

# OPINION ON THE ENDORSEMENT OF THE ECONOMIC DEVELOPMENT SCENARIO

19 September 2023 No BPE-5

Vilnius

## **WITH PRODUCTION AND CONSUMPTION ABROAD REMAINING WEAK, A MODERATE RECOVERY OF THE LITHUANIAN ECONOMY IS EXPECTED IN 2024**

The National Audit Office implementing the function of a fiscal institution (hereinafter – NAO FI) submits to the Seimas its opinion on the Economic Development Scenario (hereinafter – EDS) for 2023–2026 published by the Ministry of Finance (hereinafter – MoF) in September.

The NAO FI has been assessing the Economic Development Scenario since its inception in 2015. In order to make the process of assessing and endorsing the Economic Development Scenario more credible and transparent, the institution is starting to publish its macroeconomic forecasts. The Lithuanian economy, which had contracted for two consecutive quarters, started growing again in Q2 2023. This development has allowed to improve GDP growth forecasts for this year. In the background of geopolitical tensions and monetary tightening in the face of inflation, global economic developments remain uncertain and cloud expectations for Lithuania's economic growth in 2024. In the medium term, growth is expected to be supported by domestic consumption and investment.

- 1. Macroeconomic forecasts which the NAO FI starts publishing will further enhance transparency and credibility of the assessment of Economic Development Scenario**
- 2. Challenges in the world's major economies are dampening industrial activity in Germany, negatively affecting the prospects of its trading partners**
- 3. With production and consumption abroad remaining weak, Lithuania's economic recovery will be moderate in 2024**
- 4. Investment and a strong labour market will have a positive impact on Lithuania's real GDP development in 2023–2024**
- 5. According to the NAO FI, the Lithuanian economy will be below its potential level in the coming years, so a moderate stimulus is warranted**
- 6. The NAO FI and the Ministry of Finance have similar views on the economic outlook, thus the Economic Development Scenario is endorsed**

## 1. MACROECONOMIC FORECASTS WHICH THE NAO FI STARTS PUBLISHING WILL FURTHER ENHANCE TRANSPARENCY AND CREDIBILITY OF THE ASSESSMENT OF ECONOMIC DEVELOPMENT SCENARIO

**The National Audit Office implementing the function of a fiscal authority assesses and endorses the Economic Development Scenario published by the Ministry of Finance from 2015 onwards.** The NAO FI assesses and endorses the Economic Development Scenario in accordance with the Description of the Assessment and Endorsement Procedure<sup>1</sup>. The following indicators are approved: GDP at constant and current prices, household consumption expenditure at constant prices, changes in average monthly gross earnings and changes in the number of employed persons. In carrying out the assessment, the NAO FI compares the EDS projections with its own and other institutions' forecasts, analyses the macroeconomic environment, risk factors and assumptions in their totality, uses the endorsable range method and expert judgement, taking into account statistical and other data. This helps the NAO FI to better understand the main economic trends in the country and what forecasts could be endorsed.

**The NAO FI will not only continue to prepare macroeconomic forecasts, but starting 19 September 2023, it will also make them publicly available together with the opinion on the endorsement of the EDS (Annex 1).** The NAO FI publishes its opinion on the endorsement of the Economic Development Scenario twice a year, and during exceptional circumstances – at least once a quarter. One of the elements of the analysis of the NAO FI is the preparation of macroeconomic forecasts (Annex 2). In order to ensure that the NAO FI is able to carry out an independent analysis of EDS projections provided by the Ministry of Finance, the NAO FI prepares its forecasts before the MoF sends the draft scenario. **Estimates of the NAO FI and the MoF may differ. The Economic Development Scenario is endorsed if the differences between the projections of the indicators to be approved in the assessment of the NAO are not significant, or if the Ministry of Finance provides supporting information as to why their projections are plausible, or any other relevant information that was not available to the NAO FI when preparing its projections.**

**Reliable and accurate macroeconomic forecasts contribute to more prudent budgetary planning in order to adhere to fiscal discipline.** According to the Council of the European Union Directive<sup>2</sup>, budgetary planning should be based on the most likely or more prudent macroeconomic fiscal scenario. Optimistic macroeconomic forecasts lead to higher projected general government revenues, which creates room for higher expenditure planning. Consequently, higher-than-expected general government deficits lead to higher public debt. Studies by international organisations such as the European Commission<sup>3</sup> (EC), the International Monetary Fund<sup>4</sup> (IMF) and the Organisation for Economic Co-operation and Development<sup>5</sup> (OECD) show that macroeconomic forecasts produced or

<sup>1</sup> Description of the Procedure for Assessment and Endorsement of Economic Development Scenarios. Online access: [https://www.valstybeskontrolė.lt/TVS/Content/Biudzeto\\_stebesena/ERS\\_vertinimo\\_ir\\_tvirtinimo\\_aprasas.pdf](https://www.valstybeskontrolė.lt/TVS/Content/Biudzeto_stebesena/ERS_vertinimo_ir_tvirtinimo_aprasas.pdf).

<sup>2</sup> Directive 2011/85/EU of the Council of the European Union "On requirements for budgetary frameworks of the Member States" (OJ L 306, 23.11.2011, p. 45), Article 4(1).

<sup>3</sup> C. Axioglou, O. Grevesmüh, M. Hoogeland, European Commission, 2023. Reviewing the National Budgetary Frameworks: An Opportunity to Strengthen Independent Fiscal Institutions?.

<sup>4</sup> X. Debrun, T. Kinda, 2014. Strengthening Post-Crisis Fiscal Credibility: Fiscal Councils on the Rise - A New Dataset', IMF Working Paper, No 14/58.

<sup>5</sup> R. Hagemann, 2011. How Can Fiscal Councils Strengthen Fiscal Performance? OECD Journal: Economic Studies, Vol.2011/1. Online access: [https://www.oecd-ilibrary.org/economics/how-can-fiscal-councils-strengthen-fiscal-performance\\_eco\\_studies-2011-5kg2d3gx4d5c](https://www.oecd-ilibrary.org/economics/how-can-fiscal-councils-strengthen-fiscal-performance_eco_studies-2011-5kg2d3gx4d5c).

endorsed by fiscal institutions are less biased than those produced by government agencies. Following the observation that in many countries the deviation of balance sheets<sup>6</sup> from plans is explained by over-optimistic macroeconomic forecasts promoted by political authorities, the global financial crisis has led to calls for the establishment of an independent fiscal authority<sup>7</sup> in each EU Member State.

An independent fiscal institution is defined<sup>8</sup> as a public body that is independent of politics and whose mandate may include assessing fiscal rules and fiscal sustainability, monitoring the budget, making fiscal policy recommendations, and preparing or endorsing macroeconomic forecasts. Since 2015, the functions of an independent fiscal institution in Lithuania have been entrusted to the Budget Monitoring Department of the National Audit Office<sup>9</sup>.

In 2019, an OECD-led expert group conducted the first external review of the fiscal institution in the National Audit Office<sup>10</sup>. During reviews of independent fiscal institutions, OECD assesses their performance against the applicable OECD principles and makes recommendations to improve their efficiency. One of the recommendations made by the OECD is that the NAO FI should publish its macroeconomic forecasts to increase transparency and credibility.

## 2. CHALLENGES IN THE WORLD'S MAJOR ECONOMIES ARE DAMPENING GERMAN INDUSTRIAL ACTIVITY, NEGATIVELY AFFECTING THE PROSPECTS OF ITS TRADING PARTNERS

**Weakening business activity in the world's major economies is also affecting Lithuania's growth prospects.** In the US, inflation has been declining, while growth is supported by a strong labour market and household consumption expenditure. Savings accumulated during the pandemic are declining, slowing down private consumption, and threatening to dry up domestic demand. China's recovery from the restrictions imposed during the pandemic is losing momentum. It continues to be weighed down by sluggish domestic and external demand, declining output, and international trade, a weak real estate market and deepening demographic problems. Eurozone (EZ) growth is supported by a strong labour market, but industry-dependent countries are facing deepening difficulties and challenges from China's growth slowdown. This is particularly felt in Germany, which has the highest international trade with China in the region. From Q2 2023 onwards, all major economies in the world are experiencing a slowdown in the services sector, while the EZ, where the domestic demand is heavily influenced by the rising cost of living, is seeing a contraction in this sector (Figure 1). Together with the contraction of the EZ industry, this has a negative impact on Lithuania's international trade performance.

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<sup>6</sup> Economic Governance and EMU Scrutiny Unit, European Parliament, 2023. Strengths and weaknesses of independent advisory fiscal institutions in the EU economic governance framework.

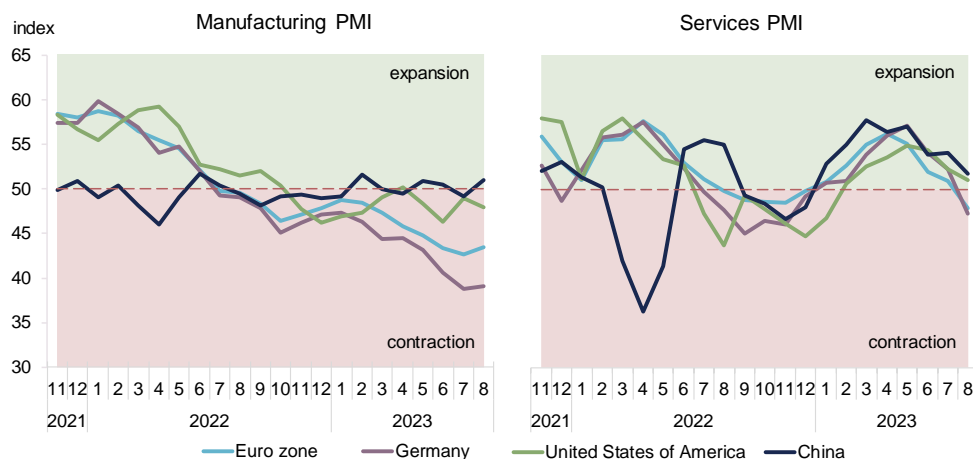
<sup>7</sup> Lithuania was not included in these studies.

<sup>8</sup> Independent fiscal institutions, European Commission. Online access [https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/fiscal-frameworks-eu-member-states/independent-fiscal-institutions\\_en](https://economy-finance.ec.europa.eu/economic-and-fiscal-governance/fiscal-frameworks-eu-member-states/independent-fiscal-institutions_en).

<sup>9</sup> Budget Policy Monitoring Department until July 2021.

<sup>10</sup> OECD External Review of the Independent Fiscal Institution of Lithuania, 2019. Online access: <https://www.oecd.org/lithuania/lithuania-independent-fiscal-institution-review-2019.htm>.

**Figure 1. Contraction of the industrial sector in the US and EZ persists, while industrial difficulties in the EZ moved over to the service sector in August**



PMI - Purchasing Managers' Index  
 Source: <https://www.pmi.spglobal.com>

**The Autumn 2023 EDS assumes that the global and EU economies will remain sluggish (Table 1).** The assumptions for global and EU economic growth have remained unchanged since June EDS. As domestic consumption in Lithuania's main trading partners stabilises, a recovery is expected from 2024 onwards. Although economic activity in the EZ is slowing down, dampening expectations of the European Central Bank (ECB) regarding further interest rate hikes, futures point to a slight appreciation of the euro against the US dollar (Annex 3), which would lead to cheaper imports of raw materials into the EU. Compared to June, the increase in the oil price in 2023–2026 is driven by the decision of oil producing countries to cut production.

**Table 1. Assumptions of the Ministry of Finance for the September 2023 Economic Development Scenario**

Indicator	2022	2023P	2024P	2025P	2026P
US dollar to euro exchange rate*	1.05	1.08 (1.09) ▼	1.09 (1.10) ▼	1.09 (1.10) ▼	1.09 (1.10) ▼
World (ex-EU) GDP growth, %**	3.2	3.1 (3.1)	3.3 (3.3)	3.3 (3.3)	3.3 (3.3)
European Union GDP growth, %**	3.4	1.0 (1.0)	1.7 (1.7)	1.7 (1.7)	1.7 (1.7)
Growth of Lithuania's main export markets, %	3.3	1.9 (1.8) ▲	2.4 (2.3) ▲	2.4 (2.3) ▲	2.4 (2.3) ▲
Oil prices ( <i>Brent</i> , in US dollars per barrel)	100.7	82.1 (76.3) ▲	82.0 (72.1) ▲	82.0 (72.1) ▲	82.0 (72.1) ▲

\* Technical assumption made public by the European Central Bank in June 2023.

\*\* Technical assumption made public by the EC on 15 May 2023.

Assumptions for the June EDS 2023 are presented in brackets.

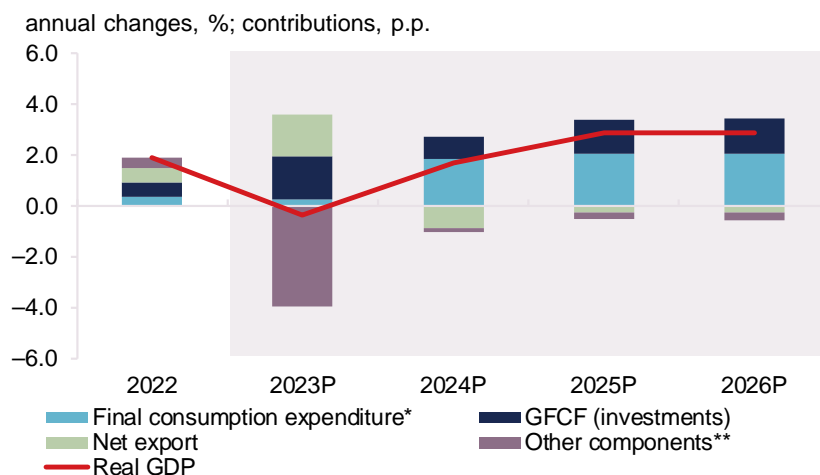
Source: Ministry of Finance

### 3. WITH PRODUCTION AND CONSUMPTION ABROAD REMAINING WEAK, LITHUANIA'S ECONOMIC RECOVERY WILL BE MODERATE IN 2024

**Favourable results in Q2 2023 substantiate a moderation of the projected economic contraction this year, with moderate real GDP growth projected for 2024.** After a significant contraction in Q1 2023, real GDP was 0.7% higher in Q2 2023 compared to a year before, boosted by rising investment and exports. This allows projecting a smaller GDP contraction for this year. However, challenges remain in Lithuania's industrial sector, especially in the wood, furniture, and chemical sectors, due to the contraction in foreign demand. According to the NAO FI's assessment, it would be very difficult to expect strong economic growth in the second half of 2023. Q3 of this year started with a faster<sup>11</sup> annual contraction in industrial production and retail trade turnover (Annex 4). Although industry expectations are slightly better in August compared to July, they remain markedly weaker than in 2022. Also, the expected poorer grain harvest this year<sup>12</sup> could have a negative impact on the value added generated by the agricultural sector in the second half of 2023. According to the NAO FI's assessment, demand in Lithuania's main trading partners is likely to remain sluggish in the first half of 2024, which would have a negative impact on Lithuania's industrial and export performance in that period. Accordingly, this leads to a more cautious assessment of Lithuania's economic recovery prospects in 2024.

The September EDS projects a contraction of 0.4% in real GDP in 2023 (Figure 2). The economy is expected to be positively affected by investment and household consumption expenditure, with negative changes in inventories. With imports falling more than exports, net exports are expected to have a positive impact on real GDP. Household consumption and investment are projected to support a moderate recovery in 2024 (1.7%). Assessments by the Ministry of Finance and the NAO FI (Annex 1) on the projected development of real GDP are similar.

**Figure 2. September EDS projects that, following the economic contraction in 2023, investment and household consumption will support a moderate recovery in real GDP in 2024.**



\* excluding NPI, \*\* NPI, changes in inventories, acquisitions less disposals/transfers

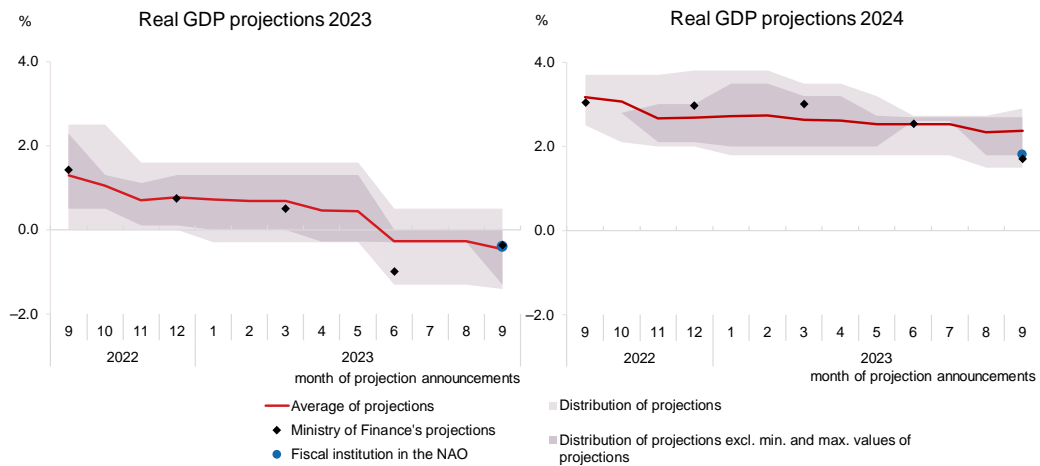
Source: State Data Agency, Ministry of Finance, calculations by the National Audit Office implementing the functions of a fiscal institution

<sup>11</sup> Turnover of industrial production (excluding refined petroleum products) was 4.9% lower than a year earlier in June 2023 and 9.0% lower in July. Retail trade (excluding fuels) fell by 2.2% and 3.5% respectively.

<sup>12</sup> Based on forecasts by the Institute of Economic and Rural Development of the Lithuanian Centre for Social Sciences 25/08/2023.

**Projections for real GDP in 2023 in September EDS 2023 are similar to the average of the projections of both the NAO FI and other institutions, while they remain more cautious for 2024 (Figure 3).** It should be noted that most institutions have updated their GDP projections for Lithuania by the end of July 2023 (Annex 5). Accordingly, their forecasts were prepared before the publication of highly favourable national accounts and labour market data for Q2 2023. The forecasts of these institutions differ notably compared to those of other institutions which updated their projections in August–September. They have moderated the projected economic recovery in 2024.

**Figure 3. Projections for real GDP by the MoF and NAO FI for September 2023 are close to the average of other institutions in 2023 and remain cautious in 2024**



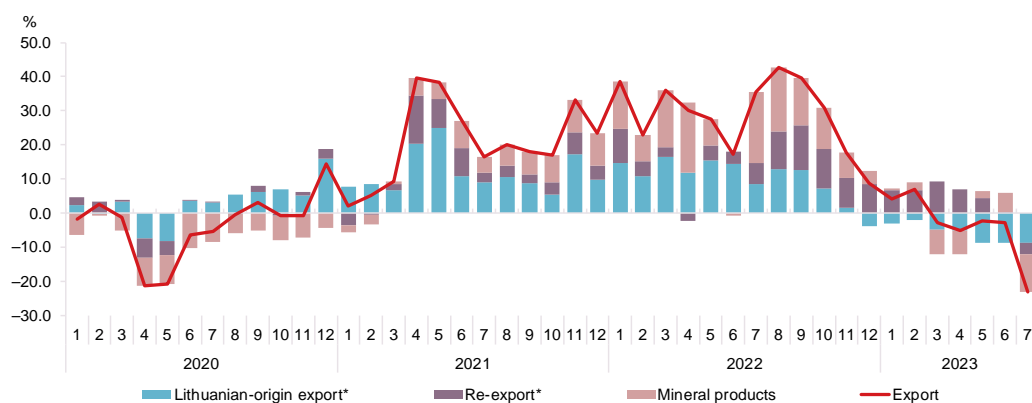
The distribution of projections includes projections from the following institutions: the European Commission, the International Monetary Fund, the Organisation for Economic Co-operation and Development, the Bank of Lithuania, Swedbank AB and SEB AB.

Source: calculations by the National Audit Office implementing the function of a fiscal institution

**In the face of forecasts of sluggish external demand, Lithuania's projections for real exports of goods and services were revised downwards in 2023 and are not expected to recover rapidly in 2024.** In Q2 2023, real exports were 0.9% higher than a year earlier. Excluding the impact of mineral products, the value of re-exports grew at a double-digit pace over the year, but the value of exports of goods of Lithuanian origin contracted (Figure 4). The fall in the value of goods exports was also driven by the accelerating decline in export prices. Rising interest rates, a decline in the purchasing power of the population in 2022, and a slowing recovery of the major world economies have a negative impact on the manufacturing and retail trade volumes of Lithuania's main export partners. According to the assessment of the NAO FI, weak external demand is likely to further reduce exports of goods of Lithuanian origin in the second half of 2023 and the first half of 2024. In addition, export volumes may be negatively affected by a worse grain harvest this year. Re-exports, which contributed to the annual decline in the value of goods exports in July 2023, are likely to be affected by the imposition of stricter control of the application of sanctions coming into force in Q3 2023<sup>13</sup>. According to the assessment of NAO FI, this will lead to a larger-than-expected contraction of Lithuania's real exports of goods and services in 2023 and a moderate recovery in 2024.

<sup>13</sup> Press release of the Customs Department under the Ministry of Finance of the Republic of Lithuania of 03 07 2023. Online access: [https://lrmuitine.lt/web/guest/naujienos/aktualijos/aktualija?p\\_p\\_id=EXT\\_WPLISTALLNEWS&p\\_p\\_lifecycle=0&EXT\\_WPLISTALLNEWS\\_obj\\_id=090004d2801b3f53](https://lrmuitine.lt/web/guest/naujienos/aktualijos/aktualija?p_p_id=EXT_WPLISTALLNEWS&p_p_lifecycle=0&EXT_WPLISTALLNEWS_obj_id=090004d2801b3f53).

**Figure 4. Annual contraction in the value of goods exports in Q2 2023 was driven by exports of goods of Lithuanian origin (excluding mineral products), which were affected by falling export prices**



\* excluding mineral products

Source: State Data Agency, calculations by the National Audit Office implementing the function of a fiscal institution

In Q2 2023, real imports of goods and services fell by 4.4% during the year. Imports of raw materials of industrial importance, such as iron and steel, organic chemicals and wood, fell in line with the high level of industrial inventories. The value of imports of mineral products also fell in line with dropping oil prices. According to the assessment of the NAO FI, real imports are likely to fall more than exports in 2023, given the sluggish development of industry and private consumption. Also, the recovery of imports in 2024 may be faster than expected in June. This would also be affected by the low comparative base. Opinions of the Ministry of Finance (Annex 6) and the NAO FI (Annex 1) on the projected development of Lithuania's real exports and imports are not significantly different.

#### 4. INVESTMENT AND A STRONG LABOUR MARKET WILL HAVE A POSITIVE IMPACT ON LITHUANIA'S REAL GDP DEVELOPMENT IN 2023–2024

**Given the strong development of gross fixed capital formation in the first half of 2023, the investment projection for 2023 was improved in the September EDS, but the growth of the indicator in 2024 was reduced.** In the first half of 2023, real gross fixed capital formation (investment) grew at a double-digit annual rate. Investment expenditure in construction, as well as in productivity-enhancing machinery and equipment, increased despite less favourable external demand, weak business expectations, low industrial capacity utilisation and the impact of monetary policy tightening due to inflation. In Q2 2023, data on tangible investment show a still positive trend not only in the private but also in the public sector. Taking this into account, together with the financial flows from both the 2014–2020 and 2021–2027 EU Multiannual Financial Framework as well as the *Recovery and Resilience Facility* (RRF), it is expected in the September EDS that gross fixed capital formation growth could reach 7.5% in 2023. Due to the possible subsequent impact of monetary policy, and a high comparative base effect, the September EDS expects a slowdown of investment growth in 2024 (Annex 6). Both the NAO FI and the MoF have similar views on the development of the indicator.

**In the face of rising energy prices, inflation is projected to continue to decline in the September EDS, but the decline will be slower than expected.** The projections for the Harmonised Index of Consumer Prices (HICP) have been revised upwards for the 2023–2025 period compared to the June EDS. HICP growth is expected to reach 9.0% in 2023 and slow down to 2.9% in 2024. This development is impacted by the assumption for an increase in the

oil price. With last year's price surge fading and the high comparative base effect in place, the annual change in the HICP is expected to decline further. According to the assessment of the NAO FI, services price inflation is not expected to decelerate sharply, and this component may therefore become the main driver of inflation. However, risks relating to energy and food products, which represent 43% of the consumer basket, persist. The projection for the GDP deflator has been revised downwards, following a decline in GDP deflator growth to 7.8% in Q2 2023 and dropping producer, export, import and agricultural produce prices. The GDP deflator growth is projected to follow the HICP and to also decline in the medium term. With no significant divergence between the price projections of the NAO FI and the MoF, the opinions of the NAO FI and the MoF regarding nominal GDP developments are similar.

**The labour market projections for 2023–2024 were increased in September EDS due to favourable data for Q2 2023.** The unemployment rate was 5.9% in Q2 2023, while the number of employed persons increased by around 0.6% compared to Q2 2022. In view of this, the projections for both the unemployment rate and the employed population in 2023 have been improved compared to the June EDS (Annex 6), and opinions of the MoF and the NAO FI were similar. According to the assessment of the NAO FI, the unemployment rate in 2023 is likely to remain close to the level of the first half of 2023, while the number of employed persons is likely to remain similar to the level in 2022. However, risks remain given the challenges faced by the country's industrial sector in terms of the sale of its products in foreign markets.

In the first half of 2023, a strong growth (of 12.8%) in average gross monthly earnings<sup>14</sup> has led to an upward revision of average gross monthly earnings projections for 2023–2024 compared to June EDS. According to the assessment of the NAO FI, they could be even higher, as the labour market situation remains tight<sup>15</sup>, and the growth of average gross monthly earnings in the second half of 2023 could be similar to the first half of the year. In 2024, the average gross monthly earnings could grow faster compared to EDS due to the pursuit of wage competitiveness in the public sector, with a 10% increase in the minimum monthly wage (MMW)<sup>16</sup>, moderate economic growth and a declining unemployment rate. However, taking into account the risks due to possible difficulties in some economic activities in the second half of 2023 and the uncertainty regarding decisions on public sector earnings increases, the NAO FI endorses the projections of September EDS for average gross monthly earnings and considers them to be conservative. It is worth noting that there is a positive risk that the growth in average gross monthly earnings over the 2024–2026 period will be higher than indicated in the September EDS, if decisions are taken on the increase of salaries for public sector employees.

**With a slowdown in price growth and rising personal incomes, the September EDS projects moderate private consumption growth in 2023 and its recovery in 2024.** In the first half of 2023, real household consumption expenditure fell. However, the development of the indicator in the second half of the year will be positively affected by the recovery in the purchasing power of the population. The NAO FI believes that when projecting above-inflation wage growth, a favourable labour market situation will have a positive impact on private consumption. The change in household consumption expenditure in the second half of 2023 will also be boosted by the low base effect. Population expectations are at a

<sup>14</sup> In the national economy, excluding individual enterprises.

<sup>15</sup> According to the State Data Agency, the number of job vacancies in Q2 2023 is the highest since 2008, at 28 082.

<sup>16</sup> Resolution No 516 of the Government of 28 June 2023. Online access: <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/5c671151173811eea9b3de7dd350a34e>.

historically high level: the consumer confidence indicator remains close to its multi-year average and households are more confident about their future financial situation than a year ago. According to the NAO FI, all this, together with the savings accumulated by the population during the pandemic period, will support domestic consumption growth in 2023. In line with the continuing positive trends in the labour market and the population's rising purchasing power, the September EDS forecasts that households' consumption expenditure on goods and services could grow by 3.1% in 2024 and by 3.4% per year in the following medium-term years. It should be noted that both the Ministry of Finance and the NAO FI have similar opinion on the development of this indicator. However, there is a risk that the recovery of private consumption would be negatively affected by the increase in savings and the deterioration of the labour market.

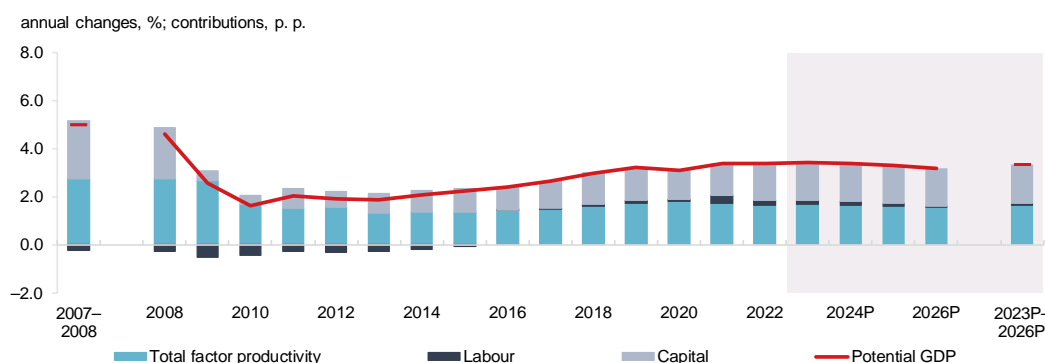
**The main risk factors for economic development remain the tense geopolitical situation, tightening of monetary policy and uncertainty about slowing global growth.**

Developments in the Russian war in Ukraine may continue to affect global energy and food commodity markets, which have an impact on consumer prices and industry. Increasing climate change is also contributing to instability in global food supply chains. The global and Lithuanian economies may also be affected by monetary tightening. The slowdown in inflation is reducing the likelihood of further interest rate hikes, but with the spike in inflation, household savings accumulated during the COVID-19 pandemic have declined. It is possible that the effects of interest rate hikes will be more pronounced in future economic indicators. Higher debt servicing costs may also affect the ability of the general government to sustain economic activity, in particular in the context of the return of fiscal discipline rules, which may lead to fiscal consolidation in the EU. As the global economy faces difficulties and external demand slows down, Lithuania's export recovery could be more sluggish. Nevertheless, the positive developments observed not only in general government investment but also in private sector investment are expected to contribute not only to higher economic activity but also to increasing the economy's potential and resilience to future shocks.

## 5. ACCORDING TO THE NAO FI, THE LITHUANIAN ECONOMY WILL BE BELOW ITS POTENTIAL LEVEL IN THE COMING YEARS, SO A MODERATE STIMULUS IS WARRANTED

The National Audit Office implementing the function of a fiscal institution projects that potential GDP<sup>17</sup> is expected to increase by an average of about 3.3% annually between 2023 and 2026 (Figure 5). Distinguishing the drivers of change, total factor productivity contributes around 1.6% p.p. to potential GDP growth. The contribution of capital, which is closely linked to the overall development of investment, is also 1.6% p.p. The impact of the labour factor is positive, at 0.1% p.p, which is driven by an increase in the labour force, due to favourable migratory trends in recent years which have led to better population projections. According to the NAO FI's assessment, the output gap is likely to be negative at -2.5% in 2023 of potential GDP and in 2024 it will be -4.1% of potential GDP (Annex 1). Given the outlook for slowing economic growth and the negative size of the output gap, a moderate fiscal stimulus is possible. The updated heatmap for Lithuanian economy shows a further cooling in Q3 2023, in line with the multi-annual average (Annex 7). The Ministry of Finance projects real GDP growth at 2.9% in 2026. The projected long-term economic development of the country is in line with the assumptions of a slow convergence towards the EU-15 average and therefore the projection for real GDP growth in 2026 is endorsed.

**Figure 5. Total factor productivity and the capital factor will be the main drivers of Lithuania's potential GDP growth in 2023–2026**



Source: Eurostat, calculations by the National Audit Office implementing the function of a fiscal institution

<sup>17</sup> The latest EDS projections of the Ministry of Finance are used to estimate potential GDP. It should be noted that due to differences in the estimation assumptions, the estimates of the potential GDP-output gap may differ between the NAO FI and the MoF. The evaluation methods used by the NAO FI are set out in more detail in the Description for the Assessment and Validation of the Economic Development Scenario. Online access: [https://www.valstybeskontrolė.lt/TVS/Content/Biudzeto\\_stebesena/ERS\\_vertinimo\\_ir\\_tvirtinimo\\_aprasas.pdf](https://www.valstybeskontrolė.lt/TVS/Content/Biudzeto_stebesena/ERS_vertinimo_ir_tvirtinimo_aprasas.pdf).

## 6. THE NAO FI AND THE MINISTRY OF FINANCE HAVE SIMILAR VIEWS ON THE ECONOMIC OUTLOOK, THUS THE ECONOMIC DEVELOPMENT SCENARIO IS ENDORSED

The NAO FI endorses the Economic Development Scenario for 2023–2026 published by the Ministry of Finance on 11 September 2023. It is consistent with the assumptions identified, is based on relevant statistical data, and the projections presented do not contradict the expert assessment of the National Audit Office implementing the function of a fiscal institution.

The Ministry of Finance submitted a draft EDS to the NAO FI for initial coordination on 25 August 2023. Its projections for real GDP development did not differ significantly from the projections of the NAO FI. During the meeting of 4 September 2023, the Ministry of Finance answered questions on the assumptions used, discussed the EDS indicators, and responded to comments made by the NAO FI. Taking into account the statements made during discussions, risks and the latest statistical data, a decision was made to adjust the projections for real GDP components (i.e., exports, imports, gross fixed capital formation), the GDP and gross fixed capital formation deflators and the wage projections in the draft EDS. Details of the EDS coordination and endorsement process are presented in Table 2.

**Table 2. EDS coordination and endorsement process**

24 August	NAO FI prepared its macroeconomic projections for 2023–2026.
<b>25 August</b>	<b>The MoF submitted a draft EDS to the NAO FI for initial coordination.</b>
29 August	A meeting between the LB and the NAO FI was held to discuss Lithuania's economic development.
29 August	A meeting between the Innovation Agency and the NAO FI was held to discuss export trends.
31 August	The Government Data Agency published its second estimate of GDP for Q2 2023. In light of the new statistical data published, the NAO FI has updated the macroeconomic projections related to the GDP components.
31 August	The NAO FI submitted comments to the MoF on the draft EDS, also providing its prepared macroeconomic forecasts for <b>2023–2026</b> .
<b>4 September</b>	<b>A meeting of the MoF and the NAO FI was held to answer questions from the NAO FI and discuss the scenario.</b>
5 September	The MoF sent a revised draft EDS which the NAO FI had no further comments on.
11 September	The MoF published September EDS 2023–2026 on its website.
19 September	The NAO FI published on its website the opinion on the endorsement of September EDS of 2023–2026. The NAO FI macroeconomic forecasts were published at the same time.

Source: The National Audit Office implementing the function of a fiscal institution

*The National Audit Office of the Republic of Lithuania, implementing the functions of the budget policy monitoring institution set out in the Constitutional Law on the Implementation of the Fiscal Treaty of the Republic of Lithuania has carried out an assessment and issued an opinion on the Economic Development Scenario for 2023–2026 prepared by the Ministry of Finance of the Republic of Lithuania and published on 11 September 2023. Pursuant to Article 7(3) of the Constitutional Law on the Implementation of the Fiscal Treaty of the Republic of Lithuania and Article 8(7)(3) of the Law on the National Audit Office, the National Audit Office submits its opinion to the Seimas of the Republic of Lithuania.*

# ANNEXES

Opinion  
 “On the Endorsement of the Economic  
 Development Scenario”  
 Annex 1

## MACROECONOMIC FORECASTS OF THE FISCAL INSTITUTION FOR 2023–2026

Indicator, %	2022	2023P	2024P	2025P	2026P
<b>Key macroeconomic indicators, rate of change</b>					
GDP at constant prices	1.9	-0.4	1.8	3.0	3.3
Household consumption expenditure	0.5	0.4	3.4	3.2	3.2
General government consumption expenditure	0.5	0.3	0.2	0.1	0.1
Gross fixed capital formation	2.6	7.7	3.0	5.5	5.5
Exports of goods and services	11.9	-2.8	3.4	5.2	5.1
Imports of goods and services	12.3	-3.7	4.5	5.4	5.1
GDP at current prices	18.9	8.2	4.9	5.7	6.0
<b>Price indicators, rate of change</b>					
GDP deflator	16.7	8.6	3.0	2.6	2.6
Harmonised Index of Consumer Prices (annual average)	18.9	9.3	2.8	2.3	2.3
<b>Labour market indicators</b>					
Change in average gross monthly earnings	13.3	12.6	8.5	7.2	6.4
Unemployment rate (according to the Labour Force Survey methodology)	5.9	6.8	6.7	6.5	6.3
Change in the number of employed persons (according to the Labour Force Survey methodology)	3.8	0.0	0.0	0.0	-0.2
<b>Changes in potential GDP and the output gap</b>					
Potential GDP	3.4	3.4	3.4	3.3	3.2
Output gap (% of potential GDP)	1.3	-2.5	-4.1	-4.6	-4.9

According to the Description of EDS Evaluation and Endorsement, the indicators based on which the NAO FI decides on the EDS endorsement are presented in the purple background.

The projections are based on information and data published until 31 August 2023.

Source: State Data Agency, calculations by the National Audit Office implementing the function of a fiscal institution

## **GUIDELINES FOR MEDIUM-TERM MACROECONOMIC INDICATOR FORECASTS OF NAO FI**

In March 2019, the econometric model previously used for the preparation of the internal macroeconomic forecasts of the NAO FI was replaced by the Lithuanian macroeconomic model. The model is defined as a system of econometric models of individual indicators, which allows the linking of key macroeconomic elements. The model is designed to forecast the main macroeconomic indicators: GDP and its components using the expenditure approach, price and labour market indicators. The macroeconomic model of the NAO FI Lithuania allows for forecasting economic developments over a 4-year period, and the forecasts of indicators are the basis for assessing the validity of the EDS prepared by the Ministry of Finance and its revisions. It should be noted that the process of endorsing EDS also includes a general expert assessment of the macroeconomic environment, risk factors and assumptions, as well as a comparison of EDS projections with those of other institutions.

### **Forecast indicators and assumptions used**

The forecasted statistical indicators are: GDP and its components in application of the expenditure method at current and constant prices and their deflators; inflation according to the Harmonised Index of Consumer Prices; labour market indicators (unemployment rate and the number of employed persons according to the Labour Force Survey, average monthly gross earnings).

The assumptions used to prepare the projections of the NAO FI are: the growth of Lithuania's main export markets (based on the International Monetary Fund, the European Commission), *Brent* crude oil price, and the exchange rate between the US dollar and the euro (the European Commission and futures <http://www.barchart.com>).

### **Methods used**

Regressors for the models are selected using correlation analysis, economic meaningfulness, analysis of publications from international institutions and scientific literature.

The indicator models are based on correlation-regression analysis, time series models (ARIMAX, VARX, etc.) and expert judgement.

The validity of the models is assessed using error analysis, other measures of the quality of mathematical models and graphical analysis.

The chain-linking method is used to estimate GDP and its components at constant prices.

Data analysis and modelling is carried out using R, Eviews, MS Excel and MS Power BI.

### **Statistical data**

The models use data published by the main Lithuanian and international institutions: the State Data Agency, the Bank of Lithuania, *Sodra*, the Employment Service, Eurostat, the European Commission, the International Monetary Fund, the European Central Bank, the Organisation for Economic Co-operation and Development, etc.

The individual models use monthly and quarterly data before and after removing the effects of season and number of working days.

### **Publicising forecasts**

The forecasts are published together with the opinion on EDS endorsement.

**INTERNATIONAL INSTITUTIONS ASSUMPTIONS COMPARISON AND FUTURES CONTRACTS**

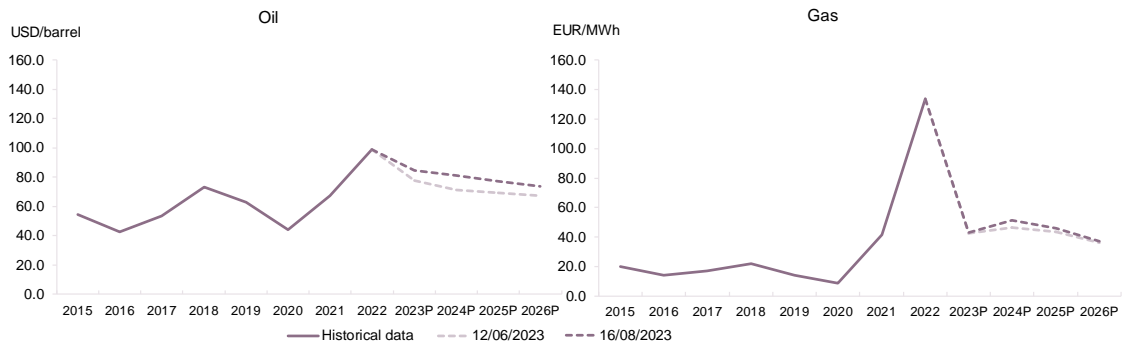
**Table 1. Comparison of projections of international institutions for the crude oil price and the USD/EUR exchange rate**

Period	EC (15/05/2023)		OECD (07/06/2023)		ECB (15/06/2023)		World Bank (06/06/2023)		Futures contracts (16/08/2023)	
	Oil price	USD/EUR	Oil price	USD/EUR	Oil price	USD/EUR	Oil price	USD/EUR	Oil price	USD/EUR
2022	100.7	1.08	100.7	1.08	103.7	1.05	100.8	--	100.7	1.03
2023P	76.3	1.10	75.0	1.04	78.0	1.08	80.0	-	83.9	1.09
2024P	72.1	1.10	75.0	1.04	72.6	1.09	82.0	-	81.4	1.11
2025P	72.1	1.10	75.0	1.04	70.4	1.09	84.4	-	77.8	1.12
2026P	72.1	1.10	75.0	1.04	70.4	1.09	84.4	-	74.7	1.14

The date of publication of the data is indicated in the brackets.

Source: European Commission, Organisation for Economic Co-operation and Development, European Central Bank, World Bank, <https://www.barchart.com>

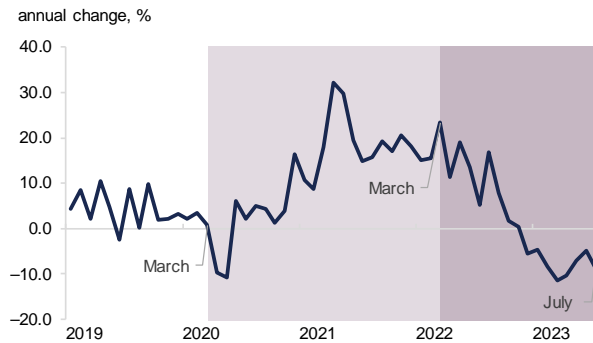
**Figure 1. In August 2023, Brent oil and gas TTF futures show higher prices than expected in early summer**



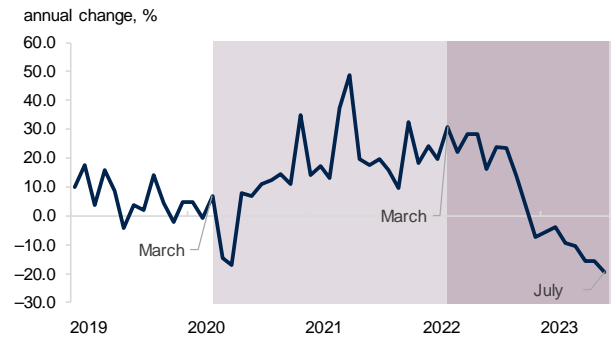
Source: <https://www.barchart.com>

## CHANGES IN THE LITHUANIAN ECONOMY DURING THE PERIOD OF EXCEPTIONAL CIRCUMSTANCES

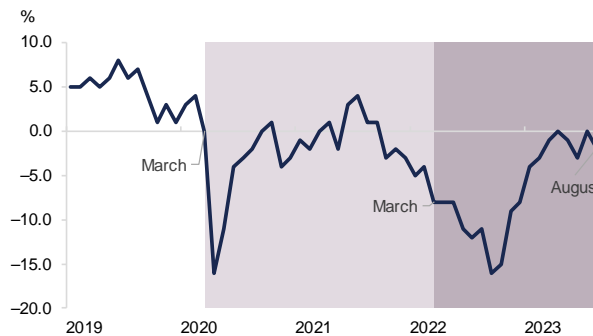
① Contraction in the industrial sector in July<sup>1</sup> was mainly due to a drop in the production of chemicals, wood and furniture.



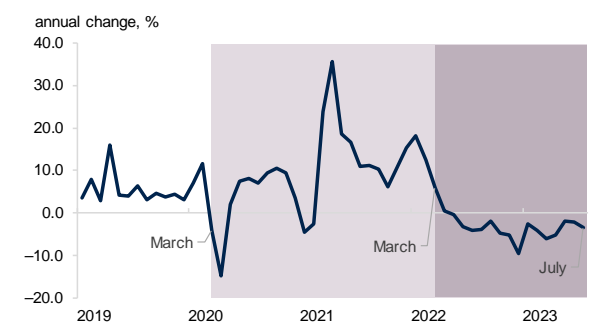
② The value of exports of goods of Lithuanian origin<sup>2</sup> continues to decline in July as manufacturing production volumes and export prices fall.



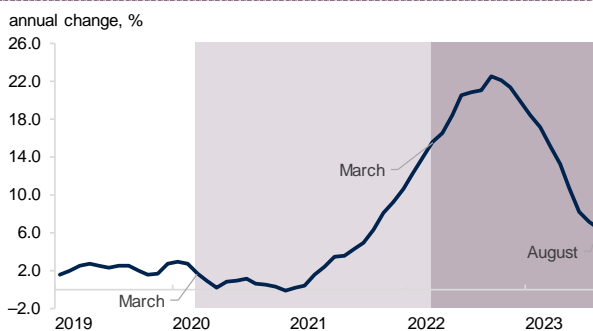
③ Consumer expectations remain cautious in August.



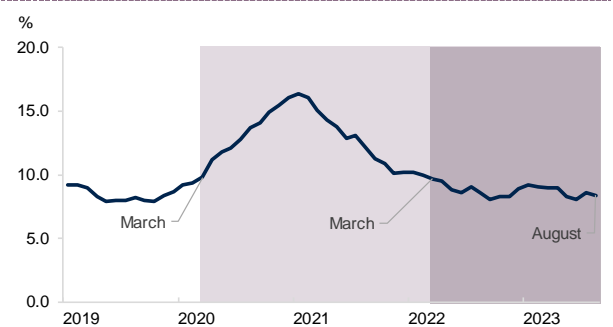
④ Contraction in food sales led to a 3.5% annual decline in retail turnover<sup>3</sup> in July.



⑤ Annual inflation continued to decline in August, reaching 6.4%.



⑥ Registered unemployment in August is in line with the average level for 2019.



<sup>1</sup> Except refined petroleum products.

<sup>2</sup> Except mineral products.

<sup>3</sup> Except for the sale of automotive fuels.

The purple background indicates a period of exceptional circumstances. The ongoing Russian war in Ukraine is highlighted separately in a darker colour.

Source: State Data Agency, Employment Service, calculations by the National Audit Office implementing the function of a fiscal institution

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## PROJECTIONS OF REAL GDP BY OTHER INSTITUTIONS

Institution	Date of publication	2023P	2024P
European Commission	15/05/2023	0.5	2.7
OECD	07/06/2023	0.0	2.6
Bank of Lithuania	19/06/2023	-1.3	2.7
AB Swedbank	23/08/2023	-0.3	1.5
AB SEB	29/08/2023	-0.2	1.8
IMF	18/07/2023*	-1.4	2.9
Average of institutions		-0.5	2.4
Ministry of Finance	11/09/2023	-0.4	1.7
NAO FI	19/09/2023	-0.4	1.8

\* After the discussions of IMF experts with NAO FI, other state institutions of the Republic of Lithuania and representatives of the private sector in Lithuania on 31 May - 13 June 2023, the IMF prepared a report on Lithuania's economic development, policies and prospects on 18 July 2023. The report was approved by the IMF Board on 28 August 2023 and published on 5 September 2023.

Source: Institutional projections: European Commission, the International Monetary Fund, the Organisation for Economic Co-operation and Development, the Bank of Lithuania, Swedbank AB, SEB AB, calculations by the National Audit Office implementing the function of a fiscal institution

## PROJECTIONS FOR THE ECONOMIC DEVELOPMENT SCENARIO OF SEPTEMBER 2023 BY THE MINISTRY OF FINANCE

Indicator, %	2022	2023P	2024P	2025P	2026P
<b>Key macroeconomic indicators, rate of change</b>					
GDP at constant prices	1.9	-0.4 (-1.0) ▲	1.7 (2.5) ▼	2.9 (3.0) ▼	2.9 (3.0) ▼
Household consumption expenditure	0.5	0.3 (0.0) ▲	3.1 (3.4) ▼	3.4 (3.4)	3.4 (3.4)
General government consumption expenditure	0.5	0.5 (0.5)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Gross fixed capital formation	2.6	7.5 (6.3) ▲	3.5 (4.5) ▼	5.4 (5.4)	5.4 (5.4)
Exports of goods and services	11.9	-4.5 (-0.7) ▼	4.5 (4.5)	4.5 (4.9) ▼	4.5 (4.9) ▼
Imports of goods and services	12.3	-6.6 (-2.0) ▼	6.0 (5.1) ▲	5.1 (5.2) ▼	5.1 (5.2) ▼
GDP at current prices	18.9	8.6 (8.3) ▲	4.7 (5.2) ▼	5.4 (5.3) ▲	5.3 (5.3)
<b>Price indicators, rate of change</b>					
GDP deflator	16.7	9.0 (9.4) ▼	2.9 (2.6) ▲	2.4 (2.3) ▲	2.3 (2.3)
Harmonised Index of Consumer Prices (annual average)	18.9	9.0 (8.9) ▲	2.9 (2.6) ▲	2.4 (2.3) ▲	2.3 (2.3)
<b>Labour market indicators</b>					
Change in gross average monthly earnings	13.3	12.1 (10.4) ▲	6.5 (6.3) ▲	5.0 (5.0)	5.0 (5.0)
Unemployment rate (according to the Labour Force Survey methodology)	5.9	6.9 (7.3) ▼	6.6 (6.9) ▼	6.4 (6.5) ▼	6.3 (6.3)
Change in the number of employed persons (according to the Labour Force Survey methodology)	3.8	0.0 (-0.8) ▼	0.3 (0.1) ▲	-0.1 (0.1) ▼	-0.2 (-0.2)

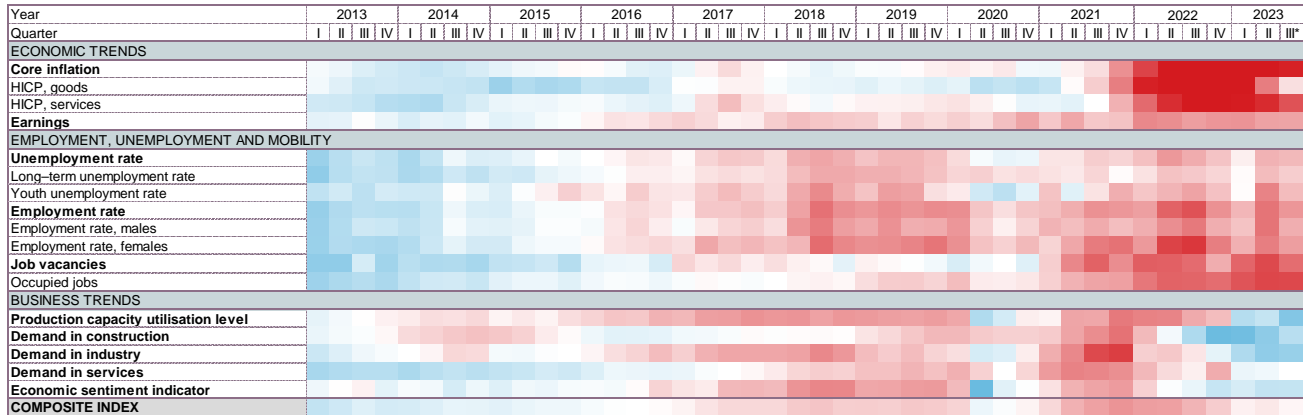
The projections of the Economic Development Scenario of June 2023 are presented in brackets.

According to the Description of EDS Evaluation and Endorsement, the indicators based on which the NAO FI decides on the EDS endorsement are presented in the purple background.

Source: Ministry of Finance

## THE HEATMAP OF LITHUANIAN ECONOMY

The monitoring of macroeconomic imbalances<sup>18</sup> shows that the persistent deterioration in the industrial situation continues to keep the temperature of the Lithuanian economy cool, in line with the multi-annual average. The temperature is supported by high services inflation and a favourable labour market<sup>19</sup>.



Cell colours according to standardised values of indicators

-2.00 -1.75 -1.50 -1.25 -1.00 -0.75 -0.50 -0.25 0.00 0.25 0.50 0.75 1.00 1.25 1.50 1.75 2.00

\* The forecast of the National Audit Office, implementing the functions of the fiscal institution

■ The value of the indicator indicates an overheating signal  
■ The value of the indicator indicates a cooling signal  
 The indicator is close to the multi-annual average

The more intense the colour, the closer the monitored indicator is to an overheating / cooling signal.

Detailed Heatmap data are available in the section *Macroeconomic Data* online at <https://www.valstybeskontrolė.lt/EN/BudgetPolicyMonitoring>.

Source: Eurostat, State Data Agency, calculations by the National Audit Office implementing the function of a fiscal institution

<sup>18</sup> The methodology for drawing up the map and the description of the indicators are presented in the Opinion No BP-5 of the NAO FI of 20 September 2018 "On the approval of the Economic Development Scenario". The chart shows deviations from the multi-annual average. Opinion No BPE-2 of 05.04.2022 "On the Endorsement of the Economic Development Scenario" provides a description of the calculation of the construction demand indicator.

<sup>19</sup> Some of the statistical indicators of Q3 2023 used in the chart are provisional. Net inflation, changes in the HICP index of goods and services, unemployment and employment rates, job vacancies and job openings in Q3 are estimated using econometric models based on data available from the State Data Agency, the Employment Service and *Sodra*.