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NOVEMBER 2004 UPDATE OF THE STABILITY PROGRAMME OF LUXEMBOURG (2004-2007)

AN ASSESSMENT

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SUMMARY AND CONCLUSIONS[1]

The 2004 update of Luxembourg's stability programme, covering the period 2004-2007, was submitted on 30 November 2004 after its approval by the government on November 26. It broadly complies with the data requirements of the "code of conduct on the content and format of stability and convergence programmes"[2]: although some compulsory data are missing, their absence does not hamper the assessment of the programme.

The macroeconomic scenario presented in the update projects real GDP growth to slow from 4.4% in 2004 to 3.8% in 2005 and 3.3% in 2006 before reaccelerating to 4.3% in 2007. This scenario is plausible: for the period 2004-2006, it is reasonably close to the autumn 2004 forecasts by the Commission services. For the whole period, the real growth rates projected by the programme are consistent with the Commission services' estimates of potential growth.

The general government balance having gone from a 0.8% -of-GDP surplus in 2003 to an estimated 1.4%-of-GDP deficit in 2004, the programme aims to reduce the deficit to 1.0% in 2005 and to stabilise it at about the same level in 2006 and 2007. It thus does not envisage a continuation of the reduction in the deficit after 2005 but positively contrasts with the 2003 update, which was based on a significantly less optimistic growth outlook than that of 2004, anticipated that the general government deficit would widen from 0.6% of GDP in 2003 to around 2% in the remainder of the programme period.

On the basis of calculations by the Commission services using the commonly agreed methodology, the cyclically-adjusted balance in the 2004 update is expected to post rising surpluses (from a deficit of less than 1% of GDP in 2003) for the rest of the period, reaching 2% of GDP in 2007. However, this dramatic improvement in the cyclically-adjusted balance seems to stem mostly from the unusual margin of uncertainty surrounding estimates of potential growth for Luxembourg rather than to reflect a genuine structural adjustment effort.

Developments in the general government balance as presented in the programme are significantly better than those projected in the Commission's autumn 2004 forecasts. This is because the latter were finalised before the 2005 budget was released and, consequently were based on a "no policy change" assumption and on the spending and revenues trends observed in previous years.

The risks to the budgetary targets of the programme are balanced. On the one hand, revenue estimates in Luxembourg are known to be cautious. On the other hand, however, the programme envisages a slowdown in expenditure growth, which has been very rapid in recent years, but without detailing the measures that should help achieve this. On

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1 This technical analysis, which is based on information available up to December 2004, accompanies the recommendation by the Commission for a Council opinion on the update of the stability programme, which the College adopted on 11 January 2005. It has been carried out by the staff and under the responsibility of the Directorate-General for Economic and Financial Affairs of the European Commission. Comments should be sent to barbara.kauffmann@cec.eu.int and jean-luc.annaert@cec.eu.int

2 Revised Opinion of the Economic and Financial Committee on the content and format of stability and convergence programmes, document EFC/ECFIN/404/01 - REV 1 of 27.06.2001 endorsed by the ECOFIN Council of 10.07.2001.

balance, therefore, the objectives presented in the programme are plausible but hardly ambitious: they should not be difficult to achieve, provided that the authorities stick to their announced intention to rein in the rise in expenditure. In view of this risk assessment, the budgetary stance of the programme as expressed by the evolution of the cyclically-adjusted balance is sufficient to achieve the medium-term objective in the Stability and Growth Pact of a budgetary position close to balance within the programme period (from 2005 onwards). But in nominal terms, the programme does not envisage a continuation of the reduction in the headline deficit after 2005 and contains no commitment to move closer, at least in nominal terms, to a balanced position before the end of the period covered, since the headline deficit remains at around 1% of GDP. However, from 2005 onwards, the budgetary stance in the programme seems to provide a sufficient safety margin within which normal cyclical fluctuations can occur without breaching the 3%-of-GDP deficit threshold.

The update estimates that the general government debt ratio will decrease from 5.3% of GDP in 2003 to 5.0% in 2004. About half of this debt comes from central government and the other half from local authorities, the debt of the social security institutions being negligible. The debt ratio is forecast to decline somewhat over the time horizon covered by the update, from 5.0% of GDP in 2004 to 4.5% of GDP in 2007. The total net asset position is even more favourable due to the substantial financial assets, estimated at about 50% of GDP, accumulated over past years with fiscal surpluses.

The programme refers to the measures recently taken in order to rein in the rise in health expenditure, especially the rise in contributions decided in November 2004. It announces additional measures aiming at moderating health expenditure which were incorporated into a bill passed by Parliament in December 2004. The programme also mentions the burden on the pension system that will arise in the coming years from the massive growth in employment in Luxembourg in the last two decades which increasingly comprises non-resident workers. While it does not yet include specific measures to tackle this problem, it announces that this issue will be debated in the course of 2005.

Due to its very low level of government debt and the considerable reserves that have been accumulated for more than two decades by the social security sector, Luxembourg appears to be in a favourable position with regard to the long-term sustainability of public finances, despite important projected budgetary costs of an ageing population. However, according to a tentative assessment made by the Commission services, on current expenditure projections, the budgetary strategy outlined in the programme would result in a “tax gap” of close to 2% of GDP which would need to be closed in order to fully ensure sustainability. The country has experienced about 20 years of exceptionally strong employment growth, which will progressively translate into a commensurate increase in the number of pensioners. The reserves could significantly contribute to easing the budgetary pressures of this situation and this policy of building up reserves should be continued.

Comparison of key macroeconomic and budgetary projections

		2004	2005	2006	2007
Real GDP (% change)	**SP Nov 2004**	**4.4**	**3.8**	**3.3**	**4.3**
	COM Oct 2004	4.0	3.5	3.6	n.a.
	SP Nov 2003	*2.0*	*3.0*	*3.8*	*n.a.*
HICP inflation (%)	**SP Nov 2004**	**2.6**	**3.2**	**1.5**	**1.7**
	COM Oct 2004	3.0	2.3	1.6	n.a.
	SP Nov 2003	*1.5*	*1.3*	*1.2*	*n.a.*
General government balance (% of GDP)	**SP Nov 2004**	**-1.4**	**-1.0**	**-0.9**	**-1.0**
	COM Oct 2004	-0.8	-1.6	-2.0	n.a.
	SP Nov 2003	*-1.8*	*-2.3*	*-1.5*	*n.a.*
Primary balance (% of GDP)	**SP Nov 2004**	**-1.2**	**-0.9**	**-0.8**	**-0.9**
	COM Oct 2004	-0.6	-1.4	-1.8	n.a.
	SP Nov 2003	*-1.6*	*-2.1*	*-1.5*	*n.a.*
Cyclically-adjusted balance (% of GDP)	**SP Nov 2004**[1]	**-0.7**	**0.3**	**1.4**	**2.0**
	COM Oct 2004	0.4	0.3	0.7	n.a.
	SP Nov 2003[1]	*0.9*	*1.0*	*2.2*	*n.a.*
Government gross debt (% of GDP)	**SP Nov 2004**	**5.0**	**5.0**	**4.6**	**4.5**
	COM Oct 2004	4.9	4.8	4.7	n.a.
	SP Nov 2003	*5.2*	*5.0*	*4.4*	*n.a.*

Note:
[1]Commission services calculations on the basis of the information in the programme
[2]Finalised before the presentation of the 2005 budget

Sources:
Stability programme (SP); Commission services autumn 2004 economic forecasts (COM); Commission services calculations

1. INTRODUCTION

The 2004 update of the stability programme of Luxembourg was submitted to the Commission on November 30, 2004 after its approval by the government on November 26. It covers the period 2004-2007.

The update broadly complies with the data requirements of the "code of conduct on the content and format of stability and convergence programmes". Some compulsory data (change in inventories as well as its contribution to GDP growth) are missing (notably in Table 1 of the code of conduct) as well as optional data and the optional Table 6 on long-term sustainability of public finance but their absence does not hamper the assessment of the programme[3].

2. MACROECONOMIC DEVELOPMENTS

The update is based on the same macroeconomic scenario as the 2005 budget, where real GDP growth, after reaching 4.4% in 2004, is expected to decelerate to 3.8% in 2005 and 3.3% in 2006 before accelerating again to 4.3% in 2007. At the end of October 2004, STATEC [4] revised its GDP growth projections to 4.2% both in 2004 and 2005. However, for reasons of consistency, the update still rests on the same growth scenario as the budget. Considering the volatility of economic aggregates in Luxembourg and the large margin of uncertainty surrounding macroeconomic forecasts, the differences between the most recent projections from STATEC and the previous ones may be regarded as limited.

Table 1 Comparison of macroeconomic developments and forecasts

	2004		2005		2006		2007
	COM	SP	COM	SP	COM	SP	SP
Real GDP (% change)	4.0	4.4	3.5	3.8	3.6	3.3	4.3
Contributions:							
- Final domestic demand	2.9	n.a	2.8	n.a.	3.0	n.a.	n.a.
- Change in inventories	-0.3	n.a.	-0.3	n.a.	-0.4	n.a.	n.a.
- External balance on g&s	1.3	1.3	0.9	0.7	1.0	1.1	0.7
Employment (% change)	2.0	2.4	2.4	2.5	2.7	2.5	2.9
Unemployment rate (%)	4.3	n.a.	4.6	n.a.	4.4	n.a.	n.a.
HICP inflation (%)	3.0	2.6	2.3	3.2	1.6	1.5	1.7
GDP deflator (% change)	2.3	2.0	2.4	2.3	2.9	2.7	2.1
Current account (% of GDP)	5.9	n.a.	5.3	n.a.	4.4	n.a.	n.a.
Sources:							
Commission services autumn 2004 economic forecasts (COM); stability programme update (SP)							

3 Compared to the Commission assessment (available at http://europa.eu.int/comm/economy_finance/about/activities/sgp/year/year20042005_en.htm), the evaluation of compliance follows a reclassification of the degree of compliance into four categories (namely "fully complies", "complies", "broadly complies" and "partly complies"), replacing the previous three-way classification ("complies", "largely complies" and "partly complies").

4 « Service central de la statistique et des études économiques », the department of the Ministry of Economic Affairs in charge of statistics and economic analysis.

The scenario presented in the update is plausible, despite the apparently high growth figures it projects. Growth in Luxembourg has been significantly faster than in neighbouring countries for about 20 years and, for the period 2004-2006, the programme's scenario differs only slightly[5] from the recent autumn forecasts of the Commission services, which project a real GDP growth of 4.0% in 2004, 3.5% in 2005 and 3.6% in 2006. The main difference between the update scenario and the Commission services forecast is that in the latter the reacceleration in growth already occurs in 2006, while in the scenario presented in the update, it is postponed until 2007. For the whole period 2004-2006, the growth rates projected by the update are compatible with the Commission services estimates of potential growth, which are even significantly higher (between 4.5 and 5%).

Moreover, according to the Commission services calculations, using the commonly agreed methodology applied to the programme's macro-economic scenario, potential output growth in Luxembourg would be even stronger, accelerating from 4.5% in 2004 to 5.6% in 2007. This is significantly higher than the programme's real growth projections at the end of the period. This results in very large, negative output gaps by the end of the programme period.

Table 2: Sources of potential output growth

	2004		2005		2006		2007
	COM	**SP[3]**	**COM**	**SP[3]**	**COM**	**SP[3]**	**SP[3]**
Potential GDP growth[1]	4.5	4.5	4.7	4.8	5.0	5.0	5.6
Contributions:							
- Labour	0.9	1.4	0.8	1.5	0.9	1.5	1.6
- Capital accumulation	1.6	1.6	1.6	1.7	1.6	1.6	1.7
- TFP	1.9	1.4	2.1	1.6	2.4	1.9	2.2
Output gap[1,2]	-1.9	-1.2	-3.0	-2.2	-4.3	-3.8	-5.0

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

Sources:
Commission services autumn 2004 economic forecasts (COM); Commission services calculations

It should be noticed, however, that potential growth estimates for Luxembourg display a wide margin of uncertainty[6], especially due to the small size of the country, the large trans-border flows of workers and the extremely elastic labour supply Luxembourg may rely on : non-residents now represent about one-third of total domestic employment (100.000 out of a total of 300.000) and, depending on the size of the area considered, there are between 200.000 and 500.000 unemployed in the regions surrounding Luxembourg. Consequently, growth in Luxembourg is not really bound by developments in its own resident population but by the country's ability to create a favourable environment in order to attract new activities and develop existing ones, with labour supply adapting almost automatically, at least up to now.

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5 Taking into account the unusually large margin of uncertainty surrounding macroeconomic forecasts in Luxembourg, a difference of less than 0.5% in growth rates may legitimately be regarded as minor.

6 For an analysis of the variability of output gap estimates in Luxembourg, see Paolo GUARDA, Potential output and the output gap in Luxembourg. Some alternative methods, Banque centrale du Luxembourg, Working Paper n° 4, June 2002.

3. BUDGETARY IMPLEMENTATION IN 2004

According to the 2004 update, the general government deficit reached 1.4% of GDP in 2004. This is a somewhat better outcome than the 1.8% of GDP deficit projected in the 2003 update[7]. General government revenues were 2.3 percentage points of GDP lower than projected in the 2003 update but expenditure was also 2.7 percentage points of GDP lower. These differences might be partly (but not totally) due to a large revision of GDP growth (and consequently of GDP level) for 2004, from 2.0% in the 2003 update to 4.4% in the 2004 one.

According to the current update, revenues fell by 2.2 percentage points of GDP in 2004, reflecting a similar drop in tax receipts. This results from the lagged impact of the recent slowdown in activity, especially because receipts from corporate tax (which, in Luxembourg, represent an exceptionally large share of tax receipts) do not depend on the current year's profits but on a weighted average of those of the last five years. Social contributions and other receipts, on the other hand, remained broadly constant in percentage of GDP in 2004.

The expenditure ratio was virtually unchanged. Since nominal GDP rose by 5.0% in 2003, this constant expenditure ratio implies a significant slowdown in the rise in public spending with respect to previous years. In total, general government is estimated to record a deficit of 1.4% of GDP, with a swing of 2.2 percentage points of GDP, exactly mirroring the fall in the revenues ratio.

However, it is quite possible that the 2004 balance eventually turns out to be significantly better than estimated in the current update as revenue projections and estimates in Luxembourg are traditionally cautious. In recent years, tax receipts almost systematically exceeded projections (and even end-year estimates) in part because GDP growth itself remained significantly faster than generally expected: for instance, the previous update had estimated a 1.2% real GDP growth and a 0.6% of GDP deficit for 2003, while, according to the current update, real GDP eventually grew by 2.9% and a 0.8% of GDP surplus was recorded. Moreover, although the programme does not mention this factor, there exist significant amounts of back taxes in the corporate sector, the collection of which could presumably be accelerated if needed[8] [9].

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[7] But not as good as the 0.8% of GDP deficit anticipated by the Commission services in their Autumn forecasts, which were finalised before the 2005 budget was known and had to be based on a "no policy change" assumption.

[8] It is thus not very clear whether the revenue projections of the programme incorporate significant amounts of back taxes but, judging from the drop in the revenue ratio in 2004, the answer seems negative, at least for that year.

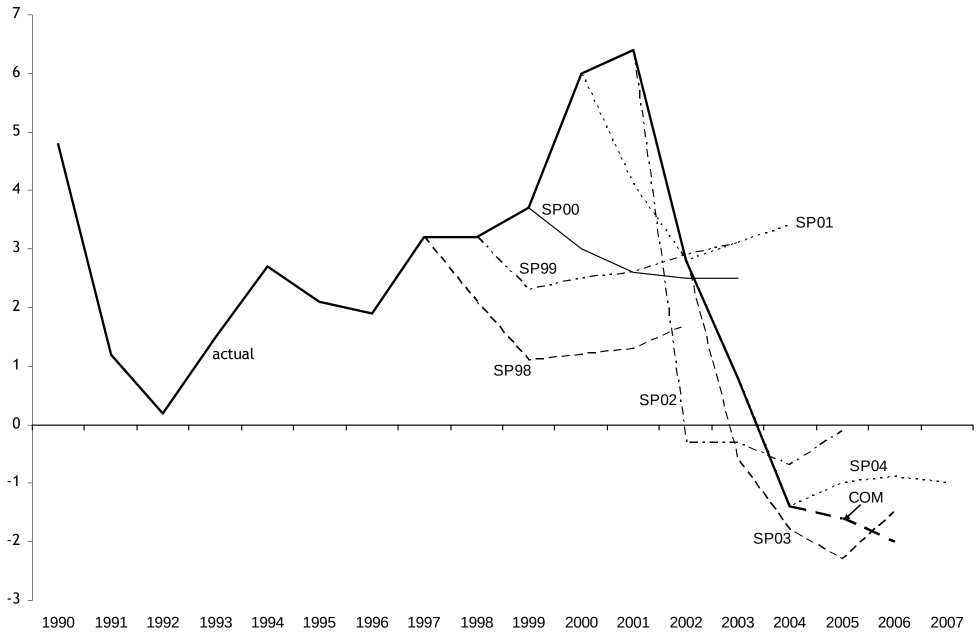
[9] It should also be noted that, in its latest projections which were released after the stability programme was submitted, the Central Bank of Luxembourg estimates the general government deficit at 0.4% of GDP in 2004, 1.0% in 2005 and 1.3% in 2006. See Banque centrale du Luxembourg, Bulletin 2004 n° 4, p. 67.

4. BUDGETARY TARGETS AND THE MEDIUM-TERM PATH OF THE PUBLIC FINANCES

4.1. Evolution of budgetary targets in successive programmes

According to the current update, the general government balance, after the strong deterioration recorded in 2004, would improve in 2005 but by only 0.4 percentage point of GDP. Subsequently, the deficit would stabilise at around 1% of GDP in 2006 and 2007. These perspectives are significantly better than those presented in the 2003 update, where the government balance was projected to deteriorate for a longer period (until 2005 instead of 2004) and to a much larger extent (up to a maximum deficit of 2.3% of GDP instead of 1.4%). On the other hand, in the previous update, the size of the correction planned in the year following the peak of the deficit (which is reached in 2005 in the previous update and in 2004 in the current one) was twice as large as is now envisaged (0.8 percentage point of GDP then, 0.4 now). One of the reasons for these differences is probably that the peak of the deficit is now significantly lower, considerably reducing the risk to approach the 3% ceiling and, consequently, the size of the required correction.

Figure 1: Evolution of budgetary targets in successive programmes



Sources: EUROSTAT, Stability Programmes, Commission services Autumn 2004 forecasts.

Table 3: Evolution of budgetary targets in successive programmes

		2003	2004	2005	2006	2007
General government balance (% of GDP)	**SP Nov 2004**	**+0.8**	**-1.4**	**-1.0**	**-0.9**	**-1.0**
	SP Nov 2003	-0.6	-1.8	-2.3	-1.5	n.a.
	SP Jan 2003	*-0.3*	*-0.7*	*-0.1*	*n.a.*	*n.a.*
General government expenditure (% of GDP)	**SP Nov 2004**	**44.9**	**44.8**	**45.6**	**45.5**	**45.7**
	SP Nov 2003	47.7	47.5	47.2	46.4	n.a.
	SP Jan 2003	*47.3*	*46.7*	*45.6*	*n.a.*	*n.a.*
General government revenues (% of GDP)	**SP Nov 2004**	**45.6**	**43.4**	**44.6**	**44.6**	**44.7**
	SP Nov 2003	47.1	45.7	44.9	44.9	n.a.
	SP Jan 2003	*47.0*	*46.0*	*45.6*	*n.a.*	*n.a.*
Real GDP (% change)	**SP Nov 2004**	**2.9**	**4.4**	**3.8**	**3.3**	**4.3**
	SP Nov 2003	1.2	2.0	3.0	3.8	n.a.
	SP Jan 2003	*1.2*	*2.4*	*3.1*	*n.a.*	*n.a.*
Sources: Stability programmes (SP)						

4.2. Budgetary targets in the updated programme

The current update aims at reducing the general government deficit from 1.4% in 2004 to around 1% of GDP in the years 2005, 2006 and 2007. Hence, it aims at keeping the deficit level well below the 3% threshold in each year without, however, making progress towards the medium-term objective in the Stability and Growth Pact of a budgetary position of close to balance or in surplus. The update acknowledges that *"(…) convergence towards the medium term objective is rather slow and the net budgetary position of general government will not reach a position close to balance or in surplus over the forecast horizon.*" These projections for the headline balance are much better than those of the Commission services autumn forecasts ; however, as already stated, the latter were finalised before the presentation of the 2005 budget and thus were made under a no-policy change scenario.

The deficit reduction presented in the programme is totally concentrated in 2005. As interest payments are negligible (0.2% of GDP) thanks to the very low level of the public debt (5.0% of GDP in 2004), they do not play any significant role in the adjustment: the primary balance is nearly equal to the total balance and their time profiles are identical.

Developments in nominal and cyclically-adjusted balances are quite different: based on Commission services calculations according to the commonly agreed methodology, the cyclically-adjusted balance, after posting a 0.7% of GDP deficit in 2004, posts rising surpluses from 2005, soaring to 2% of GDP in 2007 (see the discussion of Table 6 below).

Following the large drop in the revenue ratio and the near status-quo in the expenditure ratio in 2004, the limited narrowing of the deficit in 2005 is planned to be achieved through an increase in both ratios; thereafter, both revenues and expenditure as well as the deficit would remain broadly constant as a percentage of GDP. In 2005, the narrowing of the deficit by 0.4 percentage point of GDP in 2005 would result from a rise in the revenue and expenditure ratio by 1.2 and 0.8 percentage point of GDP respectively.

On the revenue side, after decreasing by more than 2 percentage points of GDP in 2004, tax receipts would rise by about 1 percentage point of GDP in 2005. As in 2004, developments in taxes thus drive the change in total revenues. This recovery in tax receipts is partly due to the increase on January 1st 2005 of taxes on car fuel and tobacco products[10], which should yield about € 60 Mio (0.2% to 0.3% of GDP). But it is probably also due to the increase in VAT revenues linked to the arrival in Luxembourg of the AOL Internet firm and to the fact that the yield of the subscription tax ("*taxe d'abonnemment*") paid by investment funds on the value of their assets, is likely to rise significantly thanks to the recovery in the stock markets.

As regards expenditure, the rise in total spending by 0.8 percentage point of GDP in 2005 implies that, after the significant slowdown recorded in 2004, public spending growth is projected to accelerate again, to about 8½% (the increase in nominal GDP being projected by the programme at 6.2%). This is mainly due to two items: government investment and "other" expenditure, which increase by 0.3 and 0.4 percentage point of GDP respectively compared to 2004. However, the former mostly compensates for a 0.2 percentage point of GDP decrease recorded in 2004 and is chiefly due to an exceptional factor[11]. According to the update, "other government expenditure" should increase by 1.2 percentage point of GDP over the period 2003-2007 while total expenditure should only rise by 0.8 percentage point of GDP over the same period. They constitute the only item in government spending which is projected to keep increasing in percentage of GDP after 2005 (while government investment remains broadly constant in percentage of GDP, see below). Part of this rise in other expenditure might result from the government's announced intention to increase transfers to the University of Luxembourg as well as to raise development aid from 0.85% to 1% of gross national income over the next years.

For 2006 and 2007, the programme does not present a detailed budgetary strategy but rather a technical projection, where the expenditure and revenue ratios and, consequently, the deficit ratio are kept broadly constant. As nominal (and real) GDP growth are projected to slightly fluctuate over the period 2005-2007 (between 6 and 6.5% a year in nominal terms), the rate of increase in both public revenues and expenditure would fluctuate correspondingly. While it can be reasonably assumed that fluctuations in government revenues are broadly correlated with GDP growth (even taking into account the lagged reaction of corporate tax to fluctuations in enterprises profits), the programme does not indicate the factors which would determine similar fluctuations in the rise in public spending. On average, nominal government expenditure would increase by about 6¾% a year in 2006 to 2007, a rather high figure, but lower than both the last decade's average and the rate of increase projected for 2005. The programme does not indicate the specific measures which would allow this slowdown in expenditure growth to happen in 2006 and 2007.

Government investment has traditionally been high in Luxembourg in recent years, remaining between 4 and 5% of GDP since at least 1990[12](4.8% in 2004). This ratio should not change significantly over the period 2003-2007, hovering slightly below 5%. The programme stresses that this important public investment effort is for a large part imposed by the dramatic increase in employment, especially of non-residents, in the last

[10] This includes a rise of the VAT rate on car fuel and tobacco products from 12% to 15%.
[11] The sale of a building to the European Parliament
[12] There are no ESA 95 general government accounts for the period before 1990.

two decades and the burden it imposes on public infrastructure. It also indicates that public investment projects will be submitted in the future to a more detailed analysis in order to reduce their costs.

Table 4: Composition of the budgetary adjustment

(% of GDP)	2003	2004	2005	2006	2007	Change: 2007-2004
Revenues	**45.6**	**43.4**	**44.6**	**44.6**	**44.7**	**+ 1.3**
of which:						
- Taxes & social security contributions	41.8	39.6	40.9	40.9	41.0	**+1.4**
- Other (residual)	3.8	3.9	3.7	3.7	3.7	**- 0.2**
Expenditure	**44.9**	**44.8**	**45.6**	**45.5**	**45.7**	**+ 0.9**
of which:						
- Primary expenditure	44.7	44.6	45.5	45.4	45.6	**+ 1.0**
of which:						
Gross fixed capital formation	4.8	4.6	4.9	4.9	4.8	**+ 0.2**
Collective consumption	12.3	12.5	12.4	12.4	12.3	**-0.2**
Transfers & subsidies	22.9	22.7	22.9	22.7	22.7	**0.0**
Other (residual)	4.6	4.9	5.3	5.4	5.8	**+ 0.9**
- Interest payments	0.2	0.2	0.1	0.1	0.1	**- 0.1**
Budget balance	**+ 0.8**	**- 1.4**	**- 1.0**	**- 0.9**	**- 1.0**	**+ 0.4**
Primary balance	**+ 1.0**	**- 1.2**	**- 0.9**	**- 0.8**	**- 0.9**	**+ 0.3**
Sources: *Stability programme update; Commission services calculations*						

As far as the sub-sectors of the general government are concerned, the update projects the deficit of the central government to deteriorate progressively over the period, from 1.2% of GDP in 2003 to 3.3% of GDP in 2007. The cumulative deterioration thus reaches 2.1 percentage points of GDP between 2003 and 2007, of which 1.4 percentage point of GDP, two-thirds of the total, in 2004. By contrast, the surplus in the social security sector should rise by 0.7 percentage point of GDP between 2004 and 2007 (from 1.6% of GDP to 2.3%), after a slight deterioration in 2004. However, pension expenditure will probably rise by about 0.3% of GDP in 2005, due to the biannual indexation foreseen by the law. Moreover, the rising deficits in health insurance have made it necessary to transfer about € 130 Mio (0.5% of GDP) from the Pensions Fund to the Health Fund in 2004 and then to raise the contributions financing the transfers in kind from the health insurance from 5.1% to 5.4% of GDP. This should yield about € 72 Mio (0.25% of GDP), € 26.5 Mio of which, however, would come from the central government budget. As far as the finances of local authorities are concerned, they would remain broadly balanced over the period covered by the update. However, it should be noted that about 30% of the revenues of local authorities are generated by the local tax on corporations ("*impôt commercial communal*"), which might be affected by the unfavourable developments in corporate profits in recent years.

Box : The budget for 2005

In terms of revenues, the 2005 budget foresees a rise in the tax on gas-oil as well as an increase from 12% to 15% of the VAT on car fuel and tobacco products. These measures should yield a total of € 47.5 Mio, about 0.2% of GDP.

The main sources of increase in expenditure are the contributions to the pension insurance, to the health insurance, the dependency insurance and family allowances, the salaries of civil servants and the financing of their Pension Fund, the encouragement of alternative sources of energy and additional investments in railways infrastructure.

In total, the budget foresees a 8.0% rise in the State's revenues and a 7.9% increase in its expenditure. However, a significant part of central government expenditure and especially of public investment is made by Special Funds. The State budget determines and records the transfers from the State to these Funds but not their actual expenditure, which do not necessarily follow the same time pattern as the transfers they receive from the State. Consequently, the actual evolution of central government expenditure and especially of investment spending in a specific year does not automatically reflect the State budget of that year.

The budgetary projections presented in the programme are broadly plausible. In the light of past developments, the macroeconomic scenario appears plausible too. Assumptions on government revenues do not seem overly optimistic. On the other hand, the rise in spending in recent years has traditionally been fast and the programme does not provide much information on the specific measures envisaged to slow it down. As already indicated, it is quite possible that the 2004 budgetary outcome will be significantly better than currently projected, especially thanks to better-than-expected revenues. Of course, a similar evolution could also eventually occur for the 2005 deficit but hard facts are still lacking to support such a view. Consequently, the size of the improvement projected for 2005 and even perhaps the fact that such an improvement will effectively happen, remains uncertain. In sum, barring a substantial deterioration in the external environment, the programme's budgetary objectives should be achieved, on the condition that the rise in spending after 2005 does not exceed the already relatively fast rates of increase implied by the constant expenditure ratio. On the other hand, should the 2004 outcome be effectively better than currently projected, it should be possible to achieve a better result also in 2005 because the adjustment effort required to come closer to balance would be smaller.

While the fiscal consolidation path in the programme seems rather slow in nominal terms, the significant improvement in the cyclically-adjusted balance over the period – to a surplus of 2% of GDP - gives the impression of a considerable structural adjustment effort. The large discrepancy between nominal and cyclically-adjusted balances is mostly due to the very high potential growth rates and, consequently, the very large negative output gaps estimated by the commonly agreed methodology for Luxembourg. Based on these estimates, the cyclically-adjusted balance improves by 2.7 percentage points of GDP between 2005 and 2007, exceeding the 0.5% of GDP minimum annual improvement in the cyclically-adjusted balance that is recommended in the general guidelines of the BEPGs 2003-2005 for those euro area countries that have not yet reached a position of close-to-balance. However, as already stated, this improvement in the cyclically-adjusted balance is, in the case of Luxembourg, more due to the country's very specific features than to a genuine adjustment effort, which the programme does not envisage.

Table 5: Output gaps and cyclically-adjusted (primary) balances (CA(P)B)

	2003		2004		2005		2006		2007	Change: 2007-2004
	COM	SP	COM	SP	COM	SP	COM	SP	SP	SP
Budget balance[2]	0.8	0.8	-0.8	-1.4	-1.6	-1.0	-2.0	-0.9	-1.0	0.4
Output gap[1,3]	-1.5	-1.1	-1.9	-1.2	-3.0	-2.2	-4.3	-3.8	-5.0	-3.8
CAB[1,2]	1.7	1.4	0.4	-0.7	0.3	0.3	0.7	1.4	2.0	+2.7
CAPB[1,2]	1.9	1.6	0.6	-0.5	0.4	0.4	0.9	1.5	2.1	+2.6

Notes:
[1]SP (stability programme): Commission services calculations on the basis of the information in the programme
[2]in percent of GDP
[3]in percent of potential GDP

Sources:
Commission services autumn 2004 economic forecasts (COM); Commission services calculations

As regards achievement of the budgetary objectives of the Stability and Growth Pact, the budgetary stance of the programme as expressed by the evolution of the cyclically-adjusted balance is sufficient to achieve the medium-term objective of a budgetary position of close-to-balance within the programme period (from 2005 onwards). However, the programme does not envisage a continuation of the reduction in the headline deficit after 2005 and contains no commitment to move closer to a balanced position before the end of the period covered, at least in nominal terms, with the headline deficit remaining at around 1% of GDP. Concerning the safety margin against breaching the 3% of GDP deficit threshold with normal cyclical fluctuations, the minimal benchmark computed by the Commission services is in the case of Luxembourg very high due to the high sensitivity of the government balance to cyclical fluctuations. Specifically, it requires a 0.1% of GDP cyclically-adjusted surplus. The estimates for the cyclically-adjusted balance suggest that a sufficient safety margin would be provided from 2005 onwards.

4.3. Sensitivity analysis

The programme briefly presents two alternative scenarios to the baseline, where real GDP growth over the years 2005-2007 is 0.5% higher or lower each year than in the central one. Should GDP growth be 0.5% faster, the general government balance would improve by 0.1 percentage point of GDP in 2005, 0.2 in 2006 and 0.3 in 2007. Conversely, if growth were 0.5% slower, the general government deficit would rise to 1.2% of GDP throughout the period, which corresponds to a 0.2 to 0.3 percentage point of GDP deterioration with respect to the baseline scenario. The effects of a more favourable macroeconomic environment are on average slightly smaller than those of a less favourable one but this asymmetry is very limited. It should be noted that a 0.3 percentage point of GDP improvement (deterioration) in the general government balance as a result of a 0.5% faster (slower) GDP growth implies a 0.6 sensitivity coefficient, which is in line with the Commission services' computations.

Table 6: Sensitivity analysis

	2005	2006	2007
Baseline scenario			
Real GDP growth	3.8	3.3	4.3
General government balance	-1.0	-0.9	-1.0
More optimistic scenario			
Real GDP growth	4.3	3.8	4.8
General government balance	-0.9	-0.7	-0.7
Difference with baseline scenario	+0.1	+0.2	+0.3
Less optimistic scenario			
Real GDP growth	3.3	2.8	3.8
General government balance	-1.2	-1.2	-1.2
Difference with baseline scenario	-0.2	-0.3	-0.2
Source: *Stability programme update (SP)*			

5. EVOLUTION OF THE DEBT RATIO

In 2004, the debt ratio is estimated to be 5.0% of GDP in the current update, i.e. 0.2 percentage point of GDP lower than projected in the previous update. It has traditionally been very low in Luxembourg, remaining in the neighbourhood of the current ratio since at least 1990, with a maximum of 7.2% in 1996. The programme states that the government intends to keep the debt at a low level and that new borrowing in the coming years will be limited to the financing of railway infrastructures.

There are no significant differences between the debt figures in the programme and those projected in the Commission services forecasts. The often large surpluses repeatedly recorded for two decades have not been used to totally redeem the debt, which was already very low, but have led to an impressive accumulation of assets, the amount of which represents more than 50% of GDP according to some estimates, with half of them in the social security, and especially in the pension funds. There are no known risks related to the maturity structure of the debt, its currency of denomination or existing state guarantees.

Table 7: Debt dynamics

	average 2000-2003	2004		2005		2006		2007
	COM	COM	SP	COM	SP	COM	SP	SP
Government gross debt ratio	**5.5**	**4.9**	**5.0**	**4.8**	**5.0**	**4.7**	**4.6**	**4.5**
Change in debt ratio (1 = 2+3+4)	-0.2	-0.3	-0.2	-0.1	0.0	-0.1	-0.4	-0.1
Contributions:								
- **Primary balance** (2)	**-4.2**	**0.6**	**1.2**	**1.4**	**0.9**	**1.8**	**0.8**	**0.9**
- **“Snow-ball” effect** (3)	**-0.1**	**-0.1**	**-0.1**	**-0.1**	**-0.2**	**-0.1**	**-0.2**	**-0.2**
- Interest expenditure	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.1
- Real GDP growth	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
- Inflation (GDP deflator)	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
- **Stock-flow adjustment** (4)	**4.2**	**-0.8**	**-1.3**	**-1.4**	**-0.7**	**-1.8**	**-1.0**	**-0.8**
- Cash/accruals	-0.4	.						
- Accumulation of financial assets	4.6							
of which: Privatisation proceeds	*0.0*							
- Valuation effects & residual adj.	0.0							

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

$$\frac{D_t}{Y_t} - \frac{D_{t-1}}{Y_{t-1}} = \frac{PD_t}{Y_t} + \left(\frac{D_{t-1}}{Y_{t-1}} * \frac{i_t - y_t}{1 + y_t} \right) + \frac{SF_t}{Y_t}$$

where t is a time subscript; D, PD, Y and SF are the stock of government debt, the primary deficit, nominal GDP and the stock-flow adjustment respectively, and i and y represent the average cost of debt and nominal GDP growth. The term in parentheses represents the “snow-ball” effect.

Sources:
Stability programme update (SP); Commission services autumn 2004 economic forecasts (COM); Commission services calculations

6. STRUCTURAL REFORM AND THE QUALITY OF PUBLIC FINANCES

As already stated, the recurrent deficits recorded by the health insurance have led to a rise in the contribution rate decided on November 9, 2004. It is still too soon to determine whether this increase in resources will be sufficient to keep the health insurance fund balanced in the medium term. Additional measures aiming at moderating the rise in health expenditure have been proposed by the “Tripartite coordination Committee” and incorporated into a bill which was adopted by the Parliament on December 15 2004. The update stresses that the government has launched a concerted action involving all concerned parties in order to rein in health expenditure but it is not very specific about the contents of possible future measures in that field.

Another burden on public finance in Luxembourg is the very low employment rate of older workers, which is the lowest in the EU. The various schemes of disability and early retirement as well as the generosity of the country’s pension system provide little incentive to continue to work. Consequently, successive BEPGs have encouraged the authorities to take measure to reduce the inflow into these various schemes. Some measures were decided in 2002 and 2003 and some progress has been realised in reducing the inflow into the disability scheme and raising the effective retirement age but no additional measures seem to have been taken since then, especially in 2004. This problem should be addressed without delay as the sustainability of the pension system is bound to become a major issue in the years to come (see below). The programme announces that, in the first half of 2005, the “*Inspection générale de la sécurité sociale*” will carry out a long-term projection of the financial situation of the pension system within the 'Ageing' working group of the Economic Policy Committee. At the same time, it will perform an actuarial assessment of the financial situation of the general pension insurance over the period 2006-2013.

7. THE SUSTAINABILITY OF PUBLIC FINANCE

The assessment of the sustainability of Luxembourg's public finances is based on an overall judgement of the results of quantitative indicators and qualitative features. The quantitative indicators project debt developments according to two different scenarios, to take into account different budgetary developments over the medium term. The "programme" baseline scenario assumes that the central medium-term objective set in the programme is actually achieved, while the "2004" scenario assumes that the underlying primary balance remains throughout the programme period at the 2004 level.

The graph below presents gross debt developments according to the two different scenarios. On the basis of the programme, age-related expenditure is foreseen to increase by 1.7% of GDP between 2008 and 2050 (see Annex 2 for a breakdown of different age-related expenditures). Gross debt is projected to increase significantly from an extremely low level over the coming decades as a consequence of very low primary surpluses at present and during the programme period. The impact of ageing on expenditures gradually increases and it peaks around 2040, contributing to the rise in the gross debt ratio[13].

On the basis of the debt projections, it is possible to calculate a set of sustainability indicators to measure the gap between the current policies and a sustainable one. The S1 indicator shows the permanent change in the primary balance that is required to have a debt to GDP ratio in line with the 60% of GDP reference value in the very long run (year 2050)[14] S2 shows the gap between the current tax policies and those that would ensure respect of the intertemporal budget constraint given the future impact of ageing on public expenditure, namely the change in the tax ratio that would equate the present discounted value of future primary balances to the current stock of gross debt. According to the latter indicator, in order to tackle the cost of ageing entirely through a strategy of budgetary consolidation, Luxembourg should increase its tax ratio permanently by around 2 percentage points compared to the level projected at the end of the programme period and by more if it fails to consolidate in the medium term. This would lead to a sustainable debt ratio of around -8% of GDP by the middle of the century[15]. The budgetary effort over the first 5 years of the projections (i.e. after the end of the programme period) to respect the intertemporal budget constraint requires a primary surplus of 1.5% of GDP on average, 2 percentage points higher than the one projected for the last year of the programme period (measured in underlying terms).

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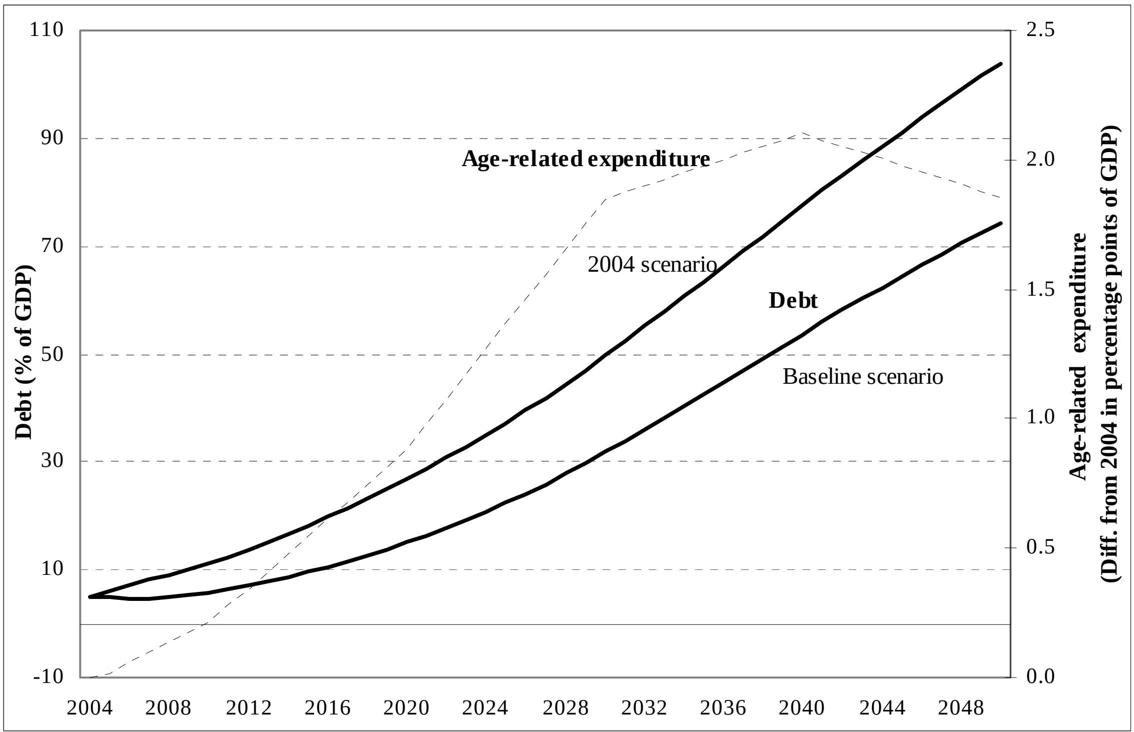
13 It should be recalled that, being a mechanical, partial equilibrium analysis, projections are in some cases bound to show highly accentuated profiles. As a consequence, the projected evolution of debt levels is not a forecast of likely outcomes and should not be taken at face value.

14 The respect of the underlying debt path does not ensure sustainability over an infinite horizon, but only that debt remains below 60% up to 2050. In most cases, this would imply an increasing trend and possible unbalances after the end of the projection period.

15 The gross debt ratio of around -8% in 2050 according to the S2 indicator illustrates that the tax gap is higher in order to ensure a sustainable evolution of gross debt beyond 2050, compared with the S1 tax gap, which illustrates that a lower tax increase is compatible with the 60% reference value in 2050.

Long-term sustainability: summary results



Sustainability indicators

	S1*	S2**	RPB***
Baseline scenario	0.4	2.1	1.5
2004 scenario	1.1	2.9	1.5

Notes:

* It indicates the required change in tax revenues as a share of GDP over the projection period that guarantees to reach debt to GDP ratio of 60% of GDP in 2050.

** It indicates the change in tax revenues as a share of GDP that guarantees the respect of the intertemporal budget constraint of the government, i.e., that equates the actualized flow of revenues and expenses over an infinite horizon to the debt as existing at the outset of the projection period; p.m. debt to GDP ratio in 2050: -7.9%

*** Based on S2, the Required Primary Balance (RPB) indicates the average minimum required cyclically adjusted primary balance as a share of GDP *over the first five years* of the projection period that guarantees the respect of the intertemporal budget constraint of the government for this period.

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

First, Luxembourg has accumulated for years considerable reserves that will help the country cope with the future cost of ageing. The programme states that the reserves of the central government amount to 11.5% of GDP and those of the pension system to 23.6% of GDP. Since, as indicated earlier, the total asset position of the general government is generally estimated to be considerably higher, the quantitative assessment of the long-term sustainability could not take this factor into account.

Second, over the period 1983–2004, total employment increased in Luxembourg by almost 90% in cumulative terms, the fastest rise in the EU. Increasingly, new jobs went to non-residents, who now constitute more than one-third of domestic employment. This dramatic rise in employment will progressively translate into a similar increase in the number of pensioners. Moreover, many non-resident workers who retired in recent years had spent only the last years of their career in Luxembourg and could only claim a limited pension in the Grand-Duchy. But this situation is bound to change drastically in a not so remote future ; increasingly, non-resident workers applying for retirement will have been employed in Luxembourg for a longer period and will be entitled to a more substantial pension. This implies that, even if the country is able in the future to keep up with the dramatic - and probably exceptional - rate of increase in employment it has recorded since 1983, the ratio between contributors to and beneficiaries from the pension system will, nevertheless, inevitably deteriorate considerably. Should employment growth be significantly slower in the future than in the past - a distinct possibility - this deterioration would be even faster and sharper. Consequently, recording surpluses and accumulating reserves as the Luxembourg authorities have been doing in the last two decades is a necessary precaution to cope with this very specific problem of budgetary pressures stemming from an ageing population.

Third, no information is available in the update on certain age-related expenditures, such as health care and education, making the longer term projections more uncertain.

Luxembourg appears to be in a favourable position with regard to long-term of the public finances, of which the projected budgetary costs of an ageing population is an important element. The budgetary strategy outlined in the programme results in a sustainability gap of close to 2% of GDP to fully ensure sustainability.

However, Luxembourg has experienced a very long period of exceptionally strong employment growth which will progressively translate into a similar increase in the number of pensioners. To this end, the considerable reserves that have been accumulated for more than two decades could significantly contribute to ease the budgetary pressures of this specific situation of the impact of ageing populations. This policy of accumulating reserves should be maintained.

* * *

ANNEX 1: SUMMARY TABLES FROM THE STABILITY PROGRAMME

Table 0. Basic assumptions

	2003	2004	2005	2006	2007
Short-term interest rate (annual average)	2.3	2.2	3.0	3.5	3.5
Long-term interest rate (annual average)	4.1	4.0	4.5	4.75	5.25
United States: short-term (three-month money market)	n.a.	n.a.	n.a.	n.a.	n.a.
United States: long term (10-year government bonds)	n.a.	n.a.	n.a.	n.a.	n.a.
€/USD exchange rate (annual average)	1.13	1.23	1.23	1.23	1.23
Nominal effective exchange rate (EU)	n.a.	n.a.	n.a.	n.a.	n.a.
World GDP growth, excluding EU	n.a.	n.a.	n.a.	n.a.	n.a.
United States, GDP growth	n.a.	n.a.	n.a.	n.a.	n.a.
Japan, GDP growth	n.a.	n.a.	n.a.	n.a.	n.a.
EU-15 GDP growth	0.7	2.4	1.9	2.2	2.2
Growth of relevant foreign markets	0.7	5.8	6.0	5.1	5.1
World import volumes, excluding EU	n.a.	n.a.	n.a.	n.a.	n.a.
World import prices (goods, in USD)	n.a.	n.a.	n.a.	n.a.	n.a.
Oil prices (Brent, USD/barrel)	28.8	38.3	41.5	36.9	35.0
Non-oil commodity prices (in USD)	n.a.	n.a.	n.a.	n.a.	n.a.

Table 1. Growth and associated factors

	2003	2004	2005	2006	2007
GDP *growth* at *constant* market prices (7+8+9)	2.9	4.4	3.8	3.3	4.3
GDP *level* at *current* market prices	23.960	25.510	27.080	28.730	30.590
GDP deflator	2.1	2.0	2.3	2.7	2.1
HICP change	2.5	2.6	3.2	1.5	1.7
Employment growth	1.8	2.4	2.5	2.5	2.9
Labour productivity growth	n.a.	n.a.	n.a.	n.a.	n.a.
Sources of growth: percentage changes at constant prices					
1. Private consumption expenditure	1.6	2.2	3.0	3.2	3.3
2. Government consumption expenditure	5.0	3.4	3.2	3.0	3.5
3. Gross fixed capital formation	-6.3	8.2	6.1	1.3	7.3
4. Changes in inventories and net acquisition of valuables as a % of GDP	n.a.	n.a.	n.a.	n.a.	n.a.
5. Exports of goods and services	1.8	6.1	5.6	5.4	5.4
6. Imports of goods and services	1.6	5.9	5.8	5.2	5.7
Contribution to GDP growth					
7. Final domestic demand (1+2+3)	1.6	1.6	1.8	1.8	2.0
8. Change in inventories and net acquisition of valuables (=4)	n.a.	n.a.	n.a.	n.a.	n.a.
9. External balance of goods and services (5-6)	0.6	1.3	0.7	1.1	0.7

Table 2. General government budgetary developments

% of GDP	**2003**	**2004**	**2005**	**2006**	**2007**
Net lending by sub-sectors					
1. General government	0.8	-1.4	-1.0	-0.9	-1.0
2. Central government	-1.2	-2.8	-3.1	-3.2	-3.3
3. State government	No intermediate government level in Luxembourg				
4. Local government	0.1	-0.1	0.0	0.0	0.0
5. Social security funds	1.9	1.6	2.1	2.3	2.3
General government					
6. Total receipts	45.6	43.4	44.6	44.6	44.7
7. Total expenditures	44.9	44.8	45.6	45.5	45.7
8. Budget balance	0.8	-1.4	-1.0	-0.9	-1.0
9. Net interest payments	0.2	0.2	0.1	0.1	0.1
10. Primary balance	1.0	-1.2	-0.9	-0.8	-0.9
Components of revenues					
11. Taxes	29.4	27.3	28.4	28.5	28.6
12. Social contributions	12.4	12.3	12.5	12.4	12.4
13. Interest income	1.4	1.3	1.2	1.3	1.2
14. Other	2.4	2.6	2.5	2.4	2.5
15. Total receipts	45.6	43.4	44.6	44.6	44.7
Components of expenditures					
16. Collective consumption	12.3	12.5	12.4	12.4	12.3
17. Social transfers in kind	5.2	5.5	5.5	5.4	5.4
18. Social transfers other than in kind	16.0	15.6	15.7	15.5	15.5
19. Interest payments	0.2	0.2	0.1	0.1	0.1
20. Subsidies	1.7	1.6	1.7	1.8	1.8
21. Gross fixed capital formation	4.8	4.6	4.9	4.9	4.8
22. Other	4.6	4.9	5.3	5.4	5.8
23. Total expenditures	44.9	44.8	45.6	45.5	45.7

Table 3. General government debt developments

% of GDP	**2003**	**2004**	**2005**	**2006**	**2007**
Gross debt level	5.3	5.0	5.0	4.6	4.5
Change in gross debt	-0.1	-0.2	-0.1	-0.3	-0.1
Contributions to change in gross debt					
Primary balance	1.0	-1.2	-0.9	-0.8	-0.9
Interest payments	0.2	0.2	0.1	0.1	0.1
Nominal GDP growth	1.2	-1.2	-1.1	-0.6	-0.9
Other factors influencing the debt ratio [1]	n.a.	n.a.	n.a.	n.a.	n.a.
Of which: Privatisation receipts	n.a.	n.a.	n.a.	n.a.	n.a.
p.m. implicit interest rate on debt	n.a.	n.a.	n.a.	n.a.	n.a.

[1] Stock-flow adjustment

Table 4. Cyclical developments

% of GDP	2003	2004	2005	2006	2007
1. GDP growth at constant prices	2.9	4.4	3.8	3.3	4.3
2. Actual balance	0.8	-1.4	-1.0	-0.9	-1.0
3. Interest payments	0.2	0.2	0.1	0.1	0.1
4. Potential GDP growth	4.2	4.2	4.1	4.2	4.2
5. Output gap	-0.1	0.1	-0.2	-1.0	-1.0
6. Cyclical budgetary component	0.0	0.0	-0.1	-0.5	-0.5
7. Cyclically-adjusted balance (2-6)	0.8	-1.4	-0.9	-0.5	-0.6
8. Cyclically-adjusted primary balance (7-3)	1.0	-1.3	-0.8	-0.4	-0.5

Table 5. Divergence from previous update

% of GDP	2003	2004	2005	2006	2007
GDP growth					
SP November 2003	1.3	1.2	2.0	3.0	n.a.
SP November 2004	2.9	4.4	3.8	3.3	4.3
Difference	1.6	3.2	1.8	0.3	n.a.
Actual budget balance					
SP November 2003	-0.6	-1.8	-2.3	-1.5	n.a.
SP November 2004	0.8	-1.4	-1.0	-0.9	-1.0
Difference	1.4	0.4	1.3	0.6	n.a.
Gross debt levels					
SP November 2003	4.9	5.2	5.0	4.4	n.a.
SP November 2004	5.3	5.0	5.0	4.6	4.5
Difference	0.4	-0.2	0.0	0.2	n.a.

Table 6. Long-term sustainability of public finances [1]

% of GDP	2004	2005	2010	2020	2030	2040	2050	2060	2070
Total expenditure	44.8	45.6							
Old age pensions									
Health care (including care for the elderly)									
Interest payments									
Total revenues	43.4	44.6							
Of which: from pensions contributions									
National pension fund assets [2]									
Assumptions [3]									
Labour productivity growth									
Real GDP growth	4.4	3.8							
Participation rate males (aged 20-64)									
Participation rates females (aged 20-64)									
Total participation rates (aged 20-64)									
Unemployment rate									

[1] Level for 2003, and per cent changes compared to 2003 thereafter
[2] Percentage of GDP
[3] Percentage change

Annex 2: Long-term sustainability of public finances in Luxembourg – quantitative scenarios

Main assumptions - baseline scenario (as % GDP)	**2008**	**2010**	**2020**	**2030**	**2040**	**2050**	**changes**
Total age-related spending	7.8	7.9	8.6	9.5	9.8	9.5	1.7
Pensions	7.5	7.5	8.2	9.2	9.5	9.3	1.8
Unemployment benefits	0.3	0.4	0.4	0.3	0.3	0.2	-0.1
*Total primary non age-related spending**	37.8						
*Total revenues**	45.1						

* constant

Results (as % GDP)	**2008**	**2010**	**2020**	**2030**	**2040**	**2050**	**changes**
Baseline scenario							
Gross debt	4.9	5.8	15.0	31.8	53.6	74.4	69.5
i + 0.5*	4.9	5.9	15.5	33.4	57.1	80.8	75.9
2004 scenario							
Gross debt	9.1	11.2	26.8	49.7	77.5	104.0	94.9
i + 0.5*	9.1	11.3	27.7	52.4	83.1	113.8	104.6

* i + 0.5 represents the evolution of debt under the assumption of the nominal interest rate being 50 basis points higher throughout the projection period.