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### Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/>

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**LIETUVOS BANKAS**  
EUROSISTEMA

# Lithuanian Economic Review

2019

MARCH

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.

The cut-off date for the data used in the Lithuanian Economic Review was 1 March 2019. The Bank of Lithuania macroeconomic projections are based on external assumptions, constructed using information made available by 12 February 2019, and other information made available by 1 March 2019.

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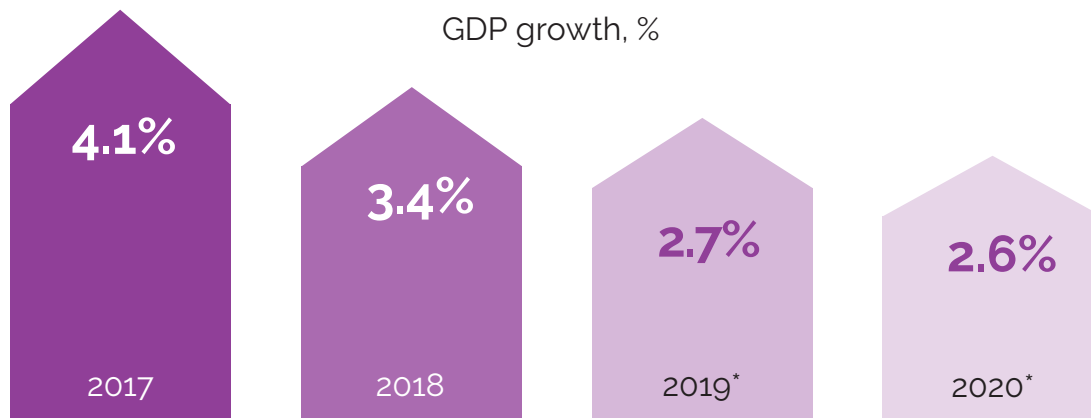
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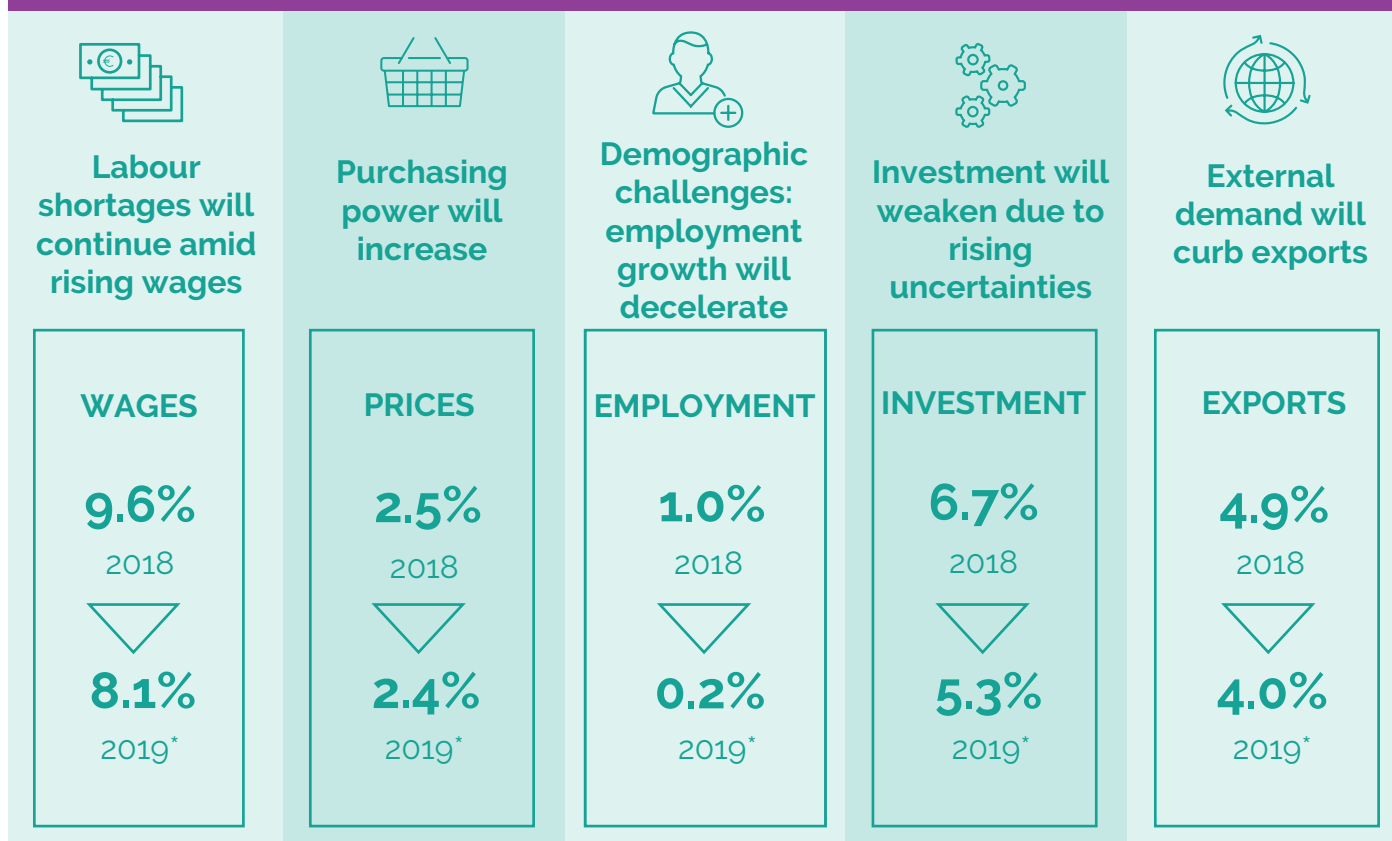
## ABBREVIATIONS

APP	asset purchase programme
CHIF	Compulsory Health Insurance Fund
CIS	Commonwealth of Independent States
EC	European Commission
ECB	European Central Bank
EPU	Economic Policy Uncertainty
EU	European Union
EURIBOR	Euro Interbank Offered Rate
Eurostat	statistical office of the European Union
FED	Federal Reserve Board
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
IMF	International Monetary Fund
MFI	monetary financial institution
NCECP	National Commission of Energy Control and Prices
PMI	Purchasing Managers' Index
UK	United Kingdom
US	United States of America
WTO	World Trade Organisation

## GROWTH MOMENTUM WILL MODERATE



## CONTRIBUTIONS TO SLOWER GROWTH



## RISKS TO ECONOMIC GROWTH REMAIN BALANCED



## LITHUANIA'S ECONOMIC DEVELOPMENT AND OUTLOOK

**Global growth is gradually losing momentum.** Uncertainty surrounding international trade is one of the key factors that contributed to the slowdown in global economic activity. Global manufacturing has been scaling down, which, in turn, also weighed on global trade. It is likely that the underlying growth pattern of international trade is even weaker than indicated by latest data since so far it has been reinforced by uncertainty regarding future escalation of trade restrictions. Other headwinds to global growth, however, have also been at play. Given signs of weaker growth, at the end of 2018 China's investment indicators deteriorated, bringing about knock-on effects on other economies in the region. Among advanced economies, the slowdown in Germany was partly related to disruptions in the car industry caused by the sluggish adaptation to new regulations on vehicle emissions tests. Adverse trends have also been observed in Italy, where concerns over government finances have had a dampening effect on domestic demand and, particularly, investment.

**Less favourable external climate has been partly offset by strong domestic demand.** This is primarily related to the situation in the labour market. Last year, due to declining unemployment and rising labour shortages, wages in the private sector saw one of the highest increases since the onset of the economic recovery, rising by more than 9%. Even stronger wage growth was recorded in the public sector. All this and other government actions, such as the decision to increase tax-exempt income, pensions and other social benefits, have provided a positive boost to household income, which is expected to continue rising and, in turn, further stimulate private consumption. On the other hand, investment dynamics are projected to take a different course. Over the last two years, investment in Lithuania has been expanding at a particularly rapid pace, boasting an annual growth rate of 6-7%. Growth in investment has been spurred by the previously favourable international economic environment and recovering EU capital flows that increased by roughly a third last year. However, the impact of these factors is likely to start fading in the upcoming years. High global uncertainty and deteriorating economic sentiment will affect investment decisions both at a domestic and global level. Investment growth is likely to be supported by EU funds, albeit to a lesser extent.

**Economic activity will still be strongly underpinned by labour market developments.** According to various data sources, last year employment in Lithuania increased, although a few projection exercises before such a pattern had not been anticipated. Rising employment was driven, among other things, by more favourable migration flows, which are difficult to predict. However, even if net migration continues to improve, the employment rate is not expected to pick up over the next several years due to adverse demographic trends (as older cohorts leave the workforce in higher numbers than younger cohorts enter it). Another important point is that the changing migration flows have only a limited impact on labour market conditions. The labour market is still clouded by significant tensions, which means that wage pressures will prevail. Wage growth is expected to weaken since the labour share has almost reached its historical highs. Nevertheless, wages should still rise substantially, continuing to support domestic demand.

**Economic growth is set to slow down.** For a number of years, economic activity in Lithuania has been exceeding its potential. This is evidenced by relatively low unemployment, wage growth which has been outpacing labour productivity, and the significantly increased labour share. With the economy above its potential, economic development should moderate since many factors of production have already been exploited. Another important aspect is also the deteriorating international environment. Uncertainties related to global trade and broad-based downward surprises in economic releases are diminishing the prospects for Lithuania's trade partners, and, as a result, weighing on the country's export sector. Having grown by 3.4% in 2018, Lithuania's real GDP is projected to increase by 2.7% in 2019 and by 2.6% in 2020.

**Inflation will remain subdued.** Unlike last year, the decline in oil prices should put downward pressure on inflation in 2019. It is expected that compared to 2018 oil prices in euro will decline by nearly a tenth. Having reached their four-year peak, oil prices dropped sharply at the end of last year, reflecting escalating market concerns about global economic outlook and higher-than-projected oil supply. However, food commodity prices are expected to follow a different path. Amid sufficient supply and stock, they remained low for the most part of 2018, yet at the end of the year started to increase. This can be explained by the drop in



production of such commodities (partly due to weather conditions) and substantial global demand. Since heat energy prices regained traction at the end of 2018 and electricity and gas prices notably increased at the beginning of 2019, administered prices will provide a stronger boost to headline inflation than they did last year. Service prices, which are most closely linked to domestic economic developments, will account for nearly half of headline inflation, reflecting the impact of rising wages and domestic demand-led pressures. According to current projections, average annual inflation is expected to decline from 2.5% in 2018 to 2.4% in 2019 and 2.3% in 2020.

### Outlook for Lithuania's economy

	March 2019 projection <sup>a</sup>			December 2018 projection		
	2018 <sup>b</sup>	2019 <sup>b</sup>	2020 <sup>b</sup>	2018 <sup>b</sup>	2019 <sup>b</sup>	2020 <sup>b</sup>
Price and cost developments (annual percentage change)						
Average annual inflation, as measured by the HICP	2.5	2.4	2.3	2.6	2.4	–
GDP deflator <sup>c</sup>	3.4	2.4	2.2	2.6	2.4	–
Wages <sup>d</sup>	9.6	8.1	6.7	9.5	6.9	–
Import deflator <sup>c</sup>	4.7	1.8	1.8	4.1	1.8	–
Export deflator <sup>c</sup>	3.8	1.8	1.7	2.7	1.8	–
Economic activity (constant prices; annual percentage change)						
Gross domestic product <sup>c</sup>	3.4	2.7	2.6	3.2	2.8	–
Private consumption expenditure <sup>c</sup>	3.9	3.9	3.6	4.2	4.0	–
General government consumption expenditure <sup>c</sup>	0.6	0.9	0.8	0.4	1.0	–
Gross fixed capital formation <sup>c</sup>	6.7	5.3	4.2	7.8	5.3	–
Exports of goods and services <sup>c</sup>	4.9	4.0	3.7	4.6	4.2	–
Imports of goods and services <sup>c</sup>	4.4	4.6	4.5	3.8	4.9	–
Labour market						
Unemployment rate (annual average as a percentage of labour force)	6.2	6.0	5.9	6.3	6.1	–
Employment (annual percentage change) <sup>e</sup>	1.0	0.2	-0.3	0.6	0.0	–
External sector (percentage of GDP)						
Balance of goods and services	2.5	2.0	1.3	2.3	1.7	–
Current account balance	-0.3	-0.5	-1.4	0.1	-0.2	–
Current and capital account balance	1.2	1.2	0.1	1.7	1.9	–

<sup>a</sup> The projections are based on external assumptions, constructed using information made available by 12 February 2019, and other information made available by 1 March 2019.

<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.

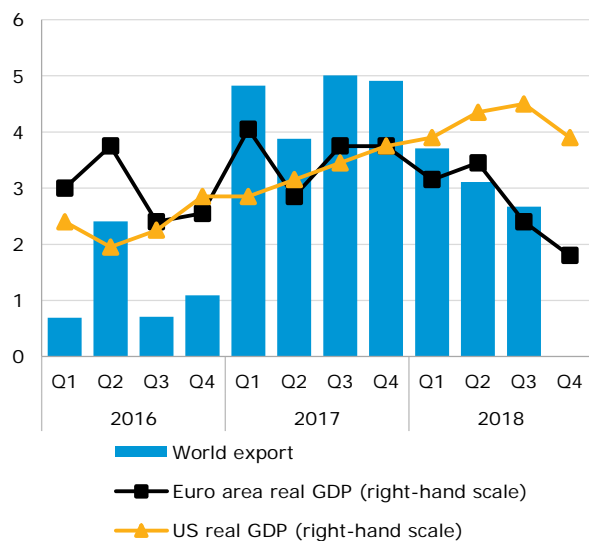
## I. INTERNATIONAL ENVIRONMENT

**Global economy lost some of its momentum in 2018.** According to the IMF provisional data, global GDP picked up by 3.7% in 2018 (3.8% in 2017). Although the euro area, China and some other countries exhibited signs of slower growth, they were partly offset by stronger economic growth in the US, India, Brazil and CIS countries. Nevertheless, last year the global economy was weighted by increasing international trade restrictions and political tensions. Global exports and industrial output recorded a slowdown in the second half of 2018. The global economy's weak streak continued into the beginning of this year, with the global PMI in January 2019 at its lowest since September 2016. According to the IMF forecasts, global growth is expected to decelerate to 3.5% this year.

**Economic growth in the US strengthened last year, though a slowdown is anticipated for 2019-2020.** Robust growth in 2018 was underpinned by the US accommodative fiscal policy, further improvements in the labour market, fast-rising wages and investment. However, provisional indicators signal that the US economic growth started to slow down early this year weighted by the partial government shutdown, trade tensions with China, tightening FED monetary policy and weaker economic growth in trade partners. This year, it will also be curbed by the fading effect of fiscal stimulus. Early this year, the US manufacturing PMI dropped to 53.7, the lowest rate since September 2017. Moreover, according to the New York Fed preliminary estimates, annual GDP growth in the US will only be 1.2% in the first quarter of 2019. Even so, unless the economy faces some more serious headwinds by this summer, the current economic expansion will be the longest in the US history – having started in June 2009, it has already lasted for 118 months.

### Global economic growth lost some of its momentum in 2018.

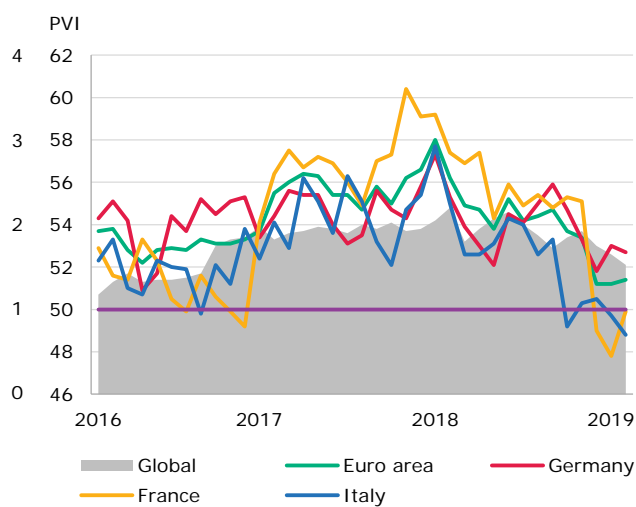
Chart 1. Dynamics of annual growth in global exports, real GDP in the euro area and the US  
Percentages



Sources: WTO, Eurostat and Bank of Lithuania calculations.

### Global PMI fell to its lowest level over the last few years.

Chart 2. Dynamics of composite PMI's



Sources: Markit and Bank of Lithuania calculations.

\*Value above 50 indicates expansion, and below 50 – contraction.

**After a significant slowdown last year, growth in the euro area is expected to further decelerate in 2019.** Even though the labour market conditions continued to improve, amid declining unemployment and fast wage growth, the economy was undermined by geopolitical unrest. One-off factors, worsening confidence indicators and weakening growth in a number of trade partners (particularly in China) also played a prominent role in the second half of 2018. Italy's economy fell into recession at the end of 2018, as GDP contracted for two consecutive quarters. Economic problems in Italy are linked to political factors: government policy, increased concerns about fiscal sustainability, and vulnerability of the banking sector, leading to heightened overall uncertainty. France was not spared by weaker growth either, as its economy suffered from the 'yellow vests' protests. In 2018, growth in Germany, one of the main importers of goods of Lithuanian origin, was at

its weakest pace in five years, while manufacturing output at the end of that year contracted to its lowest level since 2009. This was also affected by temporary factors – a slump in the automotive industry due to new vehicle emission standards and disruptions in the transportation of goods and commodities due to low river water levels. Provisional indicators of the euro area, such as PMI, show growth to be sluggish at the beginning of this year. New trade restrictions in case of Brexit are projected to weigh on economic growth in the euro area.

**China's economy is transitioning to a weaker growth path.** Growth in China slowed down to 6.6% last year, and was at its slowest since 1990. The country's manufacturing sector faced headwinds – manufacturing PMI fell below 50 at the end of the year (indicating possible output contraction), dipping further to a three-year low in January. Economic growth in China was dampened by tightening of financial regulations, undertaken in order to rein in the surge in debt of the state-owned enterprises and the private sector, and by the US imposed duties on imports of Chinese goods. The Chinese economic slowdown may have adverse impact on the economies of its trade partners, especially some EU countries, as well as global prices for goods and commodities.

**In 2018, the economic growth in Russia was weaker than in other similarly advanced economies.**

A similar situation is forecast to continue in 2019 as Russia's economic growth is likely to also be sluggish, weighted by longstanding structural problems, economic sanctions imposed by Western countries and a decline in oil prices. This, coupled with the Russian sanctions on the import of the EU food products still in place, will also limit Lithuanian prospects for export growth to Russia.

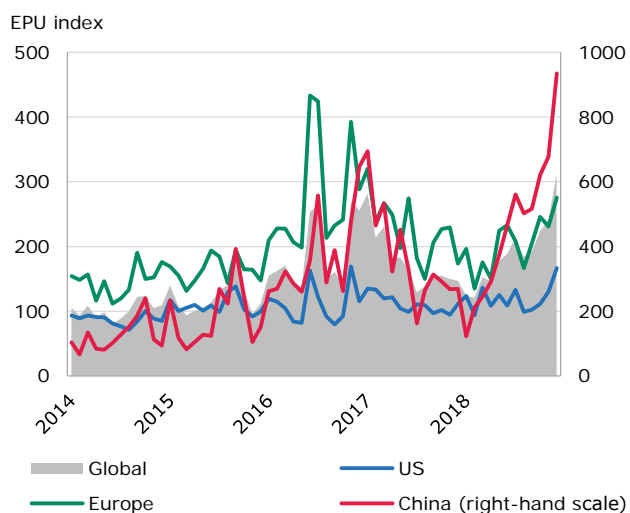
**Scandinavian and Baltic economies continued to grow at a rapid pace in 2018, but a slowdown is expected in 2019.**

Robust growth was mainly driven by strengthening investment and private consumption spurred by rising wages, growing employment and high consumer confidence indicators. Even though growth of housing prices in Scandinavian countries weakened, both house prices and the level of household indebtedness remain very high. A stronger adjustment of house prices could have negative effects on domestic demand and would likely pose a risk to the sustainability of the financial systems of these countries. Scandinavian and Baltic economies are highly open and thus may be significantly affected in the future by rising geopolitical uncertainty, other countries' protectionism and a weaker foreign demand growth.

**Financial and commodity markets were marked by uncertainties at the end of 2018.** The main stock market indices fell sharply at the end of the year (for example, the S&P 500 index dropped down at least 20% from its August peak). This reflects elevated geopolitical risks, slowdowns in the Chinese and main euro area economies, changes in the assessment of risk factors and concerns over monetary policy tightening by central banks, especially the FED. The risk assessment of government securities was tightened, which increased the cost of borrowing for certain countries (such as Italy). Financial market participants also expressed concerns about flattening US yield curve, which is often viewed as an indicator of future recession. Oil prices also went down at the beginning of the year: the average Brent crude oil price was one fourth lower than at its peak in 2018, mainly reflecting increasing oil supply, weaker demand and heightened geopolitical tensions at the end of 2018.

**Economic policy uncertainty rose significantly at the end of 2018.**

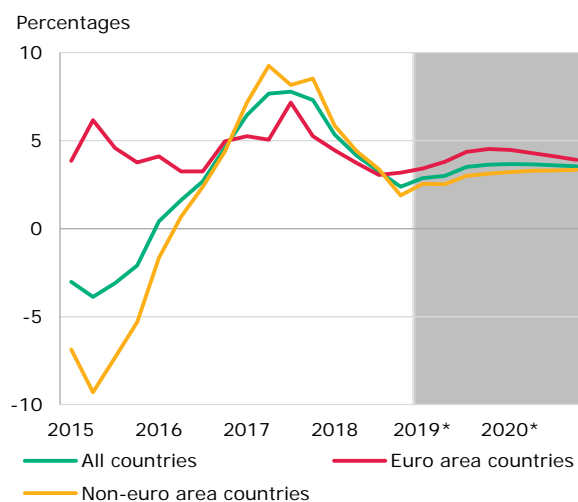
Chart 3. Dynamics of global EPU index



Sources: EPU and Bank of Lithuania calculations.

**Lithuania's external demand growth weakened in 2018.**

Chart 4. Dynamics of annual growth in Lithuania's external demand



Sources: ECB and Bank of Lithuania calculations.  
\*Projection.

**Lithuania's external demand is expected to continue on a more moderate growth path in 2019.**

This year, Lithuania's export volumes are likely to be affected by slowing economies of its main trade partners. Risks to Lithuania's external demand in 2019 are related to Brexit outcome and the deteriorating economic situation in the euro area. Germany's continued slowdown would not bode well for growth in exports of Lithuanian goods (especially machinery and equipment) and transport services. Increasing international trade restrictions, political tensions in Italy and France and their rising sovereign debt yields could weigh on the Lithuanian economy amid faltering political and economic stability in the euro area. In the longer term, rising political and economic uncertainties, political fragmentation, lack of structural reforms and climate change challenges are likely to pose the highest risk to the EU economic development and thus growth of Lithuania's external demand.

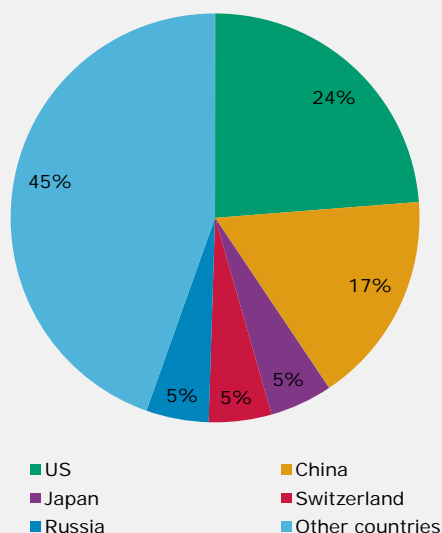
## BOX 1

### POTENTIAL IMPACT OF THE US TARIFFS ON CAR IMPORTS FROM THE EU ON THE LITHUANIAN ECONOMY

**Tensions regarding the US and EU trade relations appear to be rising again.** Having conducted an investigation, in February 2019 the US Department of Commerce decided that car imports pose a threat to the US national security as they impair the country's production base and military readiness. Such decision renewed discussions that the US may amp up the pressure on the EU and even start applying 25% tariff on car imports from the EU. Meanwhile, the EU states declare their intention to avoid escalating the trade conflict. However, if the US increases the import tariffs, the EU would be prepared to retaliate. The US is the EU's main export partner of cars and their parts (see Chart A). As a small open economy Lithuania is dependent on foreign demand trends, therefore, it is important to assess how a potential escalation of the conflict could affect our economy.

#### The largest share of the EU exports of cars and their parts goes to the US.

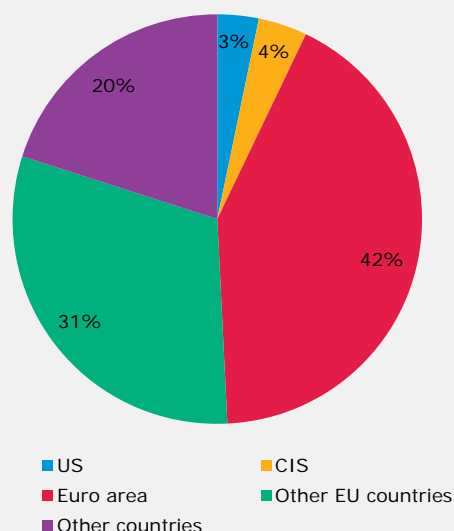
Chart A. EU exports of cars and their parts outside the EU in 2018 (by trade partner)



Sources: Eurostat and Bank of Lithuania calculations.

#### More than two thirds of goods of Lithuanian origin are exported to the EU.

Chart B. Exports of goods of Lithuanian origin, excluding mineral products, in 2018 (by country)



Sources: Eurostat and Bank of Lithuania calculations.

#### The new trade restrictions could have only a minor direct impact on the Lithuanian exports; however, it could increase production costs of the Lithuanian companies.

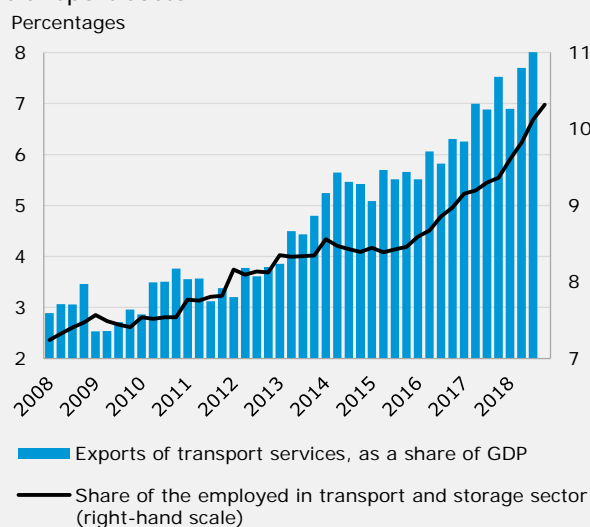
The Lithuanian car industry is poorly developed, and the share of exports of these goods is relatively small – land vehicles and their parts account for only 1.4% of total exports of goods of Lithuanian origin and 0.5% of GDP, thus, this type of impact is very weak. Still, higher prices of imported intermediary goods could increase production costs of Lithuania's companies and adversely impact competitiveness of exporters. The impact on the Lithuanian economy would hinge on which US imports the EU would increase tariffs. According to current estimates, such impact would still be low, since imports from the US account for only 2.8% of the total imports of the Lithuanian goods.

**However, it is likely that the escalation of US-EU trade conflict would mostly affect Lithuania through weaker demand in the euro area.** Lithuania exports 42% of all goods of Lithuanian origin to the euro area and another 31% to other EU states (see Chart B). Euro area is also the main export market

for commercial road transport services, and this sector is rapidly expanding in Lithuania (see Chart C). Transport sector performance is dependent on trade volumes in the EU, therefore, slower growth of trade volumes could hurt the sector's further development. However, despite high significance of the car industry in individual euro area countries, for example, Germany, the direct impact of further trade conflict escalation on the main Lithuania's export markets would probably be also relatively small. According to the IMF assessment<sup>1</sup>, if the US imposed tariffs of 25% on imports of cars from other countries and these countries retaliated, the euro area would not be directly adversely impacted in the first three years, since it would be able to direct its production to other regions. The euro area would feel a slight negative impact after three years, since the US manufacturers would have adapted to changes by then, i.e. replaced car parts currently imported from the euro area with the local production. In the long term, the direct negative impact on the euro area economy would be minor. However, according to the IMF assessment, the indirect impact on the euro area, stemming from worsened expectations, increased uncertainty, tension in financial markets and tighter financing conditions, could significantly surpass the direct impact of the trade conflict. Moreover, the negative impact could be strengthened by the disruption of global value chains. IMF estimates that, in contrast to the scenario without the imposition of additional tariffs, the total direct and indirect impact on the euro area economy over the next few years could account for a production drop of up to 0.5%, and in the long term – of up to 0.06%. Weaker euro area growth would have an adverse impact on the Lithuanian export trends. The impact on the Lithuanian economy could be similar to the overall impact on the euro area economy.

### The share of exports of transport services in Lithuania's GDP continues to increase.

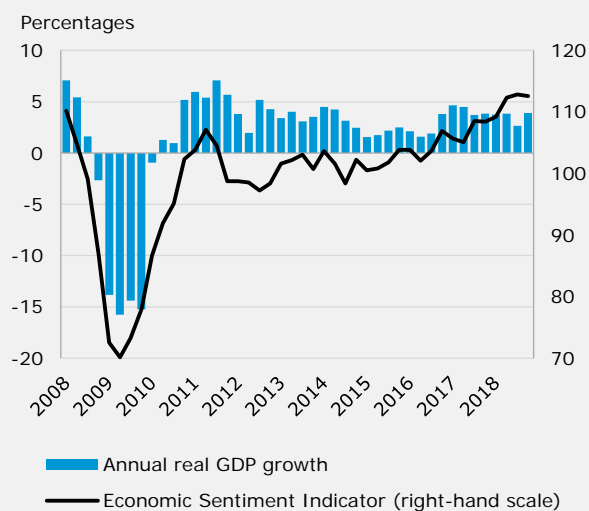
Chart C. Dynamics of the exports of transport services and the share of the employed in the transport sector



Sources: Statistics Lithuania and Bank of Lithuania calculations.

### Consumer and business confidence in Lithuania remains at high levels.

Chart D. Dynamics of the real GDP and the Economic Sentiment Indicator



Sources: EC and Bank of Lithuania calculations.

**Lower expectations and slightly higher prices could curb domestic demand growth, albeit only slightly.** Confidence indicators of Lithuanian companies remain at high levels, however, if the trade conflict heats up and fears about a slowdown in foreign demand does not abate, business and consumer expectations would probably worsen (see Chart D). As a result, Lithuanian companies may be inclined to postpone investment, whereas households could limit their consumption. Higher prices of imported goods could contribute to higher inflation and negatively affect the growth of household consumption.

<sup>1</sup> [IMF World Economic Outlook, October 2018: Challenges to Steady Growth.](#)

## II. MONETARY POLICY OF THE EUROSISTEM

**The Eurosystem continues to maintain a strong accommodative monetary policy stance so as to ensure the continued sustained convergence of inflation towards levels that are below, but close to, 2% over the medium term.** The high level of the accommodative monetary policy is maintained by exceptionally low ECB's key interest rates and their projected development, a stable size of held securities portfolio as well as new, longer-term lending operations.

**At the end of December 2018, the Eurosystem ceased its net purchases under the expanded asset purchase programme (APP), whereas since the beginning of 2019, purchases are made only with the aim to reinvest all the redeemed issues of securities.** The decision was made taking into account the economic growth, supported by domestic demand as well as a projected sustainable adjustment in the path of inflation towards the target rate (see Chart 5). From March 2015 to the end of December 2018, the Eurosystem purchased assets totalling €2.6 trillion, whereas the Bank of Lithuania's purchases amounted to a total of €10.8 billion. Debt securities issued by supranational European institutions accounted for the majority of those purchases. Even though the Eurosystem will discontinue making net purchases it is still going to maintain the size of securities portfolio stable by reinvesting for an extended period of time past the date when the key ECB interest rates will be raised.

**The ECB's Governing Council announced that the key ECB interest rates will remain at their present levels at least through the end of 2019 and longer-term lending operations will be launched.** According to the surveyed<sup>2</sup> economists, the deposit facility rate, which is currently negative at -0.4%, is expected to start rising at the end of 2019 at the earliest and to reach 0% in 2020 (see Chart 5). This would also affect EURIBOR that banks include in determining final interest rates for businesses and households. However, if a bank equates the negative EURIBOR to zero when calculating interest rates for debtors, then its increase to 0% will not raise the interest rate charged for the loan. Therefore, households with loans may not immediately feel the effects of increasing interest rates. Furthermore, a new series of quarterly targeted longer-term refinancing operations will be launched, starting in September 2019 and ending in March 2021, each with a maturity of two years, which will help to preserve favourable bank lending conditions.

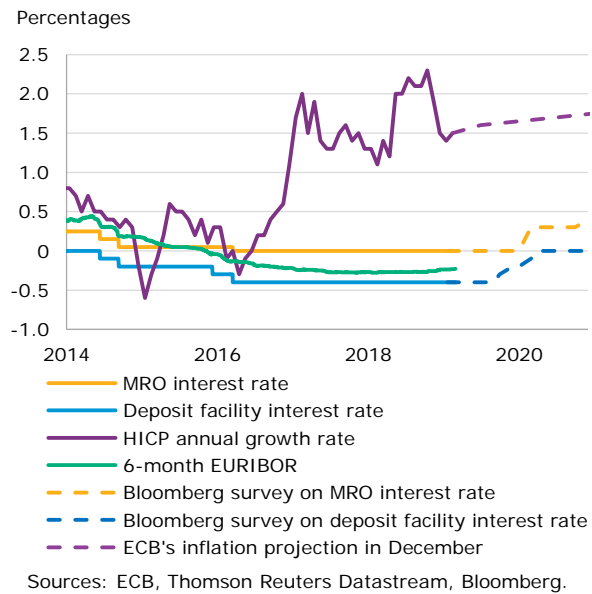
**The Eurosystem's accommodative monetary policy measures have continued to contribute to the fact that interest rates on loans in banks operating in the euro area and Lithuania are at historically low levels.** Interest rates in the euro area have been on a steady decline since mid-2014 when markets began expecting that the ECB would resort to non-standard monetary policy measures. During the recent half of the year, interest rates on loans in the euro area have stabilised but are still some of the lowest on record. In Lithuania, average interest rates on new loans have recently risen and remain higher than in the euro area, especially those for non-financial corporations (see Chart 6). This was likely caused by deteriorated competitive environment, in the context of recently increased concentration in the banking sector.

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<sup>2</sup> According to the [survey](#) carried out by Bloomberg on 14-16 January 2019.

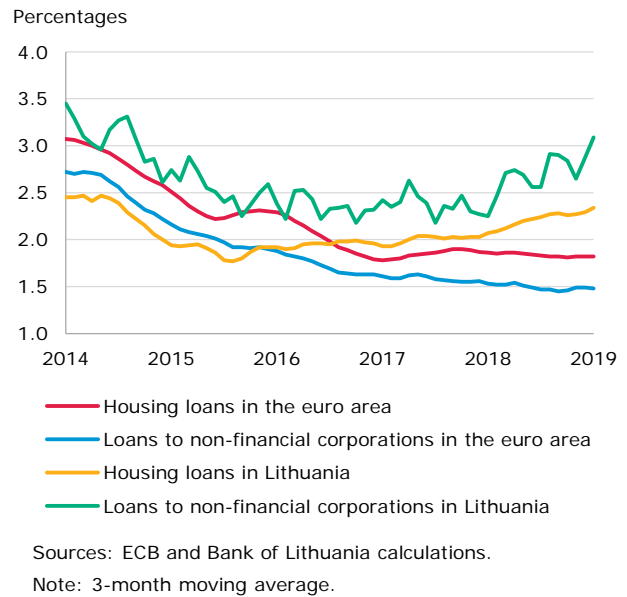
## The ECB interest rates remain at very low levels.

Chart 5. Factual ECB interest rate and inflation data and economists' projections



## Financing conditions have remained very favourable.

Chart 6. Average interest rates on new MFI housing loans and loans to non-financial corporations





### III. REAL SECTOR

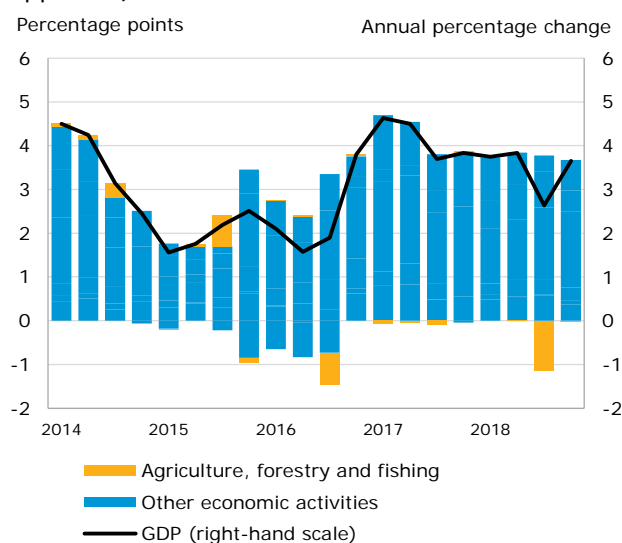
**Despite weakening external demand, Lithuania's economic growth was robust.** Economic growth in 2018 could have been even stronger, but it declined by several percentage points as a result of poor grain harvest caused by drought. Consequently, the added value generated in agriculture in the second half of 2018 was almost 15% lower than the year before. Last year, the added value of other economic activities increased at a rather rapid and steady pace, close to 4% (see Chart 7). Notably, 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 (see Chart 8). A widening output gap leads to imbalances, which are now mostly noticeable in the labour market.<sup>3</sup>

**Strong growth was mainly fuelled by domestic demand, particularly household consumption.** The latter was mostly boosted by rapidly rising household disposable income.<sup>4</sup> Even though the data has not been released yet, it is likely that disposable income growth in 2018 hit its 10-year peak. Such evolution was largely driven by labour market tensions and decisions of public authorities, including such key decisions as increases of pensions, tax-exempt income and pensions for police officers, as well as changes in child benefits. The Bank of Lithuania estimates that as a result of these decisions household disposable income is likely to have increased up to €635 million in 2018, whereas disposable income growth is likely to have been 2.3 percentage points faster than it would have been without these changes (see Chart 9).

**In 2018, economic growth was mainly dragged down by a decline in the added value of the agricultural sector, while the added value of other economic activities rose at a steady pace.**

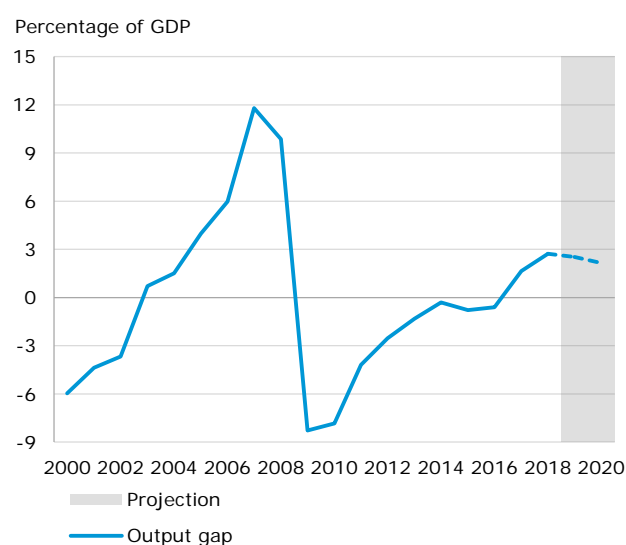
**Rather rapid economic development contributes to a widening output gap.**

Chart 7. Contributions to real GDP (output approach)



Sources: Statistics Lithuania and Bank of Lithuania calculations.

Chart 8. Output gap



Sources: Statistics Lithuania and Bank of Lithuania

**This year, growth of household disposable income will again be boosted by decisions of public authorities and the indexation of pensions. According to the estimation of the Bank of Lithuania, however, these factors will not accelerate household consumption.** In 2019, increases of the tax-exempt income threshold, wages in many public sector areas and child benefits are among the most

<sup>3</sup> For more details about the situation in the labour market, see Chapter IV of this review.

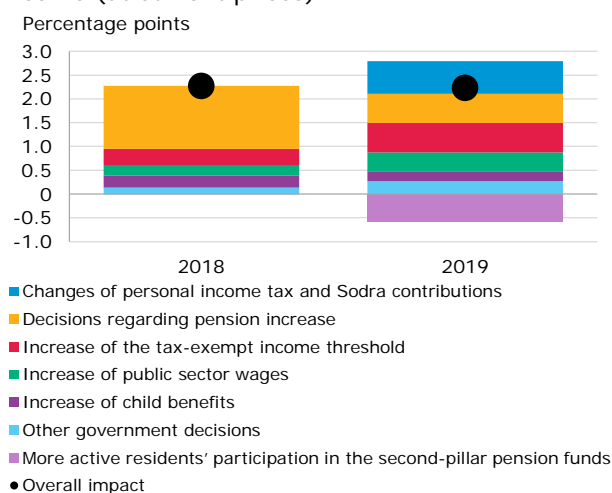
<sup>4</sup> Household disposable income can be defined as the total earnings households make, which they can spend as they wish after paying all their mandatory liabilities. For more details about the structure, evolution of household disposable income and its relationship with household consumption, see [Annex 1](#) to the Lithuanian Economic Review, December 2014.

important government discretionary decisions. Moreover, in order to ensure that the disposable income<sup>5</sup> of residents who want to participate more actively in second-pillar pension accumulation would not diminish after the pension reform amendments, it was decided to reduce the rates of personal income tax and Sodra contributions. The Bank of Lithuania estimates that, together with the indexation of pensions, these decisions, similarly to last year, should add 2.2 percentage points to the growth of household disposable income. The available data suggests that this year household disposable income is likely to grow at a similar pace as last year. Similar developments are expected for consumer prices as well. Due to these factors, the growth of household consumption will be fairly similar to that of last year. It should be noted that the increase in electricity and gas prices, which garnered considerable attention at the turn of the year, will not have any substantial effect on household consumption trends (for more details, see Box 1).

**In 2018, another domestic demand factor, namely investment, grew at almost the fastest pace in five years.** This was mainly driven by increased construction of engineering buildings, such as the cogeneration power plant, as well as the modernisation and expansion of water supply, wastewater and transport infrastructure. A substantial share of this growth comes from the strengthening recovery of flows of EU funds allocated for capital formation – in 2018, it increased by almost a third. Nevertheless, investment growth should moderate this year amid escalating risks due to less favourable further development of main Lithuanian trade partners and weaker growth of flows of EU funds.

**In 2019, government decisions will boost household disposable income to a similar extent as last year.**

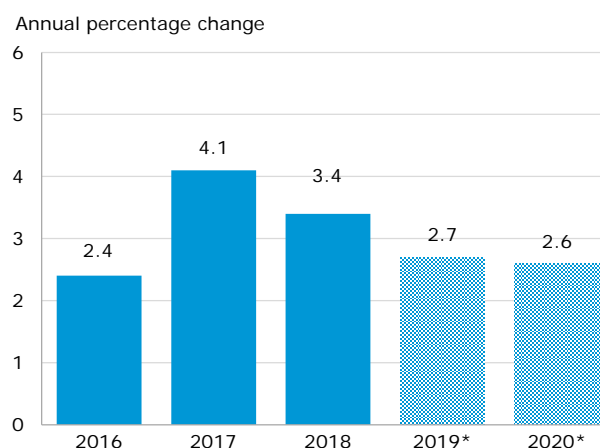
Chart 9. Impact of government discretionary decisions on the growth of household disposable income (at current prices)



Sources: Statistics Lithuania, Ministry of Finance, Eurostat and Bank of Lithuania calculations.

**The Bank of Lithuania estimates that Lithuania's economy will lose some of its growth momentum in 2019.**

Chart 10. GDP evolution and projections (adjusted for seasonal and workday effects)



Sources: Statistics Lithuania and Bank of Lithuania calculations.

\*Bank of Lithuania projection.

**The Bank of Lithuania estimates that domestic economic growth should weaken this year but will remain rather robust** (see Chart 10). December economic growth projections for 2019 are revised down to 2.7%. Growth is expected to moderate, dragged down by a slowdown in foreign demand. There are also a number of risks which could weigh on economic development. The main downside risks for Lithuania include uncertainty over the Brexit outcome, increasing international trade restrictions (see Box 1), slower than currently anticipated growth in main Lithuanian trade partners and the European Commission's Mobility Package (see Box 4).

<sup>5</sup> The assessment of the effect of government discretionary measures on household disposable income was based on the following assumption about residents' participation in the second-pillar pension accumulation system: (a) 82% of persons who accumulated for pension in 2018 (2+2+2) will continue accumulating (3+1.5); (b) 85% of persons who accumulated in 2018 (2+0+0) will continue accumulating, 85% of which will contribute 1.8%, and the others – 3%; (c) 63% of new participants aged under 40 will start accumulating in the second-pillar pension funds, 85% of which will contribute 1.8%, and the others – 3%.

## BOX 2

### IMPACT OF HIGHER ENERGY PRICES ON INFLATION AND HOUSEHOLD CONSUMPTION

**In the beginning of 2019, electricity and gas prices posted a year on year increase of 15% and 13% respectively.** Such annual growth of electricity prices is the largest in almost a decade, while that of gas prices – in six years. However, one should note, that the administrative price tariffs for household consumers are recalculated twice per year. Both gas and electricity administered prices consist of regulated and unregulated price parts.<sup>6</sup> The National Commission of Energy Control and Prices (NCECP) regulates only a regulated part of prices. Another part of prices is unregulated and depends on market conditions. This year, the increase in prices of these energy products was mostly driven by the growth of the unregulated part of gas and electricity prices due to external factors. For example, the growth of the unregulated part of electricity prices was likely affected by the lower electricity production volume of the Scandinavian hydroelectric power plants on account of unfavourable weather conditions. Electricity prices also rose partly as a result of disrupted supply, for example, from repairs of Scandinavian power plants and electricity supply links, as well as due to compensations for servitudes.<sup>7</sup> Earlier increase in oil prices and strengthening global demand significantly contributed to the upturn in gas market prices. These price developments are likely to push up the annual inflation by about 0.2 percentage point. In the first half of 2019, the price developments of these energy products are expected to remain relatively stable. However, it is quite difficult to make a longer-term forecast since fluctuations of electricity prices also significantly depend on weather conditions, whereas of gas prices – on the global supply and demand. Compared to last year, however, it is expected that gas prices on the market may be lower this year, amid rapid growth in global supply and expected decrease in oil prices.

**The anticipated gas and electricity price growth in the first half of this year may have a minor negative impact on household consumption development.** According to the latest data, household expenditure for electricity, gas and other fuel accounts for only slightly more than 4% of total household expenditure, whereas expenditure for only electricity and gas – half as much. Thus, the projected gas and electricity price increase would only somewhat reduce household consumption growth. According to the Bank of Lithuania projection, this impact would account for less than 0.2 percentage point.

**Some households are likely to be affected by the gas and electricity price growth more than others.** An average household consumes the largest share of electricity for lighting and electrical appliances (see Chart A), therefore, the majority of households will be affected by the rising prices quite similarly. However, those households that use gas for heating will be affected by higher gas prices to a larger extent. The volume of gas consumed for this purpose in Lithuania is significant – it accounts for about two-thirds of the total volume of gas consumed by households. In Lithuania, about a tenth of households using natural gas use it for heating.

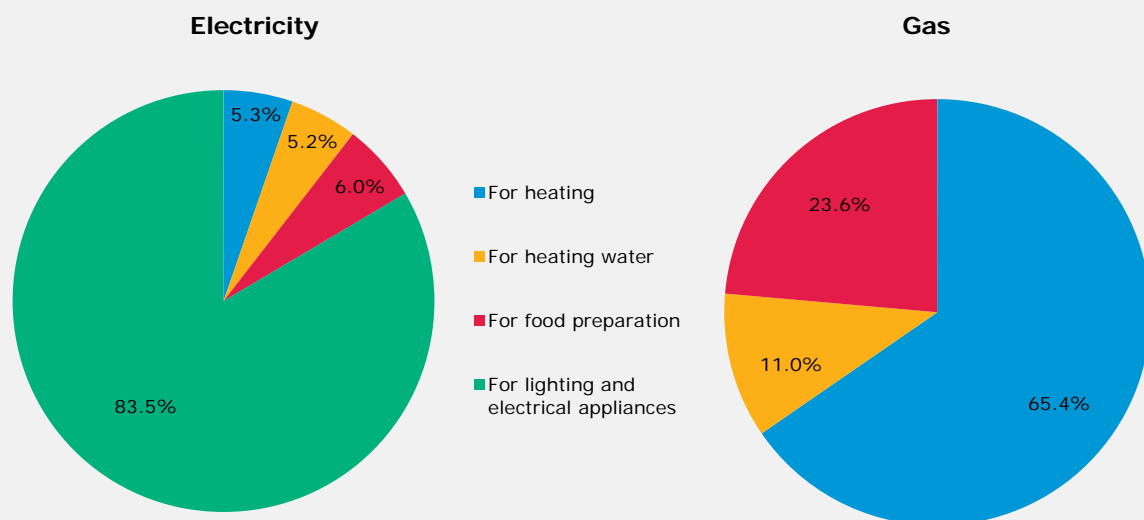
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<sup>6</sup> These price parts change each six months, when prices are reviewed. For example, according to the data from NCECP, this year the unregulated electricity price part comprises 44%, whereas the regulated part makes up 56%, exclusive of VAT.

<sup>7</sup> Compensations for servitudes are paid for the installed or planned to be installed electricity equipment or distribution networks, for example, in the land that does not belong to the operator.

**An average household mostly uses electricity for lighting and electrical appliances, and gas – for heating.**

Chart A. Household electricity and gas consumption in 2017



Sources: Statistics Lithuania and Bank of Lithuania calculations.

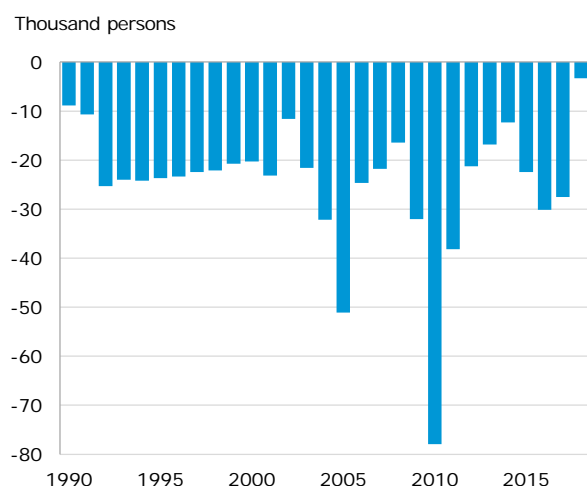
## IV. LABOUR MARKET

**The current situation in the labour market is significantly affected by labour shortages.** Even though increasing labour shortages have been eased in the context of favourable migration trends and a more conservative assessment of demand for new workers, they continue to contribute to robust wage growth, also supported by government decisions to substantially raise wages for some public sector workers.

**Last year net emigration was at its lowest since 1990.** The number of arrivals to Lithuania almost equalled the number of departures. Migration flows became significantly balanced as a result of the lowest emigration during the entire period of economic recovery. A decrease in emigration was rather markedly affected by Brexit, which significantly reduced the outflow of people to the UK, and improvement in labour market conditions for workers in Lithuania, namely better job opportunities and rapid wage growth. This improvement contributed to a slight drop in the number of people leaving for countries other than the UK. The largest immigration since 1990 also had a hand in balancing migration flows. It was boosted by looser Lithuanian immigration policy, resulting in approximately triple the usual number of immigrants from non-EU countries for two years now. Another contributing factor was the increased number of returning Lithuanians. Although slowing the process down considerably, balanced migration, however, does not stop the decline in the working age population. This decline is also driven by other demographic factors, for example, in recent years, the number of young individuals reaching the working age was lower than the number of older people falling out of this age category.

**Migration flows have been broadly balanced.**

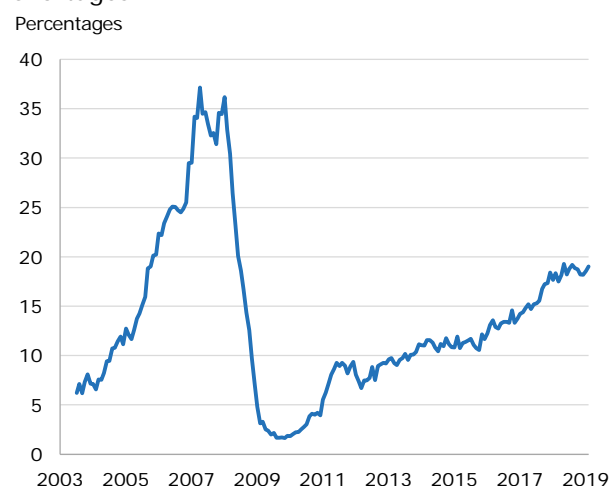
Chart 11. Migration balance



Sources: Statistics Lithuania and Bank of Lithuania calculations.

**Labour shortages continue growing, but at a slower pace.**

Chart 12. Share of companies experiencing labour shortages



Sources: Statistics Lithuania and Bank of Lithuania calculations.

**The number of occupied jobs in many economic activities is increasing slowly, while the transport sector shows an opposite trend.** Jobs in transport companies are on the rise mainly due to their expansion to the EU countries and simplified immigration procedures facilitating the arrival of long distance drivers from non-EU countries. Though much slower than in the transport sector, job growth in the construction sector was also strong, fuelled by the rather rapid sector's expansion and simplified immigration procedures also covering certain construction occupations. As regards other major economic activities, jobs grow at a sluggish pace or even decline, partly due to limited labour supply stemming from a substantial fall in unemployment in large cities and shrinking numbers of young individuals entering the labour market.

**Labour shortages continue to increase, but at a slower pace than over the last two years.** This growth was likely slightly dampened by higher immigration rates and lower emigration rates. Moreover, some companies were likely a little more cautious about their demand for new workers amid increasing risks to

global and EU economic growth. However, Lithuania's indicators directly or indirectly related to hiring have not deteriorated significantly. Both the vacancy rate and confidence indicators are fairly stable, whereas the share of companies encountering a lack in orders or customers has slightly contracted. However, although rising at more moderate pace, labour shortages affect a considerable number of companies and constitute the main driver of rapid wage growth. These shortages are underpinned by the fall in the unemployment rate down to about 4% in large cities. In the rest of the country this rate is much higher (about 9%); however, the number of unemployed persons having marketable skills could also be relatively small. Labour shortages are also driven by demographic changes related to the number of persons entering and leaving the labour market.

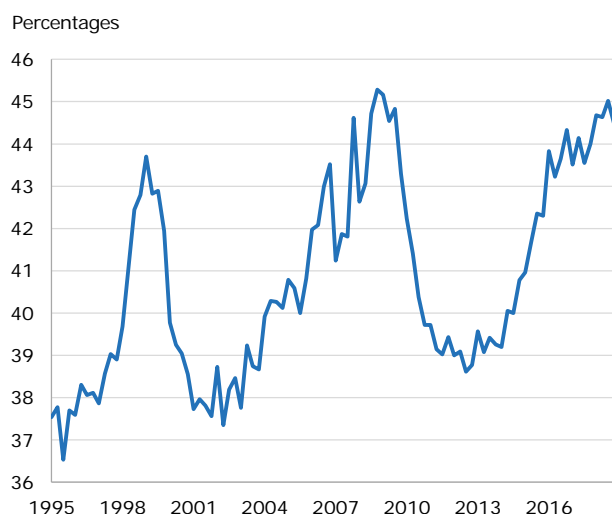
**Wage growth continues at a rapid pace.** Wages in the private sector recorded an annual increase of more than 9%. A similar momentum has been observed in this sector for two years now, which means that wage growth acceleration is losing steam. This may be partly due to the ratio of the national wage bill to GDP that has almost hit historic highs, leaving less room for faster wage growth. Furthermore, this was also possibly influenced by a slower increase in labour shortages and weaker minimum wage growth. A significant change in wage dynamics has been observed in the public sector. After a prolonged period of growth by around 6-7%, public sector wages have been rising by approximately 11% over the last six months, as a result of decisions to substantially raise wages for workers in higher education and healthcare.

**Compared to last year, wage growth should be weaker this year, going up by around 8.1%.** This slowdown will reflect the fading effect of administrative decisions, namely the introduction of the floor for social insurance contributions and the provision stating that the minimum wage is to be paid for unskilled work only. This may also be attributable to a slower increase in labour shortages. Nevertheless, the wage-related expenditure growth in this year's state and Compulsory Health Insurance Fund (CHIF) budgets is the highest since the beginning of economic recovery. As a result, this year, public sector wages may continue to rise at a similar or even faster pace than in 2018.

**The labour's share of GDP has reached historic highs.**

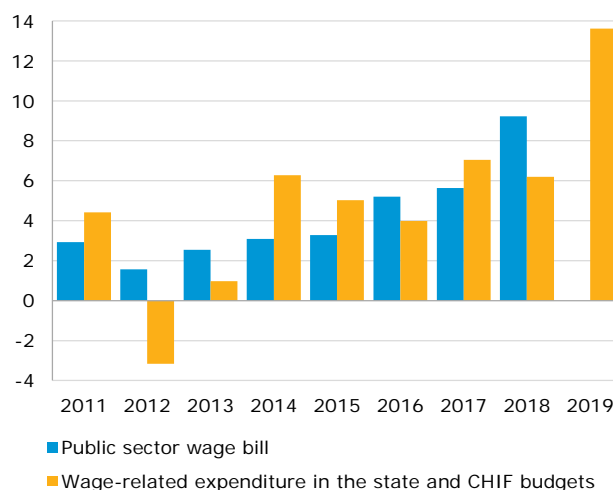
**Wages in the public sector are expected to continue rising at a rapid pace.**

Chart 13. Ratio of the national wage bill to GDP



Sources: Statistics Lithuania and Bank of Lithuania calculations.

Chart 14. Public sector wage bill and wage-related funds in the state and the CHIF budgets  
Annual percentage change



Sources: Statistics Lithuania, state and CHIF budgets, and Bank of Lithuania calculations.

## BOX 3

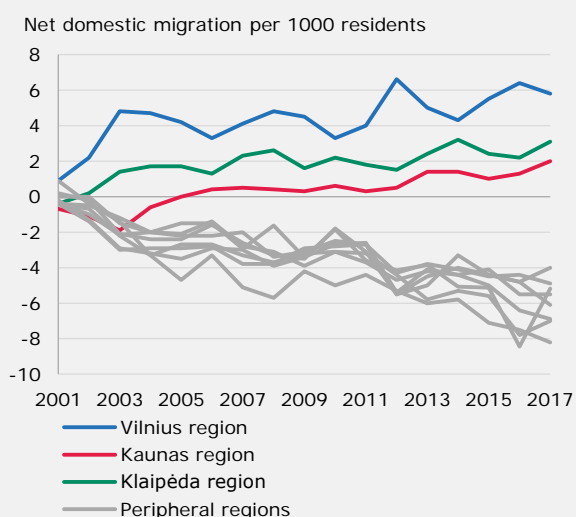
### REGIONAL DEMOGRAPHIC AND LABOUR MARKET DIFFERENCES AND THEIR IMPACT ON HOUSEHOLD DISPOSABLE INCOME

In Lithuania demographic trends differ significantly among the regions. Although fertility and mortality rates are quite similar in the regions, migration differs significantly. Net international emigration rate in 2012-2017 was 5.2 emigrants per 1,000 residents in Vilnius region and 8.5 emigrants – in other regions. Domestic migration (migration from one region to another) differed across regions even more. The number of persons arriving to major regions was higher than those departing, differing by 3.1 migrants per 1,000 residents. The situation in peripheral regions was opposite and the said indicator was -5.0 migrants. In 18 years, the differences of domestic migration among regions increased significantly; due to this, the peripheral regions currently lose more population than earlier (see Chart A).

**The regions may be divided into three groups by the overall (international and domestic) net migration.** The overall net migration rate was 0.5 emigrants per 1,000 residents in Vilnius region in 2012-2017. In Kaunas and Klaipėda regions it accounted for 7.0 migrants, whereas in peripheral regions – 13.7 migrants. Such migration developments largely impacted the number of young persons aged 25-39. Only in Vilnius region the number of such persons remained essentially stable. In Kaunas and Klaipėda regions, this number declined slightly more than by a fourth, whereas in other regions – by about a half (see Chart B).

#### Migration from peripheral regions to regions with large cities increased.

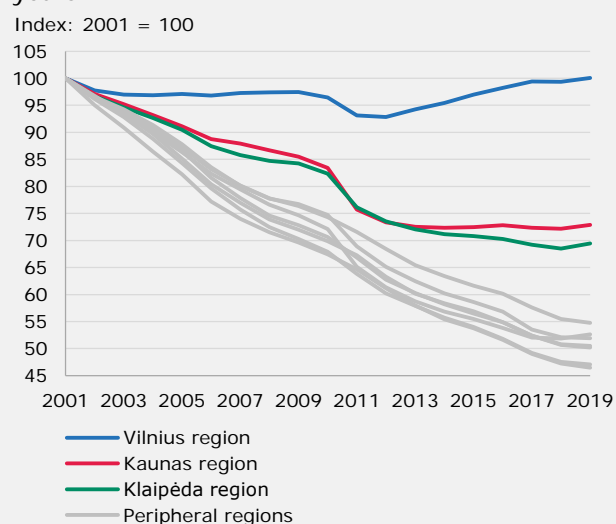
Chart A. Net domestic migration



Sources: Statistics Lithuania and Bank of Lithuania calculations.

#### In 18 years, the number of young people fell by about a half in peripheral regions.

Chart B. Changes in the population aged 25-39 years

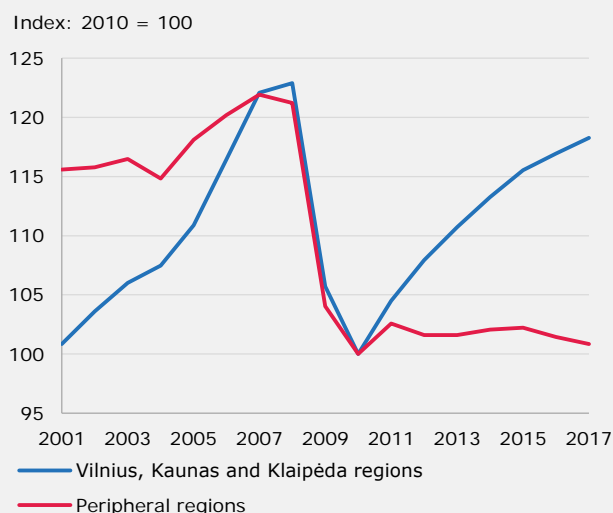


Sources: Statistics Lithuania and Bank of Lithuania calculations.

**The above-mentioned differences in migration and the residents' age structure also determine different regional labour market developments.** For example, the higher share of relatively young age population contributes to higher employment and lower unemployment rate in the regions of large cities. However, these indicators are influenced not only by demographic changes, but also by the domestic economic development, for example, by declining significance of agriculture, expansion of the services sector, etc. Job trends differed significantly among the regions, especially after the economic crisis (see Chart C). During the crisis, the number of jobs both in the regions with large cities and peripheral regions declined by a fifth, however, it did not recover in peripheral regions after the crisis and remained the same as in 2010. The unemployment rate differed as well: it was nearly identical both in the regions of large cities and in peripheral regions prior to the crisis, however, after the crisis it constantly remained about twice larger in the latter (see Chart D).

**The number of jobs has not increased in peripheral regions after the crisis.**

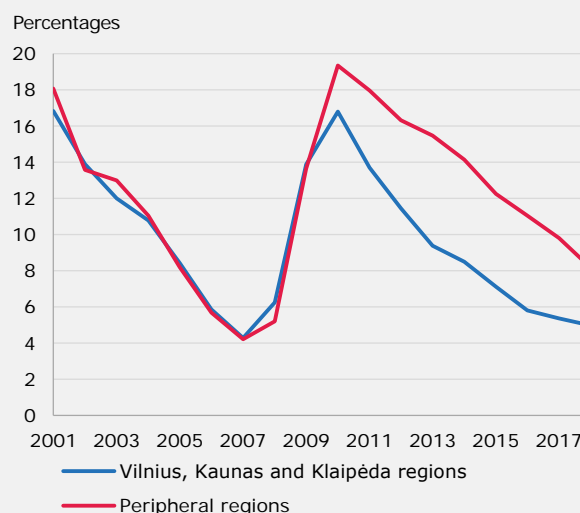
Chart C. Number of jobs in full-time equivalents



Sources: Statistics Lithuania and Bank of Lithuania calculations.

**After the crisis, unemployment in peripheral regions was twice higher, compared to regions with large cities.**

Chart D. Unemployment rate

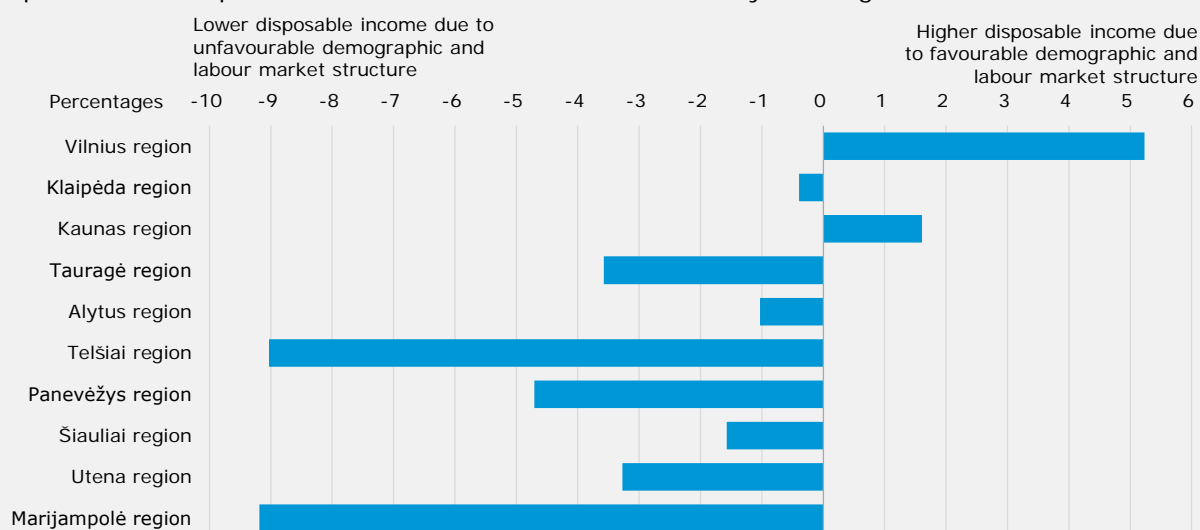


Sources: Statistics Lithuania and Bank of Lithuania calculations.

**Demographic and labour market indicators have a significant impact on the structure of disposable income of households in the regions as well.** When it comes to disposable income per one household member, it should be noted that a larger share of employed persons ensures relatively higher disposable income and demand for goods and services in the respective region. Poorer situation develops in the regions, where retirement age population comprises a relatively larger share of the total population. Since the average retirement pension is significantly lower than the average wage, this also determines relatively lower average disposable income of a certain region. The situation is even worse in the regions, where the share of unemployed persons or those that do not search for a job at all is relatively larger. The worst situation is in the regions, which have a relatively larger share of young population (aged 0-14), since this group does not generate any income.

**Demographic and labour market differences among the regions may account for the deviation of disposable income per one household member of up to 10% from Lithuania's average.**

Chart E. Impact of regional demographic and labour market structure on the deviation of disposable income per one household member from the country's average in 2017



Sources: Statistics Lithuania and Bank of Lithuania calculations.



**Demographic and labour market differences among the regions may result in the deviation of disposable income per one household member of up to 10% from Lithuania's average (see Chart E).** The data of the annual statistical survey on income and living conditions allow assessing the amount and type of income received by the representatives of the above-mentioned resident groups. According to this survey, average disposable income of one household member comprised €436 in 2017; however, income levels of the above resident groups differ significantly. The largest average disposable income is received by the employed persons aged 15-63 (€691 on average<sup>8</sup>). The income of other groups is lower: persons aged 64 or older receive almost 60% (€3928) of income of the employed aged 15-63, and unemployed and inactive persons aged 15-63 – only around 20% (€161 and €131, respectively<sup>8</sup>) of that amount, whereas persons aged 0-14 do not receive any income. Income levels of these groups and differences of regional demographic and labour market structure allows to assess the extent to which disposable income per one household member deviates from Lithuania's average. The calculations show that this difference may account for up to 10% due to the latter factor (it amounts to slightly more than €40)<sup>9</sup>. For example, in 2017, disposable income in Vilnius region exceed the country's average by more than 5% due to favourable demographic and labour market structure, whereas in Marijampolė and Telšiai regions it was almost 10% lower.

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<sup>8</sup> This income excludes social benefits for families and children, social benefits for housing maintenance, social benefits to counter social exclusion and other cases, income from property and rent, reimbursed income tax, monetary support for other households (and other income).

<sup>9</sup> Demographic and labour market structure analysis usually uses resident and employment survey statistical data, which differ from the data of the annual statistical survey on income and living conditions used in this box. The latter was chosen, because one data source, which would include the data on resident income as well as demographic and labour market structure, was more preferable.

## V. EXTERNAL SECTOR

**In 2018, Lithuania's export growth was weaker than in 2017, however, it continued at rates above the long-term average.** The nominal annual growth of exports of goods and services in Lithuania amounted to 8.7% in 2018<sup>10</sup> (18.6% in 2017). Price changes accounted for 4.9 percentage points of the annual growth in exports whereas changes in quantity – 3.7 percentage points. Key factors that stimulated export growth were previous investments and increased production capacity as well as discovered new markets. Exports of goods of Lithuanian origin excluding mineral products and transport service exports posted the largest increases. The annual slowdown of growth was underpinned by stagnating re-exports directed towards Russia, slower-paced demand and as always sluggish development of mineral products exports.

**Exports of goods of Lithuanian origin expanded to new markets due to slower EU import growth in 2018.** Exports to Japan, the US and Singapore were rapidly increasing. Various chemical products were the fastest growing group of exports to these countries. Due to a boost to production capacity and new agreements made, annual exports of tobacco products to Japan more than tripled. Lithuania's furniture exports also grew at a steady pace. Slower growth of exports to the UK, one of the main markets, was offset by expansion to Germany.

**Export growth was largely driven by exports of high value added chemical products.** Exports of various laboratory reagents increased 2.5 times in 2018, year on year. These exports, totalling €295 million in 2018 (€117 million in 2017), were bound for the US, the Netherlands, Singapore and Japan.

**In the second half of the year, the growth of re-exports stabilised.** Even though growth towards CIS countries (Russia especially) faltered, it remained stable overall, supported by EU-bound re-exports of chemical products as well as plastics, timber and furniture. Exports to Russia (92% – re-exports) account for the largest share of Lithuania's exports. In 2017 re-exports to this country increased by 30.2%, while in 2018 – by 1.4%. Weaker growth in 2018 was underpinned by the base effect, even though the flow of goods remained similar to the one in 2017. This means that Russia remains the main market for re-exports. In 2018, the largest share of goods of Lithuanian origin, excluding mineral products, was exported to Germany, Sweden, Poland, the UK and Latvia.

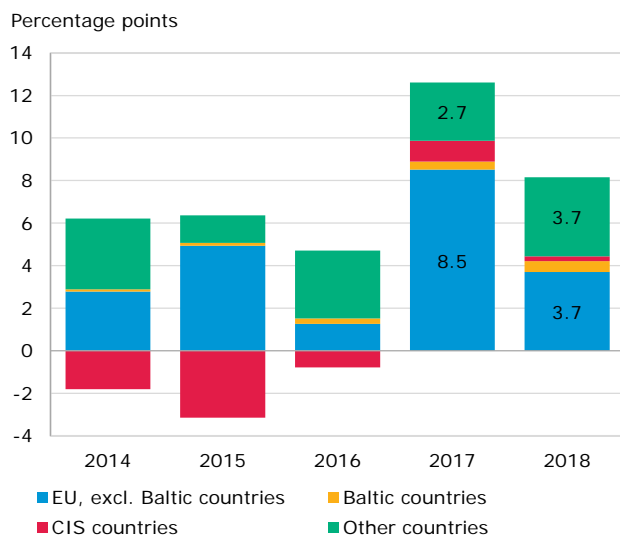
**Exports of transport services grew at a rapid pace.** Lithuania's market share in transport service exports to the EU increased, reflecting lower labour costs and investments in expansion of vehicle fleets which have been rising for three years now. Due to these factors the transport sector recorded strong growth in 2018, even though the EU market expansion was weaker. Supported by rapid expansion of transport companies during the economic upswing and accumulated reserves, exports of services have the potential to grow in 2019 as well.

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<sup>10</sup> Due to rounding, the impact of prices and quantity on growth may not add up to one decimal place.

**In 2018, a slower growth of exports of goods of Lithuanian origin to the EU and CIS countries was to some extent offset by exports to other markets.**

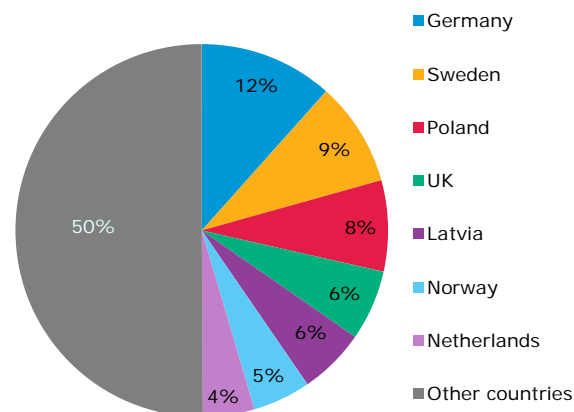
Chart 15. Annual growth rate of exports of goods of Lithuanian origin, excluding mineral products, by region



Sources: Statistics Lithuania and Bank of Lithuania calculations.

**In 2018, the largest share of goods of Lithuanian origin was exported to Germany.**

Chart 16. Structure of exports of goods of Lithuanian origin, excluding mineral products, by country



Sources: Statistics Lithuania and Bank of Lithuania calculations.

**More subdued growth of exports of goods and services projected for 2019, due to risks anticipated in the international arena.** With uncertainty clouding global growth prospects and international trade developments, economic activity for various trading partners is projected to be weaker than last year, translating into a smaller growth of domestic demand and imports. As a result, exports are projected to grow at a slower pace (4.0%) in 2019. However, there are risks that trading partner expansion may turn out weaker than projected amid uncertainty surrounding trade restrictions, the EC's decision on the Mobility Package, Brexit outcome, and expansion of developing economies, especially those in Asia.

## BOX 4

### EC MOBILITY PACKAGE AND LITHUANIA'S TRANSPORTATION SECTOR

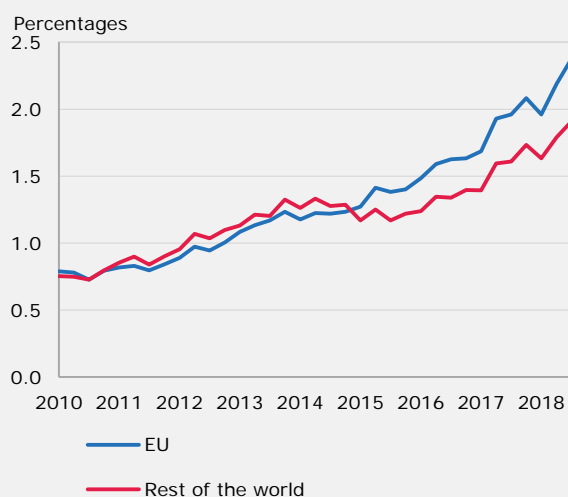
EC is finalising the first Mobility Package – a set of initiatives aimed at harmonising and simplifying the governance of commercial road transport in the EU Member States. According to the EC, the new regulations would improve enforcement of the rules, punish the countries or carriers abusing common procedures, strengthen social fairness and ensure equal competition for all EU countries. At the end of 2018, the EC's Transport Committee approved the Mobility Package.<sup>11</sup>

#### Key objectives of the Mobility Package:

1. To ensure adequate working conditions for drivers, the regular weekly rest must be spent outside the cabin.
2. Transport operations are to be scheduled in such a way that would allow the driver to return home at least every 4 weeks.
3. The new rules also aim to introduce certain limits on transport operations carried out outside of the home country. The rules for cabotage – transport companies' operations carried out within a national market outside their own country – remain unchanged, allowing a maximum of 3 cabotage operations in 7 days. However, in an effort to prevent unfair practices, the EC's Transport Committee proposes to introduce the so-called cooling off period of 5 days, before further cabotage operations can be carried out in the same country with the same vehicle. More limitations would also apply to mobility and circulation between the country of destination and the country of origin.
4. To ensure compliance with these rules, all vehicles would have to be fitted with smart tachographs by 2024.

#### Export market share in the transportation sector of the main trade partners is expanding.

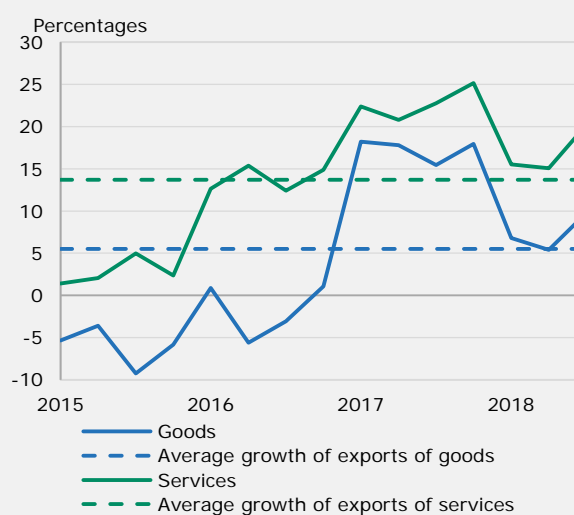
Chart A. Export market share of Lithuania's transportation sector in the EU and rest of the world



Sources: Eurostat and Bank of Lithuania calculations.

#### The annual growth of exports of services in 2018 outpaced exports of goods.

Chart B. Annual growth of exports of goods and services



Sources: Statistics Lithuania and Bank of Lithuania calculations.

<sup>11</sup> <https://www.consilium.europa.eu/en/press/press-releases/2018/12/04/clearer-fairer-and-more-enforceable-rules-for-truck-drivers-council-agrees-its-position/>.

**In the long run, the new rules might represent serious challenges for the currently booming Lithuania's transportation sector.** The Mobility Package could cause considerable difficulties for companies from the EU periphery states that have been expanding their market shares in the EU for quite some time. This is reflected by Lithuania's transportation sector indicators as well: exports are on the rise, the number of employed in the sector is increasing and expansion of vehicle fleets is under way. The implementation of the initiatives of the Mobility Package, such as limitations on transport operations and the so-called cooling off period could increase the number of empty runs for the carriers from the periphery countries.

**To retain a competitive edge, some companies could be forced to open branches in target locations.** This would allow them to save considerable resources and avoid their trucks having to return to the country of origin. In turn, however, such EU states as Lithuania would lose a chunk of their investments and potential jobs. What is more, funds, which could be used to further expansion, job creation and automation, would instead be diverted to countries in which the companies would carry out transport operations. If some drivers were to be employed in foreign countries, the amount collected in payroll taxes would decrease. This sector accounts for almost 10% of all employed and generates about 12% of added value annually (in 2017). In fact, some major logistics and transport companies already have been expanding their business into new markets closer to the main target countries (Germany, the Netherlands, France and Belgium). They have branches in Russia, Denmark or Poland. According the representatives of one of them, the branch in Poland was established due to more favourable financing conditions and shorter distance to Germany.

**Situation in the domestic market also acts as an incentive for improving the drivers' working conditions.** The application of payroll taxes to this sector's wages is rather specific. Even though the drivers' taxed monthly wage is only 1.3 of the minimum monthly wage, it is supplemented by similarly-sized daily allowance, which is exempted from social insurance taxes. These payment principles are flawed, since the larger share exempt from payroll taxes translates into smaller pension, as well as sickness and unemployment benefits. Thus, the unions' expressed concern over the share of wages paid as per diem allowance is valid. To this end, the Ministry of Social Security and Labour suggests an increase, i.e. indexing the drivers' taxed minimum monthly wage by the coefficient of 2 in relevance to the minimum monthly wage in the country.

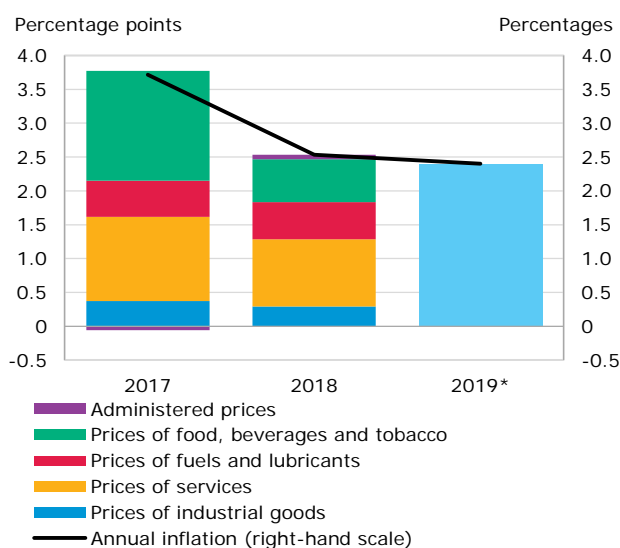
## VI. PRICES

**In 2018 the average annual inflation was lower, year on year, and stood at 2.5%.** A rather stable rise in the prices of services had the largest impact on price growth in Lithuania last year. Together with the prices of industrial goods, service prices account for around half of headline inflation for a few years now. No significant developments of these contributors to inflation are expected this year. At the same time developments of food, fuel and administered prices, the most fluctuating contributors to inflation, may affect the remaining part of average annual inflation differently to last year.

**This year, food price dynamics may not be as favourable to consumers as last year.** More moderate growth of food prices for consumers last year was supported by increased supply and stock of most global food commodities. However, prices of some food types, i.e. vegetables and grain products, rose at a faster pace than in the medium term. This was likely largely driven by adverse weather conditions last year. Food price growth was weakening last year, however, recently it has been gaining momentum. Admittedly, even though food prices in Lithuania were rising at a slower pace last year, surveys showed that it was still a source of considerable concern for the residents (for more details, see Box 5).

### Prices of services put upward pressure to inflation in Lithuania.

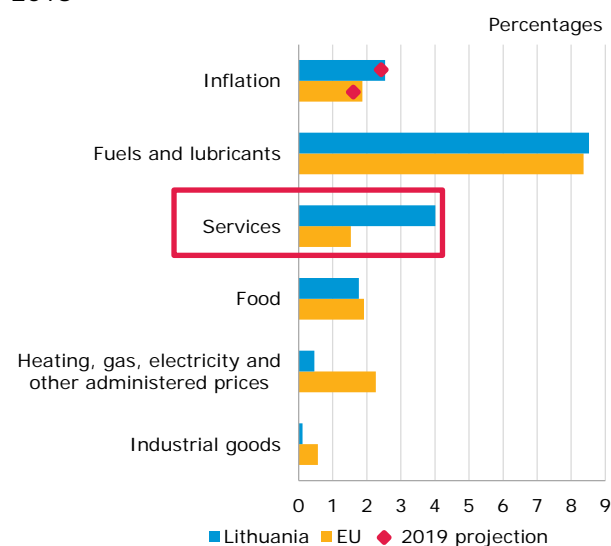
Chart 17. Contributions to HICP inflation



Sources: Eurostat and Bank of Lithuania calculations.  
\*Bank of Lithuania projection.

### Tension in the labour market is a key factor for higher inflation in Lithuania, compared to the EU.

Chart 18. Price changes in the EU and Lithuania in 2018



Sources: Eurostat, EC and Bank of Lithuania projection and calculations.

**This year, the impact of lower oil commodity prices for consumers is likely to be overshadowed by the rising prices of other energy products.** According to assessments of various international organisations, this year average oil prices in euro should be lower by a tenth compared to 2018, on the back of larger than previously expected oil supply from Iran and growing oil commodity production in the US. However, gas and electricity price increases will partly offset the projected weaker impact of oil prices on inflation (for more details, see Box 2).

**Rising prices of services are expected to remain the main driver of inflation.** With tension the labour market remaining high, labour costs are expected to grow rapidly; often this to some extent leads to price increases. This is also one of the main reasons contributing to robust growth of service prices. Then again, even though service prices are picking up, household income is rising more rapidly than services inflation and this, in turn, means that people can afford more services. It should be noted, however that average service price growth in Lithuania is outpacing that of the EU. For example, last year they rose 2.5 times more than in the EU on average. Strong growth of the services prices also mainly resulted in Lithuania's average annual inflation being higher than the EU's by 0.6 percentage point (see Chart 18). In 2019, the gap between

average annual inflation in Lithuania and the EU should remain similar since no significant changes in Lithuania's labour market and service prices developments are projected. According to the Bank of Lithuania's projection, this year inflation should remain similar to last year's and stand at 2.4%. For Lithuania, a country that has yet to catch up with more economically advanced Western European countries such growth pace is considered sustainable.

## BOX 5

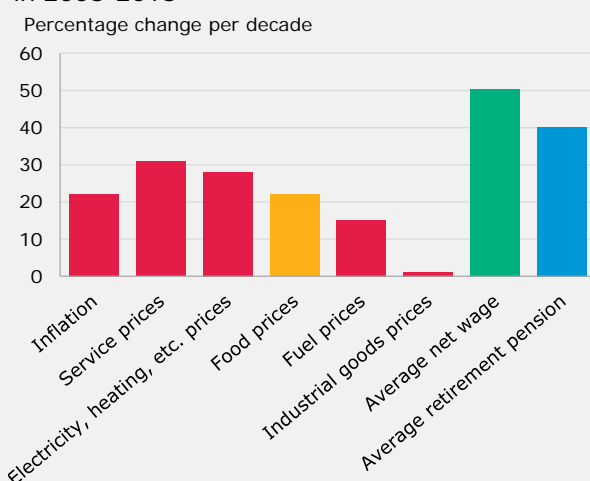
### ARE FOOD PRICES RISING FASTER THAN INCOME?

**Although more than a third of Lithuanians are concerned about rising food prices, official statistics indicate that household income is growing at a faster rate.** The Survey of Households conducted by the Bank of Lithuania in autumn 2018 reveals that rising food prices will pose the greatest concern to almost every third respondent in the upcoming six months. Surveys show that such worries have been lingering since 2013<sup>12</sup>, while household income growth has in fact significantly outpaced rising food prices. For instance, over the last decade, food prices have increased by about a fifth, whereas the average pension went up by roughly 40%, and the average net wage – by about 50% (see Chart A).

**Low-income earners are more sensitive to price fluctuations.** The impact of inflation depends not only on prices but on household income as well. According to the latest EC surveys, the absolute majority (94%) of residents believe that prices in Lithuania are on the rise, yet the impact of such increases seems to vary.<sup>13</sup> Low-income earners are more likely to indicate that prices are rising at a robust pace than those receiving higher income. The reason behind this is that lower-income earners spend a larger part of their income on basic necessities compared to residents earning the average wage or more. According to Eurostat data, a fifth of those earning the least have allocated nearly two-thirds of their expenditure on basic necessities (food and housing), compared to slightly more than a half of the total expenditure allocated by middle-income earners.

**In 2008-2018, rising prices were significantly outpaced by income growth.**

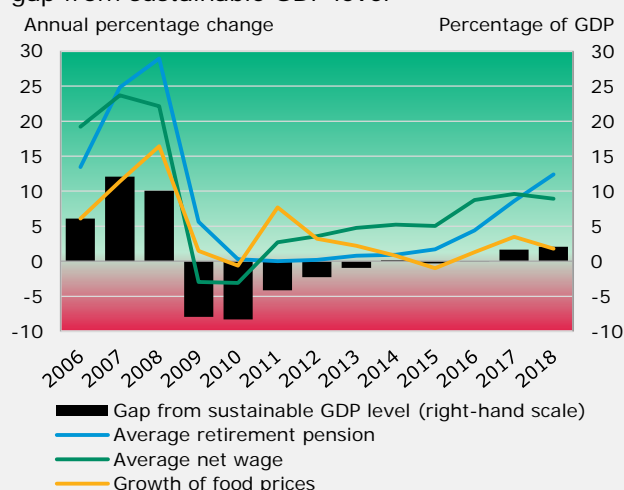
Chart A. Price and income dynamics in 2008-2018



Sources: Statistics Lithuania, Eurostat, atvira.sodra.lt and Bank of Lithuania calculations.

**With the economy growing above its potential, household income has been increasing at a faster rate.**

Chart B. Dynamics of income, food prices and the gap from sustainable GDP level



Sources: Statistics Lithuania, Eurostat and Bank of Lithuania calculations.

**Income growth, after having been subdued for some time due to the economic cycle, may be the reason behind pessimistic sentiment still embedded in public memory.** In 2006-2008, the average pension rose by more than one and a half times, as did wages. However, with the onset of the financial crisis, their growth rates dropped, while income growth remained restrained for more than five years. For example, in 2009-2015, the rise in the average pension moderated, while the average net wage was growing apace with average food prices. However, with the improved economic environment, household income started rising faster than prices. Over the past few years, both the average pension and the average net wage have been rising at a fourfold rate compared to food prices. Yet it should be noted that these calculations do not include catering services as well as goods and services related to beverages and tobacco.

<sup>12</sup> Survey results are available from 2013.

<sup>13</sup> According to the EC survey data.



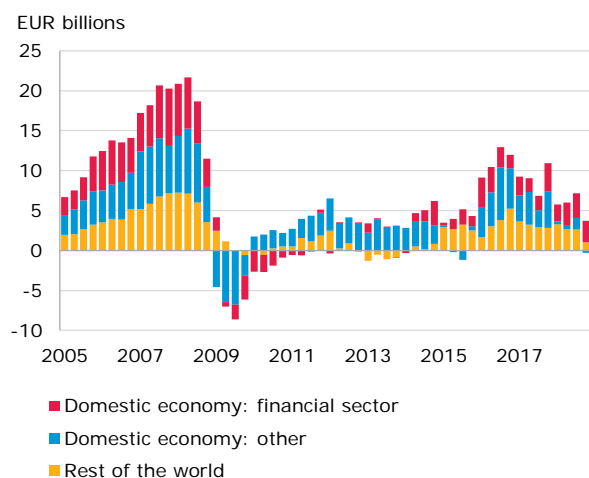
## VII. FINANCING OF THE ECONOMY

**The country's private non-financial sector's liabilities have continued to grow, however, the increase in debt is considered sustainable and there are no reasons for concern as of yet.** In 2018, total financial liabilities incurred by the Lithuanian economy picked up by 5.3% (their growth was outpaced by that of the nominal GDP, thus the overall level of indebtedness scaled down) however, their structure changed. A decade since the economic downturn and financing sources other than bank loans are now used more often (especially by non-financial corporations that tend to take out loans from abroad or each other). Even with some debtors (e.g. households) actively assuming financial liabilities, the overall level of indebtedness in Lithuania has dipped a little and is one of the lowest in the EU. The burden of debt repayment was reduced by growing income, larger profit and comparatively low interest rates (even though they inched up recently). The indicators of cyclical risks such as the gap between the credit-to-GDP ratio and its long-term trend, the loan-to-deposit ratio in banks and the house price to household income ratio does not exhibit signs of emerging risks. Furthermore, the short-term growth of nominal GDP is projected to outpace borrowing in the future, and if the projections were to differ from actual developments, the Bank of Lithuania is ready to implement macroprudential measures that reduce systemic risks.

**With household income and corporate investments increasing, and interest rates staying low, crediting in Lithuania has remained active even though its growth lost some of its momentum.** The portfolio of loans issued to private non-financial sector picked up by 6.0% in 2018 (6.2% in 2017). Slower growth of the loan portfolio was mainly driven by faster loan repayment by the largest banks' debtors (manufacturing and trading companies), however, this decrease was somewhat offset by a small rise in lending to holding companies. The portfolio of loans issued to non-financial corporations expanded by 3.2% in 2018, recording one of the slowest growth rates since the beginning of 2016. As opposed to lending to businesses, in the last few years, the portfolio of loans issued to households has been rapidly increasing (in 2018 – by 8.7%) mainly supported by active lending for house purchase. Interest rates on housing loans have remained relatively low, while household income continued to rise at a rapid pace, thus, housing affordability and access to loans improved. Improving household expectations regarding future prospects have also boosted the consumer loan segment: the consumer loan portfolio grew by 8.7% in 2018. It is likely that similar trends will prevail, were the country's economy to continue on an upward path.

**Foreign lending continues to be one of the main financing sources of the economy.**

Chart 19. Annual flows of the financial liabilities of Lithuania's economy

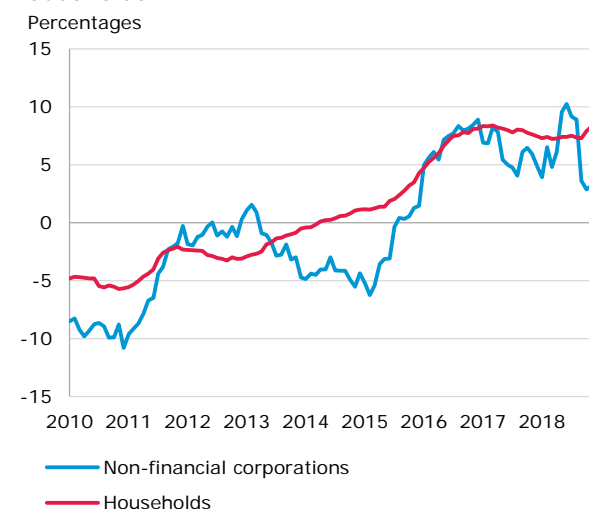


Source: Bank of Lithuania.

Note: rest of the world includes cash flows to and from abroad.

**The growth of the portfolio of loans to non-financial corporations has significantly weakened, while the one issued to households has increased.**

Chart 20. Annual growth rate of the portfolio of loans issued to non-financial corporations and households



Source: Bank of Lithuania.

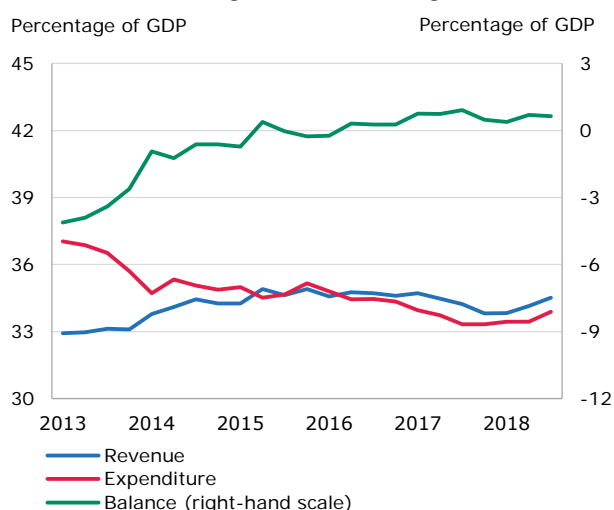
## VIII. GENERAL GOVERNMENT FINANCE

**Since 2016, the general government balance has been in surplus, mainly due to the favourable cyclical economic situation.** The recent fast-paced growth in the wage bill and household consumption contributed to an increase in revenue from related taxes (such as personal income tax) and social contributions, and, in turn, improved the balance. This improvement has also been driven by decreasing interest payments, even though overall expenditure growth was stronger than last year on the back of higher social benefits and rising public sector wages.

**Fiscal policy has a stimulating effect on the Lithuanian economy.** The fiscal policy stance is determined on the basis of the change in the cyclically adjusted primary balance rather than that in the nominal balance.<sup>14</sup> It is calculated by adjusting the nominal general government balance for the cyclical position of the economy and interest payments. This allows assessing what the balance would be when cyclical revenue and expenditure are excluded. Fiscal policy is expansionary (loosening) if the cyclically adjusted balance is deteriorating, contractionary (tightening) if the balance shows improvement, and neutral if its change is close to zero. Accordingly, the fiscal policy stance reflects the effect of fiscal policy on the real economy. Chart 22 shows that the cyclically adjusted primary balance in Lithuania has been deteriorating since 2017 (the change is negative); thus, expansionary fiscal policy has been implemented over that period. Fiscal loosening stems from discretionary decisions which include increasing non-taxable minimum, public sector wages, the minimum monthly wage, social benefits, etc.

**Since 2016, the general government balance has been in surplus.**

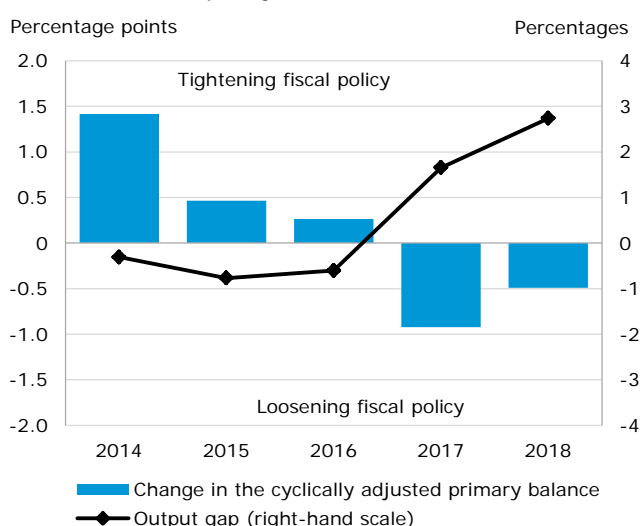
Chart 21. General government budget



Sources: Statistics Lithuania and Bank of Lithuania calculations.

**Lithuania has recently been pursuing accommodative fiscal policy.**

Chart 22. Fiscal policy stance



Sources: Statistics Lithuania and Bank of Lithuania calculations.

**Fiscal policy tends to be pro-cyclical.** The appropriateness of the fiscal policy stance in a given year, i.e. whether it helps to stabilise the economy, is assessed on the basis of the fiscal policy stance and the cyclical position of the economy, which can be defined by the sign of the output gap. Loosening fiscal policy in economic upturn, i.e. additional fiscal incentives when the economy is above potential (when the output gap is positive), is considered to be pro-cyclical fiscal policy. Given the economic cycle in Lithuania, instances of such a policy are currently observed. This means that, instead of putting aside all cyclical revenue, the general government assumes additional obligations to finance certain areas. Nevertheless, the appropriateness of fiscal policy also depends on other factors, such as the availability of fiscal space. One way of assessing it is debt sustainability and its level (debt-to-GDP ratio) which in Lithuania is rather low, compared with the rest of the EU.

<sup>14</sup> A structural or primary structural balance can also be used, in which case one-off factors are deducted from the cyclically adjusted balance (or primary balance).

## BOX 6

### ADEQUACY AND EFFECTIVENESS OF GENERAL GOVERNMENT EXPENDITURE ALLOCATION IN LITHUANIA

Tax revenue and total general government expenditure in Lithuania are among the lowest in the EU. According to the data of 2017, they amounted to 29.6% and 33.1% of GDP respectively<sup>15</sup>. However, the general government sector of Lithuania provides goods and services that are similar to those of other EU Member States, even though the revenue level and the revenue-generating mechanism, i.e. the tax system, differ. Thus, when comparing with other EU Member States, it is easier to understand what consequences Lithuania's general government revenue level (one of the lowest in the EU) has on government-funded areas, i.e. to assess whether expenditure on general public services is adequate and its use is effective. This box discusses two of the three main government-provided functions, namely social security and healthcare.

**In 2016, the ratio of Lithuania's general government expenditure to GDP was lower than the EU and euro area average by about 12 percentage points and around 6 percentage points lower than the EU-13 average (see Chart A).** A closer look at the areas of general government expenditure, showed that these differences are mostly attributed to significantly smaller share of Lithuania's expenditure on social security (approximately 8 percentage points smaller than in the EU and euro area and 2 percentage points – than the EU-13 average), general public services<sup>16</sup> (2 and 1 percentage points smaller respectively), general economic affairs<sup>17</sup> (1 and 2 percentage points smaller respectively) and healthcare (1 percentage point smaller and 1 percentage point larger respectively). It is also worth noting that the ratio to GDP of funds earmarked for education in Lithuania is approximately 0.3-0.6 percentage point higher than the average share of GDP allocated to it in the EU, the euro area and EU-13.

**The share of funds allocated to social security in Lithuania is lower than in other EU Member States, which is one of the root causes behind small old-age pensions (see Chart B).** The analysis of funds allocated to social security shows that old-age and survivors' pension expenditure in Lithuania is significantly lower than in other EU Member States. Fewer funds are also being allocated to children and family support and to reducing unemployment; however, these are smaller contributions to the gap. Furthermore, in 2016, funds for sickness and disability benefits in Lithuania were around 0.5 percentage point higher than the EU or euro area average and approximately 1.5 percentage points higher than in EU-13. The share of the total population who are pension beneficiaries is significantly higher than the EU average, which might suggest that the main reason behind small old-age pension replacement rate<sup>18</sup> is the gap between the large number of beneficiaries and a relatively low share of GDP allocated to pensions. In 2016, the replacement rate amounted to 33% of the average gross wage making it a quarter less than the EU average (45%). Based on the analysis of the ratio of replacement rate to GDP share allocated, there is

<sup>15</sup> EU average – 39.8% and 45.8% of GDP respectively.

<sup>16</sup> Under the Classification of the Functions of Government (COFOG), this area of expenditure includes expenditure on: administration, operation or support of executive and legislative organs (office of the chief executive at all levels of government); legislative bodies at all levels of government (parliaments, town councils, etc.); advisory, administrative and political staffs attached to these institutions and legislatures; financial and fiscal affairs and services at all levels of government (ministry of finance, the budget Office, the inland revenue agency and the customs authorities; the accounting and auditing services; production and dissemination of general information, technical documentation and statistics on financial and fiscal affairs and services). For more details, see [Classification of the Functions of Government](#).

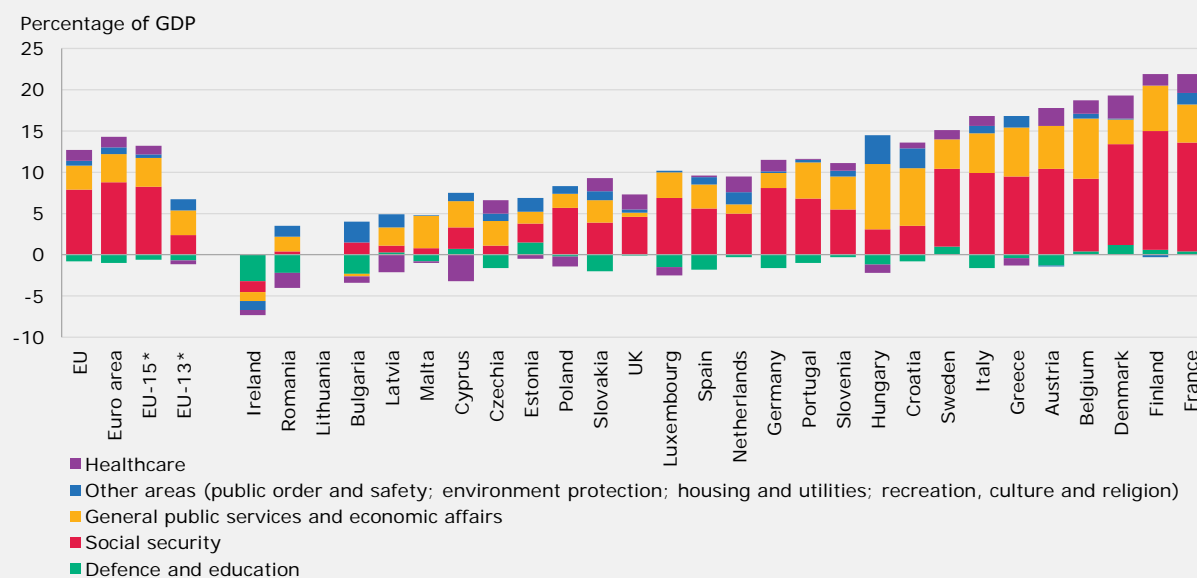
<sup>17</sup> Under the Classification of the Functions of Government, this area of expenditure includes expenditure on: administration, operation or support of activities relating to general and sectoral economic affairs, e.g. implementation of general economic and commercial policies (general regulation of monopolies and other restraints on trade and market entry; supervision of the banking industry, etc.), administration of general labour affairs and services (e.g. operation of labour exchanges), administration of agricultural affairs and services (e.g. conservation of arable land, expansion of reclamation, etc.), administration of forestry affairs and services (e.g. conservation and rationalised exploitation of forest reserves; supervision and regulation of forest operations and issuance of tree-felling licences; operation of reforestation work, pest and disease control, forest fire-fighting and fire prevention services and extension services to forest operators, etc.), administration of fishing and hunting affairs and services, administration of solid mineral fuel affairs and services, etc. For more details, see [Classification of the Functions of Government](#).

<sup>18</sup> The ratio of average pensions of persons aged 65-74 to average labour income of persons aged 50-59.

some evidence to suggest that the funds allocated to old-age pensions in Lithuania are used quite efficiently. In 2016, the replacement rate of pensions paid via state's pay-as-you-go system in Sweden, Denmark, Romania and Bulgaria was similar to Lithuania's; however, these countries allocated significantly more funds for pensions. Bulgaria particularly stands out in this regard, since it allocated 9.3% of GDP for pensions in 2016, yet the average pension amounted to only 36% of gross wage. On the other hand, in many Western European countries, a significant share of old-age pensions is made up by benefits paid by private pension accumulation funds which are not included in the data provided in the chart.

### Lithuania allocates relatively less funds than most other EU Member States to social security and healthcare, general public services and economic affairs.

Chart A. General government expenditure differences by areas in EU Member States and Lithuania in 2016



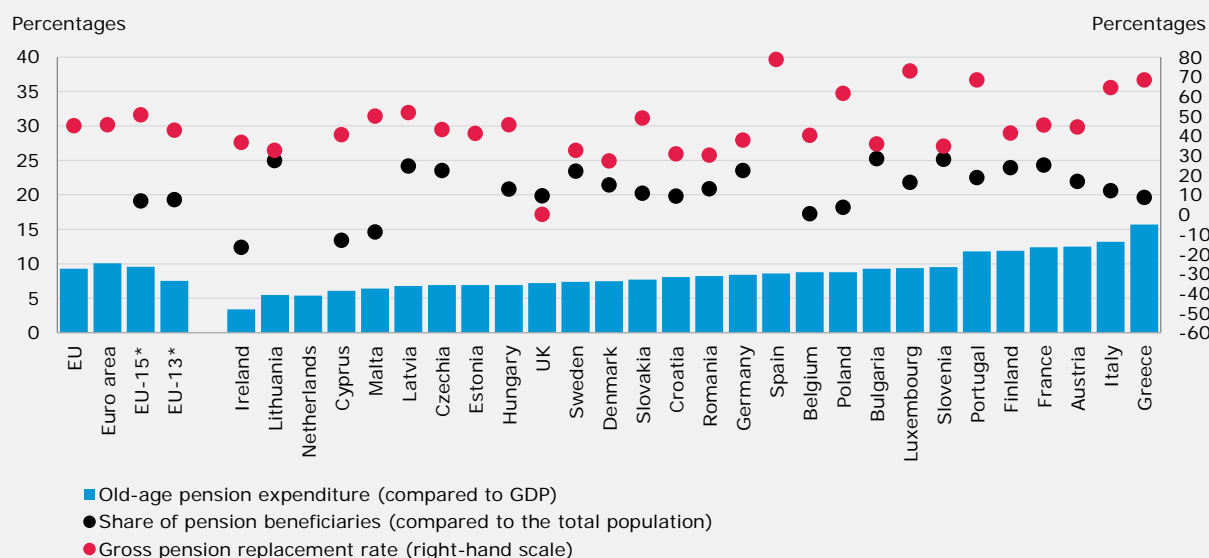
Sources: Eurostat and Bank of Lithuania calculations.

\*EU-15 – EU Member States that joined the EU before 2004 (also referred to as 'old' Member States)

EU-13 – EU Member States that joined the EU in 2004 or later (also referred to as 'new' Member States).

### A relatively low share of pay-as-you-go funding allocated to social security is one of the root causes behind small old-age pensions.

Chart B. Old-age pension expenditure and pension replacement rate and beneficiaries in EU countries in 2016



Sources: Eurostat and Bank of Lithuania calculations.

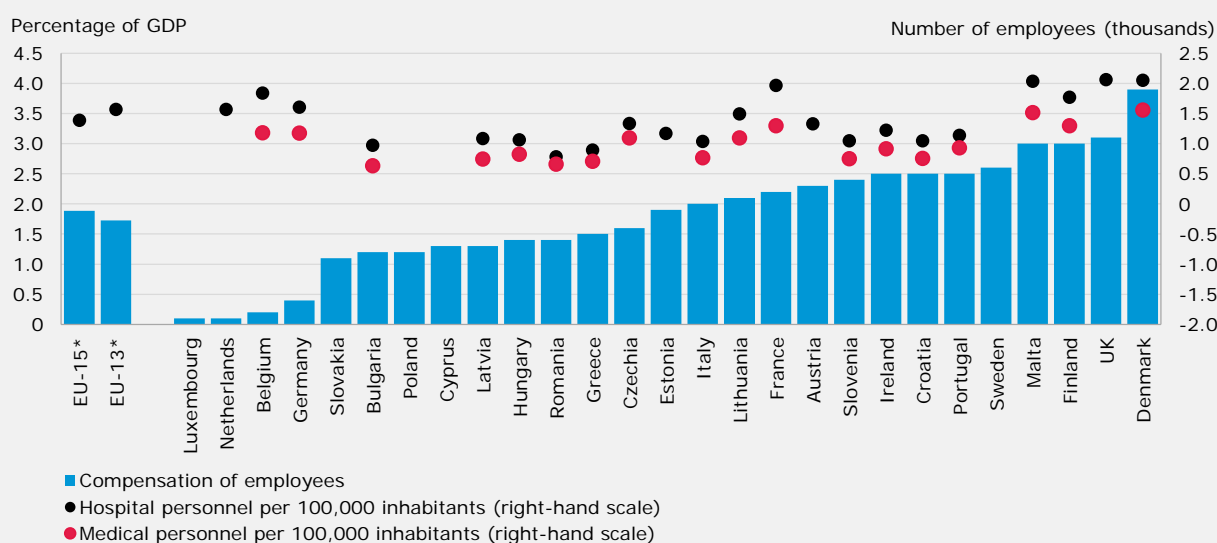
\*EU-15 – EU Member States that joined the EU before 2004 (also referred to as 'old' Member States)

EU-13 – EU Member States that joined the EU in 2004 or later (also referred to as 'new' member states).

**Lithuania's spending on wages of healthcare workers does not appear to be insufficient, therefore, the adequacy and effectiveness of other funds allocated to healthcare comes into question.** Analysis of funds allocated to healthcare in Lithuania shows that the average EU and euro area funding is higher for outpatient services, hospital services and medical products, appliances and equipment. Having analysed the appropriation of these three categories by type of expenditure it is evident that, on average, other EU Member States spend more on intermediate consumption goods and products for healthcare institutions as well as on social transfers in kind, i.e. full or partial compensation by state funds for services provided to individuals. It is important to note that in 2016, Lithuania's spending on wages of healthcare workers was slightly higher than, on average, in the old and the new EU member states (see chart C). Therefore, the relatively low average wage of Lithuanian medical personnel may be explained by a higher number of hospital and medical personnel per 100,000 inhabitants compared to the EU average.

**Lithuania is middling in terms of the share of GDP allocated to wages of healthcare workers, yet the relative number of medical personnel in the country is above the EU average.**

Chart C. Expenditure on wages and the total number of healthcare workers in the EU countries in 2016



Sources: Eurostat and Bank of Lithuania calculations.

\*EU-15 – EU Member States that joined the EU before 2004 (also referred to as 'old' member states);

EU-13 – EU Member States that joined the EU in 2004 or later (also referred to as 'new' member states).

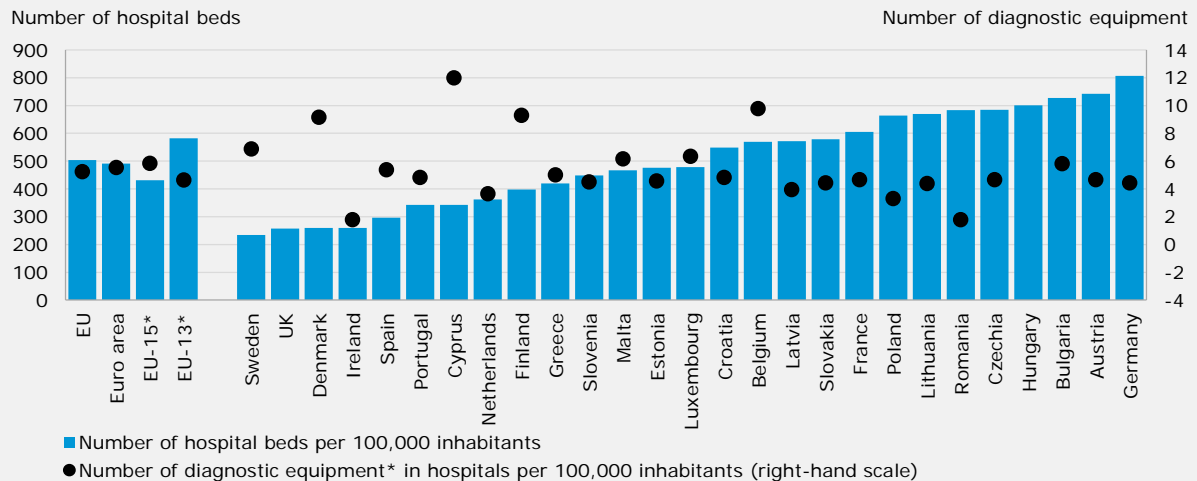
**Amongst other factors, the relatively poor health outcomes of Lithuanians and relatively high mortality rates throughout all age groups are likely heavily influenced by lower accessibility to diagnostic services; this could be improved by optimising the number of beds in hospitals.** As mentioned above, Lithuania allocates less funding for intermediate consumption goods and products for healthcare institutions, compared to the EU average. In all probability this could be directly linked to the number of diagnostic equipment available in Lithuanian hospitals, which is lower than the EU average and is quite far from the EU-15 average (see Chart D). Given higher economic development in the majority of the old EU Member States and their greater financial capacities to acquire diagnostic equipment, the lower availability of such equipment in Lithuania should come as no surprise. However, considering the number of hospital beds per 100,000 inhabitants, Lithuania has reserves to increase the effectiveness of healthcare funds' use (e.g. by increasing the number of diagnostic equipment). In 2016, the number of beds per 100,000 inhabitants in Lithuanian hospitals was one of the highest in the EU. Furthermore, Lithuanian hospitals are also facing other problems<sup>19</sup>, including the surplus of hospital beds for active treatment (particularly outside the country's largest cities), insufficient hospital bed occupancy (on an annual basis, 243 out of 1,000 Lithuanians are treated in hospitals, in Europe – 150 residents), excessive rates of

<sup>19</sup> [Lithuania's so-called hospital bed reform: some want to save money, others – ailing provincial hospitals](#). (17 August 2015).

unnecessary hospital treatment or hospitalisation for social reasons. Bearing in mind that the maintenance costs for a hospital bed approximate €20,000 per year, one can assume that bringing the number of beds in Lithuanian hospitals (and, in turn, the effectiveness level of the whole hospital network) closer to the EU average could step up funding for medical diagnostic equipment and improve the accessibility of diagnostic services to Lithuanian residents.

**In Lithuania, the number of hospital beds is much higher whereas the number of diagnostic equipment is lower than the EU average.**

Chart D. Number of hospital beds and diagnostic equipment in the EU countries in 2016



Sources: Eurostat and Bank of Lithuania calculations.

\* Computed tomography scanners, magnetic resonance imaging units, Gamma cameras, mammographs, PET scanners and radiation therapy equipment.

**In conclusion, it could be said that the consequences of one of the lowest in the EU Lithuania's general government revenue levels on government-funded social security and healthcare are quite grave.** A relatively large number of beneficiaries and a relatively low share of GDP allocated to pensions are the key reasons of changing the old-age pension replacement rate. There is quite a lot of room for improvement in more efficient usage of funds allotted to healthcare: if the Lithuanian hospital network and bed number reform was made in line with statistic EU standards, it would create real possibilities of increasing funding for medical diagnostic equipment and improving the accessibility of diagnostic services to Lithuanian residents.