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Assessment of the 2019 Stability Programme for

Luxembourg

(Note prepared by DG ECFIN staff)

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EXECUTIVE SUMMARY

Luxembourg is subject to the preventive arm of the SGP. With a gross public debt below 60% of GDP, Luxembourg is compliant with the debt criterion.

The Luxembourg economy expanded by 2.6% in 2018 in real terms. The Commission 2019 spring forecast points to a moderate and stable growth trend, where economic activity is projected to grow by 2.5% in 2019 and 2.6% in 2020. By contrast, the macro-economic scenario in the Stability Programme is more favourable with economic output projected to grow by 3.0% and 3.8% in 2019 and 2020, respectively. Growth is expected to be mainly driven by robust domestic demand, while the external outlook has weakened. With a short-term growth outlook around the level of potential growth, the output gap is forecast to remain positive. Employment growth is expected to moderate, leading unemployment to stabilise at a level just above 5%.

In 2018, the headline budget balance reached a surplus of 2.4% of GDP, following robust revenue growth that more than offset a sustained increase in total government expenditure. According to the Stability Programme, the general government budget balance is set to bottom out to 1.0% of GDP in 2019 and to return to show a steady improvement to 1.4% in 2020, 1.5% in 2021, 2.0% in 2022 and 2.2% in 2023. In structural terms, based on recalculated output gaps, the budget balance increased to 2.1% of potential GDP in 2018, well above the medium-term budgetary objective (set at -0.5%). The structural budget surplus is expected to decline to 0.6% in 2019 and to stall at that level in 2020. Risks to the short-term fiscal outlook mainly come from the macroeconomic side, such as a worsening of the economic climate, which would affect income tax revenue. The projected increase in age-related public expenditure points to high risk in long-term sustainability.

Overall, Luxembourg is expected to remain compliant with the medium-term budgetary objective (MTO) in 2019 and 2020. Nevertheless, expenditure developments should be monitored carefully, especially in light of possible future risks to the robustness of revenues.

1. INTRODUCTION

On 30 April 2019, Luxembourg submitted its 2019 Stability Programme (hereafter called Stability Programme), covering the period 2018-2023.[1] It was approved by the government and underwent an inclusive consultation process involving the national parliament.

Luxembourg is currently subject to the preventive arm of the the Stability and Growth Pact (SGP) and should preserve a sound fiscal position which ensures compliance with the medium-term budgetary objective (MTO).

This document complements the Country Report published on 27 February 2019 and updates it with the information included in the Stability Programme.

Section 2 presents the macroeconomic outlook underlying the Stability Programme and provides an assessment based on the Commission 2019 spring forecast (hereafter called Commission forecast). The following section presents the recent and planned budgetary developments, according to the Stability Programme. In particular, it includes an overview on the medium-term budgetary plans, an assessment of the measures underpinning the Stability Programme and a risk analysis of the budgetary plans based on the Commission forecast. Section 4 assesses compliance with the rules of the SGP, including on the basis of the Commission forecast. Section 5 provides an overview on long-term sustainability risks and Section 6 on recent developments and plans regarding the fiscal framework. Section 7 provides a summary.

2. MACROECONOMIC DEVELOPMENTS

The macroeconomic scenario underlying the stability programme was maintained, including 2018, as presented in the context of the economic outlook of December last year and, subsequently, in the medium-term projections of March. The latter also set the scene for the updated Draft Budgetary Plan submitted in March, where GDP was forecast to grow by 3.0% in 2018. Against this background, estimates of actual GDP growth were lower than expected at 2.6%. The difference was partly due to downward revisions to external demand in previous quarters, resulting in a lower contribution than explained by the drop in the last quarter of the year. Private consumption also grew below expectations, at 4.2% (against 5.0% in the programme), amidst a dynamic labour market and improved disposable incomes. Overall, the deterioration in the external environment and increased uncertainty appear to be the main risks for the programme scenario going forward.

[1] The english version of the Stability Programme was submitted on 11 May 2019.

Table 1: Comparison of macroeconomic developments and forecasts

	2018		2019		2020		2021	2022	2023
	COM	SP	COM	SP	COM	SP	SP	SP	SP
Real GDP (% change)	2.6	3.0	2.5	3.0	2.6	3.8	3.5	3.0	2.5
Private consumption (% change)	4.2	5.0	3.6	4.3	2.5	3.6	2.6	2.3	2.0
Gross fixed capital formation (% change)	-2.7	-3.8	2.5	15.7	1.6	13.6	-0.1	-2.9	-4.4
Exports of goods and services (% change)	4.5	6.2	1.8	4.4	2.4	7.2	7.2	7.1	6.8
Imports of goods and services (% change)	5.1	6.2	1.8	6.2	2.4	8.6	6.9	6.7	6.6
Contributions to real GDP growth:									
- Final domestic demand	1.5	1.5	2.0	5.0	1.6	4.7	1.3	0.6	0.2
- Change in inventories	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Net exports	0.5	1.6	0.5	-2.0	1.0	-0.9	2.2	2.5	2.3
Output gap[1]	0.6	0.7	1.0	1.0	1.3	1.6	1.8	1.8	1.5
Employment (% change)	3.7	3.7	3.1	3.4	2.8	2.9	3.0	2.6	2.0
Unemployment rate (%)	5.4	5.2	5.2	4.7	5.2	4.5	4.3	4.3	4.5
Labour productivity (% change)	-1.1	-0.7	-0.5	-0.4	-0.2	0.8	0.5	0.5	0.5
HICP inflation (%)	2.0	2.0	1.8	1.1	1.7	1.8	1.5	1.7	1.7
GDP deflator (% change)	3.8	3.2	1.8	1.1	1.7	1.9	1.8	2.1	2.0
Comp. of employees (per head, % change)	2.1	1.4	3.0	2.5	2.1	3.4	1.6	2.5	2.5
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	3.9	na	3.5	na	3.6	na	na	na	na

Note:

[1]In % of potential GDP, with potential GDP growth recalculated by Commission services on the basis of the programme scenario using the commonly agreed methodology.

Source :

Commission 2019 spring forecast (COM); Stability Programme (SP).

The scenario projects real GDP to grow by 3.0% in 2019 and 3.8% in 2020, before gently slowing to reach 2.5% by 2023. It is based on the same macroeconomic scenario as the one underlying the updated Draft Budgetary Plan (DBP)[2]. Compared to the no-policy-change DBP, submitted on 15 October 2018, where GDP growth was projected at 4.0% for 2019, economic perspectives were thus revised around one percentage point downwards.

The macroeconomic scenario underlying the budgetary projections of the Stability Programme is founded on improved expectations with support from the labour market in 2019, to stir domestic demand into sustained consumption and higher equipment investment; whereas an improved external environment coupled with stronger public investment underlies the stronger GDP expansion projected for 2020. In this regard, it should be pointed out that the macroeconomic scenario factors in strong growth for public investment in 2020, which is not reflected in the budgetary trajectory. Exports of goods and services are forecast to accelerate in 2020 and keep the high momentum thereafter, although their net contribution to growth is expected to be lower than that of domestic demand in 2019 and 2020, as investment is increasing at double digit (and also deducted from the external balance of goods). The strong growth momentum underlying the labour market expansion, including further declines in unemployment, is projected to continue over most of the projection period, as well as the

[2] See STATEC Medium-term forecasts available at: https://statistiques.public.lu/catalogue-publications/economie-statistiques/2019/105-2019.pdf

sizeable capital accumulation from investment in 2019 and 2020, although the output gap is set to widen despite the maturing phase of the cycle, as the stronger growth projected is not supported by higher productivity. The output gap is projected to increase to 1.8% by 2022, as recalculated by the Commission based on the information in the programme following the commonly agreed methodology. Meanwhile, consumer prices are expected to increase only moderately. Inflation is forecast to peak at 1.8% by 2020 and marginally fall subsequently.

In the Commission 2019 spring forecast, economic activity is projected to grow by 2.5% in 2019 and 2.6% in 2020. Thus, the Commission scenario points to a more moderate and stable growth trend. The Commission projections for the external sector show relatively less dynamic components but a positive net contribution to growth. The difference is mainly explained by investment. Netting out the investment effect from the Stability Programme scenario yields an external contribution close to the Commission scenario in both 2019 and 2020. Beyond, this figure, the macroeconomic assumptions underlying the Stability Programme scenario appear to be favourable up to 2022, and plausible in 2023. In addition to the lower estimate for 2018, lower growth projections for the euro area and global trade, and the overall increasing uncertainty at the current juncture; suggest a more limited expansion of private equipment investment for 2019 compared with the Stability Programme scenario. The increase projected for investment in 2020 would be unprecedented, if confirmed, for its implied increase in capital intensity but also for the effort required. Recent developments suggest a less salient upturn in the financial sector, compared with the Stability Programme projections for the later years. Private consumption growth has been less dynamic than expected. Recent weaker developments amidst a sustained favourable environment suggest that other factors might be affecting consumption decisions. Overall, lower expectations and less dynamic financial sector, among other factors, underlie the differences between the Stability Programme scenario and Commission forecasts, which nonetheless compare well against growth projections for the euro area (Luxembourg's real GDP growth is projected to be 1.4 and 1 percentage points higher in 2019 and 2020, respectively).

3. RECENT AND PLANNED BUDGETARY DEVELOPMENTS

3.1. DEFICIT DEVELOPMENTS IN 2018 AND 2019

The general government balance recorded a surplus of 2.4% of GDP in 2018 compared to a surplus of 1.4% of GDP in 2017. Total revenues increased by 9.1% year-on-year. In particular, direct taxes increased by 14.3% in 2018 supported by a strong collection in both personal (mirroring dynamic employment creation) and corporate taxes. Notably, the introduction of the electronic filing of tax returns for corporate income tax since 2017 have allowed to significantly increasing the collection rate of taxes. By contrast, total expenditure increased by 6.8% year-on-year and thus only partially offset the increase in revenues. Public employees' compensation increased substantially, due to the triggering of the wage index-linked increase in August 2018, the implementation of the wage agreement and a significant increase in public staff. Public investment increased by 4.5% compared to the previuos year and set at 4.1% of GDP.

Compared to the previous Stability Programme when a surplus of 1.1% of GDP was expected, the headline balance has been revised substantially upward. Total revenues have been revised up by 1.6 percentage points of GDP, with revenues from current taxes on income and wealth explaining a large part of the revision. The latest data on budget execution for the Central government show that revenues increased on average by around 10% in 2018 compared to the previous year. This evolution is remarkable in light of the already substantial increase of revenues recorded in 2017. By contrast, public expenditure has been revised upward by 0.3 percentage points of GDP.

The large surplus in 2018 is to a large extent the result of a successful consolidation of the central government budget. For the first time since 2008 the central government registered a budget surplus with its nominal balance improving from a deficit of 0.6% of GDP in 2017 to a surplus of 0.2% of GDP in 2018.

In 2019, the Stability Programme projects the surplus of the headline balance to drop to 1.0% of GDP from 2.4% of GDP in 2018. This represents a downward revision compared to the trajectory outlined in the 2018 Stability Programme, which projected the headline surplus at 1.4% of GDP in 2019, improving from a surplus of 1.1% of GDP in 2018. The drop in the headline surplus in 2019 (to 1.0% from 2.4% of GDP in 2018) cannot be explained by the macroeconomic scenario underpinning the budgetary trajectory, which projects a steady growth of the economic output over 2018 and 2019. With discretionary measures estimated to have a negative impact amounting to 0.5% of GDP in 2019, it appears that the drop is mostly explained by the use of rather prudent assumptions about the elasticity of revenues. In the 2019 Stability Programme almost all revenues categories show, as a percent of GDP, a decline compared to their 2018 level, with the more sizeable drop projected for current taxes on income and wealth (a drop of 0.5 percentage points of GDP). Taxes on production and capital taxes are projected to drop as well, as percent of GDP, compared to their 2018 level. This entails implicitly that sizeable windfall gains, which have contributed to improve the budgetary outcome in 2018, are not expected to repeat in 2019. At the same time, total expenditure is estimated to increase by 0.6 percentage points to 43.9% of GDP. Gross fixed capital formation is projected to increase further to 4.3% of GDP.

3.2. MEDIUM-TERM STRATEGY AND TARGETS

The Stability Programme outlines the national medium-term budgetary plan covering the period up to 2023. After a marked fall in 2019 the general government surplus is projected to return to raise in 2020. In 2020, the general government balance is projected to post a surplus of 1.4% of GDP. The surplus is then projected to increase steadily until 2023, when it will reach 2.2% of GDP.

The medium-term budgetary strategy outlined in the 2019 Stability Programme ensures compliance with the MTO throughout the program period. With the 2019 Stability Programme the national authorities decided to set; for the period 2020-2022, the country specific MTO to a surplus (in structural terms) of 0.5% of GDP, compared with the MTO of a deficit of 0.5% of GDP into force up to 2019. The new MTO respects the minimum MTO set for the period 2020-2022 of a surplus of 0.5% of GDP and is in line with the provisions of the Fiscal Compact. In this regard, the MTO reflects the objectives of the Pact. According to the Programme, the surplus of the structural balance (at face value) will decline to 0.9 and 0.8% of GDP in 2019 and 2020, respectively, before starting to steadily raise again and reach 2.2% of GDP in 2023.

The surplus of the recalculated structural balance[3] is projected to decline from 2.1% of GDP in 2018 to 0.6% of GDP in 2019 and to stall at this level in 2020 and 2021. It is then projected

[3] Recalculated by the Commission on the basis of the information in the programme according to the commonly agreed methodology.

to increase to 1.2% of GDP in 2022 and to 1.5% of GDP in 2023. According to the 2019 Commission Spring forecast the structural balance after a drop to 0.9% of GDP in 2019 will further decline to 0.5% of GDP in 2020; still in line with the new MTO of a surplus (in structural terms) of 0.5% of GDP.

Table 2: Composition of the budgetary adjustment [4]

(% of GDP)	2018	2019		2020		2021	2022	2023	Change: 2018-2023
	COM	COM	SP	COM	SP	SP	SP	SP	SP
Revenue	**45.5**	**45.2**	**45.0**	**45.4**	**45.0**	**45.0**	**45.0**	**45.2**	**-0.7**
of which:									
- Taxes on production and imports	12.1	12.0	11.8	12.0	11.8	11.8	11.8	11.9	-0.2
- Current taxes on income, wealth, etc.	16.7	16.5	16.3	16.8	16.3	16.5	16.7	16.9	0.1
- Social contributions	12.4	12.4	12.5	12.5	12.5	12.4	12.4	12.4	-0.1
- Other (residual)	4.4	4.3	4.4	4.1	4.3	4.3	4.2	4.1	-0.5
Expenditure	**43.1**	**43.8**	**43.9**	**44.3**	**43.6**	**43.5**	**43.0**	**43.0**	**-0.3**
of which:									
- Primary expenditure	42.8	43.6	43.7	44.0	43.4	43.4	42.8	42.8	-0.1
of which:									
Compensation of employees	9.2	9.3	9.4	9.4	9.4	9.3	9.2	9.3	0.1
Intermediate consumption	3.7	3.7	3.8	3.7	3.7	3.6	3.6	3.6	-0.1
Social payments	19.9	20.1	20.2	20.3	20.1	19.9	19.7	19.7	-0.2
Subsidies	1.3	1.3	1.2	1.4	1.2	1.1	1.1	1.1	-0.2
Gross fixed capital formation	4.1	4.1	4.3	4.1	4.2	4.6	4.3	4.4	0.3
Other (residual)	4.7	5.0	4.8	5.2	4.8	4.9	4.9	4.8	0.1
- Interest expenditure	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	-0.2
General government balance (GGB)	**2.4**	**1.4**	**1.0**	**1.1**	**1.4**	**1.5**	**2.0**	**2.2**	**-0.2**
Primary balance	**2.7**	**1.7**	**1.3**	**1.4**	**1.6**	**1.6**	**2.2**	**2.3**	**-0.4**
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GGB excl. one-offs	**2.4**	**1.4**	**1.0**	**1.1**	**1.4**	**1.5**	**2.0**	**2.2**	**-0.2**
Output gap[1]	0.6	1.0	1.0	1.3	1.6	1.8	1.8	1.5	1.0
Cyclically-adjusted balance[1]	2.1	0.9	0.6	0.5	0.6	0.6	1.2	1.5	-0.7
Structural balance[2]	**2.1**	**0.9**	**0.6**	**0.5**	**0.6**	**0.6**	**1.2**	**1.5**	**-0.7**
Structural primary balance[2]	2.5	1.2	0.8	0.8	0.9	0.8	1.3	1.6	-0.8

Notes:

[1]Output gap (in % of potential GDP) and cyclically-adjusted balance according to the programme as recalculated by Commission on the basis of the programme scenario using the commonly agreed methodology.

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

Source:

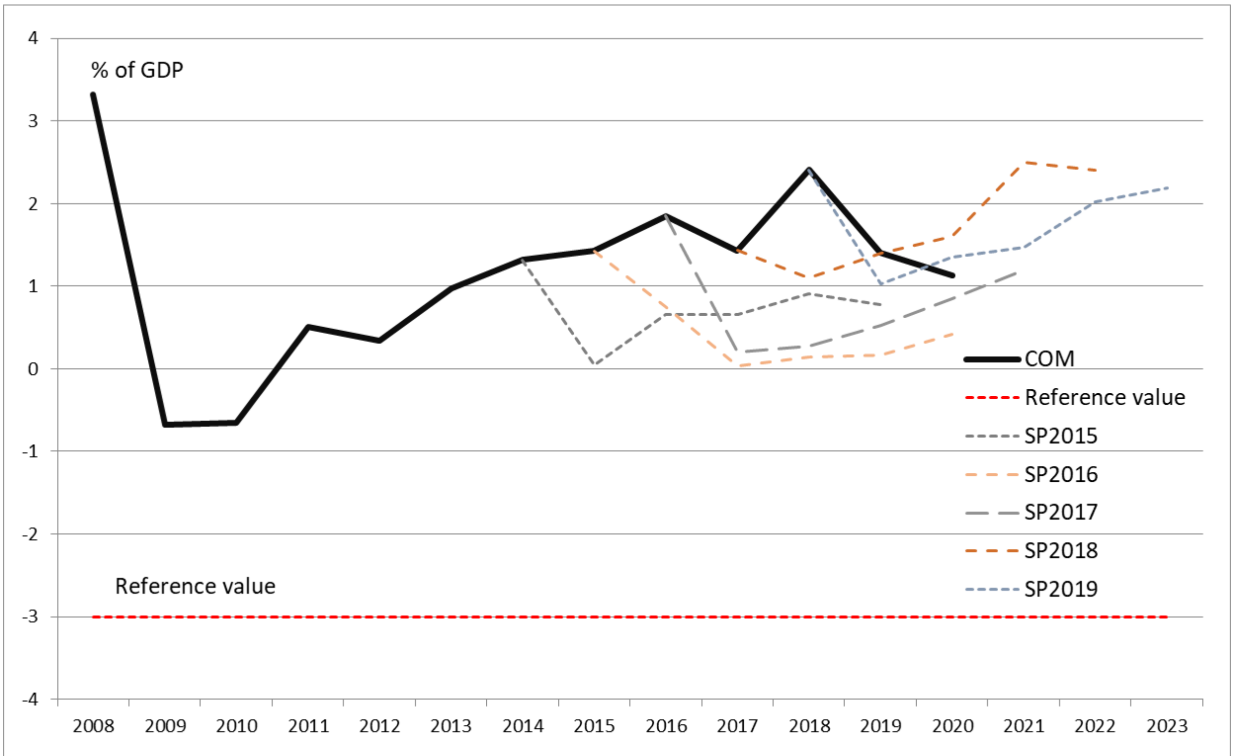
Stability Programme (SP); Commission 2019 spring forecasts (COM); Commission calculations.

Figures 1 shows that over several rounds of the Stability Programmes, the authorities have constantly adopted a rather prudent approach when defining the country budgetary strategy.

[4] The Stability Programme does not integrate for the year 2018 the figures for public finances as published by Eurostat, but reports the same figures as from the updated 2019 Draft Budgetary Plan.

This is shown by the final budgetary outcome for a given year being regularly revised upward compared with the target in the Stability Programme of the same year.

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



Source: Commission 2019 Spring Forecast. Stability programmes

3.3. MEASURES UNDERPINNING THE PROGRAMME

The budgetary strategy outlined in the programme caters for the measures with a projected impact on 2019 and 2020. The authorities have decided to use a part of their available fiscal space to ensure social cohesion, competitiveness and sustainable development. In this regard, a net increase in the minimum wage of €100 through tax credits with effect from the start of 2019 has been decided. The corporate tax rate will be reduced from 18% to 17% as from 2019 and the income bracket to which the minimum corporate tax rate applies (15%) will also be increased from €25,000 to €175,000[5]. It has been also decided to increase excised duties for both diesel and gasoline. The overall impact of these measures is estimated to increase the deficit by 0.5 percentage points in 2019.[6]

[5] It should be emphasized that the intermediate tranche that smooths the transition from minimum to the maximum tax rate is set at € 26,250 plus 31% of taxable income exceeding €175,000 when the taxable income is between €175,000 and €200,001.

[6] The 2019 Stability Programme provides information about the overall impact of discretionary measures only in 2019. Furthermore, it does not provide for the impact of individual measures.

Finally, the budgetary strategy includes the long-term impact of the saving measures adopted within the Zukunftspak[7] in 2015, which are expected to reduce expenditure growth further in 2019 and in 2020.

3.4. Debt developments

According to the Stability Programme, public debt is expected to decrease steadily over the covered period to 17.3% of GDP in 2023 (see Table 3). The trajectory is based on the assumption that the future central government deficit[8] will be entirely financed as for 2020[9] by new debt and that the expected surplus of the central government in 2023 will be used to decrease the general government debt. These developments are broadly in line with the Commission 2019 spring forecast (see Figure 2 and Table 3) that foresees a decline in the debt–to–GDP ratio by 2020.

While the gross government debt is expected to decrease, its amount is largely outweighed by the assets owned by the government. Apart from the reserves of the pension fund, equivalent to around 33% of GDP at the end of 2018, the government owns stakes in commercial and non-commercial companies, valued at approximately around 10% of GDP. Finally, since 2015 it has been established an Intergenerational Sovereign Fund, the assets of which amounted at around 0.5% of GDP at the end 2018.

[7] The Zukunftspak has been adopted with the 2015 budget and contains a list of 258 measures, of different size, to reduce expenditure with an incremental impact over the period 2015-2020.

8 After posting a surplus of 0.2% of GDP in 2018, the balance of the central government is expected to return to a deficit in 2019 and showing again a surplus only in 2023. Notably, between 2019 and 2023, the balance of the central government, as percent of GDP, is expected to evolve as follow: -1.1 in 2019, --0.8 in 2020, -0.7 in 2021, -0.1 in 2022 and +0.3 in 2023.

9 For 2019, the programme assumes that the accumulated liquidity will allow the central government to not have to resort to new debt issuance.

Table 3: Debt developments

(% of GDP)	Average 2013-2017	2018	2019		2020		2021	2022	2023
			COM	SP	COM	SP	SP	SP	SP
Gross debt ratio[1]	**22.5**	**21.4**	**20.7**	**20.2**	**20.3**	**19.9**	**19.3**	**18.4**	**17.3**
Change in the ratio	0.2	-1.6	-0.7	-1.2	-0.4	-0.3	-0.6	-0.9	-1.1
Contributions [2] *:*									
1. Primary balance	**-1.8**	**-2.7**	**-1.7**	**-1.3**	**-1.4**	**-1.6**	**-1.6**	**-2.2**	**-2.3**
2. "Snow-ball" effect	**-0.6**	**-1.0**	**-0.6**	**-0.6**	**-0.6**	**-0.8**	**-0.8**	**-0.8**	**-0.6**
Of which:									
Interest expenditure	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2
Growth effect	-0.7	-0.6	-0.5	-0.6	-0.5	-0.7	-0.7	-0.6	-0.4
Inflation effect	-0.3	-0.8	-0.4	-0.2	-0.3	-0.4	-0.3	-0.4	-0.4
3. Stock-flow adjustment	**2.6**	**2.2**	**1.6**	**0.7**	**1.6**	**2.1**	**1.9**	**2.1**	**1.9**

Notes:

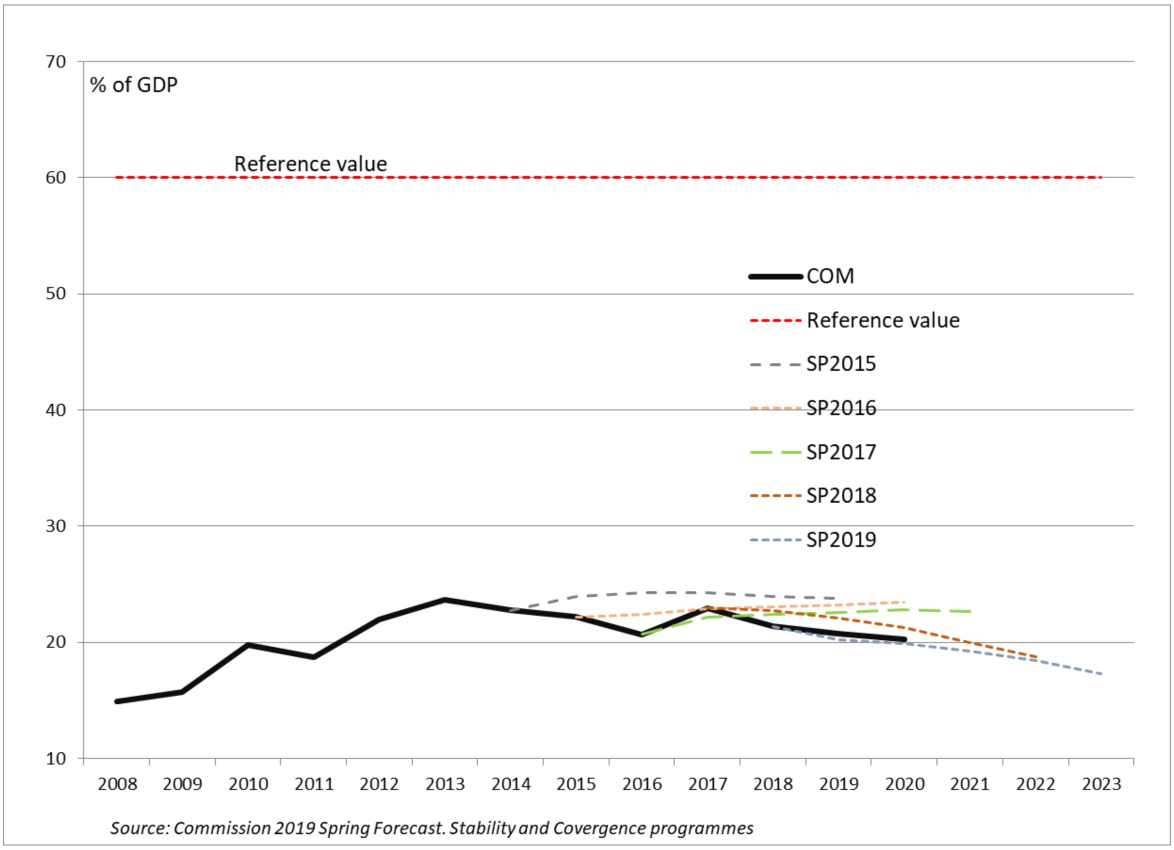
[1] End of period.

[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 :

Commission 2019 spring forecast (COM); Stability Programme (SP), Comission calculations.

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



3.5. RISK ASSESSMENT

Overall, the Stability Programme's targets, in terms of headline balance and public debt, appear to be more prudent for 2019 than in the Commission 2019 spring forecast. The authorities have opted for rather moderate assumptions about revenues evolution considering the surge in 2018 mostly the result of windfall gains. By contrast, the Commission considers that windfall gains contributed to a lesser extent to the surge in revenues in 2018 and that a part of it is linked to more structural factor as a less aggressive behaviour of corporations in the context of their fiscal optimisation strategies. By contrast in 2020, according to the Commission forecast the surplus of the public finances continues to shrink while in the national authorities' scenario it returns to expand. Apart from the more favourable macroeconomic outlook underpinning the 2020 budgetary target, this would be the result of more moderate growth of public expenditure

The Stability Programme states that the outlined budgetary trajectory does not factor in the impact, positive or negative, of the materialisation of any of the potential risks pending on the national economy. In particular and despite the efforts of the national authorities to diversify the economy by developing selected sectors, including the ICT industry and the space sector, the economy remains dependent to a large extent from the financial sector. In this regard, risks stem from changes to the regulatory environment that could adversely impact the financial sector perspectives. In a similar way, international discussion on the harmonisation of the taxation of multinational could impact the decision on headquarters location by multinationals, which Luxembourg hosts in larger number. These risk factors are however dependent on the external environment, on which the national authorities have limited possibilities to exert an influence.

The programme provides with the results of a sensitivity analysis carried out on the basis of a shock, positive and negative, to the external environment and to a positive shock on the interest rates. According to the analysis, under the adverse scenario, which considers the combined impact of a significant deterioration of global trading relationships and a hard Brexit, economic growth in Luxembourg would be 1.7 percentage points lower in 2019 with a significant long-lasting impact of on the public finances. In this case public debt would be expected to reach 20.9% of GDP at the end of the programme period compared to 17.3% of the GDP in the baseline scenario. Under the favourable scenario, which assumes an accommodative economic policy supporting global economy, economic growth in Luxembourg would be 0.4 percentage points higher in 2019 with a long-lasting and increasing positive impact of on the public finances. Finally, the impact of an increase of 100 basis points in interested rates have been simulated. In this case, economic growth would be 0.4 percentage points lower by 2023 (2.1% compare to 2.5 in the baseline scenario) with only a marginal impact on public finances.

4. COMPLIANCE WITH THE PROVISIONS OF THE STABILITY AND GROWTH PACT

Luxembourg is subject to the preventive arm of the Stability and Growth Pact and should ensure compliance with its MTO. Under the European Semester in July 2018 the Council considered that Luxembourg complied with the Stability and Growth Pact.

The general government balance posted a surplus of 2.4% of GDP in 2018 and it is planned to remain in surplus throughout the programme period. This is confirmed by the Commission 2019 spring forecast for the years 2019 and 2020. The general government debt stood at 21.4% of GDP at the end of 2018 and it is planned to gradually decrease and reach 17.3% of

GDP at the end of the program period, i.e. to remain well below the 60% of GDP threshold from the Pact.

Based on outturn data, Luxembourg's structural balance stood at a surplus of 2.1% of GDP in 2018 and thus the country remained well above its medium-term objective (MTO) of a structural deficit of 0.5% of GDP, confirming compliance with the SGP. In this regard, it is worth to note that windfall revenues are estimated, on the basis of the standard elasticity, to have significantly contributed to the 2018 outcome. Notably, revenues from direct taxation surprised on the upside; i.e., corporate income taxes over performed by 2.0 percentage points of GDP compared to the target in the previous Stability Programme.

According to the information in the Stability Programme, Luxembourg is expected to continue to remain above its MTO also in 2019, when the recalculated structural surplus is projected at 0.6% of GDP, which is more prudent than in the Commission 2019 spring forecast.

Based on the information in the Stability Programme, Luxembourg is expected to continue to be complaint with the requirements of the Stability and Growth Pact also in 2020, when the country-specific MTO is set at a surplus of 0.5% of GDP. Nevertheless, the margin with regard to its MTO is expected to shrink as the recalculated structural surplus is projected to remain at 0.6% of GDP, just above the new MTO. The Commission 2019 spring forecast projects the structural surplus in 2020 to set at 0.5% of GD, in line with the new MTO.

Table 4: Compliance with the requirements under the preventive arm

(% of GDP)	2018	2019		2020	
Background budgetary indicators[1]					
Medium-term objective (MTO)	-0.5	-0.5		0.5	
Structural balance[2] (COM)	2.1	0.9		0.5	
Setting the required adjustment to the MTO					
Structural balance based on freezing (COM)	2.4	0.9		-	
Position vis-a -vis the MTO[3]	At or above the MTO	At or above the MTO		At or above the MTO	
Required adjustment[4]	0.0	0.0		0.0	
Required adjustment corrected[5]	-2.0	-2.9		-0.4	
Corresponding expenditure benchmark[6]	10.9	11.1		5.0	
Compliance with the required adjustment to the MTO					
	COM	**SP**	**COM**	**SP**	**COM**
Structural balance pillar					
Change in structural balance[7]	Compliant				
One-year deviation from the required adjustment [8]					
Two-year average deviation from the required adjustment [8]					
Expenditure benchmark pillar					
Net public expenditure annual growth corrected for one-offs[9]					
One-year deviation adjusted for one-offs[10]					
Two-year deviation adjusted for one-offs[10]					
Finding of the overall assessment					

Legend

'*Compliance*' - the recommended structural adjustment or a higher adjustment is being observed.

'*Some deviation*' - a deviation from the recommended structural adjustment is being observed, but it is below the threshold for a significant deviation.

'*Significant deviation*' - a deviation which has reached or breached the threshold for a significant deviation (i.e. 0.5% of GDP over one year, 0.25% of GDP over two years on average).

Notes

[1] The most favourable level of the structural balance, measured as a percentage of GDP reached at the end of year t-1, between spring forecast (t-1) and the latest forecast, determines whether there is a need to adjust towards the MTO or not in year t. A margin of 0.25 percentage points (p.p.) is allowed in order to be evaluated as having reached the MTO.

[2] Structural balance = cyclically-adjusted government balance excluding one-off measures.

[3] Based on the relevant structural balance at year t-1.

[4] Based on the position vis-à-vis the MTO, the cyclical position and the debt level (See European Commission: Vade mecum on the Stability and Growth Pact, page 38.). In case of a SDP, the requirement corresponds to the Council recommendation when available, otherwise it refers to the Commission recommendation to the Council.

[5] Required adjustment corrected for the clauses, the possible margin to the MTO and the allowed deviation in case of overachievers.

[6] Reference medium-term rate of potential GDP growth. The (standard) reference rate applies from year t+1, if the country has reached its MTO in year t. A corrected rate applies as long as the country is adjusting towards its MTO, including in year t.

[7] Change in the structural balance compared to year t-1. Expost assessment (for 2019-1) is carried out on the basis of Commission 2019 spring forecast.

[8] The difference of the change in the structural balance and the corrected required adjustment.

[9] Net public expenditure annual growth (in %) corrected for discretionary revenue measures, revenue measures mandated by law and one-offs (nominal)

[10] Deviation of the growth rate of public expenditure net of discretionary revenue measures, revenue increases mandated by law and one-offs from the applicable reference rate in terms of the effect on the structural balance. The expenditure aggregate used for the expenditure benchmark is obtained following the commonly agreed methodology. A negative sign implies that expenditure growth exceeds the applicable reference rate.

Source :
Stability Programme (SP); Commission 2019 spring forecast (COM); Commission calculations.

5. DEBT SUSTAINABILITY ANALYSIS AND FISCAL RISKS

Luxembourg does not appear to face fiscal sustainability risks in the short run.[10]

Based on Commission 2019 spring forecasts and a no-fiscal policy change scenario beyond the forecast horizon, government debt, projected at 20.7% of GDP in 2019, is expected to decrease to 10.1% in 2029, thus remaining below the 60% of GDP Treaty threshold. Over this horizon, government debt is projected to peak in 2019 at 20.7% of GDP. Sensitivity analysis shows similar risks.[11] Overall, this highlights low risks for the country from debt sustainability analysis in the medium term. The full implementation of the Stability Programme would put debt on an even steeper decreasing path by 2029.

The medium-term fiscal sustainability risk indicator S1[12] is at -4.6 percentage points of GDP, primarily related to the initial low level of government debt and to the favourable budgetary position, which compensate for the projected increase in ageing cost (contributing 0.8 percentage points of GDP, thus signalling low risks in the medium term. The full implementation of the Stability Programme would put the sustainability risk indicator S1 at —7.0 percentage points of GDP. Based on the debt sustainability analysis and the S1 indicator, overall medium-term fiscal sustainability risks are, therefore, low. Fully implementing the fiscal plans in the Stability Programme would decrease those risks.

The long-term fiscal sustainability risk indicator S2 is at 8.4 % of GDP. In the long term, Luxembourg therefore appears to face high fiscal sustainability risks, primarily related to the projected increase in ageing costs contributing 8.7 percentage points of GDP. Full implementation of the programme would put the S2 indicator at 7.9 percentage points of GDP, leading to a similar level of long-term risk.[13].

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[10] This conclusion is based on the short-term fiscal sustainability risk indicator S0. See the note to Table 5 for a definition of the indicator.

[11] Sensitivity analysis includes several deterministic debt projections, as well as stochastic projections (see Fiscal Sustainability Report 2018 for more details).

[12] See the note to Table 5 for a definition of the indicator.

[13] The projected costs of ageing that are used to compute the debt projections and the fiscal sustainability indicators S1 and S2 are based on the projections of the 2018 Ageing Report.

Table 5: Debt sustainability analysis and sustainability indicators

Time horizon			Commission Scenario		Stability / Convergence Programme Scenario	
Short-term			**LOW risk**			
S0 indicator [1]			0.1			
Fiscal subindex			0.0	LOW risk		
Financial & competitiveness subindex			0.2	LOW risk		
Medium-term			**LOW risk**			
DSA [2]			LOW risk			
S1 indicator [3]			-4.6	LOW risk	-7.0	LOW risk
of which	Initial Budgetary Position		-2.1		-3.5	
	Debt Requirement		-3.2		-4.5	
	Cost of Ageing		0.8		0.9	
	of which	Pensions	0.7		0.7	
		Health care	0.1		0.1	
		Long-term care	0.1		0.1	
		Other	-0.1		0.0	
Long-term			**HIGH risk**			
DSA [2]			LOW risk			
S2 indicator [4]			8.4	HIGH risk	7.9	HIGH risk
of which	Initial Budgetary Position		-0.4		-1.0	
	Cost of Ageing		8.7		8.9	
	of which	Pensions	5.8		5.8	
		Health care	0.8		0.8	
		Long-term care	2.0		2.0	
		Other	0.2		0.3	

Source: Commission services; 2019 stability/convergence programme.

Note: the 'Commission' scenario depicts the sustainability gap under the assumption that the structural primary balance position evolves according to the Commissions' spring 2019 forecast until 2020. The 'stability/convergence programme' scenario depicts the sustainability gap under the assumption that the budgetary plans in the programme are fully implemented over the period covered by the programme. Age-related expenditure as given in the 2018 Ageing Report.

[1] The S0 indicator of short term fiscal challenges informs the early detection of fiscal stress associated to fiscal risks within a one-year horizon. To estimate these risks S0 uses a set of fiscal, financial and competitiveness indicators selected and weighted according to their signalling power. S0 is therefore a composite indicator whose methodology is fundamentally different from the S1 and S2 indicators, which quantify fiscal adjustment efforts. The critical threshold for the overall S0 indicator is 0.46. For the fiscal and the financial-competitiveness sub-indexes, thresholds are respectively at 0.36 and 0.49*.

[2] Debt Sustainability Analysis (DSA) is performed around the no fiscal policy change scenario in a manner that tests the response of this scenario to different shocks presented as sensitivity tests and stochastic projections*.

[3] The S1 indicator is a medium-term sustainability gap; it measures the upfront fiscal adjustment effort required to bring the debt-to-GDP ratio to 60 % by 2033. This adjustment effort corresponds to a cumulated improvement in the structural primary balance over the 5 years following the forecast horizon (i.e. from 2021 for Commission scenario and from last available year for the SCP scenario); it must be then sustained, including financing for any additional expenditure until the target date, arising from an ageing population. The critical thresholds for S1 are 0 and 2.5, between which S1 indicates medium risk. If S1 is below 0 or above 2.5, it indicates low or high risk, respectively*.

[4] The S2 indicator is a long-term sustainability gap; it shows the upfront and permanent fiscal adjustment required to stabilise the debt-to-GDP ratio over the infinite horizon, including the costs of ageing. The critical thresholds for S2 are 2 and 6, between which S2 indicates medium risk. If S2 is below 2 or above 6, it indicates low or high risk, respectively*.

* For more information see Fiscal Sustainability Report 2018.

6. FISCAL FRAMEWORK

The design of Luxembourg's national fiscal framework improved with the adoption of the Law of 12 July 2014, which transposed the requirements of the 2011 Council Directive on budgetary framework and the Fiscal Compact. The main numerical rule of Luxembourg covers the structural balance: the government, when setting its budgetary strategy, needs to ensure compliance with the medium-term objective (MTO). Moreover, the new government has confirmed, at the outset of its term, its commitment to keep the debt-to-GDP ratio below the 30% of GDP threshold.

Based on the information provided in the Stability Programme, the past, planned and forecast evolution of both the structural balance and the general government debt appear to comply with the requirements of the applicable national numerical fiscal rules and in particular with regard to the MTO. The new MTO for the period 2020-2022 set at a structural surplus of 0.5% GDP appears to be compatible with the commitment by the government to keep the debt to GDP ratio under the 30% of GDP threshold.

As to the general government debt, according to the Stability Programme, it is expected to have peaked at 21.4% of GDP in 2018, and since to start decreasing in the following years to reaching a low of 17.3% of GDP in 2023. It will therefore remain below the threshold fixed by the government.

The Stability Programme clearly states, in accordance with the provisions of article 4.1 of the Two-Pack Regulation that the budgetary trajectory outlined in the document should be considered as the national medium-term fiscal plan. However, neither the Stability Programme nor the National Reform Programme provide indications on the expected economic returns on non-defence public investment projects that have a significant budgetary impact, which is also a requirement of the Two-Pack Regulation 473/2013.

The macroeconomic forecast underlying the Stability Programme has been prepared by the Direction "Etudes, prévisions et recherche" of the national statistical office STATEC, which also provided the methodology for the calculation of the output gap. STATEC is an autonomous entity placed under the authority of the Ministry of Economy.

Its mandate and organisation were revised by the law of 10 July 2011, which explicitly highlights STATEC's scientific and administrative independence, its ability to access to appropriate information to carry out its mandate and its capacity to communicate freely. Its director is appointed by the Grand-Duke. Its statutes contain provisions supporting independence of the institution as a body producing macroeconomic forecasts.

7. SUMMARY

In 2018, Luxembourg recorded a government surplus of 2.4% of GDP and its structural balance stood at 2.1% of GDP, above its medium-term objective of a deficit, in structural terms, of 0.5% of GDP.

According to both the information provided in the Stability Programme and the Commission 2019 spring forecast, Luxembourg is expected to remain above or in line with its MTO both in 2019 and 2020 continuing therefore to meet the requirements under the preventive arm of the Stability and Growth Pact. At the same time, expenditure developments should be monitored carefully in the short and the medium term, especially in light of possible future risks to the robustness of revenues.

8. ANNEXES

	2001-2005	2006-2010	2011-2015	2016	2017	2018	2019	2020
Core indicators								
GDP growth rate	3.0	2.6	2.8	2.4	1.5	2.6	2.5	2.6
Output gap [1]	0.9	-0.9	-2.7	0.2	-0.2	0.6	1.0	1.3
HICP (annual % change)	2.8	2.5	1.8	0.0	2.1	2.0	1.8	1.7
Domestic demand (annual % change) [2]	2.8	2.1	3.2	3.6	2.5	3.1	3.0	2.4
Unemployment rate (% of labour force) [3]	3.6	4.7	5.7	6.3	5.6	5.4	5.2	5.2
Gross fixed capital formation (% of GDP)	20.5	18.5	19.4	18.6	18.9	17.5	17.4	17.2
Gross national saving (% of GDP)	27.7	22.2	19.4	21.8	23.8	23.1	22.7	22.6
General Government (% of GDP)								
Net lending (+) or net borrowing (-)	**1.5**	**1.6**	**0.9**	**1.9**	**1.4**	**2.4**	**1.4**	**1.1**
Gross debt	**7.2**	**13.2**	**21.9**	**20.7**	**23.0**	**21.4**	**20.7**	**20.3**
Net financial assets	**51.2**	**52.0**	**47.1**	**49.8**	**50.0**	**n.a**	**n.a**	**n.a**
Total revenue	43.6	42.9	43.6	43.7	44.4	45.5	45.2	45.4
Total expenditure	42.1	41.3	42.7	41.9	43.0	43.1	43.8	44.3
of which: Interest	0.3	0.4	0.5	0.3	0.3	0.3	0.2	0.2
Corporations (% of GDP)								
Net lending (+) or net borrowing (-)	**1.5**	**-2.1**	**-4.6**	**-2.8**	**-1.7**	**-2.4**	**-1.9**	**-1.5**
Net financial assets; non-financial corporations	**-35.3**	**-14.3**	**-51.9**	**-76.8**	**-84.4**	**n.a**	**n.a**	**n.a**
Net financial assets; financial corporations	**35.9**	**14.9**	**-28.7**	**-31.5**	**-4.4**	**n.a**	**n.a**	**n.a**
Gross capital formation	11.8	9.6	11.3	11.2	11.0	10.1	10.0	9.8
Gross operating surplus	25.9	28.6	28.8	29.0	27.2	27.8	27.2	26.9
Households and NPISH (% of GDP)								
Net lending (+) or net borrowing (-)	**3.7**	**2.7**	**3.5**	**3.2**	**4.3**	**4.0**	**4.0**	**4.0**
Net financial assets	**87.7**	**94.6**	**95.5**	**102.9**	**99.6**	**n.a**	**n.a**	**n.a**
Gross wages and salaries	29.9	27.6	27.2	27.4	28.2	27.9	28.1	28.0
Net property income	1.8	1.6	1.3	1.1	1.1	1.8	2.3	2.6
Current transfers received	14.9	14.3	15.0	14.5	15.1	14.8	14.9	15.0
Gross saving	7.8	7.4	7.8	7.3	8.6	8.4	8.3	8.3
Rest of the world (% of GDP)								
Net lending (+) or net borrowing (-)	**6.9**	**2.2**	**-0.2**	**2.0**	**4.0**	**3.9**	**3.5**	**3.6**
Net financial assets	**-139.4**	**-147.1**	**-61.8**	**-44.2**	**-60.6**	**n.a**	**n.a**	**n.a**
Net exports of goods and services	24.6	32.2	32.3	33.7	33.3	34.0	33.8	33.8
Net primary income from the rest of the world	-17.6	-28.5	-32.1	-32.1	-29.1	-29.8	-29.5	-29.2
Net capital transactions	-0.2	-1.6	-0.2	-0.6	-0.8	-0.9	-1.0	-1.1
Tradable sector	31.6	28.1	27.9	26.9	26.0	26.8	n.a	n.a
Non tradable sector	57.8	61.6	61.7	63.7	64.7	63.7	n.a	n.a
of which: Building and construction sector	5.5	5.0	4.8	5.0	4.7	4.9	n.a	n.a
Real effective exchange rate (index, 2000=100)	87.8	97.2	102.7	103.4	108.5	111.0	112.0	112.5
Terms of trade goods and services (index, 2000=100)	95.4	98.2	100.5	100.8	100.4	101.1	101.1	101.1
Market performance of exports (index, 2000=100)	89.0	98.4	107.8	116.1	108.9	110.9	109.8	108.9

Notes:

[1] The output gap constitutes the gap between the actual and potential gross domestic product at 2010 market prices.

[2] The indicator on domestic demand includes stocks.

[3] Unemployed persons are all persons who were not employed, had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed. The unemployment rate covers the age group 15-74.

Source :
AMECO data, Commission 2019 spring forecast

Mandatory variables not included in the Stability Programme

The Stability Programme does not include several mandatory variables for the basic assumptions including several definition of sector balances, investment expenditure fully matched by EU funds, revenues increased mandated by law, the breakdown of one-offs between revenue and expenditure related, GDP growth for the world excluding EU, and world import volumes (excluding EU). Not included mandatory variables do not impede the Commission’s ability to assess the Stability Programme on the basis of the Programme’s assumptions.