

Provision of data on variables in bold characters is a requirement.
Provision of data on other variables is optional but highly desirable.

Table 1a. Macroeconomic prospects

	ESA Code	2004	2004	2005	2006	2007	2008
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. Real GDP	B1*g	2546	3.6	2.4	3.1	2.8	2.3
2. Nominal GDP	B1*g	2546	4.4	3.0	5.6	5.0	4.6
Components of real GDP							
3. Private consumption expenditure	P.3	1224	1.8	2.0	3.0	2.7	2.7
4. Government consumption expenditure	P.3	706	0.3	0.0	1.8	0.9	0.2
5. Gross fixed capital formation	P.51	407	5.5	7.9	5.0	5.2	4.8
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	4	-0.3	0.1	0.0	0.0	0.0
7. Exports of goods and services	P.6	1178	10.5	4.2	6.1	6.2	5.3
8. Imports of goods and services	P.7	974	6.9	4.8	6.7	6.5	6.0
Contributions to real GDP growth							
9. Final domestic demand		-	1.9	2.2	2.8	2.4	2.2
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	-	-0.3	0.1	0.0	0.0	0.0
11. External balance of goods and services	B.11	-	2.0	0.1	0.3	0.3	0.1

Table 1b. Price developments

	ESA Code	2004	2004	2005	2006	2007	2008
		level	rate of change	rate of change	rate of change	rate of change	rate of change
1. GDP deflator		n.a.	0.8	0.6	2.4	2.2	2.2
2. Private consumption deflator		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3. HICP[20]		n.a.	0.9	1.5	1.5	2.0	2.0
4. Public consumption deflator		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5. Investment deflator		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6. Export price deflator (goods and services)		n.a.	-0.2	1.2	0.6	1.2	1.2
7. Import price deflator (goods and services)		n.a.	0.8	3.2	-0.4	1.5	1.5

Table 1c. Labour market developments

	ESA Code	2004	2004	2005	2006	2007	2008
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. Employment, persons[21]		n.a.	-0.5	0.1	1.3	0.7	0.2
2. Employment, hours worked[22]		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3. Unemployment rate (%)[23]		n.a.	5.9	5.9	4.8	4.4	4.4
4. Labour productivity, persons [24]		n.a.	2.9	2.0	1.8	2.0	2.1
5. Labour productivity, hours worked[25]		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6. Compensation of employees	D.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Table 1d. Sectoral balances

% of GDP	ESA Code	2004	2005	2006	2007	2008
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	8.3	7.5	7.8	7.6	7.3
of which: - Balance on goods and services		n.a.	n.a.	n.a.	n.a.	n.a.
- Balance of primary incomes and transfers		n.a.	n.a.	n.a.	n.a.	n.a.
- Capital account		n.a.	n.a.	n.a.	n.a.	n.a.
2. Net lending/borrowing of the private sector	B.9/ EDP B.9	n.a.	n.a.	n.a.	n.a.	n.a.
3. Net lending/borrowing of general government	B.9	1.6	1.6	0.9	1.2	1.7
4. Statistical discrepancy		n.a.	Optio-nal	Optio-nal	Optio-nal	Optio-nal

20 Dec-Dec rates.
21 Occupied population, domestic concept national accounts definition.
22 National accounts definition.
23 Harmonised definition, Eurostat; levels.
24 Real GDP per person employed.
25 Real GDP per hour worked.

Table 2. General government budgetary prospects

	ESA code	2004 Level	2004 % of GDP	2005 % of GDP	2006 % of GDP	2007 % of GDP	2008 % of GDP
Net lending (EDP B.9) by sub-sector							
1. General government	S.13	41	1.6	1.6	0.9	1.2	1.7
2. Central government	S.1311	-9	-0.3	-0.7	-1.3	-0.9	-0.2
3. State government	S.1312	-	-	-	-	-	-
4. Local government	S.1313	2	0.1	0.4	0.3	0.3	0.3
5. Social security funds	S.1314	48	1.9	2.0	1.9	1.8	1.7
General government (S13)							
6. Total revenue	TR	1,498	58.8	58.9	58.0	57.8	57.7
7. Total expenditure	TE[26]	1,457	57.2	57.3	57.1	56.6	56.0
8. Net lending/borrowing	EDP B.9	41	1.6	1.6	0.9	1.2	1.7
9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	41	1.6	1.6	1.6	1.7	1.9
pm: 9a. FISIM		-	-	-	-	-	
10. Primary balance	[27]	82	3.2	3.2	2.5	3.0	3.6
Selected components of revenue							
11. Total taxes (11=11a+11b+11c)		933	36.6	36.4	36.4	36.3	36.3
11a. Taxes on production and imports	D.2	432	17.0	17.0	17.6	17.4	17.4
11b. Current taxes on income, wealth, etc	D.5	499	19.6	19.3	18.8	18.9	18.9
11c. Capital taxes	D.91	3	0.1	0.0	0.0	0.0	0.0
12. Social contributions	D.61	369	14.5	14.5	13.7	13.8	13.4
13. Property income	D.4	49	1.9	2.1	2.0	1.9	1.8
14. Other (14=15-(11+12+13))		147	5.8	5.9	5.9	5.9	6.3
15=6. Total revenue	TR	1,498	58.8	58.9	58.0	57.8	57.7
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)[28]		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Selected components of expenditure							
16. Collective consumption	P.32	699	27.4	27.3	27.3	27.2	27.1
17. Total social transfers	D.62 + D.63	536	21.1	20.8	20.3	19.9	19.8
17a. Social transfers in kind	P.31 =D.63	77	3.0	3.0	3.0	3.0	2.9
17b. Social transfers other than in kind	D.62	459	18.0	17.8	17.3	17.0	16.9
18.=9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	41	1.6	1.6	1.6	1.7	1.9
19. Subsidies	D.3	37	1.4	1.5	1.5	1.4	1.3
20. Gross fixed capital formation	P.51	79	3.1	3.1	3.1	3.0	3.0
21. Other (21=22-(16+17+18+19+20))		66	2.6	2.9	3.3	3.3	3.0
22=7. Total expenditure	TE[29]	1,457	57.2	57.3	57.1	56.6	56.0
Pm: compensation of employees	D.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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

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

28 Including those collected by the EU and including an adjustment for uncollected taxes and social contributions (D.995), if appropriate.

29 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	2003	2008
1. General public services	1	8.2	n.a.
2. Defence	2	2.1	n.a.
3. Public order and safety	3	1.4	n.a.
4. Economic affairs	4	5.0	n.a.
5. Environmental protection	5	0.3	n.a.
6. Housing and community amenities	6	0.9	n.a.
7. Health	7	7.3	n.a.
8. Recreation, culture and religion	8	1.1	n.a.
9. Education	9	7.4	n.a.
10. Social protection	10	24.9	n.a.
11. Total expenditure (= item 7=26 in Table 2)	TE[30]	58.7	n.a.

Table 4. General government debt developments

% of GDP		2004	2005	2006	2007	2008
1. Gross debt[31]		51.1	50.9	49.4	47.8	46.0
2. Change in gross debt ratio		-0.9	-0.2	-1.6	-1.6	-1.8
Contributions to changes in gross debt						
3. Primary balance[32]		-3.2	-3.2	-2.5	-3.0	-3.6
4. Interest expenditure (incl. FISIM) [33]		1.6	1.6	1.6	1.7	1.9
5. Stock-flow adjustment		2.9	2.8	2.0	2.0	2.0
of which: - Differences between cash and accruals[34]		1.6	0.1	0.4	0.2	0.3
- Net accumulation of financial assets[35]		2.0	1.6	1.3	1.1	1.0
of which: *- privatisation proceeds*		0	0.3	0.5	0.5	0.5
- Valuation effects and other[36]		-0.9	1.3	0.3	0.7	0.7
p.m. implicit interest rate on debt[37]		3.2	3.2	3.3	3.7	4.1
Other relevant variables						
6. Liquid financial assets[38]		n.a.	n.a.	n.a.	n.a.	n.a.
7. Net financial debt (7=1-6)		-5.2	-6.1	-6.8	-7.6	-8.9

[30] Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.
[31] As defined in Regulation 3605/93 (not an ESA concept).
[32] Cf. item 10 in Table 2.
[33] Cf. item 9 in Table 2.
[34] The differences concerning interest expenditure, other expenditure and revenue could be distinguished when relevant.
[35] Liquid assets, assets on third countries, government controlled enterprises and the difference between quoted and non-quoted assets could be distinguished when relevant.
[36] Changes due to exchange rate movements, and operation in secondary market could be distinguished when relevant.
[37] Proxied by interest expenditure (incl. FISIM recorded as consumption) divided by the debt level of the previous year.
[38] AF1, AF2, AF3 (consolidated at market value), AF5 (if quoted in stock exchange; including mutual fund shares).

Table 5. Cyclical developments

% of GDP	ESA Code	2004	2005	2006	2007	2008
1. Real GDP growth (%)		3.6	2.4	3.1	2.8	2.3
2. Net lending of general government	EDP B.9	1.6	1.6	0.9	1.2	1.7
3. Interest expenditure (incl. FISIM recorded as consumption)	EDPD.41+FISIM	1.6	1.6	1.6	1.7	1.9
4. Potential GDP growth (%) (1)		n.a.	n.a.	n.a.	n.a.	n.a.
contributions:						
- labour		n.a.	n.a.	n.a.	n.a.	n.a.
- capital		n.a.	n.a.	n.a.	n.a.	n.a.
- total factor productivity		n.a.	n.a.	n.a.	n.a.	n.a.
5. Output gap		-1.1	-1.0	-0.4	0.0	0.0
6. Cyclical budgetary component		0.8	0.7	0.3	0.0	0.0
7. Cyclically-adjusted balance (2-6)		2.1	2.1	1.0	1.1	1.6
8. Cyclically-adjusted primary balance (7-3)		2.1	1.8	0.8	1.1	1.7

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

Table 6. Divergence from previous update

	ESA Code	2004	2005	2006	2007	2008
Real GDP growth (%)						
Previous update		3.5	3.0	2.5	2.3	n.a.
Current update		3.6	2.4	3.1	2.8	2.3
Difference		0.1	-0.6	0.6	0.5	n.a.
General government net lending (% of GDP)	EDP B.9					
Previous update		0.7	0.6	0.4	0.9	n.a.
Current update		1.4	1.4	0.7	1.1	1.6
Difference		0.7	0.8	0.3	0.2	n.a.
General government gross debt (% of GDP)						
Previous update		51.7	50.5	50.0	49.0	n.a.
Current update		51.1	50.9	49.4	47.8	46.0
Difference		-0.6	0.4	-0.6	-1.2	n.a.

Table 7. Long-term sustainability of public finances

% of GDP	**2000**	**2005**	**2010**	**2020**	**2030**	**2050**
Total expenditure	54.7	54.5	53.4	54.1	56.9	57.3
Of which: age-related expenditures	27.1	29.0	28.9	31.1	34.1	34.9
Pension expenditure	10.3	11.2	11.1	12.1	12.8	12.5
Social security pension	0.5	0.9	0.7	0.8	0.8	0.8
Old-age and early pensions	6.3	6.5	6.9	7.8	8.1	7.9
Other pensions (disability, survivors)	2.9	3.3	3.0	2.9	3.1	3.1
Occupational pensions (if in general government)	0.6	0.6	0.5	0.7	0.7	0.7
Health care	6.0	6.3	6.3	6.8	7.4	7.6
Long-term care *(this was earlier included in the health care)*	3.7	4.2	4.3	4.8	6.3	7.2
Education expenditure	7.2	7.3	7.3	7.3	7.6	7.5
Other age-related expenditures	0.0	0.0	0.0	0.0	0.0	0.0
Interest expenditure	4.1	2.0	2.2	1.6	1.5	2.4
Total revenue	59.7	55.9	55.4	55.8	56.5	55.9
Of which: property income	3.1	2.3	2.1	2.3	2.4	2.2
of which: from pensions contributions (or social contributions if appropriate)	1.5	0.9	1.0	1.2	1.2	1.1
Pension reserve fund assets	35.8	32.3	34.3	35.6	35.8	32.1
Of which: consolidated public pension fund assets (assets other than government liabilities)	20.9	24.1	27.9	34.0	34.3	30.8
Assumptions						
Labour productivity growth	3.7	2.0	2.0	1.9	1.7	1.9
Real GDP growth	4.3	2.4	2.4	1.9	1.5	2.0
Participation rate males (aged 20-64)	84.0	83.9	83.4	84.7	84.3	84.5
Participation rates females (aged 20-64)	78.4	78.7	78.0	79.4	78.7	78.7
Total participation rates (aged 20-64)	81.2	81.3	80.8	82.1	81.5	81.6
Unemployment rate	5.0	5.9	4.5	4.4	4.5	4.4
Population aged 65+ over total population	17.2	17.3	18.6	21.1	22.7	23.2

Table 8. Basic assumptions

	2004	2005	2006	2007	2008
Short-term interest rate[39] (annual average)	2.17	1.88	2.38	3.40	4.00
Long-term interest rate (annual average)	4.42	3.53	3.97	4.26	4.35
USD/€ exchange rate (annual average) (euro area and ERM II countries)	1.34	1.25	1.35	1.40	1.40
Nominal effective exchange rate	122	127	124	121	121
(for countries not in euro area or ERM II) exchange rate vis-à-vis the € (annual average)	8.98	9.20	9.10	8.90	8.90
World excluding EU, GDP growth	4.9	4.1	4.1	3.8	3.8
EU GDP growth	2.3	1.4	1.9	2.2	2.4
Growth of relevant foreign markets	n.a.	n.a.	n.a.	n.a.	n.a.
World import volumes, excluding EU	n.a.	n.a.	n.a.	n.a.	n.a.
Oil prices, (Brent, USD/barrel)	39	53	47	42	40

[39] If necessary, purely technical assumptions.

Annex 2: 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 new 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. In the main text, points (ii) and (iii) are grouped into the “format” requirements of the code, whereas point (iv) refers to its “content” requirements.

Guidelines in the new code of conduct	Yes	No	Comments
1. Submission of the programme			
Programme was submitted not earlier than mid-October and not later than 1 December[1].	X		
2. Model structure			
The model structure for the programmes in Annex 1 of the code of conduct has been followed.	X		No specific chapter on “institutional features of public finances”.
3. Model tables (so-called data requirements)			
The quantitative information is presented following the standardised set of tables (Annex 2 of the code of conduct).		X	
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 (ESA).	X		
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 previous programme has been presented to the national parliament.		X	
b. Economic outlook			
Euro area and ERM II Member States uses the “common external assumptions” on the main extra-EU variables.			N.a.
Significant divergences between the national and the Commission services’ economic forecasts are explained[12].		X	
The possible upside and downside risks to the economic outlook are brought out.		X	
The outlook for sectoral balances and, especially for countries with a high external deficit, the external balance is analysed.		X	Sweden has large surplus
c. Monetary/exchange rate policy			

Guidelines in the new code of conduct	Yes	No	Comments
The convergence programme presents the medium-term monetary policy objectives and their relationship to price and exchange rate stability.	X		
d. Budgetary strategy			
The programme presents budgetary targets for the general government balance in relation to the MTO, and the projected path for the debt ratio.	X		
In case a new government has taken office, the programme shows continuity with respect to the budgetary targets endorsed by the Council.			N.a.
When applicable, the programme explains the reasons for possible deviations from previous targets and, in case of substantial deviations, whether measures are taken to rectify the situation, and provide information on them.		X	
The budgetary targets are backed by an indication of the broad measures necessary to achieve them and an assessment of their quantitative effects on the general government balance is analysed.	X		
Information is provided on one-off and other temporary measures.		X	
The state of implementation of the measures (enacted versus planned) presented in the programme is specified.		X	
If for a country that uses the transition period for the classification of second-pillar funded pension schemes, the programme presents information on the impact on the public finances.	X		
e. "Major structural reforms"			
If the MTO is not yet reached or a temporary deviation is planned from the achieved MTO, the programme includes comprehensive information on the economic and budgetary effects of possible 'major structural reforms' over time.			N.a.
The programme includes a quantitative cost-benefit analysis of the short-term costs and long-term benefits of such reforms.			N.a.
f. Sensitivity analysis			
The programme includes comprehensive sensitivity analyses and/or develops alternative scenarios showing the effect on the budgetary and debt position of: a) changes in the main economic assumptions b) different interest rate assumptions c) for non-participating Member States, different exchange rate assumptions d) if the common external assumptions are not used, changes in assumptions for the main extra-EU variables.	X		Partial analyses.
In case of such "major structural reforms", the programme provides an analysis of how changes in the assumptions would affect the effects on the budget and potential growth.			N.a.
g. Broad economic policy guidelines			
The programme provides information on the consistency with the broad economic policy guidelines of the budgetary objectives and the measures to achieve them.		X	
h. Quality of public finances			
The programme describes measures aimed at improving the	X		

Guidelines in the new code of conduct	Yes	No	Comments
quality of public finances on both the revenue and expenditure side (e.g. tax 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 sustainability of public finances, especially in light of the economic and budgetary impact of ageing populations.	X		
Common budgetary projections by the AWG are included in the programme. The programme includes all the necessary additional 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.	X		
j. Other information (optional)			
The programme includes information on the implementation of existing national budgetary rules (expenditure rules, etc.), as well as on other institutional features of the public finances, in particular budgetary procedures and public finance statistical governance.		X	
Notes: [1]The code of conduct allows for the following exceptions: (i) Ireland should be regarded as complying with the deadline in case of submission on "budget day", i.e. traditionally the first Wednesday of December, (ii) the UK should submit as close as possible to its autumn pre-budget report; and (iii) Austria and Portugal cannot comply with the deadline but will submit no later than 15 December. [2]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.			

Annex 3: Consistency with the broad economic policy guidelines

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.

Integrated guidelines	Yes	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 it[1].	X		
– Member States should avoid pro-cyclical fiscal policies[2].		X	
– Member States in excessive deficit should take effective action in order to ensure a prompt correction of excessive deficits[3].			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 relationship between public spending and the achievement of policy objectives and ensure the overall coherence of reform packages.	X		
<u>Notes</u>: [1]As further specified in the Stability and Growth Pact and the new 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. [2]As further specified in the Stability and Growth Pact and the new code of conduct, i.e. Member States that have already achieved the medium-term objective should avoid pro-cyclical fiscal policies in “good times”. [3]As further specified in the country-specific Council recommendations and decisions under the excessive deficit procedure.			

Annex 4: Assessment of tax projections

Table 6 compares the tax projections of the programme with those of the Commission services' autumn 2005 forecast and Table 7 those of the Commission services' autumn forecast with tax projections obtained by using standard ex-ante elasticities, as estimated by the OECD. The tables summarise the results for the total tax-to-GDP ratio. The underlying analysis is carried out exploiting information for the four major tax categories, i.e. indirect taxes, corporate and private income taxes and social contributions (see tables below)[40]. 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 $\frac{T_i}{Y}$ can be written as:

$$\eta_i = \frac{d\left(\frac{T_i}{Y}\right)}{dY} Y = \left(\frac{dT_i}{dY_i}\frac{Y}{T_i} - 1\right)\frac{T_i}{Y} = \left(\frac{dT_i}{dB_i}\frac{B_i}{T_i}\frac{dB_i}{dY}\frac{Y}{B_i} - 1\right)\frac{T_i}{Y} = (\varepsilon_{T_i,B_i}\varepsilon_{B_i,Y} - 1)\frac{T_i}{Y}.$$

where ε_{T_i,B_i} and $\varepsilon_{B_i,Y}$ 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 elasticity[41]. 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 $\varepsilon_{B_i,Y}$ 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:

$$\sum_i d\left(\frac{T_i}{Y}\right) = \sum_I \eta_i \frac{dY}{Y}.$$

[40]Private and corporate income taxes are generally not provided, neither in the programme nor in the Commission services' autumn 2005 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.

[41]The observed or projected elasticity (ex-post elasticity) of the *i*-th tax also includes the effect of other factors (OF) such as discretionary measures: $\frac{\Delta T_i}{T_i} = \varepsilon_{T_i,B_i exante}\frac{dB_i}{B_i} + \frac{OF_i}{T_i} = \varepsilon_{T_i,B_i ex\,post}\frac{dB_i}{B_i}$.

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

$$d\left(\frac{T_i}{Y}\right)^{'} - d\left(\frac{T_i}{Y}\right) = \left[\left(\varepsilon^{'}_{T_i,B_i}\varepsilon^{'}_{B_i,Y} - 1\right)\frac{T_i}{Y} - \left(\varepsilon_{T_i,B_i}\varepsilon_{B_i,Y} - 1\right)\frac{T_i}{Y}\right]\frac{dY}{Y} \;.$$

If $(\varepsilon^{'}_{T_i,B_i} - \varepsilon_{T_i,B_i}) = \alpha_i$; $\quad (\varepsilon^{'}_{B_i,Y} - \varepsilon_{B_i,Y}) = \beta_i$,

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

where $\alpha_i\varepsilon_{B_i,Y}\frac{T_i}{Y}\frac{dY}{Y}$ determines the elasticity component and $\beta_i\varepsilon_{T_i,B_i}\frac{T_i}{Y}\frac{dY}{Y}$ 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 $\varepsilon = \sum_i w_i\varepsilon_{T_i B_i}\varepsilon_{B_i Y}$ with w_i the share of the *i-th* tax in the overall tax burden.

The tables below report the results of the assessment of the tax projections presented in the programme by major tax category, which, as mentioned above, are the basis for the aggregated results reported in Tables 6 and 7.

Assessment of tax projections by major tax category

	2006		2007		2008	p.m.:
	COM	**CP**	**COM**[2]	**CP**	**CP**	**OECD**[1]
Taxes on production and imports:						
Change in tax-to-GDP ratio	0.0	0.6	-0.1	-0.2	0.0	/
Difference	0.6		-0.1		/	/
of which[3]*: - elasticity component*	0.5		-0.1		/	/
- composition component	0.0		0.0		/	/
p.m.: Observed elasticity:						
- of taxes to tax base[4]	1.1	1.7	0.9	0.8	0.9	1.0
- of tax base[4] to GDP	1.0	1.0	0.9	1.0	1.1	1.0
Social contributions:						
Change in tax-to-GDP ratio	-0.5	-0.8	-0.1	0.1	0.0	/
Difference	-0.3		0.2		/	/
of which[3]*: - elasticity component*	-0.3		0.3		/	/
- composition component	0.0		-0.1		/	/
p.m.: Observed elasticity:						
- of taxes to tax base[5]	0.3	-0.1	1.0	1.4	0.4	1.0
- of tax base[5] to GDP	1.0	0.8	0.9	0.8	0.9	0.7
Personal income tax[6]**:**						
Change in tax-to-GDP ratio	-0.1	-0.5	0.1	0.1	0.0	/
Difference	-0.4		0.0		/	/
of which[3]*: - elasticity component*	-0.2		0.1		/	/
- composition component	-0.2		-0.1		/	/
p.m.: Observed elasticity:						
- of taxes to tax base[5]	0.9	0.7	1.2	1.3	1.1	1.3
- of tax base[5] to GDP	1.0	0.8	0.9	0.8	0.9	0.7
Corporate income tax[6]**:**						
Change in tax-to-GDP ratio	0.0	-0.1	0.0	0.0	0.0	/
Difference	-0.1		0.0		/	/
of which[3]*: - elasticity component*	-0.1		0.0		/	/
- composition component	0.0		0.0		/	/
p.m.: Observed elasticity:						
- of taxes to tax base[7]	0.9	0.4	1.0	0.9	0.9	1.0
- of tax base[7] to GDP	1.0	1.3	1.1	1.2	1.1	1.8

Notes:
[1]OECD ex-ante elasticities
[2]On a no-policy change basis
[3]The decomposition is explained in the text above
[4]Tax base = private consumption expenditure
[5]Tax base = compensation of employees
[6]Taxes 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
[7]Tax base = gross operating surplus

Source:
Commission services' autumn 2005 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)

Assessment of tax elasticities by major tax category

	2006		2007	
	COM (observed)	**ex-ante**[1]	**COM**[2] **(observed)**	**ex-ante**[1]
Taxes on production and imports:				
Change in tax-to-GDP ratio	0.0	0.0	-0.1	0.0
Difference	0.0		-0.1	
of which[3]*: - elasticity component*	0.1		0.0	
- composition component	0.0		0.0	
p.m.: Observed elasticity:				
- of taxes to tax base[4]	1.1	1.0	0.9	1.0
- of tax base[4] to GDP	1.0	1.0	0.9	1.0
Social contributions:				
Change in tax-to-GDP ratio	-0.5	-0.2	-0.1	-0.2
Difference	-0.3		0.1	
of which[3]*: - elasticity component*	-0.5		0.0	
- composition component	0.1		0.2	
p.m.: Observed elasticity:				
- of taxes to tax base[5]	0.3	1.0	1.0	1.0
- of tax base[5] to GDP	1.0	0.7	0.9	0.7
Personal income tax[6]**:**				
Change in tax-to-GDP ratio	-0.1	-0.1	0.1	-0.1
Difference	0.0		0.1	
of which[3]*: - elasticity component*	-0.3		-0.1	
- composition component	0.2		0.2	
p.m.: Observed elasticity:				
- of taxes to tax base[5]	0.9	1.3	1.2	1.3
- of tax base[5] to GDP	1.0	0.7	0.9	0.7
Corporate income tax[6]**:**				
Change in tax-to-GDP ratio	0.0	0.1	0.0	0.1
Difference	-0.1		-0.1	
of which[3]*: - elasticity component*	0.0		0.0	
- composition component	-0.1		-0.1	
p.m.: Observed elasticity:				
- of taxes to tax base[7]	0.9	1.0	1.0	1.0
- of tax base[7] to GDP	1.0	1.8	1.1	1.8

Notes:
[1]Tax projections obtained by applying ex-ante standard tax elasticities estimated by the OECD
[2]On a no-policy change basis
[3]The decomposition is explained in the text above
[4]Tax base = private consumption expenditure
[5]Tax base = compensation of employees
[6]Taxes 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
[7]Tax base = gross operating surplus

Source:
Commission services' autumn 2005 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)

Annex 5: Indicators of long-term sustainability

Table A1: Underlying assumptions compared

% of GDP	2010		2020		2030		2050	
	EPC	**SCP**	**EPC**	**SCP**	**EPC**	**SCP**	**EPC**	**SCP**
Labour productivity growth	**2.6**	**2.0**	**2.4**	**1.9**	**1.7**	**1.7**	**1.7**	**1.9**
Real GDP growth	**2.9**	**2.4**	**2.5**	**1.9**	**1.6**	**1.5**	**1.8**	**2.0**
Participation rate males (aged 20-64)	**86.4**	**83.4**	**88.0**	**84.7**	**88.2**	**84.3**	**88.4**	**84.5**
Participation rates females (aged 20-64)	**81.2**	**78.0**	**83.3**	**79.4**	**83.6**	**78.7**	**84.0**	**78.7**
Total participation rates (aged 20-64)	**83.9**	**80.8**	**85.7**	**82.1**	**85.9**	**81.5**	**86.2**	**81.6**
Unemployment rate	**4.3**	**4.5**	**4.3**	**4.4**	**4.3**	**4.5**	**4.3**	**4.4**
Population aged 65+ over total population	**18.3**	**18.6**	**21.2**	**21.1**	**23.0**	**22.7**	**24.3**	**23.2**

Table A2: Long-term projections

Main assumptions - programme scenario (as % GDP)	**2008**	**2010**	**2020**	**2030**	**2040**	**2050**	**changes**	**Impact on S2**
Total age-related spending	28.8	28.6	30.3	33.5	34.6	34.1	5.3	4.6
Pensions	11.1	11.1	12.1	12.8	13.1	12.5	1.4	1.3
Health care	6.3	6.3	6.8	7.4	7.6	7.6	1.3	1.1
Long tem care	4.3	4.3	4.8	6.3	6.9	7.2	2.9	2.5
Education	5.6	5.6	5.4	5.7	5.7	5.5	-0.1	-0.1
Unemployment benefits	1.5	1.3	1.2	1.3	1.3	1.3	-0.2	-0.2
Total primary non age-related spending	25.3	25.3	25.3	25.3	25.3	25.3	0.0	0.0
Total revenues	57.7	57.7	57.7	57.7	57.7	57.7	0.0	0.0

Table A3: The cost of a five-year delay in adjusting the budgetary position according to the S1 and S2

	S1	**S2**
2005 scenario	**-0.1**	**0.1**
Programme scenario	**-0.1**	**0.1**

Note: the cost of a delay shows the increase of the S1 and S2 indicators if they were calculated five years later.

Table A4: Debt development

Results (as % GDP)	2008	2010	2020	2030	2040	2050	changes
Programme scenario							
Gross debt	46.0	39.0	12.0	9.6	28.8	52.0	6.0
*Gross debt, i + 1**	*46.0*	*39.8*	*15.7*	*15.2*	*37.5*	*66.7*	*20.7*
*Gross debt, i - 1**	*46.0*	*38.1*	*8.7*	*5.5*	*22.8*	*42.2*	*-3.8*
Adjusted gross debt	22.6	15.3	-13.6	-19.3	-4.0	15.7	-6.9
2005 Scenario							
Gross debt	36.6	30.3	6.8	8.0	31.1	58.8	22.1
*Gross debt, i + 1**	*36.6*	*31.0*	*9.5*	*11.9*	*37.8*	*71.4*	*34.8*
*Gross debt, i - 1**	*36.6*	*29.6*	*4.4*	*5.0*	*26.4*	*49.8*	*13.2*
Adjusted gross debt	13.2	6.7	-18.8	-21.0	-1.7	22.5	9.2

* *i + 1* and *i + 1* represents the evolution of debt under the assumption of the nominal interest rate being 100 basis points higher or lower throughout the projection period.