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**Assessment of the 2017 stability programme for
Luxembourg**

(Note prepared by DG ECFIN staff)

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1. INTRODUCTION

On 28 April 2017, Luxembourg submitted its 2017 Stability Programme (hereafter called "stability programme") covering the period 2017-2021. It was approved by the government and underwent an inclusive consultation process involving the national parliament. The stability programme provides an update of the medium-term budgetary projections as foreseen by regulation 473/2013.

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 objective. The debt-to-GDP ratio stood at 20% in 2016 and it is projected to remain well below the 60% of GDP Treaty threshold throughout the period covered by the programme, peaking at 22.8% of GDP in 2020.

This document complements the Country Report published on 22 February 2017 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 2017 spring 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 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

Real GDP growth set at 4.2% in 2016, mainly due to the strong contribution of the external sector, boosted by the evolution of the financial markets. By contrast, the contribution to growth of domestic demand has been weak. In particular, despite the favourable economic environment, notably an expanding labour market and accommodative monetary conditions, private consumption has remained almost mute, increasing by 1.0%, less than population.

In 2017, according to the economic scenario underlying the budgetary projections of the programme, GDP growth is projected to remain robust at 4.4%, while rebalancing somewhat. Domestic demand, in particular consumption is projected to bounce higher. The automatic indexation of wages triggered at the start of 2017 coupled with the impact of the tax-reducing reform is expected to boost households' disposable income. With the labour market outlook remaining strong, households are expected to spend a large part of the additional income. Investment is projected to increase sharply on the back of a high level of capacity utilisation and a still accommodative credit stance. In the light of the higher private consumption and investment and their large import-content, the net contribution of exports is projected to temporarily decrease. A strong acceleration of GDP growth at 5.2% is then projected in 2018 followed by a gradual deceleration by the end of the programme period.

In this scenario, the initial negative output gap is projected to rapidly close and become positive in 2018, to then further increase in 2019. In the following two years covered by the programme, a slowdown in GDP growth is foreseen with economic output in 2021 significantly lower than potential. The output gap, as recalculated by the Commission based on the information in the programme following the commonly agreed methodology, is set to

close from -0.9% of GDP in 2016 to -0.5% in 2017, turning positive in 2018 and 2019, when it is expected to reach 0.8% and 1.3%, respectively, to then fall to -0.9% by 2021.

The stability programme's macroeconomic outlook is broadly in line with the macroeconomic scenario underlying the 2017 Draft Budgetary Plan submitted in October 2016 as regards the projected pace of expansion in 2017, while there are only slight differences concerning growth drivers. In particular, the Draft Budgetary Plan projected a more balanced growth, with a more substantial contribution of net export, while in the stability programme domestic demand is by far the most significant growth driver.

The Commission 2017 spring forecast projects economic growth to remain robust in 2017 and 2018 at 4.3% and 4.4%, respectively. In 2017, domestic demand, and in particular private consumption thanks to the increased households' disposable income, is projected to be the main driver of growth. The external environment is projected to remain favourable and a positive contribution of net export to growth is incorporated. In 2018, GDP growth is expected to become more balanced with a stronger contribution from net exports offsetting a somewhat more contained domestic demand.

Overall, compared to the Commission 2017 spring forecast, the macroeconomic scenario underlying the Stability Programme seems plausible, with the exception of 2018 when assumptions for GDP growth are markedly favourable and of 2021, when conversely assumptions for GDP growth are markedly cautious, with real GDP projected, respectively, well above/below the estimated potential growth (see Table 1).

Table 1: Comparison of macroeconomic developments and forecasts

| | 2016 | | 2017 | | 2018 | | 2019 | 2020 | 2021 |
|---|------|------|------|------|------|-----|------|------|------|
| | COM | SP | COM | SP | COM | SP | SP | SP | SP |
| Real GDP (% change) | 4.2 | 4.2 | 4.3 | 4.4 | 4.4 | 5.2 | 4.4 | 2.8 | 1.9 |
| Private consumption (% change) | 1.0 | 0.9 | 3.3 | 2.9 | 2.9 | 2.4 | 1.6 | 0.6 | 0.7 |
| Gross fixed capital formation (% change) | 0.2 | 0.2 | 5.4 | 12.6 | 4.0 | 8.8 | 6.3 | 1.6 | -0.1 |
| Exports of goods and services (% change) | 4.9 | 4.9 | 5.6 | 7.4 | 5.9 | 8.7 | 8.5 | 7.8 | 6.9 |
| Imports of goods and services (% change) | 4.0 | 4.0 | 5.7 | 8.3 | 5.8 | 8.8 | 8.8 | 8.0 | 7.3 |
| <i>Contributions to real GDP growth:</i> | | | | | | | | | |
| - Final domestic demand | 0.9 | 0.8 | 2.6 | 4.0 | 2.1 | 2.9 | 2.3 | 0.9 | 0.6 |
| - Change in inventories | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| - Net exports | 3.5 | 3.5 | 1.8 | 0.4 | 2.3 | 2.3 | 2.1 | 1.9 | 1.3 |
| Output gap ¹ | -1.0 | -0.9 | -0.3 | -0.5 | 0.3 | 0.8 | 1.3 | 0.5 | -0.9 |
| Employment (% change) | 3.0 | 3.0 | 3.1 | 3.2 | 3.1 | 3.4 | 3.1 | 2.5 | 1.5 |
| Unemployment rate (%) | 6.3 | 6.0 | 6.1 | 5.6 | 6.0 | 5.3 | 5.4 | 5.9 | 6.5 |
| Labour productivity (% change) | 1.1 | 1.1 | 1.2 | 0.9 | 1.3 | 1.6 | 1.1 | 0.0 | 0.0 |
| HICP inflation (%) | 0.0 | 0.0 | 2.4 | 2.4 | 1.8 | 1.5 | 1.9 | 1.8 | 1.8 |
| GDP deflator (% change) | -0.6 | -0.5 | 2.4 | 2.1 | 2.3 | 1.8 | 1.1 | 0.9 | 1.6 |
| Comp. of employees (per head, % change) | 0.4 | 0.5 | 3.0 | 3.4 | 1.9 | 2.0 | 3.0 | 2.2 | 3.1 |
| Net lending/borrowing vis-à-vis the rest of the world (% of GDP) | 3.4 | | 5.0 | | 5.5 | | | | |
| <i>Note:</i> | | | | | | | | | |
| 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. | | | | | | | | | |
| <i>Source:</i> | | | | | | | | | |
| Commission 2017 spring forecast (COM); stability programme (SP). | | | | | | | | | |

3. RECENT AND PLANNED BUDGETARY DEVELOPMENTS

3.1. DEFICIT DEVELOPMENTS IN 2016 AND 2017

In 2016, the general government balance recorded a surplus of 1.6% of GDP compared to a surplus of 1.4% of GDP in 2015. Total revenues amounted to 42.7% of GDP, stable compared to 2015 as they increased in line with nominal GDP. The decomposition of total revenues reveals that the relative share of current taxes on income increased as a percentage of GDP to 14.8%, compared to 14.2% of GDP the year before. By contrast, the share of revenues from taxes on production and imports dropped from 11.8% to 11.5% of GDP, while social contribution as percentage of GDP remained almost unchanged. Finally, the share of other revenues fell. Total expenditure stood at 41.2% of GDP in 2016, only slightly decreasing compared to the previous year when it set at 41.3% of GDP. Moreover, the decomposition of current expenditure shows the share of its most significant components, notably intermediate consumption, compensation of employees and social payments, has remained almost unchanged compared to the previous year. Public investment increased to 3.8% of GDP compared to 3.7% in 2015.

This outcome represents an upward revision compared to the surplus of 1.2% of GDP expected in the Draft Budgetary Plan. The better-than-expected balance is explained by developments in both the revenue and the expenditure side. On the revenue side, higher than initially estimated growth resulted in an outcome above the budget projection. On the expenditure side, while public investment continued to increase, its growth was less than budgeted, following the postponement of some investment projects. In addition, indexed-linked social expenditure increased less than expected as lower-than-planned inflation has moved backward to the start of 2017 the triggering of the automatic indexation

In 2017, the national authorities expect the general government surplus to decrease from 1.6% of GDP to 0.2% of GDP. While expenditure is to remain broadly unchanged as a percentage of GDP compared to the previous year, a large drop in revenues is projected. The implementation of the measures included in the recently introduced tax reform will shave off revenues by 0.7% of GDP. In addition, VAT revenues will suffer as of 2017 as result of the drop from 30% to 15% in the share of VAT revenues, related to e-commerce transactions, retained by Luxembourg, with an impact equivalent to 0.3% of GDP. Furthermore, investment spending is projected to accelerate as a reduction in the existing investment backlog is planned. The projected outcome does not differ substantially from the 0.3% of GDP surplus expected in the Draft Budgetary Plan and it is confirmed in the Commission 2017 spring forecast.

3.2. MEDIUM-TERM STRATEGY AND TARGETS

The stability programme outlines the national medium-term budgetary plan covering the period up to 2021. The purpose of the medium-term budgetary strategy is to ensure compliance with the medium-term objective (MTO) throughout the program period. It is worth noting that as of 2017 the MTO is set to a structural deficit of 0.5% of GDP, compared with the MTO of a structural surplus of 0.5% of GDP into force up to 2016. The new MTO chosen by the authorities respects the new minimum MTO set for the period 2017-2019 of a deficit of 1% of GDP and is in line with the provisions of the Fiscal Compact setting a deficit of 0.5% of GDP as a general minimum MTO requirement for euro area countries. In this regard, the new MTO reflects the objectives of the Pact.

The general government balance is expected to bottom out in 2017 and since then a gradual improvement of the budgetary position is projected. The general government balance is thus estimated to move from a surplus of 0.2% of GDP in 2017 to 0.3% of GDP in 2018 and steadily increase until reaching a surplus of 1.2% in 2021.

The recalculated¹ structural balance, mirroring the drop in the headline balance, is expected to decline by 1.6 percentage points of GDP from surplus of 2.0% of GDP in 2016 to 0.4% of GDP in 2017. The recalculated structural balance is then expected to bottom out in 2018 when a further decline to a deficit of 0.1% of GDP is projected. Since then a gradual improvement is expected leading to a surplus, in structural terms, of 1.6% of GDP in 2021 (see Table 2).

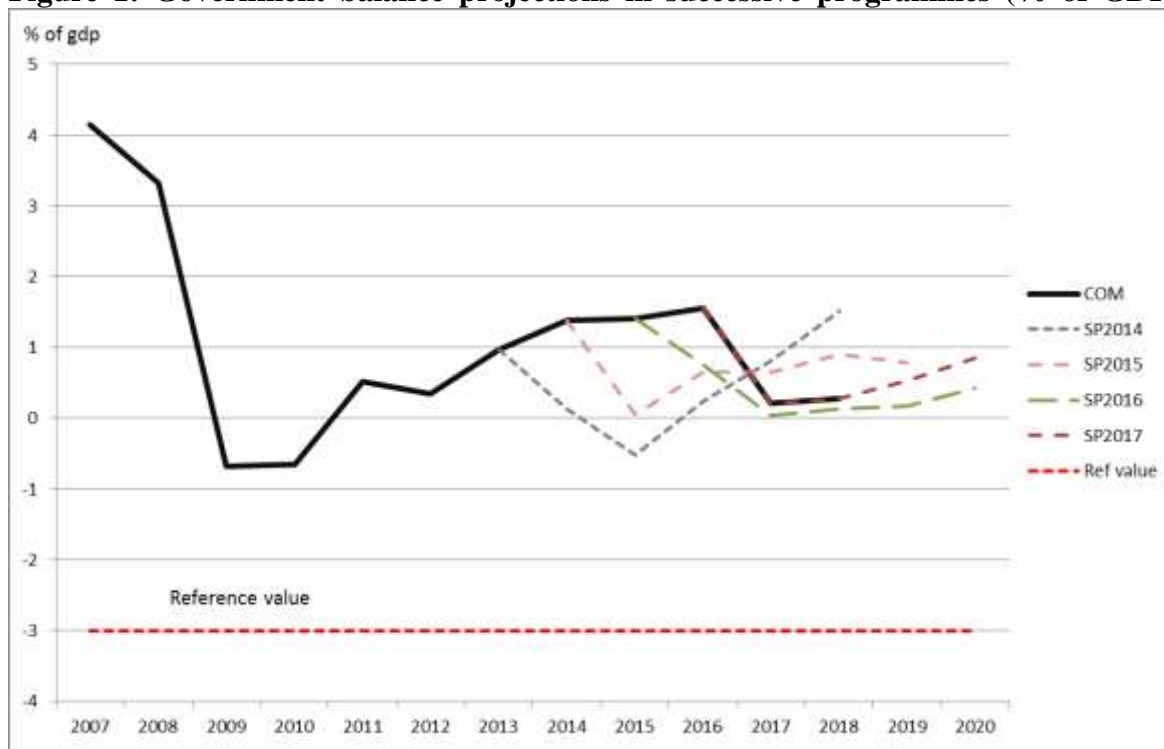
The above defined budgetary strategy is in line with the plans outlined in the multi annual financing law, covering the period up to 2020, adopted with the 2017 Budget law. After a decline in 2017 of the headline surplus, mostly reflecting the implementation of the tax reform, a gradual improvement in the general government balance is projected until the end of the planning period.

¹ Structural balance recalculated by the Commission on the basis of the information in the programme according to the commonly agreed methodology.

Table 2: Composition of the budgetary adjustment

| (% of GDP) | 2016 | 2017 | | 2018 | | 2019 | 2020 | 2021 | Change: 2016-2021 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------|
| | COM | COM | SP | COM | SP | SP | SP | SP | SP |
| Revenue | 42.7 | 41.1 | 41.3 | 40.4 | 40.5 | 40.3 | 40.8 | 41.3 | -1.4 |
| <i>of which:</i> | | | | | | | | | |
| - Taxes on production and imports | 11.5 | 11.0 | 11.0 | 10.8 | 10.8 | 10.7 | 10.6 | 10.6 | -0.9 |
| - Current taxes on income, wealth, etc. | 14.8 | 14.0 | 14.3 | 13.8 | 13.9 | 14.1 | 14.4 | 14.8 | 0.0 |
| - Social contributions | 11.9 | 11.7 | 11.8 | 11.5 | 11.6 | 11.6 | 11.8 | 12.0 | 0.1 |
| - Other (residual) | 4.5 | 4.4 | 4.1 | 4.4 | 4.1 | 4.0 | 4.0 | 4.0 | -0.5 |
| Expenditure | 41.2 | 40.9 | 41.1 | 40.2 | 40.2 | 39.8 | 39.9 | 40.1 | -1.1 |
| <i>of which:</i> | | | | | | | | | |
| - Primary expenditure | 40.8 | 40.6 | 40.8 | 39.9 | 39.9 | 39.5 | 39.6 | 39.8 | -1.0 |
| <i>of which:</i> | | | | | | | | | |
| Compensation of employees | 8.6 | 8.5 | 8.6 | 8.2 | 8.4 | 8.3 | 8.4 | 8.5 | -0.1 |
| Intermediate consumption | 3.6 | 3.7 | 3.5 | 3.8 | 3.4 | 3.4 | 3.3 | 3.3 | -0.3 |
| Social payments | 19.5 | 19.4 | 19.3 | 19.0 | 18.7 | 18.5 | 18.7 | 19.0 | -0.5 |
| Subsidies | 1.3 | 1.3 | 1.4 | 1.3 | 1.3 | 1.2 | 1.1 | 1.1 | -0.2 |
| Gross fixed capital formation | 3.8 | 3.8 | 4.0 | 3.7 | 3.9 | 3.8 | 3.7 | 3.7 | -0.1 |
| Other (residual) | 4.1 | 4.0 | 4.0 | 3.9 | 4.1 | 4.2 | 4.3 | 4.3 | -0.9 |
| - Interest expenditure | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | -0.1 |
| General government balance (GGB) | 1.6 | 0.2 | 0.2 | 0.3 | 0.3 | 0.5 | 0.9 | 1.2 | -0.4 |
| Primary balance | 1.9 | 0.5 | 0.5 | 0.6 | 0.6 | 0.8 | 1.1 | 1.4 | -0.5 |
| 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 | 1.5 | 0.2 | 0.2 | 0.3 | 0.3 | 0.5 | 0.9 | 1.2 | -0.4 |
| Output gap ¹ | -1.0 | -0.3 | -0.5 | 0.3 | 0.8 | 1.3 | 0.5 | -0.9 | 0.1 |
| Cyclically-adjusted balance ¹ | 2.0 | 0.4 | 0.4 | 0.1 | -0.1 | 0.0 | 0.6 | 1.6 | -0.4 |
| Structural balance² | 2.0 | 0.4 | 0.4 | 0.1 | -0.1 | 0.0 | 0.6 | 1.6 | -0.4 |
| Structural primary balance ² | 2.3 | 0.7 | 0.7 | 0.4 | 0.2 | 0.3 | 0.9 | 1.8 | -0.5 |
| <i>Notes:</i> | | | | | | | | | |
| 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. | | | | | | | | | |
| <i>Source:</i> | | | | | | | | | |
| Stability Programme (SP); Commission 2017 spring forecasts (COM); Commission calculations. | | | | | | | | | |

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



Source: Commission 2017 spring forecast; stability programmes

3.3. MEASURES UNDERPINNING THE PROGRAMME

The budgetary strategy outlined in the programme caters for the impact of the measures in the tax reform that took effect at the beginning of 2017. The authorities have decided to use a large part of their available fiscal space to implement a reform of the tax code. The reform introduced changes mostly in the area of direct taxation, both for individuals and corporations, aiming at a gradual reduction in the corporate income tax rate (with the aim of increasing competitiveness) and increased progressivity of the personal income tax (with the aim of increasing fairness). Its impact in 2017 is estimated at around 0.7% of GDP and it is expected to become larger in the following years reducing revenues annually for about 0.9% of GDP on average over the period 2018-2021.

The programme also incorporates the impact of the change in VAT legislation² with regard to the place of taxation for activities related to e-commerce. A transition period covering the period from 2015 to 2019 was put in place. Accordingly, Luxembourg has been able to retain 30% of VAT revenues generated by those activities between 2015 and 2016. This percentage is then reduced to 15% for the period 2017-2018. The rate is finally reduced to 0% from 2019 onward. This is estimated to produce a loss of VAT revenues, equivalent at 0.3% of GDP, in 2017 and of additional 0.2% of GDP in 2019.

² From 1 January 2015, telecommunications, broadcasting and electronic services will always be taxed in the country where the customer belongs – regardless of whether the customer is a business or consumer – regardless of whether the supplier based in the EU or outside. More information available at: http://ec.europa.eu/taxation_customs/taxation/vat/how_vat_works/telecom/index_en.htm.

Finally, the budgetary strategy includes the impact of the saving measures adopted within the Zukunftspak³ in 2015, which are expected to reduce expenditure growth further in 2017 and in 2018.

3.4. DEBT DEVELOPMENTS

The debt-to GDP ratio decreased to 20% at the end of 2016 from 21.6% of GDP in 2015, mostly driven by the surplus in the primary headline balance and to a lesser extent by favourable macroeconomic developments (see Table 3). According to the stability programme, public debt is expected to increase at 22.6% of GDP by the end of the programme period. In spite of the positive primary balance, the programme projects public debt to increase in 2017 and 2018. This is due to the fact that the primary surplus stems from the comfortable position of the social security sector, while the central government is expected to record continuous deficits. As the social security surplus is earmarked to feed the reserves of the pension fund, the central government deficits need to be financed through new debt issuances. Indeed, according to the programme, the new debt will be used to finance the central government deficits of the next years and the debt maturing during the programme period. These developments are broadly in line with the Commission 2017 spring forecast.

While the gross government debt is expected to increase, its amount is largely outweighed by the assets owned by the government. Apart from the reserves of the pension fund, equivalent to EUR 17.8 billion (32.9% of GDP) at the end of 2016, the government owns stakes in commercial and non-commercial companies, valued at approximately around 10% of GDP.

Table 3: Debt developments

| (% of GDP) | Average 2011-2015 | 2016 | 2017 | | 2018 | | 2019 | 2020 | 2021 |
|-------------------------------------|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | | COM | SP | COM | SP | SP | SP | SP |
| Gross debt ratio¹ | 21.6 | 20.0 | 22.0 | 22.2 | 22.3 | 22.4 | 22.6 | 22.8 | 22.6 |
| Change in the ratio | 0.4 | -1.6 | 2.0 | 2.2 | 0.3 | 0.3 | 0.2 | 0.2 | -0.2 |
| <i>Contributions²:</i> | | | | | | | | | |
| 1. Primary balance | -1.4 | -1.9 | -0.5 | -0.5 | -0.6 | -0.6 | -0.8 | -1.1 | -1.4 |
| 2. "Snow-ball" effect | -0.6 | -0.4 | -0.9 | -0.9 | -1.1 | -1.1 | -0.9 | -0.5 | -0.5 |
| <i>Of which:</i> | | | | | | | | | |
| Interest expenditure | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 |
| Growth effect | -0.7 | -0.9 | -0.8 | -0.8 | -0.9 | -1.1 | -0.9 | -0.6 | -0.4 |
| Inflation effect | -0.4 | 0.1 | -0.4 | -0.4 | -0.5 | -0.4 | -0.2 | -0.2 | -0.4 |
| 3. Stock-flow adjustment | 2.4 | 0.7 | 3.5 | 3.6 | 1.9 | 2.0 | 1.9 | 1.8 | 1.8 |

Notes:

¹ End of period.

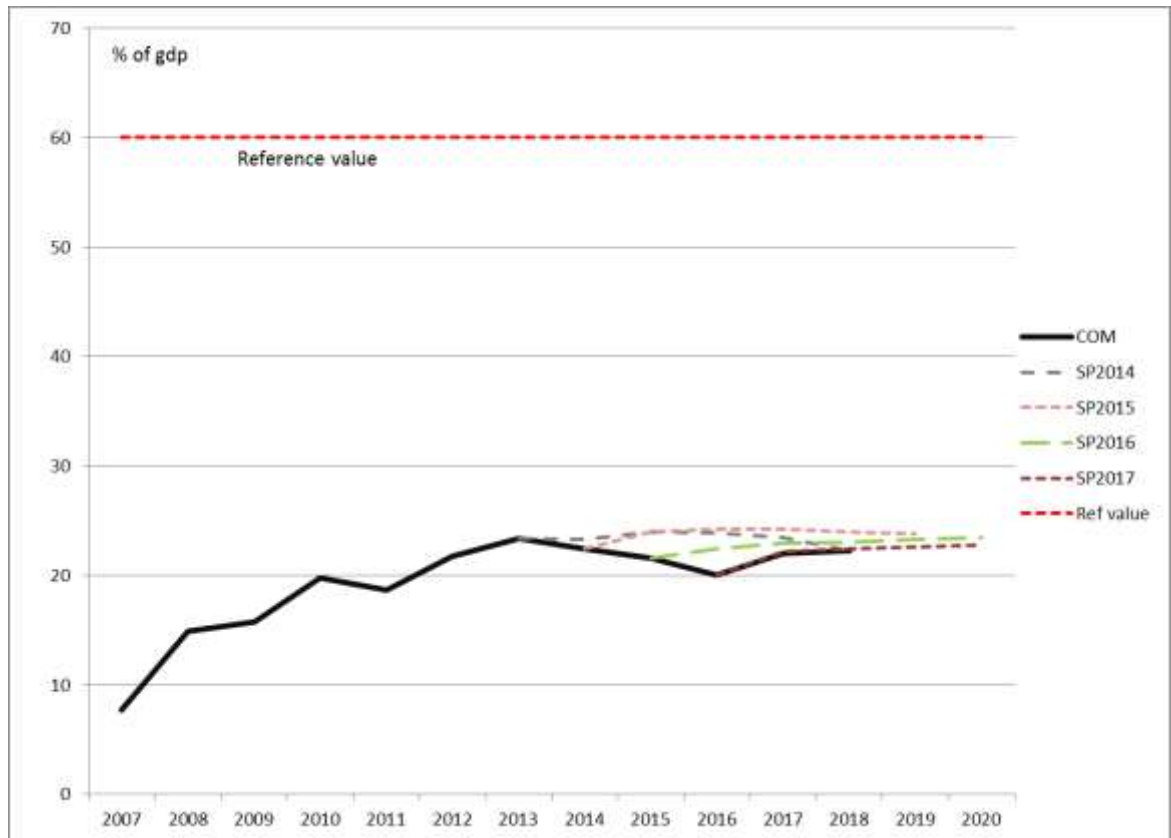
² The snow-ball effect captures the impact of interest expenditure on accumulated debt, as well as the impact of real GDP growth and inflation on the debt ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and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

Source:

Commission 2017 spring forecast (COM); stability programme (SP), Commission calculations.

³ 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.

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



Source: Commission 2017 spring forecast; stability programmes

3.5. RISK ASSESSMENT

Overall, the stability programme's targets in terms of headline balance, structural balance and public debt are in line with the Commission 2017 spring forecast and appear plausible.

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 on the national economy. In particular, risks to the above budgetary plans mainly stem from the high specialisation of the country in the financial sector, in spite of its increasing diversification of products. Regulatory and external risks remain and could adversely impact financial sector perspectives. Similarly, international discussions on the harmonisation of the taxation of multinational may impact the decision on where to locate their headquarters by multinational firm, which Luxembourg hosts in large number. Nevertheless, these risk factors are dependent on the external environment, on which the national authorities have limited possibilities to exert an influence.

The underlying macroeconomic assumptions in the programme are broadly in line with the Commission spring 2017 forecast, apart for 2018 when a markedly more favourable scenario than in the Commission forecast is projected. Nevertheless, risks are moderate as the budgetary outcome associated to the more favourable growth rate has been estimated applying a rather cautious revenue elasticity.

The programme provides the results of a sensitivity analysis carried out on the basis of a shock, positive and negative, to the euro area growth rate and to a positive shock to the

interest rates. According to the analysis, in the case of a euro area growth rate 0,5 pp. lower than in the baseline scenario, a deterioration of more than half of point of GDP in the headline balance by 2021 could materialise, with public debt peaking at 24.1% of GDP in 2021, compared to 22,6% of GDP in the baseline scenario.

Finally, it is worth noting that Eurostat expressed a reservation on the quality of the data reported by Luxembourg in relation to the sector classification of hospitals, as well as a number of technical issues such as the recording of receivables and payables, the size of statistical discrepancies in the EDP tables and the unavailability of data for local government. While Eurostat will investigate these issues with the Luxembourgish statistical authorities, the potential impact of the revision to the envisaged budgetary strategy remains unclear.

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

Luxembourg is subject to the preventive arm of the Stability and Growth Pact. In the context of the 2016 European Semester, the Council did not address a SGP-related recommendation to Luxembourg.

The general government balance posted a surplus of 1.6% of GDP in 2016 and it is planned to remain in balance or in surplus throughout the programme period. This is confirmed by the Commission 2017 spring forecast for the years 2017 and 2018. The general government debt decreased to 20.0% of GDP in 2016 and it is planned to gradually increase and to reach 22.8% of GDP by 2020 and to slightly decline to 22.6% of GDP in 2021, 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 2.0% of GDP in 2016, and thus the country remained above its medium-term objective (MTO) of a structural surplus of 0.5% of GDP.

According to the information provided in the stability programme, Luxembourg is expected to continue to remain above its revised MTO (a structural deficit of 0.5%) also in 2017, when the recalculated structural surplus is projected at 0.4% of GDP, which is in line with the Commission 2017 spring forecast.

In 2018, the recalculated structural balance is projected to drop to a deficit of 0.1% of GDP, still above the level of the country specific MTO. This compared with a surplus of 0.1% of GDP in the Commission forecast (see Table 4).

Luxembourg is therefore projected to compliant with the requirements of the preventive arm of the Pact in both 2017 and 2018. Beyond 2018, the programme indicates that the structural balance is set to remain with a margin above the MTO over the programme period.

Table 4: Compliance with the requirements under the preventive arm

| (% of GDP) | 2016 | 2017 | 2018 |
|---|---------------------|------------------------|------------------------|
| Initial position¹ | | | |
| Medium-term objective (MTO) | 0.5 | -0.5 | -0.5 |
| Structural balance ² (COM) | 2.0 | 0.4 | 0.1 |
| Structural balance based on freezing (COM) | 2.2 | 0.4 | - |
| Position vis-a-vis the MTO³ | At or above the MTO | At or above the MTO | At or above the MTO |
| (% of GDP) | 2016 | 2017 | 2018 |
| | COM | SP COM | SP COM |
| Structural balance pillar | | | |
| Required adjustment ⁴ | Compliant | | |
| Required adjustment corrected ⁵ | | | |
| Change in structural balance ⁶ | | | |
| One-year deviation from the required adjustment ⁷ | | | |
| Two-year average deviation from the required adjustment ⁷ | | | |
| Expenditure benchmark pillar | | | |
| Applicable reference rate ⁸ | Compliant | | |
| One-year deviation adjusted for one-offs ⁹ | | | |
| Two-year deviation adjusted for one-offs ⁹ | | | |
| PER MEMORIAM: One-year deviation ¹⁰ | | | |
| PER MEMORIAM: Two-year average deviation ¹⁰ | | | |
| Conclusion | | | |
| Conclusion over one year | Compliant | | |
| Conclusion over two years | | | |
| Notes | | | |
| <p>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.</p> <p>² Structural balance = cyclically-adjusted government balance excluding one-off measures.</p> <p>³ Based on the relevant structural balance at year t-1.</p> <p>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.).</p> <p>⁵ Required adjustment corrected for the clauses, the possible margin to the MTO and the allowed deviation in case of overachievers.</p> <p>⁶ Change in the structural balance compared to year t-1. Ex post assessment (for 2014) is carried out on the basis of Commission 2015 spring forecast.</p> <p>⁷ The difference of the change in the structural balance and the corrected required adjustment.</p> <p>⁸ 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.</p> <p>⁹ 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.</p> <p>¹⁰ Deviation of the growth rate of public expenditure net of discretionary revenue measures and revenue increases mandated by law 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.</p> | | | |
| <p><u>Source:</u> <i>Stability Programme (SP); Commission 2017 spring forecast (COM); Commission calculations.</i></p> | | | |

5. LONG-TERM SUSTAINABILITY

Luxembourg does not appear to face fiscal sustainability risks in the short run according to the S0 indicator, which captures the short-term risks of fiscal stress stemming from the fiscal, as well as the macro-financial and competitiveness sides of the economy.

Based on Commission forecasts and a no-fiscal policy change scenario beyond forecasts, government debt, at 20.0% of GDP in 2016, is expected, after peaking at 22.3% of GDP in 2018, to steadily decrease to 16.5% in 2027, thus remaining well below the 60% of GDP Treaty threshold. 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 more pronounced decreasing path by 2027.

The medium-term fiscal sustainability risk indicator S1 is at -3.8 pps. of GDP, primarily related to the low level of government debt and the favourable initial budgetary position contributing respectively with -3.1 and -1.7 pps. of GDP, thus indicate low risks in the medium term. The full implementation of the stability programme would put the sustainability risk indicator S1 at -6.8 pps. of GDP, leading to similar medium-term risk. Overall, risks to fiscal sustainability over the medium-term are, therefore, low. Fully implementing the fiscal plans in the stability programme would further decrease those risks.

The long-term fiscal sustainability risk indicator S2 (which shows the adjustment effort needed to ensure that the debt-to-GDP ratio is not on an ever-increasing path) is at 4.6 pps. of GDP. In the long-term, Luxembourg therefore appears to face medium fiscal sustainability risks, primarily related to the projected ageing costs, this contributing with 4.5 pps. of GDP to the indicator. Full implementation of the programme would lower the S2 indicator at 3.1 pps. of GDP, leading nonetheless to a similar assessment of long-term risks (see Table 5).

Table 5: Sustainability indicators

Luxembourg

| <i>Time horizon</i> | No-policy Change Scenario | | Stability / Convergence Programme Scenario | |
|--------------------------------------|----------------------------------|----------|---|----------|
| Short Term | LOW risk | | | |
| S0 indicator ^[1] | 0.3 | | | |
| Fiscal subindex | 0.0 | LOW risk | | |
| Financial & competitiveness subindex | 0.4 | LOW risk | | |
| Medium Term | LOW risk | | | |
| DSA ^[2] | LOW risk | | | |
| S1 indicator ^[3] | -3.8 | LOW risk | -6.8 | LOW risk |
| <i>of which</i> | | | | |
| Initial Budgetary Position | -1.7 | | -3.7 | |
| Debt Requirement | -3.1 | | -4.0 | |
| Cost of Ageing | 1.0 | | 0.9 | |
| <i>of which</i> | | | | |
| Pensions | 1.0 | | 0.8 | |
| Health-care | 0.0 | | 0.0 | |
| Long-term care | 0.1 | | 0.1 | |
| Other | -0.1 | | 0.0 | |
| Long Term | MEDIUM risk | | MEDIUM risk | |
| S2 indicator ^[4] | 4.6 | | 3.1 | |
| <i>of which</i> | | | | |
| Initial Budgetary Position | 0.0 | | -1.2 | |
| Cost of Ageing | 4.5 | | 4.3 | |
| <i>of which</i> | | | | |
| Pensions | 2.8 | | 2.4 | |
| Health-care | 0.4 | | 0.4 | |
| Long-term care | 1.2 | | 1.2 | |
| Other | 0.1 | | 0.2 | |

Source: Commission services; 2017 stability/convergence programme.

Note: the 'no-policy-change' scenario depicts the sustainability gap under the assumption that the structural primary balance position evolves according to the Commissions' spring 2017 forecast covering until 2018 included. 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 2015 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 2031. This adjustment effort corresponds to a cumulated improvement in the structural primary balance over the 5 years following the forecast horizon (i.e. from 2019 for No-policy Change 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 2015 and Debt Sustainability Monitor 2016.

6. FISCAL FRAMEWORK

The design of Luxembourg's national fiscal framework has 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 government has committed, at the outset of its term, 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. However, it is worth underscoring that ex-ante compliance with the MTO is ensured as a result of the recent government decision to lower the country's MTO as from 2017 to a deficit, in structural terms, of 0.5% of GDP compared to previous requirement of a surplus of 0.5% of GDP (see also section 3.2). The Fiscal Council, while confirming that the 2016 outcome ensures compliance with the national rules, has pointed out that the choice to set the new MTO at a deficit of 0.5% of GDP is not in line with the government's commitment to keep the debt-to-GDP ratio under the 30% of GDP threshold. According to their simulations, in order to ensure that the general government debt will remain under the threshold of 30% of GDP, the new MTO should not be set at a level lower than a surplus of 0.25% of GDP. By contrast, the government, in the stability programme, expects the structural balance, after a large drop in 2017 to a surplus of 0.4% of GDP mostly explained by the impact of the tax reform (see Section 3.3), to decline further in 2018 to a deficit of 0.1% of GDP, before improving slightly to a flat (0% of GDP) balance, followed by gradual improvement in the outer years covered by the programme to a surplus of 1.6% of GDP in 2021.

As to the general government debt, according to the Stability Programme, it would peak at 22.8% of GDP in 2020, well 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, which 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 have 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 2011², 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 2016, Luxembourg recorded a government surplus of 1.6% of GDP and its structural balance stood at 2.0% of GDP, above its medium-term objective of a surplus, in structural terms, of 0.5% of GDP.

According to both the information provided in the stability programme and the Commission 2017 spring forecast, Luxembourg is expected to remain above its revised MTO of a deficit, in structural terms, of 0.5% of GDP, in 2017 and in 2018 continuing therefore to meet the requirements under the preventive arm of the Stability and Growth Pact.

8. ANNEX

Table I. Macroeconomic indicators

| | 1999-2003 | 2004-2008 | 2009-2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--|---------------|--------------|---------------|---------------|---------------|-------------|-------------|-------------|
| Core indicators | | | | | | | | |
| GDP growth rate | 4.9 | 3.8 | 1.3 | 5.6 | 4.0 | 4.2 | 4.3 | 4.4 |
| Output gap ¹ | 3.2 | 1.3 | -4.3 | -2.6 | -2.1 | -1.0 | -0.3 | 0.3 |
| HICP (annual % change) | 2.4 | 3.3 | 2.2 | 0.7 | 0.1 | 0.0 | 2.4 | 1.8 |
| Domestic demand (annual % change) ² | 4.1 | 3.2 | 1.6 | 4.2 | 3.1 | 1.0 | 4.0 | 3.3 |
| Unemployment rate (% of labour force) ³ | 2.6 | 4.7 | 5.1 | 6.0 | 6.5 | 6.3 | 6.1 | 6.0 |
| Gross fixed capital formation (% of GDP) | 21.2 | 19.1 | 18.9 | 18.9 | 18.2 | 17.8 | 18.0 | 17.8 |
| Gross national saving (% of GDP) | 30.4 | 29.9 | 24.6 | 23.8 | 24.0 | 22.8 | 22.7 | 23.0 |
| General Government (% of GDP) | | | | | | | | |
| Net lending (+) or net borrowing (-) | 3.6 | 1.6 | 0.1 | 1.4 | 1.4 | 1.6 | 0.2 | 0.3 |
| Gross debt | 6.8 | 9.0 | 19.9 | 22.4 | 21.6 | 20.0 | 22.0 | 22.3 |
| Net financial assets | 54.1 | 51.4 | 50.5 | 50.2 | 49.5 | n.a | n.a | n.a |
| Total revenue | 43.6 | 42.6 | 43.9 | 43.2 | 42.7 | 42.7 | 41.1 | 40.4 |
| Total expenditure | 40.1 | 40.9 | 43.8 | 41.8 | 41.3 | 41.2 | 40.9 | 40.2 |
| <i>of which: Interest</i> | 0.4 | 0.3 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.3 |
| Corporations (% of GDP) | | | | | | | | |
| Net lending (+) or net borrowing (-) | n.a | 1.1 | -8.4 | n.a | n.a | n.a | n.a | n.a |
| Net financial assets; non-financial corporations | -143.2 | -94.5 | -140.1 | -126.5 | -114.6 | n.a | n.a | n.a |
| Net financial assets; financial corporations | 34.1 | 17.9 | -22.4 | -29.1 | -20.2 | n.a | n.a | n.a |
| Gross capital formation | n.a | 12.8 | 10.4 | n.a | n.a | n.a | n.a | n.a |
| Gross operating surplus | 26.4 | 31.6 | 28.3 | n.a | n.a | n.a | n.a | n.a |
| Households and NPISH (% of GDP) | | | | | | | | |
| Net lending (+) or net borrowing (-) | 3.1 | 0.7 | 3.0 | n.a | n.a | n.a | n.a | n.a |
| Net financial assets | 64.9 | 69.3 | 76.4 | 77.8 | 79.9 | n.a | n.a | n.a |
| Gross wages and salaries | 28.9 | 26.5 | 26.3 | n.a | n.a | n.a | n.a | n.a |
| Net property income | n.a | 1.4 | 1.3 | n.a | n.a | n.a | n.a | n.a |
| Current transfers received | n.a | 13.1 | 15.2 | n.a | n.a | n.a | n.a | n.a |
| Gross saving | n.a | 4.6 | 7.6 | n.a | n.a | n.a | n.a | n.a |
| Rest of the world (% of GDP) | | | | | | | | |
| Net lending (+) or net borrowing (-) | 8.5 | 9.9 | 5.3 | 2.9 | 4.0 | 3.4 | 5.0 | 5.5 |
| Net financial assets | -10.0 | -44.1 | 35.6 | 27.6 | 5.4 | n.a | n.a | n.a |
| Net exports of goods and services | 24.0 | 29.3 | 32.2 | 34.0 | 34.7 | 36.4 | 36.5 | 37.3 |
| Net primary income from the rest of the world | -15.5 | -21.4 | -30.3 | -32.6 | -34.2 | -35.1 | -35.4 | -35.4 |
| Net capital transactions | -0.4 | -0.1 | -1.0 | -2.1 | -1.1 | -1.4 | 0.5 | 0.5 |
| Tradable sector | 32.9 | 29.2 | 28.1 | 28.1 | 29.4 | 28.8 | n.a | n.a |
| Non tradable sector | 56.7 | 60.2 | 61.4 | 61.1 | 61.2 | 61.9 | n.a | n.a |
| <i>of which: Building and construction sector</i> | 5.6 | 5.1 | 4.8 | 4.9 | 4.5 | 4.6 | n.a | n.a |
| Real effective exchange rate (index, 2000=100) | 84.1 | 92.9 | 101.8 | 101.7 | 99.3 | 98.0 | 98.4 | 97.3 |
| Terms of trade goods and services (index, 2000=100) | 95.4 | 96.7 | 100.1 | 100.1 | 99.6 | 99.5 | 99.4 | 99.6 |
| Market performance of exports (index, 2000=100) | 85.7 | 94.7 | 101.0 | 113.0 | 119.1 | 120.4 | 122.3 | 124.0 |
| Notes: | | | | | | | | |
| ¹ The output gap constitutes the gap between the actual and potential gross domestic product at 2005 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 2017 spring forecast | | | | | | | | |