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LUXEMBOURG: MACRO FISCAL ASSESSMENT

AN ANALYSIS OF THE JANUARY 2010 UPDATE OF THE STABILITY PROGRAMME

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 Luxembourg's stability programme was submitted on 5 February 2010.

The attached technical analysis of the programme prepared by the staff and under the responsibility of the Directorate-General for Economic and Financial Affairs (DG ECFIN) of the European Commission, was finalised on 24 March 2010. Comments should be sent to Jean-Luc Annaert (jean-luc.annaert@ec.europa.eu). The main aim of the 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.

The analysis takes into account (i) the Commission services’ autumn 2009 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 10 November 2009) and (iii) the commonly agreed methodology for the estimation of potential output and cyclically-adjusted balances.

Based on this analysis, the European Commission adopted a recommendation for a Council opinion on the programme on 24 March 2010. The ECOFIN Council is expected to discuss the opinion on the programme on 16 April 2010.

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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/sgp/index_en.htm

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1. INTRODUCTION

This document assesses the January 2010 update of the stability programme of Luxembourg, which was submitted on 5 February 2010 and covers the period 2009-2014. The programme builds on the 2010 budget proposal. It was approved by the government and presented to the national parliament for a debate.

Table 1. Comparison of key macroeconomic and budgetary projections

		2008	2009	2010	2011	2012	2013	2014
Real GDP (% change)	**SP Jan 2010**	**0.0**	**-3.9**	**2.5**	**3.0**	**2.7**	**2.9**	**3.1**
	COM Nov 2009	0.0	-3.6	1.1	1.8	n.a.	n.a.	n.a.
	SP Feb 2009	*0.0*	*-3.9*	*2.5*	*3.0*	*2.7*	*2.9*	*3.1*
HICP inflation (%)	**SP Jan 2010**	**4.1**	**4.1**	**0.0**	**2.1**	**1.8**	**n.a.**	**n.a.**
	COM Nov 2009	4.1	0.0	1.8	1.7	n.a.	n.a.	n.a.
	SP Feb 2009	*4.1*	*0.0*	*2.1*	*1.8*	*n.a.*	*n.a.*	*n.a.*
Output gap[1] (% of potential GDP)	**SP Jan 2010**	**1.9**	**-4.0**	**-3.4**	**-2.8**	**-2.4**	**-2.0**	**-1.7**
	COM Nov 2009[2]	1.7	-3.9	-4.6	-5.0	n.a.	n.a.	n.a.
	SP Feb 2009	-	-	-	-	-	-	-
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	**SP Jan 2010**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
	COM Nov 2009	4.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	SP Feb 2009	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*
General government revenue (% of GDP)	**SP Jan 2010**	**40.2**	**41.6**	**39.6**	**38.3**	**38.5**	**39.0**	**39.5**
	COM Nov 2009	40.2	41.1	39.7	39.4	n.a.	n.a.	n.a.
	SP Feb 2009	*40.1*	*41.6*	*39.5*	*38.1*	*38.5*	*38.9*	*39.5*
General government expenditure (% of GDP)	**SP Jan 2010**	**37.7**	**42.6**	**43.5**	**43.2**	**43.2**	**43.3**	**42.6**
	COM Nov 2009	37.7	43.3	43.9	43.6	n.a.	n.a.	n.a.
	SP Feb 2009	*37.8*	*42.5*	*43.6*	*43.3*	*43.2*	*43.2*	*42.7*
General government balance (% of GDP)	**SP Jan 2010**	**2.5**	**-1.1**	**-3.9**	**-5.0**	**-4.6**	**-4.3**	**-3.1**
	COM Nov 2009	2.5	-2.2	-4.2	-4.2	n.a.	n.a.	n.a.
	SP Feb 2009	*2.5*	*-1.1*	*-3.9*	*-5.0*	*-4.6*	*-4.3*	*-3.1*
Primary balance (% of GDP)	**SP Jan 2010**	**2.8**	**-0.5**	**-3.3**	**-4.3**	**-3.7**	**-3.3**	**-2.1**
	COM Nov 2009	2.7	-1.6	-3.6	-3.6	n.a.	n.a.	n.a.
	SP Feb 2009	*2.8*	*-0.5*	*-3.3*	*-4.3*	*-3.7*	*-3.3*	*-2.1*
Cyclically-adjusted balance[1] (% of GDP)	**SP Jan 2010**	**1.6**	**0.9**	**-2.2**	**-3.6**	**-3.4**	**-3.3**	**-2.3**
	COM Nov 2009	1.6	-0.3	-2.0	-1.8	n.a.	n.a.	n.a.
	SP Feb 2009	-	-	-	-	-	-	-
Structural balance[3] (% of GDP)	**SP Jan 2010**	**1.6**	**0.9**	**-2.2**	**-3.6**	**-3.4**	**-3.3**	**-2.3**
	COM Nov 2009	1.6	-0.3	-2.0	-1.8	n.a.	n.a.	n.a.
	SP Feb 2009	-	-	-	-	-	-	-
Government gross debt (% of GDP)	**SP Jan 2010**	**13.5**	**14.9**	**18.3**	**23.9**	**29.3**	**34.1**	**37.4**
	COM Nov 2009	13.5	15.0	16.4	17.7	n.a.	n.a.	n.a.
	SP Feb 2009	*13.5*	*14.9*	*18.3*	*23.9*	*29.3*	*34.1*	*37.4*

Notes:

[1] Output gaps and cyclically-adjusted balances from the programmes as recalculated by Commission services on the basis of the information in the programmes.

[2] Based on estimated potential growth of +1.7%, -3.9%, -4.6% and -5.0% respectively in the period 2008-2011.

[3] Cyclically-adjusted balance excluding one-off and other temporary measures. There are no one-off and other temporary measures according to the most recent programme nor according to the Commission services' autumn 2009 forecast.

Source :
Stability programme (SP); Commission services' autumn 2009 forecasts (COM); Commission services' calculations.

This assessment is structured as follows. Section 2 discusses the key challenges for public finances in Luxembourg. Section 3 assesses the plausibility of the macroeconomic scenario underpinning the public finance projections of the stability programme against the background of the Commission services' economic forecasts[1]. Section 4 analyses budgetary implementation in the year 2009, the budgetary plans for 2010 and the

[1] This assessment uses the Commission services' 2009 autumn forecast, as published on 3 November 2009, as a benchmark. However, more recent information that has become available has also been taken into account to assess the risks to the programme scenarios.

medium-term budgetary strategy. It also assesses risks attached to the budgetary targets. Section 0 reviews recent debt developments and medium-term prospects, as well as the long-term sustainability of public finances. Section 6 discusses institutional features of public finances. Finally, Section 7 concludes with an overall assessment of the programme. The annex provides a detailed assessment of compliance with the code of conduct, including an overview of the summary tables from the programme.

2. KEY CHALLENGES IN THE ECONOMIC DOWNTURN AND THE POLICY RESPONSE

This section describes recent economic and budgetary developments for Luxembourg, which form the background against which the current programme assessment should be viewed, and outlines the key challenges to be addressed by future economic policies.

The Luxembourgish economy has been severely hit by the global recession : real GDP, which had already been declining since the second quarter of 2008, fell by a cumulative 6.6% in the last quarter of the year and the first two quarters of 2009. In yearly average, it stagnated in 2008 and it fell by 3.4% in 2009, despite a strong recovery in the third quarter. Domestic demand fell considerably in the last quarter of 2008 and in the first quarter of 2009 as private investment collapsed and private consumption began to decline, suffering from the deterioration in consumer confidence and employment. Although the recession was triggered by the financial crisis, the Luxembourgish financial sector does not seem, at least up to now, to have been more than proportionally affected. By contrast, manufacturing industry, which almost totally exports its production, saw its value added collapse by more than 25% between the second quarter of 2008 and the first quarter of 2009. Employment, which had been rising very fast until the beginning of the autumn 2008, decelerated strongly and has been broadly stagnating since then. As a result, despite a large recourse to short-term working, which was encouraged by the authorities in order to limit lay-offs, unemployment began to climb to levels which, though still relatively low compared with many other member states, had not been recorded in Luxembourg in more than 50 years.

The situation of public finance was comparatively very favourable in Luxembourg before the recession: with the sole exception of a minor deficit in 2004, the general government had recorded recurrent and often sizeable surpluses since at least the beginning of the 1990s. Moreover, at 6.6% of GDP in 2007, the public debt was one of the lowest in the EU. This allowed the authorities to let automatic stabilisers play fully in response to the crisis and to adopt a comprehensive package of additional measures in order to support activity and employment.

The current situation of public finances hardly raises any concern, at least in the short run: the level of the deficit as well as its increase since the beginning of the crisis remained limited and, despite its doubling in 2008 resulting from the financing of support operations to the financial sector [2], the public debt remains very low both in absolute value and in international comparison. Long-term perspectives, however, are less shining. First, the exceptional success story of Luxembourg since the first half of the 1980s has been clearly related to, and made possible by the worldwide expansion in financial services, the continuation of which in the coming years is far from certain. It is thus not sure that financial services will be able to keep playing the role of growth engine they constituted for Luxembourg during the latest 25 years. Moreover, the recurrent surpluses recorded before the current crisis have essentially been permitted by the buoyant revenues generated by the strong economic growth, since the rise in expenditure

[2] See further Section 5.1 for more details on recent debt developments.

has generally been rather strong, too. And, finally, even if the Luxembourgish economy were to record in the coming years the same growth rates it registered from 1983 to 2007, this would not prevent a progressive but sizeable deterioration in public finance resulting from population ageing : due for a large part to the fact that the country has one of the most generous pension system in the world, the increase in the four coming decades in age-related public expenditure is projected to amount to about 18 percentage points of GDP, one of the strongest in the EU.

3. MACROECONOMIC OUTLOOK

Against the background of the current macroeconomic situation and the main policy challenges set out in the previous section, this section makes an assessment of the plausibility of the macroeconomic scenario underpinning the public finance projections of the programme [3].

The programme macroeconomic scenario foresees that, after an estimated drop by 3.9% in 2009, GDP growth will strongly rebound to 2.5% in 2010 and almost 3% on average over the period 2011–2014, with a small deceleration in 2012 and a slight re-acceleration thereafter. Private consumption is projected to remain subdued in 2010–2012 (+0.3% a year on average) before accelerating somewhat in 2013 and more strongly in 2014, probably due to the expected improvement in economic conditions and decline in unemployment. Government consumption is planned to slow down with respect to the relatively high growth rates recorded in recent years (+1.9% a year from 2010 to 2014 to be compared with 3.2% on average in 2008 and 2009) and gross fixed capital formation should grow by an annual 7.9% in 2010 and 2011 before decreasing by 3.7% a year on average from 2012 to 2014. The main source of growth would be domestic demand in 2010 and 2011 (2.2% a year on average) while, from 2012 onwards, GDP growth would be exclusively generated by net exports (3.0% on average) with exports of goods and services projected to rise by 5.4% a year in real terms and imports by 5.0% [4], The contribution of domestic demand would become negative, due to the projected decline in investment [5].

Although the programme presents two different public finance scenarios, the first one based on an "unchanged policy" assumption and the second one only outlining a budgetary consolidation path [6], these two scenarios rest on the same macroeconomic assumptions. This implicitly incorporates the hypothesis that, should the envisaged consolidation be carried out, this would not have any significant effect on output growth,

[3] In accordance with the autumn 2009 forecasts of the Commission services, the programme macroeconomic scenario rests on the hypothesis of a 0.9% growth in the euro area in 2010 and 1.7% in 2011. It also assumes that this 1.7% growth rate will be maintained over the period 2012 – 2014.

[4] With exports amounting to about 185% of GDP, imports to slightly more than 160% and, consequently, net exports to 25% (2008 figures), the contribution of external trade to GDP growth can be significantly positive even when growth rates in exports and imports are very close..

[5] This is, however, somewhat confusing, since the large contribution of net exports to GDP growth from 2012 onwards is at least as much due to a strong deceleration in imports as to an acceleration in exports. This deceleration in imports is probably for a very large part the result of the projected decline in investment from 2012 onwards, which, in turn, explains the decreasing contribution of domestic demand to GDP growth : the bulk of investment goods are imported, which implies that a drop in equipment investment is almost totally matched by a similar decline in imports and is thus of little effect on GDP growth (at least in the short run).

[6] See Section 4.3 below for the two public finance scenarios.

which seems to constitute an acceptable simplification since, due to the extreme openness of the economy, multipliers are likely to be low and, moreover, the fiscal consolidation envisaged in the adjustment path is relatively moderate.

Table 2: Comparison of macroeconomic developments and forecasts

	2009		2010		2011		2012	2013	2014
	COM	SP	COM	SP	COM	SP	SP	SP	SP
Real GDP (% change)	-3.6	-3.9	1.1	2.5	1.8	3.0	2.7	2.9	3.1
Private consumption (% change)	0.2	-0.7	0.8	0.2	1.5	0.4	0.2	1.0	2.4
Gross fixed capital formation (% change)	-14.8	-11.0	0.3	6.9	2.9	8.8	-3.6	-4.5	-3.0
Exports of goods and services (% change)	-10.0	-7.9	1.8	5.2	3.2	4.8	5.3	5.8	6.2
Imports of goods and services (% change)	-11.5	-9.0	1.9	5.5	3.5	5.2	4.1	4.8	5.7
Contributions to real GDP growth:									
- Final domestic demand	-2.7	-2.3	0.7	1.9	1.4	2.4	-0.5	-0.3	0.5
- Change in inventories	-0.9	-1.4	0.1	-0.2	0.0	-0.1	0.0	0.0	0.0
- Net exports	0.0	-0.2	0.3	0.8	0.3	0.7	3.3	3.2	2.6
Output gap[1]	-3.9	-4.0	-4.6	-3.4	-5.0	-2.8	-2.4	-2.0	-1.7
Employment (% change)	1.1	1.2	-1.3	-0.5	0.0	1.0	1.6	1.6	1.6
Unemployment rate (%)	6.2	6.0	7.3	6.9	7.7	7.2	7.3	7.0	6.5
Labour productivity (% change)	-4.7	-4.8	2.4	3.1	1.8	2.0	1.2	1.3	1.5
HICP inflation (%)	0.0	4.1	1.8	0.0	1.7	2.1	1.8	n.a.	n.a.
GDP deflator (% change)	-1.0	-0.3	3.2	1.4	2.8	2.4	1.6	1.5	2.2
Comp. of employees (per head, % change)	1.2	-0.3	1.8	1.6	2.0	2.7	2.0	2.7	3.1
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Note:

[1]In percent of potential GDP, with potential GDP growth according to the programme as recalculated by Commission services.

Source :

Commission services' autumn 2009 forecasts (COM); Stability programme (SP).

This macroeconomic scenario implies that the negative output gap (as recalculated by the Commission services based on the information in the programme and following the commonly agreed methodology), which reached a maximum of 4% of GDP in 2009, would progressively but slowly narrow to about 1¾% in 2014. The programme states that, with the crisis and its impact on the financial sector, potential growth probably decreased from about 4 to 4½% a year before the crisis to around 2½% to 3%.

In their autumn 2009 forecasts, the Commission services projected real GDP, after a 3.6% contraction in 2009, to resume growing by 1.1% in 2010 and 1.8% in 2011. These projections were thus significantly less optimistic than those presented in the new programme. However, they were finalised at the end of October 2009, at a moment when preliminary estimates of GDP growth were only available for the first two quarters of the year whereas the first estimate for the third quarter (a surprisingly good 4.2% quarter-on-quarter growth) was only released on 6 January 2010 [7]. It is thus possible that the recovery in 2010 will be stronger than anticipated last autumn, if any due to the larger than expected carry-over resulting from this strong growth in the third quarter. Consequently, the programme's growth projections for 2010, though maybe slightly on the high side, can be considered as plausible.

For the period from 2011 to 2014, the programme's macroeconomic projections seem broadly plausible. The decline in investment projected for the years 2012-2014 is not implausible although the programme does not detail why it would happen in those years :

[7] According to a first estimate released on 6 April 2010, GDP decreased by 0.2% quarter-on-quarter in 2009Q4. However, the growth estimate for 2009Q3 was simultaneously revised from 4.2% to 4.8%, which implies that, despite the slight decline in 2009Q4, the carry-over for 2010 is still larger than expected in the autumn.

due to the size of the country, investment is traditionally very volatile in Luxembourg and can decrease even in a period of strong output growth. This was for instance the case in 2000, while GFCF fell by 4.7% in volume while real GDP grew by 8.4%.

For the period after 2011, for which no forecast from the Commissions services is yet available, the programme's projections (2.9% a year on average from 2011 to 2014) are significantly higher than the 2% potential growth estimated for the years 2010-2011 by the Commission services based on their autumn forecast. However, they are also substantially lower than potential growth estimates computed for the period before the crisis (4.0% a year on average over the period from 2001 to the crisis and still 3.6% in 2008). This reflects the caveat made in the programme about the fact that the crisis might have considerably reduced potential growth in a country where financial activities constituted the main source of growth in the latest three decades.

The rise in nominal GDP associated with the real growth rates projected by the programme is not particularly strong, since the increase in the GDP deflator only amounts to 1.9% a year on average over the period 2011-2014. Moreover, in a country where both exports and imports widely exceed the GDP level, developments in the GDP deflator are essentially determined by the terms of trade, which makes them extremely volatile and very difficult to forecast. Overall, the programme's macroeconomic scenario rests on slightly favourable growth assumptions for 2010 and plausible ones thereafter, with the proviso already made about the possible reduction in potential growth caused by the financial crisis.

Employment would follow developments and fluctuations in output in a less volatile way and with the usual lag, which seems to be exceptionally long in Luxembourg: after increasing by 1.2% in 2009 (exclusively due to the carry-over from 2008, when it had surged by 4.7%) it is projected to decline by 0.5% in 2010 before recovering in 2011 (+1.0%) and, more strongly from 2012 to 2014 (+1.6% in each of these three years). Unemployment is projected to keep rising until 2012, when it would peak at 7.3% of active population (in the ILO definition), before easing somewhat and coming back to 6.5% in 2014. In their autumn 2009 forecast, the Commissions services projected employment to decrease by 1.3% in 2010 (instead of 0.5% in the programme) and to stagnate in 2011 (instead of rising by 1.0%), which is in line with their lower growth projections. They also forecast unemployment to continue to rise at least until 2011. Unemployment rates in the two forecasts are not totally comparable because of differences in definitions but their annual changes are very close (see Table 2).

According to the programme's macroeconomic scenario, inflation (as measured by the HICP) after falling from 4.1% in 2008 to zero in 2009 would rise again to 2.1% in 2010 and 1.8% in 2011. This is close to the projection from the Commission services' autumn forecasts (1.8% in 2010 and 1.7% in 2011). As far as wages are concerned, the programme projects them to rise by 1.6% in 2010 and then to accelerate to 2.7% in 2011 and 2.6% on average over the years 2012-2014, while in autumn 2009 the Commission services forecast them to increase by 1.8% in 2010 and 1.7% in 2011, this lower figure being related to the slower projected rise in employment.

4. GENERAL GOVERNMENT BALANCE

This section consists of four parts. The first three parts discuss the budgetary implementation in the year 2009, the budgetary plans for 2010 and the medium-term budgetary strategy in the programme. The final part analyses the risks attached to the budgetary targets.

4.1. Budgetary implementation in 2009

According to the current programme, the general government balance deteriorated from a surplus of 2.5% of GDP in 2008 (slightly revised from the estimate of 2.6% of GDP given in the 2010 budget) to a deficit of 1.1% of GDP in 2009. The 2008 stability programme [8] forecast that the general government balance would turn from a surplus of 2.0% of GDP in 2008 into a deficit of 0.6% of GDP in 2009, with revenues declining by 0.4 percentage point of GDP in 2009 and expenditure increasing by 2.2 percentage points of GDP.

The 2010 budget, submitted to Parliament on 29 September 2009, projected an even stronger deterioration in the government balance, from a revised surplus of 2.6% of GDP in 2008 to a planned deficit of 2.3% of GDP in 2009. In their autumn 2009 forecast, which was finalised a few weeks after the submission of the budget and was based on the same information, the Commission services projected, in a similar way, the general government balance to deteriorate from a surplus of 2.5% of GDP in 2008 to a deficit of 2.2% in 2009.

The deterioration observed in 2009 (3.6 percentage points of GDP) is thus now estimated to have been significantly larger than forecast in the 2008 programme (2.6 percentage points of GDP) but considerably smaller than projected in the 2010 budget (4.9 percentage points of GDP) and in the Commission services' autumn forecast (4.7 percentage points of GDP).

Table 3 compares the projected outcome for the general government balance, revenue and expenditure (as a percentage of GDP) in 2009 as presented in the new stability programme with the targets from the previous update of the programme. Differences between outcome and targets (excluding the impact of unanticipated GDP developments which may have affected the ratio, referred to as the ‘denominator effect’) are decomposed in the impact of a different starting position (i.e. the outcome of 2008 may also have been different from what was anticipated in the previous programme update) and the impact of differences in the revenue / expenditure growth rate from the planned growth rates[9].

According to the programme, government expenditure rose by 8.3% and by 4.9 percentage points of GDP in 2009, instead of increasing by 6.2% and 2.2 percentage points of GDP as planned in the 2008 programme. Not only did interest payments increase faster than expected but also primary expenditure, though to a lesser extent. However, the difference between the 2008 projection and the 2009 estimate for primary expenditure is for the largest part due to a different starting position in 2008, when it amounted to 37.4% of GDP, according to the current programme, instead of a projected 40.9% in the previous programme.

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[8] When used in the current assessment, the expressions "2008 programme" or "previous programme" always refer, unless otherwise mentioned, to the 2008 stability programme as amended by the January 2009 addendum and not to the original programme submitted in October 2008.

[9] Mathematically, the difference in the revenue ratio in Table 3 can be expressed as:

$$\rho^o - \rho^p = \underbrace{\frac{1+r^p}{1+g^p}\Delta\rho_{-1}}_{\text{Base effect}} + \underbrace{\frac{\rho^o_{-1}}{(1+g^o)(1+g^p)}\Delta r}_{\text{Revenue growth effect}} - \underbrace{\frac{\rho^o_{-1}}{(1+g^o)(1+g^p)}\Delta g}_{\text{Denominator effect}} + \underbrace{\frac{\rho^o_{-1}\left(r^o g^p - r^p g^o\right)}{(1+g^o)(1+g^p)}}_{\text{Residual}}$$

where r is the growth rate of revenue and g is the growth rate of GDP. The subscript -1 refers to the previous year’s value. Superscripts o and p refer to the outcome and the planned value respectively. Similar for the expenditure ratio.

As far as revenues are concerned, they decreased by 0.9% in 2010 instead of 0.1% as projected by the 2008 programme. However, they increased by 1.4 percentage point of GDP rather than declining by 0.4 as expected. This rather paradoxical result – during the recession, revenues declined in percentage of GDP in most EU countries - is exclusively due to the fact that the fall in GDP (-4.2% in value) was much stronger than the drop in revenues.

The stronger-than-expected decline in revenues was essentially due to the economic downturn and the normal play of automatic stabilisers since the discretionary reductions in personal income and corporate taxes, foreseen by the 2009 budget and entered into force on 1st January 2009 and 1st January 2010, respectively, as well as their impact on revenues had been taken into account in the 2008 programme. By contrast, a large part of the stronger-than-planned increase in expenditure is due to discretionary measures decided at the end of 2008 and the beginning of 2009, after the aggravation of the crisis, in the framework of the European Economic Recovery Plan.

Table 3: Budgetary implementation in 2009

	2008		2009	
	Planned SP Oct 2008	**Outcome** SP Jan 2010	**Planned** SP Oct 2008	**Outcome** SP Jan 2010
Government balance (% of GDP)	2.0	2.5	-0.6	-1.1
Difference compared to target [1]	0.5		-0.5	
Difference excluding denominator effect [1,2]			**-0.5**	
Of which: due to a different starting position end 2008			0.7	
due to different revenue / expenditure growth in 2009			-1.1	
p.m. Residual [3]			-0.1	
p.m. Nominal GDP growth (planned and outcome)			*0.8*	*-4.2*
Revenue (% of GDP)	43.2	40.2	42.8	41.6
Revenue surprise compared to target [1]	-3.0		-1.2	
Revenue surprise excluding denominator effect [1,2]			**-3.3**	
Of which: due to a different starting position end 2008			-3.0	
due to different revenue growth in 2009			-0.3	
p.m. Residual [3]			0.0	
p.m. Revenue growth rate (planned and outcome)			*-0.1*	*-0.9*
Expenditure (% of GDP)	41.2	37.7	43.4	42.6
Expenditure surprise compared to target [1]	3.5		0.8	
Expenditure surprise excluding denominator effect [1,2]			**2.8**	
Of which: due to different starting position end 2008			3.7	
due to different expenditure growth rate in 2009			-0.8	
p.m. Residual [3]			-0.1	
p.m. Expenditure growth rate (planned and outcome)			6.2	8.3

Notes:

1 A positive number implies that the outcome was better (in terms of government balance) than planned.

2 The denominator effect captures the mechanical effect that, if GDP turns out higher than planned, the ratio of revenue or expenditure to GDP will fall because of a higher denominator. Although the denominator effect can be very significant for revenue and expenditure separately, on the balance they usually largely cancel against each other.

3 The decomposition leaves a small residual that cannot be assigned to the previous components. The residual is generally small, except in some cases where planned and actual growth rates of revenue, expenditure and GDP differ significantly.

Source: *Commission services*

4.2. The programme's budgetary strategy for 2010

The programme projects the general government deficit to deteriorate from 1.1% of GDP in 2009 to 3.9% in 2010. The government deliberately decided not yet to reverse thrust but to continue for the time being with the counter-cyclical policy launched in 2008 in order to support the economy: the programme states that "*the medium-term budgetary* *strategy follows the Ecofin guidelines and those of the European Council of the 10th and 11th December 2009, namely that all policies in support of the economy will be maintained until economic recovery is fully assured. At the same time, a credible exit strategy from the recovery policies will be developed and budgetary consolidation will have to start in 2011 at the latest.*"

The 2010 budget adopted by Parliament on 18 December 2009 foresaw the general government deficit to widen from an estimated 2.3% of GDP in 2009 to 4.4% in 2010. The 1.2 percentage point of GDP downward revision in the 2009 deficit shown in the programme with respect to the budget (from -2.3% of GDP to -1.1%) has thus only been translated into a decline in the deficit projection for 2010 by 0.5 percentage point of GDP (from 4.4% to 3.9%). This implies that the deficit is now projected to rise by 2.8 percentage points of GDP in 2010, while it was forecast to increase by 2.1 percentage points of GDP in the budget. Reasons for this difference are not explained in detail in the programme. Moreover, the budget was based on the assumption that GDP growth would reach 1% to 1½% in 2010, significantly less than the 2.5% now projected in the programme.

The rise by 2.8 percentage points of GDP in the general government balance in 2010 would come chiefly from an increase in the central government deficit by 2.6 percentage points, from 2.9% of GDP in 2009 to 5.5%. On the other hand, the deficit of the local authorities would only marginally increase from 0.1% of GDP to 0.2% and the surplus of the social security would slightly decline from 2.0% of GDP to 1.8%. Out of the 2.8 percentage points of GDP rise in the general government deficit, 2 percentage points would result from a drop in the revenue ratio (from 41.6% of GDP to 39.6%) and nearly 1% from an increase in the expenditure ratio (from 42.6% of GDP to 43.5%). The programme projects revenues to fall by 1.0% (after dropping by 0.9% in 2009) and expenditure to rise by 6.1% (to be compared with 8.3% in 2009), substantially more than the forecast increase in nominal GDP (+3.9%).

The main budgetary measures foreseen by the budget for 2010 (as presented in the programme) are the following:

- On the revenue side, the reduction in the corporate tax rate from 22% to 21%, decided in the 2009 budget in order to enter into force on 1st January 2010, the ex ante cost of which is estimated at about 0.1% of GDP.
- On the expenditure side :
    - The financing of elementary schools' structural reform (0.3 % of GDP) ;
    - Additional spending to promote public transport (0.15% of GDP) ;
    - support of purchasing power of households and development of care facilities for children (0.25% of GDP) ;
    - increase in climate change spending (0.15% of GDP) ;
    - additional spending to modernise public infrastructures.(0.6% of GDP).

Additional expenditure would thus amount to about 1½% of GDP.

The structural balance (using the output gap recalculated by the Commission services, according to the common methodology and using information from the programme) would deteriorate from a surplus of about 1% of GDP in 2009 to a deficit of more than 2% of GDP in 2010. Likewise, the structural primary balance is projected to deteriorate by more than 3 percentage points of GDP, from a surplus of 1½ % of GDP in 2009 to a deficit of about 1½% of GDP in 2010. The stance of fiscal policy is thus planned to be significantly expansive.

Table 4. Main budgetary measures for 2010

Revenue measures[1]	Expenditure measures[2]
▪ Reduction in the corporate tax rate from 22% to 21% (decided in the 2009 budget in order to enter into force on 1st January 2010) (0.2% of GDP)	▪ Financing of elementary schools' structural reform (0.3% of GDP) ▪ promotion of public transport (0.15% of GDP) ▪ support of purchasing power of households and development of care facilities for children (0.25% of GDP) ▪ increase in allowance for low income households, guaranteed minimum income and income for disabled persons (0.05% of GDP) ▪ increase in climate change spending (0.15% of GDP) ▪ modernisation of public infrastructures.(0.6% of GDP)

Notes:

[1] Estimated impact on general government revenue
[2] Estimated impact on general government expenditure

Source: Commission services and 2010 Stability Programme of Luxembourg

4.3. The programme's medium-term budgetary strategy

This section describes the medium-term budgetary strategy outlined in the programme - and how it compares with the one in the previous update - as well as the composition of the budgetary adjustment, including the broad measures envisaged.

For the period after 2010, the programme presents a full-fledged budgetary scenario based on an "unchanged policy" hypothesis, where the general government deficit would first increase to 5.0% of GDP in 2011 and then slowly decrease to 4.6% of GDP in 2012 and 4.3% of GDP in 2013 before it would reach 3.1% of GDP in 2014 as the effects of the crisis progressively fade away.

According to the programme, the increase in the deficit in 2011 would be caused by a strong drop in revenues (from 39.6% of GDP in 2010 to 38.3%) only partially offset by a much more limited decrease in expenditure (from 43.5% of GDP to 43.2%). Nearly all categories of revenues, with the sole exception of property income, would decline in percentage of GDP: direct taxes by 0.8 percentage point of GDP, indirect taxes by 0.6 and social security contributions by 0.2. On the expenditure side, government consumption and social transfers would decrease by 0.2 percentage point of GDP each.

After 2011, the deficit would spontaneously but slowly narrow, due to a gradual recovery in revenues and a concomitant slight decrease in the expenditure ratio. Revenues are forecast to progressively recover from a trough recorded in 2011 (38.1% of GDP) to 39.5% of GDP, chiefly due to a resurgence in direct taxes from 2011, when the delayed impact of the crisis on receipts is supposed to reach its maximum: after declining by 2.2

percentage points of GDP from 2009 (13.9% of GDP) to 2011 (11.7% of GDP), receipts from direct taxes would rise by 1.5 percentage point of GDP from 2011 to 2014, when they would reach 13.2% of GDP.

At the same time, expenditure would slightly decline from 43.2% of GDP in 2011 to 42.6% in 2014 because, due to the gradual acceleration in growth, the rise in nominal GDP will progressively exceed the projected increase in spending. This reduction in the expenditure ratio would first remain very limited (hardly ¼ percentage point of GDP from 2010 to 2013) before accelerating in 2014, when the decline would amount to 0.7 percentage point of GDP, chiefly as a result of a projected diminution in government consumption (by 0.2 percentage point of GDP) and in social transfers (by 0.3 percentage point of GDP), the latter being probably related to the expected decrease in unemployment.

Table 5: Composition of the budgetary adjustment (in the "unchanged policy scenario")

(% of GDP)	2008	2009		2010		2011		2012	2013	2014	Change: 2009-2014
	COM	COM	SP	COM	SP	COM[1]	SP	SP	SP	SP	SP
Revenue	**40.2**	**41.1**	**41.6**	**39.7**	**39.6**	**39.4**	**38.3**	**38.5**	**39.0**	**39.5**	**-2.1**
of which:											
- Taxes on production and imports	11.8	12.5	11.8	12.2	11.4	12.1	10.8	10.9	10.9	10.9	-0.9
- Current taxes on income, wealth, etc.	13.4	12.8	13.9	12.0	12.5	12.2	11.7	12.0	12.5	13.2	-0.7
- Social contributions	10.9	11.8	12.2	11.4	12.0	11.1	11.8	11.7	11.6	11.5	-0.7
- Other (residual)	4.0	4.1	3.7	4.0	3.7	4.0	4.0	3.9	4.0	3.9	0.2
Expenditure	**37.7**	**43.3**	**42.6**	**43.9**	**43.5**	**43.6**	**43.2**	**43.2**	**43.3**	**42.6**	**0.0**
of which:											
- Primary expenditure	37.4	42.7	42.0	43.3	42.9	43.0	42.5	42.3	42.3	41.6	-0.4
of which:											
Compensation of employees	7.1	8.0	7.9	8.1	8.2	8.1	8.1	8.0	8.0	7.9	0.0
Intermediate consumption	3.3	3.8	3.7	3.8	3.8	3.8	3.7	3.7	3.7	3.7	0.0
Social payments	18.1	20.8	20.7	21.2	20.7	21.0	20.5	20.3	20.3	20.0	-0.7
Subsidies	1.5	1.6	1.6	1.5	1.7	1.5	1.6	1.6	1.6	1.6	0.0
Gross fixed capital formation	3.6	4.2	3.5	4.5	3.9	4.5	3.9	3.9	3.9	3.9	0.4
Other (residual)	3.9	4.2	4.5	4.2	4.7	4.1	4.8	4.8	4.7	4.6	0.1
- Interest expenditure	0.3	0.6	0.6	0.6	0.6	0.7	0.7	0.9	1.0	1.0	0.4
General government balance (GGB)	**2.5**	**-2.2**	**-1.1**	**-4.2**	**-3.9**	**-4.2**	**-5.0**	**-4.6**	**-4.3**	**-3.1**	**-2.0**
Primary balance	**2.7**	**-1.6**	**-0.5**	**-3.6**	**-3.3**	**-3.6**	**-4.3**	**-3.7**	**-3.3**	**-2.1**	**-1.6**
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GGB excl. one-offs	**2.5**	**-2.2**	**-1.1**	**-4.2**	**-3.9**	**-4.2**	**-5.0**	**-4.6**	**-4.3**	**-3.1**	**-2.0**
Output gap[2]	1.7	-3.9	-4.0	-4.6	-3.5	-5.0	-3.0	-2.8	-2.6	0.0	4.0
Cyclically-adjusted balance[2]	1.6	-0.3	0.9	-2.0	-2.2	-1.8	-3.5	-3.2	-3.0	-3.1	-4.0
Structural balance[3]	**1.6**	**-0.3**	**0.9**	**-2.0**	**-2.2**	**-1.8**	**-3.5**	**-3.2**	**-3.0**	**-3.1**	**-4.0**
Change in structural balance		*-1.9*	*-0.7*	*-1.7*	*-3.0*	*0.2*	*-1.4*	*0.3*	*0.2*	*-0.1*	
Structural primary balance[3]	1.9	0.3	1.5	-1.4	-1.6	-1.1	-2.8	-2.3	-2.0	-2.1	-3.6
Change in structural primary balance		*-1.6*	*-0.4*	*-1.7*	*-3.0*	*0.2*	*-1.3*	*0.5*	*0.3*	*-0.1*	

Notes:

[1]On a no-policy-change basis.

[2]Output gap (in % of potential GDP) and cyclically-adjusted balance according to the programme as recalculated by Commission services on the basis of the information in the programme.

[3]Structural (primary) balance = cyclically-adjusted (primary) balance excluding one-off and other temporary measures.

Source :

Stability programme (SP); Commission services' autumn 2009 forecasts (COM); Commission services' calculations

This "unchanged policy scenario" thus implies that the general government deficit would remain above 3% of GDP until the end of the period covered. It may constitute a broadly plausible picture of spontaneous developments in public finances in the coming years, should no consolidation be undertaken, but it does certainly not reflect a restrictive stance in line with the exit strategy advocated by the Council. Moreover, the practical relevance of this "unchanged policy scenario" is limited by the fact that, in the programme own wording, "*it is not the government's intention to allow public finances to follow such a track.*" On the contrary, "*the Government aims at re-establishing a balanced budget at the level of the general government in 2014 at the latest.*" However, the programme does not provide any information on the way this consolidation will be realized, except for mentioning that a dialogue with social partners will be organised in order to find a consensus on consolidation measures to be taken, which is planned to take place this spring.

The programme's "alternative scenario" thus aims to achieve a balanced budget in 2014, the final year of the period covered. This adjustment is scheduled to begin in 2011 at the latest. The programme presents a budgetary path with decreasing headline deficits from 2011 onwards as well as the associated debt levels but it does not include any information on the measures foreseen to achieve these targeted deficits, nor even on the planned developments in the revenue and expenditure components. The consolidation should happen through an annual reduction by about 1 percentage point of GDP in the headline deficit, which is planned to peak at 3.9% of GDP in 2010 and then to be progressively reduced to 3.0% in 2011, 2.1% in 2012, 1.1% in 2013 and eventually zero in 2014. Although the programme does not give any information in this respect for the years after 2010, it is possible, from the very low level of the public debt and, therefore, of interest payments (which, in the unchanged policy scenario, amount to about ¾% of GDP on average over the period), to conclude that the primary deficit (which is projected to reach 3.3% of GDP in 2010) and the headline deficit would follow very parallel paths.

The programme states that, due to the importance of implicit liabilities related to population ageing (Luxembourg is one of the EU countries with the highest projected increase in age-related public expenditure [10]) the country's medium-term objective (hereafter MTO), which was up to now a structural deficit of 0.8% of GDP, has been changed into a structural surplus of 0.5% of GDP. The programme mentions that this MTO should be achieved, through a supplementary effort of about 1 percentage point of GDP from 2015 onwards, i.e. outside the period covered, without specifying when nor how it will be reached. Moreover, this new MTO does not appear to take sufficiently into account the implicit liabilities related to ageing, despite the debt being below the Treaty reference value.

However, even though the programme does not plan the MTO to be reached during the period covered (even in the "adjustment path"), this is well the case when using the output gaps recalculated by the Commission services (based on the information in the programme and following the commonly agreed methodology) rather than the output gaps given in the programme. In that case, the structural balance would be a surplus of 0.8% of GDP in 2014. The reason for this difference between the programme's original projections and those based on output gaps recalculated by the Commission services is that, by contrast with the output gap presented in the programme, which closes and then turn positive in 2014, the output gap recalculated by the Commission services, though narrowing, remains significantly negative all along the period covered (it would still amount to -1.7% of GDP in 2014). Consequently, when using the output gap recalculated by the Commission services, the improvement in the structural balance associated with the "adjustment path scenario" is much larger than in the programme's original projections: it improves from a deficit of about –2 ¼ % of GDP in 2010 to a surplus of ¾% of GDP in 2014, the year when the headline balance is planned to return to zero, which is above the new MTO.

[10] See below Section 5.2 for a more complete discussion on the issues of population ageing and long-term sustainability.

Box 1: The medium-term objective (MTO) for Luxembourg

As noted in the Code of Conduct[11], the MTO aims to (a) provide a safety margin with respect to the 3% of GDP deficit limit; (b) ensure rapid progress towards fiscal sustainability; and (c) allow room for budgetary manoeuvre, in particular taking into account the needs for public investment. The MTO is defined in cyclically adjusted terms, net of one-off and other temporary measures. On 7 July 2009, the ECOFIN Council took note of a new methodology for setting MTOs, ensuring that implicit liabilities (costs related to ageing populations, in particular projected healthcare and pension expenditure) are also accounted for.

Specifically, the country-specific MTOs should take into account three components:

(i) the debt-stabilising balance for a debt ratio equal to the 60% of GDP reference value (dependent on long-term potential growth), implying room for budgetary manoeuvre for Member States with relatively low debt;

(ii) a supplementary debt-reduction effort for Member States with a debt ratio in excess of the (60% of GDP) reference value, implying rapid progress towards it; and

(iii) a fraction of the adjustment needed to cover the present value of the future increase in age-related government expenditure.

This implies a partial frontloading of the budgetary cost of ageing irrespective of the current level of debt. In addition to these criteria, MTOs should provide a safety margin with respect to the 3% of GDP deficit reference value and, for euro area and ERM II Member States, in any case not exceed a deficit of 1% of GDP.

As communicated by the authorities in the programme, the MTO of Luxembourg is no longer a structural deficit of 0.8% of GDP but a structural surplus of 0.5% of GDP. However, this new MTO does not appear to take sufficiently into account the implicit liabilities related to ageing, despite the debt being below the Treaty reference value.

The time profile of the consolidation envisaged by the programme in this alternative scenario is gradual and very slightly back-loaded since the reduction in the headline deficit is scheduled to increase from 0.9 percentage point of GDP in 2011 and 2012 to 1.0 percentage point of GDP in 2013 and 1.1 in 2014. The primary deficit is projected to reach 3.3% of GDP in 2010, to be compared with 3.9% for the headline deficit. Although the programme does not give any information on this issue for the years after 2010, it is plausible to conclude that, like in the "unchanged policy scenario", the primary deficit would follow a path very similar to that of the headline deficit [12].

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[11] "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 on 10 November 2009, available at: http://ec.europa.eu/economy_finance/sgp/legal_texts/index_en.htm.

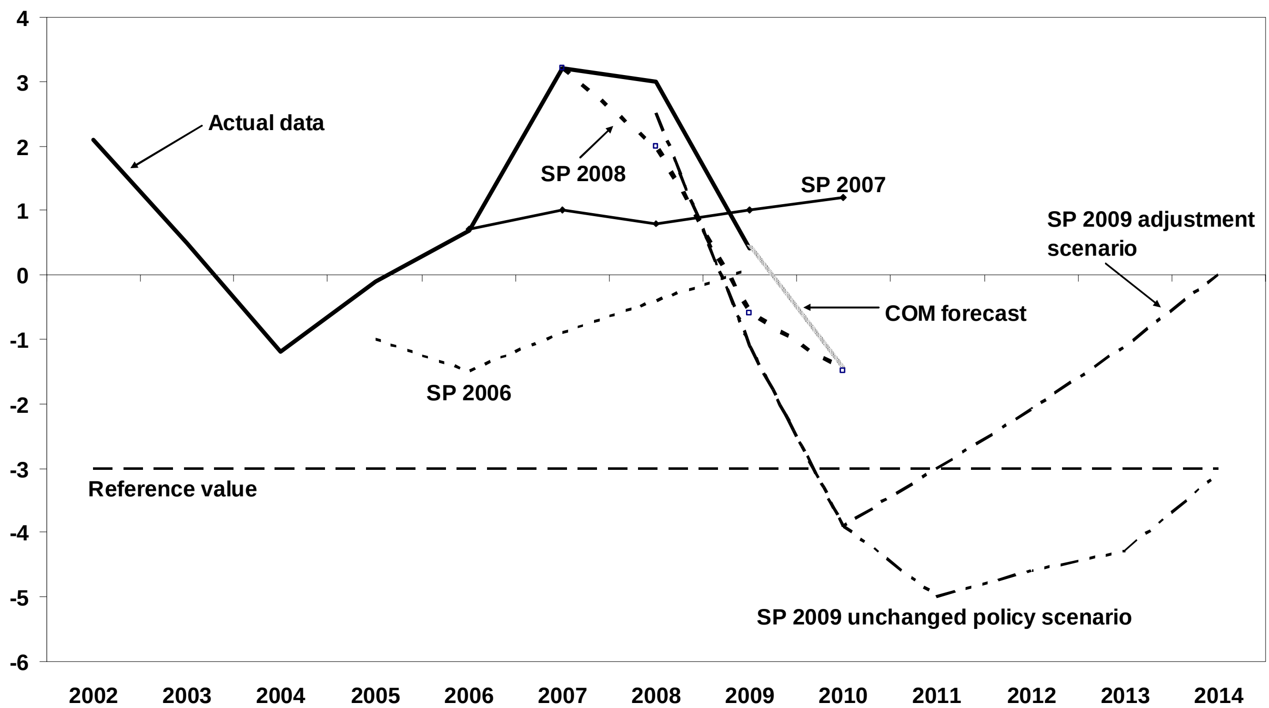
[12] According to the programme, the debt ratio would be on average 6 percentage points of GDP lower in the "adjustment path scenario" than in the "unchanged policy scenario" (the difference between the two debt paths would rise from less than 2 percentage points of GDP in 2011 to more than 10 in 2014. See below Section 5.1.1 on this point). Assuming the same average interest rate on the debt as in the "unchanged policy scenario" (the Luxembourgish debt is probably not high enough, even if it were to reach 37.4% of GDP in 2014 as projected in the "unchanged policy scenario", for its level and/or increase to generate a rise in the risk premium), interest payments would rise, in the "adjustment scenario", from 0.6% of GDP in 2010 to 0.75% of GDP, instead of increasing from 0.6% to 1% of GDP like in the "unchanged policy scenario". This implies that the difference between the headline deficit and the primary deficit would be quite similar in the two scenarios.

As already indicated, in the absence of any information in the programme on the projected revenues and expenditure levels for the years after 2010 and about the measures that will be taken in order to achieve the deficit objectives, it is not possible to assess in more detail the budgetary strategy for the period after 2010.

4.4. Risk assessment

This section discusses the plausibility of the programme's budgetary projections by analysing various risk factors. For the period until 2010, Table 5 compares the detailed revenue and expenditure projections in the Commission services' autumn 2009 forecast with those in the updated programme. However, although the assessment uses the Commission services' forecast as a benchmark, it also takes explicitly into account all available information about more recent developments.

Figure 1: Government balance projections in successive programmes (% of GDP)



<u>Source</u>: Commission services' autumn 2009 forecast (COM) and successive stability programmes

For 2009, the programme's projections are based on more recent information than the Commission services autumn forecasts and should, consequently, be considered as more plausible. Since for 2010 the downward revision in the 2009 deficit of 1.2 percentage point of GDP only resulted in a 0.5 percentage point of GDP change in the 2010 deficit projection as indicated earlier. Consequently, the programme now projects a significantly larger widening in the deficit than was initially planned in the 2010 budget and projected in the Commission services' autumn forecast, although it also forecasts GDP growth to be significantly stronger than assumed in the budget and projected in the Commission services' autumn forecast (2.5% in the programme and 1% to 1½% in the budget). Excluding another revision in current budgetary and growth data, it is thus likely that the budgetary outcome for 2010 will be better than expected, too.

For the period 2011–2014 the gradual recovery in revenues, in particular in corporate tax, seems plausible as the effects of the crisis will progressively fade away. On the other hand, GDP growth projections for the period appear slightly favourable for 2010 and plausible thereafter.

To sum up, the "unchanged policy scenario" seems to give for 2010 a somewhat pessimistic view of the deterioration in the government balance. For the period 2011-2014, it presents a broadly credible picture of possible developments in Luxembourg's public finance, should no consolidation be undertaken, with the proviso that, if the 2010 deficit turns out to be smaller than projected, the resulting base effect might reduce the deficits in the following years in a similar way, though maybe not to the same extent. However, this possible positive base effect is probably roughly balanced by the negative risks attached to the macroeconomic outlook, in particular the possible long-term reduction in the potential growth of the financial sector caused by the financial crisis and its aftermath.

5. GOVERNMENT DEBT AND LONG-TERM SUSTAINABILITY

This section is in two parts. A first part describes recent debt developments and medium-term prospects, including risks to the outlook presented in the programme. A second part takes 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

The general government gross debt in Luxembourg used to be and still is one of the lowest in the EU. However, it doubled from 6.6% of GDP % in 2007 to 13.5% in 2008, because of the financing of the support operations to the financial sector. In 2009, the debt ratio increased to 14.9% as a result both of the deficit (1.1% of GDP) and of a 4.2% decrease in nominal GDP.

In the "unchanged policy scenario" presented by the programme, the gross public debt is projected to increase from 14.9% of GDP in 2009 to 37.4% in 2014. It should be noted that this relatively considerable rise in the debt ratio (22.5 percentage points of GDP over 5 years) widely exceed the increase that would be generated by the projected general government deficits, taking into account the scenario's assumptions about nominal GDP growth. The increase in the debt explained by the deficits of the general government would only amount to about 16 percentage points of GDP. The reason for this discrepancy is that the central government is projected to record deficits of about 5.8% of GDP on average over the period 2010 – 2014 (to be compared with a global average deficit of 4.2% of GDP for the general government), while the social security system is expected to run still large (though declining) surpluses (1.7% of GDP on average over the same period), with the central government continuing to operate large transfers to the social security, as foreseen by the law. These surpluses will most probably be invested in other assets than Luxembourgish government bonds (as has always been the case up to now) [13]. Consequently, the borrowing requirements of the general government (and,

[13] Since these assets certainly yield a higher return than the interest paid by the central government on its debt, such a strategy perfectly makes sense, even if it results in a larger increase in the government gross debt than if the central government no longer had to contribute to the financing of the social security (or if the surpluses of the social security were invested in central government debt).

hence, the increase in its gross debt) will not be determined by its total deficits but by those of the central government, which are projected to be significantly larger. This also implies that the rise in the gross public debt will be partially matched by a corresponding increase in the assets of the social security system, which would at least go up by a cumulative 7.5 percentage points of GDP[14]. Finally, it should also be noted that debt projections repeatedly exceeded actual outcomes in recent years, except in 2008 when the need to support the financial sector (and to finance this operation) had not been anticipated.

Table 6: Debt dynamics

(% of GDP)	average 2003-07	2008	2009		2010		2011		2012	2013	2014
			COM	SP	COM	SP	COM	SP	SP	SP	SP
Gross debt ratio[1]	**6.4**	**13.5**	**15.0**	**14.9**	**16.4**	**18.3**	**17.7**	**23.9**	**29.3**	**34.1**	**37.4**
Change in the ratio	0.0	6.9	1.5	1.4	1.4	3.4	1.4	5.6	5.4	4.8	3.3
Contributions[2]:											
1. Primary balance	**-1.1**	**-2.7**	**1.6**	**0.5**	**3.6**	**3.3**	**3.6**	**4.3**	**3.7**	**3.3**	**2.1**
2. "Snow-ball" effect	**-0.3**	**0.0**	**1.3**	**1.2**	**0.0**	**0.0**	**-0.1**	**-0.2**	**-0.1**	**-0.2**	**-0.7**
Of which:											
Interest expenditure	0.2	0.3	0.6	0.6	0.6	0.6	0.7	0.7	0.9	1.0	1.0
Growth effect	-0.3	0.0	0.5	0.6	-0.2	-0.4	-0.3	-0.5	-0.6	-0.8	-1.0
Inflation effect	-0.3	-0.3	0.1	0.0	-0.5	-0.2	-0.4	-0.4	-0.4	-0.4	-0.7
3. Stock-flow adjustment	**1.4**	**9.7**	**-1.4**	**-0.3**	**-2.2**	**0.1**	**-2.2**	**1.5**	**1.8**	**1.7**	**1.9**
Of which:											
Cash/accruals diff.	0.2	-1.4		n.a.		n.a.		n.a.	n.a.	n.a.	n.a.
Acc. financial assets	1.3	11.1		n.a.		n.a.		n.a.	n.a.	n.a.	n.a.
Privatisation	0.0	0.0		n.a.		n.a.		n.a.	n.a.	n.a.	n.a.
Val. effect & residual	0.0	0.0		n.a.		n.a.		n.a.	n.a.	n.a.	n.a.

Notes:

[1]End of period.

[2]The snow-ball effect captures the impact of interest expenditure on accumulated debt, as well as the impact of real GDP growth and inflation on the debt ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.

Source:

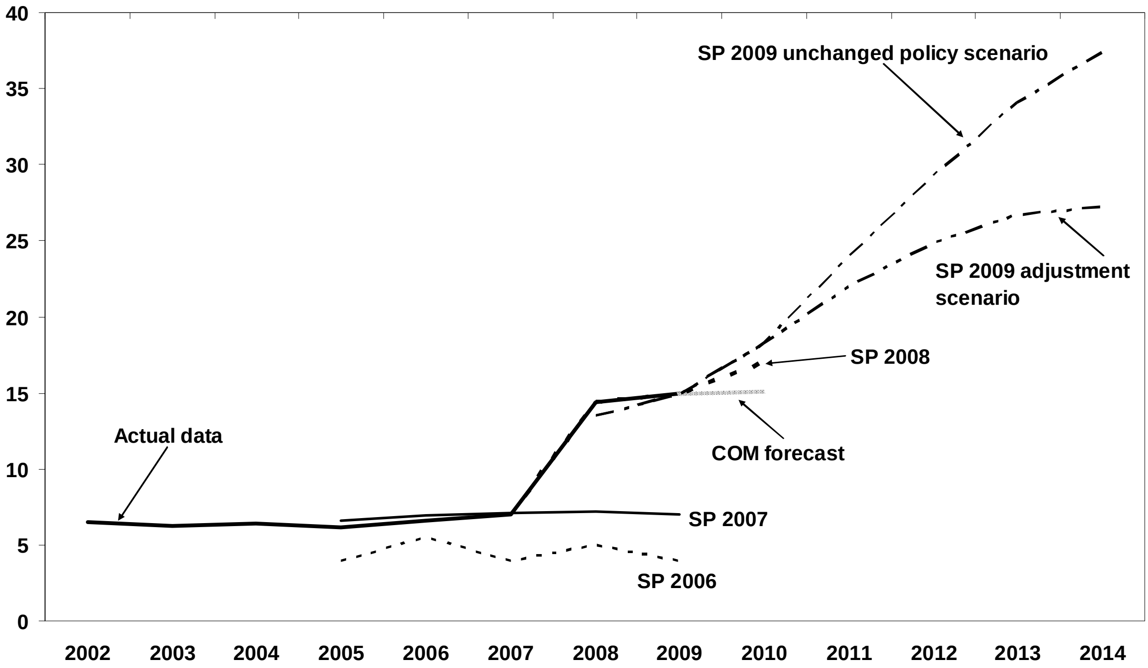
Stability programme (SP); Commission services' autumn 2009 forecasts (COM); Commission services' calculations.

In the adjustment path sketched by the programme, the debt ratio is projected to increase from 14.9% in 2009 to 27.2% in 2014, a still sizeable increase (12.3 percentage points of GDP in 5 years) but more than 10 percentage points of GDP smaller than in the unchanged policy scenario. Here too, the increase in the general government debt is projected to be significantly larger than the sum of its deficits, which would only imply a rise in the debt ratio by 5.8 percentage points of GDP. The reason for this difference is the same as in the unchanged policy scenario and the rise in the gross public debt would thus also be at least partially matched by an increase in government assets.

The government already holds sizeable assets, especially held by the social security system, which are the result of the recurrent surpluses recorded in the last decades. According to most estimates, these assets amount to about 30% of GDP. The net financial position of the government is thus widely positive. The support operation to the financial sector launched at the end of 2008, which caused the doubling of the gross debt in that year, also resulted in a corresponding increase in government assets. Moreover, as already said, the projected increase in the debt will be, in both the "unchanged policy" and the "adjustment" scenarios partially matched by an increase in the assets of the social security system.

[14] Computed as the sum of the social security surpluses over the years 2010 – 2014, not taking into account the revenues they would generate.

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



Source: Commission services' autumn 2009 forecast (COM) and successive stability programmes

5.1.2. Assessment

The debt levels presented in the programme (even those associated with the "adjustment scenario") are generally higher than those projected by the Commission services in their autumn 2009 forecasts, which were based on less recent information. As indicated above, the gross public debt doubled at the end of 2008 (from 6.6% of GDP in 2007 to 13.5%) as a result of the financing, of the support operation to the financial sector. Moreover, as part of this operation, the Luxembourgish government decided, together with the Belgian and French governments, to guarantee some liabilities of the Dexia Bank. This guarantee has not led to any disbursement up to now.

Actually, the paths of debt level presented in both scenarios of the programme do not seem to be subject to substantial risks given that the deficit targets look broadly plausible. In fact, the main risk related with the public debt in Luxembourg is not its current level, which is still very low, but its potential surge in the coming decades as a result of the considerable projected increase in age-related public expenditure. This is explained in more detail in the coming section.

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

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

This section presents sustainability indicators based on the long-term age-related government spending as projected by the Member States and the EPC in 2009 according to an agreed methodology[15].

Table 7 shows that age-related spending projected to rise by 18.2% of GDP between 2010 and 2060, which is significantly above the EU average (4.6 pps.). Sustainability indicators for two scenarios are presented in Table 8. The "2009 scenario" is based on a no-policy-change assumption and the 2009 structural primary balance as a starting year, while 'the programme scenario' takes into account the consolidation planned in the programme up to 2012 and is based on the projected 2012 structural primary balance as a starting position. Including the increase of age-related expenditure and assuming that the structural primary balance remained at its 2009 level, the sustainability gap (S2)[16] would amount to 12.7% of GDP; which is 5½ percentage point more than in last year's assessment, This is mainly due to a higher estimated structural primary balance in the starting year, additionally the rise in age-related expenditure is also higher in the 2009 projections. The starting budgetary position is more than sufficient to stabilize the debt ratio over the long-term but only partly offsets the budgetary impact of age-related expenditure.

Table 7: Long-term age-related expenditure: main projections

(% of GDP)	**2007**	**2010**	**2020**	**2030**	**2040**	**2060**	**Change 2010-60**
Total age-related spending	**20.0**	**19.9**	**21.1**	**26.1**	**31.3**	**38.0**	**18.2**
- Pensions	8.7	8.6	9.9	14.2	18.4	23.9	15.3
- Healthcare	5.8	5.9	6.2	6.5	6.8	7.0	1.1
- Long-term care	1.4	1.4	1.5	1.8	2.4	3.4	2.0
- Education and unemployment benefits	4.2	4.0	3.6	3.6	3.8	3.7	-0.3
Property income received	1.6	1.5	1.1	0.9	0.8	0.7	-0.8

Source: Economic Policy Committee and Commission services.

The "programme scenario" is based on the structural primary balance at the end-of-programme, which is significantly worse than in 2009. This scenario shows an increased gap, indicating increased risks to long-term sustainability of public finances.

Based on the assumptions used in the projection of the age-related expenditure and the calculation of the sustainability indicators, Figure 3 displays the projected debt-to-GDP ratio over the long-term.

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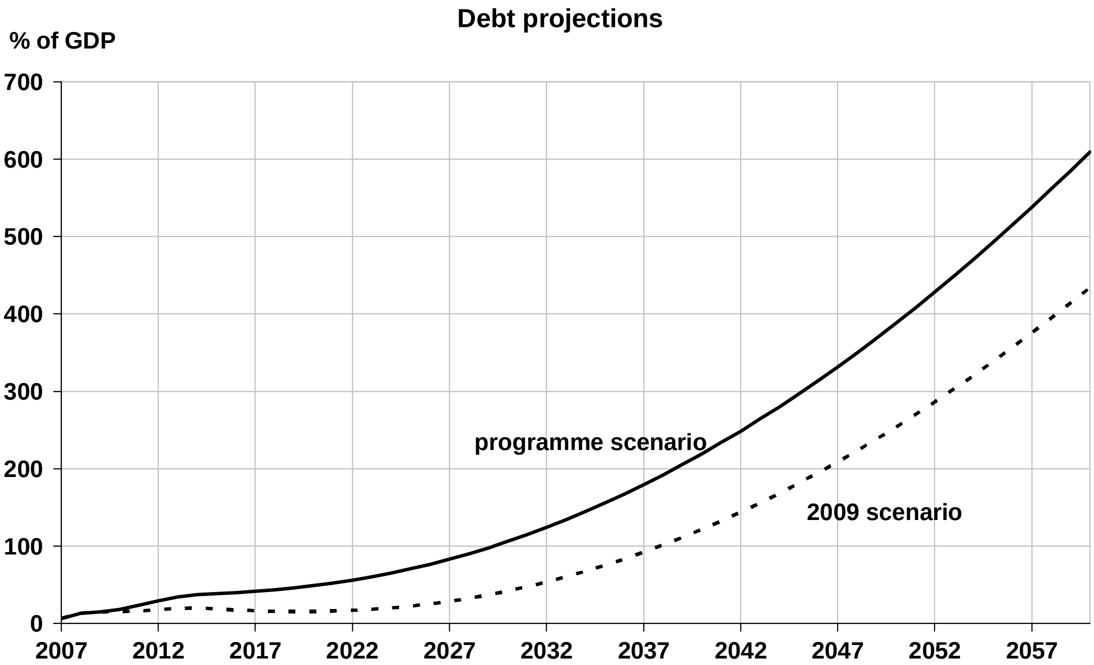
15 Economic Policy Committee and the European Commission (2009), '2009 Ageing Report: Economic and budgetary projections for the EU-27 Member States (2008-60)', *European Economy* No. 2/2009. European Commission (2009), 'Sustainability Report 2009, European Economy No. 9/2009. European Commission (2008), 'Public finances in EMU – 2008', *European Economy* No. 4/2008..

16 The S2 indicator is defined as the change in the current level of the structural primary balance required to make sure that the discounted value of future structural primary balances (including the path of property income) covers the current level of debt.

Table 8: Sustainability indicators and the required primary balance

	2009 scenario			Programme scenario		
	S1	S2	RPB	S1	S2	RPB
Value	6.7	12.7	13.5	9.9	15.6	13.7
Of which:						
Initial budgetary position (IBP)	-0.9	-0.7	-	1.9	2.1	-
Debt requirement in 2060 (DR)	-0.7	-	-	-0.4	-	-
Long-term change in the primary balance (LTC)	8.3	13.4	-	8.3	13.4	-
Source: Commission services.						

Figure 3: Long-term projections for the government debt ratio



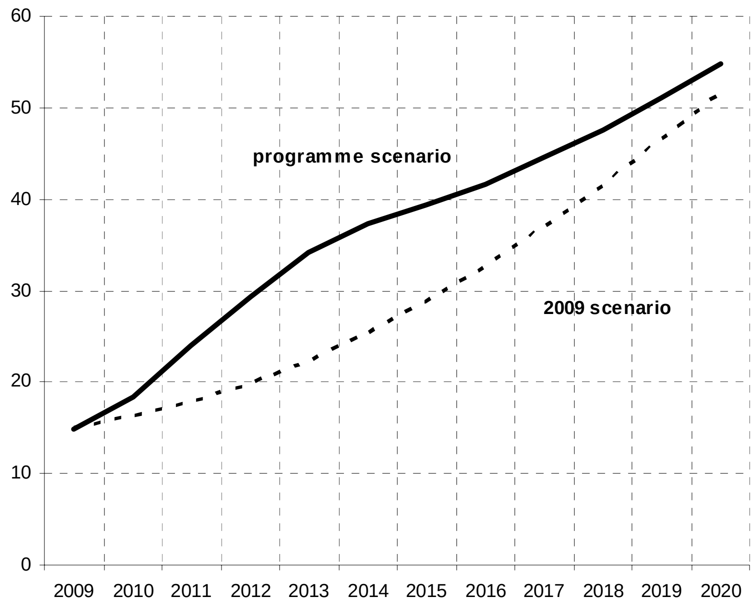
Note: Being a mechanical, partial-equilibrium analysis, the long-term debt projections are bound to show highly accentuated profiles. As a consequence, the projected evolution of debt levels should not be seen as a forecast similar to the Commission services' short-term forecasts, but as an indication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

Source: Commission services..

Based on the alternative assumptions of economic developments presented in the Commission services' autumn 2009 forecast publication[17], Figure 4 shows projected medium-term trajectories of the debt/GDP ratio. For the 'programme scenario' the projected debt trajectories show relatively similar paths under both sets of assumptions, reaching the level of about 50% of GDP in 2020. However, the debt levels in the 2009 scenario would increase at a faster pace when account is taken on most recent economic developments than under the baseline assumptions presented above.

[17] Section 3.5 in European Commission (2009), 'European Economic Forecast – autumn 2009', European Economy No. 10/2009. This economic scenario assumes that the output gap caused by the crisis will be closed by 2017.

Figure 4: Medium-term projections for the government debt ratio



Source: Commission services.

5.2.2. Additional factors

For an overall assessment of the sustainability of public finances, other relevant factors are taken into account. They are summarized in Table 9.

Table 9: Additional factors for the assessment of long-term sustainability risks

	Impact on risk
Debt and pension assets	+
Decline in structural balance until 2011 in COM Autumn 2009 forecast	-
Alternative projection of cost of ageing	na
Strong decline in benefit ratio	na
High tax burden	na
Difference between S1 and S2	+

Note: '-': factor tends to increase the risk to sustainability, '+': factor tends to decrease the risk to sustainability, 'na': not applicable.
Alternative projections are often presented in the programmes, whose assumptions often diverge from the common method. Projections currently discussed in the Economic Policy Committee but not yet published, are for the time being also considered "unofficial".
An explanation on these factors can be found in chapter V of: European Commission (2009), Sustainability Report 2009, European Economy No. 9/2009.
Source: Commission services.

The structural primary balance is forecast to be negative from 2010 until the end of the programme, which weighs on the risk of the long-term sustainability of public finances. However the low debt ratio, large assets accumulated in the pension funds and given that the projected increase in age-related expenditure doesn't materialise in the near future, as illustrated by the large difference between the S1 and S2 indicators, are factors that are assessed to diminish the risks to long-term sustainability to an extend that affects the overall sustainability assessment.

5.2.3. Assessment

The long-term budgetary impact of ageing is among the highest in the EU, influenced notably by a very considerable projected increase in pension expenditure. The low debt ratio and the significant assets accumulated in social security, contribute to offsetting the projected long-term budgetary impact of ageing populations. However, this is not sufficient to cover the sizeable increase in age-related expenditure. Moreover, the budgetary plans until 2014 imply that the structural primary surplus would no longer make a contribution to addressing the budgetary cost of ageing. Achieving high primary surpluses over the medium term and, as recognized by the authorities, implementing measures aimed at curbing the substantial increase in age-related expenditures would contribute to reducing the medium risk to the sustainability of public finances.

Medium-term debt projections until 2020 that take account of more recent economic developments and projections on the potential growth show that the budgetary development envisaged in the programme is not enough to stabilise debt in the medium term but would increase it to the level of 55 % of GDP by 2020.

6. INSTITUTIONAL FEATURES OF PUBLIC FINANCES

The quality of Luxembourgish public finance appears above average: despite its recent and sizeable deterioration resulting from the crisis, the country's current fiscal position can be considered as comparatively good: thanks to the fact that the country was in substantial surplus at the onset of the current crisis, the deficit remains much lower than in most other member states and the government debt, despite its doubling in 2008, is the lowest in the euro area. However, as stressed before, this favourable short-term position should not hide the sustainability problem resulting from the rise in public age-related expenditure, which will be among the most acute in the EU.

Despite its sizeable increase resulting from the crisis, general government expenditure remains low compared to most other Member States, even if this is for a part due to the high level of GDP, which is amplified by the very large number of non-residents working in the country (about 40% of total labour force in 2008). Public expenditure seems comparatively efficient: government consumption is low while public investment is the highest among the 15 "old" Member States and has even considerably increased as part of the support measures decided by the government in accordance with the EERP. By contrast, government spending on R&D is low but it is planned to increase substantially as a result of the development of the University of Luxembourg. Similarly, the efficiency of expenditure on education seems only average.

Like public expenditure, government revenues are low in percentage of GDP compared to most other Member States but with the same qualification: comparisons with other countries are distorted by the very high level of GDP. Taxes on labour income are comparatively low: they are significantly lower than the EU average and much lower than in neighbouring countries (around 15% of GDP as against an average of about 20% for the EU and between 20 and 25% for Belgium, France or Germany). By contrast, the interplay of tax and benefit systems provides rather little incentive to move from social assistance or unemployment to work, especially at the lower end of the wage scale but this is probably more due to the generosity of social benefits than to the taxation of labour income, which is lower than in neighbouring countries.

The updated programme of Luxembourg contains a detailed description of the current budget process, including the improvements introduced between 1999 and 2007. However, no recent significant measures have been implemented in the most recent past to further strengthen the current budgetary procedures. The legal framework of the institutional features of public finances is laid down by the Law of 8 June 1999, which involved an overhaul of the central government budgetary and accounting system by foreseeing in particular the improvement of the regulations for budgetary accounting, the possibility of granting greater financial autonomy to public services and the creation of a *Direction du contrôle financier*, whose objective is to reinforce the coordination and the monitoring of public expenditure. Financial controllers attached to ministerial departments are in charge of monitoring *ex ante* the compliance of the proposed expenditure with the applicable regulations, the mission of assessing the appropriateness and effectiveness of public expenditure being assigned to the *Inspection générale des Finances,* which is also responsible for drawing up the draft State budget.

The government programme of the previous government, presented in August 2004, foresaw a reform of the budgetary procedure from 2005 onwards, which implied in particular the postponement of the approval of the draft budget by the government and its submission to the Parliament from August to October. The objective of this rescheduling was to improve the quality of budgetary forecasts by taking into account economic forecasts performed by international institutions and by the national statistical and forecasting agency.

In addition, the 2004 declaration provided that: "*all projects of direct and indirect investments by the Government will be subject to a more detailed analysis and procedure whose objective is to reduce the cost of public investments. More particular attention will also be paid, from the planning phase onwards, to an assessment of the running and operating costs of the new infrastructures in a bid to control the balanced budgetary position of State operating expenditure*". To that effect, a new procedure was implemented in April 2006, which foresees in particular that any significant change in an investment programme occuring after the vote of the appropriation law would have to be subjected to a new assessment by the Parliament.

In its July 2009 declaration to Parliament, the current Government announced its intention "*to examine the means to improve the procedure for the preparation, implementation and evaluation of the budget with a twofold objective: i) the modernisation of the State and ii) the effectiveness of public expenditure*", as a part of its general budgetary strategy "*to reduce sustainably the trend of growth of public expenditure in order to avoid the resurgence of a structural deficit in public finances*". No measures related to other elements of the domestic fiscal frameworks are contained in the programme.

The budgetary procedure starts with a budgetary memorandum sent by the Budget Minister to all departments. This memo includes guidelines of a political nature (e.g. budgetary strategy and objectives) and a technical nature (e.g. macroeconomic assumptions, growth rate ceilings according to category of public expenditure), which the departments are requested to follow when drafting their budgetary proposals. The broad guidelines of the government's fiscal policy are presented in May to the Parliament as part of the Prime Minster's declaration on the country's economic, social and financial situation. Following this presentation and based on the draft budgetary proposals from the departments, the Budget Minister discusses the draft budget with his colleagues in August. The draft budget is then finalised by the Council of State at the end of September and presented to the Parliament around the beginning of October.

7. OVERALL ASSESSMENT

Taking into account risks attached to the budgetary targets discussed above, this section assesses the appropriateness of the fiscal strategy in relation to the budgetary objectives of the Stability and Growth Pact, against the background of the current economic situation, the debt and long-term sustainability position of the country, and the institutional features of its public finances.

The "unchanged policy scenario" described in detail by the programme presents a broadly plausible picture of possible developments in Luxembourgish public finance in the coming years should no consolidation be undertaken. However, it does not contain the necessary consolidation efforts that would be needed to reduce the deficit below 3% of GDP and to approach at an adequate pace the new and more demanding MTO of a surplus of 0.5% of GDP. It does not reflect an adequate consolidation policy and is thus not in line with the Pact. Neither is it in line with the Council conclusions of 20 October on the exit strategy that recommended a withdrawal of fiscal stimulus taking country-specific circumstances into account, and considered that the pace of consolidation should be ambitious, in most countries going well beyond the benchmark of 0.5% of GDP per annum in structural terms. Moreover, though more demanding than the previous one, the new MTO does not appear to take sufficiently into account the implicit liabilities related to ageing, despite the debt being below the Treaty reference value.

On the other hand, the government's announced intention to start fiscal consolidation from 2011 onwards and to reduce the headline deficit by about 1 percentage point of GDP every year from 2011 onwards can be regarded as a more adequate fiscal strategy, even though a final assessment cannot be made in this respect given the lack of a comprehensive dataset backing the announced consolidation. In particular, this absence of information hampers any assessment of the composition of the consolidation strategy. The envisaged progress towards the MTO, which implies a reduction in the structural deficit by about ¾ percentage point of GDP a year from 2011 onwards is in line with the requirements of the Pact, even if the level of the new MTO is inadequate.

To sum up, the budgetary strategy envisaged in the "adjustment scenario" is partly in line with the requirement by the Pact [18], should the measures needed to achieve it be properly specified, which is not the case at the moment. By contrast, the "unchanged policy scenario" provides a plausible picture of budgetary developments in the coming years, should no consolidation be undertaken, but does not reflect an adequate consolidation policy and is thus not in line with the Pact.

* * *

[18] 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.

ANNEX. COMPLIANCE WITH THE FORMAT AND CONTENT REQUIREMENTS FOR STABILITY AND CONVERGENCE PROGRAMMES

This annex provides an assessment of whether the programme respects the requirements of Section II of the code of conduct (guidelines on the format and content), notably as far as (i) the model structure (Annex 1 of the code of conduct); (ii) the formal data provisions (Annex 2 of the code of conduct); and (iii) other information requirements is concerned.

(i) Model structure

The update adheres to the code of conduct as far as its table of contents is concerned. In particular, it follows the model structure in Annex 1 of the code of conduct.

(ii) Data requirements

The update broadly adheres to the code of conduct as far as data requirements are concerned with, however, the exception of some gaps in the standard tables in Annex 2 of the code of conduct. Moreover, as already said, detailed data are only given for the "unchanged policy scenario".

As far as compulsory data are concerned,

- There is no item 1d "Sectoral balances", .
- In Table 8. Basic assumptions, the item “World import volumes, excluding EU” is missing for the whole period.

As far as optional data are concerned,

- There is no Table 1d "Sectoral balances". There are no sectoral accounts yet in Luxembourg, except for the general government.
- In Table 3 : General government expenditure by function, the years, X (2009) and X+1 (2010) are missing with the exception of total expenditure (line 11) for 2010.
- In Table 4 : General government debt developments, lines 6 (liquid financial assets) and 7 (net financial debt) are missing.
- In Table 7 : Long-term sustainability of public finances, the item “Other expenditure related to demographic ageing” is missing; the items “Total revenue” and components “property income” and “social contributions” are given for 2010 but not for 2015 to 2050.

None of this gaps (including in the compulsory data) really complicates the assessment of the programme up to 2011.

The tables on the following pages show the data presented in the January 2010 update of the stability programme, following the structure of the tables in Annex 2 of the code of conduct. Compulsory data are in bold, missing data are indicated with grey-shading.

(iii) Other information requirements

The table below provides a summary assessment of the adherence to the other information requirements in the code of conduct.

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The SCP…	Yes	No	Comments
a. Involvement of parliament			
… mentions status vis-à-vis national parliament.		**X**	
… indicates whether Council opinion on previous programme has been presented to national parliament.		**X**	
b. Economic outlook			
… (for euro area and ERM II Member States) uses "common external assumptions" on main extra-EU variables.	**X**		
… explains significant divergences with Commission services' forecasts[1].	**X**		
… bears out possible upside/downside risks to economic outlook.	**X**		
… analyses outlook for sectoral balances and, especially for countries with high external deficit, external balance.		**X**	
c. Monetary/exchange rate policy			
… presents medium-term monetary policy objectives and their relationship to price and exchange rate stability.			Not applicable
d. Budgetary strategy			
… presents budgetary targets for general government balance in relation to MTO and projected path for debt ratio.	**X**		
… (in case new government has taken office) shows continuity with respect to budgetary targets endorsed by Council.			Not applicable
… (when applicable) explains reasons for deviations from previous targets and, in case of substantial deviations, whether measures are taken to rectify situation (+ provides information on them).	**X**		
… backs budgetary targets by indication of broad measures necessary to achieve them and analyses their quantitative effects on balance.		**X**	
… specifies state of implementation of measures.		**X**	
e. "Major structural reforms"			
… (if MTO not yet reached or temporary deviation is planned from MTO) includes comprehensive information on economic and budgetary effects of possible 'major structural reforms' over time.			Not applicable
… includes quantitative cost-benefit analysis of short-term costs and long-term benefits of reforms.			Not applicable
f. Sensitivity analysis			
… includes comprehensive sensitivity analyses and/or develops alternative scenarios showing impact on balance and debt of: a) changes in main economic assumptions b) different interest rate assumptions c) if common external assumptions are not used, changes in assumptions for main extra-EU variables.	**X**		only changes in main economic assumptions
… (in case of "major structural reforms") analyses how changes in assumptions would affect budget and potential growth.			Not applicable
g. Broad economic policy guidelines			
… provides information on consistency with broad economic policy guidelines of budgetary objectives and measures to achieve them.		**X**	
h. Quality of public finances			
… describes measures to improve quality of public finances, both revenue and expenditure sides.	**X**		
i. Long-term sustainability			
… outlines strategies to ensure sustainability.		**X**	
… includes common budgetary projections by the AWG and all necessary additional information (esp. new relevant information).		**X**	
j. Other information (optional)			
… includes information on implementation of existing national budgetary rules and on other institutional features of public finances.	**X**		

Notes: SCP = stability/convergence programme; CP = convergence programme
[1]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

Tables from Annex 2 of the code of conduct

Table 1a. Macroeconomic prospects

	ESA Code	2008 Level	2008 rate of change	2009 rate of change	2010 rate of change	2011 rate of change	2012 rate of change	2013 rate of change	2014 rate of change
1. Real GDP	B1*g	*29.5*	0.0	-3.9	2.5	3.0	2.7	2.9	3.1
2. Nominal GDP	B1*g	*39.3*	5.0	-4.2	3.9	5.4	4.3	4.4	5.4
Components of real GDP									
3. Private consumption expenditure	P.3	*10.7*	3.9	-0.7	0.2	0.4	0.2	1.0	2.4
4. Government consumption expenditure	P.3	*4.5*	3.0	3.4	2.1	1.5	1.8	2.1	2.0
5. Gross fixed capital formation	P.51	*6.9*	-0.1	-11.0	6.9	8.8	-3.6	-4.5	-3.0
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53	*n.a.*	0.7	0.4	0.2	0.1	0.0	0.0	0.0
7. Exports of goods and services	P.6	*54.6*	1.5	-7.9	5.2	4.8	5.3	5.8	6.2
8. Imports of goods and services	P.7	*47.7*	3.3	-9.0	5.5	5.2	4.1	4.8	5.7
Contributions to real GDP growth									
9. Final domestic demand		-	1.8	-2.3	1.9	2.4	-0.5	-0.3	0.5
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	-	0.6	-1.4	-0.2	-0.1	0.0	0.0	0.0
11. External balance of goods and services	B.11	-	-2.3	-0.2	0.8	0.7	3.3	3.2	2.6

Table 1b. Price developments

	ESA Code	2008 Level	2008 rate of change	2009 rate of change	2010 rate of change	2011 rate of change	2012 rate of change	2013 rate of change	2014 rate of change
1. GDP deflator		*n.a.*	5.0	-0.3	1.4	2.4	1.6	1.5	2.2
2. Private consumption deflator		*n.a.*	3.7	0.2	1.6	1.7	1.9	2.2	2.5
3. HICP[1]		*n.a.*	4.1	4.1	0.0	2.1	1.8	n.a.	n.a.
4. Public consumption deflator		*n.a.*	3.8	3.8	2.2	1.7	1.4	1.8	2.3
5. Investment deflator		*n.a.*	2.0	1.1	1.8	1.2	2.0	2.3	2.5
6. Export price deflator (goods and services)		*n.a.*	0.9	-4.7	2.0	2.6	1.4	0.9	1.7
7. Import price deflator (goods and services)		*n.a.*	-0.8	-4.4	2.8	2.2	1.7	1.2	1.8

[1] Optional for stability programmes.

Table 1c. Labour market developments

	ESA Code	2008	2008	2009	2010	2011	2012	2013	2014
		Level	rate of change	rate of change	rate of change	rate of change	rate of change	rate of change	rate of change
1. Employment, persons[1]		*348.8*	4.7	1.2	-0.5	1.0	1.6	1.6	1.6
2. Employment, hours worked[2]		*n.a.*	4.3	-1.4	-1.5	0.8	1.3	1.4	1.3
3. Unemployment rate (%)[3]		*n.a.*	4.8	6.0	6.9	7.2	7.3	7.0	6.5
4. Labour productivity, persons[4]		*n.a.*	-4.5	-4.8	3.1	2.0	1.2	1.3	1.5
5. Labour productivity, hours worked[5]		*n.a.*	-4.2	-2.4	4.0	2.3	1.4	1.5	1.7
6. Compensation of employees	D.1	*17.4*	7.0	0.7	0.8	3.5	3.6	4.5	4.9
7. Compensation per employee		*52.9*	2.1	-0.3	1.6	2.7	2.0	2.7	3.1

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

[2]National accounts definition.

[3]Harmonised definition, Eurostat; levels.

[4]Real GDP per person employed.

[5]Real GDP per hour worked.

Table 1d. Sectoral balances

% of GDP	ESA Code	2008	2009	2010	2011	2012	2013	2014
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
of which :								
- Balance on goods and services		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- Balance of primary incomes and transfers		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- Capital account		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2. Net lending/borrowing of the private sector	B.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3. Net lending/borrowing of general government	EDP B.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4. Statistical discrepancy		n.a.	optional	optional	optional	optional	optional	optional

Table 2. General government budgetary prospects

	ESA Code	2008 Level	2008 % of GDP	2009 % of GDP	2010 % of GDP	2011 % of GDP	2012 % of GDP	2013 % of GDP	2014 % of GDP
Net lending (EDP B.9) by sub-sector									
1. General government	S.13	*965*	2.5	-1.1	-3.9	-5.0	-4.6	-4.3	-3.1
2. Central government	S.1311	*-90*	-0.2	-2.9	-5.5	-6.6	-6.3	-5.9	-4.8
3. State government	S.1312	*n.a.*	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4. Local government	S.1313	*-5*	0.0	-0.1	-0.2	-0.2	-0.1	0.1	0.3
5. Social security funds	S.1314	*1060*	2.7	2.0	1.8	1.8	1.8	1.5	1.4
General government (S13)									
6. Total revenue	TR	*15808*	40.2	41.6	39.6	38.3	38.5	39.0	39.5
7. Total expenditure	TE[1]	*14843*	37.7	42.6	43.5	43.2	43.2	43.3	42.6
8. Net lending/borrowing	EDP B.9	*965*	2.5	-1.1	-3.9	-5.0	-4.6	-4.3	-3.1
9. Interest expenditure	EDP D.41	*116*	0.3	0.6	0.6	0.7	0.9	1.0	1.0
10. Primary balance[2]		*1081*	2.8	-0.5	-3.3	-4.3	-3.7	-3.3	-2.1
11. One-off and other temporary measures[3]		*0*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Selected components of revenue									
12. Total taxes (12=12a+12b+12c)		*9924*	25.2	25.7	23.9	22.5	22.9	23.4	24.1
12a. Taxes on production and imports	D.2	*4655*	11.8	11.8	11.4	10.8	10.9	10.9	10.9
12b. Current taxes on income, wealth, etc	D.5	*5269*	13.4	13.9	12.5	11.7	12.0	12.5	13.2
12c. Capital taxes	D.91	*n.a.*	n.a.	n.a.	n.a.	optional	optional	optional	optional
13. Social contributions	D.61	*4298*	10.9	12.2	12.0	11.8	11.7	11.6	11.5
14. Property income	D.4	*740*	1.9	1.4	1.4	1.7	1.7	1.7	1.7
15. Other[4]		*845*	2.1	2.3	2.2	2.1	2.2	2.2	2.2
16=6. Total revenue	TR	*15807*	40.1	41.6	39.5	38.1	38.5	38.9	39.5
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)[5]		n.a.	36.1	37.9	35.9	34.3	34.6	35.0	35.6
Selected components of expenditure									
17. Compensation of employees + intermediate consumption	D.1+P.2	*4114*	**10.4**	**11.6**	**12.0**	**11.8**	**11.7**	**11.7**	**11.6**
17a. Compensation of employees	D.1	*2812*	7.1	7.9	8.2	8.1	8.0	8.0	7.9
17b. Intermediate consumption	P.2	*1302*	3.3	3.7	3.8	3.7	3.7	3.7	3.7
18. Social payments (18=18a+18b)		*7108*	17.9	20.7	20.7	20.5	20.3	20.3	20.0
18a. Social transfers in kind supplied via market producers	D.6311, D.63121, D.63131	*1830*	4.7	5.2	5.2	5.2	5.2	5.2	5.2
18b. Social transfers other than in kind	D.62	*5278*	13.4	15.5	15.5	15.3	15.1	15.1	14.8
19=9. Interest expenditure	EDP D.41	*116*	0.3	0.6	0.6	0.7	0.9	1.0	1.0
20. Subsidies	D.3	*584*	1.5	1.6	1.7	1.6	1.6	1.6	1.6
21. Gross fixed capital formation	P.51	*1408*	3.6	3.5	3.9	3.9	3.9	3.9	3.9
22. Other[6]		*1627*	4.1	4.5	4.7	4.8	4.8	4.7	4.6
23=7. Total expenditure	TE[1]	*14843*	37.8	42.5	43.6	43.3	43.2	43.2	42.7
p.m.: Government consumption (nominal)	P.3	*5920*	15.0	16.8	17.1	16.8	16.8	16.8	16.7

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

[2]The primary balance is calculated as (EDP B.9, item 8) plus (EDP D.41, item 9).

[3]A plus sign means deficit-reducing one-off measures.

[4] P.11+P.12+P.131+D.39+D.7+D.9 (other than D.91).

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

[6] D.29+D4 (other than D.41)+ D.5+D.7+D.9+P.52+P.53+K.2+D.8.

Table 3. General government expenditure by function

% of GDP	COFOG Code	2008	2010
1. General public services	1	4.0	n.a.
2. Defence	2	0.3	n.a.
3. Public order and safety	3	0.9	n.a.
4. Economic affairs	4	4.4	n.a.
5. Environmental protection	5	1.0	n.a.
6. Housing and community amenities	6	0.7	n.a.
7. Health	7	4.5	n.a.
8. Recreation, culture and religion	8	1.8	n.a.
9. Education	9	4.5	n.a.
10. Social protection	10	15.7	n.a.
11. Total expenditure (=item 7=23 in Table 2)	TE[1]	37.7	43.5

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

Table 4. General government debt developments

% of GDP	ESA Code	2008	2009	2010	2011	2012	2013	2014
1. Gross debt[1]		13.5	14.9	18.3	23.9	29.3	34.1	37.4
2. Change in gross debt ratio		0.3	1.4	3.4	5.6	5.4	4.8	3.3
Contributions to changes in gross debt								
3. Primary balance[2]		2.8	-0.5	-3.3	-4.3	-3.7	-3.3	-2.1
4. Interest expenditure[3]	EDP D.41	0.3	0.6	0.6	0.7	0.9	1.0	1.0
5. Stock-flow adjustment		2.8	0.3	-0.5	0.6	0.8	0.5	0.2
of which:								
- Differences between cash and accruals[4]		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- Net accumulation of financial assets[5]		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
of which:		-	-	-	-	-	-	-
- privatisation proceeds		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- Valuation effects and other[6]		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
p.m.: Implicit interest rate on debt[7]		2.2	4.1	3.1	2.9	2.9	3.0	2.8
Other relevant variables								
6. Liquid financial assets[8]		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7. Net financial debt (7=1-6)		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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

[2]Cf. item 10 in Table 2.

[3]Cf. item 9 in Table 2.

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

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

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

[7]Proxied by interest expenditure divided by the debt level of the previous year.

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

Table 5. Cyclical developments

% of GDP	ESA Code	2008	2009	2010	2011	2012	2013	2014
1. Real GDP growth (%)		0.0	-3.9	2.5	3.0	2.7	2.9	3.1
2. Net lending of general government	EDP B.9	2.5	-1.1	-3.9	-5.0	-4.6	-4.3	-3.1
3. Interest expenditure	EDP D.41	0.3	0.6	0.6	0.7	0.9	1.0	1.0
4. One-off and other temporary measures[1]		0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. Potential GDP growth (%)		3.0	2.5	2.2	2.1	2.0	1.9	1.8
contributions:								
- labour		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- capital		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
- total factor productivity		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6. Output gap		3.4	-3.1	-2.9	-2.0	-1.2	-0.2	1.0
7. Cyclical budgetary component		1.7	-1.5	-1.4	-1.0	-0.6	-0.1	0.5
8. Cyclically-adjusted balance (2 - 7)		0.8	0.4	-2.5	-4.0	-4.0	-4.2	-3.6
9. Cyclically-adjusted primary balance (8 + 3)		1.1	1.0	-1.9	-3.3	-3.1	-3.2	-2.6
10. Structural balance (8 - 4)		0.8	0.4	-2.5	-4.0	-4.0	-4.2	-3.6

[1]A plus sign means deficit-reducing one-off measures.

Table 6. Divergence from previous update

	ESA Code	2008	2009	2010	2011	2012	2013	2014
Real GDP growth (%)								
Previous update		1.0	-0.9	1.4	n.a.	n.a.	n.a.	n.a.
Current update		0.0	-2.9	2.5	n.a.	n.a.	n.a.	n.a.
Difference		-1.0	-2.0	1.1	n.a.	n.a.	n.a.	n.a.
General government net lending (% of GDP)	EDP B.9							
Previous update		2.0	-0.6	-1.5	n.a.	n.a.	n.a.	n.a.
Current update		2.5	-1.1	-3.9	n.a.	n.a.	n.a.	n.a.
Difference		0.5	-0.5	-2.4	n.a.	n.a.	n.a.	n.a.
General government gross debt (% of GDP)								
Previous update		14.4	14.9	17.0	n.a.	n.a.	n.a.	n.a.
Current update		13.5	14.9	18.3	n.a.	n.a.	n.a.	n.a.
Difference		-0.9	0.0	1.3	n.a.	n.a.	n.a.	n.a.

Table 7. Long-term sustainability of public finances

% of GDP	2007	2010	2015	2020	2030	2040
Total expenditure	36.2	43.5	n.a.	n.a.	n.a.	n.a.
Of which: age-related expenditures	20.1	19.9	20.0	21.1	26.1	31.3
Pension expenditure	8.7	8.6	8.9	9.9	14.2	18.4
Social security pension	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Old-age and early pensions	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other pensions (disability, survivors)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Occupational pensions (if in general government)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Health care	5.8	5.9	6.1	6.2	6.5	6.8
Long-term care *(this was earlier included in the*	1.4	1.4	1.4	1.5	1.8	2.4
Education expenditure	3.8	3.6	3.2	3.1	3.2	3.3
Other age-related expenditures	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Interest expenditure	0.2	0.6	n.a.	n.a.	n.a.	n.a.
Total revenue	39.9	39.6	n.a.	n.a.	n.a.	n.a.
Of which: property income	1.6	1.4	n.a.	n.a.	n.a.	n.a.
Of which: from pensions contributions (or social contributions if appropriate)	10.7	12.0	n.a.	n.a.	n.a.	n.a.
Pension reserve fund assets	21.8	28.0	37.5	46.0	39.3	0.0
Of which: consolidated public pension fund assets (assets other than government liabilities)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Assumptions						
Labour productivity growth	1.7	1.4	1.9	2.0	1.7	1.7
Real GDP growth	4.5	5.0	4.0	2.7	2.1	2.2
Participation rate males (aged 20-64)	74.7	74.4	73.6	72.7	71.8	72.5
Participation rates females (aged 20-64)	57.9	59.5	60.5	61.1	61.9	62.0
Total participation rates (aged 20-64)	66.4	67.0	67.1	66.9	66.9	67.3
Unemployment rate	4.2	4.6	4.6	4.6	4.6	4.6
Population aged 65+ over total population	20.7	21.1	22.3	24.2	30.8	36.3

Table 8. Basic assumptions

	2008	2009	2010	2011	2012	2013	2014
Short-term interest rate[1] (annual average)	4.6	1.1	1.0	1.9	3.1	4.6	4.6
Long-term interest rate (annual average)	4.3	3.8	4.0	4.6	4.9	5.7	5.7
USD/€ exchange rate (annual average) (euro area and ERM II countries)	1.47	1.40	1.49	1.49	1.49	1.49	1.49
Nominal effective exchange rate	-0.9	0.3	-0.5	0.0	0.0	0.0	0.0
(for countries not in euro area or ERM II) exchange rate vis-à-vis the € (annual average)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
World excluding EU, GDP growth	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
EU GDP growth	0.6	-4.0	0.7	1.5	1.7	1.7	1.7
Growth of relevant foreign markets	1.4	-8.6	2.2	4.3	4.2	4.2	4.2
World import volumes, excluding EU	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Oil prices (Brent, USD/barrel)	98.1	61.7	76.6	76.6	76.6	76.6	76.6

[1]If necessary, purely technical assumptions.