INTERNATIONAL MONETARY FUND

IMF Country Report No. 19/252

REPUBLIC OF LITHUANIA

2019 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT

July 2019

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2019 Article IV consultation with Republic of Lithuania, the following documents have been released and are included in this package:

- A **Press Release**.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on lapse-of-time basis following discussions that ended on June 25, 2019, with the officials of the Republic of Lithuania on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on July 12, 2019.
- An **Informational Annex** prepared by the IMF staff.

The document listed below have been or will be separately released.

Selected Issues

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Washington, D. C. 20431 USA

IMF Executive Board Concludes Article IV Consultation with the Republic of Lithuania

On July 30, 2019, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with the Republic of Lithuania and considered and endorsed the staff appraisal without a meeting.

The economy exceeded expectations in 2018. Real GDP expanded by 3.5 percent with external demand more resilient than expected and without pre-crisis imbalances reemerging. A strong contribution in net exports helped the current account reach its highest surplus in four years. Private consumption growth accelerated with better-than-expected employment growth and a rebound in real wage growth. The labor market remains tight with labor costs among the fastest growing in the EU, but without inflationary pressures. With a positive macroeconomic environment, the government has achieved a higher fiscal surplus for the third year in a row. Data for the first quarter of 2019 suggest that the economy’s growth momentum has carried over into this year.

With Lithuania’s economy expanding above potential, growth is expected to moderate in the next few years to a more sustainable pace. Growth in 2019 is projected at 3.2 percent, mainly because a moderating labor market will slow down consumption and exports will decelerate after a strong start early this year. Investment will depend on policy predictability, reform efforts and the business environment.

As a small open economy, Lithuania is vulnerable to a weakening external environment characterized by slower growth in Europe, continued trade tensions, uncertainty around Brexit conditions, and geopolitical risks. Domestically, emigration, population aging, and slow progress in implementing key aspects of the government’s reform agenda are the main risks to the economic outlook.

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

Executive Board Assessment[2]

In concluding the Article IV consultation with the Republic of Lithuania, Executive Directors endorsed the staff's appraisal as follows:

The Lithuanian economy has continued to enjoy a strong macroeconomic and fiscal performance, but long-term challenges remain largely unaddressed. Prudent fiscal policy, a flexible labor market, and proactive macroprudential policies have been critical to preserve stability and should be maintained. The recovery has avoided the emergence of the large imbalances of the past and better positioned Lithuania to face external shocks and future economic downturns. However, Lithuania still confronts severe demographic pressures, large social disparities, and external uncertainty that can only be addressed with structural reforms. This is the only way to ensure sustained high wage growth and improved living standards.

The continued strong economic performance suggests that a neutral fiscal stance would have been preferable this year. Going forward there are heightened risks to revenues and increased spending pressures from social needs that are partly countered by conservative economic projections. Gains from combating informality are difficult to predict while the revenue impact of recent reforms is uncertain. Thus, revenue buoyancy may largely reflect cyclical factors. Without commensurate increases in revenues, spending pressures are increasing budget rigidities.

Macroprudential policy is being used proactively to prevent systemic risks. Signs that moderate cyclical systemic risks are emerging led the Bank of Lithuania to raise the countercyclical buffer to one percent in mid-2018. The financial system remains sound, liquid, and profitable.

The external position is stronger than implied by fundamentals and desirable policies. However, under unchanged policies, Lithuania's current account should gradually converge towards its medium-term norm.

Despite growing urgency, education and healthcare reforms have failed to deliver. Maintaining large and inefficient networks comes at the cost of quality and opportunities. Only comprehensive reform will allow Lithuania to produce the competitive and well-paid workforce needed to tackle income and social disparities. Thus, planned wage increases in these sectors should be made conditional on progress in network optimization.

Pension and tax reforms go in the right direction, but remaining challenges will require future compromises. Tax reform could have been more ambitious in shifting taxes away from labor. The reduction of tax exemptions and privileged regimes is also needed. On pensions, reform has ensured the financial, but not social, sustainability of the system. Low and declining

[2] The Executive Board takes decisions under its lapse-of-time procedure when the Board agrees that a proposal can be considered without convening formal discussions.

pensions will increase pressures to boost basic pensions, which have been transferred to the budget this year. This represents a fiscal risk over the medium-term.

ALMP should be strengthened to effectively address skill mismatches and increase labor force participation. Current funding is low and relies excessively on EU funds and its composition inadequately reflects cyclical conditions or the needs of the labor market. Thus, reliance on employment subsidies should decrease and focus on the most disadvantaged groups only. The emphasis should shift to well-designed training curricula to upskill the labor force.

Lithuania faces a difficult tradeoff between maintaining a low and competitive tax system and strengthening the social safety net. With discretionary spending already low, further increases in social spending will likely require higher revenues. To ensure the most efficient use of limited resources, targeted social spending should be the main tool used. In this connection, the design and generosity of child benefits should balance their positive impact on reducing child poverty against the potential disincentives to work, particularly for women.

Fintech provides big opportunities to improve financial services and produce high-skill jobs, but it also brings challenges, particularly related to anti-money laundering. The authorities' efforts to promote fintech are already delivering results. Fintech companies will introduce some healthy competition, initially in the payment services segment. The larger focus on cross-border transactions represents a shift in the business model of the financial system that will bring new challenges for supervision, particularly regarding AML/CFT. The authorities' efforts to implement the 2018 MONEYVAL recommendations and enhance inter-agency coordination should be complemented by adequate resources across all agencies involved.

Republic of Lithuania: Selected Economic Indicators, 2018–24[1]

Quota (current, % of total): SDR 441.6 million, 0.09 percent
Main products and exports: refined fuel, machinery and equipment, chemicals, textiles, foodstuffs, plastics, wood products.
Key export markets: Russia, Latvia, Estonia, Poland, Germany

Per capita GDP (2018): € 16,100
Literacy rate (2015): 99.8 %
At-risk-of-poverty (after transfers), share of population (2017): 29.6%

	2018	2019	2020	2021	2022	2023	2024
		Projections					
Output							
Real GDP growth (annual percentage change)	3.5	3.2	2.6	2.5	2.4	2.3	2.3
Domestic demand growth (year-on-year, in percent)	2.9	3.8	3.5	3.3	3.1	3.1	3.1
Private consumption growth (year-on-year, in percent)	3.9	3.7	3.2	3.2	3.1	3.1	3.0
Domestic fixed investment growth (year-on-year, in percent)	6.5	6.0	5.5	4.3	3.9	3.6	3.6
Inventories (contribution to growth)	-1.1	-0.1	0.0	0.0	0.0	0.0	0.0
Net external demand (contribution to growth)	0.6	-0.5	-0.9	-0.9	-0.8	-0.9	-0.9
Nominal GDP (in billions of euro)	45.1	47.7	50.2	52.6	55.1	57.6	60.2
Output gap (percent of potential GDP)	0.5	0.7	0.6	0.4	0.2	0.1	0.0
Employment							
Employment (annual percentage change)	1.5	0.6	0.2	0.0	-0.1	-0.1	-0.1
Unemployment rate (year average, in percent of labor force)	6.1	5.9	5.8	5.7	5.6	5.5	5.5
Average monthly gross earnings (annual percentage change)	9.9	8.0	6.5	5.4	4.9	4.7	4.6
Average monthly gross earnings, real (CPI-deflated, annual percentage change)	7.2	5.5	4.3	3.2	2.7	2.5	2.4
Labor productivity (annual percentage change)	2.0	2.6	2.4	2.4	2.4	2.4	2.4
Prices							
HICP, end of period (year-on-year percentage change)	1.8	2.4	2.2	2.2	2.2	2.2	2.2
GDP deflator (year-on-year percentage change)	3.3	2.5	2.5	2.3	2.3	2.2	2.2
HICP core, period average (annual percentage change)	1.9	2.1	2.4	2.4	2.4	2.4	2.4
HICP, period average (annual percentage change)	2.5	2.3	2.2	2.2	2.2	2.2	2.2
General government finances 2/							
Revenue (percent of GDP)	34.7	35.7	35.8	35.8	35.8	35.7	35.7
Of which EU grants	0.8	1.3	1.2	1.2	1.1	1.1	1.0
Expenditure (percent of GDP)	34.0	35.4	35.5	35.7	35.7	35.6	35.6
Of which: Non-interest	33.1	34.5	34.8	35.2	35.3	35.3	35.3
Fiscal balance (percent of GDP)	0.7	0.3	0.2	0.1	0.1	0.1	0.1
Fiscal balance excl. one-offs (percent of GDP)	0.7	0.3	0.2	0.1	0.1	0.1	0.1
Structural fiscal balance (percent of potential GDP) 3/	0.8	0.2	0.1	0.1	0.1	0.1	0.1
General government gross debt (percent of GDP)	34.2	32.0	30.2	28.7	27.3	26.0	24.7
Of which: Foreign currency-denominated	9.6	9.0	8.5	8.1	7.7	7.3	7.0
Credit							
Private sector credit (end of period, percent change)	6.0	4.1	...	...	...	...	...
Long-term lending rate to private sector	8.1	...	...	...	...	...	...
Short-term lending rate to private sector	2.6	...	...	...	...	...	...
Balance of payments (in percent of GDP, unless otherwise specified)							
Current account balance	1.6	1.2	1.1	0.6	0.1	-0.4	-0.8
Current account balance (billions of euros	0.7	0.6	0.6	0.3	0.1	-0.2	-0.5
Exports of goods and services (volume change, in percent)	5.1	4.0	3.8	3.7	3.7	3.7	3.7
Imports of goods and services (volume change, in percent)	4.3	4.5	4.7	4.6	4.5	4.5	4.5
Foreign direct investment, net	-0.1	0.0	0.1	0.1	0.2	0.3	0.4
Short-term debt at original maturity	36.7	34.5	33.1	32.2	30.8	29.8	29.0
Gross external debt 4/	78.5	73.2	69.6	66.8	63.7	61.0	58.5
Exchange rates							
Real effective exchange rate (2005=100, +=appreciation)	126.4	..	..	..	..	..	..
Exchange rate (euro per U.S. dollar, end of period)	0.88	..	..	..	..	..	..
Exchange rate (euro per U.S. dollar, period average)	0.85	..	..	..	..	..	..
Saving-investment balance (in percent of GDP)							
Gross national saving	19.8	20.0	20.4	20.1	19.8	19.4	19.1
Gross national investment	18.2	18.8	19.3	19.5	19.7	19.8	19.9
Foreign net savings	-1.6	-1.2	-1.1	-0.6	-0.1	0.4	0.8

Sources: Lithuanian authorities; World Bank; Eurostat; and IMF staff estimates and projections.
1/ Data are presented on ESA2010, and BPM6 manuals basis.
2/ The numbers for 2014 include 302 million euros (0.8 percent of GDP) in compensation payments for past pension cuts on accrued basis. The payments are spread over 2014–16, affecting the debt profile for these years. ESM contributions are spread over 2015–19, and also increase debt. Passive projections from 2016 onward; incorporate only announced budgetary measures; budgetary impact of further defense spending, wage compensation and their potential offsetting measures are not included.
3/ Calculation takes into account standard cyclical adjustments as well as absorption gap.
4/ Government external debt excludes guaranteed loans.

INTERNATIONAL MONETARY FUND

REPUBLIC OF LITHUANIA

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION

July 12, 2019

KEY ISSUES

Context. Lithuania needs sustained productivity gains to ensure higher living standards and convergence with Western Europe. This is the only way to address, or even reverse, negative demographic dynamics. Macroeconomic and financial stability is a pre-requisite for sustained growth and has been achieved through prudent policies and labor market flexibility. Nevertheless, significant and well-identified structural challenges have yet to be addressed with ambitiously designed and decisively implemented productivity-enhancing reforms. The current expansionary cyclical environment as well as strong fiscal and external positions provide an ideal opportunity to address these challenges.

Key Policy Recommendations:

- **Preserve macroeconomic and financial stability:** Maintain a neutral fiscal stance and proactive macroprudential and supervisory policies. This will help avoid the recurrent boom-bust cycle characteristic of Lithuania.
- **Raise productivity growth:** This will support sustained high wage growth going forward and drive convergence with the standard of living of Western Europe without harming competitiveness. Reform efforts should focus on:
  - **Education and healthcare:** Reform proposals correctly identified the key issues, but initial implementation has failed to deliver in key areas.
  - **Pension and tax policy:** Reforms go in the right direction. Their impact should be regularly addressed, and adjustments made as required. Tax policy reform could be more ambitious by further reducing labor taxes and generating a broader, more efficient revenue base, including through environmental taxes.
  - **Labor market:** Improve the composition of active labor market policies to upskill the labor force, reduce skill mismatches and increase participation.
- **Social disparities and poverty:** Strengthening the provision of public services may require increasing revenues. The design of social spending should avoid impeding work incentives and, given limited resources, better target disadvantaged groups.
- **The development of a dynamic fintech industry should continue to be supported:** With opportunities come risks that should be addressed by enhancing supervisory capacity and strengthening AML/CFT safeguards.

Approved By
P. Gerson (EUR) and Z. Murgasova (SPR)

Discussions were held in Vilnius during June 12–25, 2019. The team comprised Messers. Borja Gracia (head), Enrique Flores, Karim Foda, Kanghoon Keah, and Ms. Vina Nguyen (all EUR).
Mr. Marijus Bernatavicius (OED) participated in most of the meetings. Ms. Nhu Nguyen and Ms. Hannah Jung supported the mission from headquarters.

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CONTEXT: STRONG PERFORMANCE IN A MORE UNCERTAIN EXTERNAL ENVIRONMENT

1. **Lithuania has for the first time experienced a strong recovery without the emergence of the types of imbalances experienced pre-crisis.** With a positive output gap, a tight labor market is putting pressure on wage growth. However, large competitiveness gains obtained during the crisis have been largely preserved: the current account remains in surplus with export shares increasing. Labor productivity and investment have recovered but remain below unsustainable pre-crisis levels. Fiscal deficits are now surpluses with debt at moderate levels and declining. Private-sector balance sheets have improved as have cross-sectoral exposures and contagion risks.

2. **However, in a mature cyclical position and with external conditions deteriorating, risks, mostly external, abound.** Europe's outlook has weakened, trade tensions continue, Brexit conditions remain uncertain and geopolitical risks persist. Domestically, without continued productivity gains, high wage growth, which is critical to increase living standards, will not be sustainable as it could erode hard-gained competitive advantages. Finally, the electoral calendar up to parliamentary elections next year is delaying the implementation of key reforms.

3. **Meanwhile, the challenge of transitioning from a low-wage to a high-productivity economy remains.** Progress with key structural reforms has been weak. The ambitious reform package approved last year correctly identifies the key areas where progress is needed. However, without buy-in from municipalities, implementation in healthcare and education is failing to materialize. In other areas, such as reducing the labor tax wedge and generating a broader and more efficient revenue base, reforms are not ambitious enough. Only comprehensive reforms will allow Lithuania to produce the competitive and well-paid workforce necessary to tackle, or even reverse, negative demographic dynamics.

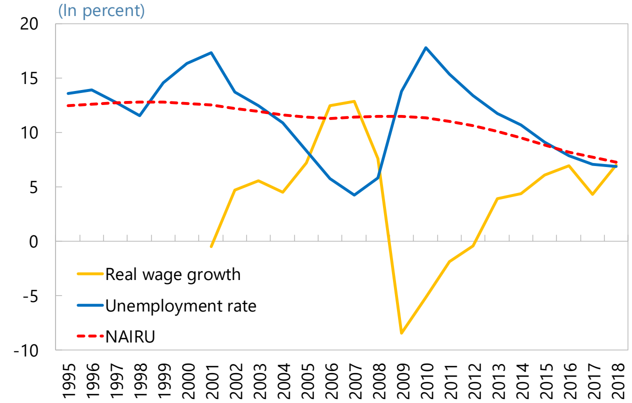
RECENT DEVELOPMENTS: STRONG CYCLICAL PERFORMANCE WITHOUT PRE-CRISIS IMBALANCES

4. **Economic performance in 2018 was positive, exceeding expectations.** Strong real growth in 2017 carried over into 2018, ending at 3.5 percent, with external demand more resilient than expected. This trend continued into early 2019, with first quarter growth at 4 percent. Private consumption growth was strong at 3.9 percent last year, a rebound from 2017, supported by strong wage and better-than-expected employment growth. Gross fixed capital formation growth remained high, with an increase in construction ameliorating the slowdown in machinery and equipment. Utilization of EU funds was significantly higher than in 2017. After a surge in the trade balance in 2017 and despite the slowdown in global trade, exports' contribution to growth remained strong. The current account surplus in 2018 was the highest in four years.

5. **The labor market remains tight with labor costs among the fastest growing in the EU, but without inflationary pressures.** The unemployment rate continued to decline, reaching

6.1 percent in 2018, below staff's estimate of the NAIRU, while labor force participation kept increasing, especially among the youth and elderly. The decline in working age population slowed with rising immigration, which contributed to employment growth turning positive. The strong wage growth since 2013 accelerated to 10 percent in 2018, with increases in the public sector exceeding those in the private sector for the first time since 2012. The minimum wage continued to increase, albeit at a slower pace and, at 43 percent of the average wage, stayed just below the Tripartite Council's targeted range of 45–50 percent. Strong wage growth has been supported by faster productivity growth in the price-taking export sector. The less productive nontradable sector has absorbed higher labor costs by partially passing them to consumers and reducing profit margins. Therefore, solid domestic demand has not yet led to increased goods inflation while service inflation was higher. This trend has largely reversed the decline in wage share and increase in profit rates observed during the crisis that was instrumental for the strong recovery.

Unemployment Rate and NAIRU
(In percent)



Sources: Statistics Lithuania and IMF staff calculations.

6. The fiscal position reflected a positive macroeconomic environment and a prudent budget. The general government has accumulated increasing surpluses for three consecutive years and the overall balance exceeded original plans. The structural fiscal position remained broadly neutral with the improvement in the overall balance reflecting better-than-expected economic conditions. However, spending pressures started to manifest, particularly in social benefits and wages at the expense of other discretionary items, which will leave a persistent impact on spending.

7. The financial system remains profitable, well capitalized and liquid with no signs of emerging imbalances. Financial soundness indicators are strong while capital adequacy ratios continue to exceed requirements. The system increasingly relies on customer deposits for funding, which increased by about 11 percent in 2018, exceeding the growth of the loan portfolio (in line with nominal GDP at about 7 percent). The composition of the loan portfolio has increasingly shifted towards mortgages. However, at less than 50 percent of GDP, the loan portfolio is relatively small and significantly below the pre-crisis peak of 64 percent. The favorable economic conditions have contributed to further improving asset quality, with non-performing loans remaining below the EU average. High profitability reflects banks' efficiency, among the highest in the EU (Box 1). Nonetheless, spillovers from real-estate related vulnerabilities in the Nordic parent banks remain a potential risk.[1] These vulnerabilities ameliorated in 2018 as the Swedish authorities implemented new mortgage-related macroprudential policies and increased the countercyclical capital buffer (CCyB), and housing prices stabilized.

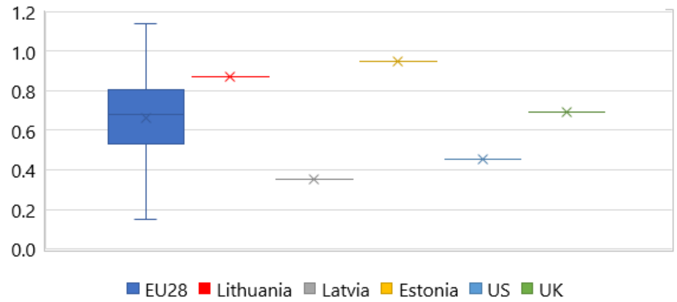
[1] Two Swedish Banks account for about 60 percent of Lithuania's banking system assets.

Box 1. Bank Competition

There is concern that the high concentration in the banking system may be hindering competition. At end-2018, 7 banks and 9 foreign branches were operating, with the three largest banks accounting for 84 percent of system assets. This level of concentration is relatively high for Europe, albeit not for some small economies similar to Lithuania.

Concentration has not resulted in poor competition. The net interest margin of Lithuanian banks is broadly in line with the European average. While the share of non-interest income is relatively high, it is likely explained by the large reliance on customer deposits as a source of funding post-crisis relative to the rest of Europe. Moreover, the traditional H-Statistic[1] is about 0.87, among the highest in Europe, which suggests strong competition. This test assesses the change of output prices in response to change in input prices, a direct attempt to capture monopolistic behavior.

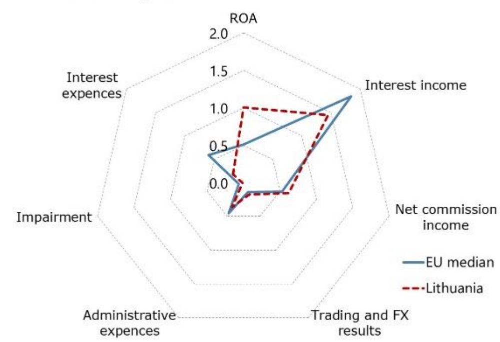
H-Statistics
(Elasticity of revenues to input prices)



Note: This is the measure associated with the Panzar and Rosse revenue test.
Source: World Bank Global Financial Development Database.

Profitability seems to reflect high efficiency. Return on assets was slightly above one percent and return on equity was around 12 percent in 2018. These levels of profitability are among the highest in Europe. However, Europe is not a good benchmark in this area. The average return on equity was around 13 percent before the crisis and fell to 3 percent afterward—and is yet to recover. Such weak profitability could erode buffers over time and undermine banks' ability to support growth. Moreover, cost-to-income ratios are among the most efficient in Europe, suggesting that profits are driven by low operating costs.

Bank Performance, 2018



Source: ECB.

However, recent signs point to decreasing competition. The exit of a medium-size bank and the ongoing restructuring of the third-largest one—which seeks to increase reliance on deposits rather than parent funding—might have eased competition in the short-term, particularly on the lending side. The impact on the deposit side is being defused by ample liquidity. The modest increase in interest margins for mortgages may reflect increased maturities while that for non-financial corporate credit is hard to assess given higher volatility and other factors such as the switch to capital markets by some strong corporates.

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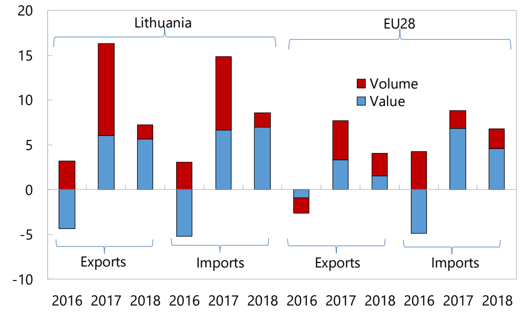
[1] See Panzar, J. C., & Rosse, J. N. (1987). Testing for "monopoly" equilibrium. The Journal of Industrial Economics, 443–456. In the Panzar and Rosse test for competition, the H-statistic sums up the coefficients of input prices on revenue.

8. The external position is stronger than implied by medium-term fundamentals and desirable policies (Box 2). The current account surplus increased to 1.6 percent of GDP in 2018, supported by strong exports of services—particularly transport—which more than compensated the modestly weaker balance in goods. In the medium-term, Lithuania is expected to run modest current account deficits as it continues to converge towards Western Europe, with investment exceeding output and attracting FDI flows. The prospective decline in European Funds does not pose a threat to external stability given Lithuania's strong balance of payments position.

Trade in goods: Volumes and Values
(Percent change)



Source: Eurostat.

Box 2. External Assessment

Staff considers the external position stronger than implied by medium-term fundamentals and desirable policies. The EBA-lite methodology was revamped and estimates a current account norm of -0.6 percent of GDP (compared to -1.4 percent of GDP under the previous methodology), including a multilateral consistency adjustment of -0.6 percent of GDP. Nonetheless, the strong CA balance in 2018 entails a gap of 2.5 percent of GDP, implying an undervaluation of 4.2 percent. The real exchange rate approach provides a similar result, but delivers a residual for Lithuania that is large, suggesting a poor fit. The external sustainability approach is less relevant given Lithuania's relatively strong net international investment position (-30 percent of GDP in 2018), which has strengthened since the global financial crisis.

External Balance Assessment[1]

Methodology	**CA Gap [2/]** (Percent of GDP)	**REER Gap [3/]** (Percent)
EBA-lite CA Approach	2.5	-4.2
EBA-lite REER Approach	…	-4.7
EBA-lite ES Approach	0.8	-0.5

Source: IMF staff calculations

1/ The assessment is done for 2018

2/ Positive gaps indicate a current account above its estimated norm

3/ Positive gaps indicate overvaluation

9. The government approved a comprehensive reform program last year. The reforms cover taxes, pensions, education, healthcare, innovation and informality and aim to increase productivity and reduce inequality and regional disparities. Measures related to tax policy and pensions came into effect in 2019.[2] Improvements in innovation policy and combating informality will be gradual. Initial implementation of reforms in healthcare and education have failed to deliver key objectives. Both reforms aim to improve the quality and the efficiency of oversized networks by changing their funding structure but the lack of buy-in from municipalities has prevented progress. After a presidential veto, healthcare reform needs further discussions in Parliament. Some measures led to social pressures and an unplanned increase in medical and teachers' salaries last year.

[2] See Box 4 in IMF Country Report No. 18/185.

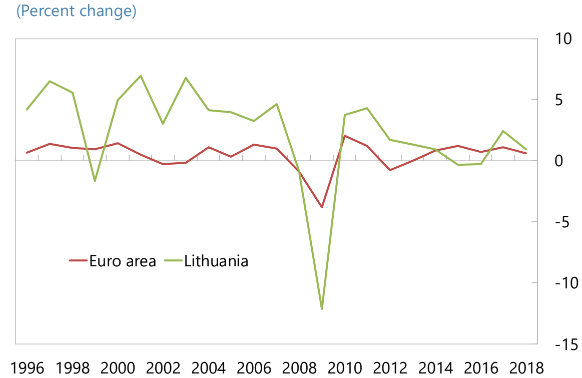
OUTLOOK AND RISKS: HIGH WAGE GROWTH WITH HEIGHTENED EXTERNAL RISKS

10. Given the advanced cyclical position, growth is expected to moderate to a more sustainable path in the next few years. While the output gap remains positive, potential growth is projected to come down to 2–2.5 percent over the medium-term. Domestic demand will continue to be the main engine of growth, but a moderating labor market will put some downward pressure on consumption. Investment will largely depend on policy predictability, reforms and the business environment where Lithuania is doing well as reflected in recent improvements in the World Bank's Doing Business indicators. As an economy undergoing convergence, the current account is projected to turn negative over the medium-term and core inflation is expected to continue trending to its long-run average above the euro area due to the Balassa-Samuelson effect. These are already translating into productivity and inflation differentials between tradables and nontradables.

11. Medium-term growth will be constrained by demographics and structural factors. Lithuania has had the most dramatic increase in old-age dependency in the EU, which is expected to double and reach 64 percent by 2060.[3] This process is driven by aging and emigration and will have an estimated negative contribution to potential growth of up to 1.4 percentage points over the next decade.[4] While the former will intensify in the coming years, the latter appears to be moderating recently (Figure 5). Emigration has also contributed to labor shortages, especially for high-skilled professions. Meanwhile, productivity growth has not sufficiently compensated for this labor shrinkage, particularly after the crisis despite past reform initiatives. Skill mismatch is high driven by the oversupply of low-skilled labor and inefficiencies in the educational system.[5]

12. The main risks over the medium-term are the lack of sustained gains in productivity and a weakening external environment (Box 3). Post-crisis, the differential in productivity growth with the euro area average has been low, and the economy risks losing competitiveness from rising labor costs above productivity gains. However, deviations between wages and productivity have been temporary and self-correcting in the past, particularly in export-oriented sectors, and there is no reason to believe that this will not happen again if needed, reducing associated potential risks.

Total Factor Productivity
(Percent change)



Sources: European Commission, Ameco.

Growth in Europe and other large economies could weaken further, affecting Lithuania via trade, confidence and FDI channels. The European Commission's Mobility Package, if approved by

[3] The 2019 Aging Report, European Commission.

[4] Annex II, "Lithuania's Potential Growth", IMF Country Report No. 18/185.

[5] Selected Issues Paper, "Skills Mismatch and Active Labor Market Policies in Lithuania."

Box 3. Republic of Lithuania: Risk Assessment Matrix[1]

Source of Risks, Likelihood, and Time Horizon	Impact on Lithuania	Recommended Policy Response
External		
High (short- to medium-term) **Weaker-than-expected global growth.** Weakening outlooks in the U.S., Europe, and China feed off each other and impact on earnings, asset prices, and credit performance. Weak foreign demand and faltering confidence delay euro area's business investment and private consumption. A disorderly Brexit causes market disruption with negative spillovers. In the medium-term, disregard for the common fiscal rules and rising sovereign yields for high-debt countries test the euro area policy framework, with adverse impact on confidence and growth.	**High/Medium** As a small, highly open economy, Lithuania would be affected through trade, confidence, and FDI channels. Growth and employment could suffer. The impact will be particularly high if the shock originates from the Euro Area.	Participate in coordinated policy responses at the European level. Diversify exports to more dynamic destinations. Redouble efforts to spur domestic productivity growth.
High (short- to medium-term) **Rising protectionism and retreat from multilateralism**. In the near term, escalating and sustained trade actions threaten the global trade system, regional integration, as well as global and regional collaboration. Additional barriers and the threat of new actions reduce growth both directly and through adverse confidence effects (increasing financial market volatility). In the medium-term, geopolitical competition and fraying consensus about the benefits of globalization lead to economic fragmentation and undermine the global rules-based order, with adverse effects on growth and stability.	**Medium** Lithuania would be affected through trade and confidence channels. But with the single market—Lithuania's largest export destination—the fallout should be contained.	Participate in global and European policy responses. Diversify risk by pushing ahead with export diversification.
Low/Medium (short- to medium-term) **EU's Mobility Package.** If approved by the European Parliament, it will require goods vehicle to return to country of origin periodically, restricting carriers' flexibility and adversely affecting peripheral countries in the EU.	**High** The transportation sector makes up 12 percent of value added and half of employment gains in 2018. Direct and indirect impact will be large.	Actively participate in discussions at the European level. Diversify risk by pushing ahead with export diversification.
Low/Medium (short-term) **Sharp tightening of global financial conditions.** Market expectation of tighter U.S. monetary policy and sustained rise in risk premium concerning some euro area sovereign debt levels can lead to higher debt service and refinancing risks, further stressing on leveraged firms, households, and sovereign, and risking a broader downturn.	**Low** Higher interest rates could somewhat cool economic momentum, but low leverage in the economy, coupled with fiscal and current account surpluses would guard against financial stress.	Let automatic fiscal stabilizers operate freely. Consider discretionary fiscal policy in case of a severe growth setback.
Medium (short- to medium-term) **Cyber-attacks** on financial systems and broader private and public institutions that trigger systemic financial instability or disrupt socio-economic activities.	**Medium** Disruptions to the financial system could curtail credit growth and investment, though high liquidity in the economy could limit the impact.	Step up collaboration with home country supervisors and strengthen crisis preparedness.
Domestic Risks		
Medium (medium-term) **Risks to competitiveness:** Wage growth exceeds productivity growth for an extended period.	**Medium** Competitiveness and growth potential would suffer and catching-up with living standards in Western Europe stall. However, real wages and productivity have traditionally been closely linked and temporary deviations have been self-correcting.	Redouble efforts to implement structural reform programs. Avoid large minimum wage increases and reduce skills mismatch.
Medium (short-term) **Election cycle.** Pressures running up to the 2019–20 election cycle.	**Medium** The electoral calendar and social pressures could stall reform progress and lead to slippages.	Commit to implementing the 2018 reform proposals. Adhere to the fiscal rules, budget spending targets, and medium-term stance in the Stability Program.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. "Short term" and "medium term" are meant to indicate that the risk could materialize within 1 year and 3 years, respectively.

the European Parliament without modifications, could have a large negative impact on Lithuania's transportation sector, which contributes 12 percent to value added and around 6 percent to tax revenue. While Lithuania is sensitive to external shocks, including a sharp tightening of global financial conditions, the current environment of low leverage, high liquidity, and fiscal and current account surpluses would mitigate their impact. Although baseline projections assume rather adverse demographic trends, the latest data on net migration indicate some upside risk, as manifested already in last year's employment data. Heightened external uncertainty tilts risks to the downside in the short- and medium-term.

13. The authorities broadly agreed with staff's assessment of the outlook and risks. They recognized that domestic demand, supported by a tight labor market, will continue to drive growth while external demand will weaken in key European partners. They acknowledged that there will be limited progress on key aspects of the reform agenda given the timing of the election cycle, and the uncertain external environment but agree that Lithuania is better prepared to weather a downturn**.**

POLICY DISCUSSIONS: SUSTAINED PRODUCTIVITY GROWTH TO INCREASE LIVING STANDARDS

Lithuania needs sustained productivity gains to ensure higher living standards and convergence with Western Europe. This is the only way to ensure high wage growth without harming competitiveness, which will be key to address, or even reverse, negative demographics and social disparities. As a small open economy in a currency union, Lithuania also needs substantial buffers to withstand shocks and detach itself from increasing external volatility. Prudent fiscal policy, a flexible labor market and active macroprudential policies are critical to preserve stability. However, decisive implementation of the structural reform agenda is the only way to boost productivity and address social disparities.

A. Preserve Macroeconomic Stability and Avoid Imbalances

14. Lithuania is in a more advanced cyclical position than the euro area. Thus, the ECB's monetary policy stance is looser than would be warranted for Lithuania alone. Over the past decade, the real interest rate gap between real and natural interest rates has been persistently negative, which has translated into looser domestic financial conditions.[6] In the absence of an independent monetary policy, available policy levers, particularly fiscal and macroprudential, need to be proactive to maintain macroeconomic stability, a prerequisite for sustained growth.

[6] Selected Issues Paper, "The Interest Rate Gap and Financial Conditions in Lithuania."

15. The 2019 budget stance is procyclical, partially undoing previous consolidation efforts. Staff recommends a neutral stance and projects a fiscal impulse of 0.6 percent of GDP with a slightly increasing output gap. Because the authorities estimate a substantially higher rate of potential growth going forward,[7] they consider the fiscal stance to involve a very modest tightening over the next two years. Lithuania has substantial fiscal space given low borrowing costs (reflecting euro area membership and prudent policies) and moderate (though above pre-crisis level) debt. As evidenced during the 2009–10 crisis, fiscal buffers and a flexible labor market are the most effective shock absorbers available.

Macroeconomic and Fiscal Projections

	2017	2018	2019	2020
Real GDP growth				
Ministry of Finance	4.1	3.5	2.6	2.4
IMF	4.1	3.5	3.2	2.6
Potential growth				
Ministry of Finance	2.5	3.1	3.5	3.5
IMF	2.6	3.0	2.9	2.7
Output gap				
Ministry of Finance	1.7	2.9	2.0	0.9
IMF	0	0.5	0.7	0.6
Overall balance				
Ministry of Finance	0.5	0.7	0.4	0.2
IMF recommendations			0.8	0.6
IMF projections	0.5	0.7	0.3	0.2
Structural balance				
Ministry of Finance	-0.7	-0.5	-0.4	-0.3
IMF recommendations			0.7	0.6
IMF projections	0.7	0.8	0.2	0.1
Fiscal impulse 1/				
Ministry of Finance	-0.2	-0.2	-0.1	-0.1
IMF recommendations			0.1	0.1
IMF projections	0.1	-0.1	0.6	0.1

Source: The Authorities and IMF Staff Estimates

1/ A positive fiscal impulse signifies a loosening of fiscal stance.

16. The procyclical stance could be exacerbated given downside risks to budget revenues and increasing budget rigidities with the rise in non-discretionary spending. The combined impact of tax and pension reforms increases uncertainty of fiscal outcomes this year. Compliance gains are projected to yield almost half percent of GDP by the authorities. Moreover, the negative revenue impact of the tax reform could be larger than expected. Both represent a risk although they could be offset by a better-than-projected economic environment. The largest increase in expenditure in the 2019 budget continues to be in social spending driven by universal child benefits and other programs such as housing for both low-income renters and young families. These are expected to have a positive impact on reducing poverty.[8] At the same time, the public sector wage bill is also projected to increase further given the planned salary increases in the health and educational sectors. Given spending pressures in these areas last year, further slippages this year cannot be ruled out. To prevent this and increase the effectiveness of fiscal policy, fiscal risks require closer monitoring in a transparent and comprehensive framework that analyzes their economic impact and interactions (Box 4).

[7] Following a production function approach and with more optimistic projections on investment and TFP growth, the authorities estimate higher potential growth than staff and a narrowing positive output gap. Thus, they project a marginal structural fiscal improvement despite a declining overall balance.

[8] The EC estimates that the reduction in at-risk-of-poverty rate for households with children falls significantly, e.g. by almost 9 percentage points for single-parent families. Country Report Lithuania 2019, European Commission.

17. Macroprudential policy is being used proactively to address systemic risks. The Bank of Lithuania (BoL) has sole responsibility for, and a broad set of, countercyclical, sectoral and liquidity macroprudential instruments to tackle a variety of shocks (excessive credit growth, asset prices and funding shocks) and has been proactively using them. Signs of emerging moderate cyclical systemic risks as the pace of credit growth remained relatively high and housing prices kept rising faster than income, led the BoL to raise the CCyB to 0.5 percent at end-2017 and to 1 percent in mid-2018.[9] Most banks were already above the new capital requirement and have large and rising liquidity buffers given high deposit growth. Since then, the pace of corporate loan growth has moderated but the growth in mortgages remains relatively high. Efforts to further strengthen the cooperation and coordination in the Nordic-Baltic Stability Group, including the joint financial crisis management exercise conducted earlier in the year, are helping to ensure crisis preparedness.

18. Lithuania's recovery from the crisis has helped build buffers and increase resilience without regenerating the imbalances seen in the past (Annex II). Unlike the pre-crisis period, no imbalances have reemerged that would require a sudden adjustment in case of a crisis. The elimination of the current account deficit that prevailed pre-crisis and the strong external position has greatly reduced financing risks. Banks, households and non-financial corporates have become less vulnerable and more resilient to shocks through deleveraging. Cross-sectoral exposures have also decreased, reducing contagion risks. The public sector is the only one with a worsened net-worth position reflecting, in part, balance sheet transfers from the private sector and an increased exposure to the rest of the world. However, risks in this area are ameliorated by euro area membership and the elimination of redenomination risks, a key driver of the sharp increase in spreads during the crisis.

19. The authorities stressed their commitment to preserve macroeconomic and financial stability. Based on different potential growth estimates, the Ministry of Finance viewed their medium-term fiscal impulse as broadly neutral and appropriate given the economic cycle, uncertain external environment and national and EU fiscal frameworks, while the BoL viewed the fiscal stance as procyclical. Both agreed that there exists high uncertainty around such estimates. Under more conservative economic assumptions, the authorities acknowledged spending pressures given large social demands but expect revenue gains from combating the shadow economy. The authorities agreed that Lithuania has fiscal space but stressed the need to rebuild buffers further to face long-term fiscal pressures due to demographic trends. While they agreed that the banking system is sound and efficient, they emphasized a concern about the insufficient level of competition, which may at least partly explain the growth of profitability and net interest margins of the banking sector.

[9] CCyB increases take effect 12-months after they are announced. The Bank of Lithuania also raised the other systemically important institutions buffer for one of the smaller banks (8 percent of the system) at end-December (effective at end 2020). These complements other macroprudential policies that were already in place, including LTV, DSTI, and maximum loan maturity requirement. Further details are available at IMF Country Report No 18/186.

Box 4. Fiscal Transparency

Lithuania does well regarding fiscal transparency and public reporting of public finances. This is the finding of the recent Fiscal Transparency Evaluation from the IMF. Performance is stronger in the areas of fiscal reporting, forecasting and budgeting. However, fiscal risks analysis and management are areas for improvement.

Fiscal reporting, forecasting and budgeting in Lithuania are good in most areas. Reports are of good quality and published regularly in a timely manner. However, there is no report providing a consolidated view of the public sector nor of public corporations that operate outside the central government. Budget documents could be enhanced by providing more information on deviations from previous projections and on the main factors behind the outlook and its impact on fiscal forecasts. Similarly, the monitoring and oversight of all state- and municipal-owned enterprises can be strengthened by producing and publishing a consolidated report on their stock, flows and inter-public sector transactions.

Although information on fiscal risks is available, there is no comprehensive report of the risks facing the public sector. Risks are discussed in budget documents (although not those to the forecasts) and the Stability Program. There are also isolated reports such as the financial sector risk and the debt reports. There is not, however, a comprehensive report that quantifies their interaction and cumulative effects. In particular, important categories are missing such as the risks from PPP contracts, municipal public corporations, and concessions at sub-national governments. The authorities are in the process of compiling such a risk report.

B. Increasing Living Standards with Sustained Wage and Productivity Growth

20. Having successfully addressed flow and stock imbalances, Lithuania needs to accelerate structural reforms in the currently benign macro and fiscal environments. This is the only way to ensure that high wage growth does not harm competitiveness and can be sustained, increasing living standards. The positive economic environment should help minimize the costs of reforms and maximize their long-term impact. Since reforms tend to entail short-term costs and face opposition from vested interests, fiscal support can help implementation and improve the sustainability of reforms. Lithuania has enough fiscal space to provide this support if needed.

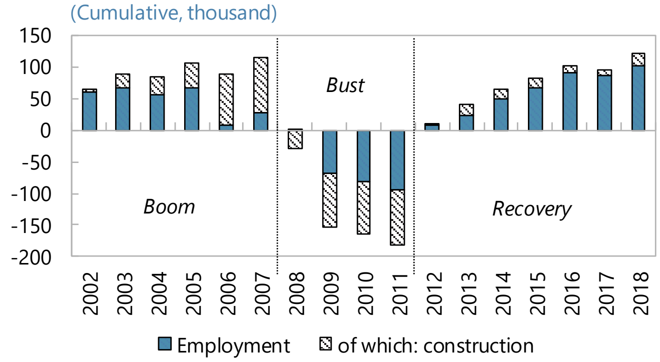
21. Education and healthcare remain the top priorities (Box 5). With demographic challenges and shortcomings in health outturns—among the most severe in the EU—and the quality of the education and training systems falling short of Lithuanian needs, education and healthcare reforms are pressing. Reform proposals identified the key issues and have the right focus, but initial steps have failed to deliver on key aspects. Buy-in from municipalities, who own and operate many schools and hospitals, has been elusive. Upfront wage increases, while needed given current low wages, have put at risk the implementation of other politically sensitive but critical reform elements such as the rationalization and consolidation of networks.

22. Pension and tax reform are steps in the right direction, but there is scope to further improve the efficiency of the tax system. Elements of the reform made the tax system more progressive and marginally reduced the labor tax wedge (Box 5). However, there is still scope to shift taxes away from labor into capital, wealth real estate and environmental taxes where Lithuania collects less revenue than peers.[10] The success of pension reform will depend on participation in the second pillar, where contributions are higher on average. However, current and projected low replacement ratios, while ensuring the fiscal sustainability of the system, raise questions about its social sustainability.

23. Lithuania's flexible labor market has helped weather cyclical factors. Contrary to other European economies, wages in Lithuania are very sensitive to unemployment (an increase in unemployment quickly leads to a reduction in wage growth), as wage setting largely happens at the firm level. Moreover, the labor code amended in 2017 introduced further flexibility by reducing dismissal costs and restrictions on hiring based on fixed term contracts. At the same time, it increased the benefits and duration of the unemployment insurance.

24. However, persistent structural inefficiencies remain. Structural unemployment, while slowly declining, is relatively high and labor productivity lags that of its peers. Skills mismatch at the job level is slightly above OECD averages. However, on the aggregate, the share of unskilled labor is significantly above what the economy demands.[11] This measure of mismatch increased sharply during the crisis and has only partially moderated since. It reflects the large share of unskilled employment created during the boom that was largely permanently destroyed in the bust. For example, with a share of 6 percent of employment, the construction sector contributed three-fourths to total employment created in the boom, half of the employment destroyed in the bust and only a tenth of the employment created in the subsequent recovery. On the other hand, skill-intensive sectors (e.g., information technology and finance) experience labor shortages.

Employment
(Cumulative, thousand)



Sources: Statistics Lithuania and IMF staff calculations.

25. Spending on active labor market policies (ALMPs) is low, its funding relies heavily on EU funds and its composition inadequately reflects the needs of the labor market. ALMP spending has not been responsive to cyclical conditions given its reliance on EU funds (two-thirds of the total). Employment subsidies have become their main component while expenditure on training, largely centered in curricula for low-skilled tasks, has fluctuated over time and only recently increased. International experience suggests that employment subsidies should concentrate on the most disadvantaged groups and well-designed training programs are the most cost-effective way to upskill the labor force, the key challenge in Lithuania.

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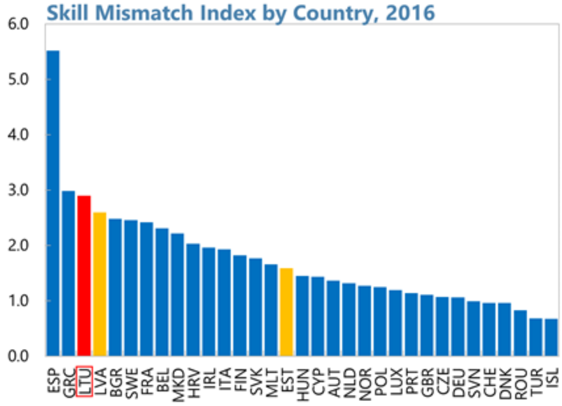
[10] Selected Issues Paper, "What Explains Lithuania's Low Tax-GDP Ratio?" IMF Country Report No. 17/178.

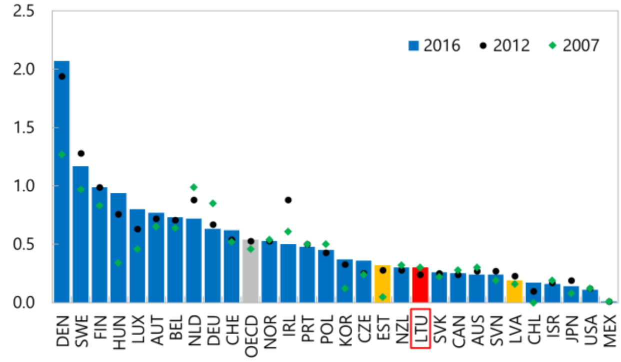
[11] Selected Issues Paper, "Skills Mismatch and Active Labor Market Policies in Lithuania."

Skill Mismatch Index by Country, 2016



Sources: Eurostat and IMF staff calculations.

Active Labor Market Program Expenditures
(In percent of GDP)



Source: OECD (Active Labour Market Policies)

26. Given emigration and aging, boosting labor supply remains critical to prevent future declines in potential growth. The demographic drag is one of the largest in the EU. Measures that can help increase labor force participation, particularly among women and the elderly, include lowering the cost of childcare, tightening early retirement schemes and reforming immigration to attract more high-skilled workers.

27. Lithuania faces a difficult tradeoff between maintaining a low and competitive tax system and strengthening the social safety net. This challenge will increase with lower projected replacement rates for pensions, the most important redistributive tool currently available. Thus, reducing high poverty rates and social disparities, especially in rural areas, will likely require more and better social programs. Social protection spending is well below the EU average. With discretionary spending already low, further increases in social spending cannot be financed without increasing revenues. Combating informality can provide some resources but gains in this area are unreliable. Thus, broadening the tax base and increasing some taxes may be inevitable.

Box 5. Structural Reforms: Diagnostic, Recommendations and Actions[1]

	Education
Issue	Oversized system does not reflect demographics resulting in high spending and poor outcomes. System leads to mismatch of education and occupational choices.
Recommendations	Address overcapacities (reduce number of teachers and consolidate school and university infrastructure). Review nexus between universities, financial incentives and quality standards.
Authorities' actions	Parliament approved reform in 2018 in line with past recommendations. With wage increases preceding other more sensitive reform aspects and without buy-in from municipalities, implementation has not meaningfully progressed.
	Healthcare
Issue	System remains hospital-care centered while out-patient and long-term care for elderly lag.
Recommendations	Continue reorganizing and rationalizing hospital sector, improve out-patient and long-term care, and expand role of primary care. Develop a copayments system to incentivize cost efficiency. Strengthen accountability, particularly at municipal level.
Authorities' actions	Healthcare reform was vetoed by the President. Though some reforms—rationalizing the hospital network—can be undertaken already, progress has failed to materialize.

Box 5. Structural Reforms: Diagnostic, Recommendations and Actions (concluded)

	Tax Policy
Issue	Low overall tax collection with high labor tax wedge and low wealth and environmental-related taxes. Tax system has limited redistributive impact.
Recommendations	Reduce social security contributions for low wage earners. Rebalance tax system from indirect and labor taxes towards wealth and capital (e.g. environmental and property). Continue tax administration reform.
Authorities' actions	Tax reform slightly reduced labor tax wedge by raising PIT rates, lowering social contributions and increasing the non-taxable income threshold. The flat PIT was replaced by two brackets. No major shift to wealth, environmental or capital taxes.
	Labor Market
Issue	Flexible labor market with high skill-mismatches and labor shortages in high-skill industries.
Recommendations	Reduce the tax wedge. Strengthen ALMPs (life-long learning and apprenticeships) and increase its funding. Assess impact of labor code and make adjustments as needed. Reduce barriers to non-EU migration and increase retirement age. Pause minimum wage increase.
Authorities' actions	Enhanced ALMPs (introduced internships, mobility support, recognition of self-education). Moderated the increase in minimum wage below Tripartite Council's target range of 45-50 percent of average wage. Restrictions on immigration were eased.
	Pensions
Issue	Low and falling replacement ratios for a rapidly aging population. Highly redistributive, but not targeted at the poor. Currently is the most effective redistributive policy.
Recommendations	Link retirement age to life expectancy and tighten early retirement. Raise gross pensions (to at least preserve replacement ratios) and subject them to progressive PIT. Strengthen multi-pillar system by funding non-contributory basic pensions through general revenues and by making payments to second pillar compulsory. Scale back incidence of disability pensions.
Authorities' actions	Basic pensions and commensurate social contributions were transferred to the state budget. Participation in Pillar II became mandatory with limited opting-out. A ceiling on social contributions was established and a new PIT bracket was introduced. A ceiling on private pension fund fees was introduced and the minimum amount to purchase an annuity reduced. The retirement age was not increased.
	Innovation
Issue	Innovation remains weak with limited interaction between businesses and public sector.
Recommendations	Consolidate a highly fragmented system and improve coordination.
Authorities' actions	Established a coordinating committee on innovation along past recommendations.

[1] Including both current and past staff recommendations.

28. Targeted spending on social protection should be the main tool to reduce poverty. Given limited resources, social protection should increase its reliance on carefully designed means-tested programs. Designs should avoid welfare dependency and disincentives to work. In particular, in-work benefits can simultaneously reduce inequality and increase employment.

29. The authorities have been proactive in developing a fintech industry (Annex III). They are promoting the country as a gateway to Europe for non-European financial companies and as a Nordic-Baltic regional fintech hub. With an innovation-friendly business environment, good and improving ease-of-doing-business and technological infrastructure, Lithuania is placing itself as an attractive host of fintech platforms. In 2018, there were 170 fintech companies operating in Lithuania, of which, 74 were payment service providers, 45 lending and banking, and 18 blockchain. The value of transactions in Lithuania's market was forecasted at around EUR 1.1 billion in 2017.[12]

30. The authorities are taking a number of steps to facilitate the development of fintech:

- Providing licenses to fintech companies. In addition to e-money and payment services licenses, the authorities introduced the concept of a "specialized bank" in 2017, with similar functions as a brick-and-mortar bank, but with lower initial capital requirements. In addition, through the 2016 law on crowdfunding, they support the creation of advisory and investment services.

- Supporting the infrastructure for payment services. BoL provides low-service-fees access to the Single Euro Payments Area.

- Foster innovation through a regulatory sandbox that allows market participants to test financial innovations in a real environment for a limited time. Moreover, BoL is creating a blockchain sandbox and promoting open banking.

- Reducing red tape through simplified procedures for establishing fintech companies ("newcomer program").

31. There will be increased competition in the financial sector going forward, particularly from fintech platforms. The completion of the ongoing restructuring of the third largest bank—with 24 percent of system assets—should increase competition in a highly concentrated market. Competition is also expected to increase from fintech companies, particularly on payment services which has been the early focus, albeit there is also activity on lending and advisory services. Moreover, the BoL has issued four specialized banking licenses over the last year.[13] While profitability seems to reflect high efficiency (Box 1), innovative solutions could improve services for customers and drive down margins and costs. Lithuanian banks are increasingly concentrating their business on traditional banking for residents while fintech companies are likely to focus on non-residents given the access to the whole EU market and the small size of the Lithuanian market.

[12] FinTech: financial technology explained—including impact, technologies, evolutions and forecasts, i-scoop.

[13] These include a credit union, a Swedish bank, a corporate group active in fintech, and a U.K. based authorized electronic money institution.

32. **Fintech provides big opportunities, but it also brings challenges, particularly regarding AML/CFT and supervision.** The global fintech industry has big potential given its small size relative to that of capital markets. The BoL's 2017 Financial Stability Report identifies risks related to fintech including regulatory, cyber, and the impact on financial stability from changes in (untested) business models. Lithuania's national ML/TF risk assessment identifies the use of technology in money transfers as a high-risk area. The likely focus of most entrants in the banking system on non-residents, marginally important at 3 percent of total deposits now, could represent a shift in the business model of Lithuania's banking system and bring new challenges for supervision, including for AML/CFT. However, there is scope to improve the AML/CFT regime to mitigate risks emanating from new technologies, with a particular focus on ensuring the effectiveness of AML/CFT supervision at addressing the rising number of fintech entities and the increased complexity of their operations.

33. **The authorities are taking actions to strengthen the AML/CFT framework to mitigate ML/TF risks by the region.** Lithuania underwent a mutual evaluation by MONEYVAL in 2018, which assessed the level of effectiveness of most aspects of its AML/CFT regime as moderate (second lowest out of four effectiveness ratings). The report recommended that the BoL should enhance its existing risk-based approach to AML/CFT supervision, further develop its ML/FT risk assessment and intensify its use of sanctions for AML/CFT violations.

34. **The authorities agreed with staff on the need to increase productivity growth through reform implementation.** They recognized that maintaining high wage growth will require sustained productivity growth and reiterated their intention to continue reform implementation particularly in the areas of education, healthcare and innovation. They highlighted early successes but recognized some bottlenecks in key areas and potential future delays given next year's elections. They also recognized the need to match higher future social spending with revenues but pointed out a lack of broad political consensus. The authorities agreed that promoting fintech should—among other things—help develop capital markets, as well as spur innovation and competition in the financial sector. However, they recognized that these developments entail challenges and agreed with the need to provide adequate resources to all agencies involved and to increase supervisory efforts further and pointed out to the new enhanced multi-agency collaboration framework.

STAFF APPRAISAL

35. **The Lithuanian economy has continued to enjoy a strong macroeconomic and fiscal performance, but long-term challenges remain largely unaddressed**. Prudent fiscal policy, a flexible labor market, and proactive macroprudential policies have been critical to preserve stability and should be maintained. The recovery has avoided the emergence of the large imbalances of the past and better positioned Lithuania to face external shocks and future economic downturns. However, Lithuania still confronts severe demographic pressures, large social disparities, and external uncertainty that can only be addressed with structural reforms. This is the only way to ensure sustained high wage growth and improved living standards.

36. The continued strong economic performance suggests that a neutral fiscal stance would have been preferable this year. Going forward there are heightened risks to revenues and increased spending pressures from social needs that are partly countered by conservative economic projections. Gains from combating informality are difficult to predict while the revenue impact of recent reforms is uncertain. Thus, revenue buoyancy may largely reflect cyclical factors. Without commensurate increases in revenues, spending pressures are increasing budget rigidities.

37. Macroprudential policy is being used proactively to prevent systemic risks. Signs that moderate cyclical systemic risks are emerging led the Bank of Lithuania to raise the countercyclical buffer to one percent in mid-2018. The financial system remains sound, liquid, and profitable.

38. The external position is stronger than implied by fundamentals and desirable policies. However, under unchanged policies, Lithuania's current account should gradually converge towards its medium-term norm.

39. Despite growing urgency, education and healthcare reforms have failed to deliver. Maintaining large and inefficient networks comes at the cost of quality and opportunities. Only comprehensive reform will allow Lithuania to produce the competitive and well-paid workforce needed to tackle income and social disparities. Thus, planned wage increases in these sectors should be made conditional on progress in network optimization.

40. Pension and tax reforms go in the right direction, but remaining challenges will require future compromises. Tax reform could have been more ambitious in shifting taxes away from labor. The reduction of tax exemptions and privileged regimes is also needed. On pensions, reform has ensured the financial, but not social, sustainability of the system. Low and declining pensions will increase pressures to boost basic pensions, which have been transferred to the budget this year. This represents a fiscal risk over the medium-term.

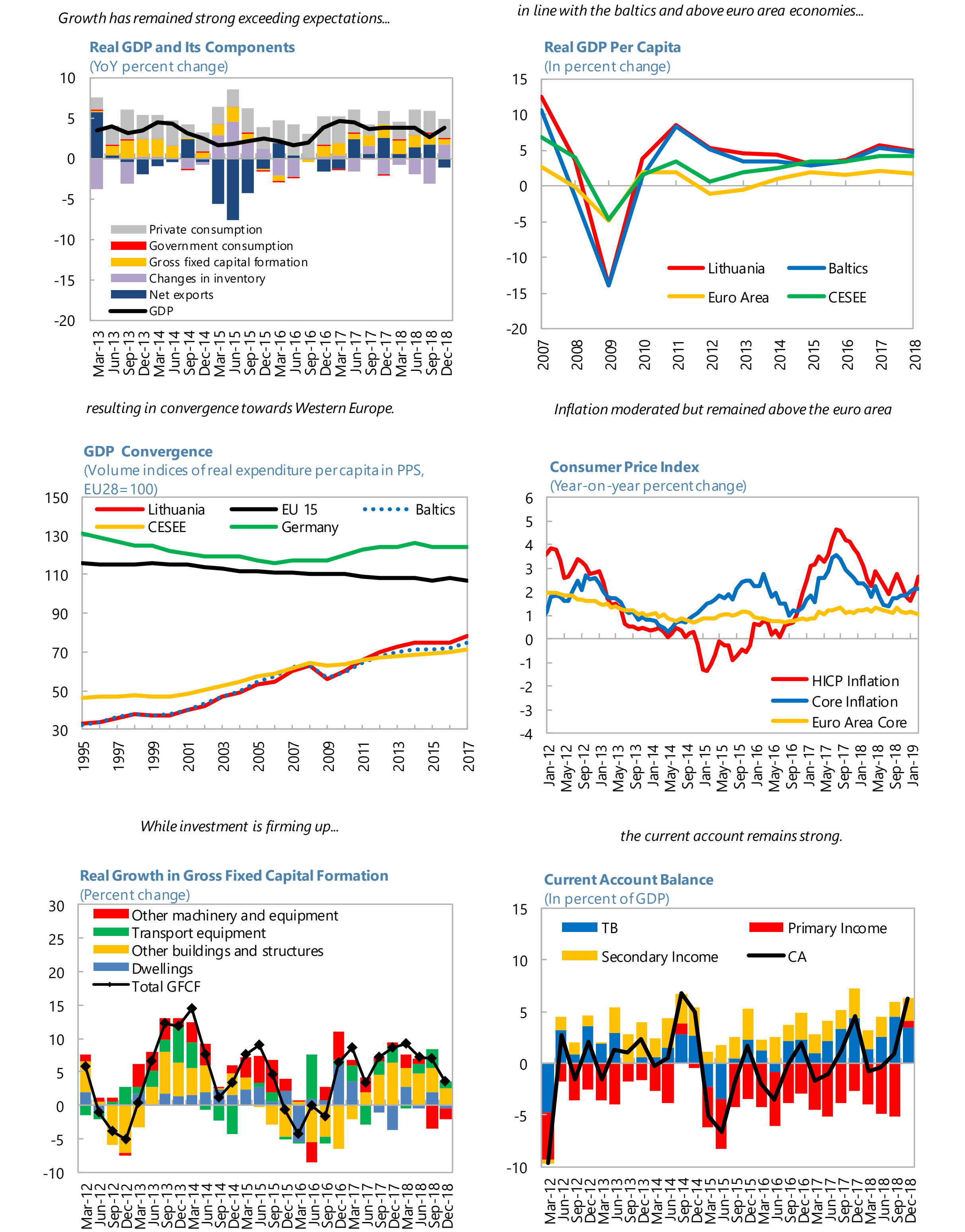
41. ALMP should be strengthened to effectively address skill mismatches and increase labor force participation. Current funding is low and relies excessively on EU funds and its composition inadequately reflects cyclical conditions or the needs of the labor market. Thus, reliance on employment subsidies should decrease and focus on the most disadvantaged groups only. The emphasis should shift to well-designed training curricula to upskill the labor force.

42. Lithuania faces a difficult tradeoff between maintaining a low and competitive tax system and strengthening the social safety net. With discretionary spending already low, further increases in social spending will likely require higher revenues. To ensure the most efficient use of limited resources, targeted social spending should be the main tool used. In this connection, the design and generosity of child benefits should balance their positive impact on reducing child poverty against the potential disincentives to work, particularly for women.

43. Fintech provides big opportunities to improve financial services and produce high-skill jobs, but it also brings challenges, particularly related to anti-money laundering. The authorities' efforts to promote fintech are already delivering results. Fintech companies will introduce some healthy competition, initially in the payment services segment. The larger focus on cross-border transactions represents a shift in the business model of the financial system that will bring new challenges for supervision, particularly regarding AML/CFT. The authorities' efforts to implement the 2018 MONEYVAL recommendations and enhance inter-agency coordination should be complemented by adequate resources across all agencies involved.

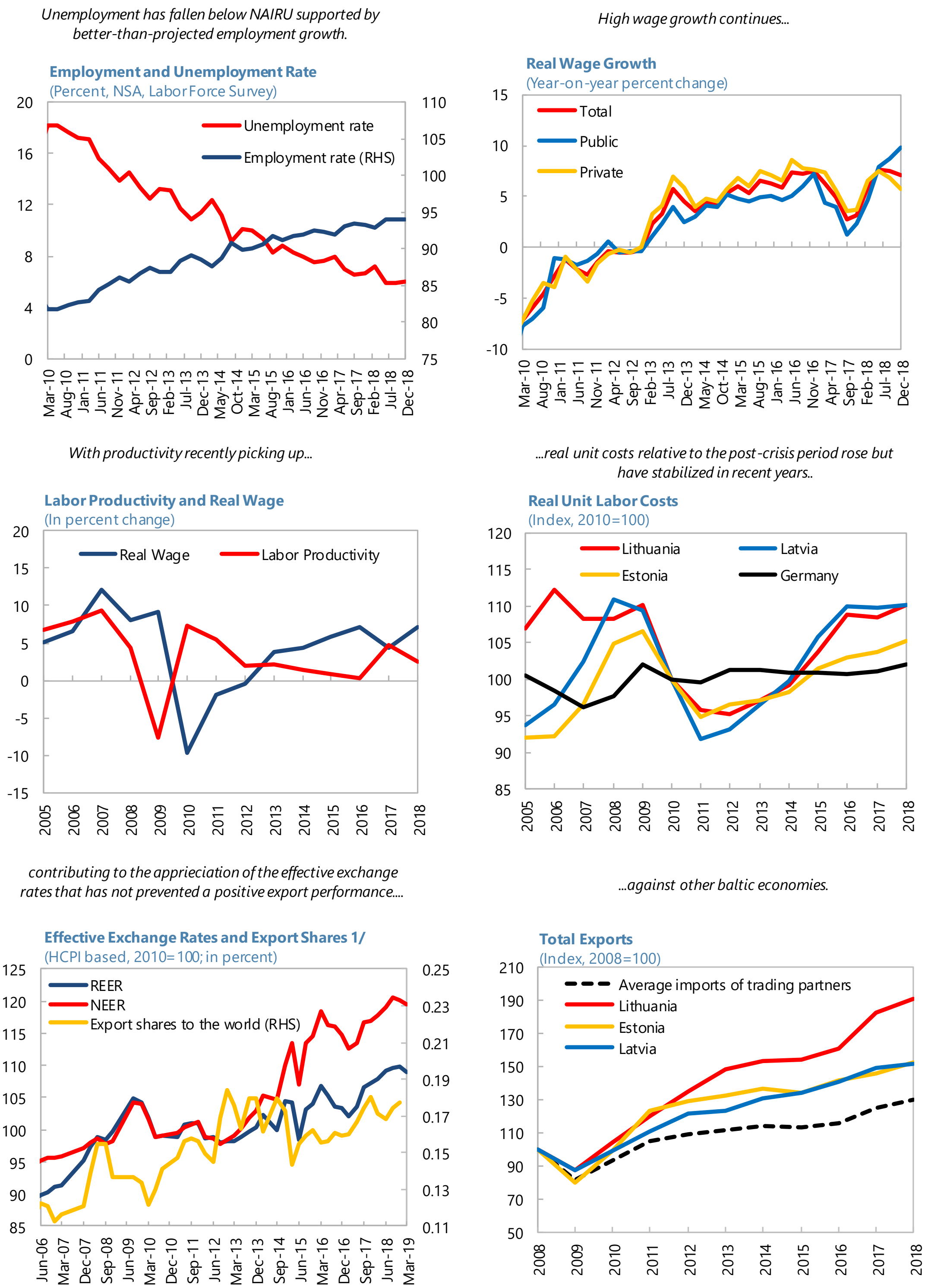
44. The next Article IV Consultation is expected to be completed on the standard 12-month cycle.

Figure 1. Lithuania: Macroeconomic Sector Developments



Sources: Haver Analytics; Lithuania Statistical Office; Bank of Lithuania; and IMF staff calculations.

Figure 2. Lithuania: Labor Market and Competitiveness Developments



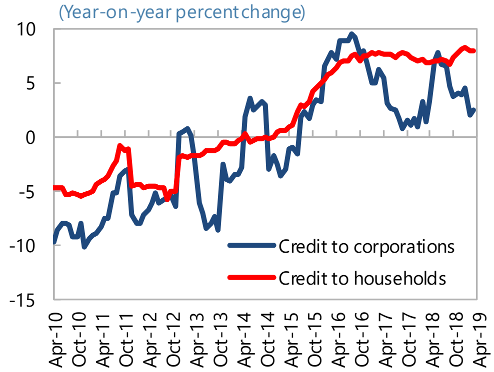
Sources: Haver; Eurostat; Lithuania Statistical Office; and IMF staff calculations.

1/ REER and NEER against a group of 42 trading partners including Russia.

Figure 3. Lithuania: Banking Sector Developments

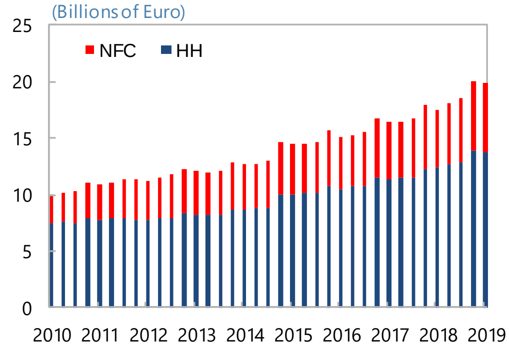
Credit remains strong, with banks raising their share of household loans...

Credit Stock
(Year-on-year percent change)



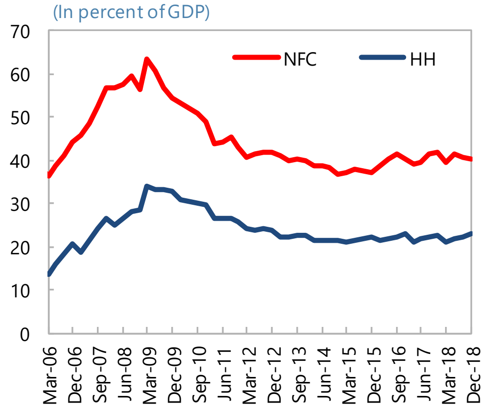
...funded by the continued increase in household deposits.

Total Deposits of Corporations and Households
(Billions of Euro)



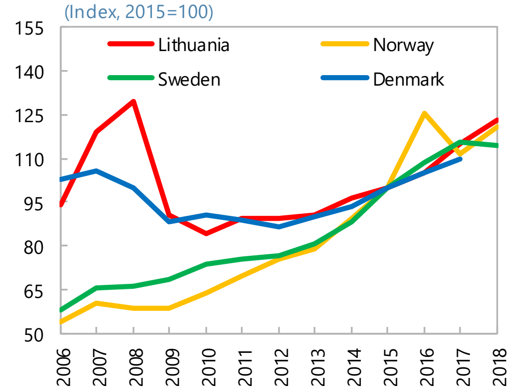
Household and corporate balance sheet are stronger than pre-crisis levels...

Household and Non-financial Corporation Debt
(In percent of GDP)



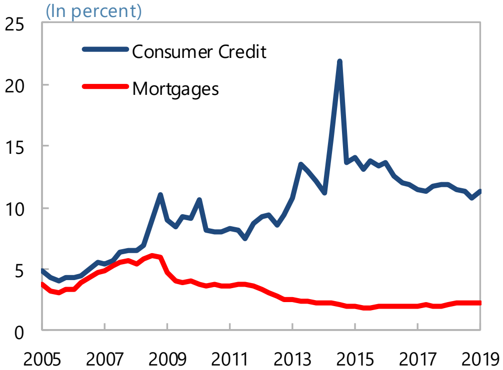
...supporting higher housing prices.

Real House Prices
(Index, 2015=100)



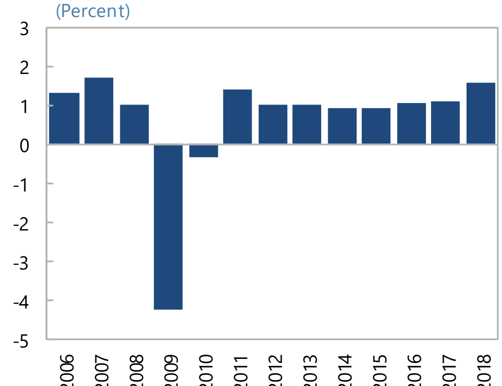
Despite low interest rates...

Household Lending Rates
(In percent)



...bank profitability remains strong.

Return on Assets
(Percent)

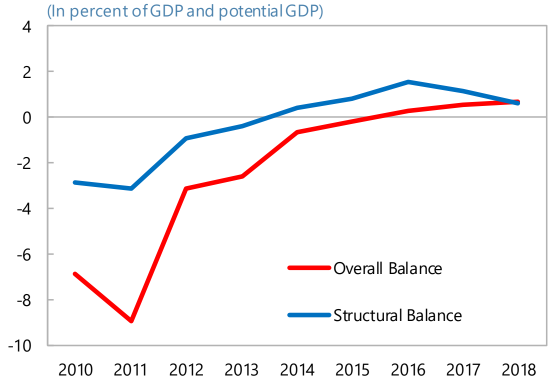


Sources: Bank of Lithuania; BIS; Haver Analytics; and IMF staff calculations.

Figure 4. Lithuania: Fiscal Developments

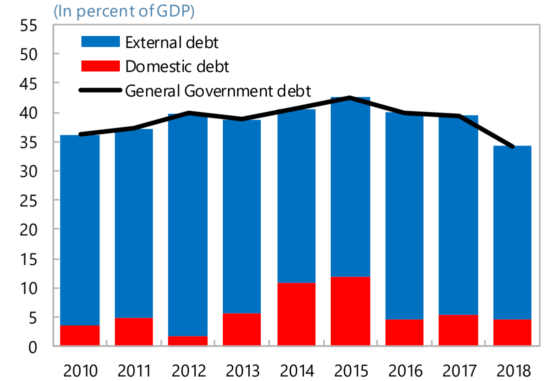
Fiscal surpluses continued...

Annual Overall Balance and Structural Balance
(In percent of GDP and potential GDP)



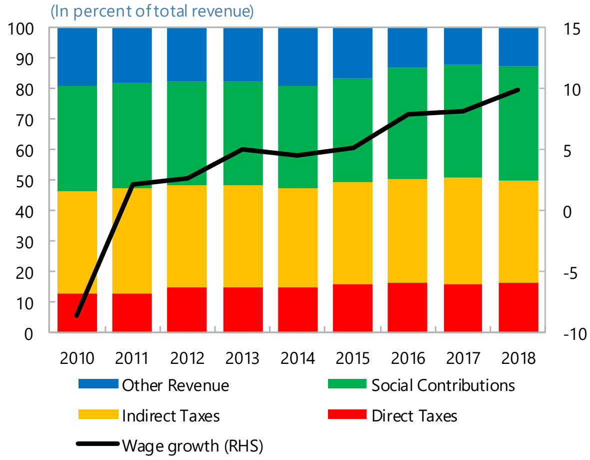
...contributing to declining debt ratios.

General Government Debt
(In percent of GDP)



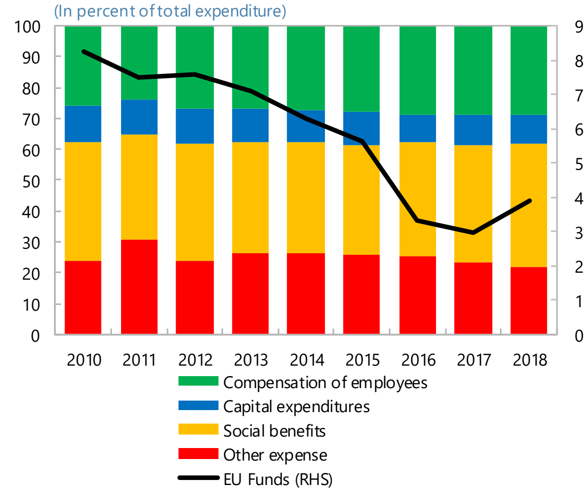
Strong wage growth contributed to higher income taxes and social contributions...

Revenue Composition
(In percent of total revenue)



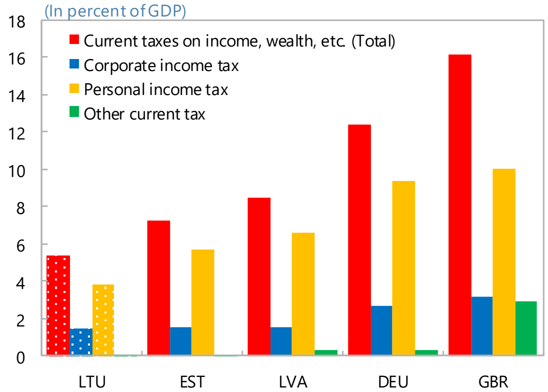
...but also higher compensation for employees, along with expanding social benefit programs.

Expenditure by Current Spending and Investment
(In percent of total expenditure)



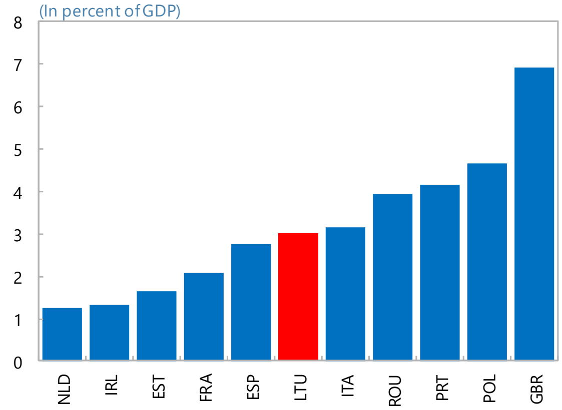
There is room for revenue gains by expanding capital and wealth taxes...

Current Taxes on Income and Wealth, 2017
(In percent of GDP)



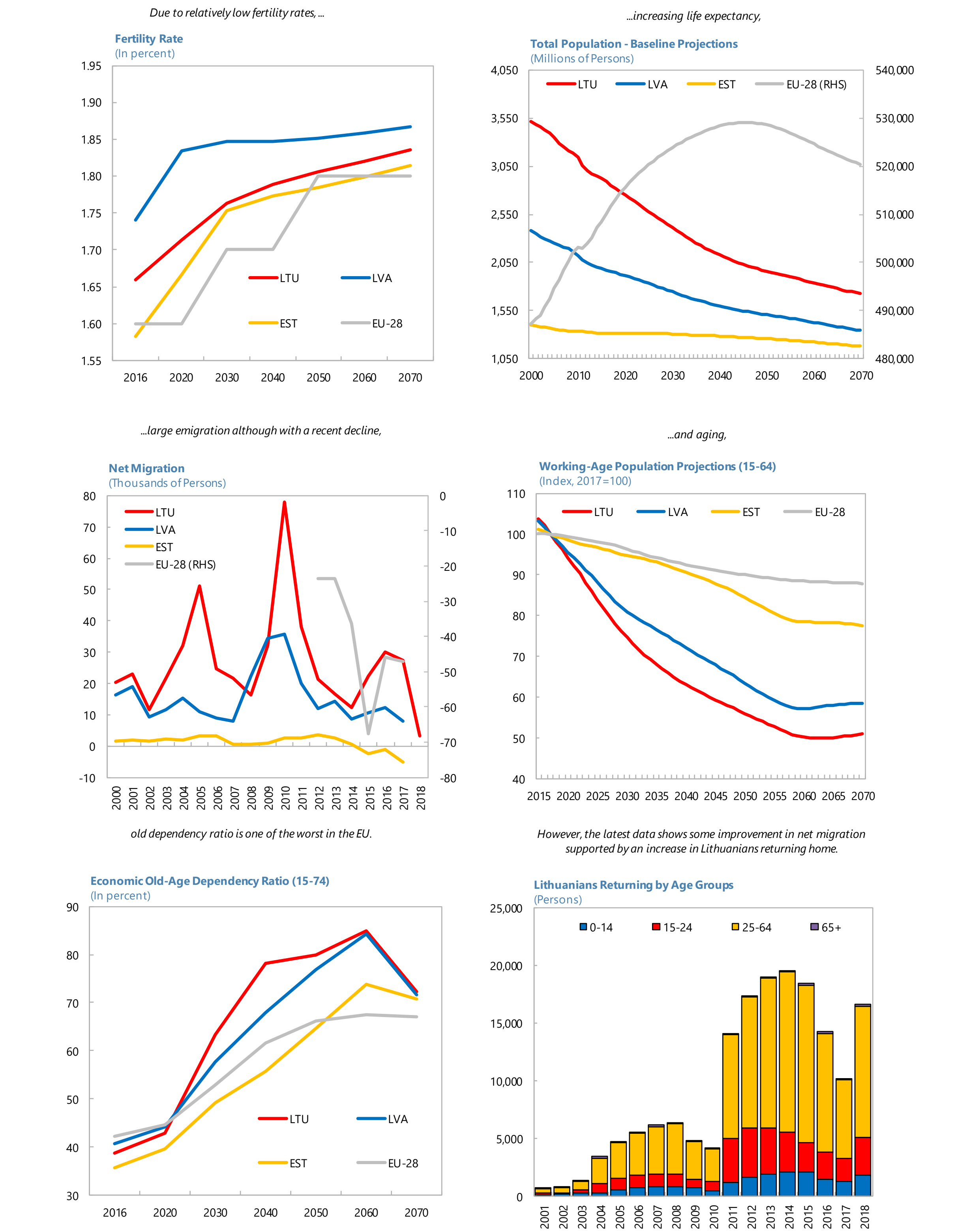
...as well as reducing tax expenditures

Revenue Loss from Tax Expenditures
(In percent of GDP)



Sources: Ministry of Finance; Statistics Lithuania; and IMF staff calculations.

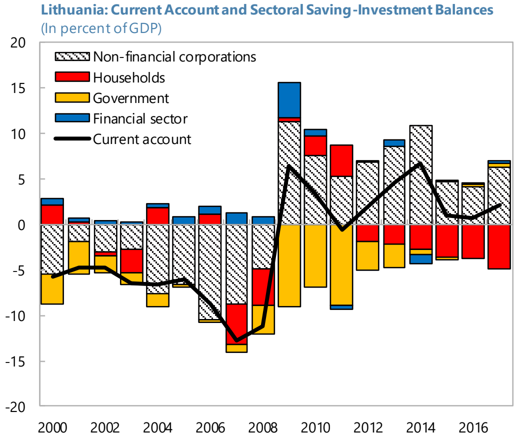
Figure 5. Lithuania: Adverse Demographic Trends



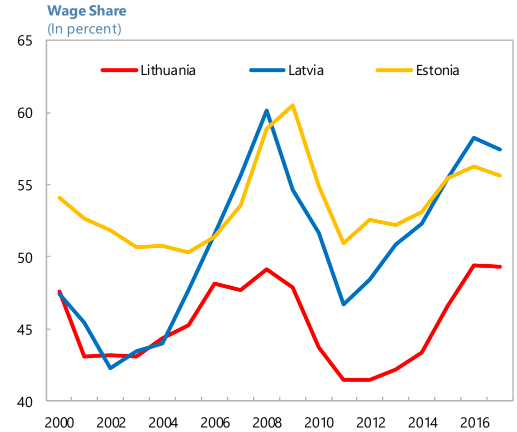
Sources: Eurostat, Haver Analytics, and IMF staff calculations.

Figure 6. Lithuania: Stock and Flow Adjustment

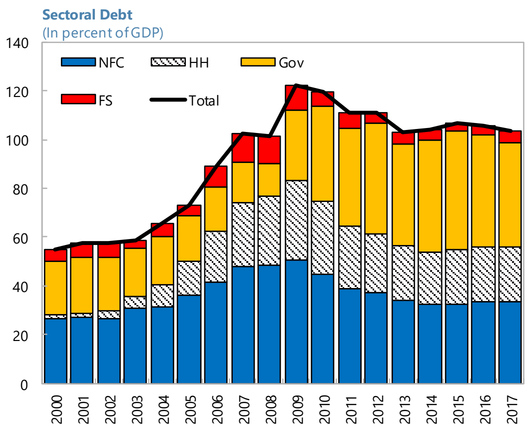
The large pre-crisis private sector imbalances, were rapidly corrected and have not re-emerged



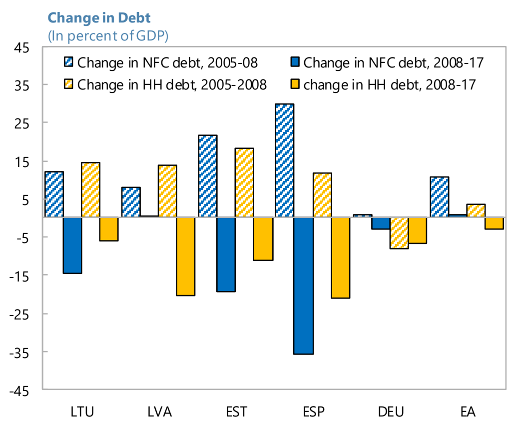
A very sharp reduction in the wage share during the crisis has been largely undone in the recovery



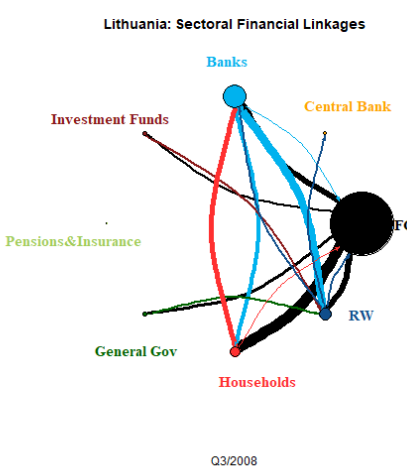
There has been significant deleveraging of the private sector supported by higher public sector debt



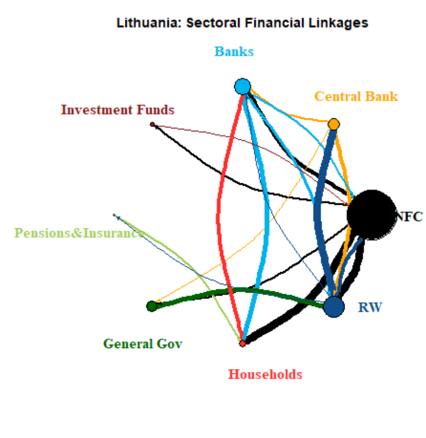
Non-financial corporate (NFC) debt is now a third lower than in 2008



There was high exposure of NFCs to houhseholds and banks to parents in 2008



Contagion and systemic risks from NFCs and banks have decreased during the recovery



Note: Each sector's bubble reflects the size of their total liabilities while the width of the lines connecting sectors reflect the size of their direct exposures. The line's color represents liabilities of one sector to another, i.e. a blue (black) line from banks to NFCs, represent banks' (NFCs) liabilities to NFCs (banks). Note that only exposures in excess of 5 percent of GDP are shown.
Sources: Eurostat; Haver Analytics; and IMF staff calculations.

Table 1. Lithuania: Selected Economic Indicators, 2015–24[1]

Quota (current, % of total): SDR 441.6 million , 0.09 percent
Main products and exports: refined fuel, machinery and equipment, chemicals, textiles, foodstuffs, plastics, wood products.
Key export markets: Russia, Latvia, Poland, Germany, U.S.

Per capita GDP (2018): € 16,100
Literacy rate (2015): 99.8%
At-risk-of-poverty (after transfers), share of population (2017): 29.6%

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
					Projections					
Output										
Real GDP growth (annual percentage change)	2.0	2.4	4.1	3.5	3.2	2.6	2.5	2.4	2.3	2.3
Domestic demand growth (year-on-year, in percent)	6.4	2.3	2.9	2.9	3.8	3.5	3.3	3.1	3.1	3.1
Private consumption growth (year-on-year, in percent)	4.0	5.0	3.3	3.9	3.7	3.2	3.2	3.1	3.1	3.0
Domestic fixed investment growth (year-on-year, in percent)	4.9	0.3	6.8	6.5	6.0	5.5	4.3	3.9	3.6	3.6
Inventories (contribution to growth)	2.7	-0.9	-0.5	-1.1	-0.1	0.0	0.0	0.0	0.0	0.0
Net external demand (contribution to growth)	-4.6	0.1	1.1	0.6	-0.5	-0.9	-0.9	-0.8	-0.9	-0.9
Nominal GDP (in billions of euro)	37.4	38.8	42.2	45.1	47.7	50.2	52.6	55.1	57.6	60.2
Output gap (percent of potential GDP)	-1.1	-1.4	0.0	0.5	0.7	0.6	0.4	0.2	0.1	0.0
Employment										
Employment (annual percentage change)	1.2	2.0	-0.5	1.5	0.6	0.2	0.0	-0.1	-0.1	-0.1
Unemployment rate (year average, in percent of labor force)	9.1	7.9	7.1	6.1	5.9	5.8	5.7	5.6	5.5	5.5
Average monthly gross earnings (annual percentage change)	5.1	7.9	8.2	9.9	8.0	6.5	5.4	4.9	4.7	4.6
Average monthly gross earnings, real (CPI-deflated, annual percentage change)	5.8	7.2	4.3	7.2	5.5	4.3	3.2	2.7	2.5	2.4
Labor productivity (annual percentage change)	0.8	0.4	4.6	2.0	2.6	2.4	2.4	2.4	2.4	2.4
Prices										
HICP, end of period (year-on-year percentage change)	-0.2	2.0	3.8	1.8	2.4	2.2	2.2	2.2	2.2	2.2
GDP deflator (year-on-year percentage change)	0.3	1.4	4.3	3.3	2.5	2.5	2.3	2.3	2.2	2.2
HICP core, period average (annual percentage change)	1.9	1.7	2.6	1.9	2.1	2.4	2.4	2.4	2.4	2.4
HICP, period average (annual percentage change)	-0.7	0.7	3.7	2.5	2.3	2.2	2.2	2.2	2.2	2.2
General government finances 2/										
Revenue (percent of GDP)	34.7	34.4	33.6	34.7	35.7	35.8	35.8	35.8	35.7	35.7
Of which EU grants	1.9	0.8	0.6	0.8	1.3	1.2	1.2	1.1	1.1	1.0
Expenditure (percent of GDP)	34.9	34.1	33.1	34.0	35.4	35.5	35.7	35.7	35.6	35.6
Of which: Non-interest	33.4	32.8	32.0	33.1	34.5	34.8	35.2	35.3	35.3	35.3
Fiscal balance (percent of GDP)	-0.2	0.3	0.5	0.7	0.3	0.2	0.1	0.1	0.1	0.1
Fiscal balance excl. one-offs (percent of GDP)	-0.5	0.2	0.5	0.7	0.3	0.2	0.1	0.1	0.1	0.1
Structural fiscal balance (percent of potential GDP) 3/	-0.1	0.8	0.7	0.8	0.2	0.1	0.1	0.1	0.1	0.1
General government gross debt (percent of GDP)	42.6	39.9	39.4	34.2	32.0	30.2	28.7	27.3	26.0	24.7
Of which: Foreign currency-denominated	11.9	11.2	11.1	9.6	9.0	8.5	8.1	7.7	7.3	7.0
Credit										
Private sector credit (end of period, percent change)	4.1	7.1	4.5	6.0	4.1	…	…	…	…	…
Long-term lending rate to private sector	8.0	6.6	7.2	8.1	…	…	…	…	…	…
Short-term lending rate to private sector	2.5	2.3	2.3	2.6	…	…	…	…	…	…
Balance of payments (in percent of GDP, unless otherwise specified)										
Current account balance	-2.8	-0.8	0.9	1.6	1.2	1.1	0.6	0.1	-0.4	-0.8
Current account balance (billions of euros)	-1.0	-0.3	0.4	0.7	0.6	0.6	0.3	0.1	-0.2	-0.5
Exports of goods and services (volume change, in percent)	0.9	4.0	13.6	5.1	4.0	3.8	3.7	3.7	3.7	3.7
Imports of goods and services (volume change, in percent)	6.8	3.8	12.0	4.3	4.5	4.7	4.6	4.5	4.5	4.5
Foreign direct investment, net	-1.9	-0.4	-1.3	-0.1	0.0	0.1	0.1	0.2	0.3	0.4
Short-term debt at original maturity	26.8	39.5	36.7	36.7	34.5	33.1	32.2	30.8	29.8	29.0
Gross external debt 4/	75.7	85.2	83.6	78.5	73.2	69.6	66.8	63.7	61.0	58.5
Exchange rates										
Real effective exchange rate (2005=100, +=appreciation)	118.9	121.0	122.6	126.4	..	..	..	..	..	..
Exchange rate (euro per U.S. dollar, end of period)	0.92	0.95	0.84	0.88	..	..	..	..	..	..
Exchange rate (euro per U.S. dollar, period average)	0.90	0.90	0.89	0.85	..	..	..	..	..	..
Saving-investment balance (in percent of GDP)										
Gross national saving	17.8	16.9	18.7	19.8	20.0	20.4	20.1	19.8	19.4	19.1
Gross national investment	20.6	17.7	17.9	18.2	18.8	19.3	19.5	19.7	19.8	19.9
Foreign net savings	2.8	0.8	-0.9	-1.6	-1.2	-1.1	-0.6	-0.1	0.4	0.8

Sources: Lithuanian authorities; World Bank; Eurostat; and IMF staff estimates and projections.

1/ Data are presented on ESA2010, and BPM6 manuals basis.

2/ The numbers for 2014 include 302 million euros (0.8 percent of GDP) in compensation payments for past pension cuts on accrued basi The payments are spread over 2014-16, affecting the debt profile for these years. ESM contributions are spread over 2015-19 and also increase debt. Passive projections from 2016 onward; incorporate only announced budgetary measures; budgetary impact of further defense spendin wage compensation and their potential offsetting measures are not included .

3/ Calculation takes into account standard cyclical adjustments as well as absorption gap.

4/ Government external debt excludes guaranteed loans.

Table 2. Lithuania: General Government Operations, 2015–24[1]

(ESA 2010 aggregates, in percent of GDP)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
					Projections					
Statement of Operations										
Revenue	34.7	34.4	33.6	34.7	35.7	35.8	35.8	35.8	35.7	35.7
Revenue excluding EU grants	32.8	33.6	33.0	33.9	34.5	34.5	34.6	34.7	34.7	34.7
Tax revenue	17.0	17.3	17.0	17.3	20.6	20.6	20.6	20.7	20.7	20.7
Direct taxes	5.4	5.6	5.4	5.7	8.7	8.8	8.8	8.9	8.9	8.8
Personal income tax	3.8	4.0	3.9	4.1	7.1	7.2	7.2	7.2	7.2	7.2
Corporate income tax	1.5	1.6	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6
Indirect taxes	11.6	11.7	11.6	11.6	11.9	11.8	11.8	11.8	11.8	11.9
VAT	7.7	7.8	7.8	7.8	8.0	8.0	8.0	8.1	8.1	8.1
Excises	3.1	3.1	3.1	3.2	3.3	3.2	3.2	3.2	3.2	3.2
Other	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Social contributions	11.9	12.5	12.6	13.1	10.3	10.5	10.5	10.5	10.5	10.5
Grants	1.9	0.8	0.6	0.8	1.3	1.2	1.2	1.1	1.1	1.0
Other revenue	3.9	3.8	3.4	3.6	3.6	3.5	3.5	3.5	3.4	3.4
Total expenditure	34.9	34.1	33.1	34.0	35.4	35.5	35.7	35.7	35.6	35.6
Current spending	31.1	31.0	29.8	30.7	32.0	32.3	32.4	32.5	32.6	32.8
Compensation of employees	9.6	9.8	9.5	9.8	10.0	9.9	9.9	9.9	9.9	9.9
Goods and services	5.0	4.8	4.6	4.4	4.8	4.8	4.8	4.8	4.8	4.8
Interest payments	1.5	1.3	1.1	0.9	0.9	0.7	0.5	0.4	0.3	0.3
Foreign	1.5	1.4	1.0	0.8	0.7	0.6	0.5	0.4	0.3	0.3
Domestic	0.0	-0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Subsidies	0.4	0.4	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Grants	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Social benefits	12.5	12.6	12.6	13.5	14.1	14.7	15.0	15.3	15.4	15.6
Other expense	1.2	1.2	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Capital spending	3.8	3.1	3.3	3.2	3.4	3.2	3.3	3.1	3.0	2.8
Net lending (+) / borrowing (-)	-0.2	0.3	0.5	0.7	0.3	0.2	0.1	0.1	0.1	0.1
Net lending (+) / borrowing (-) excl. one-offs	-0.5	0.2	0.5	0.7	0.3	0.2	0.1	0.1	0.1	0.1
Net acquisition of financial assets	1.2	-0.1	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic	0.2	-0.2	2.9	-0.5	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3
Foreign	1.1	0.1	-0.1	0.5	0.4	0.4	0.4	0.4	0.4	0.3
Net incurrence of liabilities	1.4	-0.4	2.3	-0.7	-0.3	-0.2	-0.1	-0.1	-0.1	-0.1
Domestic	2.3	-1.8	-1.0	1.8	-0.5	-0.2	0.0	0.0	0.1	0.0
Foreign	-0.9	1.4	3.3	-2.4	0.1	0.0	-0.1	-0.1	-0.2	-0.1
Financial Balance Sheet										
Financial assets	109.0	118.5	119.3	...	...	...	...	...	...	...
Currency and deposits	24.2	28.5	38.0	...	...	...	...	...	...	...
Securities other than shares	0.8	0.8	0.5	...	...	...	...	...	...	...
Loans	1.2	1.5	1.2	...	...	...	...	...	...	...
Shares and other equity	62.8	63.2	58.7	...	...	...	...	...	...	...
Other financial assets	20.0	24.6	20.8	...	...	...	...	...	...	...
Financial liabilities	204.8	208.0	191.4	...	...	...	...	...	...	...
Currency and deposits	4.8	5.5	4.7	...	...	...	...	...	...	...
Securities other than shares	148.2	152.2	145.1	...	...	...	...	...	...	...
Loans	30.6	29.2	24.1	...	...	...	...	...	...	...
Other liabilities	21.0	20.8	17.2	...	...	...	...	...	...	...
Net financial worth	-95.8	-89.5	-72.0	...	...	...	...	...	...	...
Memorandum items:										
GDP (in millions of euros)	37,434	38,849	42,191	45,114	47,716	50,172	52,603	55,088	57,604	60,239
General government debt (Maastricht def.)	42.6	39.9	39.4	34.2	32.0	30.2	28.7	27.3	26.0	24.7
Foreign debt	30.8	35.5	34.1	29.5	28.0	26.6	25.3	24.0	22.8	21.7
Domestic debt	11.8	4.4	5.3	4.7	4.0	3.6	3.4	3.2	3.2	3.1

Sources: Ministry of Finance; Ministry of Social Security; and IMF staff estimates.

1/ Passive projections from 2019 onward. Projections incorporate only announced budgetary measures.

Table 3. Lithuania: Balance of Payments, 2015–24
(Billions of Euros, unless otherwise indicated)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
							Projections			
Current account balance	-1.0	-0.3	0.4	0.7	0.6	0.6	0.3	0.1	-0.2	-0.5
Merchandise trade balance	-2.0	-1.8	-1.9	-2.6	-3.0	-3.4	-3.8	-4.2	-4.7	-5.2
Exports (f.o.b.)	22.3	21.9	25.7	27.4	29.3	31.0	32.7	34.4	36.2	38.1
Imports (f.o.b.)	24.3	23.7	27.7	30.1	32.3	34.4	36.5	38.6	40.9	43.3
Services balance	1.7	2.2	3.1	4.0	4.1	4.2	4.4	4.6	4.8	5.0
Exports	6.0	6.8	8.4	9.9	10.3	10.9	11.5	12.1	12.8	13.4
Imports	4.3	4.6	5.3	5.8	6.3	6.7	7.1	7.5	7.9	8.4
Primary income balance	-1.6	-1.6	-1.7	-1.5	-1.5	-1.3	-1.4	-1.4	-1.4	-1.5
Receipts	0.8	0.7	0.8	1.0	1.0	1.1	1.2	1.3	1.4	1.5
Payments	2.3	2.3	2.5	2.4	2.5	2.4	2.5	2.7	2.8	2.9
Secondary income balance	0.7	0.8	0.9	0.8	1.0	1.0	1.0	1.1	1.1	1.2
Capital and financial account balance	-0.9	1.3	0.6	0.7	0.4	0.8	1.1	0.9	0.9	0.9
Capital account balance	1.1	0.6	0.5	0.7	1.0	1.0	1.1	1.2	1.2	1.3
Foreign direct investment balance	-0.7	-0.1	-0.5	-0.1	0.0	0.0	0.1	0.1	0.2	0.3
Portfolio investment balance	-0.1	3.5	1.5	1.6	1.0	0.8	0.6	0.4	0.5	0.5
Financial derivatives	-0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Other investment balance	3.0	-4.1	-1.1	-1.6	-0.5	-0.6	-0.7	-0.4	-0.4	-0.5
Errors and omissions	0.7	-0.2	0.4	-0.2	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance	-1.3	0.8	1.4	1.2	1.0	1.3	1.4	1.0	0.7	0.4
Financing	1.3	-0.8	-1.4	-1.1	-1.0	-1.3	-1.4	-1.0	-0.7	-0.4
Gross international reserves (increase: -)	…	…	…	…	…	…	…	…	…	…
Use of Fund credit, net	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other prospective financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
In percent of GDP (unless indicated)										
Current account balance	-2.8	-0.8	0.9	1.6	1.2	1.1	0.6	0.1	-0.4	-0.8
Trade balance of goods and services	-0.6	1.2	2.8	3.1	2.2	1.7	1.2	0.7	0.2	-0.4
Exports	75.7	74.0	80.9	82.7	83.0	83.5	84.0	84.4	85.0	85.6
Imports	76.3	72.8	78.1	79.7	80.8	81.8	82.8	83.7	84.8	85.9
Primary income	-4.1	-4.0	-4.0	-3.3	-3.1	-2.6	-2.6	-2.5	-2.5	-2.4
Secondary income	2.0	2.0	2.1	1.8	2.0	2.0	2.0	1.9	1.9	2.0
Capital and financial account balance	-2.5	3.4	1.5	1.5	0.9	1.5	2.0	1.6	1.6	1.5
Capital account balance	3.0	1.5	1.2	1.5	2.0	2.1	2.1	2.1	2.1	2.1
Foreign direct investment balance	-1.9	-0.4	-1.3	-0.1	0.0	0.1	0.1	0.2	0.3	0.4
Portfolio investment balance	-0.3	8.9	3.6	3.5	2.0	1.5	1.1	0.8	0.8	0.9
Financial derivatives balance	-0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other investment balance	7.9	-10.6	-2.5	-3.5	-1.0	-1.2	-1.3	-0.7	-0.7	-0.9
Overall balance	-3.5	2.1	3.2	2.6	2.1	2.6	2.6	1.8	1.2	0.7
Gross external debt 1/	75.7	85.2	83.6	78.5	73.2	69.6	66.8	63.7	61.0	58.5
Public	49.1	55.5	52.7	50.3	47.4	45.3	43.4	41.6	39.9	38.3
Short-term	12.4	21.8	20.1	22.6	21.6	20.8	20.1	19.5	18.9	18.3
Long-term	36.7	33.7	32.6	27.7	25.8	24.5	23.3	22.2	21.1	20.1
Private	26.6	29.7	30.9	28.2	25.8	24.3	23.4	22.1	21.0	20.1
Short-term	19.8	22.6	20.8	18.1	16.4	15.4	14.8	13.8	13.0	12.4
Long-term	6.8	7.1	10.1	10.1	9.4	9.0	8.6	8.4	8.1	7.7
Gross external debt (in percent of GS exports)	100.0	115.0	103.3	94.9	88.2	83.4	79.6	75.5	71.8	68.4
Net external debt	25.7	24.5	20.1	14.8	10.0	7.9	6.4	5.3	4.8	4.8
Net international investment position	-43.7	-42.7	-35.9	-29.5	-26.3	-23.6	-21.5	-20.0	-19.2	-18.8
Merchandise export volume (percent change) 2/	0.9	4.0	13.6	5.1	4.0	3.8	3.7	3.7	3.7	3.7
Merchandise import volume (percent change) 2/	6.8	3.8	12.0	4.3	4.5	4.7	4.6	4.5	4.5	4.5
Merchandise export prices (percent change) 2/	-5.1	-2.5	4.4	3.5	2.7	1.9	1.6	1.5	1.5	1.5
Merchandise import prices (percent change) 2/	-7.5	-4.6	4.0	4.5	2.6	1.6	1.4	1.4	1.4	1.4
GDP (in billion of Euros)	37.4	38.8	42.2	45.1	47.7	50.2	52.6	55.1	57.6	60.2

Sources: Data provided by the Lithuanian authorities; IMF International Financial and Trade Statistics; and IMF staff estimates and projections.

1/ Government external debt does not include guaranteed loans.

2/ Derived from national accounts data.

Table 4. Lithuania: Summary of Monetary Accounts, 2011–18

(Billions of Euro: unless otherwise specified)

	2011	2012	2013	2014	2015	2016	2017	2018
Monetary Authority								
Gross foreign assets	6.4	6.4	6.0	7.9	2.9	3.0	4.2	5.7
Gross foreign liabilities	0.3	0.0	0.0	0.1	0.2	0.2	0.2	0.3
Net foreign assets	6.1	6.4	6.0	7.8	2.7	2.8	4.0	5.3
Net domestic assets	-1.1	-1.7	-1.0	-1.9	6.5	9.8	11.7	13.4
Net credit to government	-0.4	-1.1	-0.5	-1.2	0.0	1.0	-0.1	1.2
Credit to banks	0.0	0.0	0.0	0.0	1.0	0.7	0.6	0.5
Credit to private sector	0.0	0.0	0.0	0.0	1.7	4.8	8.0	8.9
Other items, net	-0.7	-0.7	-0.6	-0.7	3.8	3.3	3.3	2.9
Reserve money	5.0	4.7	4.9	5.9	9.1	12.6	15.7	18.8
Currency outside the central bank	3.1	3.3	3.4	1.7	6.1	6.2	6.4	6.8
Currency outside banks	2.8	3.0	3.2	1.4	5.7	5.8	6.0	6.3
Cash in vaults of banks	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
Deposit money banks' deposits with BoL	1.9	1.4	1.5	4.3	3.1	6.4	9.3	12.0
Banking Survey								
Net foreign assets	1.6	2.8	2.9	4.5	-2.3	-3.5	-2.7	-2.2
Monetary authority	6.1	6.4	6.0	7.8	2.7	2.8	4.0	5.3
Banks and other banking institutions	-4.5	-3.6	-3.1	-3.3	-5.0	-6.2	-6.7	-7.5
Net domestic assets	13.1	12.9	13.5	12.1	24.3	27.1	27.7	30.0
Net claims on government 1/	1.2	0.3	1.7	0.5	1.7	2.3	0.7	1.9
Monetary authority	-0.4	-1.1	-0.5	-1.2	0.0	1.0	-0.1	1.2
Banks and other banking institutions	1.6	1.4	2.1	1.7	1.8	1.3	0.8	0.8
Credit to private sector	15.4	15.3	14.9	14.8	17.1	21.3	25.2	27.2
Credit to nonbank financial institutions	1.0	1.3	0.9	0.9	3.1	6.5	9.9	11.2
Other items, net	-4.5	-4.0	-4.0	-4.1	2.5	-3.1	-8.1	-10.3
Broad money	14.6	15.7	16.4	16.6	22.0	23.6	25.0	27.8
Currency outside banks	2.8	3.0	3.2	1.4	5.7	5.8	6.0	6.3
Deposits	11.8	12.7	13.2	15.2	16.3	17.8	19.0	21.5
In national currency	8.7	9.3	9.7	11.3	15.4	16.9	18.1	20.6
In foreign currency	3.1	3.4	3.5	4.0	0.9	0.9	0.9	0.9
Memorandum items:								
Reserve money (yearly percent change)	37.5	-6.4	4.9	20.9	53.3	38.4	24.9	19.3
Broad money (yearly percent change)	5.0	7.2	4.4	1.2	32.9	7.2	5.8	11.4
Private sector credit (yearly percent change)	-5.9	-0.8	-2.3	-0.9	4.1	7.1	4.5	6.0
Money multiplier	2.9	3.3	3.3	2.8	2.4	1.9	1.6	1.5
Currency outside banks, in percent of deposits	23.8	23.6	24.0	8.9	34.9	32.5	31.6	29.3
Foreign-currency deposits (percent of total deposits)	26.4	26.4	26.5	26.0	5.5	5.1	4.8	4.1
Foreign-currency loans (percent of total loans) 2/	72.9	72.7	72.1	72.7	0.9	0.6	0.5	0.4
Velocity of broad money	2.1	2.1	2.1	2.2	1.7	1.6	1.7	1.6
Gross official reserves (billions of U.S. dollars) 3/	8.4	8.4	8.0	8.8	1.9	3.0	4.6	6.2
Gross official reserves (billions of euros) 3/	6.4	6.4	6.0	7.9	2.9	3.0	4.2	5.7
GDP	31.3	33.3	35.0	36.6	37.4	38.8	42.2	45.1

Sources: Bank of Lithuania; and IMF staff estimates and projections.

1/ Excludes local government deposits; includes counterpart funds.

2/ Loans to households and non-financial corporations.

3/ BOP basis. Differs from gross foreign assets as shown in the monetary authority's balance sheet because of valuation effects (BoP-basis official reserves include accrued interest on deposits and securities but exclude investments in shares and other equity).

Table 5. Lithuania: Financial Soundness Indicators, Banking System Data, 2012–18

(In percent unless otherwise indicated)

	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18
Capital adequacy							
Regulatory capital to risk-weighted assets 1/ 2/	15.7	17.6	21.3	24.9	19.4	19.1	18.8
Regulatory Tier 1 capital to risk-weighted assets 1/ 2/	14.6	17.1	20.9	24.3	19.1	18.8	18.5
Capital to assets 1/	12.3	12.6	12.9	11.1	10.4	9.4	9.6
Asset quality							
Nonperforming loans to capital 1/ 3/ 4/	53.4	42.6	46.9	38.3	35.5	35.0	..
o/w impaired loans to capital 1/ 3/ 4/	39.7	27.4	22.7	12.8	13.3	..	..
o/w non-impaired loans overdue more than 60 days to capital 1/ 3/ 4/	13.7	15.2	8.0	6.4	7.9	..	..
Nonperforming loans net of provisions to capital 1/ 3/ 4/ 5/	20.8	19.7	29.8	25.0	23.2	..	..
Nonperforming loans to total (non-interbank) loans 3/ 4/	13.6	11.0	7.0	5.7	4.1	4.1	4.1
o/w impaired loans to total (non-interbank) loans 4/	11.4	8.5	3.4	1.9	1.5	..	..
o/w non-impaired loans overdue more than 60 days to total (non-interbank) loans 4/	2.2	2.5	1.2	1.0	0.9	..	..
Impairment losses to total (non-interbank) loans 6/ 7/	5.6	4.2	2.5	2.0	1.4	..	..
Impairment losses to nonperforming loans 3/ 4/ 6/ 7/	61.0	53.7	36.5	34.7	34.7	..	..
Sectoral distribution of corporate loans 8/							
Agriculture, forestry and fishing	2.3	2.8	2.9	3.6	3.7	3.6	..
Mining and quarrying	0.6	0.5	0.5	0.5	0.5	0.5	..
Manufacturing	18.3	17.9	15.7	14.7	14.2	14.3	..
Electricity, gas, steam and air conditioning supply	6.8	7.6	9.5	11.0	8.7	4.7	..
Water supply; sewerage, waste management and remediation activities	0.7	0.8	1.0	1.0	0.9	0.8	..
Construction	10.4	8.6	7.3	6.1	5.4	5.2	..
Wholesale and retail trade; repair of motor vehicles and motorcycles	19.7	19.3	20.3	21.9	21.3	22.7	..
Transportation and storage	4.0	5.7	5.0	5.8	5.8	6.1	..
Accommodation and food service activities	2.8	2.7	2.6	2.4	2.4	2.4	..
Information and communication	0.8	0.8	0.9	0.8	2.4	2.4	..
Real estate activities	27.8	28.3	27.8	26.3	26.6	25.8	..
Professional, scientific and technical activities	4.0	2.6	3.7	2.6	3.2	5.0	..
Administrative and support service activities	0.9	1.0	1.8	2.0	3.0	4.4	..
Remaining activities	1.1	1.2	1.1	1.3	1.8	2.2	..
Residential real estate loans to total (non-interbank) loans	37.9	38.0	28.7	29.8	31.3	..	..
Earnings and profitability							
RoE 1/ 9/	7.7	8.9	8.1	9.0	14.0	12.5	17.4
RoA 9/	1.1	1.2	1.3	0.9	1.0	1.1	1.1
Interest margin to gross income	41.1	24.3	57.5	62.1	61.0	62.8	62.8
Noninterest expenses to gross income	63.1	60.5	58.6	57.4	52.0	55.0	49.7
Trading and foreign exchange gains (losses) to gross income	9.9	9.9	9.4	7.9	11.4	5.9	7.6
Personnel expenses to noninterest expenses	38.2	38.3	37.4	41.2	42.6	41.1	42.7
Liquidity							
Liquidity coverage ratio	..	..	..	..	266.3	281.9	..
Liquidity ratio (liquid assets to current liabilities) 10/	41.2	41.2	43.6	..	..	..	..
Liquid assets to total assets 10/	23.9	24.0	29.3	..	15.3	23.6	19.9
Current liabilities to total liabilities 10/	67.7	73.1	81.6	..	..	..	..
Loan to deposit ratio in the banking sector 11/	127.9	121.5	101.6	98.6	99.0	94.6	98.6
Foreign exchange risk							
Foreign-currency-denominated loans to total (non-interbank) loans 12/	71.6	68.7	..	..	..	..	..
Foreign-currency-denominated liabilities to total liabilities 12/	50.4	48.2	..	..	..	..	..
Net open position in foreign exchange to regulatory capital 1/ 13/	0.3	0.4	0.4	0.1	0.0	0.0	0.0
Memo item							
Provisioning (in percent of NPLs)	21.3	16.5	..	..	..	..	..

Sources: Bank of Lithuania; and http://fsi.imf.org/.

1/ Excluding foreign bank branches.

2new/ As defined in Rules for Calculation of Capital Adequacy approved by Bank of Lithuania Board Resolution No. 138 of 9 November 2006.

3/ Consolidated data are used. Due to changes in consolidation methodology, data from Q1 2014 are not entirely comparable with previous.

2015 Q3 - 2016 Q1 data were adjusted eliminating accounting changes due to the transaction between Swedbank, AB, and Danske Bank A/S Lithuania Branch.

4/ From end-2005 to Q1-2008, NPLs are loans overdue more than 60 days. Untill 2004 NPLs are loans in Substandard, Doubtful and Loss loans categories.

Starting June 2008, non-performing loans are defined as the sum of impaired loans and non-impaired loans that are overdue more than 60 days.

5/ Specific provisions include allowances for both individually and collectively assessed loans.

6/ Specific provisions include provisions against general portfolio risk until end-2004. From end-2005, due to the change in definition of NPLs, specific provisions are not directly attributable to the NPLs. Therefore, the ratio may be negative.

7/ Specific provisions include allowances for both individually and collectively assessed loans.

8/ According to Nace 1 up to Sept 2011. Data according to Nace 2 thereafter.

9/ Total profits (losses) after tax. Interim quarterly results are annualised.

10/ Composition of liquid assets and current liabilities is defined in the Liquidity Ratio Calculation Rules approved by Resolution No. 1 of

11/ Consolidated data; due to changes in data consolidation methodology, data from Q1 2014 are not entirely comparable with previous data.

12/ The large majority of foreign currency loans and foreign currency liabilities are in euros, to which the national currency is pegged via a currency board arrangement.

13/ As defined in Rules for Calculation of Capital Adequacy approved by Bank of Lithuania Board Resolution No. 138 of 9 November 2006.

Table 6. Lithuania: Public Sector Balance Sheet Overview, 2016

	General Government					Public Corporations			Public sector	
	Central gov't	Local gov't	SSIF	Consolidation	Consolidated	Nonfinancial	Central Bank	Other financial	Consolidation	Consolidated
Flows										
Revenue	21.6	7.9	12.6	-8.5	33.6	8.7	0.3	0	-2.6	40
Expenditure	21.7	7.7	12.1	-8.5	33.1	8.1	0.1	0	-2.6	38.7
Net lending/borrowing	**-0.2**	**0.2**	**0.5**	**-**	**0.5**	**0.6**	**0.2**	**0**	**-**	**1.2**
Stocks										
Assets	**109.6**	**18**	**1.7**	**-9.1**	**120.3**	**28.6**	**44.5**	**0.2**	**-28.8**	**164.8**
Nonfinancial	75.1	14.7	0	-	89.8	19.9	0.1	0	-	109.7
Financial	34.5	3.3	1.7	-9.1	30.5	8.7	44.4	0.2	-28.8	55.1
Liabilities	**49.3**	**1.7**	**9.4**	**-9.1**	**51.4**	**28.6**	**44.5**	**0.2**	**-28.8**	**96**
Liabilities, other than equity	45.7	1.7	9.4	-9.1	47.8	12.2	42.9	0.2	-10.7	92.4
Public service pension entitlements	3.6	0	0	0	3.6	-	-	-	-	3.6
Equity	0	0	0	0	0	16.4	1.6	0	-18	0
Net worth	**60.3**	**16.3**	**-7.7**	**-**	**68.8**	**-**	**-**	**-**	**-**	**68.8**
Net financial worth	**-14.8**	**1.6**	**-7.7**	**-**	**-20.9**	**-3.5**	**1.6**	**0**	**-**	**-40.9**
Memorandum items										
Net financial worth excl. public service pension entitlements	*-11.2*	*1.6*	*-7.7*	*-*	*-17.3*	*-3.5*	*1.6*	*0*	*-*	*-37.3*
Social security pension entitlements	*-*	*-*	*182.6*	*-*	*182.6*	*-*	*-*	*-*	*-*	*182.6*

Source: Eurostat, Statistics Lithuania, State Treasury, and Staff Estimates

Note: Data on social security andpublic service pension entitlements are for 2015.

Annex I. Public Sector Debt and External Sustainability Analysis

Public Sector Debt Sustainability Analysis (DSA)—Baseline Scenario

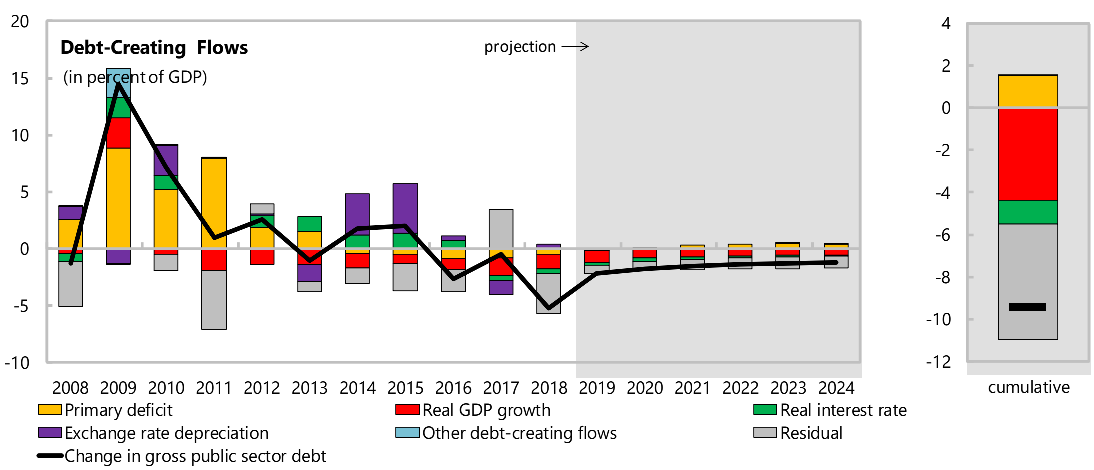
In percent GDP, unless otherwise indicated

Debt, Economic and Market Indicators [1]

	Actual			Projections						As of July 10, 2019		
	2008-2016 [2]	2017	2018	2019	2020	2021	2022	2023	2024	Sovereign Spreads		
Nominal gross public debt	35.4	39.4	34.2	32.0	30.2	28.7	27.3	26.0	24.7	EMBIG (bp) 3/		87
Public gross financing needs	9.0	4.1	5.9	1.6	3.9	3.2	2.2	1.1	1.2	5Y CDS (bp)		60
Real GDP growth (in percent)	1.2	4.1	3.5	3.2	2.6	2.5	2.4	2.3	2.3	Ratings	Foreign	Local
Inflation (GDP deflator, in percent)	2.3	4.3	3.3	2.5	2.5	2.3	2.3	2.2	2.2	Moody's	A3	A-
Nominal GDP growth (in percent)	3.6	8.6	6.9	5.8	5.1	4.8	4.7	4.6	4.6	S&Ps	A3	A
Effective interest rate (in percent) [4]	5.1	3.0	2.4	1.9	1.6	1.5	1.7	1.8	1.9	Fitch	A-	A-

Contribution to Changes in Public Debt

	Actual			Projections							
	2008-2016	2017	2018	2019	2020	2021	2022	2023	2024	cumulative	debt-stabilizing
Change in gross public sector debt	2.7	-0.5	-5.2	-2.2	-1.8	-1.5	-1.4	-1.3	-1.2	-9.4	primary
Identified debt-creating flows	4.5	-4.0	-1.7	-1.4	-1.0	-0.6	-0.4	-0.2	-0.2	-4.0	balance [9]
Primary deficit	2.9	-0.8	-0.5	-0.2	0.1	0.3	0.4	0.5	0.4	1.5	-0.7
Primary (noninterest) revenue and gr	33.7	32.7	33.6	34.7	34.8	34.9	34.9	34.9	34.9	208.9	
Primary (noninterest) expenditure	36.6	32.0	33.1	34.5	34.8	35.2	35.3	35.3	35.3	210.5	
Automatic debt dynamics [5]	1.3	-3.2	-1.2	-1.3	-1.1	-1.0	-0.8	-0.7	-0.7	-5.5	
Interest rate/growth differential [6]	0.2	-2.0	-1.7	-1.3	-1.1	-1.0	-0.8	-0.7	-0.7	-5.5	
Of which: real interest rate	0.9	-0.5	-0.4	-0.2	-0.3	-0.2	-0.2	-0.1	-0.1	-1.1	
Of which: real GDP growth	-0.7	-1.5	-1.3	-1.0	-0.8	-0.7	-0.7	-0.6	-0.6	-4.4	
Exchange rate depreciation [7]	1.0	-1.2	0.4	…	…	…	…	…	…	…	
Other identified debt-creating flows	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
LTU_FIS: Privatization Receipts (Neg	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Please specify (2) (e.g., ESM and Eur	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Residual, including asset changes [8]	-1.8	3.5	-3.5	-0.8	-0.8	-0.9	-1.0	-1.0	-1.0	-5.5	



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ Long-term bond spread over German bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as $[(r - \pi(1+g) - g + ae(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as $r - \pi (1+g)$ and the real growth contribution as -g.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

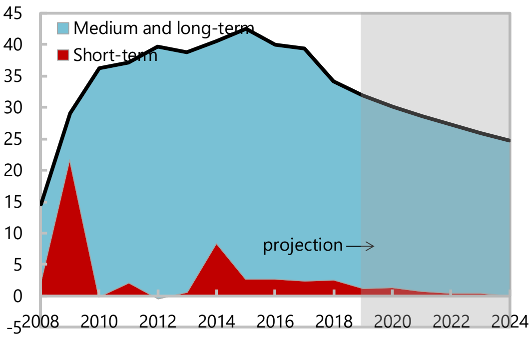
8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

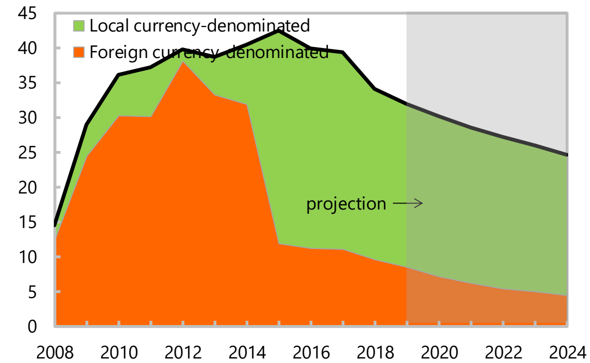
Public DSA—Composition of Public Debt and Alternative Scenario

Composition of Public Debt

By Maturity
(in percent of GDP)



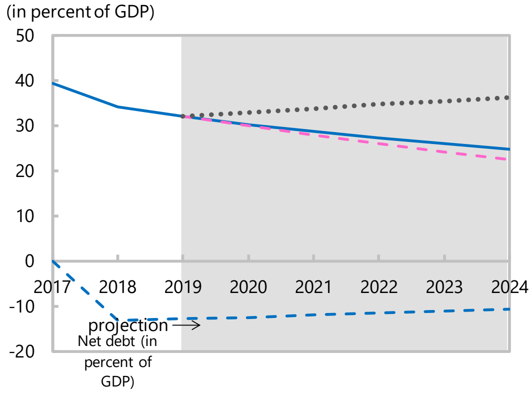
By Currency
(in percent of GDP)



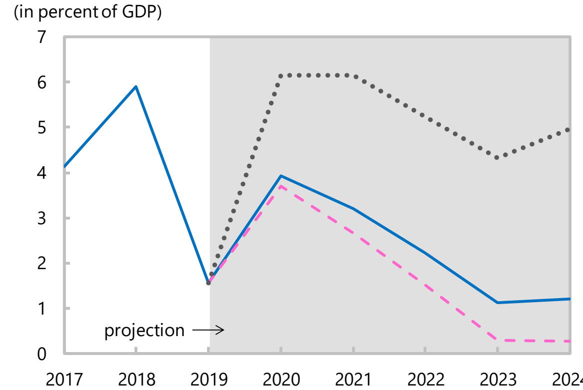
Alternative Scenarios

Baseline Historical Constant Primary Balance

Gross Nominal Public Debt
(in percent of GDP)



Public Gross Financing Needs
(in percent of GDP)



Underlying Assumptions
(in percent)

Baseline Scenario	2019	2020	2021	2022	2023	2024
Real GDP growth	3.2	2.6	2.5	2.4	2.3	2.3
Inflation	2.5	2.5	2.3	2.3	2.2	2.2
Primary Balance	0.2	-0.1	-0.3	-0.4	-0.5	-0.4
Effective interest rate	1.9	1.6	1.5	1.7	1.8	1.9
Constant Primary Balance Scenario						
Real GDP growth	3.2	2.6	2.5	2.4	2.3	2.3
Inflation	2.5	2.5	2.3	2.3	2.2	2.2
Primary Balance	0.2	0.2	0.2	0.2	0.2	0.2
Effective interest rate	1.9	1.6	1.5	1.7	1.7	1.8

Historical Scenario	2019	2020	2021	2022	2023	2024
Real GDP growth	3.2	1.6	1.6	1.6	1.6	1.6
Inflation	2.5	2.5	2.3	2.3	2.2	2.2
Primary Balance	0.2	-2.3	-2.3	-2.3	-2.3	-2.3
Effective interest rate	1.9	1.6	2.3	3.1	3.7	4.0

Source: IMF staff.

Lithuania: External Debt Sustainability Framework, 2014–24

(In percent of GDP, unless otherwise indicated)

	Actual							Projections						
	2014	2015	2016	2017	2018			2019	2020	2021	2022	2023	2024	Debt-stabilizing non-interest current account 6/
1 **Baseline: External debt**	64.8	74.2	81.1	87.6	74.9			**74.9**	**72.2**	**70.4**	**68.3**	**66.6**	**65.2**	**-5.2**
2 Change in external debt	-7.8	9.4	7.0	6.5	-12.7			0.0	-2.7	-1.8	-2.1	-1.6	-1.4	
3 Identified external debt-creating flows (4+8+9)	-8.7	11.6	-4.2	-11.2	-13.0			-5.2	-4.4	-4.1	-3.5	-3.0	-2.4	
4 Current account deficit, excluding interest payments	-5.2	1.0	-0.7	-2.2	-1.9			-1.5	-0.9	-0.6	-0.1	0.3	0.9	
5 Deficit in balance of goods and services	-1.9	0.6	-1.2	-2.8	-2.5			-2.3	-1.7	-1.3	-0.7	-0.1	0.6	
6 Exports	80.9	75.7	74.0	80.9	82.2			82.4	81.4	80.9	80.4	80.1	79.8	
7 Imports	79.0	76.3	72.8	78.1	79.7			80.1	79.7	79.6	79.7	80.0	80.4	
8 Net non-debt creating capital inflows (negative)	-2.3	-2.2	-2.5	-2.4	-2.3			-2.0	-1.9	-2.0	-2.2	-2.3	-2.6	
9 Automatic debt dynamics 1/	-1.2	12.9	-1.0	-6.6	-8.8			-1.7	-1.5	-1.5	-1.2	-1.0	-0.6	
10 Contribution from nominal interest rate	2.1	1.8	1.5	1.3	0.5			0.4	0.3	0.3	0.3	0.5	0.6	
11 Contribution from real GDP growth	-2.5	-1.5	-1.7	-3.0	-2.7			-2.1	-1.9	-1.8	-1.5	-1.4	-1.3	
12 Contribution from price and exchange rate changes 2/	-0.8	12.6	-0.8	-4.9	-6.6			...	...	...	...	...	...	
13 Residual, incl. change in gross foreign assets (2-3) 3/	0.9	-2.2	11.1	17.7	0.2			5.2	1.7	2.3	1.4	1.3	0.9	
External debt-to-exports ratio (in percent)	80.1	98.1	109.6	108.3	91.1			90.9	88.7	87.0	84.9	83.2	81.7	
Gross external financing need (in billions of US dollars) 4/	15.0	14.7	13.4	18.5	22.6			19.9	21.6	21.6	22.5	21.9	23.4	
in percent of GDP	30.9	35.3	31.2	38.8	42.5	10-Year	10-Year	36.7	37.4	35.5	35.0	32.4	32.9	
Scenario with key variables at their historical averages 5/								**74.9**	**76.0**	**77.5**	**78.3**	**78.9**	**79.3**	**-1.5**
Key Macroeconomic Assumptions Underlying Baseline						Historical Average	Standard Deviation							
Real GDP growth (in percent)	3.5	2.0	2.4	4.1	3.4	1.6	5.9	2.9	2.6	2.6	2.2	2.2	2.0	
GDP deflator in US dollars (change in percent)	1.2	-16.3	1.1	6.4	8.2	0.0	8.2	-1.2	3.5	3.0	3.2	2.9	3.2	
Nominal external interest rate (in percent)	3.0	2.4	2.1	1.8	0.7	2.6	0.9	0.6	0.4	0.4	0.4	0.7	1.0	
Growth of exports (US dollar terms, in percent)	0.8	-20.1	1.3	21.1	13.8	6.5	19.5	1.9	4.9	5.1	4.8	4.7	4.8	
Growth of imports (US dollar terms, in percent)	-0.1	-17.5	-1.2	18.9	14.2	4.8	21.4	2.3	5.6	5.5	5.7	5.4	5.8	
Current account balance, excluding interest payments	5.2	-1.0	0.7	2.2	1.9	1.7	2.2	1.5	0.9	0.6	0.1	-0.3	-0.9	
Net non-debt creating capital inflows	2.3	2.2	2.5	2.4	2.3	2.3	0.3	2.0	1.9	2.0	2.2	2.3	2.6	

1/ Derived as [r - g - r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock, with r = nominal effective interest rate on external debt; r = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate, e = nominal appreciation (increase in dollar value of domestic currency), and a = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as [-r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock. r increases with an appreciating domestic currency (e > 0) and rising inflation (based on GDP deflator).
3/ For projection, line includes the impact of price and exchange rate changes.
4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.
5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.
6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Annex II. A Stock-Flow Analysis of the Boom, Bust, and Recovery

1. Lithuania has gone over repeated boom-bust cycles since it transitioned to a market economy. This annex analyzes stock and flow variables in the Baltics since 2004, around the global financial crisis and the subsequent recovery. This will help assess the readiness of the Lithuanian economy to a changing economic cycle or a severe shock. Previous work has looked at the buildup of imbalances and the 2008–10 crisis, but left unanswered the question of what kind of recovery would follow.[1] Subsequent work analyzed the rapid recovery, but wondered whether imbalances would remerge over the cycle once again.[2] This note answers this question and complements previous work focused on flow data by analyzing flow-of-funds stock data exploiting cross sectoral exposures of financial assets and liabilities and its evolution over time.

2. The main findings are as follow:

- Regarding flows, no imbalances have reemerged during the recovery that would require a sudden and dramatic adjustment in a potential economic downturn.
- Regarding stocks, there has been a significant deleverage of banks, households and, particularly, non-financial corporates (NFCs) that make them less vulnerable.
- While the NFC sector still has the largest and weakest balance sheet, its exposures to banks and households have declined significantly. Thus, the systemic and contagion risks associated with NFCs have declined.
- The government sector's net worth has deteriorated (partly reflecting some balance sheet transfer from the private sector) with new debt mostly held by non-residents. Thus, the exposure of households, banks and NFCs remains minimal. However, risks to changes in external risk appetite have increased, but in a future crisis, the increase in spreads should be more limited due to the lack of redenomination risks given euro area membership.

Flows

3. The unprecedented capital flows that preceded the crisis led to a credit-fueled surge in domestic demand, high growth and overheating. Real per capita GDP growth was around 10 percent over 2003–08 while current account deficits exceeded 15 percent of GDP in the Baltics by 2008. Competitiveness was eroded by large nominal wage growth that exceeded 30 percent in Latvia and reached 20 percent in Lithuania. Imbalances were magnified by the lack of exchange rate flexibility and by asset price appreciation and associated wealth effects. Looking at sectoral savings-investment balances, NFCs dissaving was large in all the Baltics while household dissaving was significant in Latvia and Estonia, but less so in Lithuania (figure 1).

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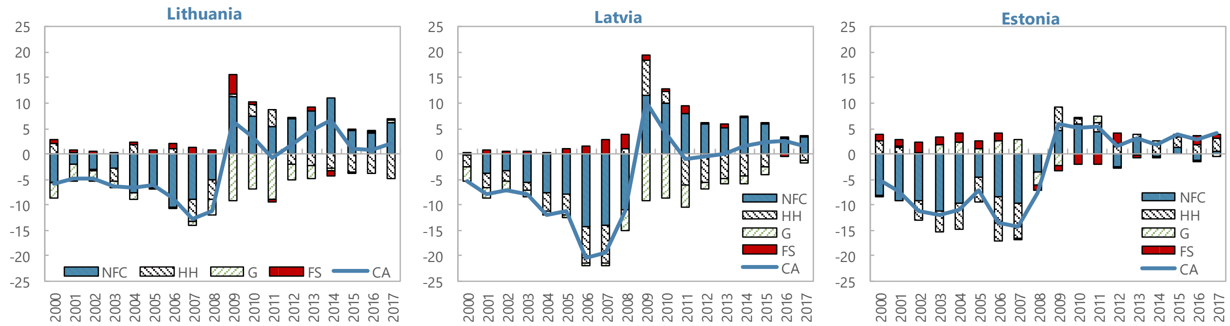
[1] Blanchard, O.J., Griffiths, M. and Gruss, B., 2013, "Boom, Bust, Recovery: Forensics of the Latvia Crisis," Brookings Papers on Economic Activity, Fall 2013, pp. 325–388.

[2] Bakker, B.B., Korczak, M., 2017, "Phoenix from the Ashes: The Recovery of the Baltics from the 2008/2009 Crisis," Comparative Economic Studies, 2017.

Figure 1. Lithuania: Current Account and Sectoral Savings-Investment Balances



Source: Haver Analytics.

4. **In 2008, capital flows dried for the Baltics and forced a sudden adjustment as the private sector could not fund their large net lending imbalances anymore.** NFCs reduced investment and costs through nominal wage decreases and reduced employment which led to a surge in profitability and retained earnings. Households increased savings, even when unemployment was increasing, and reduce residential investment. The general government, facing a severe decrease in revenues and a lack of market access, was also forced to adjust. Questions about the viability of the currency boards notwithstanding the relatively low level of public debt led to a dramatic increase in risk premia.

5. **After this sharp adjustment, the ensuing recovery was equally dramatic.** High corporate profitability combined with a recovery of trading partners and a sharp reduction in risk premia resulted in an export boom. Most private and public sector (flow) adjustment was over by 2010–11 and isolated the Baltics from the euro area crisis in 2011. The subsequent recovery has avoided pre-crisis imbalances from reemerging. The current account remains in surplus, a tight labor market has resulted in high wage growth that is still significantly below pre-crisis levels and has not translated yet in inflation or significant loss in competitiveness (exports since the crisis have consistently outperformed trading partners' import demand and resulted in an increase in exports share).

Stocks

6. **Data on sectoral financial accounts by instrument and with cross-sector exposures is available over 2004Q1–2018Q3** (Table 1 for a description of sectors). This data can be used to create a matrix of cross-sectoral exposures where rows represent assets of a sector vis-à-vis other sectors in the economy and the columns liabilities (note that the asset of sector i invested in sector j is the liability of sector j to sector i, Table 2). Alternatively, a network map of sectoral linkages can be used to show net cross-sector exposure as well as direct and indirect contagion risks (figure 2). Each sector's bubble reflects the size of their total liabilities while the width of the lines

Table 1. Lithuania: Institutional Units

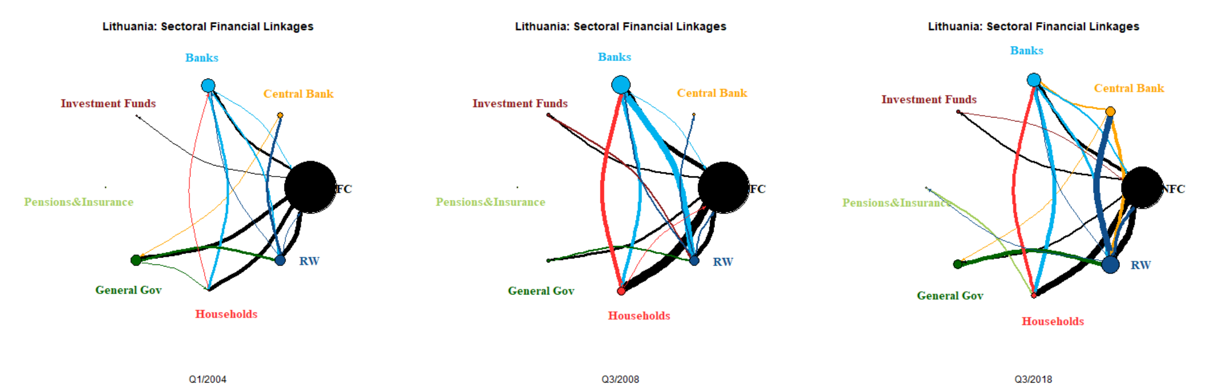
NF	NF	Non-financial corporations
FC	CB	Central bank
	OM	Other monetary financial institutions
	IF	Investment funds
	OF	Other financial institutions
	IN	Insurance corporations
	PN	Pension funds
GG	CG	Central government
	LG	Local government
	SS	Social security funds
HH	HH	Households
RW	RW	Rest of the world

connecting sectors reflect the size of their direct exposures. The line's color represents liabilities of one sector to another, i.e. a blue (black) line from banks to NFCs, represent banks' (NFCs) liabilities to NFCs (banks). Note that only exposures in excess of 5 percent of GDP are shown.

7. During the boom 2004–08 (tables 2–3):

- NFCs net financial position deteriorated significantly and increased its exposure to banks through loans and, particularly, to households through equity.
- Households' net position improved as the increase in liabilities to banks, 10 percent of GDP, was a third of the increase in equity from NFCs. The latter is virtually the only increase in households' assets and reflects revaluation gains that more than compensated the reduction in equity through transactions (figure 3). Thus, households had a strong position entering the crisis, but with a large exposure to NFCs.
- While bank's balance sheet doubled, their net-financial position barely changed highlighting their intermediation role increasingly funded by parents (net exposure to the rest of the world quadruples).
- The government sector's net position remained constant with limited exposure to all sectors of the economy, including banks.
- As can be seen in figure 2, NFCs represented the biggest vulnerability (by the size of the balance sheet as well as their net position) as well as contagion risks given the large exposure to households and banks before the crisis. Banks increased dependency on parent's funding was also a source of vulnerability. On the positive side, there was little exposure (direct or indirect) of the private sector to the general government.

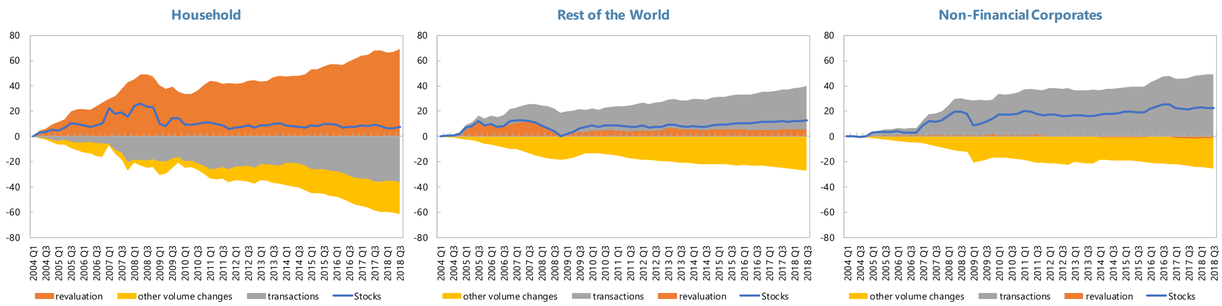
Figure 2. Lithuania: Network Map of Sectoral Linkages



Sources: Bank of Lithuania and IMF staff estimates.

8. The bust (first year after the crisis) was felt mostly by NFCs and, through them, by households. NFCs reduced liabilities by 50 percent of GDP three quarters into the crisis of which 34 p.p. was through equity. Of this, half represented households' assets and resulted in a reduction of their net financial position by the same amount. Revaluation changes only explain half of the decrease in households' equity, that were, therefore, forced to reduce their equity holdings too at the worst of the crisis (figure 3).

Figure 3. Lithuania: Equity
(Cumulative change in percent of GDP)



Sources: Bank of Lithuania and IMF staff calculations.

9. During the recovery 2008–18 (table 2–3):

- NFCs deleverage over this period has been significant, 38 percent of GDP. With constant assets in percent of GDP (although higher exposure to the rest of the world), their net worth improved by this amount. Importantly, the exposure of households and banks to NFCs felt substantially, 11 and 16 percent of GDP respectively.
- Both households and banks have maintained a largely unchanged net financial position. The size of households' balance sheet has remained constant maintaining a strong net worth. However, banks reduced its size by almost 20 percent by reducing parent funding and loans to NFCs and maintained a largely balanced net financial position
- Regarding the public sector, the Bank of Lithuania's balance sheet has increased considerably reflecting QE operations. Due to the deficits incurred over the crisis, the general government's net financial position has deteriorated 23 percent of GDP through an increase in debt held, overwhelmingly, by non-residents.

Table 2. Lithuania: Sectoral Financial Asset Exposures

(Percent of GDP)

2004 Q1

	Balance Sheet										Net Financial Position							
	NF	CB	OM	IO	IP	GG	HH	RW	Tot Ass	NW	NF	CB	OM	IO	IP	GG	HH	RW
NF	35	4	6	1	1	1	1	7	54	-93	0	4	-10	-5	0	-29	-29	-24
CB	0	0	0	0	0	0	0	16	16	0		0	-3	0	0	-6	-4	16
OM	16	3	1	2	0	5	6	6	39	-1			0	2	0	2	-10	-8
IO	6	0	0	0	0	0	1	0	7	0				0	0	0	0	-3
IP	0	0	0	0	0	1	0	0	2	-1					0	1	-1	-1
GG	29	6	3	0	0	2	0	1	41	10						0	-7	-14
HH	30	4	15	0	1	7	0	0	58	51							0	0
RW	31	0	14	3	1	15	0	0	64	34								0
Tot Liab	147	17	40	7	3	32	7	30	283	0								

2008 Q2

	Balance Sheet										Net Financial Position							
	NF	CB	OM	IO	IP	GG	HH	RW	Tot Ass	NW	NF	CB	OM	IO	IP	GG	HH	RW
NF	67	3	10	2	1	0	6	12	100	-125	0	3	-22	-12	0	-18	-52	-24
CB	0	0	0	0	0	0	0	15	15	-1		0	-4	0	0	-3	-4	14
OM	32	4	1	3	0	3	26	10	80	-1			0	3	0	0	1	-30
IO	13	0	0	0	0	0	2	2	17	0				0	0	0	0	-9
IP	0	0	0	0	0	1	0	3	5	0					0	1	-4	3
GG	19	3	4	0	0	2	0	1	28	9						0	-1	-11
HH	59	4	25	2	4	1	0	1	96	61							0	0
RW	36	1	41	10	1	11	0	0	100	57								0
Tot Liab	225	15	81	18	6	19	35	43	441	0								

2018 Q3

	Balance Sheet										Net Financial Position							
	NF	CB	OM	IO	IP	GG	HH	RW	Tot Ass	NW	NF	CB	OM	IO	IP	GG	HH	RW
NF	56	4	13	5	1	1	4	20	103	-84	0	4	-8	-6	0	-13	-38	-22
CB	0	0	0	0	0	4	0	40	45	-1		0	-10	0	0	-2	-4	19
OM	21	10	0	4	0	3	21	6	65	0			0	3	-1	-1	-8	-10
IO	12	0	1	0	0	0	1	2	16	0				0	0	0	-2	-2
IP	0	0	1	0	0	2	0	9	12	0					0	2	-10	8
GG	14	6	5	0	0	1	0	3	30	-14						0	-2	-27
HH	42	4	30	3	10	2	0	2	93	66							0	2
RW	42	22	15	4	2	30	0	0	115	33								0
Tot Liab	187	46	65	17	12	44	28	82	480	0								

Change over 2004 Q1 - 2008 Q2

	Balance Sheet										Net Financial Position							
	NF	CB	OM	IO	IP	GG	HH	RW	Tot Ass	NW	NF	CB	OM	IO	IP	GG	HH	RW
NF	32	0	3	1	0	0	6	5	46	-32	0	0	-13	-6	0	10	-23	0
CB	0	0	0	0	0	0	0	-2	-2	0		0	-1	0	0	3	0	-2
OM	16	1	-1	1	0	-2	21	5	41	1			0	1	0	-3	11	-22
IO	7	0	0	0	0	0	1	1	10	-1				0	0	0	0	-6
IP	0	0	0	0	0	-1	0	3	3	0					0	-1	-3	3
GG	-11	-3	1	0	0	0	0	0	-13	0						0	6	3
HH	29	0	10	1	3	-6	0	1	37	10							0	1
RW	5	1	26	7	0	-4	0	0	35	23								0
Tot Liab	78	-2	40	11	3	-13	27	13	158	0								

Change over 2008 Q2 - 2018 Q3

	Balance Sheet										Net Financial Position							
	NF	CB	OM	IO	IP	GG	HH	RW	Tot Ass	NW	NF	CB	OM	IO	IP	GG	HH	RW
NF	-11	0	3	4	0	1	-2	8	3	41	0	0	14	5	0	5	14	2
CB	0	0	0	0	0	4	0	26	30	0		0	-6	0	0	1	0	5
OM	-11	6	0	0	0	0	-5	-5	-15	1			0	0	0	-1	-9	20
IO	-2	0	0	0	0	0	0	0	-1	0				0	0	0	-2	7
IP	0	0	0	0	0	1	0	6	7	0					0	1	-6	5
GG	-4	3	1	0	0	-1	0	2	2	-23						0	-1	-16
HH	-16	0	4	1	6	1	0	1	-3	4							0	1
RW	7	21	-25	-6	1	18	0	0	16	-23								0
Tot Liab	-38	30	-16	-1	7	25	-7	39	39	0								

Sources: Bank of Lithuania and IMF staff calculations.

Table 3. Lithuania. Net Financial Asset Position by Sector and Instrument

(percent of GDP)

2004 Q1

	Net Financial Position									Net Financial Position						
	NF	CB	OM	IO	IP	GG	HH	RW	NFA	Currency	Debt	Loans	Equity	Invest	Pens/Ins	Other
NF	0	4	-10	-5	0	-29	-29	-24	**-93**	11	0	-29	-67	0	1	-8
CB	-4	0	-3	0	0	-6	-4	16	**0**	-13	13	0	-1	0	0	0
OM	10	3	0	2	0	2	-10	-8	**-1**	-27	5	25	-3	0	0	-1
IO	5	0	-2	0	0	0	0	-3	**0**	0	0	0	0	0	0	0
IP	0	0	0	0	0	1	-1	-1	**-1**	0	1	0	-1	0	-2	0
GG	29	6	-2	0	-1	0	-7	-14	**10**	8	-16	-2	26	0	0	-6
HH	29	4	10	0	1	7	0	0	**51**	20	0	-6	26	0	1	10
RW	24	-16	8	3	1	14	0	0	**34**	2	-3	11	20	0	0	4
NFA	**93**	**0**	**1**	**0**	**1**	**-10**	**-51**	**-34**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

2008 Q2

	NFA									NFA						
	NF	CB	OM	IO	IP	GG	HH	RW	NFA	Currency	Debt	Loans	Equity	Invest	Pens/Ins	Other
NF	0	3	-22	-12	0	-18	-52	-24	**-125**	12	1	-45	-86	0	1	-8
CB	-3	0	-4	0	0	-3	-4	14	**-1**	-14	14	0	-1	0	0	0
OM	22	4	0	3	0	0	1	-30	**-1**	-60	3	63	-6	0	0	-1
IO	12	0	-3	0	0	0	0	-9	**0**	0	0	-2	1	-1	0	1
IP	0	0	0	0	0	1	-4	3	**0**	0	2	0	-1	2	-4	0
GG	18	3	0	0	-1	0	-1	-11	**9**	5	-12	0	17	0	0	-1
HH	52	4	-1	0	4	1	0	0	**61**	27	1	-28	52	1	4	4
RW	24	-14	30	9	-3	11	0	0	**57**	29	-11	12	24	-2	0	5
NFA	**125**	**1**	**1**	**0**	**0**	**-9**	**-61**	**-57**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

2018 Q3

	Net Financial Position									Net Financial Position						
	NF	CB	OM	IO	IP	GG	HH	RW	NFA	Currency	Debt	Loans	Equity	Invest	Pens/Ins	Other
NF	0	4	-8	-6	0	-13	-38	-22	**-84**	17	-2	-27	-64	1	0	-8
CB	-4	0	-10	0	0	-2	-4	19	**-1**	-31	30	0	-1	2	0	0
OM	8	10	0	3	-1	-1	-8	-10	**0**	-44	3	47	-6	0	0	0
IO	6	0	-3	0	0	0	-2	-2	**0**	1	0	0	0	-2	0	0
IP	0	0	1	0	0	2	-10	8	**0**	1	5	0	-1	6	-10	0
GG	13	2	1	0	-2	0	-2	-27	**-14**	8	-33	-5	15	0	0	0
HH	38	4	8	2	10	2	0	2	**66**	33	1	-22	33	1	10	9
RW	22	-19	10	2	-8	27	-2	0	**33**	14	-5	9	24	-9	0	-1
NFA	**84**	**1**	**0**	**0**	**0**	**14**	**-66**	**-33**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Sources: Bank of Lithuania and IMF staff calculations.

Annex III. Fintech in Lithuania

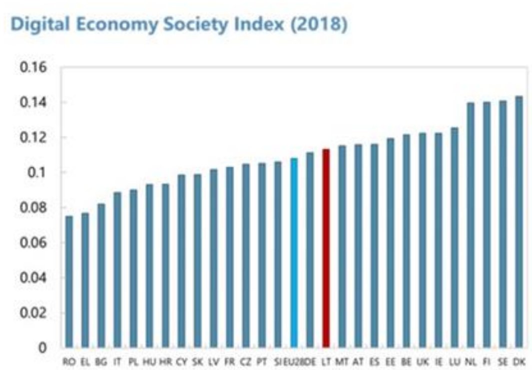
1. The authorities are supporting fintech with the goal to increase high-skill jobs and retain human capital. Lithuania faces a significant demographic challenge as the birth rate halved between 1991 and 2004, and migration has led to the loss of about a fifth of the population since 1990. Therefore, it is key to create high-wage opportunities for young talented workers.

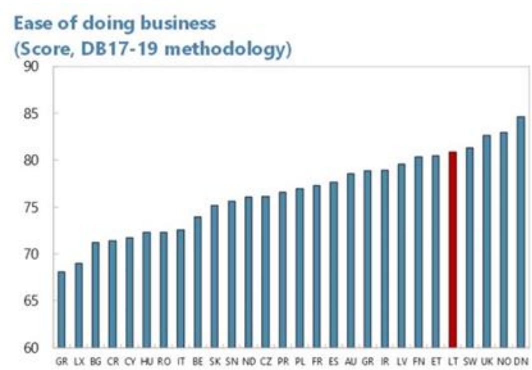
2. Fintech could also lead to increase competition and to better financial services. As is common in small size markets, there is strong concentration in the banking system—which has generated concerns about the level of competition. While the system seems efficient, fintech could bring additional competition—particularly on payment services, but also on insurance, investment and lending—and improve the quality of financial services through innovative solutions.

3. Prospects for fintech. It is hard to predict what are the prospects for development in an incipient sector at the innovation frontier. Nonetheless, there are drivers to focus on: (i) technology and business environment which should entice firms to operate in the country, (ii) consumers' attitudes which are relevant for the domestic impact on competition and financial services, and (iii) policies and regulation—particularly those specifically targeted to fintech companies. While the size of the domestic market might be a limiting factor to attract firms, it likely plays a secondary role given that Lithuania provides access to the euro area.

Technology and Business Environment

4. Lithuania has a supportive business environment. Lithuania's authorities have persistently focus on improving the overall business environment, not just for fintech. Their ease-of-doing business ranking is high among European economies, reflecting a welcoming regulatory environment. However, Lithuania seems average relative to the rest of Europe in terms of digitization of the economy,[16] lagging some wealthier economies.





Sources: Europeam Commission and World Bank.

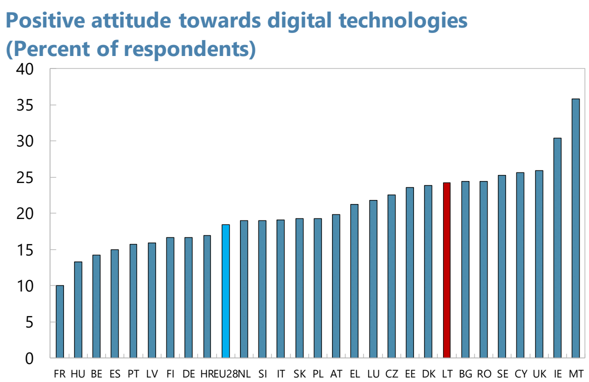
[16] Based on DESI rankings, this composite index captures issues like connectivity, human capital, use of internet services, integration of digital technology, and digital public services.

5. **While the business environment is innovation-friendly, it lags the EU on other factors that affect innovation.**[17] The European innovation scorecard assesses that Lithuania is a moderate innovator—albeit is catching up to the EU average. While it has an innovation-friendly environment, particularly a strong access to broadband, and strong linkages among key actors (SMEs, public-private collaboration), other indicators suggest relative weaknesses, including low level of high-medium tech and knowledge intensive exports,[18] and the attractiveness of the research system.[19]

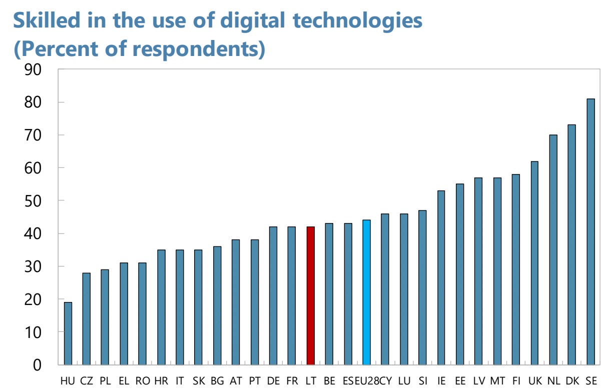
Source: European Commission.

Consumer Attitudes

6. **Consumers are ready to adopt fintech solutions.** Surveys suggest that Lithuanians' attitudes toward digital technologies and self-reported skills in their use are broadly similar to those in the rest of Europe, despite their lower income per capita.



Note: Share of respondents that think digital technologies have a positive impact on the economy, society, and their own lives.



Note: Share of respondents that consider themselves sufficiently skilled in the use of digital technologies for their daily lives.

Sources: European Commission and Eurobarometer 460.

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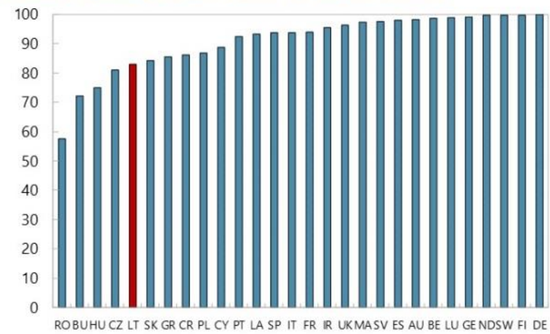
[17] See IMF Country Report No. 17/178 for further details on Lithuania's innovation system.

[18] The share of employment in high and medium-high tech is about a third of the EU average, while the share of employment in knowledge intensive services is about two-thirds the EU average.

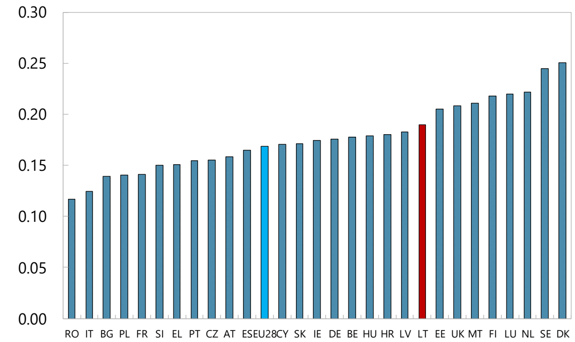
[19] The indicator is based on international scientific co-publications, citations, and foreign doctorate students.

7. Indicators that are more closely linked to fintech are generally positive. A large share of the population uses financial services, albeit it falls short of the close-to-full coverage in most EU countries. However, Lithuania's use of internet is high by European standards. While on-line shopping is yet to catch-on,[20] a large share of internet users relies on online banking.

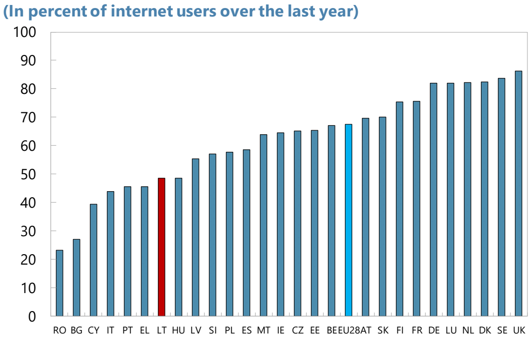
Financial inclusion
(Percent of respondants that hold an account at a financial institution)



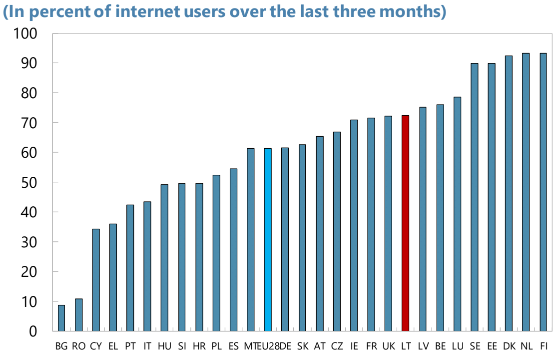
Use of Internet Indicator (2018)
(Sub-component of the DESI)



Online Shopping (2018)
(In percent of internet users over the last year)



Online Banking Users (2018)
(In percent of internet users over the last three months)



Source: European Comission

Sources: World Bank Financial Inclusion Database and European Commission.

Policies and Regulations

8. Bank of Lithuania (BoL) has granted more than 110 licenses to fintech companies. It has a menu of licensing options that includes electronic money and payment institutions, the registry of crowdfunding and peer-to-peer lending operators, and specialized banking. The latter, introduced in 2017, has lower capital requirements, but can provide most of the services provided by a full bank.[21]

9. Lithuania's newcomer program is a one stop shop for fintech businesses. The program was established in 2017 and it provides support for meetings and consultation with financial market participants, basic information about licensing and business opportunities, and advise on legal and licensing requirements.[22] BoL also introduced a smart e-licensing tool enabling potential market entrants to remotely apply for a license.

[20] Online payment service providers require less infrastructure than point-of-sale, making it a segment easily accessible for fintech providers.

[21] Excluding investment services, clearing, services related to securities emissions or managed investment, pension funds or be active in providing other services related to security emissions.

[22] BoL seeks to issue licenses within 90 days, albeit some market participants claim the process takes longer.

10. A regulatory sandbox is already in place and a blockchain sandbox is coming. It allows potential and existing financial market participants to test innovations in a live environment under the guidance and supervision of the BoL. The application process lasts up to 4 months, in which BoL and the applicant agree on the testing period, protection of consumer rights and other testing conditions. The testing period is envisaged for 6 months. Moreover, the BoL is taking the final steps to implement a blockchain sandbox.

11. The authorities have pushed strongly to promote fintech payment services. They adopted a national strategy to encourage electronic payments and developed the infrastructure to support it:

- **National Strategy.** The authorities have a national payment strategy that seeks to make innovative payments available by 2020. It entails (i) developing infrastructure for contactless and instant payments, (ii) increasing user's involvement, and (iii) building trust and encouraging the use of electronic payments.

- **CENTROlink.** BoL provides a gateway to the Single European Payments Area (SEPA) through its infrastructure. CENTROlink has direct link with RT1[23] and—since last November—interlinks with TIPS[24]. It also introduced SCT Inst[25] (for instant payments) in November 2017. Through this infrastructure, payment service providers have access to SCT Inst, and thus to instant payments in euros, at low fees.[26]

12. The authorities are moving promptly to implement PSD2. The goal is to have account servicing payment service providers (ASPSPs), particularly banks, develop open interfaces (API) to permit—with customer consent—payments initiated by third parties and make their customer's account transaction data available to third parties.[27] BoL supports the development of fintech by licensing third-party providers (TPP), maintaining a national list of payment service providers (PSP), and promptly notifying of revocations of TPP licenses. Moreover, it launched a public consultation to introduce open banking, and is planning to establish an API register by end-2019.

State of Play

13. Lithuania's fintech sector is growing at a fast pace. In 2018, there were about 170 companies, above the 117 in 2017 and more than triple the number in 2014. The authorities estimate they provide employment to 2,600 persons—with 700 jobs added in 2018.

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[23] An instant payment system that provides a pan-European infrastructure platform for real time payments in euro under SEPA.

[24] Target Instant Payment Settlement is a market infrastructure service launched by the ECB in 2018. It enables payment service providers to offer fund transfers to their customers in real time.

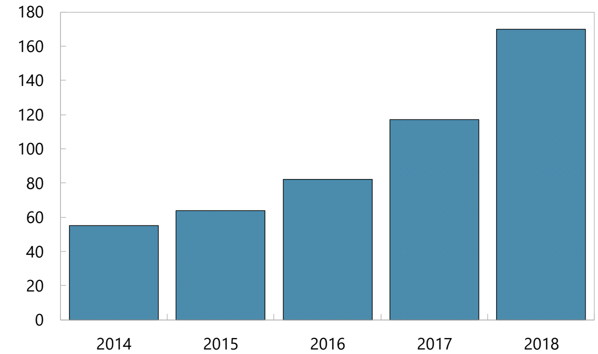
[25] SEPA Instant Credit Transfer

[26] The fees range is €0.02–0.04 for instant SCT Inst and €0.05-0.07 for SEPA direct debit (SDD).

[27] The directive envisages three types of services: payment initiation (PIS), account information (AIS), and confirmation of funds (PIIS).

14. Lithuania is a leading hub for fintech payment services in Europe. As of end-2018, they had issued 47 e-money licenses, second only to the U.K, in addition to 33 licenses for payment institutions. Most of Lithuanian fintech companies (about 44 percent) focus on payments services, followed by lending (15 percent), banking (11 percent) and Blockchain (11 percent).

Number of Fintechs in Lithuania



Source: Invest Lithuania.

15. More than half of the fintech companies are revenue funded and seek a relationship with banks as a distribution channel. While some fintech companies are still searching for the proper funding to suit their business needs, many are well-established and can generate revenue streams to support their operations and growth. Many are seeking relationships with banks for distribution and partnership, rather than funding.

Risks and Challenges

16. Fintech provides big opportunities, but it also brings significant risks, particularly regarding AML/CFT and supervision. The BoL's 2017 Financial Stability Report identifies risks related to fintech including regulatory, cyber, and the impact of financial stability from changes in (untested) business models. Lithuania's national ML/TF risk assessment identifies the use of technology in money transfer as a high-risk area within the financial sector. The likely focus of most new entrants on cross border transactions, could represent a shift in the business model of Lithuania's banking system and bring new challenges for supervision, including for AML/CFT. However, there is scope to improve the AML/CFT regime to mitigate risks emanating from new technologies, with a particular focus on ensuring the effectiveness of AML/CFT supervision at addressing the rising number of fintech entities and the increased complexity of their operations.

17. The authorities are taking actions to strengthen the AML/CFT framework to mitigate ML/TF risks by the region. Lithuania underwent a mutual evaluation by MONEYVAL in 2018, which assessed the level of effectiveness of most aspects of its AML/CFT regime as moderate (second lowest of the four effectiveness ratings). The report recommended that the BoL should enhance its existing risk-based approach to AML/CFT supervision, further develop its ML/FT risk assessment and intensify its use of sanctions for AML/CFT violations.

INTERNATIONAL MONETARY FUND

REPUBLIC OF LITHUANIA

STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

July 12, 2019

Prepared By	European Department

CONTENTS

FUND RELATIONS

(As of May 31, 2019)

Membership Status: Joined: April 29, 1992; Article VIII

General Resources Account:

	SDR Million	Percent of Quota
Quota	441.60	100.00
Fund holdings of currency (Exchange Rate)	413.58	93.65
Reserve Tranche Position	28.03	6.35

SDR Department:

	SDR Million	Percent of Allocation
Net cumulative allocation	137.24	100.00
Holdings	137.40	100.12

Outstanding Purchases and Loans: None

Latest Financial Arrangements:

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
Stand-By	Aug 30, 2001	Mar 29, 2003	86.52	0.00
Stand-By	Mar 08, 2000	Jun 07, 2001	61.80	0.00
Stand-By	Oct 24, 1994	Oct 23, 1997	134.55	134.55

Projected Payments to Fund:

(SDR Million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2019	**2020**	**2021**	**2022**	**2023**
Principal		0.00	0.00	0.00	0.00
Charges/Interest		0.00	0.00	0.00	0.00
Total		0.00	0.00	0.00	0.00

Implementation of HIPC Initiative: Not applicable.

Implementation of MDRI Assistance: Not applicable.

Implementation of Catastrophe Containment and Relief (CCR): Not applicable.

Exchange Rate Arrangement:

As of January 1, 2015, the currency of Lithuania is the euro, which floats freely and independently against other currencies. Prior to 2015, the currency of Lithuania was the litas. From April 1, 1994 to February 1, 2002, the litas was pegged to the U.S. dollar at LTL 4 per U.S. dollar under a currency board arrangement. From February 2, 2002 to Dec 31, 2014, the litas was pegged to the euro at LTL 3.4528 per euro. Lithuania joined the European Union (EU) on May 1, 2004, and ERM II on June 28, 2004. Lithuania has accepted the obligations of Article VIII of the Fund's Articles of Agreement and maintains an exchange system free of restrictions on the making of payments and transfers for current international transactions except for those maintained solely for the preservation of national or international security and which have been notified to the Fund pursuant to Executive Board Decision No. 144-(52/51).

Previous Article IV Consultation:

Lithuania is on the 12-month consultation cycle. The last Article IV consultation was concluded on May 21, 2018. The staff report and other related documents are available at https://www.imf.org/en/Publications/CR/Issues/2018/06/25/Republic-of-Lithuania-2018-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-46017.

Safeguards Assessment:

Under the Fund's safeguards assessment policy, the Bank of Lithuania (BoL) was subject to and completed a safeguards assessment with respect to the Stand-By Arrangement, (the SBA was approved on August 30, 2001 and expired on March 29, 2003) on December 10, 2001. The assessment identified certain weaknesses and proposed appropriate recommendations as reported in EBS/01/211. The BoL has implemented these recommendations.

FSAP Participation and ROSCs:

An FSAP Update mission was completed on November 19, 2007. Fiscal and statistics ROSCs were completed in November 2002 and December 2002, respectively.

Republic of Lithuania: Technical Assistance from the Fund, 1999–2018

Department	Issue	Action	Date	Counterpart
STA	Balance of payments statistics (also covering Latvia)	Mr. Buxton	Resident Advisor, Oct. 1999–Oct. 2000	Bank of Lithuania
LEG	Bankruptcy legislation	Mr. Dimitrachkov	Mar. 2000	Ministry of Economy
FAD	Establishment of Fiscal Reserve Fund	Mission	Jul. 2000	State Privatization Fund
MAE	Multi-topic	Mission	Mar. 2001	Bank of Lithuania
FAD	Tax policy issues	Mission	Jun. 13–26, 2001	Ministry of Finance
STA	ROSC	Mission	May 8–22, 2002	Department of Statistics, Ministry of Finance, and Bank of Lithuania
FAD	ROSC	Mission	Jul. 10–23, 2002	Ministry of Finance
FAD	Treasury Operations	Mr. Ramachandran	Nov. 22–Dec. 5, 2004	Ministry of Finance
FAD	Decentralization	Mission	Dec. 3–Dec. 15, 2004	Ministry of Finance
STA	External debt statistics	Mission	Aug. 2–4, 2006	Bank of Lithuania
MCM	Stress testing	Mr. Miguel A. Segoviano Basurto	Jun. 11–21, 2007	Bank of Lithuania
STA	External debt statistics	Mission	Nov. 8–19, 2007	Bank of Lithuania
FAD	Public expenditure review	WB mission / Ms. Budina (FAD) participation	Apr. 14–24, 2009	Ministry of Finance
FAD	Tax Administration	Mission	Aug. 26–Sep. 8, 2009	Ministry of Finance
MCM/LEG	Bank Resolution/Banking Law	Mission	Sep. 28–Oct. 6, 2009	Bank of Lithuania/Ministry of Finance
FAD	Reform of Social Security and Health Funds	Mission	Apr. 6–20, 2010	Ministry of Finance/State Social Insurance Fund Board
LEG	Personal Bankruptcy Reform	Mission	Apr. 30–May 8, 2010	Ministry of Economy
FAD	Tax Administration	Mission	Jul. 14–27, 2010	Ministry of Finance
FAD	General Tax Policy	Mission	Oct. 19–25, 2010	Ministry of Finance
STA	GFS 2001 Statistics	Mission	Feb. 11–22, 2013	Ministry of Finance
MCM	Credit Unions	Mission	Nov. 18–29, 2013	Bank of Lithuania
MCM	Stress Testing	Mission	Dec. 16–18, 2013	Bank of Lithuania
FAD	Local Government Finance	Mission	Dec. 9–16, 2014	Ministry of Finance
FAD	Fiscal Transparency	Mission	Nov. 28-Dec. 11, 2018	Ministry of Finance

Resident Representative:

None

Anti-Money Laundering (AML) and Combating Financing of Terrorism (CFT): Lithuania's compliance with the Financial Action Task Force (FATF) standard, was assessed by MONEYVAL, the FATF-style regional body of which it is a member, in April 2012 and December 2018. The former assessment report was published in December 2012. Lithuania was rated partially compliant on nineteen FATF Recommendations, leading to the application of the first stage of the Compliance Enhancing Procedure (CEP). In response, the authorities amended the Criminal Code and the AML/CFT Law and put in place secondary legislation and guidelines. This extended the list of punishable activities, criminalized financing of terrorism, reorganized the suspicious transactions reporting system, strengthened customer due diligence, and extended record keeping requirements. Lithuania has submitted to date three compliance reports under the CEP procedure. In recognition of the progress achieved in the key areas of concern, MONEYVAL ended the CEP at step 1 in April 2015, but recommended that the authorities address the remaining deficiencies and ensure effective implementation of its AML/CFT framework in order to exit the regular follow-up procedures. At the 50th Plenary meeting in April 2016, the MONEYVAL Secretariat acknowledged progress made by Lithuania but noted that further progress is needed with respect to R.5, R.13/SR.IV and SR.III. While Lithuania has made progress on criminalizing ML/FT, it remained subject to regular follow-up. At the MONEYVAL Plenary in September 2017, the Plenary agreed that Lithuania has taken sufficient steps to remedy deficiencies on key and core FATF recommendations which resulted in Lithuania being removed from the regular follow-up process. At the MONEYVAL Plenary in December 2018, Lithuania's 5th round mutual evaluation was adopted, with all moderate effectiveness ratings except one (substantial) and a set of recommendations to be addressed by the 2020 plenary session, including an update of the National Risk Assessment

Lithuania has transposed the 4th Anti Money Laundering and Terrorist Financing Directive. The new AML/CFT law came into force on July 13, 2017. Following changes in primary legislation, a number of secondary legal acts governing AML/CFT prevention were amended during 2017. The new legislation improves the identification process of beneficial owners, broadens the definition of politically exposed persons, and strengthens the sanctions regime, among other improvements. In particular, the new legislation extends the scope of anti-money laundering legislation to providers of all gambling and lottery services, and to agents involved in the purchase or sale of real estate properties and crowdfunding platforms. The EU Member States are obliged to create central registers containing information on the beneficial ownership of corporate and other legal entities, including trust structures. This is currently in the process in Lithuania.

Lithuania is expected to transpose the 5th AMLD by January 2020. The new legislation, among other things, makes public the registers of beneficial owners of companies (and under some conditions trusts) operating within the EU and improves interconnectedness of member countries' national registers. Virtual currencies and custodian wallet providers are included into the scope of Directive.

STATISTICAL ISSUES

General: Over the past several years, Lithuania has made good progress in establishing a macroeconomic database Data provision to the Fund for surveillance purposes is adequate for surveillance purposes.

In July 2018, Lithuania completed the requirements for adherence to the SDDS Plus, the highest tier of the Data Standards Initiatives.

National Accounts: The national accounts are compiled by Statistics Lithuania (SL) in accordance with the guidelines of the European System of Accounts 2010 (ESA 2010) from 2005 data onwards (data before 2005 still follow the European System of Accounts 1995, ESA 95). Quarterly GDP estimates at current and at constant prices are compiled using the production, expenditure and income approaches. GDP estimates by production are considered to be more reliable than the corresponding estimates by expenditure and income, but no statistical discrepancies between these three estimates are shown separately in the published figures as the discrepancies are included in the estimates of changes in inventories (expenditure approach) and operating surplus and mixed income (income approach). The annual and the quarterly national accounts are compiled at previous year prices and chain-linked to 2010. In general, good data sources and sound methods are used for the compilation of the national accounts, but measuring activity during the volatile environment of the 2008/09 crisis proved challenging. Moreover, difficulties remain in measuring the non-observed economy. Estimates compiled at detailed levels of economic activity using fixed coefficients derived from benchmark surveys conducted in 1996 and 2003, and updated in 2006 and in 2011, measured the non-observed economy at 28.5 percent of GDP in 2012. According to the most recent estimate, this figure was 14.0 percent of GDP in 2016.

Price Statistics: The main statistical data source for the production of the CPI is a monthly statistical survey on prices for consumer goods and services. Information published in the legal acts of state institutions, catalogues, pricelists, and on enterprises' websites is also used. The price survey covers the entire territory of the country, and data is collected in small, medium, and large towns. The CPI covers consumption expenditure of the residents of the country and is the main instrument of indexation. The authorities also produce the Harmonized Index of Consumer Prices (HICP) which is used to measure inflation in the EU and is fully comparable across countries. In addition to the consumption expenditure of residents, the HICP covers also consumption expenditure of non-residents and foreign visitors but excludes financial intermediation services and games of chance. Differences in coverage and hence weighting account for most of the differences in the value of the CPI and HICP. Since December 1998, CPI weights have been updated annually. The index reference period for both the CPI and the HICP is is 2015. The monthly CPI and HICP are available in the second week following the reference month. The consumer price index is calculated according to the chain-linked Laspeyres formula with weights updated every year.

Government Finance Statistics: Data on the central government budget execution are available at a monthly and quarterly frequency. A new methodology, incorporating the GFSM 2014, was adopted in October 2014. Annual and quarterly historical data have been converted into the GFSM 2014 format. Administrative data sources include the Ministry of Finance, State Social Insurance Fund Board (Sodra), Compulsory Health Insurance Fund, Employment Fund, and financial statements of enterprises. The MoF is reporting to STA general government's annual data on an accrual basis for publication in the Government Finance Statistics Yearbook (GFSY). In addition, the MoF is reporting quarterly and monthly data for publication in the IFS. Lithuania participates in the Eurostat GFS convergence project with the IMF since 2012.

Monetary Statistics: Lithuania uses the ECB reporting framework for monetary statistics and data are reported to the IMF through a gateway arrangement with the ECB that provides for efficient transmission of monetary statistics to the IMF and for publication in the IFS. IFS coverage includes the central bank and other depository corporations (ODCs) using Euro Area wide and national residency criteria. Data are published in IFS with a lag of about a month. Lithuania reports some data and indicators of the Financial Access Survey (FAS), including the two indicators adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs). There is room for improvement in reporting to the FAS, especially for series on use of financial services (depositors, deposit accounts, borrowers, and loan accounts).

Financial sector surveillance: Lithuania reports all 12 core and 8 of the 13 encouraged financial soundness indicators (FSIs) for deposit takers, three FSIs for nonfinancial corporations, one FSI for households, and all four FSIs for real estate markets on a quarterly basis.

Balance of Payments: The BoL is responsible for compiling balance of payments, international investment position (IIP), external debt and international reserves statistics. The BoL reports quarterly data on balance of payments, IIP and monthly international reserves to STA on a timely and regular basis. Balance of payments data (on a monthly and quarterly basis) are compiled using the format recommended in the Balance of Payments Manual, sixth edition (BPM6) from 2004 data onwards (data before 2004 still follow the BPM5 methodology). The monthly data correspond to several key balance of payments components, compiled on the basis of a sample survey covering the public sector, commercial banks, and some nonfinancial private sector institutions. Lithuania reports comprehensive data to two STA initiatives: (i) the Coordinated Direct Investment Survey (CDIS); and (ii) the Coordinated Portfolio Investment Survey (CPIS). The Data Template on International Reserves and Foreign Currency Liquidity is disseminated monthly according to the operational guidelines and is hyperlinked to the Fund's DSBB. Since late 2004, the BoL disseminates quarterly external debt data in the World Bank's Quarterly External Debt Statistics (QEDS) database.

Data Standards and Quality: Lithuania subscribed to the Special Data Dissemination Standard (SDDS) in May 1996, and its metadata have been posted on the Fund's Dissemination Standards Bulletin Board (DSBB) since April 1997. Lithuania meets the SDDS specifications for coverage, periodicity and timeliness of the data, and for the dissemination of the advance release calendars. A significant amount of economic and financial information is now available on various websites through the Internet (see section on Dissemination of Statistics, below). The authorities publish a range of economic statistics through a number of publications, including the SL's monthly publication, Economic and Social Developments, and the BoL's monthly Bulletin. Lithuania adhered to the SDDS Plus in July 2018. The new data sets disseminated under the SDDS Plus cover data related to the performance of Lithuania's financial sector, cross-border financial linkages, and vulnerabilities of the economy to shocks. A significant amount of data is available on the Internet:

- metadata for data categories defined by the Special Data Dissemination Standard are posted on the IMF's DSBB (http://dsbb.imf.org);
- the BoL website (http://www.lb.lt/statistical_data_tree) provides data on monetary statistics, treasury bill auction results, balance of payments, IIP, external debt and other main economic indicators;
- the SL website (http://osp.stat.gov.lt) provides monthly and quarterly information on economic and social development indicators;
- the MoF (http://www.finmin.lrv.lt) home page includes data on the national budget, as well as information on laws and privatization; and government finance statistics (deficit, debt);
- NASDAQ OMX Baltic website (http://www.nasdaqomxbaltic.com/market/?lang=en) includes information on stock trading at NASDAQ OMX Baltic stock Exchange in Vilnius (the former Vilnius Stock Exchange).

Republic of Lithuania: Table of Common Indicators Required for Surveillance

As of June 30, 2019

	Date of Latest Observation	Date Received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]	Memo Items:	
						Data Quality – Methodological soundness[8]	Data Quality – Accuracy and reliability[9]
Exchange Rates	June 2019	July 2019	M	M	M		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	April 2019	May 2019	M	M	M		
Reserve/Base Money	April 2019	May 2019	M	M	M	O, LO, LO, LO	O, O, LO, O, O
Broad Money	April 2019	May 2019	M	M	M		
Central Bank Balance Sheet	April 2019	May 2019	M	M	M		
Consolidated Balance Sheet of the Banking System	April 2019	May 2019	M	M	M		
Interest Rates[2]	April 2019	May 2019	M	M	M		
Consumer Price Index	January 2019	Feb 2019	M	M	M	O, O, O, O	O, O, O, O, O
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	2019Q1	June 2019	Q	Q	Q	LO, LO, LO, O	O, O, O, O, O
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	May 2019	June 2019	M	M	M		
Stocks of Central Government and Central Government-Guaranteed Debt[5]	March 2018	Apr 20, 2018	M	M	M		
External Current Account Balance	2019Q1	June 2019	Q	Q	Q	O, O, LO, O	O, O, O, O, O
Exports and Imports of Goods and Services	2019Q1	June 2019	Q	Q	Q		
GDP/GNP	2019Q1	June 2019	Q	Q	Q	O, LO, O, LO	O, LO, LO, LO, O
Gross External Debt	Q4/2017	Mar 23, 2018	Q	Q	Q		
International Investment Position[6]	Q1 2019	June 2019	Q	Q	Q		

[1] Any reserve assets that are pledged of otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means

[2] Both market-based and officially-determined, including deposit and lending rates, discount rates, money market rates, rates on treasury bills, notes and bonds.

[3] Foreign, domestic bank, and domestic nonbank financing.

[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and local governments.

[5] Including currency and maturity composition.

[6] Includes external gross financial asset and liability position vis-à-vis nonresidents.

[7] Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A); Not Available (NA).

[8] Reflects the assessment provided in the data ROSC published in July 2004, the findings of the mission that took place during September 2003 for the dataset corresponding to the variable in each row. The assessment indicates whether international standards concerning concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O), largely observed (LO), largely not observed (LNO), or not observed (NO).

[9] Same as footnote 8, except referring to international standards concerning source data, statistical techniques, assessment and validation of source data, assessment and validation of intermediate data and statistical outputs, and revision studies.