EXECUTIVE SUMMARY

1. Introduction

The National Council of Public Finance (CNFP) publishes hereby its third "***Assessment of Public Finances***" for Luxembourg. This evaluation takes into account the macroeconomic forecasts and fiscal projections that form the basis of the *2016-2020 Stability and Growth Programme* (hereafter referred to as "2016-2020 SGP"). This programme was submitted to the European Commission by the Luxembourg Government on 29 April 2016 as part of the European Semester.

Specifically, the CNFP assesses macroeconomic forecasts underpinning the multi-annual fiscal trajectory. It should be noted however that the CNFP does not produce its own forecasts and merely analyzes the figures produced by relevant government authorities.

The assessment of Luxembourg's public finances is based on a review of the compliance with national fiscal rules whose verification is the responsibility of CNFP, in accordance with the 12 July 2014 law. The Council briefly reviews the 2015 fiscal outcomes and then presents an assessment for the current fiscal year. The assessment focuses moreover on the medium-term framework for 2017-2020 and includes an analysis of public debt developments over the medium-term.

2. The fiscal governance framework

The principal innovation introduced by the Government in recent years in the area of fiscal governance consists in the medium-term dimension of fiscal planning. The separation of the medium-term fiscal plan from the annual budget cycle is now being gradually implemented, as recommended last year by the CNFP. It would be important to follow up this initial phase by moving the multi-annual financial programming draft law (hereafter referred to as "LPFP") to the spring of each year. In parallel, the scope of the LPFP need to be clarified given that its actual contribution to the annual budgetary process currently remains vague.

In view of the role conferred upon the CNFP through relevant European and national legislation, the role of the Council and its assessments within the context of the national budgetary process also urgently needs to be clarified. Indeed, it is important to note that Luxembourg now has a *national* budgetary governance framwork, with *national* fiscal rules and a *national* fiscal surveillance authority. This national governance should be seen as complementary to the European governance framework in which the European Commission is the fiscal surveillance authority.

3. Macroeconomic forecasts

According to the 2016-2020 SGP, economic forecasts have been produced with a cut-off date of 6 April 2016. However, they don't seem to factor in the economic impact of tax breaks announced by the Government for 2017. It should be also noted that the 2016-2020 SGP lacks meaningful sensitivity analyses capturing the specifs risks characteristic to the Luxembourg economy.

The CNFP therefore recommends that alternative scenarios be included in future budgetary documents to allow for a better assessment of the specific economic risks, which are, in the case of Luxembourg, notably linked to the financial sector.

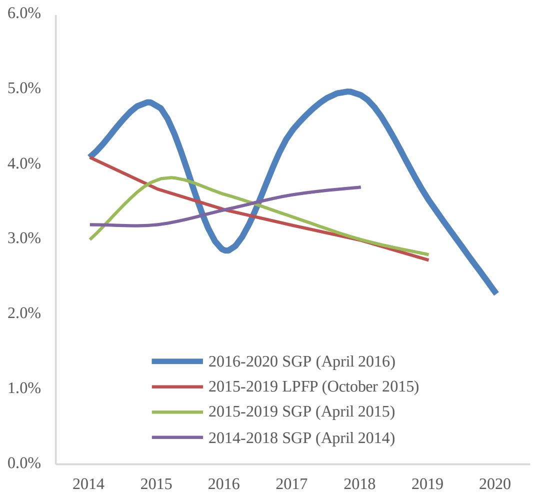
The 2016-2020 SGP is based on a conservative 1.4% growth forecast for the Euro Area in 2016 and, in line with international organisations, assumes growth of 1.6% for 2017. The medium-term growth path for the Euro Area, with a gradual easing to 1.3% by 2020, appears to be prudent.

In comparison with growth assumptions for the Euro Area set out in the 2015-2019 SGP and the 2015-2019 LPFP, the 2016-2020 SGP assumptions indicate a slightly less positive momentum in the short term, whereas the medium-term outlook is more favourable than previously assumed.

For the Luxembourg economy, the positive trend seen in previous years has continued and real GDP is now estimated to have grown by 4.8% in 2015. This latest estimation for 2015 is significantly above the growth assumption underpinning the 2015 budget which had only assumed a rate of +2.7%. Similarly, labour market developments have been more favourable than anticipated in the 2015 budgtet, while inflation was significantly lower than expected.

Over the medium term (2016-2020), real GDP growth for Luxembourg is forecast to ease somewhat in 2016 (+2.9%), followed by renewed growth above a rate of 4% in 2017 and 2018, with a significative drop at the end of the forecasting period to 3.5% in 2019 and 2.3% in 2020. This irregular growth profile for the Luxembourg economy appears to be linked to (i) developments assumed for the EuroStoxx50 index, (ii) the assumption of a gradual exit from the very accommodating monetary stance by the ECB from 2018 onwards as well as (iii) the growth profile chosen for the Euro Area. Unemployment forecasts are following a similar trend, albeit offset by one year, whereas inflation is assumed to return gradually toward 2% over the medium term.

Real GDP growth forecasts for Luxembourg.



Source: Ministry of Finance, STATEC.

Compared to the forecasts presented by international institutions, the growth projections of the Luxembourg authorities outlined in the previous paragraph appear prudent for 2016 and optimistic for 2017 and 2018. In comparison with the forecasts presented in the 2015-2019 LPFP, macroeconomic projections are more optimistic overall. The CNFP believes that these forecasts should be interpreted cautiously.

Indeed, apart from the usual uncertainties inherent in all forecasting, Luxembourg's economy is subject to a number of uncertainties, such as (i) the issue of whether or not the UK will remain in the EU, (ii) a possible return to more pronounced volatility in financial markets or (iii) lower growth in developed and/or emerging economies.

The Luxembourg economy is furthermore exposed to specific risks arising directly from the predominance of its financial sector and the challenges linked to a changing regulatory, tax and technological environment which are only materialising over time.

The CNFP concludes its assessment of the macroeconomic outlook by presenting its views on the potential GDP/output gap estimation. Along with STATEC and the Ministry of Finance, the CNFP maintains its reservations with regard to the methodology used by the European Commission to compute potential GDP, the output gap, and hence the structural balance, in the specific case of Luxembourg and which is now also used by the Government in the 2016-2020 SGP.

The CNFP therefore once again recommends clarifying the calculation method to be used under national fiscal rules. As long as the issue remains unresolved without the necessary agreement between the major players of the country in the field of budgetary governance, the relevance of national fiscal rules could be called into question. In the absence of such clarification and in the interest of transparency, the CNFP continues to evaluate the structural balance using two distinct methods, namely the Hodrick-Prescott (HP) filter and the COM-LUX method.

4. Public finances

As foreseen under the 12 July 2014 law, the CNFP carried out an overall assessment of public finances, using the following parameters as a reference:

- the structural balance and an analysis of its compliance with the Medium Term Objective (MTO),
- the central government expenditure level and an analysis of its compliance with the maximum amount for central government expenditures,
- the growth rate of general government expenditure and an analysis of its compliance with expenditure benchmark of the Stability and Growth Pact.

As a % of GDP, unless indicated otherwise	2015	2016	2017	2018	2019	2020
STRUCTURAL BALANCE						
Nominal balance (general government)	+1.3%	+0.8%	0.0%	+0.1%	+0.2%	+0.4%
STRUCTURAL BALANCE *(HP method)*	**+1.5%**	**+1.2%**	**0.0%**	**-0.6%**	**-0.7%**	**0.0%**
STRUCTURAL BALANCE (*COM-LUX method***) (SGP 2016-2020)**	**+2.3%**	**+1.9%**	**+0.6%**	**0.0%**	**0.0%**	**+0.6%**
Compliance with MTO: *+0.5% of GDP for 2015 and 2016* *–0.5% of GDP for 2017-2020*	**YES**	**YES**	**YES**	**DEPENDS ON THE METHOD**	**DEPENDS ON THE METHOD**	**YES**
Is there a significant deviation and should the correction mechanism be triggered?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
MAXIMUM EXPENDITURE LEVEL FOR THE CENTRAL GOVERNMENT						
Maximum level determined by the 2015-2019 LPFP (in € millions)	***Fiscal rule currently not implemented.***					
Level of central government expenditure as per 2015-2019 LPFP 2015-2019 (in € millions)	15,969	16,739	17,353	17,867	18,521	…
Level of central government expenditure as per 2016-2020 SGP (in € millions)	15,638	16,519	17,045	17,551	18,188	18,921
Compliance with expenditure ceiling	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
EXPENDITURE BENCHMARK AS PER STABILITY AND GROWTH PACT						
Annual change in adjusted public expenditures *(in real terms, in %)*	+0.4%	+2.1%	+4.4%	+2.7%	+2.0%	+2.3%
Applicable reference rate *(in real terms, in %)*	+2.9%	+3.1%	+3.2%	+3.3%	+3.4%	+3.5%
Difference (in % of GDP) over one year	1.0%	0.4%	-0.5%	0.2%	0.5%	0.5%
Compliance with expenditure benchmark	**YES**	**YES**	**RISK OF NON-COMPLIANCE**	**YES**	**YES**	**YES**
Procedural consequences under the Stability and Growth Pact	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Sources: *Ministry of Finance, 2016-2020 SGP, CNFP calculations.*

The assessment of the structural balance is based on the basis of figures presented in the 2016-2020 SGP using the COM-LUX method as well as on figures calculated by the CNFP using the HP filter method. This allows for a more transparent presentation and a more meaningful comparison of changes to the figures over time.

It should also be noted that the CNFP is still unable to assess compliance with respect to the ceilings for central government expenditure given that the relevant fiscal rule foreseen in the 12 July 2014 law is currently not being implemented.

The assessment with respect to the expenditure benchmark of the Stability and Growth Pact is based on Ministry of Finance figures made available to the CNFP.

The Medium-Term Objective (MTO)

Within the framework in place, the level of the MTO that the structural budgetary balance has to comply with is one of the cornerstones of budgetary governance, both, at the domestic as well as at the European level.

According to the 18 December 2015 law on multi-year fiscal programming (LPFP 2015-2019, i.e. the medium term fiscal place adopted late 2015), the MTO for Luxembourg was set at +0.5% of GDP for the entire 2015-2019 period. As the CNFP is expected to assess the structural balance with relation to the MTO as established by national law, it should theoretically base its evaluation solely on this MTO of +0.5% of GDP.

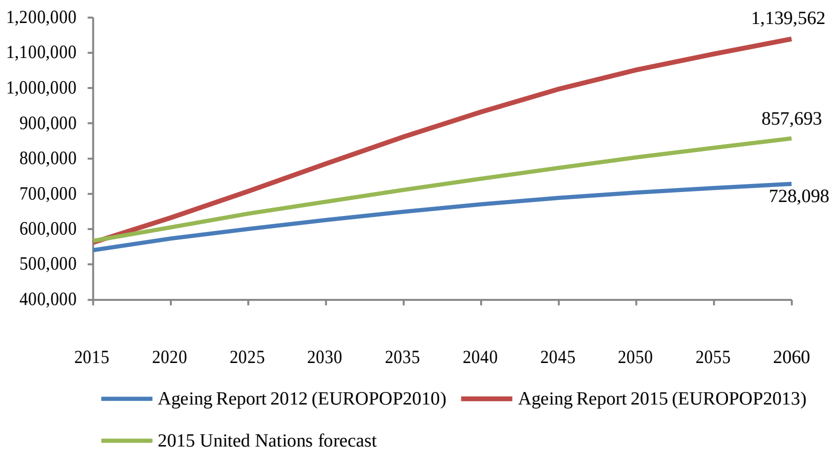
The CNFP regrets that the Government nevertheless decided, in the context of the 2016-2020 SGP, to significantly reduce its MTO from 2017 onwards, moving from +0.5% of GDP to -0.5% of GDP. This reduction from a budgetary surplus to a deficit target is difficult to follow in view of the challenges and risks the Luxembourg economy is facing, given that this criterion is in fact meant to be contributing to the long-term sustainability of public finances.

Lowering the MTO is mainly possible thanks to a considerable upward revision of demographic projections. While the previous projection exercise foresaw some 700,000 inhabitants by 2060, the latest projection now assumes 1.1 million inhabitants by 2060 (see graph below). This new projection therefore "mechanically" reduces the increase in ageing-related public expenditures (expressed as a percentage of GDP).

Such a significant increase in the population figures (through a sustained positive net migration) implies in particular that current growth trends can be maintained permanently, together with continued strong job creation as well the successful provision of the necessary infrastructure, housing and public services such as education, health, etc. The CNFP therefore calls for caution and recommends that the authorities deal with the subject in a holistic manner so as to ensure long-term sustainability of public finances.

A comparison of demographic projections

The demographic forecasts underlying the "Ageing Report 2012" were used in setting the MTO at +0.5 % of GDP in 2013, and those in the "Ageing Report 2015" now allow to revise the MTO downwards to a level of -0.5% of GDP. According to the "average" estimate of the United Nations, Luxembourg's population is estimated to increase at a significantly lower rate by 2060 as implied by the Ageing Report 2015.



Source: United Nations, Eurostat/STATEC.

This downward revision of the MTO can also take place because the *minimum MTO*, as calculated by the European Commission in accordance with commonly agreed provisions at the European level, is based on a debt target of 60% of GDP, whereas the Luxembourg Government has set a more ambitious objective in its government programme. Targeting instead a level of 30% of GDP in line with the official government target, the MTO should have been set at a minimum of +0.25% of GDP.

As with many other EU Member States, Luxembourg could have chosen to adopt a more ambitious MTO than the minimum required by European provisions (14 Member States adopted a more stringent objective at the latest MTO fixing round in 2013). In addition, the Government is free to set the MTO at a more ambitious level, under the next LPFP and consequently at the purely national level, than the level put forward in the European context. In view of recent political statements, the CNFP hopes that more ambitious budgetary objectives will be chosen in order to ensure a margin of manoeuvre that is commensurate to the challenges Luxembourg will have to face over the longer term.

Public finances in 2015

In general, the figures now presented for 2015 are significantly better than anticipated:

- The nominal budget balance is now estimated to achieve a surplus of €672 million (+1.3% of GDP), whereas the 2015 budget had foreseen a deficit of €130 million (-0.2% of GDP).
- The structural balance is estimated at +1.5% of GDP using the HP method and at +2.3% of GDP according to the COM-LUX method used in the 2016-2020 SGP, while the 2015 budget foresaw a structural balance of only +0.4% of GDP using the HP method.

In light of these considerable differences between the budget and the realised figures now put forward, the CNFP recommends that the comptent authorities initiate an in-depth review in order to identify the origin of these divergences and to correct any potential systematic bias that may affect fiscal projections.

In view of the figures presented here above, the structural balance rule was fully complied with in 2015, irrespective of the methodology used to compute the output gap. The correction mechanism should therefore not be triggered.

Compared to 2014, where the nominal budget balance amounted to +1.7% of GDP, the fiscal position has worsened in 2015. Since the structural balance in 2014 was +2.6% of GDP using the HP method (and +3.5% of GDP with the COM-LUX method), the deterioration of the *underlying* fiscal position, i.e. excluding cyclical components, is all the more considerable.

With a nominal growth rate of 4.2%, expenditure levels are revised substantially downwards, although the reasons for this are not explicitly stated in the 2016-2020 SGP. The increase of 0.4% - in real and adjusted terms - also means that the EU expenditure benchmark is fully complied with.

Public revenues grew at a less vigorous rate than in the past: +3.3% in 2015 compared to +5.3% in 2014. The improved economic backdrop, combined with the increase in VAT rates and the introduction of a temporary tax of 0.5% on invididual incomes, therefore only partially offset the loss related to the change of VAT regime for on e-commerce.

Public finances in 2016

In the latest SGP, the <u>nominal balance</u> for 2016 is estimated at €409 million (+0.8% of GDP). This represents a marked deterioration compared to 2015 which presented a surplus of +€672 million or +1.3% of GDP.

Compared to the 2016 budget adopted last autumn and which targeted a nominal balance of +€269 million or +0.5% of GDP, the nominal balance now forecast for 2016 is nonetheless revised upwards. This improvement seems to be mostly due to the major upward revision to fiscal outcomes for previous years (in particular, the level shift for 2015) and it occurs in spite of the slight slowdown in GDP growth which is now foreseen.

The 2016 <u>structural balance</u> is estimated at +1.2% of GDP (according to the HP method) and +1.9% of GDP (using the COM-LUX method), i.e. a drop of 0.3-0.4 percentage points when compared to 2015. Irrespective of the calculation method, the structural balance appears to remain above the MTO of +0.5% of GDP. Accordingly, the relevant fiscal rule should be complied with and the correction mechanism would not have to be triggered. This latest estimation of the structural balance in the 2016-2020 SGP is also clearly better than the numbers putward in the last budget which assumed a structural balance of +0.3% of GDP (according to the HP method).

Public expenditures are gaining momentum according to the 2016-2020 SGP, reaching a growth rate of 4.6% in nominal terms and 2.1% in real and adjusted terms. The expenditure benchmark should however be complied with as well.

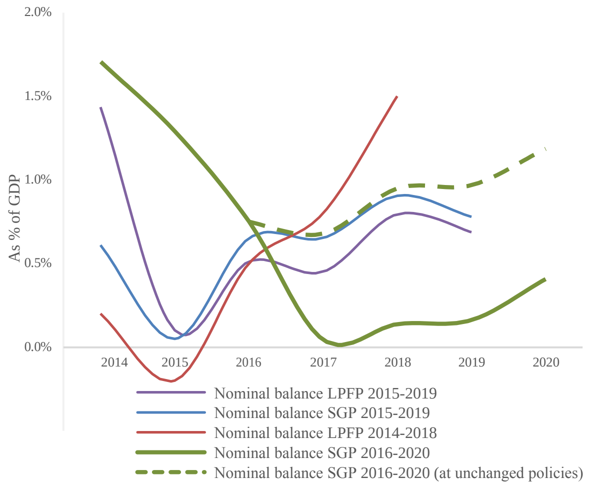
Growth in public revenues remains unchanged when compared to 2015 (up 3.3%). At this rate, the numbers indicate a relatively weak growth momentum given the favourable economic backdrop. For the second year in a row, revenues are also increasing at a slower rate than expenditures.

Public finances in 2017-2020

According to the 2016-2020 SGP, the general government would achieve a zero <u>nominal balance</u> in 2017. Over the medium term, the nominal balance would continue to be positive and even improve progressively towards +0.4% of GDP at the end of the projection period.

This medium-term trajectory is nonetheless significantly below previous forecasts, despite the improvement in the economic outlook with average (real GDP) growth of +3.8% per year from 2017 to 2020 and despite the clearly improved fiscal baseline for 2015 and 2016.

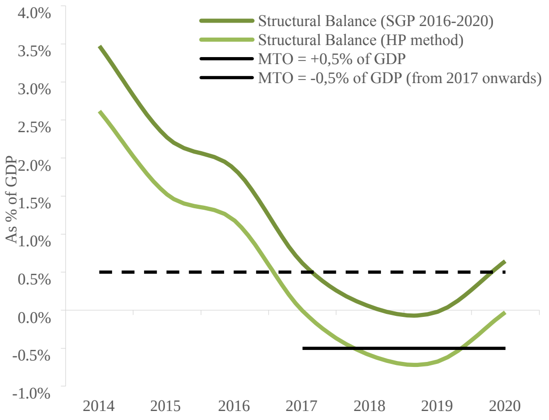
Nominal balance (general government)



Source: Minisrtry of Finance, STATEC.

The deterioration of the medium-term fiscal outlook is principally due to revenue shortfalls as a result of the planned tax reform kicking in in 2017. It should be noted that this tax reform is far from being budgetary neutral, although this was the objective explicitly stated at previous occasions. At the same time, it should be recalled that VAT revenues from e-commerce will continue to gradually disappear by 2020.

Structural balance.



Source: Ministry of Finance, STATEC, CNFP calculations.

The structural balance for 2017 is estimated to be +0% of GDP (according to the HP method) and +0.6% of GDP (according to the COM-LUX method). Compared to 2016, this would represent another deterioration of the *underlying* fiscal position. The structural balance is expected to worsen further in 2018 and 2019, hovering around -0.6% of GDP according to the HP method and close to 0% of GDP using the COM-LUX method, before returning to slightly higher levels by 2020.

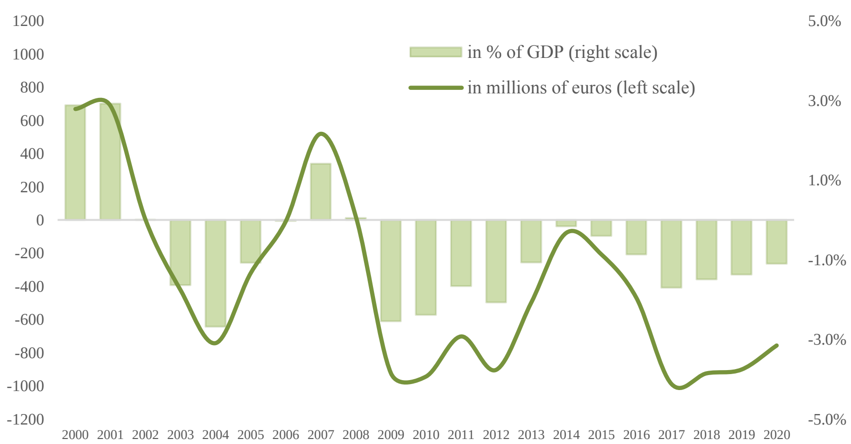
The CNFP analysis shows that the specific level of the MTO and the methodology used to determine the structural balance are essential to determine whether there is a "significant deviation" from the MTO and whether the automatic correction mechanism under the law dated 12 July 2014 should be triggered.

While the combination of an MTO lowered to -0.5% of GDP and the use the COM-LUX methodology ensures that the most important national fiscal rule is always complied with, maintaining the MTO at +0.5% of GDP in combination with the HP calculation method would lead to the presence of a "significant deviation" in all of the years under review.

As this constitutes merely an *ex ante* assessment for 2017 to 2020, the CNFP would like refer to the ideas developed previously regarding the MTO with a long-term sustainability perspective. The CNFP would also like to recall one of its recommendations made back in November 2015, in which it suggested setting up a technical working group with a view to agree on a stable, uniform and consistent approach for determining and evaluating the structural balance in Luxembourg.

In sum, it is clear that nominal and structural balances will worsen from 2017 onwards. The latest fiscal projections presented by the Government are also considerably less positive in comparision to previous estimates. Reaching a balanced budget at the central government level is seemingly no longer being pursued and the central government deficit is even supposed to increase significantly over the medium term (see graph below). It is currently projected to reach levels last experienced during the financial crisis, nearing a threshold of €1 billion as from 2017. On the basis of the numbers from SGP 2016-2020, there could be a more limited margin of manoeuvre for fiscal policy in case of a negative shock or other unexpected issues.

The budgetary balance of the central government.

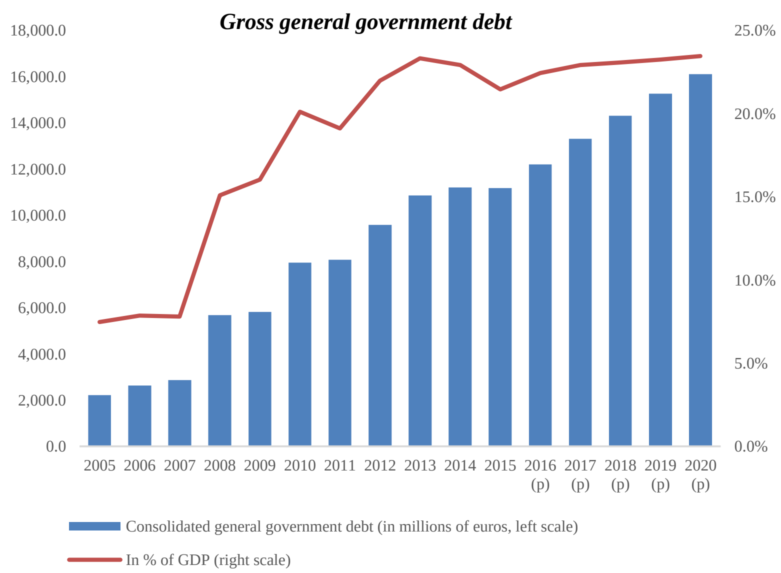


Source: STATEC (national accounts), Ministry of Finance, 2016-2020 SGP.

The fiscal projections presented in the 2016-2020 SGP also do not seem to take into account a number of risks and challenges, such as the potential impact from international tax reforms in the BEPS context or from more subdued activity in the financial sector. If various economic, geopolitical or demographic risks were to materialise, this could lead to a significant negative impact for Luxembourg's public finances. The medium-term fiscal trajectory sketched out in the 2016-2020 SGP is notably also based on the assumption of a full implementation of consolidation measures foreseen in the "Zukunftspak" and it assumes no new or extra budgetary expenditure over the entire forecasting period.

Lastly, it is useful to note that, in the 2016-2020 SGP, the level of expenditure for public investments is projected to remain stable over the medium term and even decreases when expressed as a percentage of GDP. Compared to previous forecasts, these expenditures nevertheless remain at almost identical absolute levels. The CNFP wonders in this context whether this medium-term trajectory for public investments is compatible with the new demographic projection the authorities have adopted and which likely requires a substantial increase in infrastructure investments and entails additional costs for other public services.

5. Public debt



Source: Ministry of Finance, STATEC.

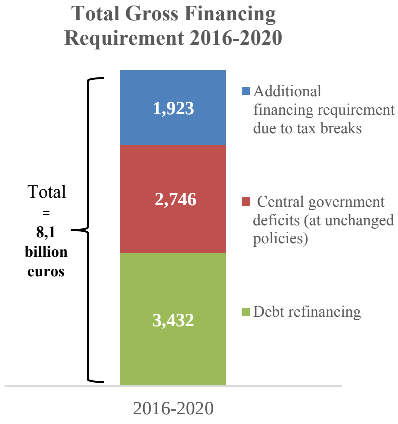
In 2015, the gross level of public debt was €11.2 billion or 21.5% of GDP. For 2016, the Government expects an increase to €12.2 billion or 22.4% of GDP. After stabilising in absolute terms, and even decreasing when expressed as a percentage to GDP, in 2014 and 2015, public debt is therefore expected to revert to an upward trend from 2016 onwards. According to the 2016-2020 SGP, public debt should pursue its upwards trajectory through to 2020, even though the structural balance is expected to comply with the MTO and despite the fact that general government finances will be in balance or even in surplus. Nevertheless, the government's limit of 30% of GDP should be complied with over the entire period under review.

In the event that authorities choose to fully use up the entire (theoretical) margin of manoeuvre now available due to the downward revision of the MTO to -0.5% of GDP from 2017 onwards, the limit of 30% of GDP could be potentially breached by 2024. This hypothetical scenario indicates that the new level of the MTO is not necessarily compatible with putting public finances on a sustainable path, thereby reinforcing the CNFP's recommendation to adopt a more ambitious MTO at the domestic level.

Even if the increase in public debt expressed as a percentage of GDP is relatively low, from 21.5% in 2015 to 23.5% in 2020, the net increase in absolute terms totals €5 billion over the 2016-2020 period.

As the central government remains in deficit over the entire period under review, any repayment of loans and bonds falling due will have to be financed entirely through the issuance of new loans or bonds. The gross financing requirement for the 2016-2020 period therefore totals €8.1 billion.

Thanks to Luxemburg's AAA rating and due to relatively low interest rates projected over the forecast horizon, this sizeable increase of public debt will not incur a significant increase in interest charges.



Source: Ministry of Finance: "Annexe nationale au PSC 2016-2020".

However, the CNFP would like to recall that the Government's debt projections don't take into account a potential capital increase of the Luxembourg Central Bank and that, more generally, the debt projection is based on budgetary forecasts that are subject to multiple assumptions that may not necessarily materialize as projected.

Compared to previous debt projections, the levels for public debt are being clearly revised upward which is primarily due to the revenue shortfalls stemming from the planned tax reform.

General conclusions

Even if Luxembourg currently presents a favourable overall fiscal position when compared to other countries, it should be noted that medium-term perspectives are worsening for its public finances, despite the fact that the economy is expected to continue to perform well.

Indeed, the 2016-2020 SGP figures show that the nominal and structural budgetary balance will deteriorate from 2017 onwards and that they are projected to evolve in a considerably less positive manner than expected not so long ago. This worsening originates mainly from a downward revision of the fiscal outlook for the central government due to the impact of a tax reform that is no longer budgetary neutral. Public debt is estimated to increase by €5 billion by 2020 because of the larger central government deficits.Thanks to positive growth forecasts, the debt-to-GDP ratio will however not increase as significantly and consequently remain below the upper limit of 30% of GDP as foreseen in the governmental programme.

National fiscal rules, which the CNFP oversees, continue to be fully complied with, especially since the Government has decided to lower its Medium Term Objective (MTO) from +0.5% to -0.5% of GDP as of 2017. By doing so, the Government has implicitly endorsed the assumptions underlying this new benchmark: (i) debt stabilizing at 60% of GDP over the long run instead of the 30% of GDP limit foreseen in the government programme, as well as (ii) the new demographic projection which has seen a significant upward revision to 1.1 million inhabitants by 2060, whereas the previous estimate was based on a projection of around 700,000 inhabitants by 2060.

The CNFP therefore recommends pursuing more ambitious budgetary targets in order to maintain a margin of manoeuvre allowing the coutry to confront any potential negative shock in the future as well as any other unexpected developments. The margin of manoeuvre should also allow authorities to address longer-term challenges the country is facing. Indeed, the growth strategy adopted implicitly by the Government requires sustained growth over the long term along with high job creation figures. Such a growth strategy implies notably the successful provision of adequate infrastructure, housing and public services (e.g. to provide for needs in education, health, etc.), in particular in view of the need to accommodate a strong inflow of new residents.