



LIETUVOS BANKAS  
EUROSISTEMA

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The Lithuanian Economic Review analyses the developments of the real sector, prices, public finance and credit in Lithuania, as well as the projected development of the domestic economy. The material presented in the review is the result of statistical data analysis, modelling and expert assessment. The review is prepared by the Bank of Lithuania.

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## Abbreviations

APP	asset purchase programme
CIS	Commonwealth of Independent States
EC	European Commission
ECB	European Central Bank
EU	European Union
Eurostat	statistical office of the European Union
GDP	gross domestic product
GNI	gross national income
HICP	Harmonised Index of Consumer Prices
ICT	information and communications technology
IMF	International Monetary Fund
MFI	monetary financial institution
MRO	main refinancing operation
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
PMI	Purchasing Managers' Index
PPS	purchasing power standard
PSPP	public sector purchase programme
SP	Stability Programme
UK	United Kingdom
US	United States of America
VŠĮ	public undertaking

## ECONOMIC OUTLOOK

**Global economic activity remains robust, although increasingly more heterogeneous across regions.** Supported by the sizeable fiscal stimulus and higher expenditure in the private sector, activity growth in the US is on an upswing. Solid domestic demand boosts US imports, thus reinforcing global trade flows, which are nevertheless currently increasing at a slower pace than a few quarters ago. The slowdown in external trade growth has been especially pronounced in advanced economies, such as the euro area and Japan, where in 2017 economic activity saw the strongest rebound, thus bolstering global economic momentum. Recently macroeconomic indicators in these countries have become more subdued – manufacturing has moderated, imports and exports are decelerating, while downside risks took a toll on confidence.

**Mounting uncertainty regarding future prospects weighs on international trade.** The direct impact of trade restrictions is limited as they are placed on a rather small portion of global trade. However, the possibility of rising tensions over trade and retrogressive approaches to free trade has a much stronger effect on both trade flows and economic activity. Tighter trade restrictions could increase corporate costs and reduce the purchasing power of households, thereby affecting household consumption, investment and labour market indicators. Macroeconomic developments could be also undermined by declining sentiment, which dents household and corporate spending. Uncertainties over international trade flows might already have implications for corporate decision-making.

**Weakening external demand has been a drag on Lithuania's exports.** Compared to last year, exports of goods of Lithuanian origin have been decelerating. This was largely influenced by slowing EU demand. Re-exports have almost come to a standstill: Russian imports, which showed robust growth in 2017, have significantly lifted Lithuania's re-export to this country; however, this year, with Russian imports slowing down, re-exports are almost at a halt.

**Unlike external demand, domestic macroeconomic indicators retain momentum.** Having started to show clear signs of upward trend last year, investment has continued on its solid growth path. It should be noted, however, that investment into means of production (a large portion of which is imported) was more buoyant in 2017, while 2018 saw more robust investment in buildings and structures. This is linked to the anticipated increase in EU funding, which spurs construction of non-residential and engineering buildings. Construction picks up steam when economic activity already exceeds potential, i.e. growth in construction work boosts economic development and reinforces certain macroeconomic imbalances. It also determines changes beyond the boundaries of the sector – activity in related sectors speeds up, household income rises, which translates into stronger domestic demand as well as pressure on wage and other labour market-related indicators.

**Higher immigration rates have eased tensions in the labour market only marginally.** The main bulk of immigrants work in the transport sector, which saw a rapid increase in employees two years ago when immigration procedures for certain professions were simplified. The number of workers in this sector is rising quickly, with its annual growth rate nearing 5%. Many other sectors, however, find themselves on the other side of the spectrum, even though an increasingly larger share of companies states that labour shortages limit their activities. For example, the number of employees in manufacturing is growing only modestly, while trade and other services activities even report a decline in the number of workers. This reveals imbalances in the labour market, ultimately leading to rapid wage increases, which have outpaced the growth rate of labour productivity, and a rise in the labour share, which has reached historically high levels. Observed for quite some time, such imbalances are not likely to disappear in the near future, affecting economic development. Given the substantial growth in domestic demand and increasing – though at a slower-than-expected pace – exports, this year real GDP is projected to expand by 3.4%. On the back of narrowing growth of flows from EU funds and further weakening demand in external trade partners, economic expansion in 2019 should moderate and reach 2.8%.

**Annual headline inflation has continued to evolve at a lower rate.** The level of inflation is largely dependent on changes in global commodity prices. Amid a pick-up in global economic activity, stronger demand boosted oil prices, which are also underpinned by supply constraints. Oil prices in euro are now roughly 40% higher than a year ago. This exerted upward pressure on fuel prices, which, in turn, are currently increasing headline inflation more than prices of other major groups of goods and services. However, in recent months oil prices have been lower compared with the previous projection exercise (partly due to the agreement between oil-exporting economies to increase its extraction), contributing to the fact that the outlook for headline inflation has been revised down for 2018. Food prices also lent a lesser-than-expected support to inflation. With sufficient supply accumulated, the majority of global food commodity (except grain) prices are declining. As a result, the rise in consumer food prices is also less pronounced. In the near term, however, this downward trend might reverse as unfavourable weather conditions and potentially poor harvest might lift food prices. Underlying inflation – which covers prices for services and industrial goods – has also slightly moderated. This was largely influenced

by air transport prices, which soared during the summer months of 2017, yet saw a significant drop this year due to the base effect. Eliminating the already-mentioned price contribution, underlying inflation remains rather stable, reflecting continued upward pressure from increasing labour costs and domestic demand. This year average annual inflation is expected to stand at 2.6%. In 2019, given the anticipated slide in oil price inflation, annual inflation is projected to average 2.2%.

#### Outlook for Lithuania's economy

	October 2018 projection <sup>a</sup>			June 2018 projection		
	2017	2018 <sup>b</sup>	2019 <sup>b</sup>	2017	2018 <sup>b</sup>	2019 <sup>b</sup>
<b>Price and cost developments (annual percentage changes)</b>						
Average annual inflation, as measured by the HICP	3.7	2.6	2.2	3.7	2.7	2.2
GDP deflator <sup>c</sup>	4.3	2.5	2.2	4.3	2.6	2.2
Wages <sup>d</sup>	8.6	8.7	6.8	8.6	7.6	6.0
Import deflator <sup>c</sup>	4.4	2.8	1.7	4.4	2.8	1.7
Export deflator <sup>c</sup>	5.4	2.5	1.6	5.4	2.5	1.6
<b>Economic activity (constant prices; annual percentage changes)</b>						
Gross domestic product <sup>c</sup>	3.9	3.4	2.8	3.9	3.2	2.7
Private consumption expenditure <sup>c</sup>	4.0	3.8	3.8	4.1	3.8	3.5
General government consumption expenditure <sup>c</sup>	1.0	1.1	1.1	1.0	1.1	1.1
Gross fixed capital formation <sup>c</sup>	6.7	7.7	5.2	6.7	6.9	5.2
Exports of goods and services <sup>c</sup>	13.7	5.3	4.6	13.7	5.7	4.6
Imports of goods and services <sup>c</sup>	13.6	6.2	5.5	13.6	6.9	5.4
<b>Labour market</b>						
Unemployment rate (annual average as a percentage of labour force)	7.1	6.5	6.3	7.1	6.7	6.6
Employment (annual percentage changes) <sup>e</sup>	-0.5	0.2	-0.3	-0.5	-0.1	-0.3
<b>External sector (percentage of GDP)</b>						
Balance of goods and services	2.3	1.4	0.7	2.3	1.2	0.5
Current account balance	0.7	-0.2	-0.8	0.7	-0.2	-1.0
Current and capital account balance	1.9	1.7	1.5	1.9	1.6	1.2

<sup>a</sup> Projections are based on information made available by 21 August 2018.

<sup>b</sup> Projection.

<sup>c</sup> Adjusted for seasonal and workday effects.

<sup>d</sup> The wage projection for 2019 excludes corrections made due to forthcoming changes in the tax and pension systems.

<sup>e</sup> National accounts data; employment in domestic concept.

# I. INTERNATIONAL ENVIRONMENT

**Global expansion continued on a strong footing this year, although increasingly more heterogeneous across regions.** The world's largest economies – the US and China – have been growing at a robust pace. Euro area growth has been losing momentum: as negative output gaps are closing, expansion in a number of countries is becoming constrained by supply-side factors. At the same time, some emerging market economies are facing financial market pressures. These deceleration trends are also reflected in a slight moderation of international trade volumes. Downside risks, such as protectionism, stronger US dollar and sharp adjustments in financial conditions, will play an important role in furthering global economic development.

**US growth has remained strong, while inflation is on the rise.** Annual GDP growth in the US accelerated, standing at 2.6% and 2.9% respectively in the first and second quarters of 2018. This was largely driven by expanding production and strengthening domestic consumption supported by employee-friendly labour market developments. According to the data of the second quarter of 2018, the unemployment rate in the country stood at 3.9%, while wage growth rose to 2.9%. It should be noted, however, that the real wage remained basically unchanged due to rising inflation. US exports are also expanding – according to the OECD forecasts, growth in exports of goods and services in 2018 will be faster on a year-on-year basis, to reach 4.8% (compared to 3.4% in 2017). Despite the strengthening dollar, exports are expected to remain one of the main driving forces behind economic growth in the US. It is also supported by fiscal policy developments (tax cuts and increases in general government spending) and still favourable financial conditions. However, such fiscal stimulus should further increase the current account deficit, which could add more fuel to protectionist sentiments in the country.

**Economic growth in Russia and China is also fairly robust, but is likely to slow down in the future.** Russia's economic expansion was stimulated by the service sector, one-off public investment projects (e.g. the World Cup which took place in Russia) and a rebound in commodity exports, which, together with higher oil and gas prices, was among the key factors that doubled Russia's current account surplus in the first half of 2018. Nonetheless, the Russian economy is forecast to grow by no more than 1.8% in 2018-2019. Sluggish future growth prospects are underpinned by the fact that little attention is paid to structural and banking sector problems. Economic growth challenges also stem from insufficient infrastructure, population ageing and global uncertainty (including economic sanctions against Russia). External challenges have not spared China either. In the medium term, the country is likely to experience the negative impact of US tariffs on its exporting sector. This, together with slower growth of the construction sector and tighter regulation of the financial sector, should have negative effects on still robust consumption and general government spending. All this is expected to gradually lead to slower, yet more balanced and sustainable economic growth in China.

**After a weak start to the year, growth in euro area economies continues to show signs of slowdown, but remains faster than the long-term average.** In the first half of the year, euro area GDP grew at a slower rate, mainly due to weaker exports. According to provisional data for the second quarter of 2018, euro area GDP increased by an annual 2.2%, somewhat slower than in the first quarter when it stood at 2.5%. Although the EU economic slowdown at the beginning of 2018 was assumed to be short-lived, growth has not yet recovered. PMI indicators show that economic development in the euro area will slow down in the short term, although trends are different across countries. For example, economic growth in Germany should pick up steam on the back of a rebound in domestic demand and domestic investment as well as low unemployment, whereas deceleration is expected

**Global economic growth has accelerated further.**

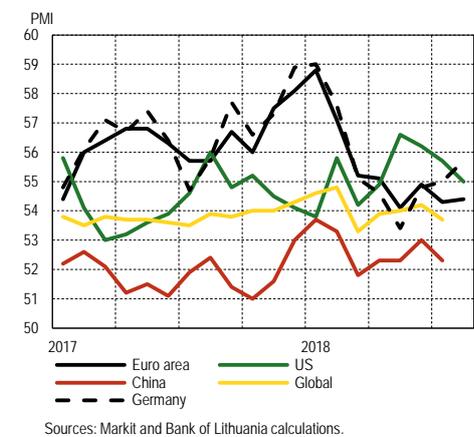
Table 1. Dynamics of GDP and consumer prices in selected advanced and emerging market economies

	2017	2018*	2019*
<b>Real GDP change, %</b>			
Global	3.7	3.9	3.9
Advanced economies	2.4	2.4	2.2
US	2.3	2.9	2.7
Euro area	2.4	2.2	1.9
UK	1.7	1.4	1.5
Emerging market economies	4.7	4.9	5.1
China	6.9	6.6	6.4
Russia	1.5	1.7	1.5
Brazil	1.0	1.8	2.5
<b>Inflation, %</b>			
Advanced economies	1.7	2.2	2.2
Emerging market economies	4.0	4.4	4.4

\*July 2018 projections by the IMF.

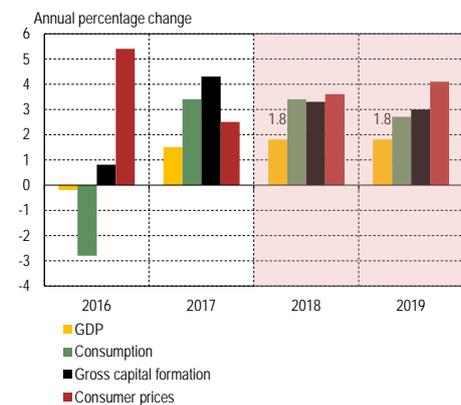
**After a fall in the first quarter of 2018, PMI indicators show a more stable situation in the manufacturing sector and a moderation in economic growth.**

Chart 1. Global PMI evolution



**The Russian economy has been growing steadily.**

Chart 2. Forecast of Russian economic indicators



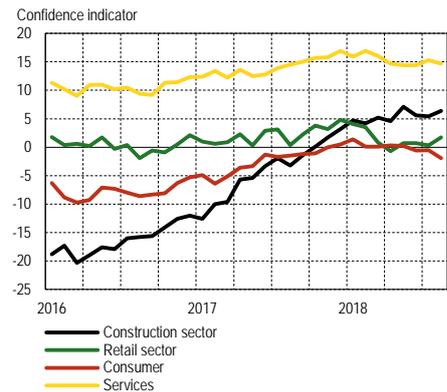
in France, Spain and Italy. In France, it is linked to weaker household consumption which is led by the rise in prices due to increased prices of petroleum products, in Spain – a drop in exports, in Italy – weaker industrial production, slower exports and rising inflation. Moreover, economic development prospects for Italy are clouded by heightened uncertainty caused by political processes, mainly persistent tensions over compliance of the national budget for 2019 with the EU fiscal discipline provisions.

**In 2018, economic growth in Latvia, Estonia and Poland will reach a fairly rapid pace, though slower than in 2017.** This will be mainly underpinned by domestic demand. In the second quarter of this year, the Latvian economy grew at a slower rate (4.4%), mainly driven by subdued industrial development as a result of a fall in energy production by hydroelectric plants and labour shortages. It should be noted, however, that Latvian economic growth has outpaced its projections. Better-than-expected economic performance was led by the construction sector where activity was boosted by EU funds and private investment. Slower economic growth in Estonia was mainly driven by weaker investment and a slower pickup in foreign demand. The negative impact of these factors was at least partly offset by high employment, strong wage growth, and more active public engagement in the labour market. The Polish economy continues to expand at a fast pace because in 2018, similarly to 2017, industrial production and exports have been showing solid growth. This, together with buoyant domestic demand, fiscal stimulus and recovering investment, has positioned Poland as one of the fastest-growing economies in the EU.

**Halfway through the year, prices for many global commodities went down, while oil prices grew at a slower pace.** The rise in oil prices was significantly affected by geopolitical factors undermining oil supply (for instance, tensions between the US and Iran, unrest in Venezuela, a decline in oil production and closure of several main oil ports in Libya). Moreover, oil price growth was not reined in by the Vienna group meeting held in June, at which OPEC members and other petroleum exporting countries agreed to increase oil output. Oil prices eased only in July when Russia and Saudi Arabia announced that they could increase their oil output more substantially than agreed at the Vienna group meeting, while Libya resumed production once its major oil ports had been reopened.

### Confidence indicators reveal a moderation in business development in the euro area.

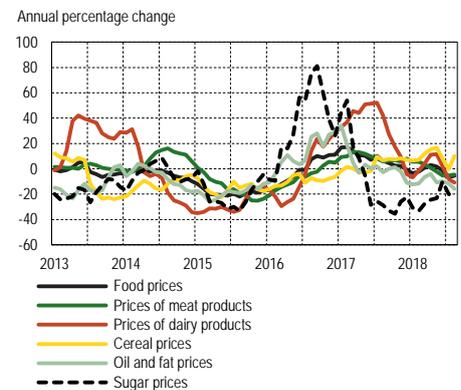
Chart 3. Eurostat confidence indicators



Sources: Eurostat and Bank of Lithuania calculations.

### Halfway through the year, commodity prices began to decline, while oil prices have been rising at a slower rate.

Chart 4. Dynamics of global food commodity prices



Sources: Food and Agriculture Organization of the United Nations and Bank of Lithuania calculations.

## II. MONETARY POLICY OF THE EUROSISTEM

From May to September 2018, the Eurosystem maintained an accommodative monetary policy stance and announced its position regarding net purchases under the APP until end-2018 as well as forward guidance on the key ECB interest rates. The decisions taken will help maintain the current ample degree of monetary accommodation so as to ensure the continued sustained convergence of inflation towards levels that are below, but close to, 2% over the medium term.

In June 2018, the Governing Council announced its intention to end net asset purchases under the expanded APP by the end of the year. Having considered the latest macroeconomic projections and the risks relating to the inflation outlook, the ECB's Governing Council expects that after the reduction of the pace of net asset purchases the sustained convergence of inflation towards the target rate will continue. As already announced, net purchases were intended to run at the monthly pace of €30 billion until the end of September 2018. From October to December this year, the monthly pace of net purchases is being reduced to €15 billion. It is anticipated that, subject to incoming data confirming the euro area medium-term inflation outlook, net purchases will then end. Moreover, the ECB's Governing Council expects that the principal payments from securities purchased under the APP will be reinvested for an extended period of time after the end of the net asset purchases.

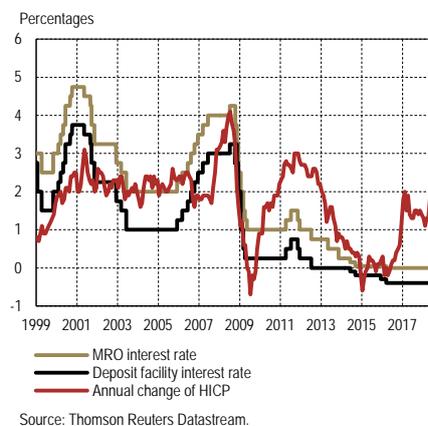
The Governing Council also presented more information concerning the future evolution of the key ECB interest rates. The Governing Council expects these rates to remain at their present levels at least through the summer of 2019, and in any case for as long as necessary to ensure that the evolution of inflation remains aligned with the current expectations of a sustained adjustment path. After the publication of these decisions, financial market participants have postponed – for several months until the third or fourth quarter of 2019 – expectations that the key ECB interest rates will be increased.

The Bank of Lithuania, like other national central banks in the euro area, continued making net purchases under the expanded APP. By the end of August 2018, the Eurosystem had purchased assets totalling €2.5 trillion, whereas asset purchases under the PSPP amounted to a total of €2.1 trillion, i.e. 82% of total assets purchased under the expanded APP. By the end of August 2018, the Bank of Lithuania had purchased debt securities under the PSPP totalling €10.4 billion. Debt securities issued by supranational European institutions accounted for the main bulk of those purchases. The rest were the government debt securities of the Republic of Lithuania purchased by the Bank of Lithuania in tandem with the ECB for a total of €2.9 billion by the end of August this year.

During the period under review, the cost of borrowing in capital markets for governments and businesses was heterogeneous across the euro area countries. Yields on euro area government bonds have been decreasing significantly since 2014 as a result of financial markets' heightened expectations regarding the adoption of non-standard monetary policy measures. Later, however, a large share of fluctuations was also driven by other factors (see Chart 6). The yields of government debt securities of Italy and some other peripheral euro area countries have risen significantly since May 2018, once financial markets discerned risks stemming from the political agenda of the new Italian government. At the same time, the yields of particularly safe assets, for instance, German bonds, have even declined slightly due to increased market uncertainties. The yield dynamics of debt securities issued by euro area corporations have been broadly in line with the yield movement of government debt securities since May 2018 (high-yield debt securities increased by 38 basis points, while less risky debt securities – by mere 6 basis points).

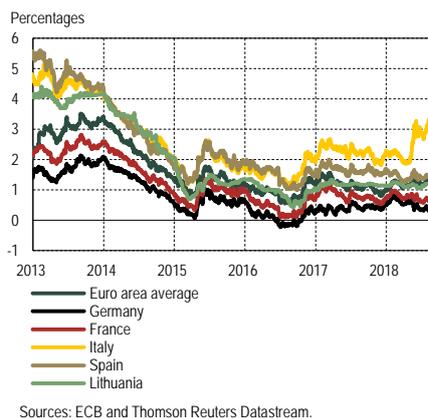
In order to ensure a sustained adjustment in the path of inflation towards the target rate, the Governing Council continued to maintain exceptionally low key ECB interest rates.

Chart 5. Key ECB interest rates and inflation



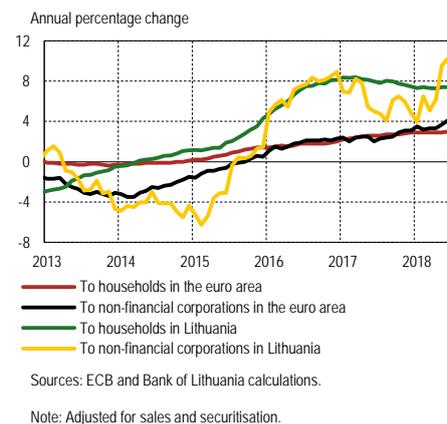
Unlike in other euro area markets, the yield on Italian government bonds has increased due to the exacerbation of political tension since May 2018.

Chart 6. Annual yields on 10-year euro area government bonds issued in national currency



Lending to the real sector in the euro area and Lithuania has maintained its momentum amid continued favourable financing conditions.

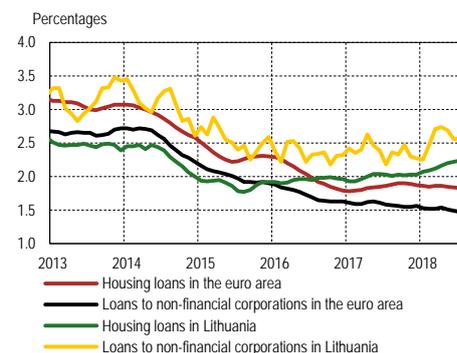
Chart 7. Dynamics of the amount of MFI loans to households and non-financial corporations in the euro area and Lithuania



The Eurosystem's accommodative monetary policy measures have contributed to the continued growth of bank lending in the euro area and Lithuania, as well as ensured that interest rates on loans would remain at historically low levels. The annual growth of loans to non-financial corporations and households in the euro area has remained practically unchanged since May 2018 (see Chart 7). The loan portfolio in Lithuania expanded at a slightly faster pace, with its growth remaining above the euro area average. Average interest rates on new loans in Lithuania are still somewhat higher than the euro area average (see Chart 8). Overall, the level of interest rates on loans remains the lowest on record in the euro area and very low in Lithuania. Interest rates in the euro area have been on a steady decline since mid-2014 when markets began expecting that the ECB would resort to non-standard monetary policy measures. Recently, interest rates on loans in the euro area have stabilised. In Lithuania they have gone up slightly on the back of a pick-up in loan demand and a greater loan portfolio share of debtors with a higher risk profile.

Thanks to the Eurosystem's accommodative monetary policy, financing conditions have remained very favourable.

Chart 8. Average interest rates on new MFI housing loans and loans to non-financial corporations



Sources: ECB and Bank of Lithuania calculations.

Note: 3-month moving average.

### III. REAL SECTOR

The Lithuanian economy continues to grow at a solid pace – the impact of a weaker external environment has been outweighed by strong domestic demand, especially household consumption. In the second half of last year, economic development was mainly fuelled by rapid growth in exports of goods and services boosted by the favourable evolution of external demand; for the time being, though, exports have lost momentum. Still, economic growth remains robust driven by household consumption which strengthened in the first half of 2018. It should be noted that the relatively fast economic expansion, which has been maintained for some time, leads to a widening output gap, which shows the extent to which the current economic development has deviated from its sustainable path. A widening output gap leads to imbalances, which are now mostly noticeable in the labour market<sup>1</sup> and are among the main reasons for the rapid wage increases.

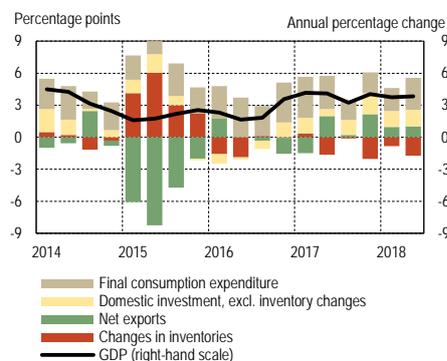
Due to declining demand in many of the main trading partners, exports of goods and services in chain-linked volumes have noticeably slowed down compared to last year. Having reached 13.6% in 2017, growth in exports of goods and services decelerated to 5.6% in the first half of 2018, with exports of both goods and services expanding at a slower pace. This is mostly affected by weaker external demand. Growth in both the EU – the most important destination for exports of goods of Lithuanian origin – and Russia – the most important market for re-exporters – has slackened. Slower EU economic development and moderating trade flows between its members also weighed on the growth of transport services, the largest group of exports of services. Having grown by more than 30% in 2017, freight transport between other countries (accounting for more than half of total road freight transport) halved in the first quarter of this year. It should be noted that so far this deceleration should not be linked to the loss of competitiveness due to increasing labour costs as Lithuanian exporters, despite a pick-up in these costs, still manage to take an increasingly larger export market share in the main trading partners.

The halt of the decline in employment and restrained inflation are among the key factors pushing up household consumption. This contributed to the faster growth of the real wage bill, one of the main factors behind household consumption. Increasing by more than a third compared to the second half of 2017, in the first half of this year it stood at 6.5%. Roughly one-third of this acceleration resulted from a 1.4 percentage point drop in prices compared to the second half of last year, while the remaining two-thirds came from a rebound in employment. Having reduced wage bill growth by nearly 3.5 percentage points in the second half of last year, now employment is making a modest upward contribution. In addition to the growing wage bill, disposable household income is also boosted by decisions of public authorities resulting in higher social benefits. Overall, since the beginning of 2017, disposable household income has been growing at a faster pace than household consumption. This is probably due to households' willingness to raise their savings ratio, which, according to the latest data, was negative. A similar trend is also observed in a number of other euro area countries.

Investment continues to grow at a robust pace. Investment in construction showed considerable growth in the first half of this year. After sluggish momentum in the second half of 2017, housing investment has rebounded. The non-residential segment also exhibited more rapid annual expansion, with particularly fast-paced increases in the floor areas of completed hotels, commercial and catering companies. Investment in engineering structures also started to gather pace, mainly spurred by recovering flows of EU funds. On the whole, EU funding should continue exerting a positive

Lithuania's economy continues its robust upward trend – strong domestic demand outweighed global headwinds.

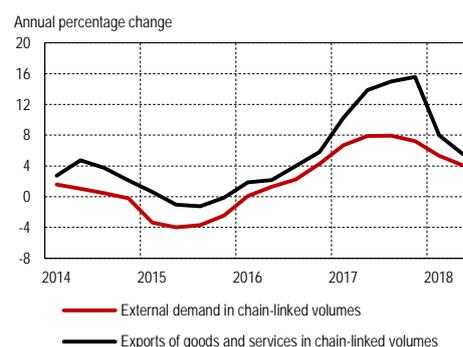
Chart 9. Contributions to real GDP (expenditure approach)



Sources: Statistics Lithuania and Bank of Lithuania calculations.

Due to weaker demand in the majority of the main trading partners, the development of exports of goods and services is noticeably slower than last year.

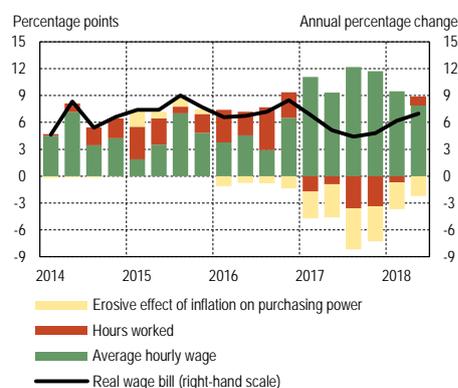
Chart 10. Development of external demand and exports of goods and services (seasonally adjusted)



Sources: ECB and Bank of Lithuania calculations.

The halt of the decline in employment and restrained inflation were among the key factors pushing up the real wage bill.

Chart 11. Contributions to the real wage bill



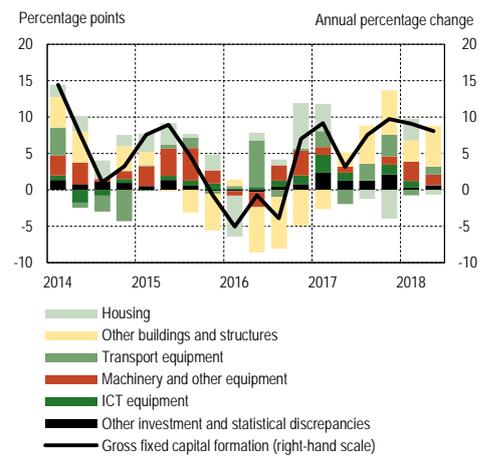
Sources: Statistics Lithuania and Bank of Lithuania calculations.

<sup>1</sup> For more details about the situation in the labour market, see Chapter IV of this review.

effect on the Lithuanian economy for an extended period of time. Under the EC's Multiannual Financial Framework for 2021-2027 published in June, Lithuania is to receive a rather generous, albeit smaller, amount of funds (for more details about the new financial framework, see Box 1 of this review). An upturn in construction investment bolsters activity in the construction sector. After a few years' break, this sector is once again one of the main driving forces behind growth in the Lithuanian economy. Somewhat sluggish growth of investment in machinery and equipment is determined by the moderate increases in investment in vehicles, whereas investment in other means of production continues to grow at a strong pace. Incentives for companies to invest in new means of production – which are mostly affected by labour shortages, increasing labour costs and the level of production capacity utilisation, which is currently hitting historic highs – should also continue into the future.

**Investment growth remains buoyant, especially in the constructions sector.**

Chart 12. Contributions to investment in chain-linked volumes



Sources: Statistics Lithuania and Bank of Lithuania calculations.

### Box 1. Initial overview of the flow of funds to Lithuania under the Multiannual Financial Framework for 2021-2027

The EC put forward a proposal for the 2021-2027 Multiannual Financial Framework<sup>1</sup>, under which the largest share of funding is to be allocated to economic, social and territorial cohesion funds as well as common agricultural policy and fisheries policy funds. The nominal size of the EU long-term budget for 2021-2027 proposed by the EC is €1,279 billion, or 1.11% of the projected EU<sup>2</sup> GNI. By comparison, the Multiannual Financial Framework for 2014-2020 accounted for 1.16% of EU GNI. Almost 30% of total funds under the Multiannual Financial Framework for 2021-2027 are earmarked for economic, social and territorial cohesion funds, another 30% – for common agricultural policy and fisheries policy funds (somewhat less than is allocated in the current Multiannual Financial Framework). Such a structural change is important as these funds set support quotas for specific EU Member States. In case of many other funds (e.g. the trans-European transport network, InvestEU, Erasmus+, HorizonEurope, etc.), EU funding is literally up for grabs: with the EC – the direct manager of these funds – making the final decision, there are no guarantees that a country submitting a project will receive funding.

The proposed Multiannual Financial Framework for 2021-2027 also sets out that the minimal national co-financing rate needed to access the Cohesion Fund<sup>3</sup> will be increased from 15% to 30-60%. This decision aims to attract a larger amount of EU states' own funds and, in turn, ensure better use of EU funding. Increasing the minimum share of own funds allocated to investment projects will affect investment development as entities implementing the projects will have to make a larger financial contribution.

Table A. Funding earmarked for Lithuania from EU funds with country quotas (EUR billions)

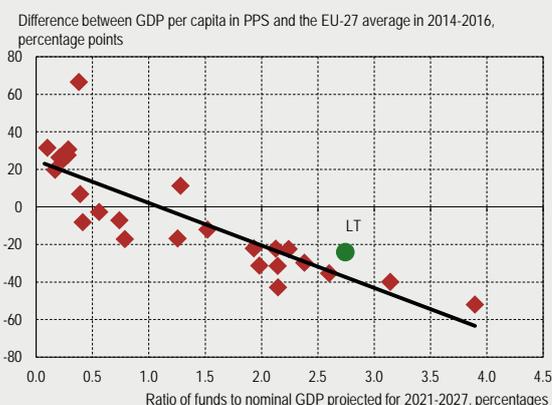
Funds	2014-2020			2021-2027			Changes at 2018 prices
	in 2018 prices	at current prices	compared with GDP, at current prices	in 2018 prices	at current prices	compared with GDP, at current prices	
Cohesion policy	7.4	7.3	2.4%	5.6	6.4	1.5%	-24.3%
Direct payments	3.2	3.1	1.0%	3.3	3.8	0.9%	3.1%
Rural development	1.6	1.6	0.5%	1.2	1.4	0.3%	-25.0%
Other EU funds	0.6	0.5	0.1%	0.8	0.9	0.2%	33.3%
Total	12.8	12.5	4.1%	10.9	12.4	2.9%	-14.8%

Sources: EC, Ministry of Finance and Bank of Lithuania calculations.

According to preliminary data, the new Multiannual Financial Framework, which sets forth country quotas, is likely to leave Lithuania with a smaller amount of EU funding. In nominal terms, Lithuania will be granted approximately €12.4 billion. The largest share of funding (almost 94%) will be allocated from the cohesion policy and common agricultural policy funds<sup>4</sup> (see Table A). In 2018 prices, cohesion policy funds earmarked for Lithuania should decrease by almost a fourth compared to the Multiannual Financial Framework for 2014-2020; funding intended for rural development should decrease to a similar extent. The majority of investment projects that rely on EU funding are financed from the two previously-mentioned funds. According to the Multiannual Financial Framework for 2021-2027, direct monetary payments to Lithuanian farmers are expected to increase. It should be noted that the ratio of Lithuania's GDP to EU funds is likely to decrease even more than the funding itself due to the projected further growth of Lithuania's economy. According to the new Multiannual Financial Framework, the amount earmarked for Lithuania from cohesion policy and agricultural policy funds should account for 2.7% of nominal GDP projected for 2021-2027<sup>5</sup>, while under the current Multiannual Financial Framework, the amount received from these funds is expected to account for 3.9% of nominal GDP projected for 2014-2020, i.e. a decrease of almost a third. Other EU countries are likely to see similar trends as well. However, the decrease in the ratio in Lithuania is one of the largest in the EU: in other EU countries the ratio of these funds to GDP went down by almost a fourth on average. In terms of the above-named ratio, however, Lithuania will remain among countries that receive the largest amount of funding from the cohesion policy and agricultural policy funds.

The decrease in EU structural funds earmarked for Lithuania has been driven by an increase in its welfare level – Lithuania's GDP per capita exceeds 75% of the EU average. This level was reached in 2014, while in 2017 Lithuania's GDP per capita in PPS increased to 76.2% of the EU-27 average<sup>6</sup>. When Lithuania exceeded 75% of the EU average, the EC reclassified it as a transition region. This means that Lithuania will be earmarked a smaller share of funds and will be subject to higher co-financing rates. For example, in the Multiannual Financial Framework for 2014-2020, the national co-financing rate for less developed regions was 15%, while that for transition regions – 40%.<sup>7</sup>

Chart A. Comparison of cohesion funds and common agricultural policy and fishery policy funds with projected nominal GDP per capita in PPS



Sources: EC, IMF and Bank of Lithuania calculations.

**In terms of the standard of living, the amount allocated to Lithuania from the cohesion policy and common agricultural policy funds is relatively larger than to other similarly-developed EU Member States.** When allocating funding from cohesion policy and common agricultural policy funds in the Multiannual Financial Framework for 2021-2027, the EC based its decisions on GDP per capita in PPS for 2014-2016. According to this indicator, Lithuania's GDP per capita has reached 76.0% of the EU-27 average. Over the same period a similar standard of living was also observed in Slovakia, Portugal and Estonia. Funding for these countries should account for 1.9-2.2% of nominal GDP projected for 2021-2027, i.e. a significantly smaller share than the one intended for Lithuania (2.7%). The comparison between these four countries shows that Lithuania will receive much more direct monetary payments to its farmers, while the amount received from cohesion policy funds and rural development funds will be rather similar.

**More funding could be allocated to Lithuania in 2021-2027, if it could agree on better financing conditions, for example, recalculation of EU funding quotas based on the division of Lithuania into two regions.** In the Multiannual Financial Framework for 2021-2027, Lithuania was considered a single region. Even though at the end of 2016 Lithuania's representatives submitted an application on dividing Lithuania into two regions, Statistics Lithuania has not yet published statistical information necessary for the EC to make relevant funding changes. According to EC representatives, the deadline for Member States to submit the required statistical information is the end of 2019. Should the EC divide Lithuania into two regions and recalculate EU funding quotas, it would significantly increase the amount of structural funds received. For example, according to the study carried out by VŠĮ Europos socialiniai, teisiniai ir ekonominiai projektai, dividing Lithuania into two regions, instead of treating it as a single transition region, would allow to increase EU financial aid for cohesion policy implementation by 50-70%.<sup>8</sup>

<sup>1</sup> European Commission, *EU Budget for the Future* ([https://ec.europa.eu/commission/sites/beta-political/files/communication-modern-budget-may\\_2018\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/communication-modern-budget-may_2018_en.pdf)).

<sup>2</sup> In the Multiannual Financial Framework for 2021-2027, the EU is comprised of 27 countries (the United Kingdom is not included).

<sup>3</sup> European Commission, *EU Budget for the Future: Regional Development and Cohesion* ([https://ec.europa.eu/commission/sites/beta-political/files/budget-may2018-tailored-approach-regional-needs\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/budget-may2018-tailored-approach-regional-needs_en.pdf)).

<sup>4</sup> Direct payments to farmers and Lithuania's rural development programme account for the majority of these funds.

<sup>5</sup> Nominal GDP projections for 2018-2023 are based on the April 2018 World Economic Outlook (<http://www.imf.org/external/datamapper/datasets/WE>); in terms of nominal GDP projections for 2024-2027, it is assumed that nominal GDP will grow at the same pace as in 2023.

<sup>6</sup> The United Kingdom is not included.

<sup>7</sup> European Commission, *Financial Management* ([http://ec.europa.eu/regional\\_policy/en/funding/financial-management/](http://ec.europa.eu/regional_policy/en/funding/financial-management/)).

<sup>8</sup> VŠĮ Europos socialiniai, teisiniai ir ekonominiai projektai, *Assessment of the Impact of EU Fund Investment on the Lithuanian Economy and Development of Priorities for 2014-2020* (<http://www.esinvesticijos.lt/lt/dokumentai/2014-2020-m-es-fondu-investiciju-poveikio-lietuvos-ukiui-ir-pletros-prioritetu-2021-2027-m-vertinimas>).

## IV. LABOUR MARKET

**Lithuania's labour market is tightening, especially in the country's largest cities.** In the middle of this year, labour shortages affected approximately 20% of domestic companies. This rate is quite high given that during economic recovery the share of such companies was half the size. It should be noted, however, that the number of companies facing labour shortages is significantly lower than in the boom of the last decade when they limited activities of about one-third of the corporate sector. Nevertheless, the situation in the labour market varies across regions. The unemployment rate in Vilnius, Kaunas and Klaipėda last year stood at 3.8%, the same as at the peak of the boom of the previous decade. Hence these cities should be suffering from the most acute shortage of workers, whereas the rest of the country is likely to be affected to a lesser extent. Unemployment in the remaining part of the country stood at roughly 9% last year, which is double the rate recorded during the boom years.

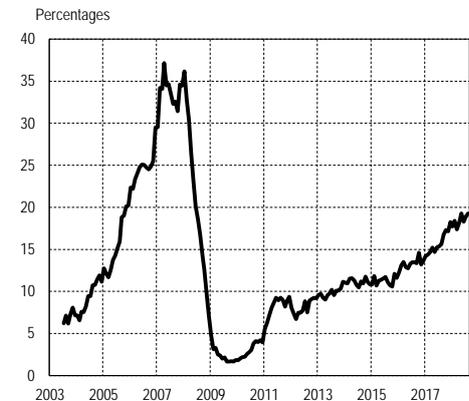
**Labour shortages are weighing on employment growth.** Increasing labour shortages have been affecting more economic activities: for a long time, the shortage of workers was getting more pronounced in trade, whereas in 2016 it also began increasing in the industry sector, spreading into other economic activities in 2017. This has led to a slowdown in new jobs, a trend that has been broad-based across almost all sectors over the last two years, yet could not have been attributed to the weaker economic situation, as the share of companies encountering a lack in orders or customers declined substantially in that period. However, changes in the number of jobs in some sectors could have been brought about by specific factors, such as the reduction of the network of educational institutions or the fact that several larger retail chains automated or transferred to other companies part of their functions. The deceleration trend was not relevant for transport activities though: job growth in the transport sector has been particularly rapid, maintaining an annual growth rate of about 6% over the last two years (the annual growth rate in the country was below 1%). One of the reasons behind such trends was immigration policy changes.

**Emigration and immigration rates have nearly converged for the first time since 2001.** This was mainly underpinned by Lithuania's immigration policy changes which had a bearing on the increased number of immigrants from non-EU countries. One of the most significant developments was the compilation of the shortage occupation list<sup>2</sup>. Since 2017, when employing non-EU workers in one of these occupations, it is not required to check whether there is an EU citizen who could fill a respective vacancy. At the beginning of 2018, certain construction-related professions were added to the list. This has accelerated immigration procedures and boosted immigration, mainly from Ukraine and Belarus. It is likely that workers of only two professions, namely long distance drivers and construction workers, accounted for most of the arrivals this year. The increase in immigration could also have been fuelled by other measures, for example, the introduction of a list of companies that can benefit from simplified immigration procedures, or the list of high-skilled occupations that are currently in shortage. It should be noted that monthly migration data is provisional and may be subsequently revised. For example, the final numbers of emigrants and immigrants in 2017 were about 10 thousand lower than the preliminary figures, yet migration balance remained broadly unchanged.

**Due to labour market tensions and government decisions, wage growth maintains a particularly rapid pace.** In the second quarter of 2018, wages saw an annual increase of more than 10% for the first time since the beginning of economic recovery. Wages in the private sector, however, have been rising by roughly 10% for over a year now. Such rapid growth is determined by a number of factors, such as growing labour shortages, the mini-

**The number of companies facing labour shortages has been markedly increasing over the last two years.**

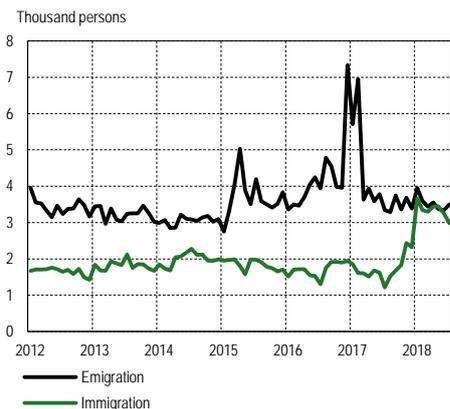
Chart 13. Share of companies whose activities are restricted by labour shortages



Sources: Statistics Lithuania and Bank of Lithuania calculations.

**Immigration policy changes contributed to balancing migration flows.**

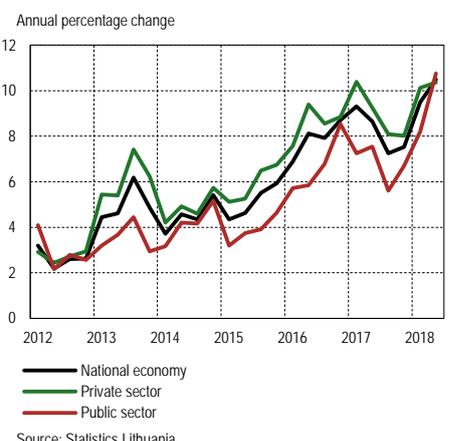
Chart 14. Emigration and immigration



Sources: Statistics Lithuania and Bank of Lithuania calculations.

**Tensions in the labour market and government decisions have led to particularly rapid wage increases.**

Chart 15. Wage dynamics



Source: Statistics Lithuania.

<sup>2</sup> Until 2018, it included five professions or their groups: long distance drivers, welders, tailors, ship hull assemblers, and certain construction occupations.

mum wage increase at the beginning of the year<sup>3</sup>, the provision of the Labour Code stating that the minimum wage is to be paid for unskilled work only, and the introduction of the floor for social security contributions. A more significant change in wage dynamics has been observed in the public sector. After a prolonged period of slower pace, wage growth in the public sector has picked up steam and started to increase at a rate similar to that in the private sector. This was driven by government decisions to substantially raise wages for workers in healthcare and higher education, which increased by 17.4% and 23.1% respectively.

<sup>3</sup> For more details about the setting of the minimum wage, see Box 2 of this review.

## Box 2. Setting of the minimum wage

The minimum wage can help<sup>1</sup> tackle income inequality, poverty and the shadow economy, but it has to be set at an appropriate level. This means striking a balance between the need to address the above-mentioned problems and the employer's capacity to pay a given minimum wage. Raising the minimum wage too high may lead to a decline or weaker growth in employment, a faster rise in prices for goods and services, a decrease in international competitiveness, a scale up in the shadow economy, etc. The likelihood of negative repercussions increases when this measure attempts to achieve goals other than addressing economic and social challenges. Often in such cases, the proposed or promised level of the minimum wage is not based on economic analysis, resulting in inefficient solution of the said problems.

In order to improve the minimum wage setting process, it would make sense to depoliticise it, linking the minimum wage level to the average wage at a certain fixed ratio. Then an increase in the average wage would automatically translate into a rise in the minimum wage (at a similar rate as the average wage).

Since Lithuania is characterised by one of the highest levels of income inequality in the EU, low income, high emigration, large shadow economy and the like, it may be wise to choose a minimum-to-average wage ratio above the EU average, which stood at 43.4% in 2014-2016. It could be equal to the mean value of the ratios of one-fourth of EU countries<sup>2</sup> with the highest ratios of minimum to average wages during the last three years. Between 2014 and 2016, these countries were Slovenia (50.9%), France (47.3%), Luxembourg (47%), Latvia (45.8%) and Poland (45.6%); the mean value of their ratios stood at 47.3%<sup>3</sup>. The evolution of this ratio and Lithuania's actual minimum-to-average wage ratio is presented in Chart A.

Having decided to link the Lithuanian minimum-to-average wage ratio to the relevant indicator of other EU countries, the minimum wage should be set taking into account the Eurostat formula. Eurostat subtracts from the average wage irregular bonuses, premiums, allowances and lump-sum benefits (it should be noted that these payments are not included in the minimum wage as well). The average wage calculated in such a way differs from the average wage usually published in Lithuania, where bonuses, premiums and other allowances are taken into account. Consequently, the minimum wage in 2019 should be equal to 47.3% of the projected average wage for 2019 exclusive of bonuses, premiums, etc. (the Bank of Lithuania estimates that it should amount to roughly €896).

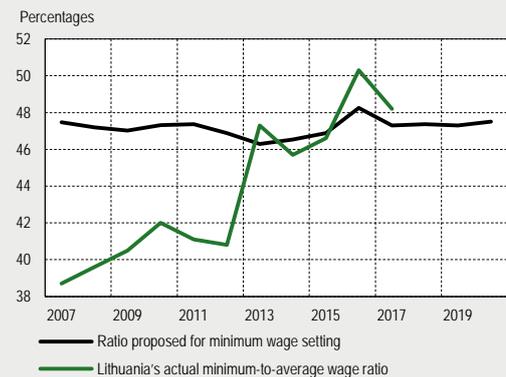
Chart B. Monthly change in wages by level of wage



Sources: atvira.sodra.lt and Bank of Lithuania calculations.

It should be noted that minimum wage increases push up remuneration of both minimum wage earners and other higher-paid workers. For example, the effect of the minimum wage raise (from €300 to €325) in July 2015 can be seen by comparing wage developments which took place during that month with developments in July 2014. In both these months the situation in the labour market was fairly similar, and July-specific seasonal factors were identical. Thus differences in wage developments were mostly due to the increase in the minimum wage. As can be seen from Chart B, it affected wages of slightly more than half of workers.

Chart A. Evolution of the minimum-to-average wage ratio



Sources: Eurostat and Bank of Lithuania calculations.

Note: For example, the minimum wage for 2019 is set according to the mean value of the minimum-to-average wage ratios of certain EU countries in 2014-2016.

Should the minimum wage be set at 47.3% of the average wage usually published in Lithuania (that includes bonuses, premiums and other allowances), the Lithuanian minimum-to-average wage ratio in 2019 published by Eurostat would reach about 50%. It would then depart from the mean value of the ratios of one-fourth of EU countries with the highest ratios of minimum to average wages and be exceptionally high. The ratio calculated on the basis of the average wage usually published in Lithuania for 2008-2017 was 1.6-3.1 percentage points lower than the ratio calculated on the basis of the Eurostat average wage. Accordingly, when setting the minimum wage on the basis of the usually published average wage, a ratio that is approximately 1.6-3.1 percentage points lower than the one calculated using Eurostat data should be applied.

<sup>1</sup> OECD Recent labour market developments with a focus on minimum wages ([https://www.oecd-ilibrary.org/employment/oecd-employment-outlook-2015\\_empl\\_outlook-2015-en](https://www.oecd-ilibrary.org/employment/oecd-employment-outlook-2015_empl_outlook-2015-en)).

<sup>2</sup> Ratios of minimum to average wages are usually published by approximately 20 EU countries. Lithuania should not be included among the one-fourth of the countries.

<sup>3</sup> According to the IMF, a minimum-to-average wage ratio amounting to 45-50% is high for Lithuania.

## V. EXTERNAL SECTOR

**Foreign trade lost some momentum in the first half of 2018.** Over the year total exports of goods and services grew by 8.3%, a 10.2% decrease compared to 2017 when total exports were boosted by exports of goods. This year, exports of goods have been waning, thus their contribution to overall growth in exports is almost the same as that of exports of services. Such a trend is broad-based across almost all product categories (except for exports of chemical products and plastics, timber and wood products). The slowdown in exports of goods mainly reflects noticeably weakening re-exports. Exports of services continue their upward climb, albeit at a marginally slower pace compared to the beginning of the year.

**After exceptionally rapid growth in 2017, this year increases in re-exports have been more subdued.** In the first half of 2018, re-exports grew by 3.3% (18.9% in 2017). Given that Lithuanian re-exports are mainly directed towards Russia, its economic development has a significant impact on re-export momentum. In 2017, Russia restocked its depleted supplies of goods and made more substantial investment in machinery and equipment, which translated into buoyant demand for imported goods and Lithuanian re-exports to this country. As Russian companies replenished stocks and automated their business processes, investment began decelerating. Once the effects of this one-off factor faded away, growth in demand for Lithuanian goods and re-exports to Russia lost steam.

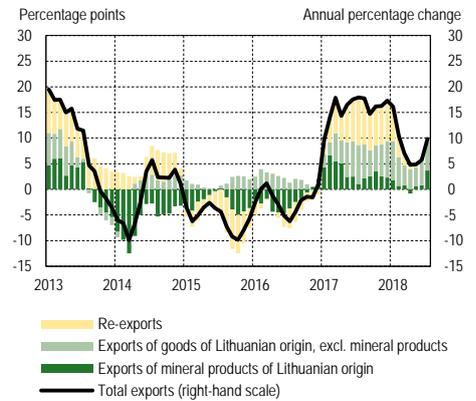
**Exports of goods of Lithuanian origin expanded at a slower pace as a result of decelerating international trade in goods and weakening EU demand.** In the first half of 2018, their annual growth rate stood at 8.5% (in 2017 – 16.9%). Exports of goods of Lithuanian origin, excluding mineral products, to the EU showed more moderate growth, with exports to important EU markets, such as Poland, Sweden and the Netherlands, rising at a slower pace. Increases in exports in the first half of the year were mainly driven by trade with the UK, France, Belgium and Denmark. Growing, on average, 0.1 percentage point faster than in 2017, trade with the neighbouring Baltic countries made a stronger contribution to export growth compared to last year. After a slowdown in the first quarter of 2018, exports of goods of Lithuanian origin to CIS countries started to recover in the second quarter. This was driven by a pick-up in exports of aluminium salts, malt beer and fermented beverages to Russia. Any further deceleration in total exports of goods of Lithuanian origin was prevented by the recovery in trade with other non-EU and CIS countries, mostly on the back of exports of chemical products as well as plastics and agricultural products, the majority of which were shipped to the US, Japan and Singapore.

**Based on four-quarter moving sums, the current account balance has improved due to the ongoing expansion in exports of goods and weaker growth in imports.** The ratio of the current account balance to GDP in the first quarter of 2018 increased by nearly 1% year on year. According to provisional data, in the second quarter the balance improved further, mainly as a result of an improvement in the balances of secondary income and goods over the same period. The deficit also narrowed due to expanding export volumes and the slowdown in exports of goods in the middle of the year.

**Rapid growth in exports in 2017 was fuelled by re-exports, but this year their contribution has moderated due to weaker demand growth in Russia.**

Chart 16. Exports of goods of Lithuanian origin and re-exports

(3-month moving averages)

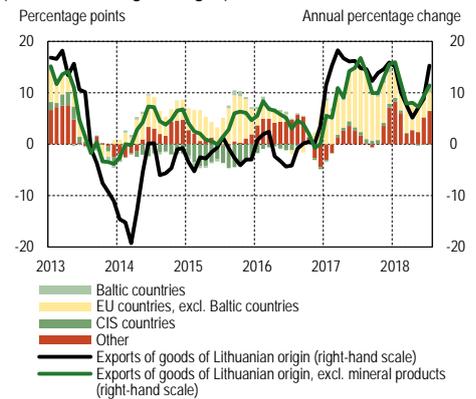


Sources: Statistics Lithuania and Bank of Lithuania calculations.

**Due to decelerating international trade in goods and declining EU demand, exports of goods of Lithuanian origin grew at a slower pace in the first half of 2018.**

Chart 17. Exports of goods of Lithuanian origin, excluding mineral products, by country

(3-month moving averages)

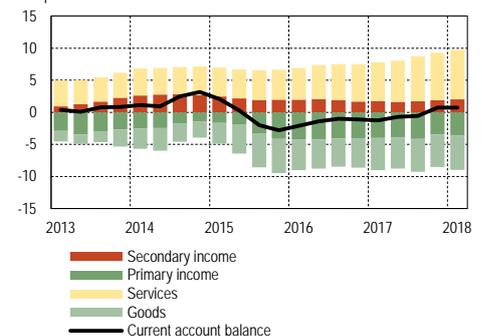


Sources: Statistics Lithuania and Bank of Lithuania calculations.

**The current account balance has improved on the back of a further expansion in exports of goods and weaker growth in imports.**

Chart 18. Components of the current account balance

Percentages, 4-quarter moving sums, compared to GDP



Sources: Statistic Lithuania, Bank of Lithuania and Bank of Lithuania calculations.

## VI. PRICES AND COSTS

**Annual HICP inflation stood at 2.6% over the period from January to August 2018 – down by a quarter on a year-on-year basis.** Having followed a moderate downward trend since the autumn of last year, the annual rate of inflation picked up slightly (to 2.9%) in May, largely due to the changes in global oil prices. From that point on it started to decelerate again, reaching a lower – similar to the one prevailing several years ago – rate (1.8%) in August 2018. Shifts in most factors contributing to inflation between January and August this year were more favourable for consumers than, on average, in 2017: the rise in prices for food, including alcoholic beverages and tobacco, industrial goods, fuels and lubricants as well as services – which constitute a major part of the consumer basket – was less pronounced. Thus only administered prices have inched up this year, after being in a slight decline last year.

**Having been sliding since October 2017, inflation lifted again in May, reflecting soaring global crude oil prices. In the subsequent months of this year, however, there has not been much movement in global crude oil prices.** In 2018 the average price for Brent oil in US dollars per barrel has been roughly 40% higher compared to the same period last year. This was mainly driven by geopolitical factors related to the clash between the US and Iran as well as political turmoil in Venezuela and Libya. However, in the last months of 2018 crude oil prices are likely to be more stable given seasonal effects and various factors restraining oil price increases, such as OPEC's agreement to increase oil output, the reduction of oil reserves and growth in shale production volumes in the US.

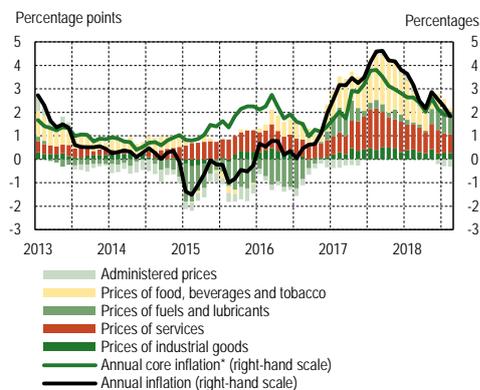
**As expected, in 2018 food prices in Lithuania have risen at a much more moderate pace than last year.** This year, food prices, excluding alcoholic beverages and tobacco, have increased by 2.4% on average, i.e. a third slower than last year. This reflects the recent decline in global food commodity prices and a considerable drop in farm-gate prices for basic agricultural products. It is, however, expected that due to this year's heat wave crop and vegetable harvests may be poor, which is likely to affect prices of these food commodities at the end of the year. As a consequence, this would also put upward pressure on bread and meat prices. Recovering exports of milk and dairy products and positive prospects for the production of these products in New Zealand have somewhat brought down global milk and dairy prices over the last few months. This year the pace of growth in food prices, including alcoholic beverages and tobacco, has significantly decelerated on account of considerably smaller changes in excise duties compared to 2017. There has been no rise in excise duties on alcoholic beverages in 2018, while the impact of increased excise duties on tobacco is slightly weaker than last year.

**The influence of prices of industrial goods on inflation is primarily determined by the evolution of solid fuel prices.** Solid fuel prices have been growing at a particularly rapid pace since 2017. This year they have increased by more than 20%, adding more than 0.2 percentage point to headline inflation. Solid fuel prices have been significantly pushed up by rising biofuel prices, resulting from timber price increases, more expensive diesel and rapid wage growth. Such a trend may also have an upward effect on heat energy prices.

**Contrary to other price groups, administered prices put downward pressure on inflation during the summer time.** Heating prices, which have been declining for the last few months due to the base effect, are expected to start inching up. This is highly attributable to the recent hike in solid fuel prices and a likely uptick in natural gas prices on the back of substantial increases in import prices. Other administered prices remain at relatively similar levels, except for road passenger transport – its prices went up by nearly 4% as a result of higher fuel prices. It should be noted, however, that electricity prices for households are slightly lower than last year.

Since autumn 2017, the overall growth in prices has noticeably slowed down, mostly due to weaker contribution from food prices.

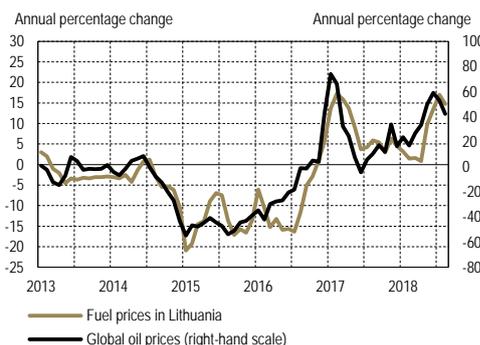
Chart 19. Contributions to annual HICP inflation



Sources: Statistics Lithuania and Bank of Lithuania calculations.  
\*Change in HICP inflation, excluding food, fuels and lubricants, and administered prices.

**Geopolitical factors have spurred the rebound in global crude oil prices.**

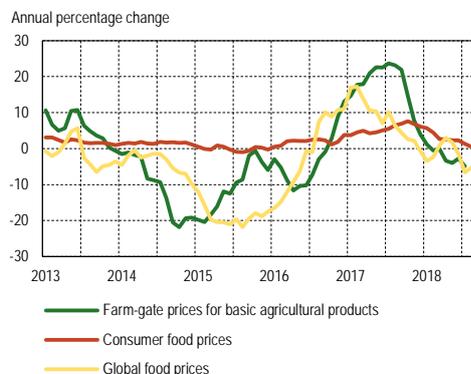
Chart 20. Trends in global crude oil and fuel prices in Lithuania



Sources: Thomson Reuters Datastream, Statistics Lithuania and Bank of Lithuania calculations.

**In 2018, growth in food prices in Lithuania has noticeably decelerated on account of lower global food commodity prices and the fall in farm-gate prices for certain agricultural products.**

Chart 21. Dynamics of Lithuanian and global food prices



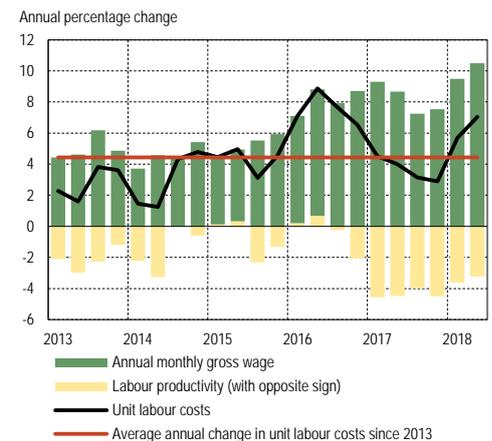
Sources: Food and Agriculture Organization of the United Nations, Statistics Lithuania and Bank of Lithuania calculations.

**This year service prices have been rising rather steadily.** In the first half of 2018 unit labour costs followed an upward trajectory, the average gross wage showed robust growth (about 10%) and productivity increased by just over 3%; nonetheless, service prices rose at a rather steady pace. It should be noted, however, that the growth of service prices has recently been dampened by some short-term factors, the main one being air transport services, which are significantly cheaper than last year. The impact of the rest of the service prices on inflation has been gradually increasing over the year.

**Annual inflation in the euro area has risen; as in Lithuania, recently it has been considerably affected by the hike in energy prices.** This, however, is considered to be short-term, thus the inflationary impact of energy price increases is not expected to last. As regards the impact of growth in service prices on headline inflation, it should be noted that labour market tensions in most euro area countries may result in higher unit labour costs, which are likely to put upward pressure on inflation. The growth rate of prices in most groups of goods and services (processed food, industrial goods, excluding energy, and services) in the euro area is quite similar to that recorded in 2017. However, apart from energy price growth – which is much faster than a year ago – more significant increases this year were only seen in unprocessed food prices (meat, fish, fruit and vegetable), which have edged up by several percentage points in recent months.

**Labour market tensions led to higher-than-usual unit labour costs, which has an impact on rising service prices.**

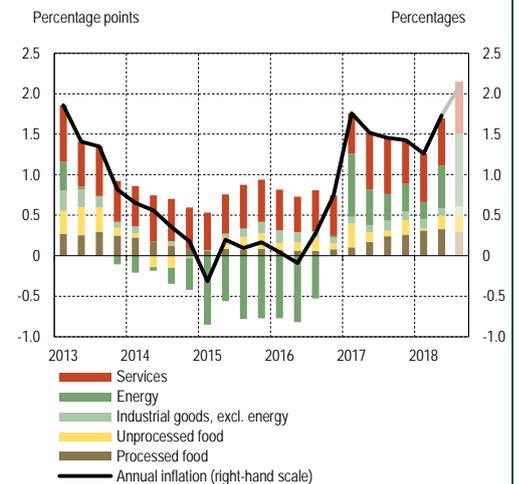
Chart 22. Contributions to unit labour costs



Sources: Statistics Lithuania and Bank of Lithuania calculations.

**Headline inflation in the euro area has recently increased on account of higher energy prices.**

Chart 23. Contributions to HICP inflation in the euro area\*



Sources: Eurostat and Bank of Lithuania calculations.

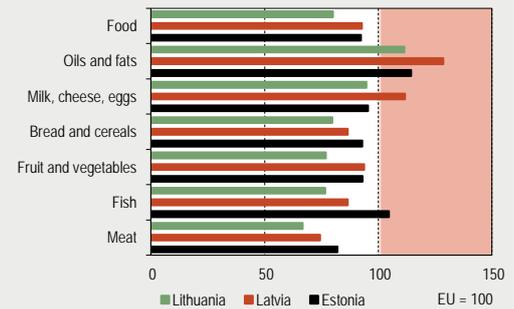
\*Note: The last column shows data for July, not for the third quarter.

### Box 3. Consumer food price indices and weights in the basket of goods in the EU and the Baltic States

In 2017, the overall food price level in Lithuania amounted to 80% of the EU average and was about 12% lower than in Latvia and Estonia. The price levels for all main groups of food in Lithuania are lower than those recorded in neighbouring Latvia and Estonia (see Chart A). Prices of oils and fats, however, have been above the EU average since 2011. The price level for milk, cheese and eggs is only roughly 4% lower than the EU average. This food group is the second largest in the consumer food basket, comprising nearly 4% of an average basket of goods. Historically, prices of milk and dairy products rose significantly when a number of dairy farms had left the milk market, following a fall in farm-gate milk prices caused by excessive supply. This happened when the EU removed milk production quotas and Russia, which used to be a significant Lithuania's partner in trading dairy products, imposed trade restrictions.<sup>1</sup> Farm-gate milk prices later recovered, but since the second half of 2017 they have once again followed a downward trajectory. Such dairy market developments and a poor harvest brought about by higher feed prices led to the fact that recently not only small- but also medium-sized dairy farms have been leaving Lithuania's market. The decreasing number of dairy farms entails diminishing competition which may, in turn, raise dairy prices. The current poor harvest may put upward pressure on prices of bread and cereals, which would subsequently increase prices of meat. The latter accounts for the highest share of the total consumer basket in Lithuania (4.6%). These are only some of the major factors that have a considerable impact on food price increases and, in turn, on the overall price level.

**Lithuania may reach the EU food price average within less than 10 years.** Assuming that the level of food prices will be catching up with its EU counterpart at a rate that prevailed in 2004-2017 (since Lithuania's accession to the EU), the level of food prices in Lithuania will reach the EU average in 2027. However, it should be taken into account that this assumption is valid only if economic development remains similar to that in the period under review and if there are no significant structural changes in the Baltic States and other EU countries that could accelerate or slow down food price convergence. Compared to Lithuania, current food prices in Latvia and Estonia are closer to the EU level: Latvia, where food prices have been converging at a quicker pace than in Lithuania during the period under review, may reach the EU food price average in two years, while Estonia – in three years (see Chart B). After reaching the EU average, however, changes in prices usually become more gradual, thus further projections should indicate price levels close to the EU average.

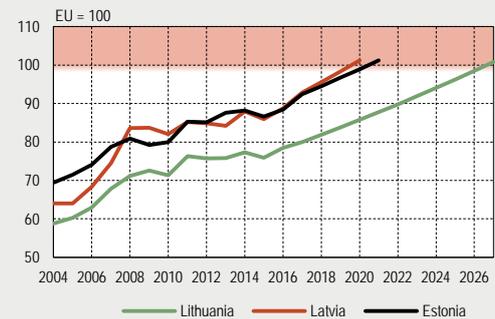
Chart A. Overall price level of food and its main components in 2017



Sources: Eurostat and Bank of Lithuania calculations.

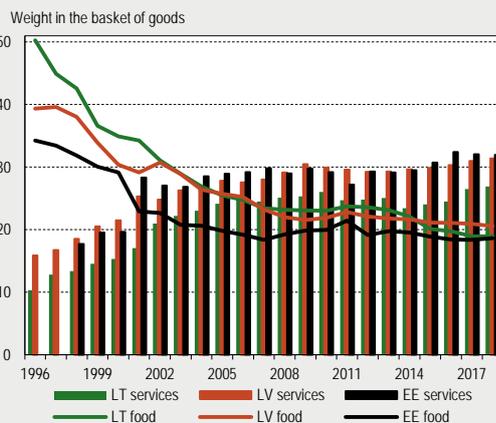
Note: The red background shows groups of goods exceeding the EU price level.

Chart B. Price level developments and projections



Sources: Eurostat and Bank of Lithuania calculations.

Chart C. Weight developments in the basket of goods



Sources: Eurostat and Bank of Lithuania calculations.

usually account for an increasingly larger share of the consumer basket. In this regard, Lithuania is rapidly catching up with the EU average, which should stand at 43% in 2018 (16 percentage points higher than in Lithuania). Compared to the neighbouring countries, the average share of expenditure on services in Lithuania is 5 percentage points smaller than that in Latvia and Estonia. At the same time, the EU share of food expenditure makes up 14%, which is nearly 5 percentage points lower than in Lithuania and Estonia and 6.5 percentage points lower than in Latvia.

**In 20 years, weights of food products and services in an average Lithuanian consumer's basket of goods have changed more significantly than in Latvia or Estonia.** Looking back, around 20 years ago, food expenditure accounted for more than a half of the average Lithuanian consumer's basket. At the same time, food expenditure in Latvia accounted for roughly 40%, in Estonia – 35% of their consumer baskets. Recently Lithuanians and Estonians have spent less than a fifth of their total income on food, while Latvians – slightly more than a fifth. Such a decline in food expenditure may be linked to the improving quality of life: with wages increasing rapidly (the average wage in Lithuania grew more than 4 times over the same period), expenditure on non-essential goods and services has been growing as well. Hence, due to rapidly rising income, the share of food expenditure has been proportionally declining. For example, in the first half of 2018, average wage growth reached 10%, while food prices rose by less than 3%. With income growing, services

<sup>1</sup> For more details, see Morkūnas P. and Skačkauskaitė I., Review of the price dynamics in Lithuania in 2013-2017 (2018) (<https://www.lb.lt/en/publications/no-19-ieva-skackauskaite-paulius-morkunas-review-of-the-price-dynamics-in-lithuania-in-2013-2017>).

## VII. FINANCING OF THE ECONOMY<sup>4</sup>

**Credit growth in Lithuania remains robust.** The portfolio of MFI loans to the private non-financial sector expanded by 8.3% year on year in July 2018, whereas the net flow of new loans picked up by 7.6% over the last 12 months. Upward trends were recorded in both corporate and household segments. With credit growing at a slightly faster rate than the country's real economy, the credit-to-GDP ratio, which indicates the level of indebtedness, also showed moderate growth. At the end of the first quarter of 2018, it stood at 65.3%, the highest level over the past five years. Changes, however, were negligible, thus they are believed to be in line with the developments in the domestic economy.

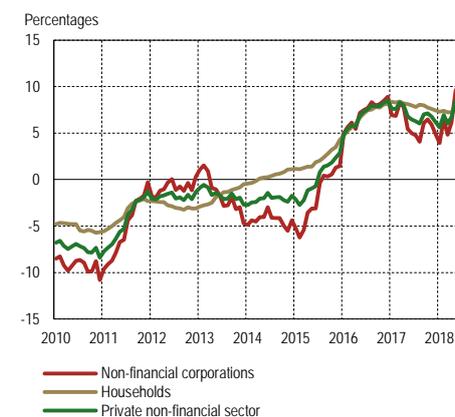
**The overall growth of the loan portfolio was mainly driven by lending to non-financial corporations.** In July 2018, the portfolio of loans to non-financial corporations increased by 9.2% year on year. The biggest increases were recorded in the portfolio of loans to companies engaged in professional, scientific and technical activities, which grew by €744.1 million between the second quarter of 2017 and the second quarter of 2018. It should be noted, however, that this segment often includes holding companies. Indeed, individual large-scale loans granted to them were the main driver behind the rapid growth of the portfolio of loans to non-financial corporations. The portfolios of loans granted to certain sectors have been shrinking. During the period under review, the sharpest decrease in lending volumes was observed in the energy, agricultural and manufacturing sectors (€418.6 million, €36.3 million and €35.8 million respectively). Such a drop in the energy sector was mainly determined by the accelerated amortisation of the previously granted large-scale loans.

**Lending to households has also remained active, yet is growing at a more stable rate than corporate lending.** In July 2018, the annual growth rate of the household loan portfolio stood at 7.5%, remaining at a similar level for almost two years. As before, it was mainly influenced by lending for house purchase. In July 2018, the portfolio of house loans grew at an annual pace of 8.1%, whereas the net flow of new housing loans increased by 6.4% over the last 12 months. The consumer loan portfolio also expanded in volume (5.2%). Active borrowing continues to be supported by relatively low interest rates, increasing household income and more favourable consumer expectations regarding the future outlook.

**The booming domestic economy, sustainable corporate health and investment growth are likely to give further stimulus for both business and household lending.** Lending to businesses and households is currently increasing at a faster pace than projected<sup>5</sup>, with no distinct signs of a slowdown expected in the near future. Tangible investment recorded annual growth of 7.2% at the end of the second quarter of 2018, while the economic sentiment indicator, which reflects business attitudes about the outlook for the domestic economy, hit pre-crisis highs. In July 2018, a number of large-scale loan transactions (worth more than €100 million) were concluded in the trade and transport sectors. All this holds out the prospect of further growth in the portfolio of loans to non-financial corporations. Positive trends should also develop in the household segment. While interest rates on housing loans have been slowly rising, such increases are not significant enough to reduce the willingness and chances of residents to purchase housing; consequently, with household income following an upward trend, demand for household loans is not subsiding and is likely to remain strong in the near future.

**Credit growth has remained robust.**

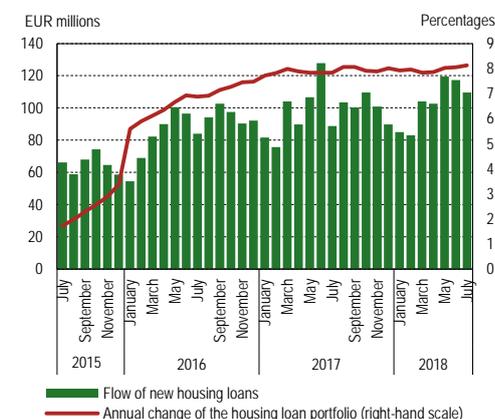
Chart 24. Evolution of the MFI loan portfolio



Source: Bank of Lithuania.

**Borrowing for house purchase is active.**

Chart 25. Net flow of new MFI housing loans and annual growth of the housing loan portfolio



Source: Bank of Lithuania.

**Lending volumes vary across sectors.**

Table 2. Change in the loan portfolio by sector (Q2 2017-Q2 2018, EUR millions)

Energy	-418.6
Agriculture	-36.3
Manufacturing	-35.8
Mining	-6.9
Accommodation and food services	-1.9
Other economic activities	0.2
Information and communication	6.9
Water supply	8.5
Construction	13.4
Trade	69.6
Administrative activity	106.7
Transportation and storage	120.2
Real estate operations	320.4
Profession, scientific and technical activities	744.1

Source: Bank of Lithuania.

<sup>4</sup> In order to evaluate loans, this section includes MFI data provided by the Statistics Department of the Economics and Financial Stability Service of the Bank of Lithuania, which is adjusted to take account of the bankruptcies and mergers in the sector concerned (for more details, see Annex 2 to the Lithuanian Economic Review, December 2014). This data may differ from the data collected from banks for supervisory purposes.

<sup>5</sup> In 2018, the portfolio of loans granted to households and businesses is set to grow at an annual rate of 7.1% and 4.4% respectively.

## VIII. GENERAL GOVERNMENT FINANCE

At the beginning of 2018, the general government balance slightly deteriorated, remaining however in positive territory. The surplus stemmed from buoyant economic activity, which brought rapid increases in tax revenue and social contributions.

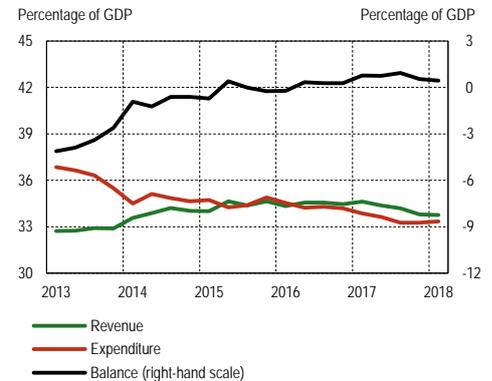
Growth in tax revenue at the beginning of the year was underpinned by higher social contributions and direct taxes, namely personal income tax. Such developments were spurred by wage growth, which picked up at the beginning of the year. Increases in social security contributions were also attributable to administrative changes: on 1 January 2018 the government introduced a floor for social security contributions, i.e. they are calculated from no less than a minimum monthly wage (with certain exceptions). At the beginning of the year, growth in revenue from indirect taxes decelerated. This was led by the decrease in revenue from excise duties reflecting a high comparative base – the first quarter of 2017 saw a strong collection of revenue from excise duties as, prior to the imposition of higher excise-duty rates in March 2017, there was an upturn in sales of ethyl alcohol and alcoholic beverages. During the first months of 2018 capital and current transfers (a component of non-tax revenue) showed signs of upward momentum, yet this did not exert a significant impact neither on total revenue nor the general government balance.

At the beginning of 2018, general government expenditure grew by 7.5%, almost in line with the pace recorded at the end of 2017. Expenditure growth has been accelerating since the beginning of 2016. This year it has been mainly driven by increases in social benefits, which rose by 12.3% in the first quarter of 2018. Growth in social benefits started to show signs of upward momentum during the last quarter of 2017, largely as a result of a €10 increase in the basic pension in October 2017. Indexation at the beginning of 2018 raised pensions, on average, by a further 7%. Although the long-lasting decline in the number of pensioners somewhat limited the rise in social benefits, a substantial contribution to their growth at the beginning of the year came from the increase in sickness and unemployment benefits, which stemmed from the rising number of beneficiaries. The growth of unemployment benefits was also driven by the increase in their size. In addition, it could have also been stimulated by changes in the unemployment insurance system, which came into effect on 1 July 2017; as a result, the duration of unemployment benefits was prolonged to 9 months (previously 6-9 months, depending on the length of service), their maximum threshold was raised, and the unemployment insurance record was shortened from 18 to 12 months. The increase in the number of beneficiaries could have been affected by the abovementioned introduction of the minimum limit for social security contributions. Another important factor which put upward pressure on general government expenditure was a 7.9% increase in compensation of employees. Spending on wages was spurred by various factors, including the minimum monthly wage increase on 1 January 2018 and the rise in wages for civil servants and healthcare workers. Nevertheless, some factors, such as decreasing interest payments and investment, had a restrictive effect on expenditure in the first quarter of 2018.

At the beginning of 2018, the general government debt-to-GDP ratio decreased by 3.5 percentage points to 36.3%, standing at the lowest level since 2009. The decrease in the debt ratio resulted from the redemption of the €1.4 billion Eurobond issue in February. Funds required to redeem this issue were borrowed in 2017, i.e. the debt was refinanced. The debt-to-GDP ratio is expected to decline this year before going up again in 2019 (in preparation for higher-value bond redemption in 2020). Subsector debt ratios also underwent changes: in 2018 the debt of social security funds was transferred to the state budget.

At the beginning of 2018 the general government surplus slightly decreased and amounted to 0.4% of GDP.

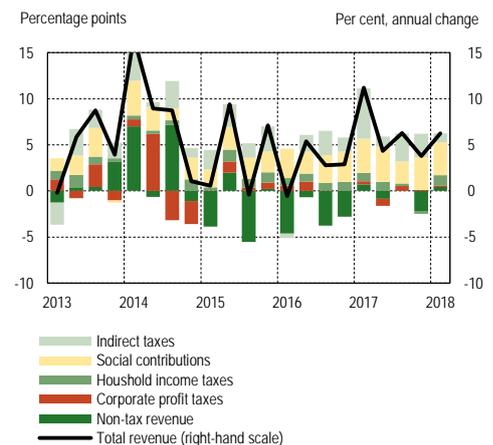
Chart 26. General government budget



Sources: Statistics Lithuania and Bank of Lithuania calculations.

Growth in general government revenue at the beginning of 2018 was mainly driven by increases in social contributions.

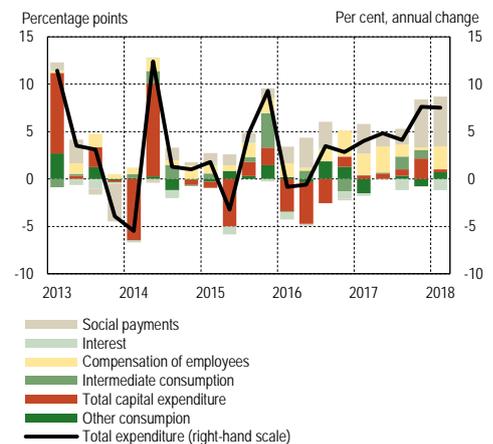
Chart 27. Contributions to general government revenue



Sources: Statistics Lithuania and Bank of Lithuania calculations.

The rapid growth of general government expenditure at the beginning of 2018 was led by higher social payments and wages.

Chart 28. Contributions to general government expenditure



Sources: Statistics Lithuania and Bank of Lithuania calculations.

#### Box 4. Assessment of the tax and pension system reform

On 28 June 2018, the Seimas of the Republic of Lithuania approved the amendments to the Law on Personal Income Tax<sup>1</sup>, Law on State Social Insurance<sup>2</sup>, Law on the Accumulation of Pensions<sup>3</sup>, and other related legal acts. These amendments led to the introduction of new personal income tax rates (20% and 27%) and personal income tax reliefs (for voluntary and larger than 3% contributions to second pillar pension accumulation funds, expenses on the finishing works of buildings and other constructions, vehicle repairs, and child care services), the increase in the size of non-taxable income and the extension of its scope (up to two average monthly wages), consolidation of state social security contributions on the employee's side, setting of a 'floor' and 'ceiling' for state social security contributions (as of 1 July 2018), abandonment of overlapping state social benefits, the increase in social assistance pensions, and the introduction of old-age or disability 'pension bonuses'. The amendments also phased out the transfer of a certain part of state social security contributions to second pillar funds, provided for a possibility to transfer more than 3% to these funds or stop (suspend or terminate) participation in the second pillar altogether, boosted resident involvement in the pension accumulation system, tightened the requirements for pension accumulation fund companies (the requirement to establish a pension asset preservation fund and target age group pension funds, reduction of deductions from pension assets), centralised the pension annuity system and introduced new types of annuities.

**The approved amendments are deemed appropriate, however, pressing issues within Lithuania's tax system are not addressed sufficiently.** The Bank of Lithuania experts believe that the main problem within the tax system is the inappropriate balance between general government revenue and the scope of the public services (health, social security, education, etc.). For example, in 2016 Lithuania's social security expenditure accounted for a meagre 11.2% of GDP, i.e. far below the average of the new and old EU Member States (13.8% and 19.4% respectively) or the average share of Latvia's, Estonia's and Poland's GDP allocated to social security (14.1%). Inadequate financing lowers the quality of some public services, provides preconditions for 'shadow' activities and corruption, and increases public dissatisfaction. It also prompts emigration. The lack of government sector tax revenues is primarily driven by the large-scale shadow economy and extremely uneven taxation of labour income; thus, the Bank of Lithuania proposes<sup>4</sup> to use the key reform measures to tackle these issues specifically.

**Changes in Lithuania's tax and pension system will affect its economy: in 2019-2020 real GDP is expected to expand by a further 0.5 percentage point, while inflation is projected to rise by a further 0.3 percentage point.** The increase in non-taxable income, reduction of personal income tax and state social security contribution rates, the rise in social assistance pensions and the introduction of 'pension bonuses' will boost household disposable income. Nevertheless, greater residents' involvement in the second pillar pension accumulation system is expected to put a dampening effect on its growth.

**Given the economic cycle, the amendments are considered to reflect a pro-cyclical fiscal policy.** Pro-cyclical fiscal policy implies that instead of putting aside revenue received during an economic upswing the government assumes additional liabilities to finance certain areas. The nature of fiscal policy can be judged from the change in the primary structural general government balance and the sign of the output gap.<sup>5</sup> As can be seen in Table A, in its Stability Programme for 2018, the Government of the Republic of Lithuania planned to take up a neutral fiscal policy stance in 2019. However, considering the impact of the adopted amendments, in 2019 Lithuania's fiscal policy is likely to become pro-cyclical.

Table A. General government primary structural balance and the output gap in 2017-2021

Indicator	2017	2018 projection	2019 projection
General government primary structural balance, % of GDP (SP 2018)	0.7	0.6	0.7
Change in the general government primary structural balance, % (SP 2018)	-0.6	-0.1	0.0
General government primary structural balance, % of GDP (after the reform)	0.7	0.6	0.0
Change in the general government primary structural balance, % (SP 2018)	-0.6	-0.1	-0.6
Output gap, %	2.3	2.4	1.8

Sources: Stability Programme for 2018 and Bank of Lithuania calculations.

**The approved amendments are not neutral in fiscal terms as they will cause the general government balance to deteriorate by 0.6%, 0.5% and 0.1% of GDP in each year during the projection horizon (2019-2021).** The adopted amendments will reduce the state and municipal budget balances and improve the balance of the State Social Insurance Fund; however, the overall general government balance will deteriorate. The decrease in the general government budget (roughly €170-190 million each year) will stem from the increase of non-taxable income and the extension of its scope as well as the future rise in government spending given that the principal part of pensions will be financed with state budget funds.

<sup>1</sup> Consolidated version of the Republic of Lithuania Law on Personal Income Tax, which will come into force in 2019 (<https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.171369/sNkiPPXsQP>).

<sup>2</sup> Law on the Amendment of Articles 2, 4, 7, 8, 10, 23, 25 and 32 of the Republic of Lithuania Law on State Social Insurance No I-1336 (<https://www.e-tar.lt/portal/lt/legalAct/c55830907c4c11e8ae2bfd1913d66d57>).

<sup>3</sup> Law on the Amendment of the Republic of Lithuania Law on the Accumulation of Pensions No IX-1691 <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/028b05207b9c11e89188e16a6495e98c?positionInSearchResults=0&searchModelUUID=c0dd9464-97a0-4504-b866-61e44448e723>).

<sup>4</sup> Bank of Lithuania presents position regarding tax and pension system reform, Bank of Lithuania Press Release, 18 April 2018 (<https://www.lb.lt/en/news/bank-of-lithuania-presents-position-regarding-tax-and-pension-system-reform>).

<sup>5</sup> If during a certain year the output gap and the change in the primary structural general government balance are positive, the fiscal policy implemented that year is considered to be countercyclical tightening; if the output gap and the change in the primary structural general government balance are negative, the fiscal policy is considered to be countercyclical easing; if the output gap is positive and the change in the primary structural general government balance is negative, the fiscal policy is considered to be pro-cyclical easing; if the output gap is negative and the change in the primary structural general government balance is positive, the fiscal policy is considered to be pro-cyclical tightening.