EUROPEAN COMMISSION
DIRECTORATE GENERAL
ECONOMIC AND FINANCIAL AFFAIRS

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ECONOMIC ASSESSMENT OF THE CONVERGENCE PROGRAMME OF LATVIA (UPDATE OF JANUARY 2007)

The Stability and Growth Pact requires each EU Member State to present an annual update of its medium-term fiscal programme, called "stability programme" for countries that have adopted the euro as their currency and "convergence programme" for those that have not. The most recent update of Latvia's convergence programme was submitted on 12 January 2007.

The attached technical analysis of the programme, prepared by the staff of, and under the responsibility of, the Directorate-General for Economic and Financial Affairs of the European Commission, was finalised on 26 February 2007. Comments should be sent to Balazs Forgo (balazs.forgo@ec.europa.eu). The main aim of the technical analysis is to assess the realism of the budgetary strategy presented in the programme as well as its compliance with the requirements of the Stability and Growth Pact. However, the analysis also looks at the overall macro-economic performance of the country and highlights relevant policy challenges.

Based on this technical analysis, the European Commission adopted a recommendation for a Council opinion on the programme on 7 March 2007. The ECOFIN Council is expected to adopt its opinion on the programme on 27 March 2007.

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

http://ec.europa.eu/economy_finance/about/activities/sgp/main_en.htm

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SUMMARY AND CONCLUSIONS[1]

As part of the preventive arm of the Stability and Growth Pact, each Member State that does not use the single currency, such as Latvia, has to submit a convergence programme and annual updates thereof. The most recent programme, covering the period 2006-2009, was submitted on 12 January 2007.

Latvia is a catching-up country undergoing structural transformation with very high economic growth, and which has been making substantial progress in closing the gap with EU25 income per head. It faces relatively high inflation reflecting the convergence process, product and factor market rigidities and more recently an increasingly evident overheating. Unemployment has fallen (though is still at a high level in some regions) and labour shortages have appeared in key sectors. Taken together with demand pressures, labour supply constraints, exacerbated by significant outward migration and a progressively declining working-age population, have resulted in upward wage pressure. Consequently, although labour productivity is growing, unit labour costs are increasing more rapidly than in Latvia's main trade partners, thus undermining competitiveness.

High trade deficits in goods are only partly compensated by surpluses in services. Behind the external deficit lies a structural private sector saving-investment gap: increasing saving of the private sector has been outweighed by higher and more rapidly increasing private sector investment. High external imbalances imply reliance on equally-large financial inflows, mainly in the form of bank credit, and their scale has led to the gross external debt-to-GDP ratio having risen to a very high level. From a viewpoint of long-term sustainability, public finances in Latvia appear healthy, in view of the low public debt ratio and relatively high potential output growth in the long term. However, from a macro-financial stability perspective, while nominal general government deficits have remained moderate in recent years, significant demand injections are also due to expenditure financed with EU funds. In the current context of evident overheating the underlying pro-cyclical fiscal stance is of great concern.

This analysis leads to the identification of the following budgetary policy challenges in the years ahead: On the one hand, in the area of stabilisation, a prudent fiscal policy stance needs firstly to avoid adding further to demand pressures in an economy running well above potential (internal imbalance), and so helping to counter the widening external deficit (external imbalance) and secondly to remedy the lack of effective medium-term budgetary planning. The planned pro-cyclical loosening in 2007 threatens to aggravate imbalances in the Latvian economy. Therefore, further measures should be envisaged to regain macroeconomic stability[2]. On the other hand, regarding efficiency, prioritising public investment in infrastructure and other growth-promoting expenditure,

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

[2] On 6 March 2007, the Latvian government announced a plan aiming at combating inflation. This includes a revision of the budgetary targets, with a balanced budget in 2007 and 2008 and a surplus from 2009 onwards. However, this technical assessment is based on the convergence programme. The plan announced on 6 March 2007, if fully implemented, would represent an important step in the right direction.

taking account of the wider economic context, is an urgent challenge, particularly given the very large sums allocated to the EU-funded projects. In this context, it is necessary to improve appraisal, management and financial control of major capital projects.

The macroeconomic scenario underlying the convergence programme envisages a soft-landing of the economy, with real GDP growth slowing from 11.5% in 2006 to 8.0% on average over the rest of the programme period. Assessed against currently available information, this scenario appears to be based on plausible growth assumptions. Nevertheless, there is a significant probability of much less favourable macroeconomic developments in view of large external imbalances and the overheated state of the Latvian economy. The programme's projections for inflation appear to be on the low side.

Although the positive output gap, as implied by the Commission services autumn 2006 forecast, is closing and becomes negative in 2008, the overall macroeconomic situation remains favourable, with strong GDP growth, a decreasing rate of unemployment and a modest growth in employment being characteristic for the whole programme period. Therefore, it can be said that in the base case scenario, Latvia will experience economic good times over the whole programme period, but the risks accompanying this scenario are very high.

For 2006, the Commission services' autumn 2006 forecast estimated the general government deficit at 1.0% of GDP, against a target of 1.5% of GDP set in the previous update of the convergence programme. The most recent update of the programme presents a deficit estimate of 0.4% of GDP, which is plausible in view of the higher than expected revenues and despite the impact of budgetary amendments adopted in October 2006, which increased expenditures by an estimated 1.5% of GDP.

The main goal of the medium-term budgetary strategy of the programme is to gradually improve the fiscal outlook and achieve a balanced budget by 2010. This goal will require a considerable consolidation effort after the deterioration in 2006 and 2007 by almost 1½ percentage point of GDP. The envisaged adjustment in 2008 and 2009 is identical in the headline and in the primary balance, respectively 0.4 and 0.5 percentage points of GDP. Compared to the previous update, the planned budgetary targets are more stringent, but the adjustment remains back-loaded against a more favourable macroeconomic scenario. After the significant loosening of the expenditure-to-GDP ratio in 2007, the programme envisages consolidating the budget during 2008-2009 by increasing the revenue-to-GDP ratio by 0.4 percentage points each year, while keeping broadly constant the expenditure-to-GDP ratio. The revenue-to-GDP ratio is planned to increase mainly due to higher "other" revenues, which represents an increased inflow of EU funds. Accordingly, the expenditure ratio for the gross fixed capital formation component is increasing, broadly offset after 2007 by a decline in "other" expenditures (which in the programme includes part of consumption expenditure) by ¾ percentage points in 2008 and in social transfers by ½ percentage points in 2009.

The structural balance (i.e. the cyclically-adjusted balance net of one-off and other temporary measures) calculated according to the commonly agreed methodology is planned to deteriorate from a deficit of 1% of GDP in 2006 to a deficit of 1¾% of GDP in 2007 and to improve to a surplus of ¼% by 2009. The medium-term objective (MTO) for the budgetary position presented in the programme is a structural deficit of 1% of GDP, which is in line with the Pact. The programme aims to achieve the MTO around 2008.

The risks to the budgetary projections in the programme appear broadly balanced for 2007, but the budgetary outcomes could be worse than projected in the programme from 2008, due to risks to the macroeconomic scenario. The budgetary strategy relies on an increase in the revenue-to-GDP ratio and on declines in the ratios to GDP of social transfers and "other expenditure" (which in the programme includes part of consumption expenditure), which could have been better substantiated, taking into account that according to the update a formal medium-term framework for the planning and control of public finances is planned to be introduced from 2008 onwards.

In view of this risk assessment, the budgetary stance in the programme may not be sufficient to ensure that the MTO is achieved by 2008, as envisaged in the programme. However, it seems to provide a sufficient safety margin against breaching the 3% of GDP deficit threshold with normal macroeconomic fluctuations throughout the programme period. Except for 2007, the pace of the adjustment towards the MTO implied by the programme is broadly in line with the Stability and Growth Pact, which specifies that the adjustment should be higher in good economic times and could be lower in bad economic times. Nevertheless, 2007 is clearly a year of moving away from the MTO in economic good times, which is not in line with the Stability and Growth Pact. A stronger structural adjustment path frontloaded during the programme period would be appropriate to support a stable macroeconomic convergence process and the mitigation of risks of imbalanced economic growth.

The long-term budgetary impact of ageing in Latvia is lower than the EU average, with age-related expenditure projected to fall as a share of GDP over the coming decades, influenced by the expenditure-reducing impact of the reform of the pension system. The current level of gross debt is very low in Latvia and improving the structural budgetary position as planned in the convergence programme update would contribute to contain the risks to the long-term sustainability of public finances. Overall, Latvia appears to be at low risk with regard to the sustainability of public finances.

The October 2006 implementation report of the national reform programme (NRP) of Latvia, provided in the context of the renewed Lisbon strategy for growth and jobs, identified as key challenges/priorities: securing macro-economic stability; stimulating knowledge and innovation; developing a favourable and attractive environment for investment and work; fostering employment; and improving education and skills. The Commission's assessment of this programme (adopted as part of its December 2006 Annual Progress Report[3]) showed that Latvia is making progress in the implementation of its NRP, in particular in the micro-economic and employment areas. However, policy responses to address the macro-economic key challenge are less comprehensive. Against the background of strengths and weaknesses identified, Latvia was recommended to pursue a more restrictive fiscal policy; take action in the areas of R&D and innovation; and promote labour supply and productivity by improving mobility, education and training. The convergence programme and the NRP are to some extent integrated. In particular, both programmes envisage significant increase in public investment and the convergence programme further expands on measures to be implemented in order to improve the institutional features of the public finances, including the introduction of the multi-annual budgetary framework.

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

The overall conclusion is that the worsening of the budgetary position in 2007 is not in line with a prudent fiscal policy aimed at ensuring sustainable convergence, including by reducing the external imbalance and containing inflation. In the subsequent years, the programme envisages progress towards the MTO in a context of strong growth prospects, but the budgetary targets are not ambitious and there are risks to their achievement from 2008 onwards.

Comparison of key macroeconomic and budgetary projections

		2005	2006	2007	2008	2009
Real GDP (% change)	**CP Jan 2007**	**10.2**	**11.5**	**9.0**	**7.5**	**7.5**
	COM Nov 2006	10.2	11.0	8.9	8.0	n.a.
	CP Nov 2005	*8.4*	*7.5*	*7.0*	*7.0*	*n.a.*
HICP inflation (%)	**CP Jan 2007**	**6.9**	**6.6**	**6.4**	**5.2**	**4.2**
	COM Nov 2006	6.9	6.7	5.8	5.4	n.a.
	CP Nov 2005	*6.9*	*5.6*	*4.3*	*3.5*	*n.a.*
Output gap (% of potential GDP)	**CP Jan 2007[1]**	**0.0**	**1.8**	**1.3**	**-0.5**	**-2.0**
	COM Nov 2006[5]	-0.2	1.1	0.4	-1.0	n.a.
	CP Nov 2005[1]	*0.8*	*0.4*	*-0.5*	*-1.1*	*n.a.*
General government balance[6] (% of GDP)	**CP Jan 2007**	**0.1**	**-0.4**	**-1.3**	**-0.9**	**-0.4**
	COM Nov 2006	0.1	-1.0	-1.2	-1.2	n.a.
	CP Nov 2005	*-1.5*	*-1.5*	*-1.4*	*-1.3*	*n.a.*
Primary balance[6] (% of GDP)	**CP Jan 2007**	**0.7**	**0.2**	**-0.8**	**-0.4**	**0.1**
	COM Nov 2006	0.7	-0.4	-0.7	-0.7	n.a.
	CP Nov 2005	*-0.7*	*-0.8*	*-0.6*	*-0.6*	*n.a.*
Cyclically-adjusted balance[6] (% of GDP)	**CP Jan 2007[1]**	**0.1**	**-0.9**	**-1.7**	**-0.8**	**0.2**
	COM Nov 2006	0.2	-1.3	-1.3	-0.9	n.a.
	CP Nov 2005[1]	*-1.7*	*-1.6*	*-1.3*	*-1.0*	*n.a.*
Structural balance[2,6] (% of GDP)	**CP Jan 2007[3]**	**0.1**	**-0.9**	**-1.7**	**-0.8**	**0.2**
	COM Nov 2006[4]	0.2	-1.3	-1.3	-0.9	n.a.
	CP Nov 2005	*-1.7*	*-1.6*	*-1.3*	*-1.0*	*n.a.*
Government gross debt (% of GDP)	**CP Jan 2007**	**12.1**	**10.7**	**10.5**	**10.6**	**9.4**
	COM Nov 2006	12.1	11.1	10.6	10.3	n.a.
	CP Nov 2005	*13.1*	*14.9*	*13.6*	*13.7*	*n.a.*

Notes:
[1]Commission services calculations on the basis of the information in the programme.
[2] Cyclically-adjusted balance (as in the previous rows) excluding one-off and other temporary measures.
[3] There are no one-off and other temporary measures in the programme
[4] There are no one-off and other temporary measures in the Commission services' autumn 2006 forecast.
[5]Based on estimated potential growth of 9.3%, 9.6%, 9.6% and 9.5% respectively in the period 2005-2008.
[6]The net costs of the ongoing pension reform (introduction of a second pillar) are included in the deficit. The costs are estimated at 0.3% of GDP in 2005, 0.4% of GDP in 2006, 0.6% of GDP in 2007, 1.3% of GDP in 2008 and 1.5% of GDP in 2009. The year-on year change in the structural balance foreseen in the programme, adjusting for the impact of the phased implementation of the pension reform, would be a worsening of 0.6% of GDP in 2007, an improvement of 1.6% in 2008 and 1.2% in 2009.

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

1. INTRODUCTION

The third update of the Latvian convergence programme[4], covering the period 2006-2009, was submitted on 12 January 2007. The late submission reflects the situation that Latvia held parliamentary elections in October 2006 with a new government formed in November. The Latvian Cabinet approved the convergence programme on 9 January 2007 and it was sent to the Budget and Financial Affairs committee as well as the European Affairs committee of the Latvian Parliament. There is no formal parliamentary approval of the convergence programme in Latvia.

The programme broadly follows the model structure for stability and convergence programmes specified in the code-of-conduct. The programme provides all compulsory and most optional data prescribed by the code of conduct[5]. However, some inconsistencies exist with regards to standard Table 2[6]. Annex 3 provides a detailed overview of all aspects of compliance with the code of conduct.

2. ECONOMIC TRENDS AND POLICY CHALLENGES

This section is in five parts. The first provides a brief overview of the macroeconomic performance in terms of growth and other major macro-variables. The second part presents the results of a growth accounting exercise and tries to identify the main reasons for low or high average annual economic growth vis-à-vis the EU10. The third looks at the volatility of growth and other key macroeconomic variables and the stabilising or destabilising role of macro-policies. The fourth part focuses on trends in public finances. The fifth part then identifies major economic challenges with implications for public finances.

2.1. Economic performance

Upon Latvia's regaining independence in 1991, the Latvian economy experienced a sharp decline as it began its transition to a market economy and lost most of its economic links with the former USSR. Real GDP during 1991-93 fell by about 50 percent. Inflation surged towards hyper-inflation in 1992. A short period of recovery, with GDP growing at 2.2% in 1994, ended when the economy was struck a blow by the banking crisis of 1995. The Latvian banking system (which embraced offshore banking activities for Russians) all but collapsed when the then largest bank in the Baltic States, Baltija Bank, went bankrupt. Nonetheless, since the capital markets were not yet deep and households bore the lion's share of the cost by losing their savings, the damage to the economy in terms of

[4] The English translation of the programme was submitted on 2 February 2007.

[5] Optional data have not been provided in Table 4 on 'Stock-flow adjustment', 'Liquid financial assets' and 'Net financial debt' (lines 5, 6 and 7) and in Table 7 on 'Interest expenditure', 'Pension reserve assets' and 'Consolidated pension fund assets'.

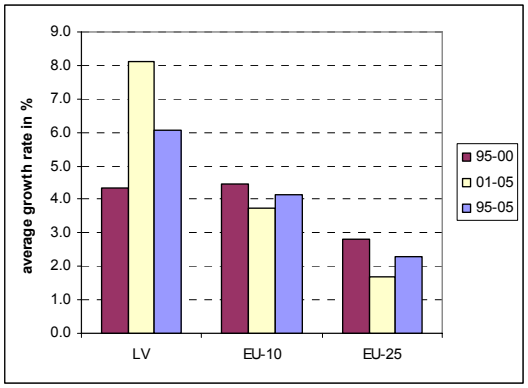
[6] For 2005, individual consumption (social transfers in kind) is misclassified into line 21 ("other" expenditure), instead of line 17a. From 2006 to 2005 collective consumption (line 16) increased by 4.0 percentage points, which is inexplicable by normal development. Furthermore, according to the table, compensation of employees (pm line) decreases over the programme period, which appears to be inconsistent with large public sector wage increases.

output and employment losses was limited. Recovery was back on track the following year. It seems that at this crucial point the economy was already benefiting from the earlier economic reforms and the restructuring these brought about. Furthermore, trade relations with Russia remained undisrupted. At the same time, the newly-gained access to European markets and a significant inflow of foreign direct investment was instrumental in safeguarding the recovery. The restructuring of the economy led to a dramatic adjustment of the labour market. Employment dropped from 79.3% of the working age population in 1991 to 59.1% in 2000. During these ten years the annual decline in employment averaged 3.8% and the only year when the employment level increased was 1997. The downward trend has since been reversed. Similarly, from being virtually non-existent, unemployment rose to reach an all-time high of 20.6% in 1996 before gradually falling back.

The monetary policy followed by the Bank of Latvia, coupled with the government's fiscal and wage policies, led to a considerable reduction of inflation. The year-on-year growth of the consumer price index fell to a single digit level in 1997 and declined further in subsequent years to around 1 percent in the summer of 2002, before picking up again. In the early stage of the reform process, inflation in Latvia was generally related to credit growth and price liberalization. From 1993 inflation became dominated by other factors, such as the country's economic cycle, external shocks and indirect tax changes.

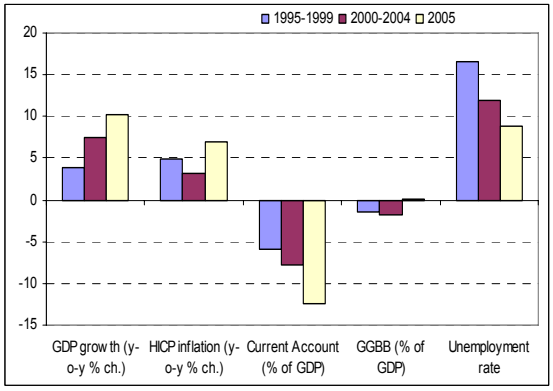
After achieving progress in economic reforms and in stabilisation and enjoying a period of high economic growth in the mid-1990s, the Latvian economy suffered a fresh downturn from mid-1998 as a result of the Russian currency crisis. However, supported by a successful export reorientation toward EU markets and helped by comprehensive structural reforms in the financial and enterprise sectors, the economy recovered from early 2000, with industrial output and investment growing and business confidence improving. In the period 1995-2005 real GDP growth averaged 6.1% per year, markedly higher than the 4% recorded by the EU10 as a whole (see Figure 1). This growth performance has been characterised by increased productivity and more recently also by employment growth. Since 2001, employment has grown each year on average by 1.6%. The unemployment rate fell from 13.7% in 2000 to 8.9% in 2005. Strong growth has helped Latvia's GDP per capita in Purchasing Power Standards (PPS) to rise rapidly from 32% of the EU25 average in 1996 to 47% in 2005. Nominal convergence has been particularly swift following EU accession. Real GDP finally exceeded the pre-1991 level in 2005. Partly stimulated by preparing for EU accession and continuing to date, Latvian economic policy makers have pursued liberal trade policies, limited budget deficits, implementation of structural reforms and the creation of a competitive economic environment.

Figure 1: Average growth in Latvia compared with the EU10 and the EU25



Source:
Commission services

Figure 2: Main macroeconomic trends in 1995-2005



Source:
Commission services

In demand terms, growth has been domestically driven. Private sector investment and private consumption have been the major driving forces. An important role has been played by credit expansion to the private sector at an annual rate of 40-60% (with significant foreign currency-denominated lending)[7]. Rapid credit growth, essentially bank lending, has been particularly concentrated in the real estate sector, with an expansion of construction activity and very fast-rising property prices. Thus from a supply-side perspective, although investment has increased, the increase has not been weighted towards increasing capacity in the manufacturing or more generally tradeable goods and services sectors of the economy. This pattern is replicated in terms of current output, where growth of the tradeable sector has lagged far behind that of non-tradeables. The share of manufacturing in total output fell precipitately in the late 1990s and has not subsequently recovered.

Consistently with this pattern, export performance during the last decade has been unimpressive, with a notable lack of progress compared with other central and eastern European states in moving up the quality and technology ladder[8]. Net exports have been volatile, showing both positive and negative contributions to GDP growth in individual years. However, the overall impact of net exports has been clearly negative, revealing the economy's dependence on imports. The merchandise trade balance averaged 15% of GDP during 1996-2002 but has significantly worsened since 2003, reaching around 19% of GDP. Averaging 7.5% of GDP during 1996-2005 and showing similarities with the other Baltic states, Latvia's external deficit was significantly larger than in the non-Baltic EU 10 countries. Moreover the deficit has recently widened further despite a significant increase in inflows of EU funds: in 2005 the deficit approached 11.4% of GDP. The behaviour of the real exchange rate is one explanatory factor. While repegging to the euro from the beginning of 2005 initiated a period of stable nominal effective exchange

[7] Recent rates of credit growth in Latvia are among the very highest among the so-called "early risers" transition economies. See Hilbers, P., I. Ötker, C. Pazarbasioglu, G. Johnsen (2005), *Assessing and Managing Rapid Credit Growth and the Role of Supervisory and Prudential Policies*, IMF Working Paper WP/05/151.

[8] See, for example, World Bank (2007), *EU8+2 Regular Economic Report*, January.

rates (following an earlier depreciation trend), subsequent relative price and cost behaviour has resulted in declining competitiveness on all the major measures. Underlying this vulnerability are very high increases in compensation, fuelled by decreasing labour market slack exacerbated by emigration, which have outstripped even rapid productivity growth.

In sectoral terms there is a large structural private sector saving-investment gap: increasing saving of the private sector has been outweighed by higher and more rapidly increasing private sector investment, concentrated in sectors unlikely to contribute significantly to easing the external constraint. High external imbalances imply reliance on equally large capital inflows. The gross external debt ratio has risen above 90% of GDP in 2005 while the build-up in net foreign liabilities has risen from near-zero in 1995 to nearly 60% of GDP at the end of 2005. Financing has taken the form chiefly of debt, with FDI playing a minor role (and given the preceding analysis, then chiefly to finance the services sector rather than an expansion of manufacturing).

Economic development has amplified regional imbalances. The most rapid growth rates have been in the Riga capital city region (attracting nearly 60% of foreign investment) and those parts of the country traditionally associated with export-oriented sectors and transit services. The country's imbalanced development is illustrated by regional per capita GDP figures, which show distinct differences between the economically-powerful Riga capital city region, which in 2005 produced more than 70% of all industrial output and market services, and Latgale, which contributed less than 10% of the country's GDP.

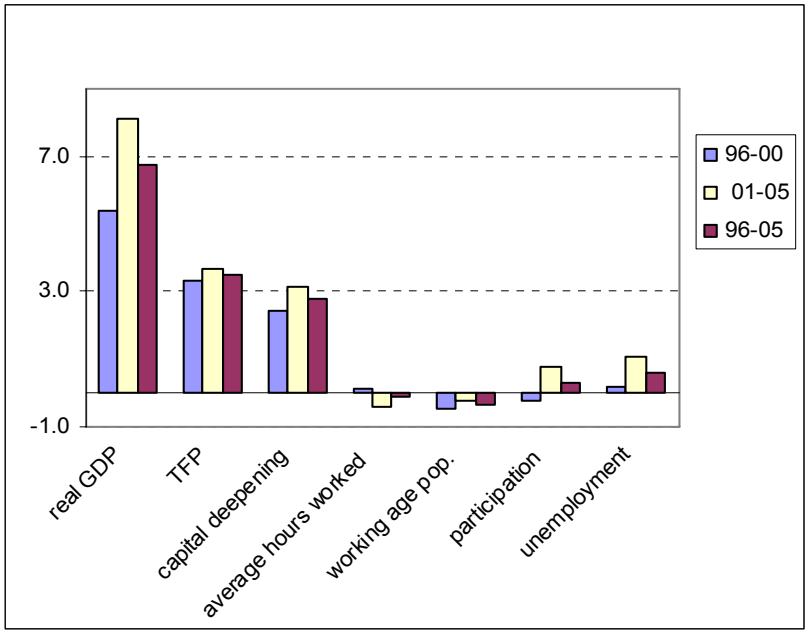
Annual HICP inflation in Latvia remained within the 2-3% range throughout 1999-2003 before rising sharply to 6.2% in 2004 and escalating further to 6.9% in 2005. Since July 2004 inflation in Latvia has been the highest among the Member States with stubbornly high core inflation. As regards labour costs, up to 2003, average wage growth was not significantly out of line with productivity growth. However, wages accelerated noticeably between 2002 and 2005 (gross nominal wages from 8.8% to 16.6% annually) to outpace productivity growth, with labour scarcities contributing to wage pressures more recently worsened by large-scale emigration.

2.2. Anatomy of medium-term growth

Within the framework of a traditional growth accounting exercise, this section examines the sources of high or low average growth as well as possible differences in average economic growth vis-à-vis the EU10. The growth accounting exercise is carried out on the basis of a Cobb-Douglas production function, the results of which are shown in Figure 3 for real GDP over the 1996-2005 period. The dominant contribution to real GDP growth has come from TFP, whereas capital-deepening has gained importance over time. TFP growth averaged about 3% per annum, a result which stands out when comparing with the EU10 (Figure 4).

Compared with the EU10 average, a more important role also has been played by capital-deepening, especially since 2000. Even though the lion's share of FDI was directed to the financial sector, recent trends confirm that investment in manufacturing has increased at

Figure 3: Real GDP growth and its components



Note:
Assuming a Cobb-Douglas-production function $Y = A(L \cdot H)^{\alpha} K^{1-\alpha}$ where Y denotes the level of *GDP*, L employment, H the average hours worked per person employed, K the capital stock and α the labour share in income, real GDP can be written as $Y = \frac{Y}{H \cdot L} H \cdot L = A \cdot \left(\frac{K}{H \cdot L} \right)^{1-\alpha} H \cdot WP \cdot PART \cdot (1 - ur)$ where WP stands for working age population, $PART$ denotes the participation ratio as a share of WP and ur the rate of unemployment. In terms of growth rates g this is:

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

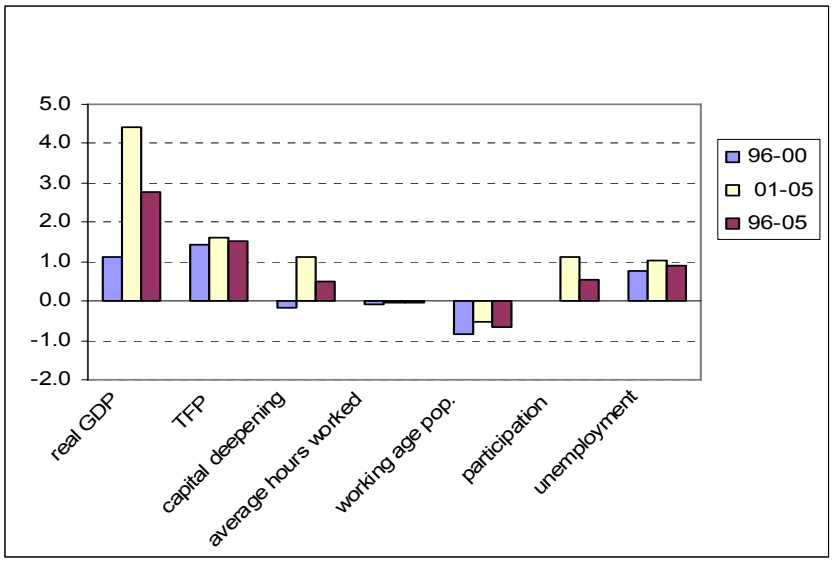
The expression $(g_K - g_L - g_H)$ is referred to as capital deepening, i.e. the increase in the capital labour ratio.

Source:
Commission services

the same time as the number of employees in this sector has fallen, freeing labour to shift into the rapidly expanding services sector. While the contribution to increased output from extra labour input has been marginal overall, sub-components illustrate diverging trends. First, it is clear that there has been a detrimental demographic situation over the period with a decreasing share of the population in working-age cohorts. Also, there appears to have been a decline in average hours worked. However, this has been counteracted by higher participation rates, in particular over the last five years. These trends, though more pronounced in Latvia, correspond to the developments in the EU10 more generally. This can partly be explained by the fact that Latvia went through a more severe structural adjustment phase just after the beginning of the transition, which affected a wide range of socioeconomic indicators, including population health, fertility and life expectancy. Thus, it has taken longer before the recovery could be observed in labour market indicators.

During the 1996-2005 period unemployment dropped significantly, while the estimated NAIRU rate declined more gradually. Consequently, the actual rate of unemployment fell below the estimated NAIRU. Despite the positive development of decreasing unemployment, structural problems in the labour market have remained an important impediment to economic growth, in particular the low geographical mobility of workers and skills mismatches and more recently the large-scale emigration of those seeking employment in other Member States.

Figure 4: Real GDP growth and its components: Difference vis-à-vis the EU10 average



Note:
See note of Figure 3

Source:
Commission services

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

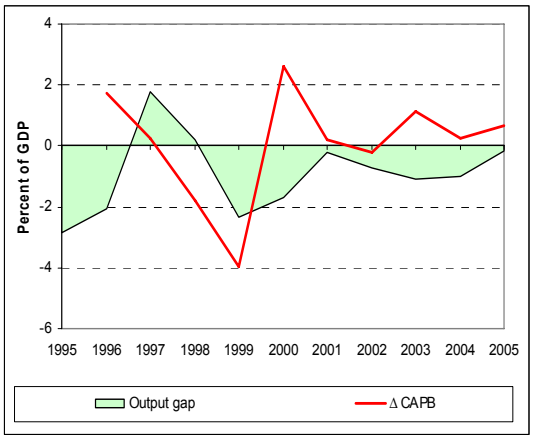
Apart from the disruption in 1998 and 1999, annual GDP growth was stable at a level of around 6-8% over the 1996-2005 period. However, due to the past and ongoing structural changes it is still very difficult to assess the cyclical position of the economy. Despite high growth rates, the estimated output gap has been negative with only two notable exceptions: 1997 and 2005 when the real growth rate reached 8.3% and 10.1% respectively. The output gap remaining negative (albeit close to zero) during 2000-2004 could be explained in terms of growth being accompanied by capital-deepening[9]. Nonetheless, in the last few years the pick-up in prices has been reflected in all inflation indices, including wage inflation, consistent with sustained above-potential economic growth[10].

[9] On the other hand, potential output may be overestimated in case of Latvia, e.g. because measured capital stock does not differentiate between types of investments and investment is construction has boomed.

[10] In small, open economies, like Latvia, another indicator of overheating is the external account imbalance.

Figure 5 plots the estimate of the output gap with the change in the cyclically-adjusted primary balance, a measure of the fiscal stance. While the fiscal position weakened in the wake of the 1998 Russian crisis, subsequent consolidation was achieved by restraining expenditure below the budget appropriations. However, following the 2002 slippage, fiscal policy had a mildly pro-cyclical stance. This is evident from closer analysis of the tax elasticities. While tax policy, if anything, would suggest reductions in tax elasticities across all the major tax categories, the evidence is of the opposite. In particular elasticities of indirect taxes have shown abnormal developments exceeding long-term averages by up to 70%. The Latvian authorities have commonly revised budgets to allow for higher expenditure whenever revenues exceed forecasts, as has regularly been the case. As only part of such windfall tax revenue was directed towards deficit reduction, despite the increasing evidence of overheating, automatic stabilizers were not allowed to play to their full extent.

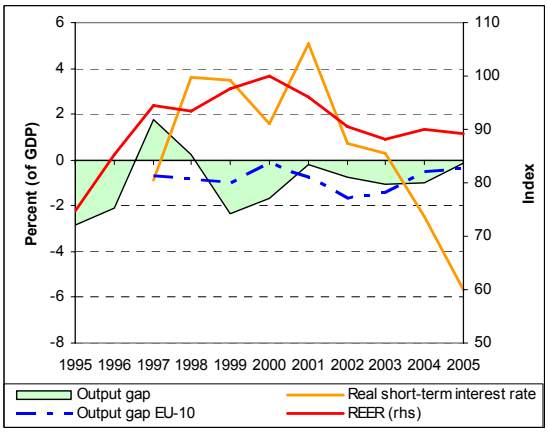
Figure 5: Output gap and fiscal stance



Note:
ΔCAPB denotes the change in the cyclically-adjusted primary budget balance

Source: Commission services

Figure 6: Output gap and monetary conditions



Note:
Source: Commission services

Chart 6 assesses Latvia's cyclical position against the backdrop of monetary conditions, by plotting the estimates of the output gap for Latvia and the EU10 average against real short-term interest rates and the real effective exchange rate. As evident from the chart, economic cycles for Latvia and the EU10 have moved broadly together but with the cycle in Latvia appearing to be more volatile than in the EU10, with GDP reacting more strongly to external shocks. Upon Latvia's entry in ERM II on 2 May 2005, with the unilateral adoption of narrow intervention margins against the euro central rate interest spreads to the euro were compressed. Since, changes in the short-term interest rate mirrored developments in the euro area. However, spreads widened in late-2005 in response to a tightening of reserve requirements which tightened liquidity conditions. Monetary conditions, as indicated by the fall in real short-term interest rates coinciding with a broadly stable real effective exchange rate, have become more distinctly expansionary from 2001 onwards. This has contributed to intensified demand pressures.

Box 1: Monetary policy and exchange rate regimes of LATVIA	
Peg of the lats to SDR basket (February 1994)	The Bank of Latvia was established by the Parliament and operates under the "Law on the Bank of Latvia", adopted in 1992. The Bank is independent in the adoption of its decisions and in their practical implementation. The primary objective of the Bank of Latvia is to maintain price stability. In order to achieve this objective, the Bank of Latvia has implemented since February 1994 an exchange rate peg. Initially, the lats was pegged to the SDR basket of currencies at the fixed rate 0.7997 LVL per 1 SDR. The normal fluctuation band around the fixed peg rate was ±1 percent. The peg was maintained despite two periods of significant distress in Latvian financial markets which triggered substantial interventions in the foreign exchange market to sustain the peg in response to substantial capital outflows: the domestic banking crisis in 1995, and the Russian crisis in 1998.
Repegging of the lats to the euro *(1 January 2005)*	On 1 January 2005, the lats was repegged to the euro. The central parity was set at the prevailing market rate of 1 euro = 0.702804 lats.
Membership of ERM II (*2 May 2005)*	The central parity against the euro was kept unchanged. Latvia unilaterally adopted a narrower fluctuation corridor of ±1% around the central parity. Lats has remained within the narrow band since.

At the end of the period, the fiscal situation in Latvia at first glance appeared healthy, in view of the low public debt ratio, contained deficits and relatively high average potential output growth in the long term. However, with the balance of indicators clearly suggesting that the economy was growing above potential, leading to substantial revenue windfalls, and taking account of the consolidation within the budget of substantial net inflows of EU funds, a more searching scrutiny suggests the stance of fiscal policy was significantly pro-cyclical.

2.4. Public finances

Public finances moved from a period of fiscal consolidation in which the general government balance averaged a deficit of 0.6% of GDP (1994-1998) to a period of non-negligible deterioration, leading to deficits of 1.5% on average (2000-2005). Government debt remained between 9.5% and 15% of GDP during the 1996-2005 period, well below the reference value of 60% of GDP. Debt interest payments declined steadily from 1.4% of GDP in 1996 to just 0.6% in 2005 The implicit interest rate fell from around 10% to under 5% over the same period, reflecting the decline in global interest rates but also to some apparent extent the credibility of the macroeconomic framework and of the peg to the euro in particular.

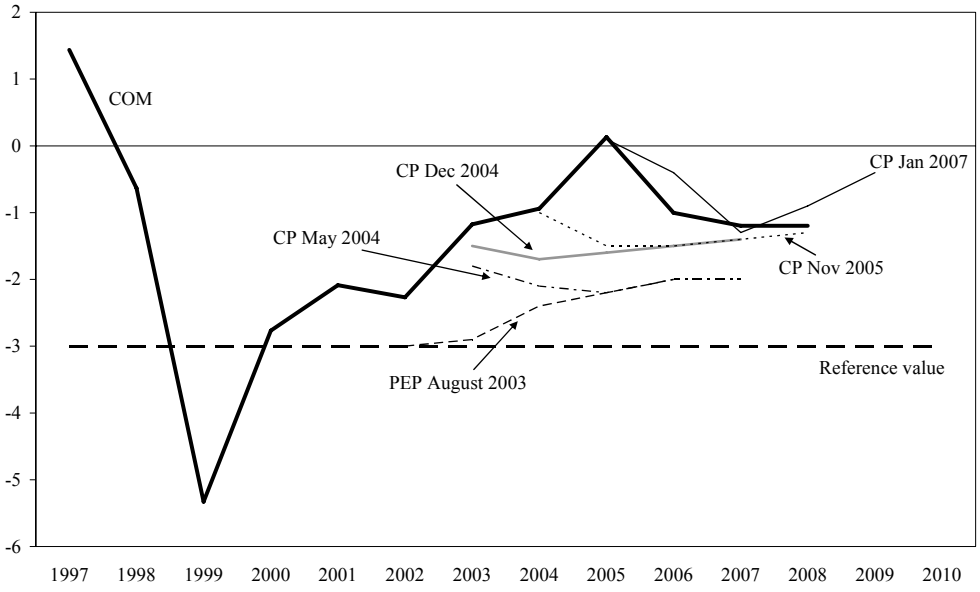
Fiscal strategy aimed at containing deficits below the 3% of GDP reference value. However, given the robust growth performance the operational general government deficit targets tended to gravitate to about 1.5% of GDP. Looking at the track record of the public finances projections over recent years, on average outturn balances have been slightly better than initially projected (by around 0.2% of GDP), in particular because revenue growth was underestimated. This can, however, be explained by a common practice of preparing budgets using a cautious macroeconomic forecast and adjusting the expenditure based on the actual revenue during the year. The essential weakness of budgetary procedures thus originates from the absence of a multi-annual framework with well-defined expenditure targets and control methods. Expenditure is allocated according to past performance and not to strategic goals, thus encouraging inefficient spending.

Despite the lack of clear strategy, expenditure policy is aimed at a moderation of overall public expenditure growth, while promoting growth of the wider economy. Over the ten years to 2005, the expenditure-to-GDP ratio first declined from 37% in 1996 to 34.6% in 2003 and then returned to an increasing trend[11]. As for the functional classification of primary expenditure, spending on social protection was reduced, while spending on education and economic affairs rose.

On a year-to-year basis, the revenue to GDP ratio fluctuated with the economic cycle. Over the ten years, it first declined before returning to an increasing trend from 2001. Fiscal policy has been aimed at reducing the tax burden. From 1995 the overall tax burden declined from 34.0% of GDP to 29.6% of GDP in 2005. Within this, the share of direct taxes decreased gradually, whereas the share of consumption and capital taxes expanded. With privatization largely concluded in 1997, the inflow of EU funds became an important source of revenue and on average amounted to 1.7% of GDP in years 2001-2005. From 2004 EU funds became even more important, exceeding 2.5% of GDP.

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

[11] This description excludes 1998 and 1999, these years being unrepresentative of normal developments.



Note:
PEP = pre-accession economic programme.
Source:
Commission services' autumn 2006 forecast (COM) and successive convergence programmes

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

Latvia is a catching-up country undergoing structural transformation with very high economic growth, and which from a very low level has been making substantial progress in closing the gap with EU25 income per head. It faces relatively high inflation originating from a mixture of Balassa-Samuelson effects, product and factor market rigidities as well as nominal price level convergence, but more recently from increasingly evident overheating. Unemployment has fallen (though is still at a high level in some regions) and labour shortages have appeared in key sectors. Taken together with demand pressures, labour supply constraints, exacerbated by significant outward migration and a progressively declining working-age population, have resulted in upward wage pressure. Consequently, although labour productivity is growing, unit labour costs are increasing more rapidly than in Latvia's main trade partners, thus undermining competitiveness. High trade deficits are only partly compensated by surpluses in services. Behind the external deficit lies a structural private sector saving-investment gap: increasing saving of the private sector has been outweighed by higher and more rapidly increasing private sector investment. High external imbalances imply reliance on equally-large financial inflows, mainly in the form of bank credit, and their scale has led to the gross external debt-to-GDP ratio having risen to a very high level. From a viewpoint of long-term sustainability, public finances in Latvia appear healthy, in view of the low public debt ratio and relatively high potential output growth in the long term. However, from a macro-financial stability perspective, while nominal general government deficits have remained moderate in recent years, these mask significant demand injections through expenditure financed with EU funds and in the current context of evident overheating the underlying pro-cyclical fiscal stance is of great concern.

The analysis above leads to the identification of budgetary policy challenges in the years ahead:

- *Stabilisation*: A prudent fiscal policy stance needs to tackle two core issues. These are, first, avoiding adding further to demand pressures in an economy running well above potential (internal imbalance), and so helping to counter the widening external deficit (external imbalance); secondly, remedying the lack of effective medium-term budgetary planning.

- *Efficiency*: Prioritising public investment in infrastructure and other growth-promoting expenditure, taking account of the wider economic context, is an urgent challenge, particularly given the very large sums allocated to the EU-funded projects. In this context, it is necessary to improve appraisal, management and financial control of major capital projects.

Table 1: Key economic indicators

	Latvia						EU-10					
	Averages			2003	2004	2005	Averages			2003	2004	2005
	'96–'05	'96–'00	'01–'05				'96–'05	'96–'00	'01–'05			
Economic activity												
Real GDP (% change)	6.8	5.4	8.1	7.2	8.6	10.2	4.0	4.3	3.7	4.0	5.1	4.6
Contributions to real GDP growth:												
Domestic demand	8.7	6.6	10.7	11.7	13.7	9.6	4.3	5.3	3.4	4.1	5.6	3.0
Net exports	-1.9	-1.2	-2.6	-4.5	-5.1	0.7	-0.3	-1.0	0.4	0.0	-0.5	1.6
Prices, costs and labour market												
HICP inflation (% change)	n.a.	n.a.	4.1	2.9	6.2	6.9	n.a.	n.a.	3.3	1.9	4.1	2.5
Labour productivity (% change)	6.2	6.0	6.4	5.4	7.5	8.6	4.2	4.6	3.7	4.3	4.5	2.9
Real unit labour costs (% change)	-1.5	-1.1	-1.9	1.9	-0.3	-3.1	-0.8	-0.6	-1.0	-0.7	-2.5	-1.8
Employment (% change)	0.6	-0.5	1.6	1.7	1.1	1.5	-0.1	-0.3	0.0	-0.2	0.6	1.7
Unemployment rate (% of labour force)	13.3	15.6	11.0	10.5	10.4	8.9	12.8	11.3	14.2	14.3	14.2	13.4
Competitiveness and external position												
Real effective exchange rate (% change) (1)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Export performance (% change) (2)	1.6	-0.7	3.8	0.7	0.8	11.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
External balance (% of GDP)	-7.5	-6.4	-8.6	-7.3	-11.8	-11.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public finances												
General government balance (% of GDP)	-1.4	-1.5	-1.3	-1.2	-0.9	0.1	n.a.	n.a.	-4.2	-5.1	-3.7	-3.3
General government debt (% of GDP)	12.8	11.9	13.7	14.4	14.5	12.1	38.0	35.8	40.1	39.9	43.4	41.3
Structural budget balance (% of GDP) (3)	n.a.	n.a.	n.a.	-0.8	-0.7	0.2	n.a.	n.a.	n.a.	-4.5	-3.4	-3.0
Financial indicators (4)												
Long term real interest rate (%) (5)	n.a.	n.a.	0.4	1.3	-1.9	-4.9	n.a.	n.a.	n.a.	3.5	2.2	2.2
Household debt (% of GDP) (6)	n.a.	n.a.	n.a.	14.1	20.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt (% of GDP) (7)	n.a.	n.a.	n.a.	45.9	49.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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

Source:
Commission services

3. MACROECONOMIC OUTLOOK

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

3.1. External assumptions

The key external assumptions underlying the macroeconomic scenario of the programme are broadly in line with those underlying the Commission services' autumn 2006 forecast. The programme assumes a slightly weaker euro against the US dollar in 2007-2008 and slightly lower oil prices in 2006-2008 (the biggest difference is in 2007, about 2% lower).

3.2. Economic activity

The programme update projects real GDP growth of 11.5% for 2006, 9.0% for 2007 and 7.5% for both 2008 and 2009, thus assuming a gradual slowdown from historically high rates of growth to just slightly below the average rate of growth in the period 2001-05. According to the programme, private consumption and gross fixed capital formation (GFCF) will remain the main growth contributors, although private consumption is expected to slow significantly over the programme period. Net exports contribute negatively to growth throughout the period.

For 2006, projected GDP growth is a half percentage point higher than the respective figure of the Commission services' autumn 2006 forecast. For 2007, projected GDP growth in the programme and autumn forecast are practically identical and for 2008 broadly in line (Table 2).

More significant differences between the update and the autumn forecast exist regarding the composition of growth. In particular the update indicates much higher growth of private consumption for 2006 and 2007 than does the Commission services' autumn 2006 forecast, due to more severe overheating of the economy than earlier expected.

Gross fixed capital formation is foreseen by the update to continue to grow robustly over the forecast period. The update's GFCF figures project a lower rate of growth than the Commission services for 2007 and the reverse for 2008.

Overall, both exports and imports are projected in the updated convergence programme to grow much more slowly in the period to 2008 than foreseen by the autumn forecast; export growth in particular is relatively low. From 2007 the update depicts a more favourable growth contribution of net exports than does the autumn forecast.

According to the programme, the existing large positive output gap, which developed during the above-potential growth years of 2005-2006, will start to decrease from 2007. By 2008, output will fall below its potential and by 2009 the negative output gap will

reach 2% (Table 3). Despite this apparent caution, in the short-run the programme projections imply a more severe overheating of the economy, representing an increased risk of a hard-landing. It should, however, be noted that output gap figures in general must be interpreted with special caution in the case of an economy such as Latvia's, as potential growth is difficult to determine for an economy subject to a rapid catching-up process.

In the course of 2006, the Bank of Latvia increased the refinancing rate by 100 basis point in two steps, to 5 percent, following the tightening of ECB policy rates. Interest rates in Latvia had converged quite closely to the ones prevailing in the euro area after the repegging of the lats to the euro, especially at the long end of the yield curve. Interbank money market spreads vis-a-vis the euro area, which had widened to around 150 basis points at the end of 2005, were rapidly compressed towards the end of the year. By contrast, 10-year bond spreads widened.

Table 2: Comparison of macroeconomic developments and forecasts

	2006		2007		2008		2009
	COM	CP	COM	CP	COM	CP	CP
Real GDP (% change)	11.0	11.5	8.9	9.0	8.0	7.5	7.5
Private consumption (% change)	12.6	17.0	11.4	12.1	8.9	7.6	7.5
Gross fixed capital formation (% change)	18.5	18.2	11.7	10.5	8.6	10.0	9.0
Exports of goods and services (% change)	14.2	8.6	15.0	11.6	12.8	9.1	8.8
Imports of goods and services (% change)	17.7	18.0	16.3	11.0	11.8	8.7	8.1
Contributions to real GDP growth:							
- Final domestic demand	15.1	17.6	12.3	12.4	9.7	9.3	8.9
- Change in inventories	0.0	0.7	0.0	-1.5	0.0	-0.3	-0.1
- Net exports	-4.1	-6.8	-3.4	-1.9	-1.7	-1.5	-1.3
Output gap[1]	1.1	1.8	0.4	1.3	-1.0	-0.5	-2.0
Employment (% change)	2.6	5.0	1.0	1.5	0.7	1.0	0.5
Unemployment rate (%)	7.4	6.9	7.2	6.6	7.0	6.3	6.0
Labour productivity growth (%)	8.2	6.2	7.8	7.4	7.2	6.4	7.0
HICP inflation (%)	6.7	6.6	5.8	6.4	5.4	5.2	4.2
GDP deflator (% change)	8.7	10.0	8.8	7.5	7.8	6.0	4.5
Comp. of employees (per head, % change)	18.2	23.2	15.0	15.9	12.0	13.4	12.3
Real unit labour costs (% change)	0.6	5.5	-1.9	0.4	-3.1	0.4	0.4
External balance (% of GDP)	-14.4	-17,4	-15.4	-17,2	-14.3	-16,3	-15,8

Note:
[1]In percent of potential GDP, with potential GDP growth as reported in Table 4 below.
Source:
Commission services' autumn 2006 economic forecasts (COM); convergence programme (CP)

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

(% of potential GDP)	2006		2007		2008	
	COM	CP[1]	COM	CP[1]	COM	CP[1]
CP January 2007	-	1.8	-	1.3	-	-0.5
Autumn 2006	1.1	-	0.4	-	-1.0	-
Spring 2006	0.5	-	-0.7	-	0.0	-
CP November 2005	-	0.4	-	-0.5	-	-1.1
Autumn 2005	0.3	-	-0.7	-	0.0	-
Spring 2005	-0.7	-	0.0	-	0.0	-
CP December 2004	-	0	-	-0.5	-	-

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

Source:
Commission services' forecasts, convergence programmes and Commission services

3.3. Potential growth and its determinants

Commission services' calculations using the commonly agreed method on the basis of the figures in the updated programme indicate that potential GDP growth throughout the programme period is expected to remain higher than the average actual growth of the 1996-2005 period. These potential growth figures are in line with the potential growth estimates derived from the Commission services' autumn 2006 forecast. The programme implies a lower contribution from TFP and a higher contribution from labour than the autumn forecast, but the two share the common view that capital accumulation and TFP will be the main future contributors to potential growth.

Table 4: Sources of potential output growth

	2006		2007		2008		2009
	COM	CP[2]	COM	CP[2]	COM	CP[2]	CP[2]
Potential GDP growth (%)[1]	9.6	9.6	9.6	9.5	9.5	9.4	9.2
Contributions:							
- Labour	1.0	1.2	1.0	1.4	1.1	1.4	1.3
- Capital accumulation	4.4	4.4	4.3	4.2	4.1	4.1	3.9
- TFP	3.9	3.7	3.9	3.7	4.0	3.7	3.7

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 convergence programme (CP).

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

3.4. Labour market developments

The projected labour market developments outlined in the programme are broadly in line with the trends of the past five years. According to the programme, the share of the working-age population within the total Latvian population will continue to increase. However, the size of the working-age population will decrease due to continuing emigration following the country's EU entry and to ageing effects. The share of the economically active population is projected to increase slowly towards 70% during the programme period. Employment growth peaked in 2006 at 5.0% and is projected to

continue but at a much slower pace. The projected average labour content of GDP growth - with the exception of 2006, when employment growth was unusually high[12] - is similar to that projected by the Commission services' autumn 2006 forecasts, due to similar employment growth projections (the programme is slightly more optimistic). Favourable cyclical conditions have contributed largely to a recent decline in the rate of unemployment, estimated to have fallen by 2 percentage points from 8.9% in 2005 to 6.9% in 2006 and which is projected to continue to decline slowly towards 6.0% by the end of the programme period. The development of the unemployment rate foreseen by the programme is somewhat more optimistic than the projection of the Commission services' autumn 2006 forecast, which assumes a somewhat higher initial unemployment rate for 2006 of 7.4%.

3.5. Costs and price developments

After HICP inflation of 6.6% in 2006, the programme expects inflation only slightly lower at 6.4% in 2007 and then gradually to decrease by the end of the programme period to 4.2%. The projection regarding 2007 is slightly more pessimistic than the Commission services' autumn forecast, but is substantiated by inflationary pressure arising from above-potential economic growth in 2005-2006 and upward pressure on inflation from increase in administered energy tariffs and excise duty increases. Given that the programme is based on a soft-landing scenario from the current overheated condition of the Latvian economy, not yet evidenced by actual data, chances are high that inflation outturns could be worse than projected in the programme.

The programme assumes faster nominal wage growth than the autumn forecast, with relatively high nominal wage growth for the whole programme period, partly due to evolving labour market constraints and possibly also to regularisation of wages paid in the previously grey economy. Extremely high nominal wage growth in 2006 led to a marked increase in unit labour costs. According to the programme, the pace of nominal wage growth is to gradually slow during the forecast period, but, even so, nominal unit labour costs even in 2009 are expected to increase by 5%, largely undermining the prospect of a rapid reduction in the pace of inflation. Risks are again on the negative side, given that recent data do not indicate a slowing of wage growth. Furthermore, recent large public sector wage increases are likely to exert pressure on private sector wages in the coming years.

3.6. Sectoral balances

According to the update, net borrowing from the rest of the world during the programme period will be well over the levels of the past five or ten years, due mainly to a much higher deficit on goods and services.

Net borrowing from the rest of the world is expected to decrease from 17.4% of GDP in 2006 to 15.8% by 2009, a narrowing of only 1.6 percentage points. This view is more pessimistic than the one taken by the Commission services' autumn forecast and raises the issue of sustainability, especially with regard to the country's already high external indebtedness. Although according to the programme the private sector will gradually improve its position until 2008, the larger part of the relatively huge external borrowing

[12] This is only partly due to real growth, as regularisation of wages paid in the previously grey economy also plays a role.

need would continue arising from this sector. On the other hand, the net borrowing position of the public sector is expected to deteriorate in 2007, thus contributing to the large external imbalances. Latvia would also risk becoming increasingly exposed to potential financial contagion arising elsewhere.

3.7. Assessment

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

3.7.1. Plausibility of the macroeconomic scenario

The growth assumptions of the January 2007 update of the convergence programme are plausible. However, consumption growth fuelled by employment growth, substantially higher wages, soaring confidence in a better economic future and abundant flow of credit is coupled with large external imbalances, which represents a significant risk for the realisation of the programme's economic scenario. The prevailing huge external imbalances foreseen by the programme would further increase the already very high external vulnerability of the Latvian economy. The update projects higher inflation than the average of the past five years and is broadly in line with the autumn 2006 forecast, but nevertheless seems to be slightly optimistic, considering the current inflationary pressure in the economy. Overall, the January 2007 update of the convergence programme is based on plausible macroeconomic assumptions, but the risks accompanying this scenario are very high.

3.7.2. Economic good vs. bad times

According to the Commission services' autumn 2006 forecast, the current positive output gap is expected to close in 2007 and become negative by 2008. Nevertheless strong growth is characteristic for the whole programme period. Real GDP growth largely exceeded the potential growth rate in 2006, which resulted in growth of the labour force and in a sharp decrease in the rate of unemployment. The unemployment rate is projected to decrease further throughout the programme period coupled with a modest growth in employment. Taking into account all the above, the Latvian economy is considered to be in economic good times throughout the whole programme period. However, the risks to sustainability highlighted in this assessment imply that such conditions during the whole programme period are far from assured.

4. GENERAL GOVERNMENT BALANCE

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

4.1. Budgetary implementation in 2006

The most recent update of the convergence programme estimates the outcome for the 2006 deficit at 0.4% of GDP[13]. It follows budgetary amendments adopted in October 2006 foreseeing increases in spending within the year of about 1½% of GDP, which were not included in the 2006 deficit target of 1.5% of GDP set in the previous update of the programme. However, even after taking account of the additional expenditures, in the light of the very strong revenue growth driven by higher-than-anticipated economic growth, the likely outturn is about 1 percentage point better then the original deficit target. In sectoral terms, the outcome combines a sizable surplus (roughly 2% of GDP) on the social security balance and a small surplus on the local government sector balance, offset by a large deficit of the central government sector.

Of the additional expenditure of LVL 162.4 million (1.5% of GDP) decided in the October 2006 supplementary budget, nearly LVL 38 million (0.3% of GDP) was spent on child benefits and on raising police and teachers' salaries and benefits. Another LVL 25.8 million (0.2% of GDP) was distributed in compensation to farmers in response to adverse weather conditions in the summer of 2006. LVL 53.5 million (0.5% of GDP) was used to improve conditions in the healthcare system. Consequently, most of the extra spending accrued to the household sector and generated additional domestic demand.

Table 5: Evolution of budgetary targets in successive programmes

		2005	2006	2007	2008	2009
General government balance (% of GDP)	**CP Jan 2007**	**0.1**	**-0.4**	**-1.3**	**-0.9**	**-0.4**
	CP Nov 2005	-1.5	-1.5	-1.4	-1.3	n.a.
	CP Dec 2004	*-1.6*	*-1.5*	*-1.4*	-	-
	COM Nov 2006	0.1	-1.0	-1.2	-1.2	n.a.
General government expenditure (% of GDP)	**CP Jan 2007**	**36.0**	**37.9**	**39.5**	**39.5**	**39.4**
	CP Nov 2005	36.8	37.5	38.8	38.7	n.a.
	CP Dec 2004	*39.3*	*38.8*	*36.5*	-	-
	COM Nov 2006	36.0	39.5	39.3	38.8	n.a.
General government revenues (% of GDP)	**CP Jan 2007**	**36.2**	**37.5**	**38.2**	**38.6**	**39.0**
	CP Nov 2005	35.3	36.1	37.4	37.4	n.a.
	CP Dec 2004	*37.7*	*37..3*	*35.1*	-	-
	COM Nov 2006	36.2	38.5	38.1	37.6	n.a.
Real GDP (% change)	**CP Jan 2007**	**10.2**	**11.5**	**9.0**	**7.5**	**7.5**
	CP Nov 2005	8.4	7.5	7.0	7.0	n.a.
	CP Dec 2004	*6.7*	*6.5*	*6.5*	-	-
	COM Nov 2006	10.2	11.0	8.9	8.0	n.a.

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

[13] Convergence Programme of the Republic of Latvia 2007-2009.

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 programme aims at making progress in respecting the Maastricht convergence criteria and at a gradual improvement of the fiscal outlook.

The medium-term budgetary strategy of the update is to end by 2009 with the same deficit ratio expected for 2006, i.e. a general government budget deficit of 0.4 percent of GDP, but the achievement of this goal will require a considerable consolidation effort after the planned significant deterioration in 2007. The update also aims to achieve a balanced budget by 2010.

As the interest burden is assumed to remain constant (at the low level of 0.5% of GDP per year), the changes in the headline and in the primary balance are identical. The adjustment is back-loaded to the final two years of the programme (2008 and 2009).

The general government budget deficit figures of the latest programme update are slightly more favourable than those of the previous update. Nevertheless, taking into account that the 2005 and 2006 fiscal outturns were much better than those presented in the previous programme[14] and that the GDP growth expectations of the latest programme are higher than those of the previous programme, the new adjustment path is no more ambitious than the previous one.

The general government data presented in the programme include the pension reform costs resulting from the classification of the second-pillar funded pension schemes outside the general government estimated at 0.4% of GDP in 2006, increasing to 0.7% of GDP in 2007, 1.5% of GDP in 2008 and 1.7% of GDP in 2009[15].

[14] As expected by the Commission services' technical assessment of the previous update.

[15] There are also savings resulting from parametric changes in the pension system, which amount to 0.1% of GDP in 2007 and 0.2% of GDP in 2008-2009. The net costs of pension reform are estimated at 0.3% of GDP in 2005, 0.4% of GDP in 2006, 0.6% of GDP in 2007, 1.3% of GDP in 2008 and 1.5% of GDP in 2009.

Table 6: Composition of the budgetary adjustment

(% of GDP)	2005	2006	2007	2008	2009	Change: 2009-2006
Revenues	36.2	37.5	38.2	38.6	39.0	**1.5**
of which:						
- Taxes & social contributions	29.3	30.2	30.3	30.0	29.9	**-0.3**
- Other (residual)	6.9	7.3	7.9	8.6	9.1	**1.8**
Expenditure	36.0	37.9	39.5	39.5	39.4	**1.5**
of which:						
- Primary expenditure	35.4	37.4	39.0	39.0	38.9	**1.5**
Of which:						
Collective consumption[1]	8.7	12.7	14.2	14.4	13.9	**1.2**
Transfers other than in kind & subsidies	9.3	8.4	7.6	7.5	7.1	**-1.3**
Gross fixed capital formation	2.3	3.0	3.7	4.3	5.1	**2.1**
Other (residual) [1]	15.1	13.3	13.5	12.8	12.8	**-0.5**
- Interest expenditure	0.6	0.5	0.5	0.5	0.5	**0.0**
General government balance (GGB)	**0.1**	**-0.4**	**-1.3**	**-0.9**	**-0.4**	**0.0**
Primary balance	**0.7**	**0.1**	**-0.8**	**-0.4**	**0.1**	**0.0**
One-offs[2]	0.0	0.0	0.0	0.0	0.0	**0.0**
GGB excl. one-offs	**0.1**	**-0.4**	**-1.3**	**-0.9**	**-0.4**	**0.0**

Note:
1 Individual consumption expenditure is included in the residual 'other' category.
[2]One-off and other temporary measures.
Source:
Convergence programme update; Commission services' calculations

4.2.2. The composition of the budgetary adjustment

Based on the expected deficit outcome for 2006, the overall budgetary adjustment until 2009 is zero, as both the revenues-to-GDP and the expenditure-to-GDP ratios are planned to increase by 1.5 percentage points.

According to the programme, the expenditure-to-GDP ratio will significantly increase in 2007, due mainly to an increase in public investment and public sector wage rises[16]. Following this, the programme envisages consolidating the budget during 2008-2009 by keeping broadly constant the expenditure ratio while increasing the revenue-to-GDP ratio by 0.4 percentage points each year. The revenue-to-GDP ratio is planned to increase mainly due to higher "other" revenues, as the tax ratio decreases modestly. The development of "other" revenues reflect expectations about increasing EU inflows over the programme horizon. As elaborated in 3.7.2 above, Latvia is experiencing good times throughout the whole programme period. High GDP growth apparently facilitates the envisaged deficit reduction in 2008 and 2009 while at the same time there are significant increases in expenditure in real terms.

The surplus of the social security funds, estimated at 1.8% of GDP in 2006, is projected to decrease gradually during the programme period to 1.0% of GDP by 2009. This

[16] The latter idea is however not supported, by Table 2, which shows the ratio of compensation of employees-to-GDP decreasing in 2007. However, as it was earlier commented, Table2 shows several signs of inconsistency.

deterioration is partly due to population ageing and partly to the stepwise transformation of the pension system.

The programme foresees significant investment plans to increase the long-term growth potential. Accordingly, public investment is expected to rise by 2.1% of GDP over the programme period of which 1½% after 2007 but the expenditure savings (e.g. transfers and "other" expenditure including individual consumption) that should keep the overall expenditure ratio constant are not fully detailed in the programme.. The programme does not specify any one-off or other temporary measures.

Box 2: The budget for 2007

The Latvian 2007 budget law was adopted on 19 December 2006. The budget targets a headline general government deficit of 1.3% of GDP in 2007. The deficit target calculated according to the ESA95 methodology is expected to be slightly lower at 1.3% of GDP.

The budget was presented in the framework of promoting economic growth and social welfare and the implementation of structural reforms. The impact of EU accession in 2004 is still being felt in the sense that it is partly responsible for an increase in the size of the budget. Accordingly, total general government budget revenues are set to increase by 23.2% in comparison with the amended 2006 budget and expenditure by 24.8%. Foreign financial assistance including receipts from EU funds account for LVL 591.8 million, 4.7% of GDP.

Table: Main measures in the budget for 2007

Revenue measures*	Expenditure measures**
o Increase in the personal income tax-free threshold from LVL 32 (EUR 45) per month to LVL 50 (EUR 70) per month and the setting of income tax rebates for dependents at LVL 35 (EUR 49) per month (LVL 63.5 million 2007, -0.5% of GDP); o Increase of the statutory minimum wage from LVL 90 (EUR 126) per month to LVL 120 (EUR 168) per month (LVL 18.5 million 2007, +0.1% of GDP); o Increase in excise duties on oil and tobacco products (LVL 37.2 million 2007, +0.3% of GDP); o Reduced VAT rate (5% instead of 18%) on natural gas, electricity and some other non-commercial services (LVL 10.2 million 2007, -0.1% of GDP);	o Reform of the National Armed Forces and NATO integration related requirements (LVL 80.4 million 2007, +0.6% of GDP); o Modernization and restructuring of the healthcare system (LVL 68.8 million 2007, +0.5% of GDP); o Increase of the statutory minimum wage for the public sector employees (LVL 14.5 million 2007, +0.1% of GDP); o Increased judges' an prosecutors' wages (LVL 10.5 million 2007, +0.1% of GDP); o Financing for EU and other financial instruments (LVL 213.1 million 2007, +1.6% of GDP).

* Estimated impact on general government revenues.
** Estimated impact on general government expenditure.
*** National method figures were used in this box, unless otherwise indicated.
Sources: Commission services and the 2007 Budget law of the Republic of Latvia .

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

The medium-term objective (MTO) for the budgetary position identified in the programme is a general government structural deficit of 1.0% of GDP, the same as in the previous update. According to the output gap calculations and cyclical adjustment presented in the programme, Latvia would achieve the MTO around 2008[17]. As shown in

[17] According to the output gap calculations of the programme, Latvia would have a structural deficit of 1.1% of GDP in 2008. However, structural figures are used in rounded-terms with one-quarter being

Table 7 below, according to the Commission services' calculations on the basis of the information in the programme according to the commonly agreed methodology, the programme targets show that the MTO would be achieved by 2008. The previous update also put the date for achieving the MTO as 2008.

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

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

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

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

The MTO satisfies the condition of providing a safety margin (the most recent estimate of the minimum benchmark is a cyclically-adjusted deficit of around 2% of GDP) and, for euro area and ERM II countries, respects the lower bound of a structural deficit of 1% of GDP. It is considered appropriate in view of the debt ratio and average potential growth in the long run.

Based on Commission services' calculations according to the commonly agreed methodology, the structural balance is estimated to have deteriorated from a small surplus of 0.1% of GDP in 2005 to a 1% deficit in 2006. It is projected to deteriorate further to a deficit of 1¾% of GDP in 2007. Thereafter, the structural balance gradually improves to ¾% of GDP deficit in 2008 and a small surplus of ¼% of GDP in 2009. The structural improvement between 2006 and 2009, by about 1 percentage points of GDP occurs in the last two programme years despite cyclical conditions gradually worsening from currently favourable cyclical conditions as measured by a large positive output gap.

The effort is concentrated in 2008 and 2009 (¾ and 1 percentage points in 2008 and 2009 respectively), while in 2007 the structural balance is estimated to worsen by ¾ percentage points; i.e. the adjustment is back-loaded.

The fiscal stance based on the recalculation by the Commission services is expansionary in 2006 and 2007 in a situation of positive output gap and is restrictive in the years 2008-2009.

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the finest fraction, therefore the above estimate practically means the achievement of the MTO according to both forecasts.

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

(% of GDP)	2005		2006		2007		2008		2009	Change: 2009-2006
	COM	CP[1]	COM	CP[1]	COM	CP[1]	COM	CP[1]	CP[1]	CP[1]
Gen. gov't balance	0.1	0.1	-1.0	-0.4	-1.2	-1.3	-1.2	-0.9	-0.4	0.0
One-offs[2]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Output gap[3]	-0.2	0.0	1.1	1.8	0.4	1.3	-1.0	-0.5	-2.0	-
CAB[4]	0.2	0.1	-1.3	-0.9	-1.3	-1.7	-0.9	-0.8	0.2	1.1
change in CAB	0.8	0.8	-1.5	-1.0	0.0	-0.8	0.4	0.9	0.9	-
CAPB[4]	0.7	0.7	-0.7	-0.4	-0.8	-1.2	-0.4	-0.3	0.7	1.1
Structural balance[5]	0.2	0.1	-1.3	-0.9	-1.3	-1.7	-0.9	-0.8	0.2	1.1
change in struct. bal.	0.8	0.8	-1.5	-1.0	0.0	-0.8	0.4	0.9	0.9	-
Struct. prim. balance[5]	0.7	0.7	-0.7	-0.4	-0.8	-1.2	-0.4	-0.3	0.7	1.1

Notes:
[1]Output gaps and cyclical adjustment according to the convergence programme (CP) as recalculated by Commission services on the basis of the information in the programme.
[2]One-off and other temporary measures.
[3]In percent of potential GDP. See Table 2 above.
[4]CA(P)B = cyclically-adjusted (primary) balance.
[5]Structural (primary) balance = CA(P)B excluding one-off and other temporary measures.
Source:
Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations

4.3. Risk assessment

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

Table 8: Comparison of budgetary developments and projections

(% of GDP)	2005	2006		2007		2008		2009
		COM	CP	COM	CP	COM[1]	CP	CP
Revenues	36.2	38.5	37.5	38.1	38.2	37.6	38.6	39.0
of which:								
- Taxes & social contributions	29.3	31.7	30.2	31.4	30.3	30.8	30.0	29.9
- Other (residual)	6.9	6.8	7.3	6.7	7.9	6.8	8.6	9.1
Expenditure	36.0	39.5	37.9	39.3	39.5	38.8	39.5	39.4
of which:								
- Primary expenditure	35.5	39.0	37.4	38.8	39.0	38.3	39.0	38.9
of which:								
Consumption[2]	8.7	8.8	12.7	8.6	14.2	8.5	14.4	13.9
Transfers other than in kind & subsidies	9.3	10.1	8.4	9.9	7.6	9.5	7.5	7.1
Gross fixed capital formation	2.3	3.4	3.0	3.9	3.7	4.6	4.3	5.1
Other (residual)[2]	15.2	16.6	13.3	16.3	13.5	15.8	12.8	12.8
- Interest expenditure	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
General government balance (GGB)	0.1	-1.0	-0.4	-1.2	-1.3	-1.2	-0.9	-0.4
Primary balance	0.7	-0.4	0.1	-0.7	-0.8	-0.7	-0.4	0.1
One-offs[3]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

GGB excl. one-offs	0.1	-1.0	-0.4	-1.2	-1.3	-1.2	-0.9	-0.4

Notes:
[1]On a no-policy change basis.
[2] Consumption only includes collective consumption expenditure. The programme includes individual consumption expenditure in "other" expenditure and the Commission services' autumn forecast is presented likewise to facilitate comparison. However, further inconsistency seems to exist in the consumption figures presented by the programme.
[3]One-off and other temporary measures.
Source:
Commission services' autumn 2006 economic forecasts (COM); convergence programme update (CP); Commission services' calculations

As assessed in Section 3.7.1 above, even if the macroeconomic outlook is deemed to be plausible, there are significant risks for overall macroeconomic stability stemming from the extremely wide external imbalance and the current overheated state of the economy. Were the credit-financed, domestically-driven rapid growth of the Latvian economy to slow down abruptly, the budget could come under great pressure, as current expectations of future budgetary revenues are based on the assumption of high consumption growth. The update includes a section on the sensitivity of the public finances with respect to changes in economic activity compared to the central scenario. Two alternative scenarios are described taking into account the behaviour of private consumption and exports. In the *high-growth scenario*, higher employment growth and lower unemployment rates than in the base scenario are shown with higher wage increases and lower current account deficits. The boost to public finances via higher taxes and social contributions amounts to around 20 million LVL (0.2% of GDP). In the *low-growth scenario*, the opposite movements in the same economic variables result in a fall in revenues of around 23 million LVL (0.3% of GDP). However, if unchanged from the pattern of the previous years, it seems unlikely that higher growth would be consistent with a lower current account deficit. Furthermore, the sensitivity analysis included in the programme does not seem sufficient to capture the impact of a possible realization of the risks mentioned in the same section of the programme (changes in consumer confidence, adverse developments on the real estate market, inflationary pressure on competitiveness).

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 2006-2009 period; (ii) trend output based on the HP-filter and (iii) no policy response (notably, the expenditure level is as in the central scenario), reveal that, by 2009, the cyclically-adjusted balance is 0.6 percentage point of GDP below the central scenario. Hence, in the case of a persistently slightly lower real growth, additional measures of around 0.6 percentage point of GDP would be necessary to keep the public finances on the path targeted in the central scenario.

The programme provides sufficient information about the planned personal income-, value-added and excise tax changes, with their expected budgetary impact thoroughly analyzed. However, it provides insufficient information about the expenditure-side measures which are essential for the success of the consolidation from 2008. No one-offs or other temporary measures are planned in the programme.

Compared with the Commission services' autumn forecast, the tax revenue projections embody more optimistic assumptions about the tax intensity of economic activity, and slightly more so in 2007 than in 2008. Table 9 shows that the tax-to-GDP ratio rises slightly in 2007 and falls in 2008-2009. This cannot be explained by differences in elasticity assumptions; rather, the programme seems to assume a more favourable

composition of economic growth. These more optimistic assumptions are mainly due to higher revenues coming from taxes on production and imports, while revenues coming from social contributions are expected to fall more markedly, as can be seen in Annex 5. The alignment of excise tax rates on tobacco and oil products with those of the EU partly explains the rise in taxes on production and imports from 2007 onwards. On the other side, the fall in social contributions is explained by the channelling of pension funds to the state-funded pension scheme.

On the expenditure side, the projected reductions in the ratios to GDP of "other" expenditure (declining by 0.7 percentage points in 2008) and total social transfers (declining by 0.5 percentage points in 2009) are unexplained in the programme, which thus fails to substantiate important elements of the fiscal consolidation foreseen over the programme period as a whole. The impression given in the programme is that the expenditure in these two categories has been projected so as to yield an evolution of the total expenditure ratio constrained to deliver the foreseen degree of medium-term consolidation, given a necessarily increasing government investment ratio to match increased EU funding (included within 'other revenue') on the revenue side. If this interpretation is correct, increased EU funding in the programme period is apparently accompanied by a restructuring on the expenditure side in order to generate a benign impact on the overall budget. While such restructuring is in theory possible, that projected in the Latvian programme (as, for example, a large year-on-year reduction in social transfers) appears implausible, an impression strongly reinforced by the absence of articulated information in the programme. A coherent and plausible medium-term evolution of the budget, taking into consideration the substantial planned accrual of EU funding, co-financing from domestic revenue sources and higher supported expenditure, is thus lacking. On these grounds, the risks to the programme strategy, at least in terms of its projected composition, are heftily negative.

As can be seen from Figure 7, the Latvian government has until now always respected and even exceeded its budgetary targets. The capacity for expenditure restraint has not been seriously tested in recent years, as high nominal growth has created the opportunity each year to spend extra revenues in the framework of a supplementary budget. Going forward, it is difficult to say what will be the effect on public finances if the economy has to face unexpected hard times. The envisaged consolidation in 2008-2009 will likely be supported by high nominal growth, but this also represents a serious risk if nominal growth is lower than expected.

Without ignoring the experience of the previous years, when deficit outturns were regularly better than expected due to higher than expected GDP growth, the imbalanced nature of economic growth represents a huge risk, as a possible hard-landing of the Latvian economy would have serious repercussions on consumption, the major source of tax revenues. Although the programme is based on a plausible macroeconomic scenario, the risk of a deviation to the negative side is much more likely and severe than of one to the positive side. The absence of detail on the composition of the adjustment is itself a negative risk, which is reinforced when the programme projections are scrutinised from the perspective of policy plausibility. Therefore, while the risks to the budgetary projections appear broadly balanced for 2007, an overall negative risk is attached to the budgetary targets from 2008, hence budgetary outcomes could be worse than projected.

Table 9: Assessment of tax projections

	2007			2008			2009
	CP	COM	OECD[3]	CP	COM[1]	OECD[3]	CP
Change in tax-to-GDP ratio (total taxes)	0.1	-0.4	-0.5	-0.3	-0.7	-0.4	-0.1
Difference (CP – COM)	0.5		/	0.3		/	/
of which[2]:			/			/	/
- discretionary and elasticity component	0.0		/	-0.2		/	/
- composition component	0.7		/	0.7		/	/
Difference (COM - OECD)	/	0.0		/	-0.3		/
of which[2]*:*	/			/			/
- discretionary and elasticity component	/	-0.4		/	-0.3		/
- composition component	/	0.4		/	0.0		/
p.m.: Elasticity to GDP	1.0	0.9	0.9	0.9	0.9	0.9	1.0

Notes:
[1]On a no-policy change basis.
[2]The decomposition is explained in Annex 5.
[3] Based on OECD ex-ante elasticity relative to GDP.
Source:
Commission services' autumn 2006 economic forecasts (COM); Commission services' calculations and OECD (N. Girouard and C. André (2005), "Measuring Cyclically-Adjusted Budget Balances for the OECD Countries", OECD Working Paper No. 434)

4.4. Assessment of the fiscal stance and budgetary strategy

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

Table 10: Overview of compliance with the Stability and Growth Pact

	Based on programme[4] (with targets taken at face value)	**Assessment** (taking into account risks to targets)
a. Safety margin against breaching 3% of GDP deficit limit[1]	throughout programme period	throughout programme period
b. Achievement of the MTO	from 2008 onwards	possibly not within the programme period
c. Adjustment towards MTO in line with the Pact[2]	fully in line except in 2007	broadly in line except in 2007
d. Temporary deviation from adjustment towards MTO	implicit	***pension reform*** can be taken into account***/ healthcare reform*** and ***investment projects*** can not be taken into account

Notes:
[1]The risk of breaching the 3% of GDP deficit threshold with normal cyclical fluctuations, i.e. the existence of a safety margin, is assessed by comparing the cyclically-adjusted balance with the above mentioned minimum benchmark (estimated as a deficit of around 2% of GDP for Latvia). These benchmarks represent estimates and as such need to be interpreted with caution.
[2]The Stability and Growth Pact requires Member States to make progress towards their MTO (for countries in the euro area or in ERM II, this has been quantified as an annual improvement in the structural balance of at least 0.5% of GDP as a benchmark). In addition, the structural adjustment should be higher in good times, whereas it may be more limited in bad times. The year-on year change in the structural balance foreseen in the programme, adjusting for the impact of the phased implementation of the ***pension reform***, would be a worsening of 0.6% of GDP in 2007, an improvement of 1.6% in 2008 and 1.2% in 2009.

[3]According to the Stability and Growth Pact, countries which have already achieved their MTO should avoid pro-cyclical fiscal policies in "good times".
[4]Targets in structural terms as recalculated by Commission services on the basis of the information in the programme.
Source:
Commission services

Taking into account the risks to the budgetary targets identified above, the cyclically-adjusted deficit is within the minimum benchmark of around 2% of GDP in each year. However, Latvia might not achieve the MTO within the programme period given the uncertainties surrounding the revenue-based adjustment and the expenditure savings that should offset the increase in the public investment ratio after 2008. There are thus very considerable risks to the budgetary targets.

While the average annual structural adjustment over the programme period is ¾% of GDP (taking the targets at face value and admitting the net cost of the ***pension reform***[18]), there is a large deterioration in 2007 even as Latvia is experiencing "good times". While the output gap turns negative towards the end of the programme period, other economic indicators such as continued strong economic growth and improving labour market conditions point to a continuation of good times according to the Commission services' autumn 2006 forecast (see Section 3.7.2 above). The programme projects some revenue loss after 2007, not clearly explained in the programme. At the same time the elasticity of the tax base relative to GDP is forecast to increase, which reflects the domestic-demand-led composition of GDP growth. This analysis of tax elasticities therefore reinforces the assessment of *economic* good times made earlier.

As regards the request for a temporary deviation from the adjustment path that is implicit in the update, the deterioration in the structural balance by ¾% of GDP in 2007 (taking the target at face value) would diminish (to ½% of GDP) but not disappear once the impact of the phased implementation of the pension reform is taken into account. This means that the deviation from the adjustment path to the MTO in 2007 cannot be "justified" on the basis of the rising costs of the pension reform over time. As to the remaining years, the structural improvement is ¾% and 1% of GDP respectively in 2008 and 2009 (targets taken at face value) becomes 1½% in 2008 and 1¼% in 2009 once the net cost of the pension reform is taken into account.

Box 4: Major structural reforms in the Stability and Growth Pact

According to the Stability and Growth Pact and the code of conduct, Member States that have not yet reached their MTO can temporarily depart from the required adjustment path in case of "major structural reforms".

Several conditions need to be met for this clause to be applicable:

1. The structural reforms that underlie the request for a temporary deviation must have a verifiable positive impact on the long-term sustainability of public finances. This includes

[18] Other reform measures discussed in the programme (***healthcare reform and investment plans)*** cannot be admitted as a basis for temporary deviation as they are not clearly supported by a detailed, comprehensive and cautious quantitative cost-benefit-analysis of the short- and long-term budgetary impact (see Box 4 above).

reforms with direct long-term cost-saving effects as well as reforms raising potential growth, which have indirect effects on the public finances.

2. The claim to a temporary deviation must be supported by a detailed, comprehensive and cautious quantitative cost-benefit-analysis (to be presented in the programme) of the short- and long-term budgetary impact of the reforms.

3. The reforms must have been adopted.

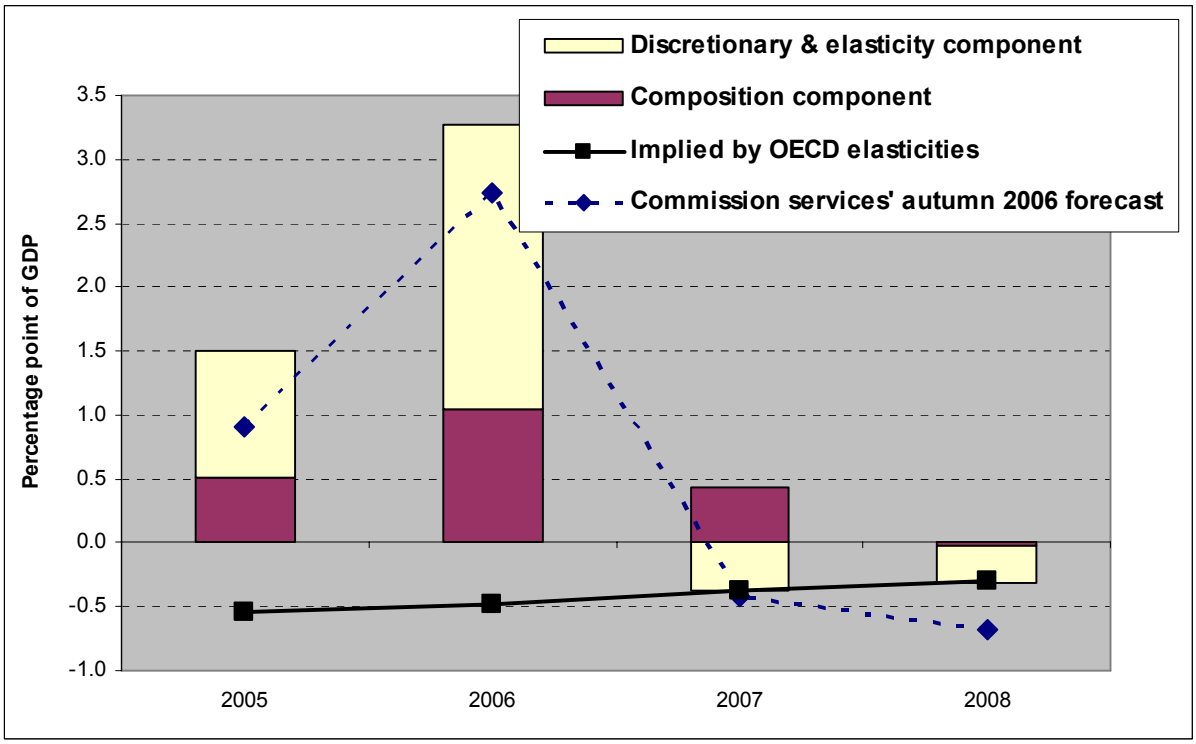
4. An appropriate safety margin against breaching the 3% deficit limit should be preserved in each year.

5. For structural reforms other than systemic pension reform (of the kind that introduces a multi-pillar system including a fully-funded pillar), the budgetary position has to return to the MTO within the period covered by the programme; in the case of systemic pension reform as meant above, the deviation should nonetheless remain temporary and the size of the deviation from the MTO should reflect the reform's impact on the general government balance.

The overall conclusion is that the worsening of the budgetary position in 2007 represents a pro-cyclical fiscal policy in good times and is inconsistent with a prudent fiscal policy necessary to ensure sustainable convergence, including by reducing the external imbalance and containing inflation. In the subsequent years, the programme envisages progress towards the MTO, but budgetary targets are not ambitious and there are risks to their achievement from 2008 onwards, due to uncertainties surrounding the measures supporting the consolidation both on the revenue and the expenditure side. Uncertainties surrounding potential growth estimates represent another type of risk for fiscal surveillance[19].

[19] Namely, potential growth figures are probably overestimated for Latvia.

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



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

Source:
Commission services

5. GOVERNMENT DEBT AND LONG-TERM SUSTAINABILITY

Government debt is the result of the financing needs of government over the years. It corresponds primarily to an accumulation of deficits, although the build-up of financial assets and other adjustments may also play a role.[20] The reform of the Stability and Growth Pact has raised attention to the crucial importance of government debt and of sustainability in fiscal surveillance.

This section is in two parts: a first part describes recent developments and the medium-term prospects for government gross debt; it describes the convergence programme's

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

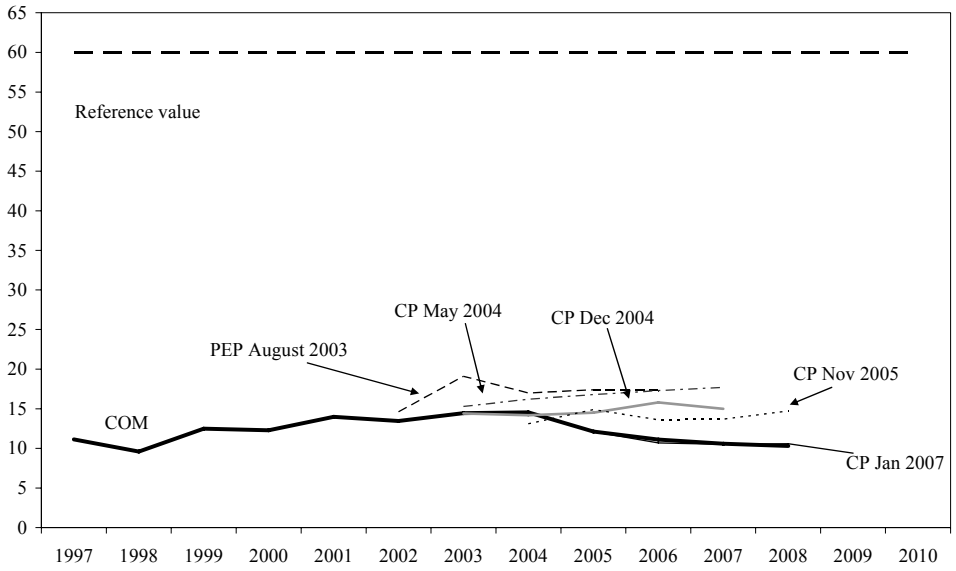
targets, compares them with the Commission services' forecasts and assesses the associated risks. A second part looks into the government debt from a longer-term perspective with the aim of assessing the long-term sustainability of public finances.

5.1. Recent debt developments and medium-term prospects

5.1.1. Debt projections in the programme

As can be seen from Figure 9 and Table 12, the gross debt ratio is low and well under the Treaty reference level. The gross debt-to-GDP ratio was about 11% in 1997 and reached a maximum of 14.5% in 2004, hand in hand with rising budget deficits. The debt ratio fell substantially in 2005, mostly due to high nominal GDP growth, but also to a positive primary balance. Over the period to 2008, the consolidated gross debt ratio is projected to remain stable at some 10½%, broadly in line with the Commission services' autumn 2006 forecast: as the ratio-reducing effect of nominal GDP growth is offset by a primary deficit, interest expenditures and a positive stock-flow adjustment. A further fall to 9.4% of GDP is projected for 2009 reflecting steady nominal GDP growth, a balanced primary balance and an unexplained change of sign of the stock-flow adjustment.

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



Note: PEP = pre-accession economic programme.
Source: Commission services' autumn 2006 forecast (COM) and successive convergence programmes

Although Figure 9 shows that debt projections in successive programmes have been consistently cautious, resulting in an underestimation of the actual debt developments, the projections in the latest update seem more bullish.

Table 11: Debt dynamics

(% of GDP)	average 2000-04	2005	2006		2007		2008		2009
			COM	CP	COM	CP	COM	CP	CP
Gross debt ratio[1]	**14.5**	**12.1**	**11.1**	**10.7**	**10.6**	**10.5**	**10.3**	**10.6**	**9.4**
Change in the ratio	0.6	-2.4	-1.0	-1.4	-0.5	-0.2	-0.3	0.1	-1.2
Contributions[2]*:*									
Primary balance	1.0	-0.7	0.4	-0.1	0.7	0.8	0.7	0.4	-0.1
"Snow-ball" effect	-0.6	-1.9	-1.5	-1.7	-1.2	-1.1	-1.0	-0.8	-0.7
Of which:									
Interest expenditure	0.8	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
Growth effect	-0.9	-1.2	-1.1	-1.1	-0.8	-0.8	-0.7	-0.7	-0.7
Inflation effect	-0.5	-1.2	-0.9	-1.1	-0.9	-0.7	-0.8	-0.6	-0.5
Stock-flow adjustment	0.2	0.2	0.0	0.4	0.0	0.1	0.0	0.5	-0.4
Of which:									
Cash/accruals diff.	0.1	0.6							
Acc. financial assets	-0.1	-0.5							
Privatisation	-0.5	0.0							
Val. effect & residual	0.2	0.1							

Notes:
[1]End of period.
[2]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 (in the table, the latter is decomposed into the growth effect, capturing real GDP growth, and the inflation effect, measured by the GDP deflator). The term in parentheses represents the "snow-ball" effect. The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.

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

5.1.2. Assessment

The debt projections in the programme are jointly subject to the same risks as those set out above in Section 4.3 for the net lending position. The lack of information in the programme on the erratic profile of the implied stock-flow adjustment raises doubts as to the consistency of the deficit and debt projections. Nevertheless, given its relatively low level, public debt is not a major concern for Latvia.

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

The issue of long-term sustainability is a multi-faceted one. It involves avoiding imposing an excessive burden on future generations and ensuring the country's capacity to appropriately adjust budgetary policy in the medium and long run.[21]

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

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

The approach adopted by the Commission services and the Ageing Working Group of the Economic Policy Committee (EPC) is to project the debt, and to calculate the associated sustainability indicators (See box 5), on the basis of two different scenarios. The first scenario assumes that the structural primary balance will remain unchanged from 2006 through 2009, the final year of the convergence programme; it is called the "2006 scenario". Debt projections in this scenario start in 2007. The second scenario assumes that the macroeconomic and budgetary plans until 2009 provided in the convergence programme will be fully respected. This is the "programme scenario". Debt and primary balance projections in this scenario start in 2010. In addition to this quantitative analysis, other relevant factors are taken into account which allows to better qualify the assessment with regard to where the main risks are likely to stem from and to reach an overall assessment.

5.2.1. Sustainability indicators and long-term debt projections

Table 12 shows the evolution of government spending on pensions, healthcare, long-term care for the elderly, education and unemployment benefits according to the EPC's projections[22]. Non age-related primary expenditure and revenue is assumed to remain constant as a share of GDP.

Table 12: Long-term age-related expenditure: main projections

(% of GDP)	2004	2010	2020	2030	2040	2050	changes
Total age-related spending	17.5	14.6	14.6	16.0	16.2	16.2	-1.3
Pensions	6.8	4.9	4.9	5.6	5.9	5.6	-1.2
Healthcare	5.1	5.5	5.8	5.9	6.1	6.2	1.1
Long-term care	0.4	0.4	0.5	0.5	0.6	0.7	0.3
Education	4.9	3.5	3.2	3.7	3.3	3.5	-1.4
Unemployment benefits	0.3	0.2	0.2	0.2	0.2	0.2	-0.1
Source: Economic Policy Committee and Commission services.							

The projected dynamics in age-related spending in Latvia is below the EU average; falling by 1.3% of GDP between 2004 and 2050. This is mainly due to the projected decline in pension expenditures falling by a similar amount as a share of GDP over the projection period, due to the large pension reform enacted. The increase in healthcare expenditure is projected to be 1.1 p.p. of GDP, slightly below the EU average. For long-term care spending, the projected increase of 0.3 p.p. of GDP up to 2050 is below the EU average.

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

Table 13: Sustainability indicators and the required primary balance

	2006 scenario	Programme scenario

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

	S1	S2	RPB	S1	S2	RPB
Value	-0.1	1.2	1.6	-1.1	0.2	1.6
of which:						
Initial budgetary position	0.4	0.4	-	-0.7	-0.6	-
Debt requirement in 2050	-0.9	-	-	-0.9	-	-
Future changes in budgetary position	0.4	0.8	-	0.4	0.8	-

Source: Commission services.

Box 5: – Sustainability indicators*

- The **sustainability gap S1** shows the permanent budgetary adjustment (often presented as an increase in the tax burden**) required to reach a debt ratio in 2050 of 60% of GDP.
- The **sustainability gap S2**, shows the permanent budgetary adjustment that guarantees the respect of the intertemporal budget constraint of the government. In order to estimate S2, the revenue and expenditure ratios (age-related and non age-related) after 2050 are assumed to remain constant at the 2050 level.
- The sustainability indicators can be decomposed into the***: (i) **Initial Budgetary Position (IBP)**; and, (ii) **Long-Term Change in the budgetary position (LTC)**;
- In addition, the **required primary balance (RPB)** can be derived from the S2 indicator. It measures the average primary balance over the first five years after the programme horizon (i.e. 2010-2014) that results from a permanent budgetary adjustment carried out to comply fully with the S2 indicator.

Summarizing the sustainability indicators

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

* For a complete description of the sustainability indicators, see Annex I of the "The Long Term Sustainability of Public Finances – A report by the Commission services", European Economy n°4/2006, published in October 2006.

** Although the sustainability gap indicators (S1, S2) are usually defined as differences between revenue ratios, this does not mean that countries are asked to increase taxes to reach sustainability.. There are several ways to ensure sustainability and governments typically choose a combination of budget consolidation over the medium term (either through expenditure reduction and/or tax hikes) and the implementation of structural reforms aiming at curbing long-term public spending (e.g. pension reforms).

*** Moreover, in the case of S1, the decomposition also separates the impact of the debt position (60% of GDP in 2050); the debt requirement in 2050 (DR). In particular, if the current debt/GDP ratio is below 60% of GDP debt is allowed to rise and this component reduces the sustainability gap as measured by the S1 indicator, and

Table 13 shows the sustainability indicators for the two scenarios. In the "2006 scenario", the sustainability gap (S2) which satisfies the intertemporal budget constraint would be 1.2% of GDP. Latvia however does not have a sustainability gap in terms of the sustainability indicator S1 that assures reaching the debt ratio of 60% of GDP by 2050 (the sustainability gap in this case would be -0.1% of GDP). Compared with the results of the Commission's Sustainability Report, the situation concerning the sustainability gaps is similar.

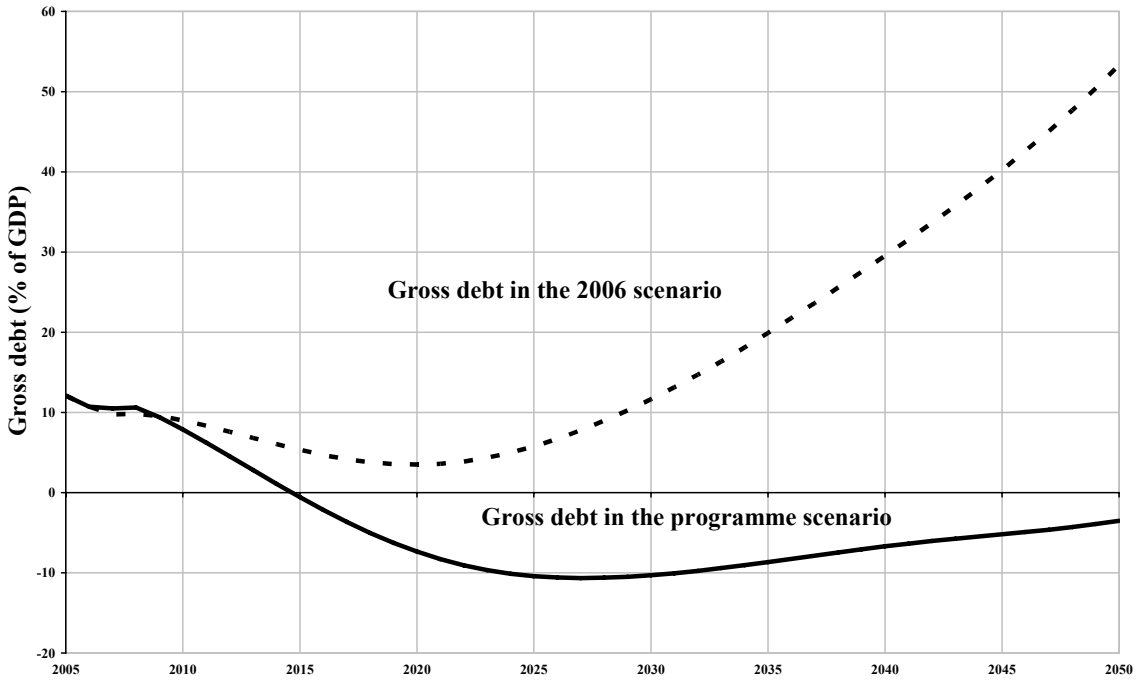
Around a third of the contribution to the S2 sustainability gap results from the current initial budgetary position and the rest from the impact of the increase in age-related expenditure up to 2050. The budgetary plans in the programme imply a further strengthening of the structural primary balance, of around 1% of GDP, between 2006 and 2010. If achieved, such a consolidation would further reduce risks to the long-term sustainability of public finances.

The required primary balance (RPB) is 1.6% of GDP, somewhat higher than the structural primary balance of about 0.7% of GDP in the last year of the programme's period.

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

The gross debt ratio is currently well below the 60% of GDP reference value, estimated in the programme at just above 10% of GDP in 2006. According to both scenarios, the gross debt-to-GDP ratio is projected to remain below 60% of GDP reference value throughout the projection period, though increasingly rather rapidly from the mid 2020s onwards in the '2006'scenario.[23]

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



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

5.2.2. Additional factors

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

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

First, as mentioned above Latvia has a very low stock of debt, just above 10% of GDP in 2006, and it is planned to decline further in accordance with the implementation of the budgetary strategy as presented in the convergence programme update.

Second, the reformed pension system would ensure sustainability of the system despite the projected increase in the old-age dependency ratio. An important contribution to the sustainability of the pension system comes from the parametric changes: both the gradual increase in the statutory retirement age for women scheduled until 2008 and the indexation system (PAYG expenditures are not fully indexed in line with wage growth) contributes to a broadly stable share of PAYG pension expenditure to GDP. The second pillar will thus become increasingly important. A relevant part of future pensions will be covered through the funded pillar without generating an additional deficit[24].

Finally, there could be pressures to raise the quality of public services, such as health and long-term care and education. The implementation of the healthcare system reform (outlined in the development programme for healthcare service providers of in-patient and out-patient care for 2005-2010) remains a priority of the new government. The underlying action plan (listing activities such as mergers of hospitals, reduction of hospital beds and restructuring of institutions) has been finalized and reorganizations of some services are already being implemented. The total cost of reform is estimated at 323.4 million lats (3% of GDP in 2006 prices). The 2007 budget provides additional 68.8 million lats (0.5% of GDP) for the implementation of the reform.

5.2.3. Assessment

The long-term budgetary impact of ageing in Latvia is lower than the EU average, with age-related expenditure projected to fall as a share of GDP over the coming decades, influenced by the expenditure-reducing impact of the reform of the pension system.

The current level of gross debt is very low in Latvia and improving the budgetary position as planned in the convergence programme update would contribute to contain the risks to the long-term sustainability of public finances. Overall, Latvia appears to be at low risk with regard to the sustainability of public finances.

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

The analysis of the composition of adjustment in Section 4.2 indicates a number of projected shifts in revenue and expenditure, including a higher investment ratio and a shift from direct to indirect taxation. Prioritising public investment and shifting the tax burden from direct to indirect taxation can be expected to have a positive effect on both economic growth and labour market participation, particularly among the low- and medium-income labour force. Furthermore, continued institution-building and

[24] The Latvian pension system comprises of three pillars:

- the first pillar – a pay-as-you-go notional defined contribution scheme, modelled on the Swedish example;
- the second pillar – a defined contribution arrangement financed by part of the contribution that would otherwise go to the first-pillar pension; and
- the third pillar – voluntary defined-contribution savings arrangements, with tax relief, that can provide a lump-sum payment or phased withdrawals fully operational since 1998.

strengthening of public administration accounts for a large part of the increase in expenditure with a view to improving efficiency.

Government priorities include: the modernization and restructuring of the healthcare system, requiring a sizable annual increase in public financing over the medium term; an ambitious public investment programme along with a significant increase in the financing of fundamental research and higher education. The programme foresees the ratio to GDP of healthcare-related expenditure to increase gradually until 2050. The total reform costs, including significant wage increases (per employee) in the healthcare sector, are estimated at 3-4% of GDP. Accordingly, spending in the healthcare sector is estimated to increase from roughly 4% of GDP in 2004 to 5½% of GDP in 2009[25]. The objective of the reform is to ensure further development of an integrated healthcare system by optimising the number and assignment of service providers, thereby raising the quality of the delivered healthcare services, cost-efficiency and effective availability to patients.

The programme also notes that pension reform will gradually increase the share of social security contributions accruing to the state-funded pension scheme until 2010; accordingly, social security contributions in the general government balance will decline by 1.4% points of GDP in 2009 compared to the 2005 level. The programme states that the sustainability of public finances will improve as the pension liabilities to be paid from the state budget will be reduced in the long-term. Other parametric changes, notably gradual increase in the statutory retirement age, would also contribute to the long-term sustainability of public finances. Furthermore, the quality of public finances are said to improve as result of the expansion of the long-term saving and investment infrastructure as well as thanks to the higher liquidity on the financial markets. The three-pillar pension system became fully operational with introduction of the funded pension pillar in 2001.

As regards institutional features of the public finances, the quality of the budgetary process in Latvia is influenced by two recently introduced innovations intended to enhance budgetary discipline: a medium-term budget framework, including multi-annual budgeting of the structural policy measures recognized as government policy priorities and the establishment of limits on annual deficits; and further efforts to improve auditing. However, this non-binding multi-annual budgetary framework has still not yet been complemented by more binding rules such as expenditure ceilings. As a result, part of the better-than-expected revenues in 2006 has been used for financing increased government spending.

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

The implementation report of the National Reform Programme of Latvia, submitted on 17 October 2006, identifies securing macro-economic stability as the main challenge with implications for public finances and to that end allots a major role to the strengthening of fiscal discipline and budgetary planning procedures. The convergence programme contains a qualitative assessment of the overall impact of the October 2006 implementation report of the national reform programme within the medium-term fiscal strategy. In addition, it provides some information on the direct budgetary costs or

[25] According to the COFOG classification

savings of the main reforms envisaged in the national reform programme and its budgetary projections explicitly take into account the public finance implications of the actions outlined in the national reform programme. The measures in the area of public finances envisaged in the convergence programme seem consistent with those foreseen in the national reform programme. In particular, both programmes envisage significant increases in public investment and the convergence programme complements the actions envisaged in the national reform programme with measures to improve the institutional features of the public finances, including the introduction of a multi-annual budgetary framework.

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

The implementation report of the National Reform Programme of Latvia, provided in the context of the renewed Lisbon strategy for growth and jobs, was submitted on 17 October 2006. The Commission's assessment of this report, which was adopted on 13 December 2006 as part of its Annual Progress Report, can be summarised as follows.

Latvia's national reform programme identified as key challenges/priorities: securing macro-economic stability; stimulating knowledge and innovation; developing a favourable and attractive environment for investment and work; fostering employment; and improving education and skills.

The Commission's assessment of this programme (adopted as part of its December 2006 Annual Progress Report) showed that Latvia is making some progress in the implementation of the National Reform Programme. Progress in the macro-economic area has been mixed and reform implementation in the micro-economic and employment area is not yet at full speed.

Among the strengths of the National Reform Programme and its implementation are: measures taken to facilitate the start-up and financing of innovative SMEs, including the establishment of new guarantee and venture capital funds and developments in promoting a one-stop-shop to establish companies. Latvia has also implemented a set of measures that have successfully supported labour market performance.

The policy areas in the Latvian National Reform Programme where weaknesses need to be tackled with the highest priority are: more concrete measures to secure macroeconomic stability and prevent the overheating of the economy; further development of the R&D strategy to improve prioritisation and increase private sector involvement; and stronger measures to increase labour supply and strengthen the skills of the labour force.

Against the background of strengths and weaknesses identified, Latvia was recommended to: maintain economic and budgetary sustainability by pursuing a more restrictive fiscal policy, so as to contribute to the prevention of overheating and a careful prioritisation of expenditure; make faster progress in the implementation of the research and innovation policy reforms, in order to meet effectively the ambitious targets set out in its National Reform Programme. This concerns especially policies to stimulate partnerships between research and education institutions and businesses; intensify efforts to increase labour supply and productivity by improving regional mobility, enhancing the responsiveness of education and training systems to labour market needs and putting in place a lifelong learning system.

In addition, it will be important for Latvia over the period of the National Reform Programme to focus on: faster progress on establishing a single contact point for the administrative formalities involved in hiring the first employee; promoting entrepreneurship education; pursuing active labour market policies; and improving access to childcare.

The table below provides an overview of whether the strategy and policy measures in the programme are consistent with the broad economic policy guidelines in the area of public finances, which are included in the integrated guidelines for the period 2005-2008. The assessment of guideline 1 corresponds to the evaluation in Section 4.4 above, whereas that of the pace of debt reduction in guideline 2 (relevant for high-debt countries only) is covered in Section 5.1.2 above. Information on the different elements covered by the remaining guidelines in the table can be found in Sections 5.2 and 6.

Overall, the budgetary strategy in the programme is only partly consistent with the broad economic policy guidelines included in the integrated guidelines for the period 2005-2008. In particular, the projected fiscal stance is not working towards the sustainability of the external balance.

Table 14: Consistency with the broad economic policy guidelines

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

Notes:
[1]As further specified in the Stability and Growth Pact and the code of conduct, i.e. with an annual 0.5% of GDP minimum adjustment in structural terms for euro area and ERM II Member States.
[2]As further specified in the Stability and Growth Pact and the code of conduct, i.e. Member States that have already achieved the medium-term objective should avoid pro-cyclical fiscal policies in "good times".
[3]As further specified in the country-specific Council recommendations and decisions under the excessive deficit procedure.

Source:
Commission services

* * *

Annex 1: Glossary

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

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

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

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

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

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

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

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

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

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

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

EDP notification See *notification of deficit and debt*.

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

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

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

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

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

Government debt See *public debt*.

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

Government net lending/borrowing See *budget balance*.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Annex 2: Summary tables from the programme update

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

Table 1a. Macroeconomic prospects

	ESA Code	2005	2005	2006	2007	2008	2009
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. Real GDP	B1*g	7016.9	10.2	11.5	9.0	7.5	7.5
2. Nominal GDP	B1*g	8937.3	20.4	22.7	17.1	14.0	12.4
Components of real GDP							
3. Private consumption expenditure	P.3	4518	11.4	17.0	12.1	7.6	7.5
4. Government consumption expenditure	P.3	1108.4	2.7	3.0	3.0	2.5	2.5
5. Gross fixed capital formation	P.51	2391.9	18.6	18.2	10.5	10.0	9.0
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	24.9	4.4	8.8	8.2	7.1	6.2
7. Exports of goods and services	P.6	3113.4	20.7	8.6	11.6	9.1	8.8
8. Imports of goods and services	P.7	4139.8	13.5	18.0	11.0	8.7	8.1
Contributions to real GDP growth							
9. Final domestic demand		-	13.6	17.6	12.4	9.3	8.9
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	-	-4.0	0.7	-1.5	-0.3	-0.1
11. External balance of goods and services	B.11	-	0.7	-6.8	-1.9	-1.5	-1.3

Table 1b. Price developments

	ESA Code	2005	2005	2006	2007	2008	2009
		level	rate of change	rate of change	rate of change	rate of change	rate of change
1. GDP deflator		-	9.2	10.0	7.5	6.0	4.5
2. Private consumption deflator		-	7.0	6.5	6.5	5.9	4.9
3. HICP[26]		-	6.9	6.6	6.4	5.2	4.2
4. Public consumption deflator		-	6.4	6.0	6.0	6.0	6.0
5. Investment deflator		-	10.0	12.0	7.5	7.0	4.5
6. Export price deflator (goods and services)		-	9.0	7.0	5.0	3.5	3.5
7. Import price deflator (goods and services)		-	11.0	9.5	5.5	3.0	3.0

26 Optional for Stability programmes.

Table 1c. Labour market developments

	ESA Code	2005	2005	2006	2007	2008	2009
		Level	rate of change	rate of change	rate of change	rate of change	rate of change
1. Employment, persons[27]		1036	1.8	5.0	1.5	1.0	0.5
2. Employment, hours worked[28]		1890	-0.2	0.2	0.2	0.2	0.2
3. Unemployment rate (%)[29]			8.7	6.9	6.6	6.3	6.0
4. Labour productivity, persons[30]			8.3	6.2	7.4	6.4	7.0
5. Labour productivity, hours worked[31]			10.5	11.3	8.8	7.3	7.3
6. Compensation of employees	D.1	3480.4	18.7	29.4	17.6	14.5	12.9

Table 1d. Sectoral balances

% of GDP	ESA Code	2005	2006	2007	2008	2009
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	-11,4	-17,4	-17,2	-16,3	-15,8
of which: - Balance on goods and services		-15.3	-20.8	-20.7	-20.0	-19.3
- Balance of primary incomes and transfers		2.6	2.1	2.2	2.3	2.1
- Capital account		1.3	1.3	1.3	1.4	1.4
2. Net lending/borrowing of the private sector	B.9	-11.5	-17.0	-15.9	-15.4	-15.4
3. Net lending/borrowing of general government	B.9/ EDP B.9	0.1	-0.4	-1.3	-0.9	-0.4
4. Statistical discrepancy		-2.0	0.0	0.0	0.0	0.0

[27] Occupied population, domestic concept national accounts definition.

[28] National accounts definition.

[29] Harmonised definition, Eurostat; levels.

[30] Real GDP per person employed.

[31] Real GDP per hour worked.

Table 2. General government budgetary prospects

	ESA code	2005	2005	2006	2007	2008	2009
		Level	% of GDP	% of GDP	% of GDP	% of GDP	% of GDP
Net lending (EDP B.9) by sub-sector							
1. General government	S.13	11.6	0.1	-0.4	-1.3	-0.9	-0.4
2. Central government	S.1311	-109.2	-1.2	-2.2	-2.7	-2.0	-1.5
3. State government	S.1312	-	-	-	-	-	-
4. Local government	S.1313	1.7	0.0	0.1	0.1	0.1	0.1
5. Social security funds	S.1314	119.1	1.3	1.8	1.3	1.0	1.0
General government (S13)							
6. Total revenue	TR	3232.8	36.2	37.5	38.2	38.6	39.0
7. Total expenditure	TE[32]	3221.2	36.0	37.9	39.5	39.5	39.4
8. Net lending/borrowing	EDP B.9	11.6	0.1	-0.4	-1.3	-0.9	-0.4
9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	51.0	0.6	0.5	0.5	0.5	0.5
pm: 9a. FISIM							
10. Primary balance	[33]	62.6	0.7	0.2	-0.8	-0.4	0.1
Selected components of revenue							
11. Total taxes (11=11a+11b+11c)		1840.9	20.6	21.4	21.9	22.3	22.4
11a. Taxes on production and imports	D.2	1126.0	12.6	12.8	13.4	13.7	13.8
11b. Current taxes on income, wealth, etc	D.5	714.9	8.0	8.6	8.5	8.6	8.6
11c. Capital taxes	D.91	-	-	-	-	-	-
12. Social contributions	D.61	777.9	8.7	8.8	8.4	7.7	7.5
13. Property income	D.4	63.3	0.7	0.6	0.4	0.4	0.4
14. Other (14=15-(11+12+13))		550.7	6.2	6.7	7.5	8.2	8.7
15=6. Total revenue	TR	3232.8	36.2	37.5	38.2	38.6	39.0
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)[34]		2645.5	29.6	30.5	30.6	30.3	30.2
Selected components of expenditure							
16. Collective consumption	P.32	779.3	8.7	12.7	14.2	14.4	13.9
17. Total social transfers	D.62 + D.63	796.4	8.9	7.9	7.4	7.4	6.9
17a. Social transfers in kind	P.31 =D.63	9.6	0.1	0.1	0.1	0.1	0.1
17b. Social transfers other than in kind	D.62	786.8	8.8	7.8	7.4	7.3	6.9
18.=9. Interest expenditure (incl. FISIM)	EDP D.41 incl. FISIM	51.0	0.6	0.5	0.5	0.5	0.5
19. Subsidies	D.3	44.0	0.5	0.6	0.2	0.2	0.2
20. Gross fixed capital formation	P.51	205.4	2.3	3.0	3.7	4.3	5.1
21. Other (21=22-(16+17+18+19+20))		1345.1	15.1	13.1	13.4	12.7	12.8
22=7. Total expenditure	TE[35]	3221.2	36.0	37.9	39.5	39.5	39.4
Pm: compensation of employees	D.1	904.6	10.1	9.5	9.2	8.9	8.7

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

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

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

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

Table 3. General government expenditure by function

% of GDP	COFOG Code	2004	2009
1. General public services	1	4.6	4.8
2. Defence	2	1.2	2
3. Public order and safety	3	2.2	2.9
4. Economic affairs	4	4.7	4.8
5. Environmental protection	5	0.8	1.8
6. Housing and community amenities	6	0.8	0.8
7. Health	7	4	5.5
8. Recreation, culture and religion	8	1.4	1.8
9. Education	9	6	5.8
10. Social protection	10	10.2	9.2
11. Total expenditure (= item 7=26 in Table 2)	TE[36]	**35.8**	**39.4**

Table 4. General government debt developments

% of GDP		2005	2006	2007	2008	2009
1. Gross debt[37]		12.1	10.7	10.5	10.6	9.4
2. Change in gross debt ratio		-2.4	-1.4	-0.2	0.1	-1.2
Contributions to changes in gross debt						
3. Primary balance[38]		-0.7	-0.2	0.8	0.4	-0.1
4. Interest expenditure (incl. FISIM) [39]		0.6	0.5	0.5	0.5	0.5
5. Stock-flow adjustment		0.2	0.4	0.1	0.5	-0.4
of which: - Differences between cash and accruals[40]		0.6				
- Net accumulation of financial assets[41] *of which:* *- privatisation proceeds*		-0.5 -0.1				
- Valuation effects and other[42]		0.1				
p.m. implicit interest rate on debt[43]		4.7	5.5	5.7	5.7	5.4
Other relevant variables						
6. Liquid financial assets[44]		1.9				
7. Net financial debt (7=1-6)		10.2				

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

[37] As defined in Regulation 3605/93 (not an ESA concept).

[38] Cf. item 10 in Table 2.

[39] Cf. item 9 in Table 2.

[40] The differences concerning interest expenditure, other expenditure and revenue could be distinguished when relevant.

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

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

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

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

Table 5. Cyclical developments

% of GDP	ESA Code	2005	2006	2007	2008	2009
1. Real GDP growth (%)		10.2	11.5	9.0	7.5	7.5
2. Net lending of general government	EDP B.9	0.1	-0.4	-1.3	-0.9	-0.4
3. Interest expenditure (incl. FISIM recorded as consumption)	EDPD.41 +FISIM	0.6	0.5	0.5	0.5	0.5
4. Potential GDP growth (%)[45]		9.2	9.7	9.0	8.5	8.0
contributions: - labour - capital - total factor productivity		 1.3 3.9 3.8	 1.6 4.2 3.7	 0.9 4.4 3.5	 0.4 4.4 3.4	 0.2 4.2 3.4
5. Output gap		0.2	1.8	1.8	0.8	0.4
6. Cyclical budgetary component		0.1	0.5	0.5	0.2	0.1
7. Cyclically-adjusted balance (2-6)		0.0	-0.9	-1.8	-1.1	-0.5
8. Cyclically-adjusted primary balance (7-3)		0.6	-0.4	-1.3	-0.6	0.0

Table 6. Divergence from previous update

	ESA Code	2005	2006	2007	2008	2009
Real GDP growth (%)						
Previous update		8.4	7.5	7.0	7.0	-
Current update		10.2	11.5	9.0	7.5	7.5
Difference		1.8	4.0	2.0	0.5	-
General government net lending (% of GDP)	EDP B.9					
Previous update		-1.5	-1.5	-1.4	-1.3	-
Current update		0.1	-0.4	-1.3	-0.9	-0.4
Difference		1.6	1.1	0.1	0.4	-
General government gross debt (% of GDP)						
Previous update		13.1	14.9	13.6	13.7	-
Current update		12.1	10.7	10.5	10.6	9.4
Difference		-1.0	-4.2	-3.1	-3.1	-

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

Table 7. Long-term sustainability of public finances

% of GDP	2000	2004[46]	2010	2020	2030	2050
Total expenditure		36.2	39.0	38.9	40.3	40.5
Of which: age-related expenditures		17.2	13.8	13.8	15.1	15.3
Pension expenditure		6.8	4.9	4.9	5.6	5.6
Social security pension		6.8	4.9	4.9	5.6	5.6
Old-age and early pensions		5.7	4.3	4.3	4.9	4.9
Other pensions (disability, survivors)		1.1	0.6	0.6	0.7	0.6
Occupational pensions (if in general government)						
Health care		5.1	5.3	5.4	5.5	5.9
Long-term care *(this was earlier included in the health care)*		0.4	0.4	0.4	0.4	0.5
Education expenditure		4.6	3.3	3.1	3.5	3.3
Other age-related expenditures		0.3	0.3	0.2	0.2	0.2
Interest expenditure						
Total revenue		35.3	39.0	38.6	38.4	38.5
Of which: property income						
of which: from pensions contributions (or social contributions if appropriate)		7.1	6.1	5.6	5.4	5.4
Pension reserve fund assets						
Of which: consolidated public pension fund assets (assets other than government liabilities)						
Assumptions						
Labour productivity growth		6.4	6.5	4.0	2.7	1.1
Real GDP growth		7.5	7.4	2.9	2.1	0.4
Participation rate males (aged 20-64)		83.4	87.6	89.6	89.5	87.6
Participation rates females (aged 20-64)		71.9	76.2	79.0	79.8	76.6
Total participation rates (aged 20-64)		77.4	81.7	84.1	84.5	82.0
Unemployment rate		9.8	7.6	7.0	7.0	7.0
Population aged 65+ over total population		16.2	17.4	18.4	21.3	26.1

[46] 2005 is required by the Code of Conduct

Table 8. Basic assumptions

	2005	2006	2007	2008	2009
Short-term interest rate[47] (annual average)	3.1	4.4	5.0	5.0	5.0
Long-term interest rate (annual average)	3.6	4.3	4.5	4.5	4.5
USD/€ exchange rate (annual average) (euro area and ERM II countries)	1.24	1.25	1.28	1.29	1.29
Nominal effective exchange rate	-5.0	-0.4	0.0	0.0	0.0
(for countries not in euro area or ERM II) exchange rate vis-à-vis the € (annual average)	-	-	-	-	-
World excluding EU, GDP growth	5.6	5.7	5.2	5.2	5.2
EU GDP growth	1.7	2.8	2.3	2.4	2.4
Growth of relevant foreign markets	9.0	9.6	8.6	7.8	7.8
World import volumes, excluding EU	7.1	9.0	8.2	7.9	7.9
Oil prices, (Brent, USD/barrel)	54.1	66.1	67.6	68.4	68.4

[47] If necessary, purely technical assumptions.

Annex 3: Compliance with the code of conduct

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

Guidelines in the code of conduct	Yes	No	Comments
1. Submission of the programme			
Programme was submitted not earlier than mid-October and not later than 1 December[1].		X	Following the formation of a new government in November 2006, submitted on 12 January 2007 in Latvian and on 2 February in English
2. Model structure			
The model structure for the programmes in Annex 1 of the code of conduct has been followed.	X		
3. Model tables (so-called data requirements)			
The quantitative information is presented following the standardised set of tables (Annex 2 of the code of conduct).	X		
The programme provides all compulsory information in these tables.	X		
The programme provides all optional information in these tables.		X	
The concepts used are in line with the European system of accounts (ESA).	X		
4. Other information requirements			
a. Involvement of parliament			
The programme mentions its status vis-à-vis the national parliament.	X		
The programme indicates whether the Council opinion on the previous programme has been presented to the national parliament.	X		
b. Economic outlook			
Euro area and ERM II Member States uses the "common external assumptions" on the main extra-EU variables.	X		
Significant divergences between the national and the Commission services' economic forecasts are explained[2].	X		Differences mainly due to recent data
The possible upside and downside risks to the economic outlook are brought out.		X	The sensitivity analysis is not fully sufficient to address the risks faced by the Latvian economy
The outlook for sectoral balances and, especially for countries with a high external deficit, the external balance is analysed.	X		Not elaborated to enough detail
c. Monetary/exchange rate policy			
The convergence programme presents the medium-term monetary policy objectives and their relationship to price and exchange rate stability.	X		
d. Budgetary strategy			
The programme presents budgetary targets for the general government balance in relation to the MTO, and the projected path for the debt ratio.	X		
In case a new government has taken office, the programme shows continuity with respect to the budgetary targets endorsed by the Council.	X		

Guidelines in the code of conduct	Yes	No	Comments
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.			Not applicable
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	Not explained where necessary savings will come from
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.			Latvia does not use the transition period, however, the programme provides details on pension reforms' costs and benefits.
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		
The programme includes a quantitative cost-benefit analysis of the short-term costs and long-term benefits of such reforms.			Not applicable
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 X	 X X 	 Immaterial differences
In case of "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 the programme. The programme includes all the necessary additional information. (…) To this end, information included in programmes should focus on new relevant information that is not fully reflected in the latest common EPC projections.	X		
j. Other information (optional)			
The programme includes information on the implementation of existing national budgetary rules (expenditure rules, etc.), as well as on other institutional features of the public finances, in particular budgetary procedures and public finance statistical governance.	X		

Guidelines in the code of conduct	Yes	No	Comments
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. *Source:* *Commission services*			

Annex 4: Key economic indicators of past economic performance

This Annex includes two tables. The first displays key economic indicators that summarise the economic performance of the country. To put the country's performance into perspective, the second table displays the same set of indicators for the EU10.

Latvia - Key economic indicators

	Averages			2003	2004	2005
	1996–2005	1996–2000	2001–2005			
Economic activity						
Real GDP (% change)	6.8	5.4	8.1	7.2	8.6	10.2
Private consumption (% change)	7.1	5.4	8.8	8.2	9.5	11.4
Government consumption (% change)	1.6	0.9	2.3	1.9	2.1	2.7
Investment (% change)	18.7	21.6	15.8	12.3	23.8	18.6
Exports (% change)	9.1	8.5	9.6	5.2	9.4	20.7
Imports (% change)	11.4	10.4	12.4	13.1	16.6	13.5
Contributions to real GDP growth:						
Domestic demand	8.7	6.6	10.7	11.7	13.7	9.6
Net exports	-1.9	-1.2	-2.6	-4.5	-5.1	0.7
Output gap (% of potential GDP)	-0.7	-0.8	-0.6	-1.1	-1.0	-0.2
Prices and costs						
HICP inflation (% change)	n.a.	n.a.	4.1	2.9	6.2	6.9
Unit labour costs (% change)	4.5	5.9	3.0	5.5	6.6	5.8
Labour productivity (% change)	6.2	6.0	6.4	5.4	7.5	8.6
Real unit labour costs (% change)	-1.5	-1.1	-1.9	1.9	-0.3	-3.1
Comparative price levels (EUR25=100)	46.3	42.4	50.1	48.3	49.7	50.4
Labour market						
Employment (% change)	0.6	-0.5	1.6	1.7	1.1	1.5
Employment (% of working age population)	61.6	60.5	62.6	62.8	63.6	64.6
Unemployment rate (% of labour force)	13.3	15.6	11.0	10.5	10.4	8.9
NAIRU (% of labour force)	12.8	14.2	11.3	11.4	10.5	9.4
Participation rate (% of working age population)	70.6	70.8	70.4	70.3	71.0	70.9
Working age population (% change)	-0.3	-0.4	-0.1	-0.1	-0.2	0.0
Competitiveness and external position						
Real effective exchange rate (% change) (1)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Export performance (% change) (2)	1.6	-0.7	3.8	0.7	0.8	11.1
External balance of g & s (% of GDP)	-10.6	-8.8	-12.4	-12.6	-15.6	-14.3
External balance (% of GDP)	-7.5	-6.4	-8.6	-7.3	-11.8	-11.3
FDI inflow (% of GDP)	n.a.	n.a.	3.2	2.6	5.1	4.0
Public finances						
Total expenditure (% of GDP)	37.0	38.6	35.3	34.6	35.8	36.0
Total revenue (% of GDP)	35.6	37.1	34.1	33.5	34.9	36.2
General government balance (% of GDP)	-1.4	-1.5	-1.3	-1.2	-0.9	0.1
General government debt (% of GDP)	12.8	11.9	13.7	14.4	14.5	12.1
Structural budget balance (% of GDP) (3)	n.a.	n.a.	n.a.	-0.8	-0.7	0.2
Financial indicators (4)						
Short term real interest rate (%) (5)	n.a.	n.a.	-0.4	0.3	-2.5	-5.6
Long term real interest rate (%) (5)	n.a.	n.a.	0.4	1.3	-1.9	-4.9
Household debt (% change) (6)	n.a.	n.a.	n.a.	76.7	68.4	n.a.
Corporate sector debt (% change) (7)	n.a.	n.a.	n.a.	23.1	24.6	n.a.
Household debt (% of GDP) (6)	n.a.	n.a.	n.a.	14.1	20.5	n.a.
Corporate sector debt (% of GDP) (7)	n.a.	n.a.	n.a.	45.9	49.4	n.a.

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

EU-10 - Key economic indicators

	Averages			2003	2004	2005
	1996 – 2005	1996 – 2000	2001 – 2005			
Economic activity						
Real GDP (% change)	4.0	4.3	3.7	4.0	5.1	4.6
Private consumption (% change)	4.2	4.7	3.8	3.9	4.1	3.7
Government consumption (% change)	2.5	1.9	3.1	5.0	1.8	2.0
Investment (% change)	5.6	8.4	2.9	1.7	7.2	6.2
Exports (% change)	10.0	11.0	9.0	9.1	14.5	10.3
Imports (% change)	10.2	12.7	7.8	8.5	14.6	6.9
Contributions to real GDP growth:						
Domestic demand	4.3	5.3	3.4	4.1	5.6	3.0
Net exports	-0.3	-1.0	0.4	0.0	-0.5	1.6
Output gap (% of potential GDP)	n.a.	n.a.	-1.0	-1.4	-0.5	-0.4
Prices and costs						
HICP inflation (% change)	n.a.	n.a.	3.3	1.9	4.1	2.5
Unit labour costs (% change)	5.7	9.2	2.3	1.3	1.4	0.7
Labour productivity (% change)	4.2	4.6	3.7	4.3	4.5	2.9
Real unit labour costs (% change)	-0.8	-0.6	-1.0	-0.7	-2.5	-1.8
Comparative price levels (EUR25=100)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Labour market						
Employment (% change)	-0.1	-0.3	0.0	-0.2	0.6	1.7
Employment (% of working age population)	58.0	59.4	56.6	56.1	56.2	57.0
Unemployment rate (% of labour force)	12.8	11.3	14.2	14.3	14.2	13.4
NAIRU (% of labour force)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Participation rate (% of working age population)	66.4	66.7	66.1	65.7	65.6	65.8
Working age population (% change)	0.3	0.4	0.3	0.4	0.4	0.3
Competitiveness and external position						
Real effective exchange rate (% change) (1)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Export performance (% change) (2)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
External balance of g & s (% of GDP)	-3.4	-4.2	-2.6	-3.0	-2.6	-1.2
External balance (% of GDP)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FDI inflow (% of GDP)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public finances						
Total expenditure (% of GDP)	n.a.	n.a.	44.2	44.9	43.4	43.6
Total revenue (% of GDP)	n.a.	n.a.	40.0	39.9	39.6	40.3
General government balance (% of GDP)	n.a.	n.a.	-4.2	-5.1	-3.7	-3.3
General government debt (% of GDP)	38.0	35.8	40.1	39.9	43.4	41.3
Structural budget balance (% of GDP) (3)	n.a.	n.a.	n.a.	-4.5	-3.4	-3.0
Financial indicators (4)						
Short term real interest rate (%) (5)	n.a.	n.a.	3.5	3.3	1.8	1.8
Long term real interest rate (%) (5)	n.a.	n.a.	n.a.	3.5	2.2	2.2
Household debt (% change) (6)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt (% change) (7)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Household debt (% of GDP) (6)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Corporate sector debt (% of GDP) (7)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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

Annex 5: Assessment of tax projections

Table 9 in the main text compares the tax projections of the programme with those of the Commission services' autumn 2006 forecast and those obtained by using standard ex-ante elasticities, as estimated by the OECD. It summarises the results for the total tax-to-GDP ratio. The underlying analysis exploits information for the four major tax categories, i.e. indirect taxes, corporate and private income taxes and social contributions (see results in the table below)[48].

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[49]. By contrast, if ε_{T_i,B_i} is the standard *ex-ante* elasticity, as estimated by the OECD, it will be net of discretionary measures.

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

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

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

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

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

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

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

---

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

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

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 $\varepsilon = \sum_i w_i \varepsilon_{T_i B_i} \varepsilon_{B_i Y}$ with w_i the share of the *i-th* tax in the overall tax burden.

Assessment of tax projections by major tax category

	2007			2008			2009
	CP	**COM**	**OECD[1]**	**CP**	**COM[2]**	**OECD[1]**	**CP**
Taxes on production and imports:							
Change in tax-to-GDP ratio	0.7	-0.1	0.0	0.3	-0.2	0.0	0.1
Difference CP – COM	0.8			0.5			
of which[3]:							
- discretionary & elasticity component	0.5			0.5			
- composition component	0.3			0.1			
Difference COM – OECD		-0.1		/	-0.2		
of which[3]:							
- discretionary & elasticity component		0.0		/	0.0		
- composition component		-0.1		/	-0.2		
p.m.: Elasticity							
- of taxes to tax base[4]	1.2	1.0	1.0	1.2	1.0	1.0	1.1
- of tax base[4] to GDP	1.1	1.0	1.0	1.0	0.9	1.0	1.0
Social contributions:							
Change in tax-to-GDP ratio	-0.5	-0.2	-0.5	-0.8	-0.3	-0.4	-0.2
Difference CP – COM	-0.3		/	-0.5		/	
of which[3]:							
- discretionary & elasticity component	-0.5		/	-0.8		/	
- composition component	0.2		/	0.4		/	
Difference COM – OECD	/	0.3		/	0.0		
of which[3]:							
- discretionary & elasticity component	/	0.0		/	0.0		
- composition component	/	0.3		/	0.1		
p.m.: Elasticity							
- of taxes to tax base[5]	0.7	1.0	1.0	0.3	1.0	1.0	0.7
- of tax base[5] to GDP	1.0	0.9	0.7	1.0	0.8	0.7	1.0
Personal income tax[6]:							
Change in tax-to-GDP ratio	-0.1	-0.1	-0.1	0.1	-0.1	-0.1	0.0
Difference CP – COM	0.0		/	0.2		/	
of which[3]:							
- discretionary & elasticity component	-0.1		/	-0.1		/	
- composition component	0.2		/	0.3		/	
Difference COM – OECD	/	0.0		/	0.0		
of which[3]:							
- discretionary & elasticity component	/	-0.3		/	-0.2		
- composition component	/	0.3		/	0.1		
p.m.: Elasticity							
- of taxes to tax base[5]	0.9	1.0	1.4	1.1	1.1	1.4	1.0
- of tax base[5] to GDP	1.0	0.9	0.7	1.0	0.8	0.7	1.0
Corporate income tax[6]:							
Change in tax-to-GDP ratio	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Difference CP – COM	0.0		/	0.1		/	
of which[3]:							
- discretionary & elasticity component	0.0		/	0.1		/	
- composition component	0.0		/	0.0		/	
Difference COM – OECD	/	0.3		/	0.0		
of which[3]:							
- discretionary & elasticity component	/	0.0		/	0.0		
- composition component	/	0.3		/	0.1		
p.m.: Elasticity							
- of taxes to tax base[7]	0.9	0.8	1.0	1.1	0.8	1.0	1.0
- of tax base[7] to GDP	1.0	1.1	0.7	1.0	1.1	0.7	1.0

Notes:
[1]Based on OECD ex-ante elasticity relative to GDP.
[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 2006 economic forecasts (COM); Commission services' calculations and OECD (N. Girouard and C. André (2005), "Measuring Cyclically-Adjusted Budget Balances for the OECD Countries", OECD Working Paper No. 434)