April 9, 2020
Approval: 4/16/20

INTERNATIONAL MONETARY FUND

Minutes of Executive Board Meeting 19/37-1

9:30 a.m., May 8, 2019

## 1. Luxembourg—2019 Article IV Consultation

Documents: SM/19/86 and Correction 1; and Correction 2; and Supplement 1; SM/19/87

Staff: Stavrev, EUR; Haksar, SPR

Length: 34 minutes

## Executive Board Attendance

T. Zhang, Acting Chair

| **Executive Directors** | **Alternate Executive Directors** |
|---|---|
| | J. Essuvi (AE), Temporary |
| | H. Razafindramanana (AF) |
| | J. Di Tata (AG) |
| | Johnston (AP) |
| | P. Fachada (BR) |
| Z. Jin (CC) | |
| | M. Mulas (CE), Temporary |
| L. Levonian (CO) | |
| | C. Just (EC) |
| | A. Castets (FF) |
| | S. Meyer (GR) |
| | P. Dhillon (IN), Temporary |
| | F. Spadafora (IT), Temporary |
| | Saito (JA) |
| | K. Badsi (MD), Temporary |
| | P. Al-Riffai (MI), Temporary |
| A. De Lannoy (NE) | |
| T. Ostros (NO) | |
| | S. Potapov (RU), Temporary |
| | R. Alkhareif (SA) |
| A. Mahasandana (ST) | |
| P. Inderbinen (SZ) | |
| | O. Haydon (UK), Temporary |
| | P. Pollard (US), Temporary |

G. Bauche, Acting Secretary
K. Hviding, Summing Up Officer
D. Jiang, Board Operations Officer
M. McKenzie, Verbatim Reporting Officer

**Also Present**
Communications Department: G. Vilkas. European Central Bank: A. Meyler. European Department: L. Antoun de Almeida, J. Decressin, M. Souissi, E. Stavrev, R. Varghese. Legal Department: J. Ams. Strategy, Policy, and Review Department: V. Haksar.
Alternate Executive Director: I. Mannathoko (AE), L. Palei (RU), K.Tan (ST). Senior Advisors to Executive Directors: M.Gilliot (FF), N. Jost (NE), G. Gasasira-Manzi (AE),

G. Vasishtha (CO). Advisors to Executive Directors: D. Cools (NE), J. Corvalan (AG), Z. Huang (CC), G. Khurelbaatar (AP), R. Lopes Varela (AF), P. Mooney (CO), B. Parkanyi (NE), A. Urbanowska (SZ).

## 1. LUXEMBOURG—2019 ARTICLE IV CONSULTATION

Mr. De Lannoy and Mr. Jost submitted the following statement:

The Luxembourg authorities thank Mr. Stavrev and his team for the constructive cooperation during the Article IV consultation and the thorough assessment presented in their report. They broadly agree with staff's appraisal and will, as in previous years, carefully consider the policy recommendations.

Luxembourg's economy remains strong with sound employment and economic growth prospects. Public debt levels are low compared to peers and are projected to decline further. Public investment and social spending remain high. A stable political and social environment, a skilled international labor force, a long-standing track record of fiscal prudence and a robust and predictable legal and regulatory framework, including in the financial sector, are key factors supporting growth. A continuous triple-AAA credit rating confirms the market's confidence in the country. The recently re-appointed Government is fully committed to prudent economic and fiscal policies supporting the country's competitiveness and resilience, while increasing its efforts to reduce the economy's ecological footprint and promoting inclusiveness.

The authorities concur with staff regarding mostly external downside risks, including a retreat from cross-border integration, and policy uncertainty at European and global level. On the national level, sustained increases in population, notably as a result of strong economic growth, lead to structural challenges including pressures on infrastructure and the housing market. The authorities continue to actively monitor and manage the existing risks, fully aware of the open nature of Luxembourg's economy, as, for instance, the preparations for a possible disorderly exit of the United Kingdom from the European Union show. Challenges arising from changes in international taxation are considered to be balanced, as the more level global playing field could also bring other traditional strengths of Luxembourg's socio-economic context to the fore.

Macroeconomic outlook

Economic growth is expected to remain strong. Despite lower growth expectations in the Euro Area, the Luxembourg economy is set to grow at 3.0 percent in 2019 and 3.8 percent in 2020, according to the national statistical agency. Similarly, employment growth, measured at 3.7 percent in 2018, is also projected to remain strong at 3.4 percent in 2019. Financial and business services, healthcare and ICT remain among the most dynamic sectors for job creation. Unemployment is expected to further trend down from 5.5 percent in 2018 to 4.8 percent in 2020, to reach post-crisis lows.

The current declining trend in unemployment is due to both the Government's targeted active labor market policies and favorable growth dynamics. In particular, the employment agency has devised personalized programs tailored to the needs of, often long-term, unemployed, in a high-skilled and rapidly evolving labor market. Examples include the reform of the Revenu d'Inclusion Sociale which aims at combating inactivity traps, or the novel Digital Skills Bridge program designed to provide technical and financial assistance to companies upskilling their employees even before their jobs may be digitized. The authorities remain committed to closely working with the private sector and adapting policies to the challenges posed by digitalization.

Public finances

Luxembourg's fiscal position remains structurally sound. The projected drop of the general government nominal surplus from +2.6 percent of GDP in 2018 to +1.0 percent in 2019 and +1.4 percent in 2020, primarily reflects a prudent approach in estimating fiscal revenues. It also reflects the Governments' strong commitment to the socio-economic resilience of the country and its focus on high levels of public investment to prepare the country for future challenges, notably by investing in climate- and ecologically-friendly infrastructure. At the same time, the authorities continue to set aside substantial amounts to a dedicated pension reserves fund, whose assets have accumulated to around 33 percent of GDP by the end of 2018. Reserves are destined to finance future pension obligations and would contribute to mitigating potential challenges arising from population ageing. Debt levels remain low at 21.4 percent of GDP in 2018 and are projected to decline to 20.2 percent and 19.9 percent in 2019 and 2020 respectively.

Low and declining public debt levels, a budget in surplus, the continued full respect of EU fiscal rules as well as its self-set public debt limit of 30 percent of GDP, demonstrate the Government's long-standing commitment to sound fiscal policies. The authorities are aware of the existing revenue risks and stand ready to actively address them, as past years have shown. Examples include fiscal remedies in response to the change to the EU VAT regime applicable to electronic commerce activities, or continued policy adjustment in the context of ongoing BEPS-related developments. In this vein, maintaining fiscal room for maneuver acts as a countercyclical fiscal buffer and adds to the economy's resilience to potential shocks. This prudent approach is in line with past and present IMF recommendations, notably for small and open economies.

While the short- and medium-term fiscal position remains favorable, the authorities agree that population ageing could pose challenges in the long-run, while noting that cost of ageing projections are subject to volatile assumptions on demographic and economic developments. The authorities thank staff for their thorough assessment and providing sensitivity analyses, which can help frame a policy debate. As noted by staff, past reforms have introduced a parametric framework that facilitates adjustments, but political economy considerations remain key. The authorities place strong emphasis on discussing possible reforms with social partners. Finally, a dedicated pension reserve fund provides a significant buffer, with assets amounting currently to some 33 percent of GDP, which allow to sustain pension expenditures over a substantial period into the future, even under a no-policy change scenario.

Economic policy

The Government remains committed to high levels of public investment, in both tangibles and intangibles, in line with IMF recommendations. Going forward, public investment spending is scheduled to amount to over 4 percent of GDP annually and aims at addressing infrastructure needs, including in housing and public transportation, and at preparing the economy for technological change, while continuing efforts to diversify the financial sector and the economy as a whole. Investments in ICT infrastructure and e-Government remain key. In addition, the Government's policies aim at making growth more socially inclusive and beneficial for all. Reducing the carbon footprint of the economy and supporting R&D are other areas of priority. The Government remains committed to the emission targets agreed under the Paris agreement. The planned increase in fuel taxation, among other measures, illustrates this commitment. The authorities look forward to working with staff to further improve public investment efficiency.

As the staff report highlights, Luxembourg has fully embraced the international tax transparency agenda. Over the last five years, the Government has taken and continues to take decisive actions to align its tax framework to international standards, including those set by the OECD, such as the BEPS action plan. Luxembourg is participating in the automatic exchange of information in the field of taxation and has put into place a BEPS-compliant IP box regime. In addition, in 2018 and 2019 respectively, parliament transposed the Anti-Tax Avoidance Directive (ATAD) I, as well as the Multilateral Instrument (MLI). The authorities expect to transpose the ATAD II by the end of 2019. This is in addition to earlier steps, such as the introduction of regulations aimed at neutralizing hybrid mismatches or the introduction of the arm's length principle into national law.

Reflecting some of these efforts, the 2019 peer review report by the OECD Global Forum on Transparency and Exchange of Information for Tax Purposes found Luxembourg to be "largely compliant" with the international standard of transparency and exchange of information on requests. The Government remains committed to staying actively engaged in all relevant fora and to aligning the tax framework to international developments. Recent efforts at the OECD level are a powerful example of a successful global consensus-based approach, which Luxembourg continues to fully support. In this sense, the authorities welcome staff's analysis of BEPS actions implemented in Luxembourg.

The authorities are aware of the challenges stemming from a changing international tax environment. They are monitoring the developments closely and stand ready to adapt where necessary. At the same time, the authorities stress the importance of a global level playing field, which would also bring about opportunities, considering Luxembourg's various other comparative advantages such as its political and social stability, prudent policies and an effective governance framework.

Financial sector

The financial sector remains sound. As staff points out, banks are profitable and maintain high levels of capital, liquidity and asset quality. NPLs are very low, both in absolute levels and compared to peers. Banks remain resilient to shocks as stress tests indicate. The fund industry, distributing to a diverse pool of investors both in the European internal market and globally, remains an important component of the financial industry in Luxembourg. The authorities continue to closely monitor existing and emerging risks, in both the fund industry and banking sector, including at the level of the Systemic Risk Committee (CdRS).

The authorities remain committed to implementing robust financial policies, notably by continuously adjusting the national regulatory framework and macroprudential surveillance to evolving international standards and best practices. Authorities are thereby also following up on IMF recommendations, as staff rightly highlights. As such, the frequency of on-site inspections for investment funds and banks has increased, engagement with authorities of other jurisdictions has been strengthened even further, revised early warning indicators under the Solvency II regime are used, and steps to standardize reporting of borrower-related indicators have been taken. The authorities are contributing to the development of consistent leverage measures, guidance for liquidity stress testing by investment fund managers, and standardized stress testing for money market funds.

Similarly, the authorities took a number of steps to continue to strengthen the AML/CFT framework. Luxembourg transposed the 4th EU AML Directive (AMLD4), and the transposition work relating to the AMLD5 is on schedule. In addition, the authorities conducted a National Risk Assessment (NRA), in line with OECD best practices and are in the process of implementing a strategy to ensure that measures to prevent or mitigate money laundering and terrorist financing are commensurate with the risks identified in the NRA. A Register of Beneficial Owners of corporate and other legal entities was established in January 2019 in conformity with AMLD4 provisions.

The authorities believe that these efforts will further strengthen the robust and effective supervisory framework. In the same vein, the authorities are tracking evolving international regulatory standards and developments, and are actively engaged in discussions in all relevant fora such as ESMA, ESRB, FSB, IOSCO, SSM and SRM. The authorities also remain attached to the objective of further risk reduction in the banking sector at EU level to further strengthen financial stability in order to facilitate the completion of the banking union. At the same time, it is and remains crucial that institutions, including subsidiaries, maintain sufficient levels of own funds and eligible liabilities in order to allow for a smooth operationalization of resolution strategies.

Housing market

Economic developments and related population growth generate strong demand in the housing market. The Government has made alleviating housing supply constraints a priority, focusing in particular on increasing the availability of social housing. Accordingly, and in line with 2018 Article IV recommendations, the Government intends to change urban planning laws, boost the construction of social housing, and reform real estate taxation to reduce speculation. On the financial side, the authorities continue to actively monitor and manage potential risks, including within the Systemic Risk Committee (CdRS). The introduction of macro-prudential measures contributes to the build-up of capital buffers in the banking system. A draft enabling bill extending the macroprudential toolkit by including tools allowing for borrower-based mortgage lending measures is in the legislative process.

Diversification efforts

Despite the positive economic outlook, and in order to increase the economy's resilience to shocks and facilitate employment across sectors, the Government maintains its efforts to diversify the financial sector itself and the economy as a whole.

Fostering innovation in the fields of financial technology and promoting climate finance, including in the form of public-private partnerships, remain priorities. The inception of the Luxembourg House for Financial Technology (LHoFT) and the International Climate Finance Accelerator Luxembourg showcase the ambitions of the Government to contribute to the continued development of the internationally oriented financial center, and to the mobilization of capital supporting climate change mitigation in Europe and beyond.

In addition to the efforts to further develop the ICT sector by providing first-class infrastructures and telecommunication, Luxembourg has implemented a legal and regulatory environment aimed at enabling private investors and companies to explore and use space resources via the SpaceResources.lu initiative. More generally, the Government continues to pay careful attention to developing a climate conducive to business, investment and innovation, as reflected in the 2019 Budget.

Mr. Daïri and Mr. Badsi submitted the following statement:

We thank staff for the well-written set of papers and Mr. De Lannoy and Mr. Jost for their informative buff statement. Luxembourg continues to enjoy strong economic performance supported by buoyant domestic demand and a strong labor market. The fiscal and external current account balances remain in surplus, allowing a build-up of comfortable buffers. The financial sector is efficient, despite some pockets of vulnerability that need to be addressed. While the sustained domestic demand is expected to continue supporting growth, risks are skewed to the downside, mainly from less favorable external environment which, along with potential changes in international tax rules, could significantly impact the highly open economy and globally integrated financial system. We agree with the thrust of the staff appraisal.

We welcome the authorities' commitment to maintain a sound fiscal policy and to comply with international anti-tax avoidance and tax transparency initiatives. We are encouraged by the shared view between the authorities and staff on the need for preserving fiscal buffers against adverse external shocks. We look forward to the implementation of the authorities' fiscal measures aimed at addressing fiscal risks and lifting the economy's potential and making growth more resilient and more inclusive, as indicated by Mr. De Lannoy and Mr. Jost. We welcome the authorities' renewed commitment to consistently meeting the medium-term fiscal objective (MTO) and to keep public debt below 30 percent of GDP.

The banking sector is well capitalized, liquid and profitable, and NPLs are very low. However, there is a need for further efforts to strengthen macroprudential policies, oversight of non-bank holding companies of banks, and large bank exposures, as well as in monitoring developments and risks in the key investment funds sector and addressing risks in the real estate market. We are comforted by the authorities' recognition of these challenges and their commitment to maintaining financial stability and further strengthening the resilience of the financial sector, including through implementation of FSAP recommendations. We are pleased to note the measures taken by the CSSF to strengthen the ML/TF legal framework.

We welcome the authorities' agreement on the need for continuous efforts to address the main structural gaps, including with regard to pension reform to ensure its long-term sustainability, supply constraints in the housing market, structural unemployment, and infrastructure and efficiency gaps. Progress made in these areas, as highlighted by Mr. De Lannoy and Mr. Jost, is commendable. While we note that the public capital stock-to-GDP ratio of Luxembourg is one of the highest among EU countries, efforts are needed to further strengthen infrastructure and enhance investment efficiency. We welcome the authorities' commitment to their undertakings under the Paris climate agreement, further promote climate finance, and continue working with the private sector to address the challenges posed by digitalization.

We wish the authorities' further success.

Mr. Meyer submitted the following statement:

We thank staff for their informative report and Selected Issues paper in the context of Luxembourg's Article IV consultation and Mr. De Lannoy and Mr. Jost for additional details in their buff statement.

Luxembourg's economic model, based on sound economic and fiscal policies, firm prudential oversight and a business-friendly environment has served the country well and is continuing to deliver solid growth and favorable labor market conditions. However, as staff rightly point out in their reports, risks continue to exist linked to the economy's size, openness, its specialization in financial services and because it is home to numerous large multinational companies. In particular, Luxembourg's adjustments to the changing international taxation framework, or shocks to the global financial sector pose substantial revenue risks. Moreover, ageing-related costs are estimated to grow at a rapid pace. Therefore, we welcome the prudent fiscal policy of the Government maintaining sufficient fiscal policy buffers, while prioritizing expenditure to boost potential growth. Given the large size of the financial sector, it will be important that the authorities continue to enhance financial regulation and supervision, and to closely monitor emerging risks such as in AML/CFT or fintech.

Macroeconomic developments

Growth of the Luxembourg economy has been solid on average and is expected to continue at a similar pace. A considerable uptick in both private and public consumption, supported by favorable labor market developments, boosted growth in 2018. Investments continued to slow down; whereas net export made a positive contribution. Although a sizable volatility and frequent revisions of historical figures make projections particularly uncertain for Luxembourg we found that staff's forecast is premised on quite robust productivity growth, especially in the outer years. Nevertheless, we do agree that the unemployment rate, declining to pre-crisis lows, and a solid wage growth, together with growth-oriented and prudent fiscal policy should provide a stable floor to growth going forward. This being said, given the economy's small size, open orientation and sectorial specialization render it particularly vulnerable to shocks, especially external ones, including those linked to global economic developments, international tax developments and Brexit.

Fiscal policies

Given vulnerability to external shocks, the authorities' planned growth-friendly yet prudent fiscal policy seems appropriate. Windfall gains increased the 2018 headline budgetary surplus to 2.4 percent of GDP from 1.4 percent of GDP in 2017. This favorable fiscal position allows the slightly expansionary fiscal stance in 2019, which reflects the Government's efforts to maintain high levels of public investment of around 4 percent of GDP per year. The orientation of the 2019 budget, aiming at lifting the economy's potential and making growth more inclusive, appears appropriate and is expected to remain compliant with EU fiscal rules. However, a number of potential external risks could impact its tax revenues. Hence, we share staff's analysis on the need to make the tax system more robust and less reliant on potentially fragile sources of revenues. We also see merit in reducing tax exemptions (e.g. VAT) and welcome the increase of fuel taxation as a step in the right direction, as these taxes are among the lowest in the EU. Noting that Luxembourg has not yet observed any significant impact from the implementation of the EU and international transparency and anti-tax avoidance agenda, changes in international tax rules, while having the potential of broad benefits, could negatively impact the tax base. Moreover, potential external shocks to the financial sector, which accounts for 21 percent of fiscal revenues, represent an additional source of vulnerability. In that sense, we welcome the fact that the medium-term fiscal strategy is prudent, with debt among the lowest in the EU.

The expected increase in age-related expenditure could threaten public finances in the medium and long term. Luxembourg is expected to face one of the largest increases in age-related spending and to have the highest level of pension expenditures as a share of GDP in the EU by 2070. We therefore welcome the analysis presented in the Selected Issues paper and staff's recommendation to ensure the long-term sustainability of the pension system considering intergenerational equity and the trade-offs of various reform options. The results suggest that although all reforms have the potential to ensure long-term sustainability of public finances, their impact on macroeconomic variables differs significantly and only the reform based on the increase of the retirement age supports economic growth and consumption.

Financial market policies

The resilience of the Luxembourg banking system is confirmed by larger than average capital buffers and high asset quality. At the same time, the average return on equity was lower in Luxembourg's larger banks than in the rest of the Euro Area. Particularly, rising operating costs (including also costs related regulatory compliance as well as investment in new technology) have increased profitability challenges. The financial sector, as the main driver of the country's growth, continues to be both a conduit and recipient of shocks originating abroad. This holds particularly true for its large investment fund industry that has undergone a rapid expansion in recent years. We therefore welcome progress regarding enhanced regulation and supervision in the sector. We concur with staff's recommendation to further enhance the risk monitoring and supervisory regime for the investment fund sector to keep up with the strong growth and increasing complexity of the sector. Efforts to strengthen the supervision of banks' large cross-border exposures should also continue and the 2017 FSAP recommendations should continue to be addressed. In this regard, we welcome the recent increase in resources dedicated to reviewing existing waivers for large exposure limits.

We concur with staff on the need to continue monitoring the risks related to anti-money laundering, challenges arising from fintech and risks in the real estate market. Like staff, we welcome steps taken by the CSSF to strengthen its AML/CFT framework and enhance the oversight of the risks in private banking and wealth management. Rising residential real estate (RRE) prices and elevated private household indebtedness also warrant attention. The large share of variable interest rate loans exposes the private sector to interest rate risks and thereby put the sustainability of household indebtedness at risk. In this context, we welcome the introduction of a 0.25 percent countercyclical capital buffer (CCyB), signaling tighter macroprudential stance, and recent steps to standardize the reporting of borrower-related indicators. At the same time, the authorities should stand ready to further increase the CCyB if needed; especially as long as borrower-based measures remain unavailable. Regarding the macroprudential toolkit, while the draft law from December 2017 and the recent harmonization of required data definitions represent important steps towards its expansion, only the swift ratification of the law and the timely implementation of the data definitions would indeed expand the scope of macroprudential maneuver at the current stage. On macroprudential oversight more generally, we support staff's view that the leading role of the Banque Centrale du Luxembourg in financial stability analysis should be enshrined into law.

Structural policies

The continuation and follow through of the labor market reform agenda can help increase the growth potential, support vulnerable groups and address labor shortages. Robust employment growth in the past few years masks structural problems in the labor market. In particular, the share of long-term unemployment needs to be addressed by better matching skills with the high demands of the labor market and by investigating how the automatic wage indexation mechanism and the disincentives implicit in the social security system could raise the barriers to work. In this sense, initiatives to increase the labor force participation of female and elderly workers are welcome. We welcome the 2019 budget priorities, which lay out the Government's plans to foster investment in digital integration, transportation and in particular housing, which not only poses affordability challenges, as stated in the report, but may also have an impact on the country's potential to attract skilled labor.

Mr. Jin and Mr. Huang submitted the following statement:

We thank staff for the set of papers and Messrs. De Lannoy and Jost for their helpful buff statement. On the back of sound macroeconomic policies, Luxembourg has experienced solid economic growth with unemployment rate at a decade low. As a global financial center and hub for multinational companies' treasury activities, Luxembourg is facing challenges associated with changes in international taxation and uncertainties in the Brexit process. The authorities are encouraged to maintain a prudent fiscal policy and closely monitor the highly interconnected financial sector. We broadly agree with the thrust of staff's appraisal and limit our comments to the following for emphasis.

External risks to tax revenue warrant prudent fiscal policy. We welcome staff's quantitative analysis of the impact on Luxembourg's tax revenue from the U.S. tax reform. The estimated potential long-term revenue loss is not negligible. The ongoing international discussion on taxing the digital economy and further reducing the profit shifting adds more complexities and uncertainties. In this regard, we see merit in staff's suggestion to explore growth-friendly options to mitigate these tax revenue risks, including adjusting low property taxes, increasing environment taxes and reducing tax exemptions. In addition, more could be done to maintain Luxembourg's comparative advantages to avoid potential corporate tax base erosion. The authorities' strong commitment to comply with international anti-tax avoidance and the transparency initiative is commendable.

The financial sector is broadly resilient, but vulnerabilities remain. We take note of the recent dynamics in the investment fund sector, including the increased common risk-taking behavior, liquidity and maturity mismatch and larger exposure to sovereign debts outside the euro area. The authorities should closely monitor the above risks, address the leverage and asset quality data gap, and improve system-wide stress testing. The banking sector is well capitalized and liquid, but profitability remains a concern especially for small banks. We concur with staff that the authorities should complete the resolution plan for small banks. Overvalued housing market and high level of household indebtedness are other sources of vulnerability. Recent decision to introduce a countercyclical buffer is a step in the right direction. Looking forward, measures from the borrower's side, including borrower-based mortgage lending limits, could be considered in order to contain the household indebtedness in a well-targeted way. Regarding the Brexit, could staff elaborate more on the relocation of financial service firms from UK to Luxembourg? Is this relocation already happening? If any investment funds relocated to Luxembourg, will they add to the common risk-taking behavior or help to diversify the risks?

Decisive structural reforms are needed to address long-term challenges. Given less favorable demographic dynamics in the future, the pension system requires reforms to ensure its long-term sustainability. We welcome the selected issues paper on the fiscal and macroeconomic impacts of different reform options. Using it as a reference, the authorities are encouraged to reform the pension system in a timely and growth-friendly way. The authorities continuous efforts to diversify the economy, as stated in the buff statement, are welcome. Can staff elaborate more on Luxembourg's progress toward economic diversification, which seems missing in the reports?

With these remarks, we wish the authorities every success in their future endeavors.

Mr. Saito and Mr. Ozaki submitted the following statement:

We thank staff for the informative papers and Mr. De Lannoy and Mr. Jost for their insightful statement. We welcome that Luxembourg's economic growth outlook remains favorable, reflecting sound economic policies, firm prudential oversight, and a business-friendly environment. However, we take note of staff's view that risks are tilted to the downside. Key risks include a weaker-than-expected global growth, changes in international tax rules, a disorderly Brexit, and a sharp tightening of global financial conditions. As we broadly agree with the thrust of the staff's appraisal, we will limit our comments to the following points:

Fiscal Policy

While we appreciate the recently reappointed Government is fully committed to prudent economic and fiscal policies supporting the country's competitiveness and resilience as in the buff statement, we encourage authorities to implement the announced fiscal measures while preserving sizable fiscal buffers. We positively note that public debt–to-GDP ratio is projected to decline to about 20 percent, among the lowest in the EU, and is expected to remain sustainable under different scenarios over the medium term. We observe that the government envisages several expansionary measures in 2019 and likely over the medium term, utilizing its fiscal space. Given the volatility of the tax base and potential contingent liabilities related to the financial sector, we concur with staff's view that fiscal policy should aim to preserve sizeable buffers by continuing to comfortably meet the MTO.

From the perspective of revenue side, we see risk from possible future changes in international taxation, in particular, the ongoing U.S. tax reform. Changes in international taxation might lead to reduce multinationals' incentives to locate assets in Luxembourg and erode the country's corporate tax base, potentially leading to non-negligible tax revenue losses. In this regard, could staff provide their view about how Luxembourg authorities should respond to these changes, and what kind of measures the authorities should take going forward?

Financial Sector

We positively take note that the financial sector, a key driver of growth in the medium term, remained profitable in 2018, despite recent bouts of volatility in global financial markets. We welcome that the authorities took steps to enhance regulation and supervision in line with past staff advice including the 2017 FSAP recommendations. In terms of banks' profitability, we see from Figure 2 that net interest income has been improving since 2016, despite of worldwide low interest rate environment. We are wondering how the banks improve margin from the lending in this challenging environment. Staff's comments are welcome. Turning to broader picture, Luxembourg has been playing its role as a financial center and a hub for multinational companies' treasury activities. In this vein, we invite staff to make comments how the Brexit would affect the financial sector in Luxembourg. In particular, how do staff assess the expected relocation of major financial institutions from London to Luxemburg, taking into account its relative advantage compared to other cities in Europe?

When it comes to the Fintech developments, we favor Luxembourg for being actively engaged in Fintech developments, which could bring efficiency gains and new business opportunities to the financial sector, while risks related to operational, cyber, compliance, and ML/TF have to be carefully monitored.

Structural Reforms

While Luxembourg's pension system is expected to be sound over the near term, we urge the authorities to implement a combination of reforms to ensure the long-term sustainability of the system. We recognize that the pension system is currently in surplus and has accumulated reserves exceeding

30 percent of GDP, with the lowest old-age dependency ratio in Europe and strong net migration flows in recent years. However, given lower population growth, less favorable migration flows and higher life expectancy in the future, we note that pension expenditures are expected to roughly double to 18 percent of GDP by 2070—the highest increase in Europe. We witness that a cross-country comparison shows that Luxembourg has the lowest effective retirement age and the second highest replacement rate in the EU. In this respect, Box 4 provides concise and insightful perspective, with three different illustrative scenarios. We are curious which scenario (or appropriate combination) is most desirable and realistic considering political economy. We also would like to know the appropriate sequencing to gain support from the nationals. Staff's comments are welcome.

Mr. Fanizza and Mr. Spadafora submitted the following statement:

We thank staff for a set of comprehensive reports and Mr. De Lannoy and Mr. Jost for their informative buff statement. We broadly concur with the staff's appraisal and the policy recommendations; we associate ourselves with Mr. Meyer's statement and offer a few comments for emphasis.

Against a backdrop of a broadly favorable economic outlook and sound macroeconomic policies, Luxembourg should keep addressing external downside risks and a number of structural gaps to ensure sustained strong economic performance.

Luxembourg has the fiscal space to accommodate a modest fiscal expansion envisaged in the 2019 draft budget, although the significant improvement in the fiscal balance in 2018 mostly reflects non-recurrent and cyclical factors. Over the longer term, fiscal policy is appropriately targeted at raising the economy's potential and making growth more inclusive, including by mitigating housing affordability challenges and high structural unemployment.

We support the staff's call for preserving strong fiscal buffers while implementing the government's fiscal plan, in light of the specificities of the country's business model, the risks to fiscal revenues posed by possible changes in international taxation and rising age-related costs. We also welcome the authorities' commitment to comply with EU and international anti-tax avoidance and transparency initiatives.

The financial system – Luxembourg's main growth driver – is assessed to be resilient, on the back of high asset quality and larger capital and liquidity buffers; but there is scope for improvements, notably by further implementing the 2017 FSAP recommendations. Banks' profitability has benefitted from a diversification of income sources; but looking forward new challenges have emerged. The financial system as a whole faces risks originating from its size, high interconnectedness and rising liquidity and maturity mismatches. Also, the large investment-fund sector is exposed to an abrupt tightening of global financial conditions, and growing vulnerabilities from common risk-taking strategies driven by search-for-yield pressure.

Against this background, we fully support the staff's recommendations to resolutely address the above risks; further enhancing the risk monitoring and supervisory regime for the investment fund sector is a key priority. In the same vein, steps to improve macroprudential oversight are justified in the face of potential risks in the residential real estate sector.

Finally, we share the staff's call on the authorities to move forward with implementing the strategy based on the National ML/FT Risk Assessment.

Mr. Moreno and Ms. Mulas submitted the following statement:

We thank staff for its report and informative paper, as well as Mr. De Lannoy and Mr. Jost for their candid buff statement. We associate ourselves with Mr. Meyer´s statement and would like to add the following comments for emphasis.

Luxembourg´s economic performance surged in 2018. After slowing in 2017, GDP growth picked up again in 2018 driven by robust domestic demand and a strong labor market. According to staff, the outlook remains favorable, underpinned by robust domestic demand, and real GDP growth is projected at around 2.6 percent in the medium term. However, Luxembourg appears too dependent on the financial sector and lags in diversification of its economic structure. Against this background, we encourage authorities to take advantage of the positive outlook to accelerate its economic diversification strategy by engaging the domestic business and investment community in the current technological and digital transformation.

We agree that risks are tilted to the downside. Global risks, such as a weaker global growth, a tightening of global financial conditions, or a disorderly Brexit, are particularly relevant for Luxembourg. While economic expansion has been remarkable, Luxembourg has also become more dependent on a narrow base of goods and services and sensitive to external shocks. Besides, vulnerabilities have increased due to population ageing and a potential change of international taxation, which, in our view, need to be addressed through structural reforms not through buffers.

Luxembourg maintains its position as a net creditor to the rest of the world. The current account balance has continually run current surplus of around 5 percent since 2013. Its net assets, measured by the net international investment position, have risen to around EUR 27.4 billion in 2018 and reached 47 percent of GDP in 2018. Given these outstanding figures, we consider that greater attention should be given to Luxembourg´s external position. Staff's bottom line assessment is that Luxembourg´s external position is broadly consistent with fundamentals and desirable policies, but, as staff notes, the EBA-lite models can only partially capture some important specificities of Luxembourg.

We welcome that the draft budget envisages some fiscal expansion this year, a path that can be reinforced. Despite the slightly expansionary budget in 2019, authorities expect to register a surplus of 1.0 percent in 2019 and 1.4 percent in 2020, remaining largely compliant with the MTO. Among the key measures, we welcome higher spending on education, healthcare, infrastructure, and the digitalization of the economy to foster its productivity and its diversification strategy. We also welcome the fiscal plans beyond 2019 aiming at lifting the economy´s potential and making growth more inclusive. Luxembourg´s ample fiscal space will allow them to fund higher spending in 2019 and over the medium term, while ensuring compliance—also in structural terms— with the requirements of the Stability and Growth Pact.

Reforms are needed to address the risks to fiscal revenues and the ageing population, as buffers are not enough. Considering that changes in international taxation would be of a structural nature, we consider that a readjustment of the revenue structure would be more suitable than preserving sizeable buffers to address the risk to fiscal revenues. In the same vein, as population ageing is a long-term trend, we agree with staff that further reforms of the pension system are needed to ensure its sustainability. Although the pension reserve fund provides a significant buffer, projections of long-term trends in pensions and long-term care expenditure point at risks to the sustainability of public finances. Considering staff simulations, higher retirement age seems the best option among the ones considered, but we agree with authorities on the importance of discussing the possible reforms with social partners. Could staff advice if other reform options have been discussed with authorities or social partners, besides the ones covered by staff simulations?

We welcome that the Global Forum has rated Luxembourg overall largely compliant. The recent report concludes that Luxembourg has worked to address the deficiencies but stresses the need to improve on the availability of beneficial ownership information on Luxembourg stock companies and partnerships and on the application of taxpayers' rights and safeguards. We welcome that authorities expect to transpose the Anti-Tax Avoidance Directive II by the end of 2019. Notwithstanding these developments, a recent resolution by the European Parliament on financial crimes, tax evasion and tax avoidance (2018/2121(INI)) states that seven EU countries, including Luxembourg, display traits of a tax haven and facilitate aggressive tax planning. Staff's comments are welcome.

Further efforts to fully implement the 2017 FSAP recommendations are needed. We welcome that authorities remain committed to implementing robust financial policies, notably by continuously adjusting the national regulatory framework and macroprudential surveillance to evolving international standards and best practices. We note that, while most of the short and medium-term key recommendations have already been implemented, the recommendation on AML/CFL of agreeing on the roles and responsibilities in dealing with a system-wide crisis is still under consideration.

Structural reforms are needed to foster private investment and to enhance housing affordability. Private investment, especially on innovative technologies and digitization, remains low compared with the euro area average. The perceived shortage of qualified workforce across sectors, mobility concerns and expensive and rising housing prices might be negatively affecting the country's attractiveness, and hence restraining a surge of private investment.

Mr. Di Tata and Mr. Corvalan Mendoza submitted the following statement:

We thank staff for a comprehensive set of well-written reports and Mr. De Lannoy and Mr. Jost for their informative buff Statement.

Reflecting sound macroeconomic policies and a favorable global environment, in recent years Luxembourg's economy has experienced solid growth and strong labor market conditions. Real GDP growth increased to 2.6 percent in 2018, unemployment fell to its lowest level since 2009, and average core inflation declined below 1 percent. The external position remains broadly consistent with fundamentals and public debt is estimated at around 22 percent of GDP. The economic outlook remains favorable. Potential growth is projected at 2.6 percent over the medium term, supported by strong domestic demand, and core inflation is expected to increase to 1.9 percent driven by strong wage growth. Key risks include weaker than expected global growth, changes in international taxation, a disorderly Brexit, and a sharp tightening of global financial conditions.

Against this backdrop, we welcome the government's commitment to prudent macroeconomic policies in support of the country's competitiveness and resilience, while promoting inclusiveness. We also agree with the consultation's focus on fiscal policy, risks from changes in international taxation that could affect tax planning by multinational firms, measures to enhance financial sector resilience, and key reforms to address structural gaps.

The fiscal position remains sound, but strong buffers should be preserved. The general government fiscal surplus is expected to decline to 0.9 percent of GDP in 2019, from 2.4 percent in 2018, owing to the nonrecurrence of temporary factors and the implementation of several revenue and expenditure measures, including a reduction in the CIT rate and higher spending on education, healthcare, and infrastructure. The government's medium-term fiscal plans include additional fiscal measures, including stepping up public investment in infrastructure and housing, generalizing individual income taxation and reforming real estate taxation, and introducing free public transport in 2020 to support more inclusive and greener mobility. However, the cost of these measures has not yet been determined. Without considering these initiatives, staff notes that the fiscal surplus would increase to 1.3 percent of GDP over the medium term due to higher social contributions and VAT revenues.

We concur with staff that the government's fiscal plans should be implemented while preserving sizable buffers, given the volatility of the tax base and potential contingent liabilities related to the financial sector. In this regard, we notice that estimates included in Box 1 suggest that the long-term revenue losses in Luxembourg related to the recent reduction in the CIT rate in the US could amount to about 0.4 percent of GDP, and that these losses could increase if a reduction in Luxembourg's CIT rate or possible changes in international taxation that pose risks to the country's revenues were to materialize. In this connection, we welcome the authorities' commitment to meeting the EU fiscal rules and keeping the public debt below 30 percent, as well as to exploring growth friendly options to mitigate revenue risks from possible changes in international taxation.

Regarding the financial sector, banks are profitable, maintain high levels of capital and liquidity and exhibit low levels of NPLs, and stress tests confirm that they are resilient to shocks. At the same time, although financial stress in the investment fund sector remains contained, staff notes that that there are growing vulnerabilities that could lead to liquidity strains and spillovers if global conditions were to tighten sharply. Against this backdrop, we welcome the authorities' efforts to implement past staff advice and FSAP recommendations. Going forward, we encourage them to further strengthen the supervision of banks' large cross-border exposures, complete the resolution plans for the less systemic banks, and work closely with the ECB to implement the credit bureau across the euro area. Regarding investment funds, efforts should continue to engage regulators in jurisdictions where delegated portfolio and risk management are important and to enhance macroprudential-based surveillance. On a related matter, could staff comment on the timeline for approval of the draft bill to implement the borrower-based mortgage lending limits as well as to enshrine into law the role of the central bank in financial stability analysis? In addition, could staff elaborate further on the authorities' position with regards to the staff's recommendation to upgrade governance arrangements for the BCL Supervisory Board and the financial supervisory bodies?

We welcome the steps taken by the Commission de Surveillance du Secteur Financier (CSSF) to strengthen the ML/TF legal framework, the completion of the first National Risk Assessment (NRA) report, and the recent establishment of the Register of Beneficial Owners of corporate and other legal entities. Looking ahead, we encourage the authorities to move forward with the implementation of the national strategy based on the NRA, focusing on mitigating risks related to private banking and foreign trusts.

Luxembourg's pension system is sound over the short and medium term but faces significant challenges in the long run given less favorable migration flows and population ageing. In the absence of pension reform, the projected increase in pension expenditures could have important implications for the fiscal deficit and the public debt. Although the pension reserve fund provides a significant buffer, we concur with staff on the need to engage key stakeholders in a timely manner to discuss the macroeconomic tradeoffs of reform options to ensure the system's long-term sustainability.

Other key structural areas that need to be addressed include supply constraints in the housing market, relatively high structural unemployment, and infrastructure bottlenecks. Regarding the housing market, we encourage the authorities to press ahead with the announced policies to expand social housing to alleviate affordability pressures. With respect to unemployment, we welcome the recent increase in incentives for job searching. We also welcome the measures taken in recent years to increase elderly labor market participation. Going forward, we encourage the authorities to move ahead with further actions to raise labor market participation of seniors, including by phasing out benefits for early retirement, and to increase incentives for female participation. Despite Luxembourg's high public investment spending, there is substantial room to improve investment efficiency, including by implementing a medium-term expenditure framework to improve the coordination and prioritization of investment projects.

With these comments, we wish the people of Luxembourg every success in their future endeavors.

Ms. Mannathoko and Mr. Essuvi submitted the following statement:

We appreciate staff's report, and thank Messrs. De Lannoy and Jost for their helpful buff statement. We commend the Luxembourg authorities on the economy's solid performance record, reflecting in part, sound and prudent economic policies, strong supervisory oversight and a business-friendly environment. Nevertheless, the economy faces a combination of risks ranging from accelerating housing prices, to the possibility of a sharp tightening of global financial conditions, weaker-than-expected euro area growth, a disorderly Brexit, and adverse revenue effects from changes in international tax rules. We note the authorities' efforts to address these challenges, and encourage timely delivery on the fiscal measures and structural reforms proposed. We are in broad agreement with the staff's assessment and recommendations and offer the following additional observations.

Given the economy's vulnerability to external risks under the current business model, we agree that fiscal policy should aim to build buffers, diversify the fiscal revenue base, and develop strong contingency plans. Nevertheless, the expansionary fiscal stance in 2019 makes sense in the wake of a much higher than projected fiscal surplus in 2018, and given the need to sustain growth under the agenda to lift the economy's potential and boost its resilience and inclusiveness. We also note that the authorities are fully compliant with EU fiscal rules and that debt is low and declining. Beyond this, the authorities continue to exercise prudence, accumulating savings in a pension reserve fund that will finance rising pension obligations from an aging population in the future. That said, given the varied external risks to revenues, could staff elaborate on planned measures to diversify the fiscal revenue base? Could staff also comment further on the potential contingent liabilities related to the financial sector, mentioned in the report?

The vulnerabilities that remain in the financial sector despite its broad resilience, alongside increasing risks, necessitate close monitoring of the sector, broad-based stress testing and strengthened regulation and risk based supervision in pace with Fintech developments. We take note of the authorities' efforts to further enhance system-wide supervision, improve the effectiveness of liquidity management tools, upgrade governance and address risks related to AML/CFT. Nevertheless, we wish to encourage the authorities to go further, and complete outstanding measures under the 2017 FSAP recommendations.

High levels of household indebtedness in an overvalued housing market will leave some households vulnerable to increased debt service and possible default should monetary policy normalization force a correction. While banks may be able to withstand the resultant expansion in high loan-to-value ratios, it is unclear what the broader impact would be. To what extent would such a shock be a precursor to slower growth? Staff comments are welcome. It is a concern that high house prices continue to affect house affordability in a market with already excessive household indebtedness. We encourage the authorities to prioritize the mobilization of housing supply to help contain the development of a significant real estate price bubble. We note the plan to change urban laws, boost construction of social housing and implement a housing reform taxation system to address supply constraints in the housing market. Could staff also comment on the fiscal implications of these envisaged reforms? Have they been factored into projections?

Effective structural reforms are critical in addressing the economy's growth potential and long term fiscal sustainability, and in this regard, tackling the remaining challenges in the labor market is also important. As long term unemployment has not yet reverted to the lower levels of the past, (following the higher unemployment seen post-GFC), re-empowering and re-skilling unemployed labor in a manner that reduces skills mismatches becomes especially important. Could staff elaborate on measures the authorities are using to ensure re-skilling beyond digital aptitudes matches specific industry needs, positioning unemployed labor to be able to fill existing vacancies? With respect to the relatively low elderly labor market participation, it is unclear why the authorities would continue to provide early retirement benefits in this context. Could staff discuss the reasons for this?

With these comments we wish the authorities continued success.

Mr. Mouminah, Mr. Alkhareif and Mr. Rouai submitted the following statement:

We thank staff for an informative set of reports and Mr. De Lannoy and Mr. Jost for their helpful buff statement. We broadly share staff conclusions and policy recommendations and would like to limit our remarks to the following points.

Luxembourg continues to benefit from its strong fundamentals. GDP and employment growth remains strong, the fiscal position is sound, and public debt is low. Despite its comfortable buffers, Luxembourg is, however, vulnerable to external risks associated with its open economy, high dependence on financial services, and changes in international taxation rules and transparency standards. Staff caution on the need for care in analyzing GDP figures given the frequent and substantial revisions to national accounts. In this regard, we noted that between last year and this year Article IV reports, GDP growth has been revised down by 1 to 2 percentage point per year for the period 2017-2020. In addition, we also noted a large difference between staff and the authorities' projections of GDP growth for 2019 and 2020. Could staff clarify if there are plans to address this weakness and to what extent these revisions may affect staff assessment of macroeconomic developments in Luxembourg and policy advice?

Fiscal policy remains prudent. We commend the authorities for their sound fiscal policy reflected in a fiscal surplus of 2.4 percent of GDP in 2018 and a relatively low public debt. We consider that the 2019 fiscal stance to support, among other things, higher spending in education, healthcare, and infrastructure is appropriate since it remains compliant with the EU medium-term fiscal objective (MTO) and with the authorities' commitment of keeping public debt below 30 percent of GDP and preserving the sizable fiscal buffers.

The authorities are making good progress in complying with international anti-tax avoidance and tax transparency initiatives and in being alert to emerging risks. We welcome the indication that the authorities are implementing actions to align Luxembourg's tax framework to international standards, including those set by the OECD such as the BEPS action plan. We are also reassured that the authorities are monitoring developments and stand ready to adapt and mitigate risks associated with relocation of assets.

The financial system remains resilient. However, because of Luxembourg's high interconnectedness, we encourage the authorities to continue strengthening supervision of investment funds and of banks' large cross-border exposures and to remain vigilant to risks in the real estate market. In the same vein, we welcome the authorities' actions to strengthen the AML/CFT framework and we encourage them to continue their efforts and closely monitor emerging risks, including those from Fintech.

Structural reforms remains critical. Staff refers to the important long-term challenges facing Luxembourg, including population aging, supply constraints in the housing market, and gaps in infrastructure. We note that the authorities share these concerns and are open to further reforms to ensure the sustainability of the pension system and reduce structural unemployment and gaps in housing and infrastructure.

With these remarks, we wish the authorities all the success.

Mr. Ostros and Ms. Karjanlahti submitted the following statement:

We thank staff for their reports and Mr. de Lannoy and Mr. Just for their informative BUFF statement. Luxembourg's growth prospects are robust, and we commend the authorities for their sound economic policies. Despite this, being a small open economy reliant on the financial service leaves Luxembourg exposed to external risks including a negative surprise on global growth, sudden changes in financial conditions, or changes in the international tax rules. We associate ourselves with Mr. Meyer's gray, and generally concur with staff's appraisal, while adding the following for emphasis.

We support the growth-friendly fiscal policy coupled with a strong and prudent fiscal framework and efforts to comply with EU and international anti-tax avoidance initiatives. As revenues from multinational profits constitute a major share of Luxembourg's tax revenues, insecurities arise from the on-going changes in the international environment. Improving the transparency and efficiency of the global tax system is an important objective and complying with the initiatives may create some new opportunities for Luxembourg. At the same time, changes in the incentive structures may lead to a reallocation of assets negatively affecting the revenue base. We concur with staff's advice on the importance of quantifying the risks and maintaining a focus on inclusive growth-friendly fiscal policy while maintaining fiscal buffers, broadening the tax base and keeping with the structural surplus target along the lines of the MTO.

While the financial sector remains resilient, its size, interconnectedness, and the rising risks call for enhanced supervision and regulation. The increasing vulnerabilities in the large investment fund sector require continued attention. We appreciate the efforts to improve supervision, but we support staff's suggestion to strengthen the macroprudential surveillance of the sector, including monitoring the growing maturity and liquidity mismatches. In the banking sector, capital buffers are large and asset quality high, but rising operational costs have increased profitability risks. Also, risk related to anti money-laundering warrant attention. We encourage the authorities to maintain vigilance in mitigating the risk identified in the National Risk Assessment, particularly related to private banking and foreign trusts.

Preparing for the future requires reforming the pension system and increasing labor force participation. Staff's longer-term projection of pension expenditures portrays drastic increases in costs if the current combination of low retirement age, contribution, and high replacements rate is maintained. Thus, starting the process of reforming the pensions system over the medium term is warranted. Labor market reforms will help the economy to adapt to an aging labor force. We are encouraged by the authorities' plans to move to a fully individual income taxation in support of women's labor force participation. We also commend the efforts to increase the labor force participation of the elderly.

Mr. Johnston and Mr. Khurelbaatar submitted the following statement:

We thank staff for the report and Mr. De Lannoy and Mr. Jost for their buff statement. Luxembourg's role as a financial center has served the country well. The stable political situation, legal framework and business environment have helped this sector, and the wider economy, perform well in recent years. Continued fiscal surpluses have helped keep public debt low, putting the country in a strong position to face short term negative external shocks.

We agree that Luxembourg's vulnerabilities are mainly external, although the country's economic outlook remains positive. As staff point out, a disorderly Brexit, changes in international taxation settings and lower global growth could have a negative effect on the economy. Although the country's main risks are an external, the authorities could use the current favorable environment to make progress on some long-term structural issues such a housing, infrastructure, pension reform and diversification of the economy.

We welcome the authorities' strong commitment to comply with international anti-tax avoidance and transparency initiatives. The recent reviews by the Global Forum and the OECD, and the legislative changes that have been made to reflect international standards and directives, show the country's commitment. This is essential in maintaining the country's status as an important financial center in an increasingly competitive environment.

Mr. Fachada and Mr. Antunes submitted the following statement:

We thank staff for the reports and Mr. De Lannoy and Mr. Jost for their useful statement. With low public debt and recurrent budget surpluses, Luxembourg is in a comfortable fiscal situation, coupled with a solid external position. Nevertheless, there are important external risks in the horizon. In this context, Luxembourg's plans to boost potential growth and make it more inclusive and sustainable are welcome. Further, we commend the authorities' continued efforts to enhance the resilience of the financial sector, a key part of Luxembourg's economy.

Luxembourg fiscal position remains strong, allowing for well-designed public investments to improve infrastructure and increase housing supply. The authorities are delivering consistent budget surpluses and public debt remains among the lowest in advanced countries. Therefore, there is fiscal space to back the authorities' ambitious plans to enhance inclusive growth, step up environmental efforts and boost economic potential. Nevertheless, we agree with staff's evaluation that risks are tilted to the downside. Changes in international taxation may reduce revenues, making Luxembourg less attractive for multinational corporations. The consequences of Brexit remain uncertain. Furthermore, a faster-than-expected deceleration in other euro area economies may negatively impact economic activity. Accordingly, we second staff's assessment that Luxembourg should seek to preserve sizable fiscal buffers.

Inflation is under control in a context of robust domestic demand, and the external position remains solid. Reflecting significant increases in wages in a context of low unemployment and strong economic growth, inflation is projected to increase slightly, remaining well under control, however. We take note that, with current account surpluses around 5 percent of GDP fueled by a highly competitive services sector, Luxembourg's external position is assessed by staff as broadly consistent with fundamentals and desired policy settings. However, we underscore that external sector models in general cannot capture the specificities of Luxembourg's economy.

The authorities have been taking appropriate steps to contain financial stability risks. However, as a small open economy and a financial hub, Luxembourg remains vulnerable to external shocks.  We commend the authorities' ongoing efforts to strengthen financial supervision in line with the recommendations of the 2017 Financial Stability Assessment Program (FSAP). The large cross-border exposure of banks justifies staff's calls for enhanced supervision, although liquidity buffers of Luxembourg's banks seem adequate and above regional average. We also second staff's assessment that fintech developments bring new business opportunities, as well as new operational, compliance, ML/CT and cyber risks, requiring updated monitoring arrangements. We take note that Luxembourg rates as "largely compliant" in the 2019 peer review by the Global Forum on Tax Transparency and Exchange of Information for Tax Purposes, as well as "fully compliant" on exchange of information on tax rulings according to the OECD.

Luxembourg is in a position to lead the way in the adoption of innovative social policies for inclusive and environmentally sustainable development. We commend the authorities' endeavor to provide affordable housing and to step up efforts to transition towards a greener economy. Particularly interesting is Luxembourg's free public transportation policies, aiming at reducing traffic jams and carbon emissions. In a moment when several countries are trying to devise the best policies to reduce fuel subsidies and/or carbon emissions, while protecting the most vulnerable sectors of society, Luxembourg's pioneering initiative may yield useful insights. Could staff provide more details about the transportation policies being proposed by Luxembourg's authorities, including their estimated fiscal, social and environmental impact?

Ms. Pollard and Ms. Svenstrup submitted the following statement:

We thank staff for their report and the informative Selected Issues Paper and Mr. De Lannoy and Mr. Jost for the additional details in their buff statement.

Luxembourg continues to experience robust growth and macroeconomic stability, reflecting the authorities' sound policies. Nevertheless, given the country's status as a global financial center and the openness of the economy, Luxembourg faces challenges from external factors and evolving tax regimes, which could have implications for growth and stability. We welcome the authorities' commitment to implement the EU and international transparency and anti-tax avoidance agenda and encourage further progress consistent with staff's recommendations. We broadly agree with staff's assessment and limit our comments to a few specific points:

Luxembourg has fiscal space to fund near-term fiscal expansion, including as envisioned in the 2019 budget, while protecting fiscal buffers. We agree that the spending composition in the medium term should be geared toward promoting inclusive growth and lifting potential. Staff recommend that the authorities seek to quantify risks associated with changes in international taxation and explore growth-friendly options to mitigate them over the medium term. Could staff clarify if this work underway, and if so, are staff involved in these discussions? Given plans to scale up infrastructure investment, we strongly urge the authorities to enhance their project screening, prioritization, and oversight frameworks to maximize efficiency and returns on public funds.

Luxembourg's financial system remains resilient, and we welcome the authorities' concrete progress in implementing the 2017 FSAP recommendations. Given the financial sector's high degree of interconnectedness and potential exposure to Brexit, particularly for investment funds, we urge the authorities to continue to take steps to enhance regulation and supervision practices in line with staff advice. We also encourage continued efforts to strengthen AML/CFT frameworks and oversight to the FATF standards, including in the area of fintech.

We agree with staff that efforts to address structural challenges are necessary to further support medium-term sustainable and inclusive growth, including regarding housing, infrastructure investment, and eventually pensions. We also welcome the authorities' efforts to reduce structural unemployment by improving skills matching and training, and better aligning taxes and benefits to incentivize labor market participation.

The Selected Issues Paper on the public pension system in Luxembourg illustrates that even countries with large pension fund reserves can be at risk of substantial increases in fiscal costs as a result of demographic changes. Structural policies to boost growth and raise the female labor force participation rate can reduce some of the projected fiscal costs. We agree, with staff, however, that policies aimed at reducing the generosity of the system, including through raising the retirement age, are needed. Could staff indicate whether policies to boost private saving for retirement could also be helpful?

Ms. Levonian, Ms. McKiernan and Mr. Mooney submitted the following statement:

We thank staff for their comprehensive report and Messrs. De Lannoy and Jost for their informative buff statement. The Luxembourg economy remains solid, the banking sector appears to be resilient and unemployment rates are at their lowest since 2009. However, the balance of risks is tilted to the downside, including the potential for weaker-than-expected global growth, a sharp tightening of global financial conditions and a disorderly Brexit. As we broadly agree with the thrust of the staff appraisal, we offer only the following remarks for emphasis.

We agree with staff that the authorities should implement the announced fiscal measures while preserving sizable fiscal buffers. In this regard, we agree that the spending composition should be geared towards promoting inclusive growth and lifting the economy's potential. In addition, we welcome the authorities' intention to make growth "greener." We welcome Luxembourg's positive rating in the 2019 peer review by the Global Forum on Tax Transparency and Exchange of Information for Tax Purposes. We note the authorities' commitment to implement the BEPS actions as outlined in Appendix I, in addition to plans to implement the EU's Anti-Tax Avoidance Directive II (ATAD II) by January 2020. We agree with staff that, in order to mitigate revenue risks, authorities should explore alternative growth-friendly revenue-raising options.

We welcome the further progress made by authorities in the implementation of the 2017 FSAP recommendations. In this regard, we note the recent efforts to strengthen the supervision of both investment funds and banks' large cross-border exposures. We note the ongoing preparation of the national AML/CFT strategy and encourage the authorities to transpose the 5$^{th}$ EU AML Directive in a timely manner. While noting that solvency stress tests indicate that the banking system as a whole remains resilient to severe macro shocks, we nevertheless encourage authorities to monitor risks in the real estate market and continue to take further action as required.

We welcome the analysis of the pension system in Luxembourg contained in the Selected Issues Paper. We concur with staff that, despite the short-term soundness of the pension system, an early engagement of key stakeholders is needed to allow for a gradual transition and more intergenerational equity. We welcome the policies introduced by authorities to make growth more inclusive, in particular the tax measures to enhance female labor market participation, and the introduction of free public transport in 2020 to support more inclusive and greener mobility. Finally, we agree with staff that public investment policy could be better articulated with multiyear expenditure planning to ensure that investment expenditures are driven by policy priorities and fiscal objectives.

Ms. Mahasandana and Ms. Ong submitted the following statement:

We thank staff for an informative set of reports, and Messrs. De Lannoy and Jost for their helpful buff statement. The Luxembourg economy continues to perform well, underpinned by effective macroeconomic stewardship and a favorable external environment. Given robust employment and growth prospects, the authorities should leverage their position of strength to boost resilience against downside risks and tackle longer-term structural challenges, including from aging costs. We support the thrust of the staff appraisal and note the broad convergence in views between staff and authorities.

Fiscal headwinds should be tackled proactively. The authorities' track record of sound fiscal policy is reflected in low and declining public debt levels. We welcome Luxembourg's commitment to comply with international tax transparency standards, as affirmed by recent ratings in Global Forum peer reviews. Nonetheless, international tax developments inevitably increase uncertainty regarding future tax performance. Meanwhile, sharply rising pension liabilities may substantially narrow fiscal space, even as aging-related spending pressures build. We therefore encourage the authorities to find growth-friendly ways to make the tax base broader and more stable. Pension reforms will also be necessary to preserve long-term fiscal sustainability, given the relative generosity of the current system. In this regard, Luxembourg's fiscal buffers offer ample lead time to find a solution that ensures inter-generational equity in a manner consistent with social preferences. Staff's analysis of different reform options in the SIP seems a useful reference in this process. Could staff elaborate on the impact of raising the statutory retirement age, which currently exceeds the effective retirement age?

Luxembourg's financial sector is both domestically and globally systemic, and we welcome that it remains resilient. We commend the authorities' prudent oversight of the financial sector and the progress made in addressing the findings of the 2017 FSAP. Given price pressures in the housing market, elevated household indebtedness, and the prevalence of high-LTV mortgages, the authorities should press on with pending legislation to embed borrower-based regulations in the macroprudential toolkit. Systemic risks in the large investment fund sector also warrant close monitoring, particularly those stemming from increased common risk-taking behavior. Could staff elaborate on the authorities' plans if systemic vulnerabilities in the investment fund sector were to crystallize? We positively note progress in strengthening AML/CFT regulation, including the finalization of the National

Risk Assessment and the transposition of EU AML rules into domestic legislation.

Efforts to diversify the economy and address structural gaps should continue. We welcome the authorities’ active labor market strategy and encourage further efforts to boost elderly labor force participation and tackle long-term structural employment. While the analysis of public investment efficiency seems somewhat cursory, we can see merit in enhancing inter-ministry coordination and prioritization of the public investment pipeline. Finally, we strongly support the authorities’ efforts to diversify the financial sector and the economy as a whole.

Mr. Castets and Ms. Gilliot submitted the following statement:

We thank staff for their insightful and interesting set of documents and Mr. De Lannoy and Mr. Jost for their useful buff statement. We commend the authorities for the strong performances of the economy which has been reflected for several years now in strong growth and domestic demand, dynamic job creation and continuous decline in unemployment. The fiscal position remains sound and solid sustained by sizable fiscal buffers while, on the financial side, the banking sector remains resilient, liquid and profitable despite rising operational costs. We broadly share staff’s overall assessment on sound economic policies and rising external downside risks including deceleration in global growth and a sharp tightening of global financial conditions. We associate ourselves with Mr. Meyer’s statement and wish to add some remarks for emphasis.

Outlook and risks

The strong performance of the economy has been driven by dynamic private and public consumption. Moreover, the banking system proved resilient and displayed efforts to diversify sources of income with commission and fees in a context of low interest rates. This buoyant economic activity has been fueling job creations and wage growth contributing hence to boost private consumption. Luxembourg also remains an attractive destination for multinational corporations’ treasury operations. Consequently, and supported by a large share of financial services trade in GDP, the current account surplus has remained stable at a level of around 5 percent of GDP broadly consistent with the level implied by fundamentals. Still, risks are tilted to the downside both in terms of preparedness to address structural domestic challenges including infrastructure gap, housing affordability and inclusiveness and in terms of capacity to cope with global uncertainty related to trade tensions, downward macroeconomic projections and political turbulences.

Fiscal policy

The strong position of public finances creates room to deal with rising external risks and address age-related challenges.

Given the ample fiscal room for maneuver with nominal and structural fiscal surplus exceeding the EU Medium-Term Objective, the authorities could consider alternative growth-friendly scenarios to offset the impact of potential external risks. Tax reforms including an increase in property and environmental taxes and reduction in tax exemptions including the numerous non-compulsory exemptions in the VAT system could also help mitigate revenue risks rate. Furthermore, ensuring the long-term sustainability of the pension system is critical in a context of population ageing, less favorable migration flows and generous current pension plans. Ageing cost coming ahead is noteworthy. The significant buffer – assets amounting to 33 percent of GDP – from the dedicated pension reserve funds allows the authorities to engage with stakeholders on a gradual adjustment starting to ensure the pension system' long term sustainability.

Progress has been made to strengthen the tax transparency framework through the introduction of a new (BEPS-compliant) IP box regime and the timely transposition of the EC's Anti-Tax Avoidance Directive (ATAD) I into national law. We acknowledge the expected transposition of ATAD II by the end of 2019 and appreciate the detailed information given by Mr. De Lannoy and Mr. Jost for their buff statement in this regard and the commitment of the Government to remain committed to aligning the tax framework to international developments. However, more needs to be done to enhance tax transparency and cooperation, as well as to enhance the AML-CFT framework and its effective implementation. We strongly encourage the authorities to transpose the 5th EU AML Directive in a timely manner and implement the national strategy develop based on the first published National Risk Assessment report which highlights private banking and foreign trusts as sources of risks.

Financial sector

Financial sector's resilience should be further enhanced in line with the 2017 FSAP recommendations. The financial sector including the banking sector and the investment fund industry remains a key driver of growth. As such, we agree that weaker performance in this sector could adversely affect national economic activity and reduce tax revenues. The update of the 2017 FSAP recommendations is indeed very useful to evaluate the progress made by the CSSF to strengthen the supervision framework, in particular of intra-group exposures and of investment fund industry systemic risks including the liquidity risk analysis. We encourage the authorities to proceed further with the implementation of the FSAP recommendation to enhance the fund industry's surveillance and address the already high household indebtedness and the risks associated to rising housing prices and financial stability. Risks in the real estate market should be further monitored and mitigated by expanding the macroprudential policy toolkit with borrower-based mortgage lending limits and have the corresponding draft bill approved. Residential real estate market and bank-investment fund interlinkages represent critical risks that should continue to be monitored closely. We salute the efforts made to close the remaining data gaps in this respect and support the recommendation to enhance the cooperation between the Banque centrale du Luxembourg and the ECB to include household credit data in the ECB's initiative of creating a harmonized credit bureau across the euro area. We feel that, given the centric role of Luxembourg as a European and worldwide financial center, mentioning the importance of the Banking Union's deepening and the Capital Market Union would have been relevant for Luxembourg and the Euro Area. Challenges arising front Fintech should also continue to be closely observed.

Structural policies

Further structural reforms should be implemented to enhance both growth's potential and inclusiveness by removing structural bottlenecks in the labor and housing markets as well as in infrastructure. Supply-side constraints and growing demand are putting pressure on house prices and the announced measures aimed at boosting the building of social rental housing are welcome in this context and will contribute to ease up the housing affordability levels. Likewise, the strong public finance position allows for more capital spending, namely in transportation, even though Luxembourg has maintained relatively high public investment spending for a long time. A medium-term expenditure framework would certainly contribute to the identification of priority investment projects and enhance consequently public spending's efficiency. To bolster potential growth, we concur with staff that more is needed to reduce structural unemployment and increase market participation for the most vulnerable and in particular female, elderly but also young and low qualified workers labor market participation. In this regard, we salute the introduction of the Revenu d'Inclusion Sociale in January 2019 to increase incentives to job-seekers.

Mr. Inderbinen and Ms. Urbanowska submitted the following statement:

We thank staff for their candid set of reports and Messrs. De Lannoy and Jost for their insightful buff statement. We broadly share staff's assessment of the economic outlook and the balance of risks, and we would like to offer the following comments.

Luxembourg's economy continues to perform strongly. Robust economic performance is in large part due to sound economic and fiscal policies, openness, strong institutions, and the competitive financial sector. Growth prospects remain favorable, while potential downside risks stem predominantly from the external environment, including changes in international taxation, a potential no-deal Brexit, and weaker-than-expected global growth. Domestically, rising housing prices could aggravate already elevated household indebtedness and increase affordability challenges. Against this background, future policy efforts should aim at ensuring financial stability and economic resilience and address key structural impediments to growth.

Longstanding prudent fiscal policy has resulted in sound public finances. The budgetary surplus and low public debt allow for some fiscal expansion this year. We welcome the authorities' plans to increase spending on infrastructure, education, and digitalization of the economy—all aimed at lifting potential and inclusive growth—while preserving sizable fiscal buffers. We share staff's view that the U.S. tax reform and changes in international taxation could have negative spillovers on revenue. We note the authorities support of a global consensus-based approach to international tax policy, and their emphasis on the importance of ensuring a level playing field. The authorities highlight that the impact of the evolving international tax standards on revenue is currently not significant, given the strong revenue performance. Nonetheless, quantifying the possible impact under different scenarios and exploring options to mitigate the impact would seem useful. Could staff offer comments on the revenue impact of different scenarios of international tax policy?

The well-developed and highly integrated financial sector is a key driver of economic growth. Banks are profitable and have solid capital and liquidity ratios, and they would be able to withstand shocks. This said, vulnerabilities to investment funds are growing. The authorities should thus continue to extend and improve data coverage. More generally, it is important to further enhance regulatory, supervisory, and macroprudential measures in line with the 2017 FSAP recommendations. In addition, risks related to the real estate and mortgage markets, and in particular those stemming from rising housing prices, should remain under close surveillance. We welcome the announced introduction of a counter-cyclical capital buffer.

Structural reforms should focus on addressing key challenges in the economy. Despite recent strong job creation, Luxembourg faces relatively high structural unemployment. Measurers focused on attracting a skilled workforce and increasing elderly labor market participation could alleviate some structural bottlenecks. Also, further efforts to tackle Luxemburg's pension system would help mitigate spending pressure in the future. We support staff's advice on advancing measures to stimulate housing supply, particularly the amount of land available for building and the supply of social housing. Could staff comment on the functionality of the residential rental market? Finally, we underscore the significance of investment in infrastructure, innovation, and education to boost competitiveness, productivity and support diversification of the economy.

Mr. Raghani and Mr. Carvalho da Silveira submitted the following statement:

We thank staff for the set of comprehensive papers and Mr. De Lannoy and Mr. Jost for their helpful buff statement.

We commend the Luxembourgish authorities for their sound policy implementation which has helped preserve macroeconomic stability and steady growth above EU average over recent years. Economic activity continued to improve with real GDP growth reaching 2.6 percent in 2018, underpinned by robust demand. The expansion has led the unemployment to reach its lowest rate in a decade at about 5 percent, while keeping the inflation low. The external position of the country also continues to be strong and in line with fundamentals. While the outlook remains expansionary, downside risks stem from external factors, notably tightening financial conditions, global growth slowdown, a disruptive Brexit and developments in the international taxation landscape. The rising real estate prices and household indebtedness add to the risks. Against this background, we share the view that efforts looking forward should aim at safeguarding fiscal buffers, strengthening the resilience of the financial sector and addressing existing structural bottlenecks to boost long-term inclusive growth.

We broadly agree with staff's analysis and policy recommendations and will confine our comments to the following issues.

Strong fiscal buffers are essential to weather external shocks related to financial sector and international tax developments. We note the expansionary fiscal stance and the range of measures planned by the authorities for 2019 and beyond to support competitiveness, reduce ecological footprint and promote inclusive growth, as highlighted in the buff statement. We also welcome actions taken to comply with International Tax Initiatives, including the implementation of the BEPS actions, Intellectual Property Regime (IP) and Anti-Tax Avoidance Directives, which have helped the country secure the rating of "largely compliant" by the 2019 OECD report. Notwithstanding these positive steps, various developments in the international tax landscape could pose risks to the authorities' tax revenue efforts, given the volatile nature of their tax base. Box 1 presents a good example of potential spillovers from the ongoing U.S. tax reform to Luxembourg's fiscal revenues. Going forward, we agree with staff that revenue risks should be adequately quantified and addressed in a growth-friendly manner. Building strong buffers will be helpful in case these risks materialize.

While the financial system is resilient, the 2017 FSAP recommendations should be fully and swiftly implemented in light of rising vulnerabilities. The progress made to strengthen regulation and supervision of the banking and investment fund sectors, improve macroprudential oversight and anti-money laundering and combating of terrorism financing (AML/CFT) legal framework while closing data gaps go in the right direction. We concur that, while these efforts should continue, attention should also be given to (i) banking cross-border exposures, (ii) resolution plan for smaller banks, (iii) collaboration with other regulators and (iv) macroprudential-based surveillance for investment funds. The high and rising property prices and their effect on the already elevated household's indebtedness also warrant close monitoring in order to safeguard financial stability. Could staff comment on the expected timeline for the approval of the draft bill to implement borrow-based mortgage lending limits?

We are pleased to note that Luxembourg is making strides in the Fintech area and that important steps were taken to close gaps in the legal framework for blockchain. Looking ahead, we reiterate the importance of regulation striking a sensible balance between creating a supportive space for innovation and maintaining a robust regulatory framework capable of containing emerging risks. The creation of the Luxembourg House for Financial Technology (LHoFT) and the International Climate Finance Accelerator Luxembourg are welcome steps. That said, we wonder whether the Commission de Surveillance du Secteur Financier (CSSF) has assumed an official position regarding virtual currency initial coin offerings (ICOs) or crowdfunding? Are there any fintech-specific laws or regulations being considered or envisaged in Luxembourg in 2019?

Finally, we welcome the authorities' commitment to address major structural challenges to make growth sustainable and more inclusive. We appreciate the emphasis given by the authorities to alleviating housing supply constraints with planned reforms to urban planning laws and real estate taxation. We encourage the authorities to advance much-needed reforms to enhance labor market efficiency while incentivizing labor participation especially for the vulnerable segments of the population, reinforce public investment efficiency and ensure the sustainability of the pension system in the long-term. On the latter challenge, we appreciate the analysis of the Selected Issues paper and note that an increase in the retirement age seems to carry larger macroeconomic advantages than the other two pension reform options, namely an increase in contribution rates and a reduction of benefits. We would inquire the state of the authorities' reflection on this option, if any, noting that the senior population has historically recorded a low labor participation in Luxembourg? Staff's elaboration is welcome.

With these remarks, we wish the authorities success in their future endeavors.

Mr. Just submitted the following statement:

We thank staff for their informative reports, and Mr. De Lannoy and Mr. Jost for their helpful buff statement.

Luxembourg's economy continues to show an outstanding performance in various dimensions. This achievement is linked, inter alia, to its specialization strategy focused on the financial sector. We welcome the authorities' efforts to ensure the sustainability of this success and proactively manage risks arising from possible revenue losses from international corporate taxation to further broaden the basis of economic growth and making growth more inclusive. A cautious fiscal policy stance, measures to further strengthen financial regulation and supervision as well as policies to tackle existing structural gaps (e.g. with respect to structural unemployment and housing) and bottlenecks (e.g. with respect to transportation) are important also for increasing resilience against looming risks. We associate ourselves with the statement by Mr. Meyer and would like to provide the following comments for emphasis.

Recent economic growth, again above the euro area's average growth rate, has been associated with favorable labor market developments and strong private consumption growth, while the public investment-to-GDP ratio has been maintained at the comparatively high level of 4 percent. The staff report appropriately points out several external risks, ranging from adverse economic growth developments and a sudden tightening of global financial conditions to changes in the global tax environment and a disorderly Brexit. In addition, staff cautions about the domestic risk of sharp increases in residential real estate prices, given the already elevated levels of households' indebtedness.

Fiscal policy considerations start from a favorable fiscal surplus position, strengthened by windfall gains in 2018. The staff report appropriately strikes the balance between endorsing the authorities' fiscal measures to address structural gaps and make growth greener and more inclusive on one hand and, on the other hand, supporting a prudent, buffer preserving fiscal strategy, given the non-negligible revenue risks. In particular, we found staff's analysis in Box 1 on the impact of the US tax reform and the word of caution on the revenue impact of a CIT cut useful. In this context, we also appreciate the various growth-friendly options that are listed in the staff report to address the revenue risks.

Concerning financial market policies, the Staff report contains an informative in-depth analysis on the financial sector and, in particular, on the investment funds industry. We appreciate that this analysis includes a look into the structure of cross-border holdings and wonder whether some similar elements of analysis could be added with respect to the sizeable stock of cross-border liabilities. We commend the authorities for the multi-faceted efforts to strengthen supervision, both by improving regulations and by conducting various stress tests on different segments of the financial sector. We also welcome the decisive commitment of the authorities to strengthen the legal framework to enhance transparency, anti-tax avoidance and anti-money laundering (AML/CFT). In this context, we would like to encourage the authorities to transpose the 5th EU AML Directive, in force since July 9, 2018, in a timely manner, that is, no later than January 10, 2020. In view of Luxembourg's significant financial interconnectedness, we would appreciate staff's comments whether more EU-wide supervisory AML/CFT cooperation as well as of sharing of information among Financial Intelligence Units would be advisable to increase ML resilience.

The representative from the European Central Bank submitted the following statement:

> We would like to thank Staff for their report and Mr. De Lannoy and Mr. Jost for their buff statement. We associate ourselves with the statement by Mr. Meyer.
>
> Luxembourg's sound macroeconomic policies have supported the current robust economic performance which is projected to continue. However, the economy's small size, open orientation and sectoral specialisation render it particularly vulnerable to shocks, especially external ones. Like Staff, we expect the strong growth performance of the Luxembourg economy to continue with growth rates close to medium-term potential, but also see the risks as tilted to the downside. These stem primarily from global economic developments, a possible tightening of global financial conditions, international tax developments, and Brexit.
>
> Fiscal policies and the outlook are generally sound, but as a small and open economy there are external and domestic challenges and risks. Fiscal risks stem externally from developments in the international tax environment and domestically there are long-term challenges related to rising ageing-related costs. We concur with Staff's recommendations to keep prudent fiscal policy – that will enable Luxembourg to meet its Medium-term Objective (MTO) – and also to implement pension system reforms to ensure long-term sustainability of public finances.
>
> The continuation and follow through on the labour market reform agenda can help growth potential, support vulnerable groups, address shortages and enhance pension sustainability. The structural policies undertaken by the government, which aim at increasing the labor force participation of female and elderly workers, are therefore welcome. Further monitoring of the impacts of such policies should be undertaken to quantify their impact in the short and medium run. However, Staff do not address the key issue of the automatic wage indexation mechanism. As this can hinder the alignment of wage and productivity developments at the sectorial level, it could hold back sectoral diversification.
>
> With larger than average capital buffers and high asset quality, the Luxembourg banking system has important elements of resilience, although there are challenges to profitability. Overall, Luxembourg banks have larger capital buffers than the average of EU banks and asset quality remains high as reflected by a low NPL ratio. At the same time, risks to profitability have

increased. Rising operating costs (including also costs related regulatory compliance as well as investment in new technology) have increased profitability challenges. We also agree with Staff regarding the risk stemming from a potential sharp tightening of global financial conditions particularly in view of Luxembourg's highly interconnected financial sector. This holds for Luxembourg's large and complex financial system with substantial global as well as domestic interconnections via its large investment fund industry. This industry has undergone a rapid expansion in recent years with the repricing of risk premia posing potential vulnerabilities to financial stability also in view of common investment strategies. We therefore welcome progress regarding enhanced regulation and supervision in the investment sector. We concur with Staff's recommendation to further enhance the risk monitoring and supervisory regime for the investment fund sector to keep up with the strong growth and increasing complexity of the sector. More generally, we support Staff's recommended that the resilience of the large and highly interconnected financial sector should continue to be enhanced. Efforts to strengthen the supervision of banks' large cross-border exposures should continue. Staff acknowledge the steps taken to enhance regulation and supervision in line with their past advice and call for continued follow up on the 2017 FSAP recommendations. In this regard, we welcome the recent increase in resources dedicated to reviewing existing waivers for large exposure limits.

Staff emphasise the importance of monitoring the risks related to anti-money laundering and challenges arising from Fintech. Within the supervisory priorities for 2019, the SSM will, for all banks it supervises, assess IT and cyber risk as well as the credit underwriting criteria and exposure quality covering real estate. The SSM is also currently conducting an area-wide sensitivity analysis of liquidity risk as part of its 2019 stress test. The sensitivity analysis, which is expected to be completed by mid-2019, will focus on the potential impact of idiosyncratic liquidity shocks on individual banks. Regarding anti-money laundering (AML) issues, it is important to note that enforcing national AML legislation is a competence of the relevant national authorities. Nevertheless, within the limits of its competence and in the light of the information available, the SSM takes money laundering issues into consideration. It does so, for instance, through the SREP assessment, as serious breaches of requirements on AML and on combating the financing of terrorism (CFT) can ultimately pose a risk for a bank's viability.

We agree with staff on the need to closely monitor risks in the real estate market and to take further action as needed. Rising residential real estate (RRE) prices and elevated private household indebtedness are noteworthy vulnerabilities. These vulnerabilities coupled with a large share of variable interest rate loans expose the private sector to interest rate risks. In this context, the introduction of a 0.25 percent countercyclical capital buffer (CCyB) to signal tighter macroprudential stance and recent steps to standardise the reporting of borrower-related indicators are important steps. However, should the developments in credit, RRE dynamics and household indebtedness prevail a further increase in the CCyB rates might be considered, especially as long as borrower-based measures remain unavailable. Regarding the macroprudential toolkit, while the draft law from December 2017 and the recent harmonisation of required data definitions represent important steps towards its expansion, only the swift ratification of the law and the timely implementation of the data definitions would indeed expand the scope of macroprudential manoeuvre at the current stage. To attenuate risks from RRE in particular with regard to the sustainability of household indebtedness, we would hence suggest considering an activation of such measures once the legal framework has been ratified. On macroprudential oversight more generally, we support Staff's view that the leading role of the Banque Centrale du Luxembourg (BCL) in financial stability analysis should be enshrined into law.

The Acting Chair (Mr. Zhang) made the following statement:

Luxembourg has benefitted from strong growth in recent years, supported by sound economic policies and favorable global conditions. This is reflected in the strong employment growth and a decline in unemployment, to record post-crisis lows.

As noted in Directors' gray statements, the outlook remains favorable. However, there are a number of risks that could cloud Luxembourg's prospects.

In terms of policies, the new government has broad program reforms, which aim to make the economy more inclusive and greener in order to raise the growth potential in a sustainable way.

To achieve all of this, it is important to maintain prudent yet growth-friendly fiscal policies and to address the issues identified in the 2017 Financial Sector Assessment Program (FSAP) and to make further progress on the long-term structural issues, including housing, infrastructure, labor market, and pension reforms.

Mr. Meyer made the following statement:

I have issued a gray statement in coordination with my European colleagues, so I would just reiterate a few points to support the authorities' efforts.

We believe that the Luxembourg economic model is working well for Luxembourg. It has produced solid growth in the past few years and has brought unemployment rate down to close to 5 percent. As with any small and open economy, external developments can have a sizable impact on the domestic economy. In the case of Luxembourg, a particular challenge is the changing international taxation framework. We commend the authorities for being proactive in accommodating these changes, which could be a reason why no negative impact on tax revenues has been observed so far.

Like the staff and the authorities, we also believe that maintaining an adequate fiscal buffer is the right approach, as it can cushion the negative impact, should such a shock hit in the future.

Having said this, let me also point out that there are potentially huge benefits from international tax cooperation, and it is important that Luxembourg is part of all this.

Moving from the external fiscal risks to domestic ones, we see rapidly rising ageing-related costs as an important challenge. We found the staff's analysis of the available reform options for the pension system pertinent. We would encourage the authorities to use these lessons in addressing the growing demographic risk.

The main driver of growth in Luxembourg is its large financial sector. Therefore, it is of strategic interest to have state-of-the-art financial regulation and oversight. We acknowledge the progress the authorities have made in these areas and would support the staff's recommendation to further enhance the risk monitoring and supervisory regime, in particular, for the investment fund industry.

Finally, let me mention some of the structural reform needs of Luxembourg. While the heavy specialization in financial services has been successful in making Luxembourg rank first in the world in terms of per capita GDP, it could also make it difficult to produce or attract the talents and skills that are needed in its labor market. Therefore, we encourage the authorities to investigate and address the disincentives to work arising from the social security system, continue with their efforts to raise labor force participation of women and the elderly, and foster investment in digital integration, transportation, and, in particular, in housing. In this context, we welcome the 2019 budget that substantially increased the funds available for investment.

With this, I wish the authorities all the best in their endeavors.

Ms. Pollard made the following statement:

I want to raise a few points. The first is to agree with the point made in Mr. Moreno's and Ms. Mulas' gray statement, that more attention should be paid to the external sector. We would be interested in knowing the factors behind the high current account norm and would like more information on saving rates and the saving behavior in Luxembourg.

Our understanding is that the household saving rate is fairly high. Given the generosity of the pension system, there is a question of what is behind this high saving rate? What are individuals saving for, if not for retirement? Are they anticipating reductions in benefits? How does this relate to the current account norm?

Mr. Inderbinen made the following statement:

We note the favorable outcome of Luxembourg. In our gray statement, we emphasize the contribution of prudent macroeconomic policies to this state of affairs. A strong fiscal position, in particular, and a low level of public debt provide buffers to react to contingencies and have allowed the accumulation of sizable fiscal reserves to help ensure the viability of pensions in the face of adverse demographics.

There are risks, including the uncertainties related to further developments in international tax policy. But inasmuch as these developments contribute to the establishment of a level playing field, this should benefit the country, as mentioned in the buff statement of Mr. De Lannoy and Mr. Jost.

Like others, we encourage continued steps to strengthen financial sector supervision, including the maintenance of a robust Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT) framework. As the staff notes, the latter should include an adequate supervision of Luxembourg's vibrant fintech sector, in line with the authorities' technology-neutral approach.

We acknowledge the measures taken by the authorities to ensure a close monitoring of the risks associated with the housing market. In particular, like Mr. Meyer, we welcome the announced introduction of a countercyclical buffer.

On the housing market, we had a question on the rental market. The staff has helpfully referred us to last year's selected issues paper on the housing sector. The focus of this work and also the answers that the staff has provided in writing seem to be focused on the subsidized sector of the rental market. Given that alleviating the pressures on the housing market is a priority of the authorities, we were wondering whether any measures were envisaged to increase the functionality of a residential rental market more broadly, not just in the social subsidized space—for instance, by abolishing regulations like the cap on rental income that the staff mentioned in the written answers.

Ms. Mulas made the following statement:

We have issued a gray statement, and we associate ourselves with Mr. Meyer's statement and his remarks.

We found Mr. Jin's and Mr. Huang's response on Luxembourg's progress on economic diversification very informative. We welcome that Luxembourg's diversification strategy is bearing fruit, as the weight of the sectors enhanced by the authorities has continued to increase since 2008 and is now at about 10 percent of gross value added. This is a remarkable accomplishment, considering that Luxembourg's economy is less diversified than other countries, even after excluding the financial sector, when compared to countries with a small population.

We commend the authorities for this success, and we encourage them to continue along this path to achieve a more diversified economy. We consider that this objective has become even more pressing in light of the current downside risks, particularly those related to fiscal revenues. Therefore, we welcome that the draft budget envisages some fiscal expansion to prepare the country for future challenges, notably, by investing in climate and ecologically friendly infrastructure. Indeed, the 2019 draft budget envisages higher spending on education, healthcare, infrastructure, and the digitalization of the economy to foster its productivity and its diversification strategy.

To foster this trend, we also welcome that the fiscal plans beyond 2019 aim to lift the economy's potential and make growth more inclusive. Luxembourg's ample fiscal space will allow the authorities to fund higher spending in 2019 and over the medium term, while ensuring compliance also in structural terms with the requirements of the EU fiscal rules.

Finally, we welcome that Luxembourg has finally embraced the international tax transparency agenda. We are all confident that Luxembourg will continue to take swift actions to align its tax framework with international standards. In this vein, we encourage the authorities to improve the availability of beneficial ownership information on Luxembourg's top companies and partnerships, and to improve the application of rights and safeguards of taxpayers, as noted by the OECD Global Forum on Tax Transparency and Exchange of Information for Tax Purposes in its 2019 report.

Mr. Castets made the following statement:

We commend the authorities for the strong performance of the economy and the strong economic policies that have supported those achievements over the recent years. We associate ourselves with Mr. Meyer's written statement and his oral remarks. I would like to add a few remarks for emphasis.

First, on fiscal policies, in the context of strong domestic demand and the export of financial services, we still agree that there are some external risks related to the global economic deceleration and the potential tightening of global financial conditions that could result in a decrease in activity and, consequently, in a loss of tax revenues. But still, Luxembourg benefits from ample fiscal room to enhance its preparedness by reforming taxation, notably, through property and environmental tax hikes and also through a reduction in tax exemption regimes, such as in the VAT system. This is pointed out by the staff report.

On the challenges in the international taxation environment, as noted by Mr. Meyer, so far, the impact on the tax revenues have been quite limited, if not absent. We would insist on the fact that enhancing the framework for increasing cooperation and transparency, both at the EU and at the global level, is an asset for the economy of Luxembourg. We would also recall our message to the staff on that issue—that we have to be cautious in presenting the cooperation in international taxation as a risk.

We also strongly encourage the authorities to finalize the transposition of the Anti-Tax Avoidance Directive to prevent mismatches with third countries and the so-called hybrid mismatches and tax redundancy mismatches.

On the financial sector, we encourage the authorities to proceed further with the implementation of the 2017 FSAP recommendations to enhance the Fund's industry surveillance and address the already high household indebtedness and also the risks associated with rising housing prices.

We would have appreciated further consideration in the staff report on the benefits for Luxembourg's further integration of the banking and financial sector markets within the euro area through the project to deepen the banking union and the capital markets union.

On another issue, we would like to associate ourselves with Mr. Moreno and Ms. Mulas' point and Ms. Pollard's point on dedicating further attention to the external sector, in particular, the level of saving.

Lastly, we commend the authorities for their commitment to develop tools to reach the emissions targets agreed under the Paris agreement, notably the planned increase in fuel taxation. We know it is not an easy issue.

Ms. Mannathoko made the following statement:

We have issued a gray statement, where we commended the authorities on their solid performance record and prudent policies. However, we also noted that the economy does face a range of external risks and that fiscal policy should aim to build buffers and diversify the revenue base and develop strong contingency plans and also focus on further strengthening the monitoring, regulation, and supervision of the financial sector.

I just wanted to add one comment, mainly for emphasis. We agree that Luxembourg's economic model has worked well. However, as noted by most chairs, because of the vulnerability, additional measures are needed. With these significant risks, we wanted to emphasize the significant importance of diversification, not just of the revenue base but also of the economic base. This remains critical.

We noted in the staff's responses to questions, the scope cited by the staff to diversify the revenue base. However, the measures cited are not a long-term solution. We want to encourage a focus on sustaining a strong emphasis on diversifying the economic base. Even though there has been rapid improvement, given the vulnerabilities in the global economy and the potential financial events going forward, a strong focus on diversification would be prudent.

Mr. Just made the following statement:

We thank the staff for a good set of reports and associate ourselves with Mr. Meyer’s earlier intervention.

The staff’s analysis does justice to the significant efforts by the Luxembourg authorities to adjust to and comply with international taxation developments and to transpose AML/CFT regulations into national law. The jury is still out on the more permanent effects on Luxembourg’s economic structure or whether the other factors, such as Luxembourg’s sound institutional and legal framework, give the country a comparative edge.

Luxembourg’s financial sector is complex, and its complexity is increasing with its strong focus on investment management. We appreciate that the authorities are increasing their resources, but we still see a clear need to address data gaps. This is not a Luxembourg-only problem but a euro area-wide problem, as identified also in last year’s euro area FSAP. Especially on the liability side, these data gaps hinder comprehensive monitoring and appraisal of risks.

The staff representative from the European Department (Mr. Stavrev), in response to questions and comments from Executive Directors, made the following statement:

We thank Directors for the insightful questions we received and which we tried to answer as much as possible. A few additional questions were raised, which I would like to address now.

Ms. Pollard asked about the large current account norm. Our analysis in the context of the External Balance Assessment (EBA)-Lite exercise suggests that the large current account norm is driven, to a large extent, by the output per capita. We adjust the norm for the cross-border workers. The actual current account is mainly driven by the large financial sector of the country.

As far as I can recollect now, the saving rates of Luxembourg households are not an outlier compared to other European countries, though the staff will confirm whether this is true.

Mr. Inderbinen raised a question about improving the residential rental market. The report mentions the authorities’ plans in their new program to reform the residential real estate taxation. One way to improve the supply constraints, including those of the rental market, is to increase the supply of residential real estate, which is very limited. Specific details on these plans, which are complex and have a political economy dimension, are yet to be specified. But the government has in mind that this is to be done in the current five-year term.

We do not have any details on the private rental market. Mr. Inderbinen mentioned the abolition of tax subsidies. We will follow up on this.

There was a question about the diversification of Luxembourg's economy. The staff agrees with this. As we indicated in our written answers, the government, in its program, has devoted space to further its efforts to diversify the economy. Since 2008, there has been some progress. The share of the non-financial sector in Luxembourg has increased and is now about 10 percent of value added.

In addition, we mentioned in the written responses that the authorities are aware of the so-called revenue risks stemming from international taxations. They mean to take mitigating measures in a growth-friendly manner.

Mr. De Lannoy made the following concluding statement:

I thank Directors for their statements and today's interventions.

The staff's assessment highlights Luxembourg's robust economic prospects. It acknowledges the authorities' sound fiscal and economic policies and deems the banking sector to be generally resilient, while highlighting the past and ongoing efforts in regulation and supervision.

Despite the positive outlook, the authorities concur with the staff regarding the existing risks which, for the most part, are external. Fully aware of the open nature of the Luxembourg economy, the authorities continue to actively monitor and manage those risks, as the preparations for a possible no-deal Brexit show. Similarly, prudent fiscal policies allow the authorities to maintain sizable fiscal buffers fully in line with the staff's recommendations.

Low and declining debt levels, a budget in surplus, the continued full compliance with EU fiscal rules, as well as the government's self-imposed debt limit of 30 percent of GDP, demonstrate the government's longstanding commitment to sound fiscal policies. While acknowledging long-term risks related to the cost of ageing, the authorities would like to point out the availability of sizable reserves in a dedicated pension fund.

The government acknowledges revenue risks stemming from the country's steadfast implementation of the evolving international tax agenda, while noting that the authorities remain actively engaged in all relevant fora, including at the OECD level. At the same time, the government considers the risks to revenues to be balanced, as a more level global playing field could also bring other traditional strengths of Luxembourg's socioeconomic context to the fore, including its political and social stability, prudent policies, and an effective governance framework.

Regarding the financial sector, the authorities remain committed to robust financial policies and continue to pursue an ambitious supervisory and regulatory agenda. As the report highlights, the country is actively addressing past and current recommendations, including those contained in the 2017 FSAP report.

Similarly, the authorities are tracking the evolving regulatory standards and remain actively engaged in discussions at the European and the international level. Vital steps have been taken to address risks in the housing market, as the activation of a countercyclical capital buffer illustrates. As the staff report points out, Luxembourg's financial sector remains sound, with larger-than-average capital buffers, high asset quality, and low levels of NPLs.

Regarding AML/CFT risks, Luxembourg transposed a fourth EU AML Directive, and work related to the fifth EU AML Directive is on schedule. In addition, the authorities conducted and published a national risk assessment, in line with the OECD's best practices, and established a Register of Beneficial Owners of corporate and other legal entities in January 2019, in conformity with the fourth EU AML Directive's provisions and in line with past Article IV recommendations.

As the recently passed 2019 budget highlights, the government remains committed to high levels of public investment. Going forward, public investment spending is scheduled to amount to more than 4 percent of GDP annually and aims at addressing infrastructure needs, including in housing, public transportation, and internet communications technology. In this context, focusing on inclusiveness, preparing the economy for technological change, and promoting climate and ecologically-friendly growth remain key priorities. The government will continue its efforts to diversify the financial sector and the economy as a whole.

On behalf of the Luxembourg authorities, I thank the entire Article IV team for their efforts and constructive dialogue, in particular, given the challenging timeline. The authorities look forward to continuing this dialogue in the coming weeks and months.

The Acting Chair (Mr. Zhang) noted that Luxembourg is an Article VIII member, and no decision was proposed.

The following summing up was issued:

Executive Directors agreed with the thrust of the staff appraisal. They commended the authorities for the sound economic policies that continue to support a favorable growth outlook, while noting that risks are tilted to the downside from both external and domestic factors. Against this backdrop, Directors encouraged the authorities to maintain prudent fiscal policies, continue to implement new international tax standards, further enhance the resilience of the financial system, and address key structural gaps.

Directors praised the authorities for the strong fiscal position and low public debt. While stressing the need to maintain adequate buffers, they welcomed the fiscal plans aimed at lifting the economy's potential and making growth more inclusive, by increasing public investment and introducing more growth-friendly, equitable, and "green" taxation. They commended the authorities' continued commitment to implement the European and global tax transparency and anti-tax avoidance initiatives. Directors noted the need to quantify revenue risks arising from the changing international tax environment and consider mitigating measures.

Directors welcomed the progress in implementing the 2017 Financial Stability Assessment Program recommendations while emphasizing efforts to further enhance the oversight of the highly interconnected financial sector. In particular, Directors noted the need to continue to strengthen the supervision of banks' large cross-border exposures and complete resolution plans for less systemic banks and implement Luxembourg's component of the euro area credit register. In the investment fund sector, system-wide supervision and cooperation with relevant jurisdictions should be further enhanced. Directors commended the authorities for strengthening AML/CFT legislation and finalizing their first National Risk Assessment.

While welcoming recent measures to enhance macroprudential surveillance, Directors called for close monitoring of developments in the real estate market and vulnerabilities arising from high household indebtedness. In this context, they also encouraged the authorities to alleviate housing supply constraints and to expand the macroprudential policy toolkit, introducing borrower-based mortgage lending limits.

While acknowledging that Luxembourg’s pension system is sound over the near term, Directors saw merits in further reforms to ensure its long-term sustainability. Given the long lags of pension reforms, they considered it essential to engage with key stakeholders in a timely manner, taking into account intergenerational equity and the tradeoffs of various reform options.

Directors noted that key structural gaps need to be addressed to boost Luxembourg’s economic potential and make growth more inclusive. While the youth and low-skilled were benefiting the most from the recent strong job creation, they noted that more needs to be done to tackle structural unemployment and low elderly labor market participation.

It is expected that the next Article IV consultation with Luxembourg will be held on the standard 12-month cycle.

APPROVAL: April 16, 2020

JIANHAI LIN
Secretary

Annex

The staff circulated the following written answers, in response to technical and factual questions from Executive Directors, prior to the Executive Board meeting:

**Recent Developments, outlook, and risks**

**1.** ***Regarding the Brexit, could staff elaborate more on the relocation of financial service firms from UK to Luxembourg? Is this relocation already happening? If any investment funds relocated to Luxembourg, will they add to the common risk-taking behavior or help to diversify the risks?***

- This relocation is already happening. Latest data indicate that 51 out of 80 new licenses in 2018 were granted to financial institutions relocating activities (from the United Kingdom) due to Brexit. In addition, some firms have expanded their existing Luxembourg operations. For example, a recent report from CAA, the national insurance supervisor, shows a significant increase in premiums in the non-life sector reflecting Brexit related relocation. \

- Regarding investment funds, as indicated in the Staff Report (FN 3), the delegation of risk and portfolio management to U.K.-based entities is unlikely to be disrupted in the event of a no-deal Brexit. The relocation of some activities—mostly fund distribution—will not alter common risk/portfolio management strategies.

**2.** ***We invite staff to make comments how the Brexit would affect the financial sector in Luxembourg. In particular, how do staff assess the expected relocation of major financial institutions from London to Luxemburg, taking into account its relative advantage compared to other cities in Europe?***

- See answer to question 1.

**3.** ***Could staff clarify if there are plans to address this weakness and to what extent these revisions may affect staff assessment of macroeconomic developments in Luxembourg and policy advice?***

- Given the evolving complexity of the economy, highlighted by frequent and large revisions to GDP, the authorities are aware about the need to devote more resources to this end at the national statistical agency, STATEC.

- That said, in assessing the conjuncture, staff relies on a broader set of high-frequency indicators, such as labor market indicators, consumer and business confidence indicators, and inflation.

**Fiscal Policy**

**4.** ***Changes in international taxation might lead to reduce multinationals' incentives to locate assets in Luxembourg and erode the country's corporate tax base, potentially leading to non-negligible tax revenue losses. In this regard, could staff provide their view about how Luxembourg authorities should respond to these changes, and what kind of measures the authorities should take going forward?***

- The authorities are aware of the revenue risks stemming from the changing international taxation and the need to quantify them. The quantification of the risks under different scenarios and the specific policy options would require deeper analysis, for which the authorities indicated their interest in discussing the matter with FAD colleagues. As a first step, the staff report (Box 1) provides a short analysis on the spillover risks to Luxembourg fiscal revenues from the U.S. CIT reform. The impact of other changes in international taxation would require further work. As noted in the staff report (paragraph 16), possible options to mitigate the revenue risks include adjusting Luxembourg's low property taxes which are based on outdated property values, increasing revenues from environmental taxes which are among the lowest in the EU, reducing tax exemptions including the numerous non-compulsory exemptions in the VAT system.

**5.** ***Given the varied external risks to revenues, could staff elaborate on planned measures to diversify the fiscal revenue base?***

- See answer to question 4.

**6.** ***Staff recommend that the authorities seek to quantify risks associated with changes in international taxation and explore growth-friendly options to mitigate them over the medium term. Could staff clarify if this work underway, and if so, are staff involved in these discussions?***

- See answer to question 4.

**7.** ***Could staff offer comments on the revenue impact of different scenarios of international tax policy?***

- See answer to question 4.

**8.** ***We welcome that authorities expect to transpose the Anti-Tax Avoidance Directive II by the end of 2019. Notwithstanding these developments, a recent resolution by the European Parliament on financial crimes, tax evasion and tax avoidance***

***(2018/2121(INI)) states that seven EU countries, including Luxembourg, display traits of a tax haven and facilitate aggressive tax planning. Staff's comments are welcome.***

- The EU Parliament report (paragraph 21) welcomes the adoption of ATAD I and ATAD II, which will provide a minimum level of protection against corporate tax avoidance. The Staff Report (paragraph 6) notes that Luxembourg took welcomes steps to introduce BEPS-compliant IP regime and to timely transpose the EC's Anti-Tax Avoidance Directive (ATAD) I into national law. Accordingly, Luxembourg's rating as "largely compliant" was maintained in the 2019 peer review by the Global Forum on Tax Transparency and Exchange of Information for tax purposes. Also, the large stock of FDI in Special Purposes Vehicles (SPVs) started to decline, indicating possibly diminishing incentives to conduct business through Luxembourg (paragraph 15).

**9.** ***We note the plan to change urban laws, boost construction of social housing and implement a housing reform taxation system to address supply constraints in the housing market. Could staff also comment on the fiscal implications of these envisaged reforms? Have they been factored into projections?***

- The specific plans, including higher investment in social housing and the reform of housing taxation are yet to be specified. Thus, it is not possible to provide an estimate of the net fiscal cost of these measures.

**10.** ***Could staff provide more details about the transportation policies being proposed by Luxemburg's authorities, including their estimated fiscal, social and environmental impact?***

- Staff's projections incorporate the fiscal cost of free transportation to be introduced in March 2020, which is estimated at about 0.15 percent of GDP over the medium term. At this stage, there is no a quantitative assessment of the environmental and more broadly the economic impact of this policy.

**Financial Sector**

**11.** ***We are wondering how the banks improve margin from the lending in this challenging environment. Staff's comments are welcome.***

- Banks' margins remained broadly unchanged since 2017. The higher contribution of net interest income to bank net income in 2018 (see the top left chart in Figure 2) was mainly driven by the strong growth in bank credit to households and non-financial corporations and not by higher interest margins.

**12.** ***On a related matter, could staff comment on the timeline for approval of the draft bill to implement the borrower-based mortgage lending limits as well as to enshrine into law the role of the central bank in financial stability analysis? In addition, could staff elaborate further on the authorities' position with regards to the staff's recommendation to upgrade governance arrangements for the BCL Supervisory Board and the financial supervisory bodies?***

- The authorities indicated that the draft bill to implement the borrower-based mortgage lending limits, which is now in Parliament would be approved in the course of this year.

- BCL has a de-facto leading role in financial stability analysis. The authorities consider the current institutional framework to be adequate.

- The code of conduct for non-executive members of the BCL Supervisory Board has been revised but could be further aligned to best practices. The code of conduct for the CAA board members will be discussed during the next board meetings of the CAA in 2019.

**13.** ***Could staff comment on the expected timeline for the approval of the draft bill to implement borrow-based mortgage lending limits?***

- See answer to question 12.

**14.** ***While banks may be able to withstand the resultant expansion in high loan-to-value ratios, it is unclear what the broader impact would be. To what extent would such a shock be a precursor to slower growth?***

- Younger and/or poorer households with variable rate mortgages are the most vulnerable to a spike in interest rates. A large interest rate shock could increase their probability of default, potentially causing them to curtail consumption, with adverse effects on domestic demand and growth. The impact of such a shock on the economy would be limited as the most vulnerable only represent a small proportion of the population.

**15.** ***Could staff also comment further on the potential contingent liabilities related to the financial sector, mentioned in the report?***

- The contingent liabilities scenario in the Debt Sustainability Analysis, which is focused on the domestically-active banks, assumes a sizeable shock to public finance equivalent to 10 percent of domestic banking sector assets (about 10 percent of GDP).

As indicated in the Staff Report (paragraph 14), under this severe scenario, public debt remains below 35 percent of GDP.

**16.** ***Could staff elaborate on the authorities' plans if systemic vulnerabilities in the investment fund sector were to crystallize?***

- The Luxembourg framework for liquidity management tools compares favorably to its peers at both within and outside EU. In case of systemic stress—for example, triggered by a sharp tightening in global financial conditions—investment funds can rely on an extensive set of liquidity management tools, including the suspension and deferral of redemptions.

**17.** ***We wonder whether the Commission de Surveillance du Secteur Financier (CSSF) has assumed an official position regarding virtual currency initial coin offerings (ICOs) or crowdfunding? Are there any fintech-specific laws or regulations being considered or envisaged in Luxembourg in 2019?***

- CSSF follows a technology-neutral approach to regulating and supervising fintech activities, including for crypto currency and blockchain technology. Specifically, CSSF treats fintech activities based on the existing legal and supervisory frameworks for financial services. In addition, CSSF advocates for an EU approach to close potential gaps in existing legal frameworks to ensure a level playing field in the industry. As indicated in the Staff Report (paragraph 24), the authorities passed early this year a bill providing a legal framework for securities issued over blockchains.

**18.** ***In view of Luxembourg's significant financial interconnectedness, we would appreciate staff's comments whether more EU-wide supervisory AML/CFT cooperation as well as of sharing of information among Financial Intelligence Units would be advisable to increase ML resilience.***

- As recommended in the 2018 euro area FSAP, coordination and information sharing regarding AML/CFT between the ECB and national authorities should be improved. Establishing a European-level institution responsible for AML/CFT supervision, which would facilitate a consistent and comprehensive approach to what are often cross-border risks, should ultimately be considered.

**Structural issues**

**19.** ***Can staff elaborate more on Luxembourg's progress toward economic diversification, which seems missing in the reports?***

- Luxembourg’s diversification strategy has focused on promoting ICT, logistics sector, the space industry, health technology, and clean technologies. The weight of these sectors in the economy has continued to increase since 2008 and is now about 10 percent of gross value added. Key measures to support economic diversification, include new programs to foster business digital integration and new initiatives to promote entrepreneurship such as Creative Clusters and the House of Start-ups.

**20.** ***We are curious which scenario (or appropriate combination) is most desirable and realistic considering political economy. We also would like to know the appropriate sequencing to gain support from the nationals. Staff’s comments are welcome.***

- As the selected issues shows, all reforms considered in the analysis have pros and cons. It is essential to engage with key stakeholders, such as employers and employees’ associations, in a timely manner to ensure support from the nationals. Thus, given our discussions with the authorities, our sense is that acting simultaneously on the three reform options (contribution rate, replacement rate, and statutory/effective retirement age) would require smaller adjustments in the three parameters and would likely ensure more national support.

**21.** ***Could staff advice if other reform options have been discussed with authorities or social partners, besides the ones covered by staff simulations?***

- See answer to question 20.

**22.** ***We appreciate the analysis of the Selected Issues paper and note that an increase in the retirement age seems to carry larger macroeconomic advantages than the other two pension reform options, namely an increase in contribution rates and a reduction of benefits. We*** *w**ould inquire the state of the authorities’ reflection on this option, if any, noting that the senior population has historically recorded a low labor participation in Luxembourg? Staff’s elaboration is welcome.***

- Staff analysis suggests that an increase in the effective retirement age will have the same effect as an increase in the statutory retirement age. Authorities prefer first to explore options to increase the effective retirement age. Currently citizens are entitled to early retirement at age 57 after 40 years of contribution and at age 60 after 40 years of contributory and qualifying non-contributory years (with at least 10 years of contributions).

- In recent years the authorities have taken additional measures to increase elderly labor market participation, such as the reform of the professional reclassification scheme which could reduce the share of disability pensions, the creation of subsidized jobs, and the abolishment of some pre-retirement schemes. While these measures had some positive impact, further action is needed.

**23.** ***Could staff elaborate on the impact of raising the statutory retirement age, which currently exceeds the effective retirement age?***

- See answer to question 22.

**24.** ***With respect to the relatively low elderly labor market participation, it is unclear why the authorities would continue to provide early retirement benefits in this context. Could staff discuss the reasons for this?***

- See answer to question 22.

**25.** ***Could staff indicate whether policies to boost private saving for retirement could also be helpful?***

- Luxembourg has a small private pension system. While increasing private saving could help, staff analysis has focused on the sustainability of the public pension system.

**26.** ***Could staff comment on the functionality of the residential rental market?***

- The authorities noted that the increase of price-to-income/rent ratios in recent years, points to growing affordability problems. Rental income is capped at 5 percent of the purchase value of the dwelling, which is compensated with tax deductions during the first five years after purchase. Share of rental social housing is low comparable to other European countries. For further details, see the 2018 AIV SIP on Luxembourg housing market.

**27.** ***Could staff elaborate on measures the authorities are using to ensure re-skilling beyond digital aptitudes matches specific industry needs, positioning unemployed labor to be able to fill existing vacancies?***

- The authorities have several active labor market policies focused on vulnerable groups, such as the youth, the elderly, the low-skilled, and the long-term unemployed. Specifically, they provide a wide range of training programs, which aim at developing certain skills, such as language and sector-specific skills. The authorities have also recently introduced several programs to facilitate labor market integration, such as the professionalization internship and the employment reintegration contract.