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DECEMBER 2005 UPDATE OF THE CONVERGENCE PROGRAMME OF LITHUANIA (2005-2008)

AN ASSESSMENT

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SUMMARY AND CONCLUSIONS[1]

The second update of the Lithuanian convergence programme, covering the period 2005-2008, was submitted on 1 December 2005. It was approved by the government on 12 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]

In its opinion of 8 March 2005 on the previous update of the convergence programme, covering the period 2004-2007, the Council invited Lithuania to make further progress towards a close to balance budgetary position, particularly in order to manage domestic demand pressures, to implement strictly the budget for 2005 in order to reduce the risk of breaching the 3% reference value and to use better-than-projected or additional revenues and unused expenditure items for deficit reduction.

During the last decade, Lithuania successfully completed the transition to a functioning market economy and currently enjoys one of the highest growth rates in the EU. Real GDP growth averaged almost 8% in the period 2001-2004. GDP per capita in purchasing power standards was about 48% of the EU-25 average in 2004. There have not been significant macroeconomic imbalances, although the structural nature of unemployment and increasing demand pressures stemming from a rapid expansion of bank credit remain a matter of some concern. A significant deterioration of the general government deficit occurred partly as a consequence of the external shock induced by the Russian crisis in 1998. Afterwards, a budgetary consolidation plan was implemented. Since 2001 the deficit has remained at 2% of GDP or below and the cyclically adjusted deficit was brought to 1% of GDP in 2002.

The macroeconomic scenario presented in the programme expects real GDP growth to reach 7% in 2005 and to decelerate progressively to 5.3% in 2007, bouncing back to 6.8% in 2008. Growth is expected to be led by domestic demand, particularly investment and private consumption. The growth outlook and its composition are plausible and broadly in line with the Commission services' autumn 2005 forecasts, but cautious in 2007. Cyclical conditions, as measured by the output gap calculated by Commission services according to the agreed methodology on the basis of the information in the

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[1] This technical analysis, which is based on information available up to 14 February 2006, accompanies the recommendation by the Commission for a Council opinion on the update of the convergence programme, which the College adopted on 22 February 2006. 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 Luis Fau (Luis.Fau@cec.eu.int). The analysis takes into account (i) the Commission services' autumn 2005 forecast, (ii) the code of conduct ("Specifications on the implementation of the Stability and Growth Pact and guidelines on the format and content of stability and convergence programmes", endorsed by the ECOFIN Council of 11 October 2005), (iii) the commonly agreed methodology for the estimation of potential output and cyclically-adjusted balances and (iv) the broad economic policy guidelines included in the integrated guidelines for the period 2005-2008.

[2] The programme provides all compulsory and most optional data prescribed by the new code of conduct, although the presentation of compulsory data is in a few cases slightly different from that in the new code of conduct. For instance domestic demand is shown instead of final domestic demand, interest expenditure corresponding to FISIM is missing and the tax burden shows what should be total taxes, i.e. the sum of direct, indirect and capital taxes, therefore indirect taxes paid to the EU budget and social contributions are missing in the calculation of the tax burden.

programme, are favourable with a large positive output gap being gradually closed over the programme period.

Lithuania has maintained full exchange rate stability within ERM II into early 2006 in the context of its currency board, which it operates as a unilateral commitment within the mechanism. Average annual HICP inflation increased to 2.7% in 2005, and there is a risk of a further acceleration in inflation in 2006. The programme projects inflation to be stable at 2.7% in 2005-2007, decreasing to 2.5% in 2008, which appears to be on the low side, also in view of recent developments regarding an increase in imported gas prices. Money market and bank lending rates have remained low and stable through 2005, reflecting the credibility of Lithuania's monetary framework.

As regards budgetary implementation in 2005, the general government deficit for 2005 was estimated at 2% of GDP in the Commission services' autumn 2005 forecast, against a target of 2.1% of GDP set in the previous update of the convergence programme[3]. The updated programme presents a deficit estimated at 1.5% of GDP. However, preliminary data for the whole of 2005 point to an even better deficit outcome, at around 1% of GDP. The better-than-targeted outcome stems from a good budgetary performance of all levels of general government, which are estimated to have recorded higher-than-planned revenues while expenditure plans were broadly achieved.

The main goal of the programme is to reduce the general government deficit in structural terms (i.e. in cyclically-adjusted terms and net of one-off and other temporary measures) to or below 1% of GDP, which is the country's medium-term objective (MTO) for the budgetary position as meant in the Stability and Growth Pact, by the end of the programme period. The update foresees the general government deficit to gradually decrease from 1.5% of GDP in 2005 to 1.0% in 2008. The time profile of the primary deficit is similar, with a decline from 0.6% of GDP in 2005 to 0.2% at the end of the programme period. Overall, the programme relies on a favourable economic outlook that would create good conditions for fiscal retrenchment. The consolidation foreseen in the programme is expenditure-driven, mostly due to a cut in collective consumption and social transfers as a percentage of GDP. A significant increase in government investment is planned, from 4.1% of GDP in 2005 to 5.2% in 2008, remaining well above the EU average (2.5% of GDP). The revenue ratio is planned to drop by ½% of GDP over the programme period. The more significant decline is in taxes and social contributions (by 1¾% of GDP) as a result of the tax reform. A significant increase in other revenues mainly reflects the inflow of EU structural funds. Against a broadly unchanged macroeconomic scenario, taking into account the reclassification of savings and real estate restitutions, the budgetary adjustment is slower compared to the previous update.

Based on Commission services' calculations according to the commonly agreed methodology, the structural deficit would improve from about 2¼% of GDP in 2005 to 1¼% in 2008, while the ample positive output gap in 2005, estimated at 2.5% of potential GDP, is projected to close gradually over the programme period. As mentioned above, the update sets its MTO at a structural deficit of 1% of GDP or lower, which it aims to achieve by 2008. As the programme's MTO is more demanding than the

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[3] Following a decision by Eurostat in May 2005 on the classification of payments related to the compensation for lost rouble savings in the early years of transition and the restitution of real estate property confiscated in Soviet times, the deficit target set in the previous update (2.5% of GDP) has been adjusted to exclude payments related to these liabilities to allow for a meaningful comparison.

minimum benchmark (estimated at a deficit of 1¾% of GDP), its achievement should fulfil the aim of providing a safety margin against the occurrence of an excessive deficit. The programme's MTO is at an appropriate level because it lies within the range indicated for euro area and ERM II Member States and adequately reflects the debt ratio and average potential output growth in the long term.

The risks to the budgetary projections in the programme appear broadly balanced. On the one hand, the general government deficit outcome in 2005 is very likely to be lower than estimated in the programme. A likely carry-over to 2006 and the authorities' track record of cautious revenue planning in the last few years indicate that outcomes could be better than targeted in 2006. The programme's plans to use any higher-than-expected revenues or unspent expenditure over the period 2006-2008 for deficit reduction increases confidence in the achievement of the targets. On the other hand, the programme largely relies on a decrease in expenditure (as a percentage of GDP), particularly through public wage moderation, which could prove difficult to obtain. In addition, there are uncertainties about the impact of the pension reform, given the voluntary nature of participation in the funded pillar, and the impact of the tax reform towards the end of the programme period.

Taking into account the risk assessment above, the budgetary strategy outlined in the programme may not be sufficient to ensure that the programme's MTO will be reached in 2008, as planned in the update. The programme requests a temporary deviation from the adjustment path towards the MTO on the basis of "major structural reforms" in the meaning of the revised Stability and Growth Pact and the new code of conduct. While the programme lists several reforms to support this claim, only the pension reform is sufficiently detailed in the programme and can be considered as having a beneficial impact on the long-term sustainability of the public finances (by contrast, a detailed cost-benefit analysis for the public finances of the tax reform is not provided in the programme). The net budgetary costs of the pension reform increase from 0.5% of GDP in 2005 to 0.8% in 2007 and 2008. The average structural adjustment planned over the programme period is 0.5 percent of GDP if the pension reform costs are taken into account (it is 0.4% excluding the pension reform), which would be in line with the "benchmark" for euro area and ERM II Member States set in the Stability and Growth Pact. However, given the strong likelihood of a better-than-estimated outturn in 2005, the structural improvement could be less than the benchmark if the deficit targets for 2006 and beyond are not strengthened accordingly. Furthermore, according to the Pact, the structural adjustment should be higher in good times, which are projected to continue to prevail over the programme period. The safety margin against breaching the 3% of GDP deficit threshold with normal macroeconomic fluctuations would only be provided from 2007, as the structural deficit (calculated by Commission services) is about ¼ percentage point of GDP above the minimum benchmark in 2006. Thus, the temporary deviation from the adjustment path towards the MTO would be admissible in the meaning of the revised Stability and Growth Pact and the new code of conduct, conditional on meeting the minimum benchmark in 2006, which is possible if a better-than-planned deficit outcome in 2005 is carried over to 2006 and subsequent years.

The update estimates Lithuania's debt ratio to be slightly above 19% of GDP at the end of 2005, well below the 60% of GDP reference value. The debt ratio is expected to remain at about 19-20% of GDP throughout the remainder of the programme horizon. The debt-increasing contribution of the primary deficit is expected to progressively fade out. The combined effect of interest rates and GDP growth will have a decreasing effect on the debt level over the programme's horizon, partly due to a pick up in inflation from very low levels of the last few years, while financial transactions are expected to increase the debt.

With regard to the sustainability of public finances, Lithuania appears to be at low risk on grounds of the projected budgetary costs of ageing populations. The level of gross debt is currently very low and is projected to remain below the 60% of GDP reference value throughout most of the projection period and a contained government deficit is planned over the programme period. Lithuania has enacted a pension reform which contributes significantly to contain the budgetary impact of ageing populations. Further changes to the pension system are envisaged by the Lithuanian authorities, aiming at increasing the replacement rates for pensioners and at the same time gradually raising the retirement age. The implementation of these planned measures would be key in ensuring the financial sustainability of the public pension system.

The envisaged measures in the area of public finances are broadly consistent with the broad economic policy guidelines included in the integrated guidelines for the period 2005-2008. In particular, taking into account the temporary deviation linked to pension reform, Lithuania is making progress towards its MTO. Also, the government is taking several measures to improve the quality of public finances (e.g. tax reform) and has also progressed with the pension reform in order to improve the sustainability of public finances in the long-term.

The National Reform Programme (NRP) of Lithuania, submitted on 2 November 2005 in the context of the renewed Lisbon strategy for growth and jobs, highlights the need for reforms of the pension and healthcare systems to guarantee the sustainability of public finances in the long term. It also points to the need to promote employment and R&D activities and investment in human capital, which have budgetary implications. The measures presented in the NRP in the area of public finances are consistent with those presented in the programme, and mostly relate to next steps to be taken with the pension, health care and tax reforms. Measures aiming at improving budgetary procedures (e.g. to complete programme-based budget at the different levels of the general government and a flexible use of funds for co-financing of EU projects) are also in line with those described in the update. The budgetary implications of the limited number of concrete reform measures specified in the NRP are reflected in the budgetary projections of the convergence programme.

In view of the above assessment, the convergence programme can be considered as envisaging progress towards the MTO. In the context of strong growth prospects, it would be appropriate for Lithuania to (i) ensure sustainable convergence with the EU by strengthening the effort in the structural budgetary adjustment, in order to speed up the attainment of the MTO and (ii) in particular, aim for a more demanding general government deficit target in 2006, making sure that a better-than-projected deficit outcome in 2005 is carried over to 2006 and subsequent years.

Comparison of key macroeconomic and budgetary projections

		2004	2005	2006	2007	2008
Real GDP (% change)	**CP Dec. 2005**	**7.0**	**7.0**	**6.0**	**5.3**	**6.8**
	COM Nov 2005	7.0	7.0	6.2	5.8	n.a.
	CP Jan 2005	*6.5*	*6.5*	*6.2*	*6.0*	*n.a.*
HICP inflation (%)	**CP Dec. 2005**	**1.1**	**2.7**	**2.7**	**2.7**	**2.5**
	COM Nov 2005	1.1	2.6	2.8	2.9	n.a.
	CP Jan. 2005	*1.2*	*2.9*	*2.5*	*2.9*	*n.a.*
Output gap (% of potential GDP)	**CP Dec. 2005**[3]	**2.5**	**2.9**	**2.1**	**0.5**	**0.6**
	COM Nov 2005[6]	2.1	2.2	1.4	0.2	n.a.
	CP Jan. 2005[3]	*1.6*	*1.3*	*0.5*	*-0.1*	*n.a.*
General government balance[1] (% of GDP)	**CP Dec. 2005**	**-1.4**	**-1.5**	**-1.4**	**-1.3**	**-1.0**
	COM Nov 2005	-1.4	-2.0	-1.8	-1.6	n.a.
	CP Jan.2005[7]	*-2.5*	*-2.5*	*-1.8*	*-1.5*	*n.a.*
Primary balance (% of GDP)	**CP Dec 2005**	**-0.4**	**-0.6**	**-0.6**	**-0.6**	**-0.2**
	COM Nov 2005	-0.4	-1.1	-1.0	-0.8	n.a.
	CP Jan 2005[7]	*-1.5*	*-1.4*	*-0.8*	*-0.5*	*n.a.*
Cyclically-adjusted balance (% of GDP)	**CP Dec. 2005**[3]	**-2.1**	**-2.3**	**-2.0**	**-1.4**	**-1.2**
	COM Nov 2005	-2.0	-2.6	-2.2	-1.7	n.a.
	CP Jan 2005[3]	*n.a*	*n.a*	*n.a*	*n.a*	*n.a.*
Structural balance[2] (% of GDP)	**CP Dec. 2005**[4]	**-2.1**	**-2.3**	**-2.0**	**-1.4**	**-1.2**
	COM Nov 2005[5]	-2.0	-2.6	-2.2	-1.7	n.a.
	CP Jan 2005	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*
Government gross debt (% of GDP)	**CP Dec 2005**	**19.5**	**19.2**	**19.9**	**19.8**	**18.9**
	COM Nov 2005	19.6	20.7	20.2	19.6	n.a.
	CP Jan 2005	*20.1*	*20.9*	*20.3*	*20.1*	*n.a.*

Notes:

[1]The costs of the ongoing pension reform (introduction of a second pillar) are included in the deficit. The costs are estimated at 0.3% in 2004, 0.5% of GDP in 2005, 0.7% in 2006, 0.8% in 2007 and 0.8% in 2008.
[2]Cyclically-adjusted balance (as in the previous rows) excluding one-off and other temporary measures. The adjustment taking out the pension reform costs according to the updated programme would be 0.5% of GDP in 2006, 0.7% in 2007 and 0.2% in 2008, or 0.5% on average in the period 2006-2008.
[3]Commission services calculations on the basis of the information in the programme.
[4]There are no one-off and other temporary measures in the programme.
[5]There are no one-off and other temporary measures in the Commission services' forecast.
[6]Based on estimated potential growth of 7.0%, 6.9%, 7.0% and 7.0% respectively in the period 2004-2007.
[7]It included payments related to savings compensations and real estate restitutions amounting to 0.4% of GDP in 2005, 0.8% in 2006 and 1.2% in 2007.

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

1. INTRODUCTION

The second update of the Lithuanian convergence programme, covering the period 2005-2008, was submitted on 1 December 2005[4]. The programme was approved by the Council of Ministers. Overall, the programme is based on the same macroeconomic scenario as the Budget for 2006, which was adopted by Parliament on 8 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. It provides all compulsory and most optional data prescribed by the new code of conduct.[5] Annex 2 provides a detailed overview of all aspects of compliance with the new code of conduct.

2. ECONOMIC OUTLOOK

During the last decade, Lithuania successfully completed the transition from central planning to a functioning market economy and now enjoys one of the highest output growth rates among the EU Member States. This was possible thanks to a sound macroeconomic policy mix, anchored in the currency board arrangement, and the implementation of structural reforms in a wide range of economic areas. The economy went through two crises in the second half of the nineties from which it recovered rapidly, namely a banking crisis in 1995 and the external shock induced by the Russian crisis in 1998, which in turn led to rapid trade integration with the EU markets. Over the period 2001-2004, real GDP growth averaged almost 8%, and productivity growth ranked among the highest in the EU, starting from a very low base. Preliminary data point that growth reached 7.3% in 2005. Lithuania's GDP per capita in purchasing power standards was 48% of the EU average in 2004. Growth has been primarily driven by domestic demand, fuelled by a very rapid expansion of bank credit in the last few years, and has contributed to inflationary pressures although inflation remained relatively low. The current account deficit has been widening since 2001 to some 7.7% of GDP in 2004, largely reflecting a decrease in gross national savings in the private sector. Unemployment remains high, but has been on a steady decreasing trend from more than 16% in 2001 to about 11% in 2004. However, the structural nature of unemployment, in particular the high share of long-term unemployment, remains a matter of concern.

[4] The official English translation of the programme was submitted on 27 January 2006.

[5] The presentation of compulsory data is in a few cases slightly different from Annex 2 of the new code of conduct. In particular, Table 1a (macroeconomic prospects): domestic demand is shown instead of final domestic demand; Table 1d shows differences between the aggregate net borrowing position and the sum of subcomponents; Table 2 (general government budgetary prospects) does not show interest expenditure corresponding to FISIM; "Total taxes" is not provided although the subcomponents are; "Tax burden" shows what should be "Total taxes", i.e. the sum of direct, indirect and capital taxes, therefore indirect taxes paid to the EU budget and social contributions are missing in the calculation of the tax burden; the line "Total social transfers" is missing, but the subcomponents are indicated. Optional data on "Liquid financial assets" and "Net financial debt" in Table 4 of the code of conduct are also missing and the composition of the stock-flow adjustment is not provided. Overall, though, these gaps do not hamper the assessment. Potential output calculations in the programme are based on the Hodrick-Prescott filter and not on the commonly agreed methodology. The sensitivity analysis is not explicit on structural reforms.

The macroeconomic scenario presented in the programme expects real GDP growth to reach 7% in 2005 and to decelerate progressively thereafter to 5.3% in 2007, bouncing back to 6.8% in 2008. Growth is expected to be led by domestic demand, particularly investment and private consumption. The contribution of external trade to growth is expected to be very negative until 2008, when it improves significantly on the back of a marked deceleration in import growth. Cyclical conditions implied by the programme (as measured by the output gap recalculated by Commission services with the commonly agreed methodology) are favourable with the significant positive gap gradually closing by the end of the programme period.[6]

The growth outlook and its composition are plausible and broadly in line with the Commission services' autumn 2005 forecasts for the years 2005 and 2006. For 2007, the programme's forecast is cautious at 0.5 percentage points below the Commission services' autumn 2005 forecasts (it is also far below potential growth rates consistent with the programme scenario as reported in Table 2). The main difference stems from a more negative contribution of external trade to growth in the programme. The update projects a stronger final domestic demand and wage growth, which results in better tax receipts. For 2008, the programme's growth projection is in line with the Commission services' estimate of potential growth consistent with the autumn forecast (see Table 2). Overall, the programme's growth assumptions are plausible (and cautious in 2007).

The most important external assumptions underlying the programme's macroeconomic scenario include the exchange rate between USD and EUR, GDP growth in the EU 25, and the development of oil prices. These assumptions can be considered as broadly similar to those underlying the Commission services' 2005 autumn forecasts.

The updated programme predicts positive labour market developments against the background of strong economic growth and the implementation of personal income tax cuts and active labour market measures in the context of the Lisbon objectives. Employment is expected to increase during the entire programme period, though at a slower rate after 2006. Productivity increases relatively fast, though below real wage growth. The productivity growth forecast appears favourable.[7] The projected average labour content of GDP growth is higher than projected by the Commission services' autumn 2005 forecasts, mainly due to higher employment growth projections in the update, and is above the values observed in the last few years. Favourable cyclical conditions, in terms of a positive (though declining) output gap, are expected to largely contribute to the decline in the rate of unemployment, which is projected to fall by 2.1 percentage points by the end of the programme period (from 9.6% in 2005 to 7.5% in 2008). The fall in the unemployment rate foreseen in the programme is broadly in line with that projected in the Commission services' forecasts, though the latter assumes a lower initial level of unemployment in 2005 at 9%.

The convergence programme forecasts a stable average HICP rate of inflation at 2.7% in 2005-2007, decreasing thereafter to 2.5% in 2008. The projections are below the Commission services' autumn forecast, the finalisation of which preceded the recent

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[6] The calculation of potential growth (and therefore of the output gap) needs to be interpreted with caution, in particular for countries going through a rapid catching-up process.

[7] It is noted that figures for employment and productivity growth in Table 1 do not match the real overall growth rate.

decision by Lithuania's only gas supplier (Gazprom) to increase wholesale prices (although this was mentioned as a possible upside risk to the inflation projections). Therefore inflation is likely to increase above the levels foreseen in the Commission services' autumn forecast. Thus the inflation projections in the programme are on the low side, particularly when taking into account the programme's projections of real wage growth remaining considerably above labour productivity gains and strong domestic demand.

Table 1: Comparison of macroeconomic developments and forecasts

	2005		2006		2007		2008
	COM	**CP**	**COM**	**CP**	**COM**	**CP**	**CP**
Real GDP (% change)	7.0	7.0	6.2	6.0	5.8	5.3	6.8
Contributions:							
- Final domestic demand	8.6	10.3	8.1	9.0	7.7	8.0	7.1
- Change in inventories	0.3	-0.9	0.0	-0.7	-0.1	0.3	0.5
- External balance on g&s	-1.9	-2.4	-1.9	-2.3	-1.8	-3.0	-0.9
Output gap[1]	2.2	2.9	1.4	2.1	0.2	0.5	0.6
Employment (% change)	1.6	1.7	0.7	2.0	0.6	1.3	1.0
Unemployment rate (%)	9.0	9.6	8.1	8.6	7.5	7.9	7.5
Labour productivity growth (%)	5.3	6.6	5.5	6.1	5.2	5.3	6.7
HICP inflation (%)	2.6	2.7	2.8	2.7	2.9	2.7	2.5
GDP deflator (% change)	3.2	2.4	4.1	3.6	4.0	2.7	2.6
Compensation of employees (% change)	10.8	10.2	8.9	10.5	7.4	9.5	9.9
External balance (% of GDP)	-5.9	-5.5	-5.5	-4.7	-5.3	-5.4	-4.8

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

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

The estimate of potential output based on Commission services' calculations according to the commonly agreed methodology and consistent with the programme's macroeconomic scenario is broadly comparable to that embodied in the Commission services' autumn 2005 forecasts. In terms of contributions to growth, the programme assumes a somewhat higher contribution from capital accumulation, compensated by lower total factor productivity.[8]

The programme presents several "major structural reforms" within the meaning of the Stability and Growth Pact to motivate a temporary deviation from the adjustment path towards the achievement of the medium-term objective (MTO) for the budgetary position (see Section 4.2.3 below). The most important ones are the pension and tax reforms (see Box 1 for the tax reform). The update does not present the impact of the pension reform on (potential) growth within the programme period (see Section 6 below). The tax reform mainly consists of a decrease of the personal income tax from 33% in 2005 to 24% in two stages over the programme's period. It is accompanied by a temporary increase in the corporate income tax to compensate for the revenue loss and by a widening of the real estate tax base. The update estimates that the cut in the personal income tax will increase potential GDP by about 2.7% to 3.6%, though it does not specify in which period. The expected impact on employment growth is not quantified. The macroeconomic scenario commented on above seems to embody these effects, although

[8] The potential output calculations presented in the programme are based on the Hodrick-Prescott filter and imply worse cyclical conditions as compared with the Commission services' calculations.

it is difficult to assess the channels through which the assumed growth and employment impact are to work as this is not made explicit. The update bases its calculations on a recent World Bank Quarterly Economic Report[9], which assumes that a 1 percentage point increase in the tax burden slows down the growth of employment by 0.5-0.7 percentage points.[10]

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]	6.9	6.6	7.0	6.8	7.0	6.9	6.7
Contributions:							
- Labour	0.5	0.5	0.7	0.7	0.8	0.8	0.7
- Capital accumulation	3.0	3.2	3.0	3.3	3.0	3.4	3.3
- TFP	3.2	2.9	3.1	2.7	3.1	2.6	2.5

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

The update estimates that net external borrowing declined from 6½% of GDP in 2004 to 5½% in 2005, partly aided by a significant improvement in the terms of trade, and that it should remain at around 5% throughout the rest of the programme period, which is broadly in line with the Commission services' autumn forecast. The deterioration of the balance of goods and services by some 1½ percentage points of GDP from 2005 to 2008 is offset by higher inflows of EU capital transfers. While public savings are expected to increase progressively over the programme's period, the evolution of private savings is volatile. This sector's negative balance is expected to improve in the years 2006 and 2008, which suggests a positive effect on private savings from the decrease of the personal income tax.

Box 1: The tax reform

The Parliament approved on 7 June 2005 a reduction in the personal income tax rate, from 33% of the gross salary to 24%. The cut will be implemented in two stages. The first reduction will be effective from July 2006, when the rate will be reduced to 27%, and the second from January 2008. The Parliament also approved a new "social tax", aiming at partly compensating for the loss of revenue implied by the reduction in personal income tax. The tax is paid by legal entities and is regarded as a *de facto* increase in the corporate income tax by 4 percentage points, applicable as of January 2006. It is planned to be reduced by 1 percentage point in 2007, before being completely phased out in 2008. An expansion of the real estate tax base was also approved, by extending the tax to households who own land and use it for commercial purposes, but details as regards timing and the applicable rate were not specified.

The background for the tax reform was a general perception of the need to improve the balance between taxes on labour and capital taxes. In December 2005, the personal income tax rate and

[9] 'World Bank EU-8 Quarterly Economic Report, April 2005' (Part II, Special Topic: Labour taxes and employment in the EU-8).
Web-link: http://siteresources.worldbank.org/INTECA/Resources/042005EU8QERPart2of2.pdf

[10] The update mentions other structural reforms that could warrant a temporary deviation from the MTO, such as a programme to subsidise renovations for isolating household dwellings. However, a detailed analysis of their impact on potential growth is not presented (see Section 4.2.3 below).

the corporate income tax rate were 33% and 15%, respectively. With the reform, the government aims at improving competitiveness of the Lithuanian economy by reducing labour costs, while contributing to a better tax collection and making progress towards the objectives set in the context of the Lisbon process as regards employment and participation rates. It is also expected to help curbing the current emigration trend of the labour force to higher-income countries.

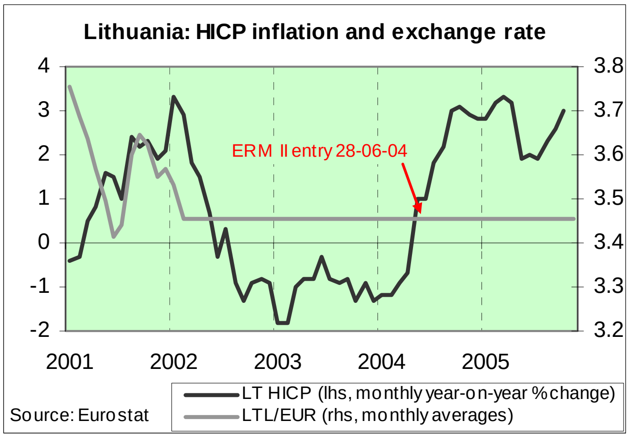
The convergence programme update projects that the combined effect of the changes in the personal income tax and corporate income tax will result in a revenue loss of 0.1% of GDP in 2006, 0.8% in 2007 and 2% in 2008. It estimates that the reform will increase potential output by about 2.7-3.6%, but the period is not specified.

Overall, the decrease of the personal income tax was well received by employees and the business community, as the tax burden on labour has always been perceived as one of the most important constraints on activity growth. Nevertheless, according to some social partners, tax administration reforms (in view of, for instance, a lack of transparency and a poor tax collection) and the elimination of certain tax exemptions should progress further.

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

Lithuania continues to pursue the objective of price stability through a firm exchange rate anchor. The country's long-standing currency board was maintained as a unilateral commitment when the litas entered into ERM II on 28 June 2004. In line with this commitment, the litas has not deviated from its central rate through the period of ERM II participation. The peg continues to enjoy high credibility.

The convergence programme reaffirms Lithuania's aim to enter the euro area on 1 January 2007, and it underlines the authorities' commitment to sound policies in the run-up to euro adoption.



Year-on-year HICP inflation reached 3.0 percent in December 2005, and the annual average rate edged up to 2.7 percent. HICP inflation rates rose in the last few months of the year, after some easing in the summer. The increase mostly reflected higher energy, health care, transport and food prices. The pick up in inflation occurred against the background of a nominal depreciation of the litas against the dollar, strong wage growth and a sustained rapid trend of bank credit growth that continues fuelling consumption and may signal upward inflationary pressures in the medium term.

Under the currency board, the Lithuanian central bank does not set independent policy interest rates. Lithuanian market rates have become even more closely aligned to euro area rates in the course of 2005, with spreads of 3-month rates vis-à-vis euro area rates decreasing from nearly 50 basis points at the beginning of 2005 to some 5 basis points toward the end of the year. In the absence of an active secondary market, the yield recorded in the successive primary emissions of long-term government bonds during 2005 were close to euro area sovereign bond yields; the most recent spread on the November 2005 issue was around 25 basis points.

The effective exchange rate of the litas recorded only limited fluctuations in 2005, reflecting the strong role of the euro and euro-linked currencies in its trade-weighted reference basket. In nominal effective terms, the litas appreciated by just over half a percent in the course of the year, while it recorded a somewhat higher real appreciation of around two percent during that period, reflecting higher inflation rates compared to its trading partners.

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 updated programme foresees a gradual reduction of the general government deficit from 1.5% of GDP in 2005 to 1% in 2008. The targets are not comparable with those presented in previous programmes. This is because, in 2005, Eurostat decided on a methodological change for the classification of compensations related to real estate property confiscated in Soviet times and private savings lost due to currency devaluations in the early 1990s. The implications of the decision are that payments related to the mentioned liabilities do not increase the deficit at the moment when they are paid, but when the liability was recognised in the past. This implies that, in order to make a meaningful comparison of budgetary targets in successive programmes, the deficit targets should be improved by the amount of the planned payments.[11] It is then clear that the targets in the new update are worse for 2006-2007, mainly due to the tax reform that was adopted after the previous update (see Box 1 above).

A marked decrease of the expenditure-to-GDP ratio in 2005-2007 as compared to the previous update (see Table 4) is mainly due to a methodology change in the accounting of pension reform costs. The previous update accounted the reassignment of social contributions to the second pillar as an increase in government expenditure while the most recent update accounts them as a loss of general government revenue, in line with ESA95. Furthermore, payments related to the savings and real estate restitutions have been subtracted from total expenditure in the update, in line with Eurostat's decision on the issue.[12]

The updated programme estimates the outcome for the 2005 deficit to have been 1.5% of GDP, compared to a target in the previous update (modified to reflect the Eurostat ruling mentioned above) of 2.1% of GDP and an estimated outturn of 2% of GDP in the

[11] In the previous update, such payments were estimated to account for 0.4% of GDP in 2005, 0.8% in 2006 and 1.2% in 2007.

[12] Eurostat letter to the Lithuanian statistical institute of 25 February and 13 May 2005.

Commission services' autumn forecast. However, preliminary data for the whole 2005 point to an even better deficit outcome (by 0.5 percent of GDP).

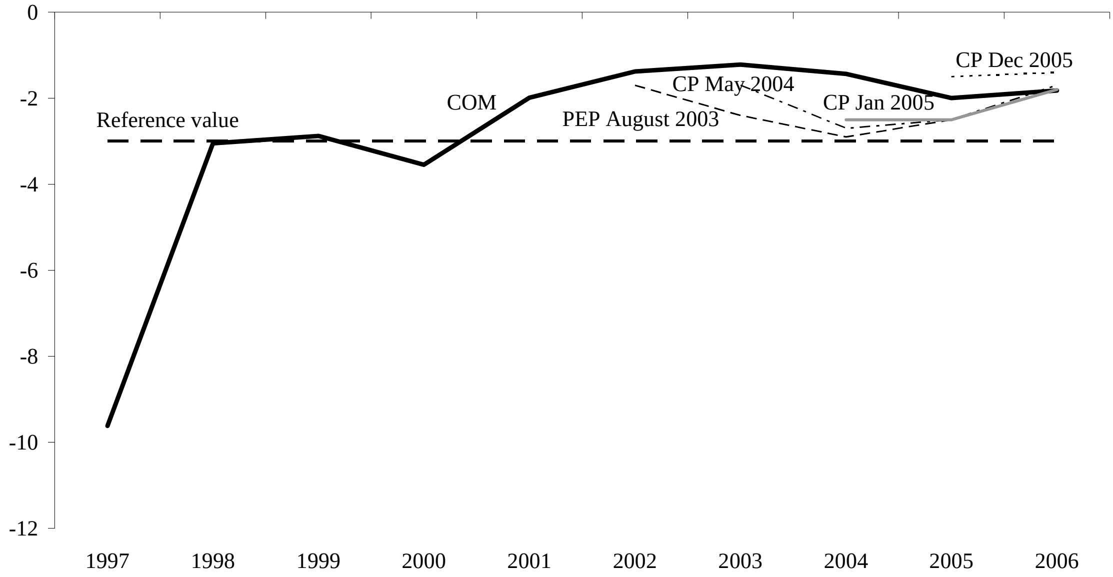
The more favourable expected outcome stems from a good budgetary performance of all levels of general government, which are estimated to have recorded higher-than-planned revenues while expenditure plans were broadly achieved. This was possible due to higher-than-foreseen economic activity and improvements in tax collection and enforcement. A prudent forecasting of revenues underlying the target, in line with the experience of previous years, also made it easier for revenues to surpass the plans.

Table 3: Evolution of budgetary targets in successive programmes

		2004	2005	2006	2007	2008
General government balance[1] (% of GDP)	**CP Dec 2005**	**-1.4**	**-1.5**	**-1.4**	**-1.3**	**-1.0**
	CP Jan 2005[2]	-2.5	-2.5	-1.8	-1.5	n.a.
	CP May 2004	*-2.7*	*-2.5*	*-1.8*	*-1.5*	*n.a.*
	COM Nov 2005	-1.4	-2.0	-1.8	-1.6	n.a.
General government expenditure (% of GDP)	**CP Dec 2005**	**33.2**	**35.1**	**35.2**	**34.6**	**34.0**
	CP Jan 2005	35.5	36.9	36.5	36.0	n.a.
	CP May 2004	*37.6*	*37.8*	*36.7*	*35.9*	*n.a.*
	COM Nov 2005	33.5	34.8	34.0	32.7	n.a.
General government revenues (% of GDP)	**CP Dec 2005**	**31.8**	**33.5**	**33.8**	**33.3**	**33.0**
	CP Jan 2005	33.0	34.4	34.7	34.5	n.a.
	CP May 2004	*34.9*	*35.3*	*35.0*	*34.4*	*n.a.*
	COM Nov 2005	32.1	32.8	32.2	31.2	n.a.
Real GDP (% change)	**CP Dec 2005**	**7.0**	**7.0**	**6.0**	**5.3**	**6.8**
	CP Jan 2005	6.5	6.5	6.2	6.0	n.a.
	CP May 2004	*7.0*	*7.3*	*6.6*	*6.3*	*n.a.*
	COM Nov 2005	7.0	7.0	6.2	5.8	n.a.

[1]The costs of the ongoing pension reform are included in the deficit. The costs are estimated at 0.3% of GDP in 2004, 0.5% in 2005, 0.7% in 2006, 0.8% in 2007 and 0.8% in 2008.
[2]The deficit included payments related to savings compensations and real estate restitutions amounting to 0.4% of GDP in 2005, 0.8% in 2006 and 1.2% in 2007.
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

4.2. The programme's medium-term budgetary strategy

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

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

The main goal of the programme is to reduce the general government structural deficit (i.e. the deficit in cyclically-adjusted terms net of one-off and other temporary measures) to or below 1% of GDP, which is the country's medium-term objective (MTO) for the budgetary position as meant in the Stability and Growth Pact (see also Section 4.2.3 below), by the end of the programme period.

The update foresees the general government deficit to gradually decrease from 1.5% of GDP in 2005 to 1.0% in 2008. The time profile of the primary deficit is similar, with a decline from 0.6% of GDP in 2005 to 0.2% at the end of the programme period. The most significant general government deficit reduction is planned to occur in 2008, driven by a reduction in the primary deficit stemming from a decrease in expenditure as a percentage of GDP that is less than fully offset by a decline in the revenue ratio.

Against a broadly unchanged macroeconomic scenario, taking into account the reclassification of savings and real estate restitutions, the budgetary adjustment is slower compared to the previous update.

Table 4: Composition of the budgetary adjustment

(% of GDP)	2004	2005	2006	2007	2008	Change: 2008-2005
Revenues	**31.8**	**33.5**	**33.8**	**33.3**	**33.0**	**-0.5**
of which:						
- Taxes & social contributions	28.6	29.2	28.8	28.2	27.5	-1.7
- Other (residual)	3.2	4.3	5.0	5.1	5.5	1.2
Expenditure	**33.2**	**35.1**	**35.2**	**34.6**	**34.0**	**-1.1**
of which:						
- Primary expenditure	32.2	34.2	34.4	33.8	33.3	-0.9
of which:						
Consumption	17.7	16.6	16.9	16.4	15.3	-1.3
Transfers other than in kind & subsidies	9.6	10.1	10.0	10.2	10.1	0.0
Gross fixed capital formation	3.4	4.1	4.5	5.1	5.2	1.1
Other (residual)	1.5	3.4	3.0	2.1	2.7	-0.7
- Interest expenditure	1.0	0.9	0.8	0.8	0.8	-0.1
General government balance (GGB) [1]	**-1.4**	**-1.5**	**-1.4**	**-1.3**	**-1.0**	**0.5**
Primary balance	**-0.4**	**-0.6**	**-0.6**	**-0.6**	**-0.2**	**0.4**
One-off and other temporary measures		-	-	-	-	-
GGB excl. one-off & other temporary measures	**-1.4**	-1.5	-1.4	-1.3	-1.0	0.5

<u>Source</u>:
Convergence programme update; Commission services' calculations
[1]The costs of the ongoing pension reform are included in the deficit. The costs are estimated at 0.3% of GDP in 2004, 0.5% in 2005, 0.7% in 2006, 0.8% in 2007 and 0.8% in 2008.

4.2.2. The composition of the budgetary adjustment in the programme

Overall, the programme relies on a favourable economic outlook that would create good conditions for fiscal retrenchment. The consolidation foreseen in the programme is expenditure-driven (with some offsetting influence from the revenue side), mostly due to a cut in collective consumption and social transfers as a percentage of GDP. A significant increase in the public investment to GDP ratio is planned, from 4.1% of GDP in 2005 to 5.2% in 2008, remaining well above the EU average (2.5% of GDP). The planned increase in investment is subject to some uncertainty as it assumes an acceleration of absorption of EU structural funds. In this regard, the programme expresses the commitment to allocate unspent budget envelopes to deficit reduction.

General government total expenditure is projected to broadly stabilise in 2006 and to decline thereafter, from just above 35% of GDP in 2005-06 to 34% in 2008. A decrease of the ratio of consumption by more than 1 percentage point is projected to be the most significant factor in the fall in the expenditure ratio. This is expected to be achieved thanks to increased efficiency and wage moderation in the public sector. According to the update, average gross wages in the public sector in 2007 and 2008 would be kept at the level of 2006 thanks to the personal income tax cut. Given the overall high wage growth projected in 2007-2008, wage moderation in the public sector may be difficult to obtain. There is a lack of detailed information on the measures to achieve the planned decrease in expenditure. A significant decline in "other expenditure" over the programme period by 0.7% of GDP is not explained in the programme.

On the revenue side, the programme plans a shift of the tax burden from direct to indirect taxation. The decrease of the personal income tax (see Box 1) and the increasing costs of the pension reform are the main drivers of the expected fall in budgetary revenues, from 33.5% of GDP in 2005 to 33% in 2008. A temporary increase of the corporate income tax will mitigate the decrease, until it will be abolished in 2008. Indirect taxes are projected to increase by 0.5 percent of GDP over 2005-2008, owing to improved tax administration and high consumption growth. A significant decline in taxes and social contributions (by 1¾% of GDP) stems from the tax reform. A significant increase in other revenues mainly reflects the inflow of EU structural funds.

Box 2: The budget for 2006

The central and local governments' draft budget for 2006 was presented on 18 October 2005 and was approved by Parliament on 8 December. A separate budget for the social security fund (Sodra) was approved on the same day. The draft budget targets a general government deficit of 1.4% of GDP in 2006 in ESA 95 terms (2.3% of GDP according to the cash-based national methodology). A major difference between the ESA 95 target and the target set according to the national methodology is that the latter includes payments related to the compensation of lost rouble savings and the restitution of real estate assets, while the former excludes them following a Eurostat decision in February and May 2005 on the classification of these liabilities.

The budget contains important new measures. On the revenue side, the main measure consists of a decrease of the personal income tax rate from 33% of gross wages to 27% with effect July 2006. In order to compensate for the revenue loss incurred by the decrease of the personal income tax, a new "social tax" has been introduced, which is a *de facto* increase in the corporate income tax rate by 4% points and which is meant to finance social spending. The social tax increase is effective from January 2006.

Total revenues of the central and local governments are projected to increase by some 20% compared to the budget plans for 2005. But it should be noted that plans for 2005 are now estimated to have been substantially overachieved. Total taxes are projected to grow by about 19%, where personal income tax revenues would grow by some 3.2%, and corporate income tax revenues would increase by 27%, both affected by the tax reform impact (although in opposite directions). VAT revenues are also projected to increase strongly by above 20% on the back of robust consumption growth. Excise duties are projected to increase by some 13%. Social security revenues are projected to increase 11%, on the back of strong employment and wage growth. EU grants are expected to increase by 24%, in line with an increase in investment and an improving capacity to absorb EU funds.

On the expenditure side, a significant increase by 18% is planned. Among the major categories of expenditure, the most sizeable increase corresponds to agriculture, to which allocated spending rises nearly 40%, including allocations for rural support programmes, co-financing of EU funds for agricultural projects and property right restitutions. Social protection related expenditure from the central government budget is set to increase notably by 12%, while Sodra's expenditures are planned to increase by 10%, including the reassignment of social contributions to the funded pension pillar. Health care related expenditure is planned to increase by 14%.

The revenue growth rates presented in the budget for 2006 are based on last years budget and do not take into account a significantly better-than-expected budgetary outcome in 2005.

The convergence programme states the commitment to use budget allocations that might remain unspent for the reduction of the budget deficit and possible better-than-planned revenues to achieve the government targets, which reinforces the likelihood to meet (or overshoot) the target.

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 thereof) 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 update sets a medium-term objective (MTO) for the budgetary position as a structural deficit (i.e. the cyclically-adjusted deficit net of one-off and other temporary measures) of 1% of GDP or lower, which it aims to achieve by 2008.

Based on Commission services' calculations according to the commonly agreed methodology, the structural balance would improve from -2¼% of GDP in 2005 to -1¼% in 2008, implying that, taking the targets at face value, the programme's MTO would not be achieved within the programme's period. The structural improvement by about one percent of GDP occurs against the background of favourable cyclical conditions as measured by a large positive output gap that is gradually closing over the programme period.[13]

The structural balance as recalculated by the Commission services is planned to improve on average by 0.4 percentage points of GDP per year. The highest effort (0.6 percentage points) is made in 2007.

According to the revised Stability and Growth Pact and the new code of conduct, Member States that have not yet reached their MTO can temporarily depart from the required adjustment path, while Member States that have already reached their MTO can temporarily deviate from it, in case of major structural reforms that have a verifiable positive impact on the long-term sustainability of the public finances. In both cases the budgetary position has to return to the MTO within the period covered by the programme (in case of pension reforms, the deviation should remain "temporary"). The claim to such a temporary deviation should be supported by a detailed quantitative cost-benefit-analysis (of the short-term costs and of the long-term benefits) from the budgetary point of view, to be presented in the programme.

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[13] Significant differences between the output gap recalculations reported in the update and the Commission services calculations are due to different methodologies used, as the programme uses the Hodrick-Prescott filter. This results in a significantly higher output gap and a higher structural deficit on average than reported in the programme.

The programme presents several "major structural changes" in the meaning of the revised Stability and Growth Pact and the new code of conduct:

- The programme claims that the pension reform warrants a temporary deviation from the adjustment path towards the MTO. A presentation of the budgetary costs is provided, which takes account of estimates of the number of persons subscribing to the new funded pillar and the increase in the rate of contributions. Projections on pension related spending in the long-term are provided within section 7 (the sustainability of the public finances). Section 6 provides detail of the pension reform itself.

- The tax reform (see Box 1 above) is expected to produce beneficial economic effects by reducing the tax burden and increasing competitiveness. An estimation of budgetary costs during the programme period and the impact on potential growth are provided, but it is not supported with a detailed presentation of budgetary costs and benefits in the long run.

- The programme includes as a major structural reform a large housing renovation plan for heating isolation purposes, part of which will be subsidised by the state. A detailed presentation of budgetary costs and benefits in the short and long term is not presented.

- A significant investment programme is being implemented, which is expected to lift the public investment-to-GDP ratio from 4.1% of GDP in 2005 to 5.2% in 2008. The programme does not offer a verifiable impact on long-term potential growth and sustainability of the investment programme.

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[2]	-1.4	-1.4	-2.0	-1.5	-1.8	-1.4	-1.6	-1.3	-1.0	0.5
One-offs[3]	-	-	-	-	-	-	-	-	-	-
Output gap[4]	2.1	2.5	2.2	2.9	1.4	2.1	0.2	0.5	0.6	-
CAB[5]	-2.0	-2.1	-2.6	-2.3	-2.2	-2.0	-1.6	-1.4	-1.2	1.1
change in CAB	*-0.2*	*-0.3*	*-0.6*	*-0.2*	*0.4*	*0.3*	*0.6*	*0.6*	*0.2*	-
CAPB[5]	-1.0	-1.1	-1.7	-1.4	-1.4	-1.2	-0.9	-0.6	-0.4	1.0
Structural balance[6]	-2.0	-2.1	-2.6	-2.3	-2.2	-2.0	-1.6	-1.4	-1.2	1.1
change in struct. bal.	-0.2	-0.3	-0.6	-0.2	0.4	0.3	0.6	0.6	0.2	-
Struct. prim. bal.[7]	-1.0	-1.1	-1.7	-1.4	-1.4	-1.2	-0.9	-0.6	-0.4	1.0

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]The costs of the ongoing pension reform are included in the deficit. The costs are estimated at 0.5% of GDP in 2005, 0.7% in 2006, 0.8% in 2007 and 0.8% in 2008.
[3]There are no one-off and other temporary measures.
[4]In percent of potential GDP. See Table 1 above.
[5]CAB = cyclically-adjusted balance; CAPB = cyclically-adjusted primary balance. The annual budgetary adjustment towards the MTO planned in the programme if the costs of the pension reform are taken out is 0.5% of GDP in 2006, 0.7% in 2007 and 0.2% in 2008, or 0.5% on average in the period 2006-2008.
[6]CAB excluding one-off and other temporary measures.
[7]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 programme's MTO is more demanding than the minimum benchmark (estimated at a deficit of 1¾% of GDP), its achievement should fulfil the aim of providing a safety margin against the occurrence of an excessive deficit.

The programme's MTO is at an appropriate level because it lies within the range indicated for euro area and ERM II Member States in the Stability and Growth Pact and the code of conduct and adequately reflects the debt ratio and average potential output growth in the long term.

4.3.2. Risks attached to the budgetary targets

The risks to the budgetary projections in the programme appear broadly balanced.

On the one hand, the general government deficit outcome in 2005 is likely to be lower than estimated in the programme (by about 0.5 percent of GDP). A likely carry-over to 2006 and the authorities' track record of cautious revenue planning in the last few years indicate that outcomes could be better than targeted in 2006. In this regard, revenue growth estimated in the Budget for 2006 appears cautious, as it is not based on the revenue level actually achieved in 2005. The programme states that any higher than expected revenues over 2006-2008 as well as possible unspent expenditures will be used for deficit reduction, which increases confidence on the achievement of the budgetary targets.[14]

On the other hand, the programme largely relies on a decrease in expenditure (as a percentage of GDP), particularly through public wage moderation, which could prove difficult in view of high per capita wage growth predicted in the rest of the economy and inflationary pressures. Public investment, which is planned to rise markedly, could be the adjusting tool if the budgetary targets were at risk. In addition, there are uncertainties about the impact of the pension reform, given the voluntary nature of participation in the funded pillar, and about the impact of the tax reform towards the end of the programme period. The lack of detailed information on the envisaged measures also introduces uncertainty. The update projects employment growth to be stronger in the programme period, compared to the Commission services' Autumn 2005 forecasts, and lower employment growth could imply that tax projections in the programme are favourable.

[14] It is noted that in previous years, better-than-planned revenues were often used to finance additional payments mostly related to savings and real estate restitutions, which do not account as expenditure in ESA 95 following a decision by Eurostat in February and May 2005. There was a budgetary amendment in June 2005 allocating additional expenditure, for about 0.4% of GDP, mostly financed from savings on government debt service and some social benefits.

The elasticity of taxes relative to GDP is on average in 2006-2007 broadly in line with the Commission services' Autumn 2005 forecasts at an aggregated level, although a stronger final domestic demand and wage growth in the update results in better tax receipts. In addition, tax elasticities, taking into account the tax reform, seem favourable in 2007, as they appear to be higher than the observed ex-ante elasticities.

In view of the risk assessment the budgetary projections are plausible assuming that higher-than-expected revenues or unspent expenditures will continue to be used for deficit reduction.

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	-0.8	-0.4	-0.4	-0.6	-0.8	/
Difference	0.4		-0.2		/	/
of which[3]*: - elasticity component*	0.0		-0.7		/	/
- composition component	0.4		0.9		/	/
p.m. Observed elasticity to GDP	0.7	0.8	0.8	0.7	0.7	0.9

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)

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 does not seem sufficient to ensure that the programme's MTO will be reached in 2008, as planned in the update, because the structural deficit will probably be around ¼% of GDP above the MTO. From 2007, however, the budgetary stance in the programme should provide a sufficient safety margin against breaching the 3% of GDP deficit limit with normal macroeconomic fluctuations.

The planned adjustment path towards the MTO is on average 0.4% of GDP (in structural terms) in the period 2006-2008 (0.3% of GDP in 2006, 0.6% in 2007 and 0.2% in 2008), which is below the "benchmark" of 0.5% annually for euro area and ERM II Member States set in the Stability and Growth Pact. Also, taking into account that cyclical conditions are favourable (with a large positive output gap that is gradually closing over the programme period) and that tax elasticities, taking into account tax reform, may be favourable, the planned adjustment path would not be in line with the requirement in the Pact to implement a higher adjustment in good times.

Table 7: Assessment of tax elasticities

	2006		2007	
	COM (observed)	**ex-ante**[1]	**COM**[2] **(observed)**	**ex-ante**[1]
Total taxes				
Change in tax-to-GDP ratio	-0.8	-0.3	-0.4	-0.3
Difference	-0.5		-0.2	
of which[3]*: - elasticity component*	-0.9		-0.3	
- composition component	0.2		0.1	
p.m.: Elasticity to GDP	0.7	0.9	0.8	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)

However, the programme calls for a temporary deviation from the adjustment path towards the MTO, on the basis of major structural reforms. As mentioned in Section 4.2.3 above, the tax reform and housing renovation plan are not accompanied by a detailed presentation of budgetary costs and benefits in the long run so that they cannot be said to have a "verifiable positive impact on the long-term sustainability of public finances" as required in the Stability and Growth Pact. The implementation of the ongoing pension reform, however, could provide a justification for a temporary deviation. The reform was adopted in 2004 and consists of the introduction of a funded pillar, in which the choice of participation is voluntary. Its budgetary impact increases within the programme period, from 0.5% of GDP in 2005 to 0.8% in 2007-2008 and can be said to have a verifiable positive impact on the long-term sustainability of public finances. As regards the other remaining condition for allowing a temporary deviation on the basis of pension reform (set in the Pact and the code of conduct), a safety margin against breaching the 3% deficit limit is only provided from 2007. However, if the better-than-expected outturn for 2005 (is allowed to) carry over to 2006, it may also be provided in 2006 because the excess over the minimum benchmark is only 0.2 percentage point of GDP (according to the Commission services calculations of the structural balance).

If the pension reform costs are excluded from the structural balance, the average structural adjustment in 2006-2008 is 0.5% of GDP (0.5% of GDP in 2006, 0.7% in 2007 and 0.2% in 2008), which is in line with the "benchmark" mentioned above.

Overall, a temporary deviation of the size foreseen in the programme is admissible in the meaning of the revised Stability and Growth Pact and the new code of conduct, conditional on meeting the minimum benchmark in 2006, which is possible if a better-than-planned deficit outcome in 2005 is carried over to 2006. Nevertheless, as the fiscal adjustment is made against the background of strong growth and a positive output gap, the adjustment path could be speeded up (especially in 2006).

The strategy for the general government balance outlined in the programme is broadly consistent with the broad economic policy guidelines in the area of public finances (see Annex 3). In particular, taking into account the temporary deviation linked to pension reform, Lithuania is making progress towards its MTO. However, a faster fiscal consolidation would help containing domestic demand pressures that could lead to unsustainable external imbalances, particularly if inflation continues increasing, real wage growth above productivity gains persists and competitiveness is undermined.

4.4. Sensitivity analysis

The sensitivity analysis is presented in the programme in a succinct way, covering the impact of interest rates and a lower-than-assumed absorption of EU funds. The analysis is not very explicit about how revenues and expenditure are projected to react to variations in economic variables as required by the new code of conduct. The programme states that an increase in interest rates by 1 percentage point would result in an average deterioration of the deficit by 0.1% of GDP in 2005-2007, due to the same increase in interest payments on public debt. A lower than planned absorption of EU funds would lead to a 0.5% lower GDP growth, but the lower absorption is not quantified. The programme also states that wages and salaries could grow faster than projected, but its magnitude and the potential impact on government revenues is not quantified. Thus, it is difficult to assess the plausibility of the analysis other than the impact of interest rate fluctuations.

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 HP-filter[15] and (iii) no policy response (notably, the expenditure level is as in the central scenario[16]), reveal that, by 2008, the cyclically-adjusted balance is 0.4 percentage points of GDP above/below the central scenario. Hence, in the case of persistently lower real growth, additional measures of around ½ percentage point of GDP would be necessary to keep the public finances on the path targeted in the central scenario.[17].

A sensitivity analysis of how changes in the key aspects of the presented structural reforms would affect potential output and the general government balance is not presented.

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 estimates Lithuania's government debt ratio to have decreased from 19.5% of GDP at the end of 2004 to 19.2% at the end of 2005. This is below the Commission services' Autumn 2005 forecasts expected outcome in view of more recent information

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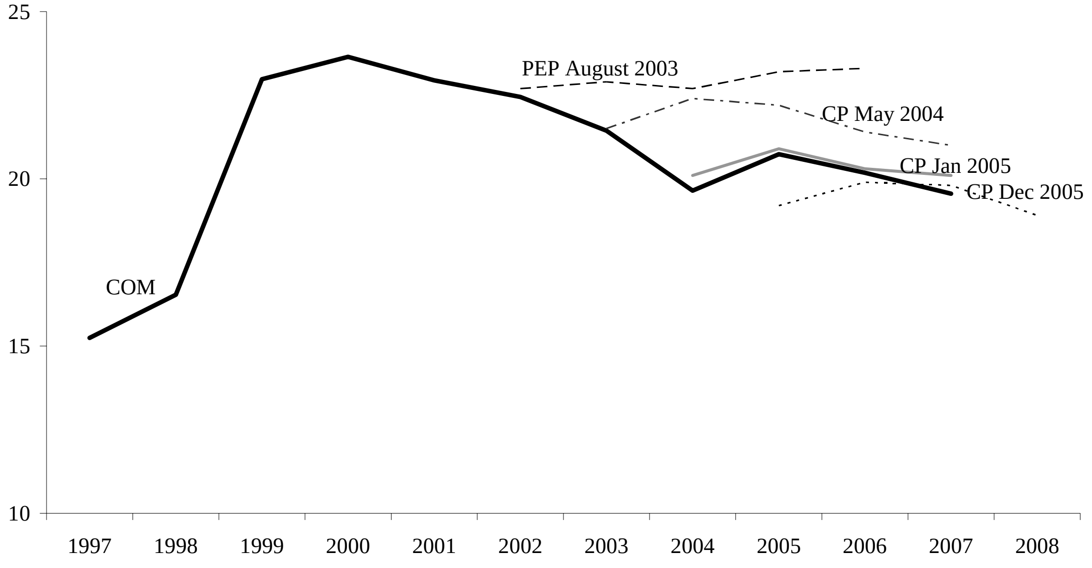
[15] In the absence of a fully-specified macroeconomic scenario that would underlie such deviations, it is obviously impossible to derive new estimates of potential growth from the agreed production function method.

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

[17] 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.

on budgetary implementation (the autumn forecast assumed a higher general government deficit outcome in 2005) and differences in the stock flow adjustment, which was assumed to be less favourable in the Commission services' Autumn 2005 forecasts. It is also notably below the target presented in the previous programme update.

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



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

Table 8: Debt dynamics

	average 2000-2004	2005		2006		2007		2008
	COM	**COM**	**CP**	**COM**	**CP**	**COM**	**CP**	**CP**
Government gross debt ratio	**22.0**	**20.7**	**19.2**	**20.2**	**19.9**	**19.6**	**19.8**	**18.9**
Change in debt ratio (1 = 2+3+4)	-0.7	1.1	-0.4	-0.6	0.7	-0.6	-0.1	-0.9
Contributions:								
- **Primary balance** (2)	**0.3**	**1.1**	**0.6**	**1.0**	**0.6**	**0.8**	**0.5**	**0.2**
- **"Snow-ball" effect** (3)	**-0.1**	**-0.9**	**-1.0**	**-1.1**	**-0.9**	**-1.1**	**-0.7**	**-0.9**
- Interest expenditure	1.4	0.9	0.9	0.8	0.8	0.8	0.8	0.8
- Real GDP growth	-1.5	-1.2	-1.2	-1.2	-1.0	-1.1	-1.0	-1.2
- Inflation (GDP deflator)	-0.1	-0.6	-0.7	-0.8	-0.7	-0.8	-0.5	-0.5
- **Stock-flow adjustment** (4)	**-0.8**	**1.0**	**-0.1**	**-0.4**	**1.0**	**-0.4**	**0.1**	**-0.2**
- Cash/accruals	0.5							
- Accumulation of financial	-0.7							
assets	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
of which: Privatisation proceeds	-0.6							
- Valuation effects & residual adj.								

Note:

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.

Source:

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

5.2. Assessment

The debt ratio is expected to remain at about 19-20% of GDP throughout the remainder of the programme horizon. The debt increasing contribution of the primary deficit is expected to progressively fade out. The "snow-ball" effect, that is the combined effect of implicit interest rates and GDP growth, – which in 2004 was virtually zero – will contribute to reducing the debt ratio over the programme's horizon, partly due to a pick up in inflation from very low levels of the last few years. The impact of financial transactions of the government reflected in the stock-flow adjustment, is projected to follow an erratic trend. Notably, in 2006, such transactions are expected to lead to an increase in debt by 1% of GDP. However, this development is not explained in the programme. The debt projections for 2006 and 2007 are in line with those of the Commission services' autumn 2005 forecast, although the driving forces are somewhat different. The update reflects lower primary deficits (carry-over effect from a better budgetary outcome in 2005) and a higher stock-flow adjustment, while the Commission services' higher nominal and real GDP growth rate lead to a more favourable "snow-ball" effect.

While risks from the structure of the debt are limited given the savings stemming from rolling over loans at lower interest rates and little exposure to foreign currencies[18], government guarantees are sizeable and would affect negatively the deficit and the debt ratio in the event of serious financial sector problems. In this regard, the update estimates the total amount of insured deposits at slightly above 31% of GDP as of November 2005.

6. Structural reform, the quality of public finances and institutional features

The programme reviews the main structural reforms underway.

The pension reform started in 2004 with the introduction of a funded pillar. Workers can voluntarily decide to participate in the funded scheme with a given share of their obligatory social contributions. The contribution that goes to the funded pillar is increasing progressively from 2.5% of the participant's income in 2004 to 5.5% in 2007. In the period 2004-2005, almost 55% of the workers covered by social security joined the funded pillar and the programme estimates an additional 10% will join in 2006. The update presents the budgetary impact of the reform during the programme period, as well as projections of the expenditure-to-GDP ratios in the long-term. The reform is expected to improve the quality of public finances in the long run. However, without an increase in the retirement age to 65 years for women and men, as envisaged by the update, the reform seems insufficient to guarantee the sustainability of the pension system according

[18] The largest part of government debt is denominated in euro, to which the litas is pegged in a currency board regime.

to the demographic assumptions (see also Section 7 below). The update does not present the impact of the pension reform on (potential) growth within the programme period.

A tax reform is being implemented (see Box 1). The programme quantifies the impact on potential growth and on private savings and employment. A health care reform is ongoing, with the main aim of guaranteeing the efficiency of the system and a wider regional availability. It is estimated that the budget of the Health Insurance Fund will be in balance over the programme period, and that health care related expenditure increases gradually as a percentage of GDP up to 2050. This is more realistic than the previous programme update which assumed a constant ratio over the same period.

With the aim of promoting a more efficient energy use, a plan to improve very inefficient isolation in household dwellings has been launched. The plan covers the period 2005-2020 and is estimated to affect more than 60% of the apartment buildings in Lithuania. The implementation cost is very sizeable, estimated at about 8% of the projected level of GDP in 2008, of which 30% or more can be subsidised by the state. The costs of the plan are marginal over the programme period, but they can be expected to increase rapidly in subsequent years.

A significant public investment programme is being implemented. The investment ratio is expected to increase from 4.1% of GDP in 2005 to 5.2% in 2008.

The Budget for 2006 introduces flexibility in the management of EU funds, allowing reallocating unspent allocations for EU co-financing from one project to another.

The measures described above are consistent with the broad economic policy guidelines in the area of public finances (see Annex 3) and in line with the National Reform Programme, submitted on 2 November 2005 in the context of the renewed Lisbon strategy for growth and jobs. The budgetary projections in the update take into account the public finance implications of the main actions envisaged in the NRP. However, it should be noted that the general government deficit targets presented in the NRP were significantly higher than those presented in the convergence programme, where targets have been updated taking account of recent positive developments on the revenue side.

7. THE SUSTAINABILITY OF THE PUBLIC FINANCES

The assessment of the sustainability of Lithuania’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[19] remains unchanged at the 2005 level throughout the programme period.

On the basis of the information in the update, age-related expenditure is foreseen to increase by 2% of GDP between 2008 and 2050, to which pension expenditures

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

contribute the most, namely with an increase of 2.3% of GDP (see Table A2 in Annex 5). In contrast, education expenditures decrease by 1.2% of GDP. The present analysis is based on the set of government expenditure items covered by the common projections carried out by the Economic Policy Committee (EPC)[20]. Tax revenues and non-age related expenditures have been kept constant throughout the projection period.

The gross debt-to-GDP ratio, being considerably below the average level in the EU at present, is projected to remain below the 60% of GDP reference value throughout most of the projection period up to the 2050 in the 'programme' scenario. In the '2005' scenario, gross debt could breach the reference value in the 2030s (see Table A4 in Annex 5)[21].

Indeed, according to the S1 indicator which ensures a debt level at 60% of GDP in 2050, a relatively small sustainability gap of around 1¼% of GDP emerges in the '2005' scenario. In the 'programme' scenario, however, the sustainability gap is negligible. However, S1 only takes into account changes in the primary balance up to 2050, which underestimates the cost of ageing.

The government's inter-temporal budget constraint, captured by the S2 indicator, reveals that a sustainability gap of about 2¾% of GDP emerges in the '2005' scenario. In the 'programme' scenario, the sustainability gap is smaller at around 1¾%; highlighting that fiscal consolidation has a positive impact in terms of reducing the budgetary challenge posed by ageing populations. The long-term projections reveal that the increase in pension expenditure up to 2050 is relatively limited as a result of the reform of the pension system enacted in recent years. Nevertheless, a further consolidation of the public finances would contribute to reduce the sustainability gap further. The sustainability gap, as measured by the S2 indicator, translates into a required primary balance (RPB) of about 1½% of GDP, higher than the structural primary balance of almost -½% of GDP of the last year of the programme period.

The sustainability gap, as measured by S2, would increase marginally by up to 0.2% GDP if the (budgetary or structural) adjustment was to be postponed by 5 years (see table A3 in Annex 5).

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)	**1.3**	**2.8**		**1.6**	**0.2**	**1.7**		**1.6**
initial budgetary position	*1.6*	*1.8*			*0.5*	*0.6*		
debt requirement in 2050	*-0.7*	*:*			*-0.7*	*:*		
future changes in budgetary position	*0.4*	*1.0*			*0.4*	*1.0*		

Note: The S1 indicator measures the sustainability gap as the difference 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 measures

[20] Namely, government expenditure on pension, health-care, long-term care, education and unemployment benefits.

[21] 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 as a forecast.

the sustainability gap as the difference 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[22]. 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 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.

The assumptions underlying the long-term projections are those commonly agreed and used by the EPC in the current common projections exercise. Overall, the underlying assumptions in the programme can therefore be considered to be plausible.

The recent pension reform in Lithuania includes the introduction of a 2nd and 3rd pillar, which should contribute to alleviate the impact of ageing on public finances. The cost of the pension reform is to be financed by privatisation revenues and via the State budget. In this context, it is crucial to monitor the implementation of the pension reform and to ensure sufficient financing to cover the reduction in government receipts stemming from gradual re-directing of the social contributions outside government.

Moreover, the Lithuanian authorities envisage further reforms: they plan to raise the retirement age to 65 years for both men and women by 2026 in a phased fashion. The update notes that this will facilitate the Lithuanian authorities' objective of increasing the replacement rate and at the same time ensure a financially sustainable pension system. Implementing such measures in a balanced and measured way would contribute to reduce the budgetary challenge posed by ageing populations.

Overall assessment. With regard to the sustainability of public finances, Lithuania appears to be at low risk on grounds of the projected budgetary costs of ageing populations. The level of gross debt is currently very low and is projected to remain below the 60% of GDP reference value throughout most the projection period and a contained government deficit is planned over the programme period. Lithuania has enacted a pension reform which contributes significantly to contain the budgetary impact of ageing populations. Further changes to the pension system are envisaged by the Lithuanian authorities, aiming at increasing the replacement rates for pensioners and at the same time gradually raising the retirement age. Ensuring the financial sustainability of the public pension system would be key in the implementation of these planned measures.

* * *

[22] 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.

Annex 1: Summary tables from the convergence programme update

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	61583.9	7.0	7.0	6.0	5.3	6.8
2. Nominal GDP	B1*g	62440.2	10.0	9.7	9.9	8.2	9.6
Components of real GDP							
3. Private consumption expenditure	P.3	40393.4	9.7	8.6	8.4	6.7	6.9
4. Government consumption expenditure	P.3	11306.3	7.5	9.0	3.0	2.5	2.5
5. Gross fixed capital formation	P.51	13824.3	12.3	13.5	12.2	12.0	7.3
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	3934.4	6.4	5.1	4.1	4.2	4.4
7. Exports of goods and services	P.6	33025.4	4.2	12.9	7.0	6.0	5.9
8. Imports of goods and services	P.7	40899.9	14.8	13.9	8.9	8.8	5.7
Contributions to real GDP growth							
9. Final domestic demand		69458.3	13.8	9.4	8.3	8.3	7.6
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	13824.3	3.6	-0.9	-0.7	0.3	0.5
11. External balance of goods and services	B.11	-7874.5	-6.8	-2.4	-2.3	-3.0	-0.9

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		101.4	2.8	2.4	3.6	2.7	2.6
2. Private consumption deflator		74.9	0.7	2.8	2.4	2.2	2.2
3. HICP		118.2	1.1	2.7	2.7	2.7	2.5
4. Public consumption deflator		74.9	0.7	2.8	2.4	2.2	2.2
5. Investment deflator		84.9	-7.6	-6.4	4.1	4.9	2.9
6. Export price deflator (goods and services)		101.4	7.5	8.0	2.2	1.8	2.5
7. Import price deflator (goods and services)		101.4	-0.5	4.9	1.1	1.8	1.8

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[23]		1436.3	-0.1	1.7	2.0	1.3	1.0
2. Employment, hours worked[24]		2608388.0	1.1	0.0	0.0	0.0	0.0
3. Unemployment rate (%)[25]		184.4	11.4	9.6	8.6	7.9	7.5
4. Labour productivity, persons [26]		40382.9	6.6	6.6	6.1	5.3	6.7
5. Labour productivity, hours worked[27]							
6. Compensation of employees	D.1	24586.2	10.5	10.2	10.5	9.5	9.9

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	-6.6	-5.5	-4.7	-5.4	-4.8
of which: - Balance on goods and services		-7.1	-6.6	-7.0	-8.7	-8.1
- Balance of primary incomes and transfers		-0.7	-0.9	-2.0	-2.0	-2.1
- Capital account		1.3	2.1	3.8	3.3	3.6
2. Net lending/borrowing of the private sector	B.9/ EDP B.9	-5.1	-3.9	-3.3	-4.1	-3.9
3. Net lending/borrowing of general government	B.9	-1.4	-1.5	-1.4	-1.3	-1.0
4. Statistical discrepancy		0.0	0.0	0.0	0.0	0.0

[23] Occupied population, domestic concept national accounts definition.
[24] National accounts definition.
[25] Harmonised definition, Eurostat; levels.
[26] Real GDP per person employed.
[27] Real GDP per hour worked.

Table 2. General government budgetary prospects

	ESA code	2004	2004	2005	2006	2007	2008
		Level	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP
Net lending (EDP B.9) by sub-sector							
1. General government	S.13	-888.9	-1.4	-1.5	-1.4	-1.3	-1.0
2. Central government	S.1311	-1398.9	-2.2	-1.7	-1.4	-1.3	-1.0
3. State government	S.1312	NA	NA	NA	NA	NA	NA
4. Local government	S.1313	91.8	0.1	0.2	0.0	0.0	0.0
5. Social security funds	S.1314	418.2	0.7	0.0	0.0	0.0	0.0
General government (S13)							
6. Total revenue	TR	19855.7	31.8	33.5	33.8	33.3	33.0
7. Total expenditure	TE[28]	20744.7	33.2	35.1	35.2	34.6	34.0
8. Net lending/borrowing	EDP B.9	-888.9	-1.4	-1.5	-1.4	-1.3	-1.0
9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	623.8	1.0	0.9	0.8	0.8	0.8
pm: 9a. FISIM							
10. Primary balance	[29]	-265.0	-0.4	-0.6	-0.6	-0.6	-0.2
Selected components of revenue							
11. Total taxes (11=11a+11b+11c)		12403.2	19.9	21.0	20.9	20.4	19.7
11a. Taxes on production and imports	D.2	6937.5	11.1	11.6	11.6	11.8	12.1
11b. Current taxes on income, wealth, etc	D.5	5464.0	8.8	9.4	9.3	8.6	7.6
11c. Capital taxes	D.91	1.7	0.0	0.0	0.0	0.0	0.0
12. Social contributions	D.61	5440.0	8.7	8.2	7.9	7.8	7.8
13. Property income	D.4	453.2	0.7	0.6	0.6	0.6	0.6
14. Other (14=15-(11+12+13))		1559.3					
15=6. Total revenue	TR	19855.7	31.8	33.5	33.8	33.3	33.0
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)[30]		12403.2	19.9	21.0	20.9	20.5	19.7
Selected components of expenditure							
16. Collective consumption	P.32	4531.4	7.3	7.1	7.0	6.4	6.1
17. Total social transfers	D.62 + D.63	12151.7	19.5	18.9	19.2	19.3	18.4
17a. Social transfers in kind	P.31=D.63	6498.1	10.4	9.5	9.9	10.0	9.2
17b. Social transfers other than in kind	D.62	5653.6	9.1	9.4	9.3	9.3	9.2
18.=9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	623.8	1.0	0.9	0.8	0.8	0.8
19. Subsidies	D.3	341.6	0.5	0.7	0.7	0.9	0.9
20. Gross fixed capital formation	P.51	2148.7	3.4	4.1	4.5	5.1	5.2
21. Other (21=22-(16+17+18+19+20))		947.4	1.5	3.4	3.0	2.1	2.7
22=7. Total expenditure	TE[31]	20744.7	33.2	35.1	35.2	34.6	34.0
Pm: compensation of employees	D.1	6747.2	10.8	11.0	11.0	10.1	9.8

28 Adjusted for the net flow of swap-related flows, so that TR-TE=EDP B.9.
29 The primary balance is calculated as (EDP B.9, item 8) plus (EDP D.41 + FISIM recorded as intermediate consumption, item 9).
30 Including those collected by the EU and including an adjustment for uncollected taxes and social contributions (D.995), if appropriate.
31 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	3.4	
2. Defence	2	1.5	
3. Public order and safety	3	1.9	
4. Economic affairs	4	4.2	
5. Environmental protection	5	0.4	
6. Housing and community amenities	6	0.6	
7. Health	7	4.3	
8. Recreation, culture and religion	8	0.8	
9. Education	9	5.9	
10. Social protection	10	10.0	
11. Total expenditure (= item 7=26 in Table 2)	TE[32]	33.1	34.0

Table 4. General government debt developments

% of GDP		**2004**	**2005**	**2006**	**2007**	**2008**
1. Gross debt[33]		19.5	19.2	19.9	19.8	18.9
2. Change in gross debt ratio		-1.7	-0.3	0.7	-0.1	-0.9
Contributions to changes in gross debt						
3. Primary balance[34]		0.4	0.6	0.6	0.5	0.2
4. Interest expenditure (incl. FISIM) [35]		-1.0	-0.9	-0.9	-0.7	-1.0
5. Stock-flow adjustment		-1.2	0.0	1.0	0.2	-0.1
of which: - Differences between cash and accruals[36]						
- Net accumulation of financial assets[37] *of which:* *- privatisation proceeds*						
- Valuation effects and other[38]						
p.m. implicit interest rate on debt[39]		5.0	4.7	4.5	4.3	4.1
Other relevant variables						
6. Liquid financial assets[40]						
7. Net financial debt (7=1-6)						

Table 5. Cyclical developments

% of GDP	ESA Code	**2004**	**2005**	**2006**	**2007**	**2008**

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

1. Real GDP growth (%)		7.0	7.0	6.0	5.3	6.8
2. Net lending of general government	EDP B.9	-1.4	-1.5	-1.4	-1.3	-1.0
3. Interest expenditure (incl. FISIM recorded as consumption)	EDPD.41 + FISIM	1.0	0.9	0.8	0.8	0.8
4. Potential GDP growth (%) (1)		7.0	7.0	6.9	6.7	6.5
contributions: - labour - capital - total factor productivity						
5. Output gap		1.7	1.7	0.9	-0.5	-0.2
6. Cyclical budgetary component		0.5	0.5	0.2	-0.1	-0.1
7. Cyclically-adjusted balance (2-6)		-1.9	-2.0	-1.6	-1.2	-0.9
8. Cyclically-adjusted primary balance (7-3)		-0.9	-1.1	-0.8	-0.3	-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		6.5	6.5	6.2	6.0	NA
Current update		7.0	7.0	6.0	5.3	6.8
Difference		0.5	0.5	-0.2	-0.7	NA
General government net lending (% of GDP)	EDP B.9					
Previous update		-2.5	-2.5	-1.8	-1.5	NA
Current update		-1.4	-1.5	-1.4	-1.3	-1.0
Difference		-1.1	-1.0	-0.4	-0.2	NA
General government gross debt (% of GDP)						
Previous update		20.1	20.9	20.3	20.1	NA
Current update		19.5	19.2	19.9	19.8	18.9
Difference		-0.6	-1.7	-0.4	-0.3	NA

Table 7. Long-term sustainability of public finances

% of GDP	2000	2005	2010	2020	2030	2050
Total expenditure	39.13	35.06	33.69	33.34	34.51	35.76
Of which: age-related expenditures		15.65	14.83	14.48	15.65	16.90
Pension expenditure	8.01	6.85	6.75	7.21	8.22	9.05
Social security pension	8.01	6.85	6.75	7.21	8.22	9.05
Old-age and early pensions	7.07	5.65	5.59	5.98	6.81	7.33
Other pensions (disability, survivors)	0.94	1.19	1.16	1.24	1.41	1.72
Occupational pensions (if in general government)						
Health care		4.15	4.25	4.45	4.60	4.96
Long-term care *(this was earlier included in the health care)*		0.47	0.48	0.52	0.56	0.69
Education expenditure		4.53	3.74	2.75	2.77	2.83
Other age-related expenditures	0.19	0.12	0.09	0.07	0.06	0.06
Interest expenditure	1.74	0.87				
Total revenue	35.58	33.53	33.03	33.03	33.03	33.03
Of which: property income	1.16	0.63	0.60	0.60	0.60	0.60
of which: from pensions contributions (or social contributions if appropriate)	7.09	6.66	6.32	6.08	5.97	6.14
Pension reserve fund assets	0.13					
Of which: consolidated public pension fund assets (assets other than government liabilities)	0.00	0.74	4.29	14.02	28.01	52.76
Assumptions						
Labour productivity growth		6.3	5.3	3.6	2.7	1.7
Real GDP growth		6.7	6.4	3.0	1.9	0.4
Participation rate males (aged 20-64)	82.6	84.2	85.6	87.6	88.0	86.3
Participation rates females (aged 20-64)	74.5	75.6	77.8	81.4	82.2	79.7
Total participation rates (aged 20-64)	78.3	79.7	81.5	84.4	85.0	83.0
Unemployment rate	16.7	11.2	8.9	7.0	7.0	7.0
Population aged 65+ over total population	14.2	15.2	16.1	17.5	21.4	26.7

Table 8. Basic assumptions

	2004	2005	2006	2007	2008
Short-term interest rate[41] (annual average)	2.3	2.3	2.7	3.0	3.2
Long-term interest rate (annual average)	4.6	3.6	4.0	4.1	4.2
USD/€ exchange rate (annual average) (euro area and ERM II countries)	1.24	1.25	1.21	1.22	1.22
Nominal effective exchange rate	6.1	-0.8	-1.1	0.2	0.2
(for countries not in euro area or ERM II) exchange rate vis-à-vis the € (annual average)					
World excluding EU, GDP growth	5.1	5.1	4.9	4.6	4.6
EU GDP growth	2.4	1.5	2.1	2.4	2.4
Growth of relevant foreign markets	2.4	1.5	2.1	2.4	2.4
World import volumes, excluding EU	5.7	8.8	8.8	8.5	8.5
Oil prices, (Brent, USD/barrel)	38.0	55.0	61.4	60.3	60.3

[41] 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		English official translation received on 27 January 2006
2. Model structure			
The model structure for the programmes in Annex 1 of the code of conduct has been followed.	X		Minor differences in sudivissions
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		Minor differences subcomponents
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.	X		
Significant divergences between the national and the Commission services' economic forecasts are explained[2].	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		
c. Monetary/exchange rate policy			
The <u>convergence</u> 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	X		

Guidelines in the new code of conduct	Yes	No	Comments
government balance in relation to the MTO, and the projected path for the debt ratio.			
In case a new government has taken office, the programme shows continuity with respect to the budgetary targets endorsed by the Council.			Not applicable
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.			Not applicable
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.			Not applicable
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.	X		Only for the pension reform
The programme includes a quantitative cost-benefit analysis of the short-term costs and long-term benefits of such reforms.	X		Only for the pension reform
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		More detail would be welcome. Different exchange rate assumptions or key aspects of the structural reforms not included.
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.		X	
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 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).	X		
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	X		

Guidelines in the new code of conduct	Yes	No	Comments
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.			
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 included in the integrated guidelines for the period 2005-2008.

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-	X		

Integrated guidelines	Yes	No	Not applicable
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.			
Notes: [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)[42]. Conceptually, the analysis draws on the definition of a semi-elasticity, which measures the change in a ratio vis-à-vis the relative change in the denominator. The semi-elasticity of the tax-to-GDP ratio of the *i-th* tax $\frac{T_i}{Y}$ can be written as:

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

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[43]. 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.

[42]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.

[43]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: $\frac{\Delta T_i}{T_i} = \varepsilon_{T_i,B_i exante}\frac{dB_i}{B_i} + \frac{OF_i}{T_i} = \varepsilon_{T_i,B_i ex post}\frac{dB_i}{B_i}$.

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:

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

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

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

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

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

where $\alpha_i\varepsilon_{B_i,Y}\frac{T_i}{Y}\frac{dY}{Y}$ 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 $\varepsilon = \sum_i w_i\varepsilon_{T_iB_i}\varepsilon_{B_iY}$ 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	-0.4	0.0	-0.3	0.2	0.3	/
Difference	0.4		0.5		/	/
of which[3]*: - elasticity component*	0.3		0.4		/	/
- composition component	0.0		0.1		/	/
p.m.: Observed elasticity:						
- of taxes to tax base[4]	0.6	0.9	0.7	1.1	1.4	1.0
- of tax base[4] to GDP	1.0	1.1	1.0	1.1	0.9	1.0
Social contributions:						
Change in tax-to-GDP ratio	-0.1	-0.3	0.2	-0.1	0.0	/
Difference	-0.3		-0.3		/	/

of which[3]: - elasticity component	-0.4		-0.6		/	/
- composition component	0.2		0.6		/	/
p.m.: Observed elasticity:						
- of taxes to tax base[5]	1.1	0.6	1.6	0.7	1.0	1.0
- of tax base[5] to GDP	0.8	1.1	0.7	1.2	1.0	0.7
Personal income tax[6]:						
Change in tax-to-GDP ratio	-0.3	-0.1	-0.3	-0.7	-1.0	/
Difference	0.2		-0.4		/	/
of which[3]: - elasticity component	0.1		-0.5		/	/
- composition component	0.1		0.3		/	/
p.m.: Observed elasticity:						
- of taxes to tax base[5]	0.8	0.8	0.8	0.0	-0.3	1.5
- of tax base[5] to GDP	0.8	1.1	0.7	1.2	1.0	0.7
Corporate income tax[6]:						
Change in tax-to-GDP ratio	0.0	0.0	0.0	-0.1	-0.1	/
Difference	0.0		0.0		/	/
of which[3]: - elasticity component	0.0		0.0		/	/
- composition component	0.0		0.0		/	/
p.m.: Observed elasticity:						
- of taxes to tax base[7]	0.6	0.9	0.5	0.0	-0.3	1.0
- of tax base[7] to GDP	1.1	1.0	1.2	0.9	1.0	1.4

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	-0.4	0.0	-0.3	0.0
Difference	-0.4		-0.3	
of which[3]: - elasticity component	-0.4		-0.3	
- composition component	0.0		0.0	
p.m.: Observed elasticity:				
- of taxes to tax base[4]	0.6	1.0	0.7	1.0
- of tax base[4] to GDP	1.0	1.0	1.0	1.0
Social contributions:				
Change in tax-to-GDP ratio	-0.1	-0.3	0.2	-0.2
Difference	0.2		0.4	
of which[3]: - elasticity component	0.1		0.4	
- composition component	0.1		0.1	
p.m.: Observed elasticity:				
- of taxes to tax base[5]	1.1	1.0	1.6	1.0
- of tax base[5] to GDP	0.8	0.7	0.7	0.7
Personal income tax[6]:				

Change in tax-to-GDP ratio	-0.3	-0.1	-0.3	-0.1
Difference	-0.2		-0.2	
of which[3]: - elasticity component	-0.5		-0.4	
- composition component	0.1		0.0	
p.m.: Observed elasticity:				
- of taxes to tax base[5]	0.8	1.5	0.8	1.5
- of tax base[5] to GDP	0.8	0.7	0.7	0.7
Corporate income tax[6]:				
Change in tax-to-GDP ratio	0.0	0.0	0.0	0.0
Difference	-0.1		-0.1	
of which[3]: - elasticity component	0.0		0.0	
- composition component	0.0		0.0	
p.m.: Observed elasticity:				
- of taxes to tax base[7]	0.6	1.0	0.5	1.0
- of tax base[7] to GDP	1.1	1.4	1.2	1.4

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	**5.1**	**5.3**	**3.6**	**3.6**	**2.7**	**2.7**	**1.7**	**1.7**
Real GDP growth	**6.1**	**6.4**	**3.0**	**3.0**	**1.9**	**1.9**	**0.4**	**0.4**
Participation rate males (aged 20-64)	**85.5**	**85.6**	**87.6**	**87.6**	**87.9**	**88.0**	**86.3**	**86.3**
Participation rates females (aged 20-64)	**77.8**	**77.8**	**81.4**	**81.4**	**82.2**	**82.2**	**79.7**	**79.7**
Total participation rates (aged 20-64)	**81.5**	**81.5**	**84.4**	**84.4**	**85.0**	**85.0**	**83.0**	**83.0**
Unemployment rate	**8.9**	**8.9**	**7.0**	**7.0**	**7.0**	**7.0**	**7.0**	**7.0**
Population aged 65+ over total population	**16.1**	**16.1**	**17.5**	**17.5**	**21.4**	**21.4**	**26.7**	**26.7**

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	15.6	15.3	15.0	16.2	16.9	17.6	2.0	1.0
Pensions	6.8	6.8	7.2	8.2	8.6	9.1	2.3	1.6
Health care	4.2	4.3	4.5	4.6	4.8	5.0	0.8	0.5
Long-term care	0.5	0.5	0.5	0.6	0.6	0.7	0.2	0.1
Education	4.1	3.7	2.8	2.8	2.8	2.8	-1.2	-1.2
Unemployment benefits	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0

Total primary non age-related spending	17.6	17.6	17.6	17.6	17.6	17.6	0.0	0.0
Total revenues	32.8	32.8	32.8	32.8	32.8	32.8	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	**0.2**	**0.2**
Programme scenario	**0.0**	**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	18.9	18.0	14.6	19.9	37.7	69.8	50.9
*Gross debt, i + 1**	*18.9*	*18.3*	*16.5*	*23.8*	*45.4*	*86.2*	*67.3*
*Gross debt, i - 1**	*18.9*	*17.7*	*13.0*	*16.8*	*31.7*	*57.8*	*38.9*
Adjusted gross debt	18.9	18.0	14.6	19.9	37.7	69.8	50.9
2005 Scenario							
Gross debt	21.3	22.4	29.0	46.7	80.6	135.7	114.5
*Gross debt, i + 1**	*21.3*	*22.8*	*31.8*	*53.5*	*95.9*	*168.3*	*147.1*
*Gross debt, i - 1**	*21.3*	*22.0*	*26.5*	*40.9*	*68.4*	*111.3*	*90.0*
Adjusted gross debt	21.3	22.4	29.0	46.7	80.6	135.7	114.5

* *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.