LATVIJAS BANKA
EIROSISTĒMA

# Macroeconomic Developments Report

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MACROECONOMIC DEVELOPMENTS REPORT
September 2023, No 37



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## Abbreviations

€STR – euro short-term rate
AS – joint stock company
CSB – Central Statistical Bureau of Latvia
EC – European Commission
ECB – European Central Bank
EU – European Union
EURIBOR – Euro Interbank Offered Rate
FRS – US Federal Reserve System
GDP – gross domestic product
HICP – Harmonised Index of Consumer Prices
IMF – International Monetary Fund
ISIN – International Securities Identification Number
OECD – Organisation for Economic Co-operation and Development
UK – United Kingdom
US – United States of America
VAT – value added tax

## Additional information

The cut-off date for the information used in the Macroeconomic Developments Report (September 2023, No 37) is 15 September 2023. The cut-off date for the information used in the forecasts is 15 September 2023 and 22 August for the information used in some technical assumptions.

# Topical issues in brief

Inflation is declining; however, the world's major central banks have emphasised that inflation will remain above the target level over a longer period.

The Governing Council continued to raise the key ECB interest rates. In the view of the Council, they have reached levels that, maintained for a sufficiently long duration, will contribute to the return of inflation to its 2% target.

Tighter financing conditions observed in the euro area as a result of monetary policy tightening are reducing demand and thus also economic activity in Latvia.

Latvia's economic activity remains sluggish this year; however, lower inflation and the rapid wage growth as well as the support planned by the government will strengthen the household purchasing power.

The unemployment rate remains low, and labour shortage still puts an upward pressure on wages.

Lending conditions become tighter; however, the projects financed from the EU funds will maintain investment activity.

Inflation is losing its momentum, but a risk of higher inflation persists due to rising labour costs which, inter alia, also weaken competitiveness.

A return to robust economic growth in Latvia requires eliminating weaknesses in the labour market and bottlenecks in lending and construction process that hinder investment.

# 1. External Demand

***Major global economies have seen an uneven development.***

The FRS, the ECB and other leading central banks have continued to raise their interest rates to facilitate further decline in inflation. The growth trends in the largest countries in the world have varied since March of this year: positive news about the resilience of the US economy was coupled with increasingly more evident signs of weakness in the euro area economy, while a weaker export and domestic demand and the prolonged crisis in the real estate sector became a significant obstacle to growth in China. In the commodities market, positive signals were sent by the downward developments in natural gas and grain prices, while oil products became more expensive.

According to the latest forecast of the IMF published in July 2023, global growth will reach 3.0% both this year and next year. The assessment of 2023 is higher by 0.2 percentage points compared with the estimates in April, while the forecast for 2024 has remained unchanged. The upward adjustment for this year mainly reflects the resilient consumption in the US and lower risks to financial stability, since the financial stress episode that started in the US[1] in March has not extended to a wider range of credit institutions. According to the IMF, inflation could reach 6.8% this year and 5.2% next year. This year's updated inflation forecast is 0.2 percentage points lower than the April forecast; this is partly explained by weaker inflation in China. In contrast, the assessment for 2024 is higher by 0.3 percentage points owing to persistent core inflation.

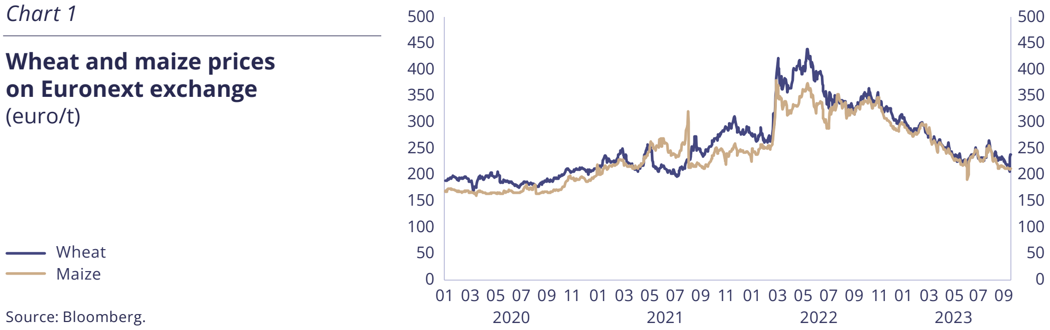
***The price of natural gas has reached its pre-war level.***

Relatively large reserves of natural gas at the end of the last heating season, sluggish growth in China and increasing availability of liquefied gas in the global market contributed to the drop in natural gas prices up to 25 euro per MWh in the Dutch TTF in July. The prices of futures contracts suggest that the price could increase in autumn; however, repeatedly reaching the price peaks of 2022 is an unlikely scenario, unless the buoyant growth of Asia causes a rising gas demand and the next heating season brings unusually harsh weather.

It should be kept in mind that the market prices of gas are still very volatile and sensitive to new information. For instance, the price reached 40 euro per MWh for a short time in August. It was caused by concerns about a potential strike in liquefied natural gas plants in Australia.

*Chart 1*

**Wheat and maize prices on Euronext exchange**
(euro/t)




Source: Bloomberg.

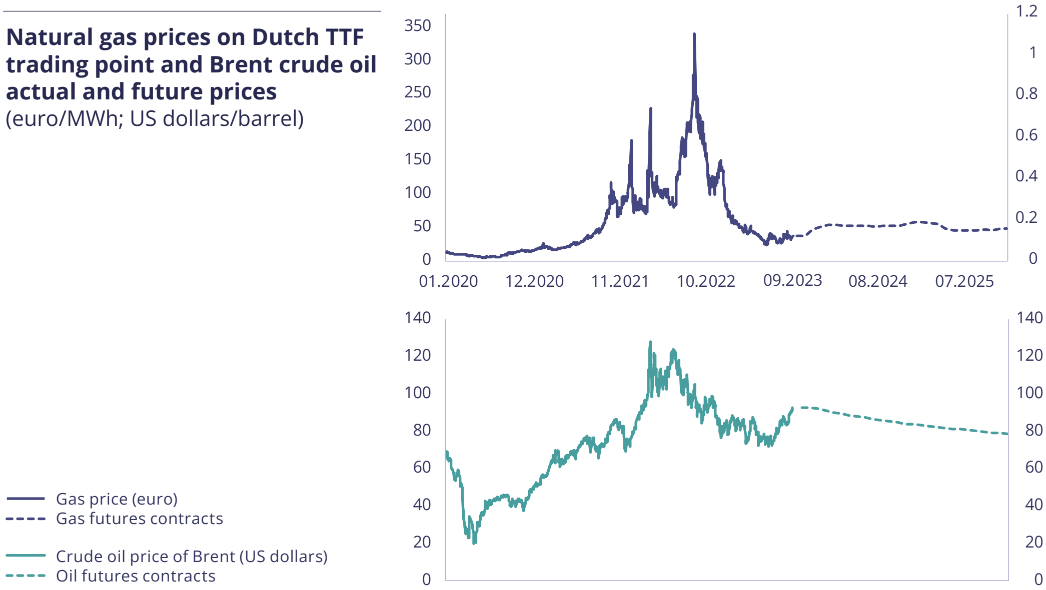
The price of oil has exceeded 90 US dollars per barrel for the first time since the beginning of the year. It is mostly due to the reduction of oil extraction levels done in a targeted way by Saudi Arabia and Russia to restrict the global volume of oil supply. Meanwhile, the ongoing fall has continued in the prices of wheat and maize. Now, their price stands approximately equal to the average price of 2021. Despite the fact that Russia pulled out of the deal which

[1] From March to May, three US banks (Silicon Valley Bank, Signature Bank and First Republic Bank) went bankrupt, and UBS took over Credit Suisse in Switzerland.

allowed Ukraine's grain exports through the Black Sea, the development of alternative grain transport routes, high productivity in the EU, global growth slowdown and rumours about the potential renewal of the deal have contributed to a decrease in grain prices.

*Chart 2*

**Natural gas prices on Dutch TTF trading point and Brent crude oil actual and future prices**
(euro/MWh; US dollars/barrel)




Sources: Refinitiv un Datastream.

***In the US, a resilient demand was accompanied by a swift decline in inflation.***

In June 2023, the US consumer prices posted a 3.0% rise year on year, still exceeding the level of the target set by the FRS, but at the same time marking substantial progress in reducing inflation from 9.1% – the highest rate in June of last year.

A significant part of this drop was explained by the base effect of energy prices: the largest price hikes were observed exactly a year ago; therefore, inflation accelerated somewhat again in August and reached 3.7%. The reduction in core inflation was less notable: it edged down to 4.3% in August. Overall, despite a persistently very low unemployment rate and economic growth, the price rises were slower. GDP increased at almost the same rate during the first and second quarter of this year: by approximately 0.5% in comparison with the three previous months[2] – private consumption contributed significantly. These figures also suggested that the bank stress episode of the first half of the year when the outflow of uninsured deposits triggered the bankruptcy of three US banks concluded without an obvious impact on the economy.

The cumulative increase in the federal funds rates has reached 525 basis points, and, taking into account the time needed for monetary policy transmission, success in the fight against inflation and the first signs of moderation in the labour market (for example, the decrease in the job vacancy rate), financial market participants currently believe that the FRS is closing in on the end of its rate hiking cycle. The IMF expects the economic growth to reach 1.8% in 2023 (0.2 percentage points more than estimated in April).

***In China, the reversal of zero-Covid policy has not met the expectations of analysts hoping for a rapid economic recovery.***

Although the growth in the first quarter – immediately after lifting the restrictions – was swift (2.2% quarter on quarter), it lost momentum over the next three months (only 0.8%). More

[2] In the US, the quarterly growth rates are officially published in annual terms. To improve comparability with performance of other countries, all quarterly growth rates in the US have been recalculated from annual terms to quarterly terms. This chapter presents all quarterly growth rates in quarterly terms.

detailed data on retail trade turnover and manufacturing output have also disappointed market participants often with actual figures regularly falling short of expectations. The reasons can be found both in external demand (in August, exports declined by 14.5% year on year) and the weak domestic demand, particularly in the real estate market which has remained weak for a long time. Marking a sluggish demand, consumer prices were even lower in July than a year ago. In response to these developments, the government of China has launched support measures. For instance, the central bank of China has reduced its key lending rates and the government of China has released guidelines aimed at promoting investments in specific high-potential sectors. However, the measures introduced so far have been cautious, and there are concerns that China might fall short of the government's annual 5% growth target this year.

The lifting of Covid-19 restrictions by China and the domestic tourism support programme introduced by the government of Japan have contributed to the quarter-on-quarter growth in the Japanese economy by 0.8% in the first quarter. The growth was even stronger in the second quarter (1.2%); however, private consumption and investments fell, leading analysts to doubt the growth potential in the second half of the year. Exports to China is a key factor in the Japanese economy; however, exports have so far been weak. Although the rise in consumer prices exceeds the 2% target set by the central bank of Japan, wages are yet to increase. This reduces the population's real income and makes the central bank of Japan continue to implement an accommodating monetary policy.

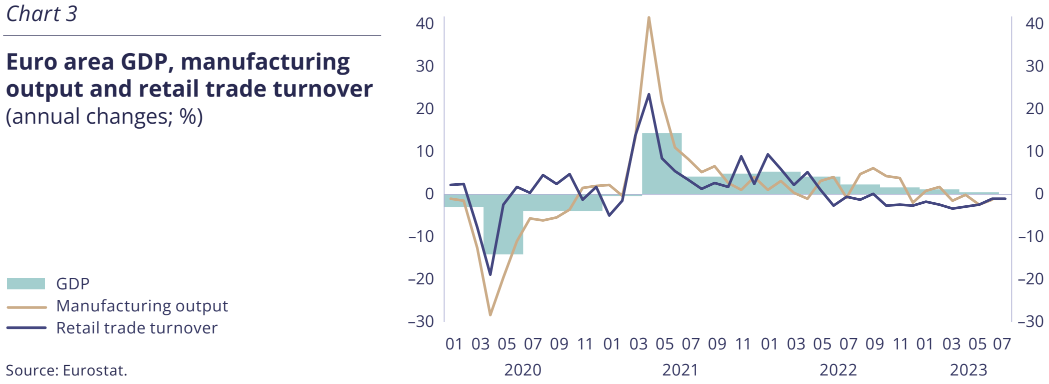
***Growth slows in the euro area, while inflation remains too high.***

In the first and second quarter, GDP grew at a steady and sluggish pace – 0.1% compared to the previous three months. One of the primary reasons behind the weak growth is private consumption which remained unchanged in the first half of the year. It continued to be hampered by elevated inflation which, despite a significant decline from an annual 10.6% in October 2022, was still uncomfortably high (5.3%) in August 2023. Core inflation was just as high. However, wages grew considerably as well – in the second quarter, they posted a 5.6% increase year on year, allowing many people to maintain the level of consumption. The Purchasing Managers' Index (PMI) suggests that economic activity has so far substantially decreased in the industrial sector in the third quarter and has stopped expanding in the services sector as well. The EC's Economic Sentiment Indicator (ESI) has deteriorated every month since May, thus supporting the PMI readings. In its fight against excessive price hikes, the ECB has continued to raise its key interest rates with their cumulative increase reaching 450 basis points. At its September meeting, the Governing Council of the ECB noted that its interest rates had currently reached a level that, maintained for a sufficiently long duration, will significantly contribute to the timely return of inflation to its target. Nevertheless, it reiterated that future decisions would remain subject to incoming data.

In the most recent forecasts published in September, the ECB expects that growth will reach 0.7% in 2023 and 1.0% in 2024 (0.2 and 0.5 percentage points less than estimated in June respectively). The main reasons behind the anticipated slowdown in growth are the transmission of monetary policy tightening to domestic demand and weaker external demand. Meanwhile, according to the ECB, inflation could be 0.2 percentage points higher both in 2023 and 2024 and reach 5.6% and 3.2% respectively. The upward adjustment mainly reflects higher energy prices than expected in June.

*Chart 3*

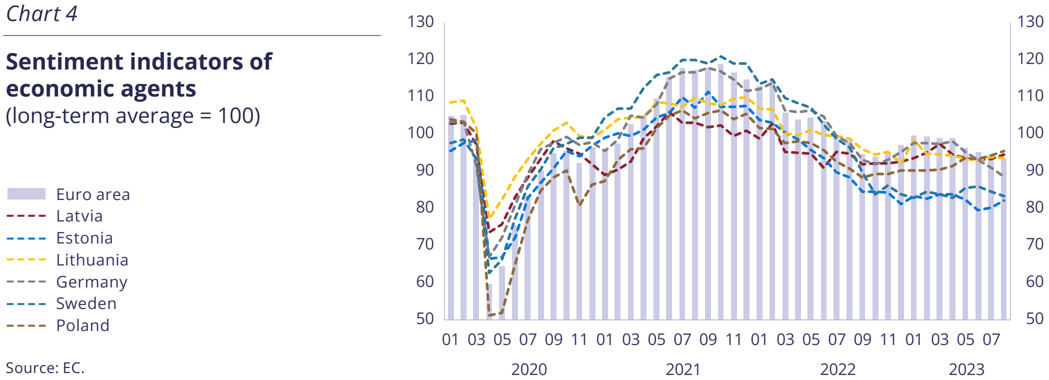
**Euro area GDP, manufacturing output and retail trade turnover**
(annual changes; %)




Source: Eurostat.

*Chart 4*

**Sentiment indicators of economic agents**
(long-term average = 100)




Source: EC.

***The Baltic States are no longer among European leaders in the annual inflation rate; however, the economic performance was modest in the first half of the year.***

Although the population's purchasing power is gradually improving, more time is needed for a complete recovery. Domestic demand remains relatively low, but holds a promise for future growth. Rapidly rising wages are putting pressure on the production costs, thereby reducing cost competitiveness in the global market. While the amount of loans in the economy of the Baltic States is relatively small compared to the rest of the euro area, the effect of increased interest rates has been felt (although indirectly) through external demand, and decreasing external demand has also reduced the volume of external trade. Therefore, the economy of the Baltic States has been weaker as a whole – the downturn in Estonia has continued for already six successive quarters with a GDP contraction by 3.4% in the first half of 2023 if compared to the previous year. The first half of 2023 has been weaker if compared to the previous year in Lithuania as well; however, unlike Estonia, the second quarter of 2023 has showed a better growth in Lithuania with its GDP expanding by 2.9% over the first quarter. According to forecasts, a recovery in real incomes will contribute to a growth of domestic demand and consumption, while slowdown in the global economic development will have an adverse impact on external trade. Various institutions do not foresee a swift recovery for Lithuania and Estonia in the second half of the year, as the next quarters are projected with a weaker performance if compared to the previous year. It is expected that external demand and the purchasing power of consumers will rebound next year.

***In the second quarter, Germany did not show any economic growth and GDP was below the last year's level.***

Although the current inflation is somewhat lower than previously, it remains relatively high. The population's purchasing power is still weak; however, it tends to improve as the strength of the labour market allows wages to outpace inflation (6.6% and 6.5% respectively in the second quarter of 2023). Yet, external demand is causing greater concerns: export-oriented industrial sectors, such as manufacture of motor vehicles, are living through tough times.

Moreover, investments are slowing down due to monetary policy tightening, in particular, the energy-intensive producing companies are becoming less attractive to any investments. This is also illustrated by the European Commission's forecasts: contrary to the projected growth in the euro area on average, only Germany (of the major euro area countries) is expected to experience an overall recession in 2023.

***The level of GDP in the UK remains lower than that of 2019.***

While data suggest that the UK's economic performance has been weak in the recent years, it might be adjusted during data revision and economic indicators for 2020 and 2021 might be improved[3]. Overall, it keeps the current situation unchanged though: growth was very sluggish in the second quarter (0.2% compared to the first quarter). Consumption has slightly improved: with price increase slowing down, private consumption rose in the second quarter. Meanwhile, investments have been weaker. The slowing growth in the global market has also affected the performance of the UK's external trade, as exports have continued to decline since the beginning of the year. Although the first half of the year has been slightly better than expected, stagnation is projected in the second half of the year due to UK's growth in 2023 being one of the lowest among G7 countries, surpassing only Germany[4].

***Ties with Russia are weakening; however, it is still among Latvia's six major partners in exports of goods.***

Despite the extensive sanctions, Russia's economy has not collapsed and continues to fund the war in Ukraine through its incomes from energy exports. Although it is not possible to export to Europe anymore, more cooperative partners, such as India, have been found in the East.

According to the information published by The New York Times, Russia might have redirected almost one third of its commercial economy to the production of weapons[5]. The good news is that the share of imports from Russia remains considerably lower than in the previous years and Latvia is becoming less dependent on Russia's energy.

[3] Impact of Blue Book 2023 changes on gross domestic product - Office for National Statistics (ons.gov.uk).
[4] Assessment by the OECD and the IMF: OECD Economic Outlook and World Economic Outlook Update, July 2023: Near-Term Resilience, Persistent Challenges (imf.org).
[5] Russia Overcomes Sanctions to Expand Missile Production, Officials Say - The New York Times (nytimes.com).

# 2. Financial Conditions

***The major central banks continued to raise key interest rates in response to persistent inflation.***

Despite the ongoing rise in interest rates, central banks increasingly take the view that most of the interest rate hikes are behind us, and there are more policy lags in the pipeline from the past interest rate hikes.

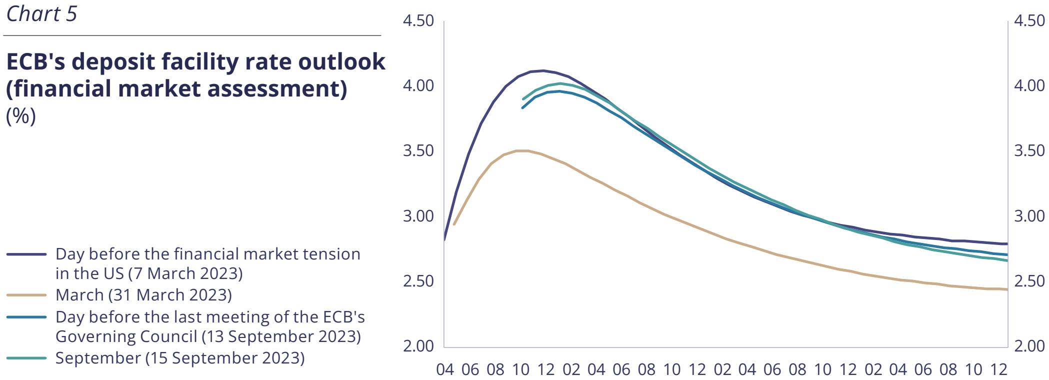
## 2.1 Decisions taken by the ECB and other major central banks

***The Governing Council of the ECB has been moving further towards tighter monetary policy since late March.***

It raised the key interest rates by 25 basis points in the May, June, July and September meetings and noted that despite headline inflation continuing to decline over the past months, the underlying price pressure remains strong. The rates on the deposit facility, the main refinancing operations and the marginal lending facility reached 4.00%, 4.50% and 4.75% respectively. On the outlook for interest rates, the ECB points out that, based on the current assessment, it believes that the key interest rates have reached levels that, maintained for a sufficiently long duration, will make a substantial contribution to the timely return of inflation to its target. Nevertheless, it reiterated that future decisions would remain subject to the incoming data. In addition, the Governing Council of the ECB in accordance with the decision taken at the May meeting no longer reinvested the principal payments from maturing securities under the Eurosystem's asset purchase programme (APP) as of July 2023. Meanwhile, in accordance with the decision taken in December, the APP securities portfolio declined by an average of 15 billion euro per month from early March to late June. With regard to the euro area economy, the ECB notes that its growth will remain contained in the months ahead. In the first half of the year, it mostly stagnated, and the latest data suggest that it also showed weakness in the third quarter. Lower demand for exports in the euro area and effects of the tight financing conditions, as well as declining housing and business investments hold back growth. Growth slowdown has also spread to the services sector, which has been more resilient so far. Economic growth rate should gather pace, as real income bolstered by declining inflation, wage growth and the strong labour market is expected to increase contributing to strengthening of consumer spending. Meanwhile, governments are encouraged to focus their fiscal policies on improving the productivity of economy and gradually reducing high levels of public debt. Financial markets expect that the ECB's deposit facility rate might remain unchanged at least until spring 2024.

*Chart 5*

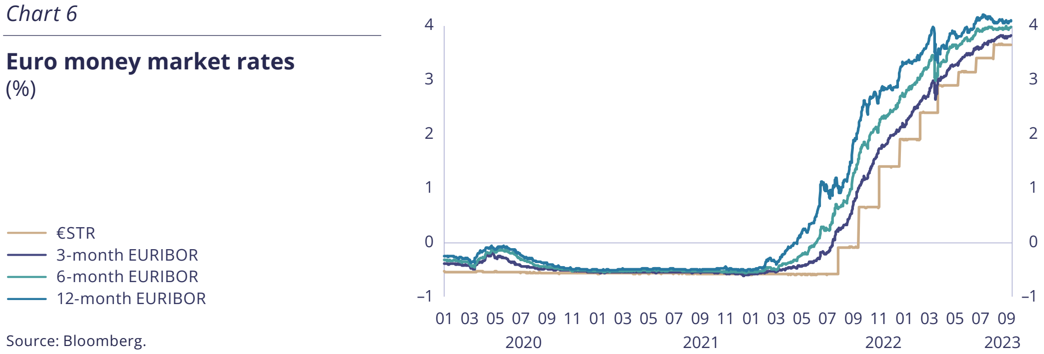
**ECB's deposit facility rate outlook (financial market assessment)**
(%)




Sources: Bloomberg, Latvijas Banka's estimates.

*Chart 6*

**Euro money market rates**
(%)




Source: Bloomberg.

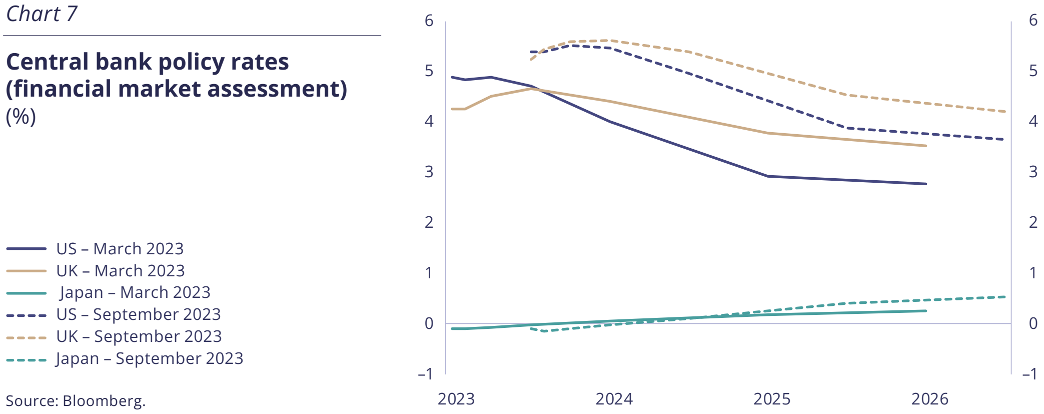
### *FRS continues raising interest rates*

Despite insolvency of several US regional banks declared in spring, the FRS at its meetings held at the end of March and the beginning of May decided to raise the target range for the federal funds rate by 25 basis points. At their June meeting, heads of the FRS took a decision to pause and wait for more data, while at the July meeting they decided to raise the target range for the federal funds rate by another 25 basis points (to 5.25%–5.50%). The FRS stated in its July report that according to the latest data US economic activity continues to increase at a modest pace. Job creation has been resilient over the past months, and therefore the unemployment rate remains low. At the same time, inflation is still too high. As regards the US banking system, the FRS pointed out that it is still sound and resilient. Tighter terms and conditions on loans to households and businesses are likely to weigh on economic activity, employment and inflation. However, the magnitude of their impact remains uncertain. In addition, the FRS emphasised that it continues to keep a particularly close watch on inflation risks. The FRS also pointed out that it takes account of the time lags used in monetary policy to affect economic activity, inflation, as well as economic and financial developments when determining the extent to which monetary policy needs to be tightened.

Jerome H. Powell, Chair of the Board of Governors of the FRS, indicated at the July press conference that a lot of work has been done, albeit the effects of monetary policy tightness remain to be seen. Likewise, he commended the moderation in inflation achieved so far without having a significant adverse effect on the labour market. He also added that stronger growth can lead to higher inflation. Overall, Jerome H. Powell considers that monetary policy has not yet been sufficiently restrictive over a reasonably long period to achieve the desired effect. According to FRS forecasts, economic development is expected to slow down in the second half of the year. However, taking account of the economic resilience observed recently, the FRS anticipates no more recession. Financial markets expect that the FRS might raise the target range for the federal funds once more by the end of the year to reach the highest level (5.50%–5.75%). Meanwhile, they expect the first reduction in the target range next spring or summer depending on whether one more increase in the target range will follow by the end of this year.

*Chart 7*

**Central bank policy rates (financial market assessment)**
(%)




Source: Bloomberg.

***The Bank of England has continued to raise interest rates since late March***

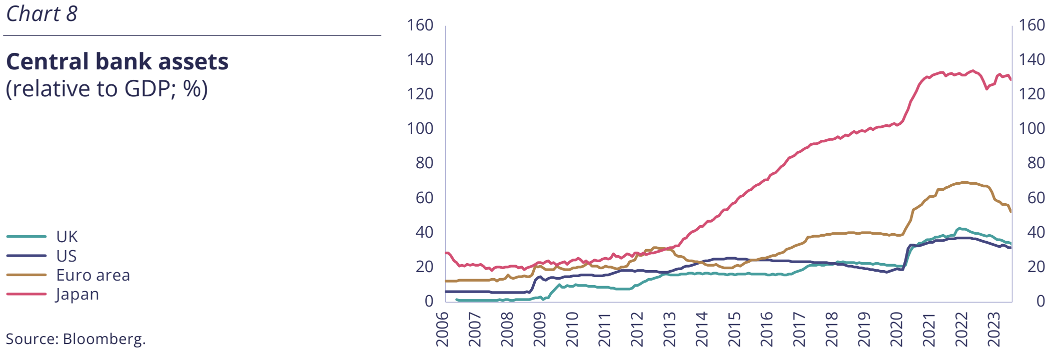
It increased the base interest rate by 25 basis points in May, while in June, in response to higher than expected inflation data, it took aback financial markets by increasing the base interest rate by 50 basis points. In August, the Bank of England shifted back to taking smaller steps and raised the base interest rate by another 25 basis points (to 5.25%). In its report released in August that included the latest economic development forecasts, the Bank of England stated that quarterly GDP growth rate was 0.2% during the first half of the year, and that it might remain unchanged in the near term, reflecting more resilient household income, retail sales volumes and business survey data. At the same time, it is also noted that more recent indicators show signs of economic weakening. As regards the labour market, the report says that it remains tight but there are some indications that it is softening. Annual private sector regular wage growth increased to 7.7% in three months (from February to May), materially above expectations of the May forecast. Earnings growth is nevertheless expected to decline in coming quarters, to 6% by the end of the year. It is projected that inflation will fall to 5% by the end of the year, while risks remain on the upside, albeit to a lesser extent than in the May forecast. At the same time, forecasts of the Bank of England suggest that inflation might return to its target in the second quarter of 2025. On 13 September, the possibility that the target interest rate might peak at 5.50% in November and the first reductions in interest rates are not expected before 2024 were priced in financial markets.

***The Bank of Japan, contrary to the other major central banks, continues its very supportive monetary policy.***

It maintains the short-term interest rate at –0.1% and the target level of yields on the Japanese government 10-year debt securities at 0.0%. In July, it decided to expand the fluctuation band of yields on government 10-year debt securities. Financial markets expect that the Bank of Japan's short-term target interest rate might be increased to 0.1% (currently –0.1%) in early 2024. The Governor of the Bank of Japan pointed out that the Bank of Japan might have enough information by the end of the year to assess whether conditions have been met and to take a decision on raising the short-term interest rate.

*Chart 8*

**Central bank assets**
(relative to GDP; %)




Source: Bloomberg.

## 2.2 Global financial market developments

***Although the major central banks kept raising their key interest rates to continue to respond to still too fast pace of inflation, longer-term government bond yields remained broadly unchanged during the reporting period.***

The shocks experienced by the US regional banking sector in early March, which also reverberated in Europe and resulted in the consolidation of banks both in the US and Switzerland as well as in a steep fall in government bond yields, petered out.

However, these shocks affected market participants' expectations of slower interest rate increases in the future and an accelerated reduction in interest rates after peaking. Against a background of falling commodity prices, in particular those of natural gas and oil, inflation figures, although reluctantly but slowly, also began to decrease. This strengthened market participants' expectations of a faster reduction in interest rates in the future, thus limiting a further increase in government bond yields. Yields sensitively responded to the most recent data on the economic situation, taking account of central banks' guidance on the significant role played by these data in future decision-making. Market participants actively analysed the data received and what was said by the governors of the central banks to build expectations of further development of central banks' key interest rates. The US government debt ceiling increase resulted in an additional tension in the development of government bond yields. Although the US government debt ceiling was revised upwards at the very last minute, the postponed issuance of debt securities contributed to a pickup in yields following the increase of debt ceiling. The unexpected decision made by the credit rating agency Fitch Ratings to downgrade US government credit rating from AAA to AA+ when the situation regarding the highest debt level was already remedied took the market by surprise. Fitch Ratings based its decision on the deterioration in US fiscal situation over the next three years as well as on the discussion concerning multiple recurrence of the increase in the debt ceiling that jeopardises the government's ability to pay its bills. The decision by the Central Bank of Japan to make the fluctuation band of yields on government 10-year debt securities more flexible also somewhat shook the government debt securities market in the euro area and the US. Analysts pointed out that the upswing in the yields on the Japanese government 10-year debt securities might encourage Japanese investors to sell part of their positions in the euro area and the US to invest in the domestic market. This would affect the government bond market in France, the Netherlands and Germany in particular.

***In the second half of the summer, economic indicators pointed to the growth slowdown in the euro area more clearly, although inflation figures declined slowly.***

Meanwhile, the US data testified to a stronger than expected economic growth and a further downward inflationary trend. Some representatives of euro area and US central banks started to signal that the interest rate peak had almost been reached, but the rates would be kept at the highest level as long as necessary for inflation to return to the target. Market participants adjusted their forecasts respectively, and yields on longer-term securities followed an upward path. In Greece, the yield on 10-year debt securities saw the strongest decrease in the reporting period – by 40 basis points. This steep fall experienced in Greece can be explained by expectations of a credit rating upgrade received from the credit rating agency DBRS Morningstar at a later date. Thus, Greece has regained the investment grade credit rating. It is projected that other credit rating agencies might also upgrade Greece's credit rating to the investment grade. In Italy, the yields on 10-year debt securities decreased by 7 basis points, in Germany – by 1 basis point, while in France and Spain they edged up by 6 and 10 basis points respectively. On the other hand, the yields on the US Treasury debt securities increased by 36 basis points. Further developments in yields on government debt securities will hinge crucially on countries' fiscal policy, financial needs at the start of the next budget year, new inflation figures, overall dynamics of economic development indicators and guidance given by the central banks on the future direction of monetary policy. Also, the banking sector situation and future dynamics of lending development will still play a key role. Likewise, the reduction in the securities portfolio initiated by the ECB and decisions on its subsequent pace might affect dynamics of yields on debt securities.

***Yields on euro area corporate debt securities and their spread over the risk-free yield remained broadly unchanged – both in the high-yield debt securities segment and the investment grade securities segment.***

As a result of the shocks experienced by the banking sector in March, investors were cautious when dealing with risky assets. This led to upswing in yields on high-yield euro area debt securities and their spread over the risk-free yield, albeit this upward trend gradually reversed during the reporting period. With the onset of troubles faced by US banks, yields on investment-grade corporate debt securities followed a downward path, but these yields declined less than those of government debt securities, thus their spread over the risk-free yield grew slightly. The end of the reporting period saw both yields on investment-grade corporate debt securities and their spread approaching the period's initial levels. This was driven by still steady corporate key indicators. The level of corporate defaults also remains low. Likewise, stabilising growth rates of commodity costs incurred by businesses dampened a further increase in yields. This enabled investment-grade companies to issue new debt securities, and it was done particularly actively in early September. The riskier high-yield companies remained more reluctant to raise new market-based financing. In the coming months, the yields on corporate debt securities will still depend on the central banks' monetary policy normalisation pace, the overall economic growth and commodity price developments as well as the sectoral outlook, and most likely will remain sensitive to new inflation data.

***Stock markets recovered from US banking sector shocks quite fast, and the issues of economic growth perspectives and expectations of future action by the major central banks to strengthen monitory policy were central to their agenda.***

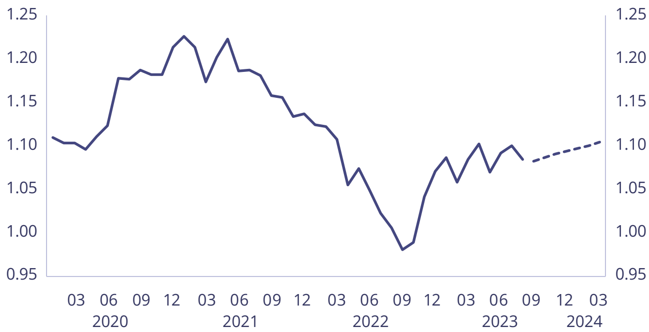
The still robust second-quarter corporate earnings contributed to the lasting nature of stock prices. Overall, the EuroStoxx index, characterising the euro area stock market, dropped by 1.6%, while the S&P 500 index, characterising the US stock market, experienced an increase of 12.4%. The excellent performance of the US technology sector contributed to growth of the common stock market. The NASDAQ 100 index, characterising the stock market of the US technology sector, posted a 27.0% rise. Booming artificial intelligence technologies facilitated increased demand for semi-conductors which was reflected in the upward trend of the sector's stock prices. Decelerating economic growth rates both in the euro area and its trade partner China led to a lower demand for euro area goods and weakened the performance of the euro area stock market. The US soft landing scenario, contrary to the euro area stagflation risks, also persuaded stock market investors to invest in the US stock market. The S&P 500 price-to-earnings ratio recorded an increase, but the EuroStoxx price-to-earnings ratio declined slightly. Indices characterising future fluctuations – both the European VSTOXX and the US VIX – continued on a downward path, with the US VIX (–6.5 points) being ahead of the European VSTOXX (–3 points) in terms of decline. During the period considered, the euro area retail trade sector (+9.5%), the travel and leisure sector (+4.8%) and the health sector (+4.5%) performed best. Meanwhile, the stock prices of the basic resources sector (–14.5), the real estate sector (–12.8%) and manufacture of food products, beverages and tobacco (–9.6%) were hit by the highest losses. As to national euro area stock markets, the FTSE MIB (4.%), characterising the Italian stock market, performed best. It was followed by Germany's DAX (2.3%) and France's CAC 40 (–0.6%). Further developments in the stock markets will continue to largely depend on the pace of economic development and on the ability of policy makers to balance decisions and measures, so that to contain the rising inflation without leading to a significant economic downturn and subsequent revaluation of financial assets. In the event that energy prices show positive growth in the context of the approaching heating season, it might have a significant impact on future development of stock prices.

***The process of monetary policy normalisation in the US, which is one step ahead of the euro area in this regard, contributed to the appreciation of the euro.***

From the end of February to 12 September, the euro appreciated by 1.7% against the US dollar (to 1.0754 US dollars per 1 euro). In mid-summer, the euro exchange rate peaked, appreciating even up to 1.1236 US dollars per 1 euro. In the second half of the summer, however, market participants' vision of a more balanced macroeconomic development in the US vis-à-vis the euro area weakened the euro. Analysts foresee that the euro could appreciate against the US dollar again by the end of March 2024 and reach 1.10. Future developments in the euro exchange rate will depend on the dynamics of the monetary policy decisions taken by the FRS and the ECB and future outlooks to be heavily affected by further development of inflation rates and economic growth indicators. The uncertainty resulting from the war in Ukraine will undoubtedly continue to weigh on the future prospects of the euro exchange rate.

*Chart 9*

**Euro exchange rate against US dollar and future financial market expectations**




Source: Refinitiv.

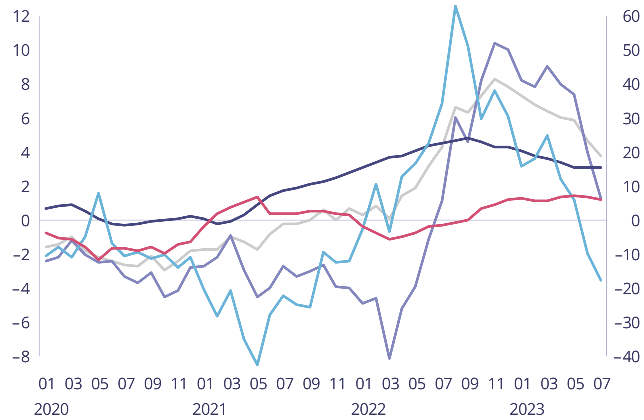
## 2.3 Financing conditions in the Latvian economy

***The results of the euro area bank lending survey point to tighter credit standards and a decrease in the demand for credit, suggesting that lending to the economy will weaken further.***

When granting loans to businesses and households, credit institutions maintain a focus on the development risks of the economy, individual sectors and businesses and the housing market. Credit institutions' tolerance of these risks is also decreasing. Overall, this weakens the willingness of credit institutions to play a more active role in lending. High interest rates also prevent potential borrowers from assuming new liabilities, although the growing need for current asset financing due to the approaching heating season can improve corporate lending activity in the short term.

*Chart 10*

**Domestic loans**
(outstanding amounts; annual changes; %)



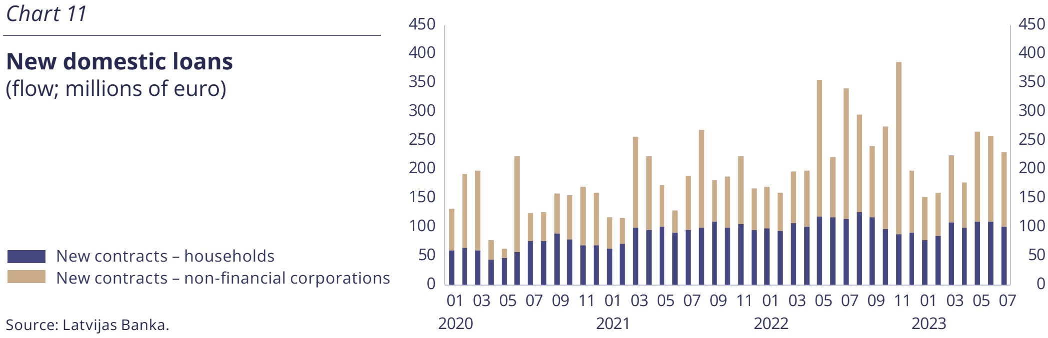

* The impact of structural changes and one-off factors of the banking sector has been removed for comparison purposes.

Source: Latvijas Banka.

Over the last five months, the domestic loan portfolio has somewhat expanded on account of lending to financial corporations and households. Meanwhile, during this period, lending to non-financial corporations has drifted downwards owing to a decline in previously issued short-term loans. The domestic loan portfolio (excluding loans to the government) expanded by 1.7% from late February to late July 2023. This expansion was driven by an increase in loans to financial corporations by 7.5% and to households by 1.9% (including housing loans by 1.1% and consumer loans by 10.1%). Meanwhile, loans issued to non-financial corporations over the last five months declined by 0.9% (short-term loans decreased by 10.8%, while long-term loans edged up by 1.3%). The adjusted annual growth rate of domestic loans (excluding loans to the government) decreased to 3.8% in July, with loans to non-financial corporations growing by 1.3% and loans to households – by 3.8% (housing loans – by 2.4%). The amount of new loans has shrunk compared with the previous year. In the first seven months of 2023, the amount of new loans issued to non-financial corporations decreased by 12.3%, while the amount of new loans issued to households – by 8.0% compared with the same period of the previous year.

*Chart 11*

**New domestic loans**
(flow; millions of euro)



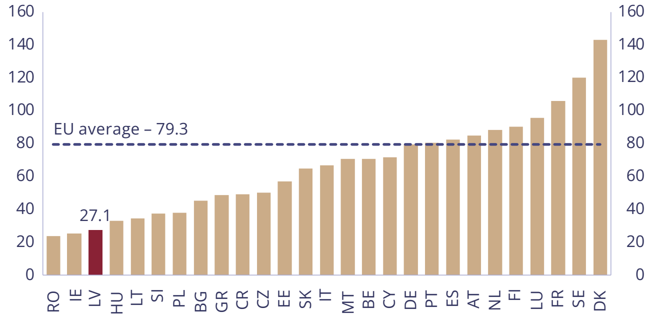

Source: Latvijas Banka.

***The cautious lending resulted in the shrinkage of the already low loan-to-GDP ratio.***

In the second quarter of 2023, it dropped to 27% (in 2022 – 34%). In relation to the ratio of loans to non-financial corporations and households to GDP, Latvia still ranks among the lowest in the EU.

*Chart 12*

**Loans to domestic non-financial corporations and households in EU countries in the second quarter of 2023**
(outstanding amount; % of GDP)




Sources: ECB, Eurostat.

***With economic development stagnating and interest rates on loans following an upward path, lending to businesses both from the supply side and the demand side will not see significant changes in the near future.***

## Box 1. What is EURIBOR and why do credit institutions use it as a reference rate for lending?[6]

Benchmark rates or indices used for reference when setting the interest rates and calculating the respective amounts payable in relation to financial instruments or contracts play an important role in financial markets. EURIBOR is an index[7] reflecting the interest rate at which banks can borrow funds in the money market in the short term, in other words – the price of money. Meanwhile, the price of money is an important cornerstone of the financial system which ensures the transmission of monetary policy from the central bank's decision on its interest rates to another participant of the financial system, including costs of banks, funds and then also to costs of funds of non-financial corporations and households.

In Latvia, EURIBOR indices (close to 80%) or another short-term benchmark are used as a reference rate for most of loans issued to households and non-financial corporations.

[6] Prepared by Anete Kravinska, economist of Latvijas Banka.
[7] EURIBOR is calculated for the following tenors: 1 week, 1, 3, 6 and 12 months.

EURIBOR is administered by the European Money Markets Institute (EMMI) – an independent organisation. To bring EURIBOR calculation in line with the EU regulation on indices used as benchmarks in financial instruments and financial contracts[8], the method for EURIBOR calculation was changed to reflect interest rates of real money market transactions as precisely as possible. EURIBOR administrator has introduced a range of procedures to bring EURIBOR in line with the requirements of a reliable benchmark. Moreover, many financial instruments, including deposits, loans, debt securities and financial derivatives, are linked to the EURIBOR value. According to EMMI estimates, the total amount of the financial instruments for which EURIBOR is used as a reference exceeds 100 trillion euro[9].

### Why do banks use EURIBOR as a reference rate for loan pricing?

The financial market is a linked and complex mechanism, and EURIBOR indices reflect the key ECB interest rates quickly and effectively owing to the efficiency of the financial market. Smooth and efficient transmission of monetary policy rates to other segments of financial markets, including bank loans to households and non-financial corporations, is ensured through EURIBOR as a reference rate for various financial instruments.

From a bank customer viewpoint, linking interest rates on loans to the short-term benchmark, EURIBOR, allows interest payments of bank customers to change along with financial market conditions. Thus, bank customers benefit from lower loan interest payments under conditions where the central banks implement supportive monetary policy and interest rates decline or are low, but their payments edge up in situations where monetary policy tightens and interest rates rise.

In theory, if lending rates are linked to EURIBOR, it is easier for banks to balance their cash inflows and outflows and manage the interest rate risk. Traditionally, costs for mobilising funds incurred by banks also have to change along with changes in interest rates in financial markets. The use of EURIBOR to calculate lending rates also allows banks' revenue generated from issuing loans to change in response to market conditions. In other words, if financial markets experience the price of money and thus also banks' borrowing costs drifting upwards, this is reflected in loan payments linked to EURIBOR, making it possible to transfer such general interest rate risks to the borrower, retaining (or even increasing) profit margins even in turbulent market conditions.

However, the reality is different. Funds borrowed by banks operating in Latvia mainly consist of deposits therefore raising of funds does not directly depend on market conditions. It is natural that the statement about buoyant growth in banks' profits has become more and more audible recently. In the current circumstances, this is because interest revenues of banks have elevated faster than interest expenses.

### Where do banks get money?

Bank financing costs should grow along with an increase in interest rates, including the EURIBOR index. However, in practice, this process may be slower against the background of weak competitiveness and high liquidity. Moreover, it is also affected by bank funding structure, i.e. the extent to which it depends on developments in financial markets.

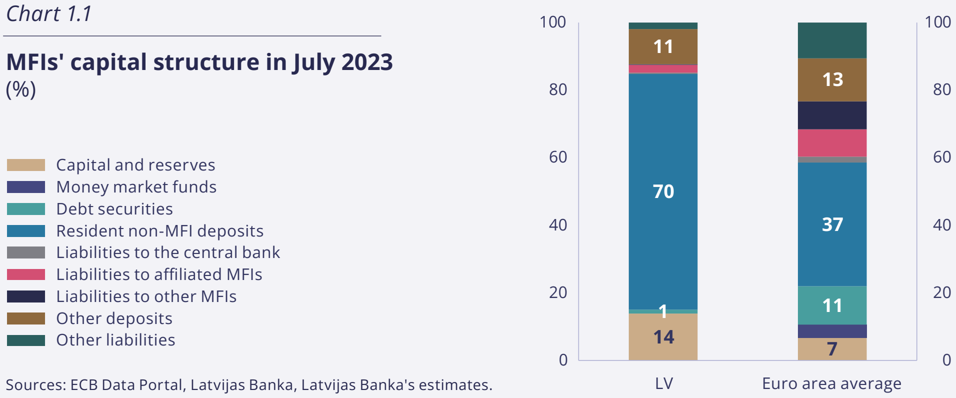
To gain insight into bank financing costs, let us look at the banks' capital structure. The capital structure of euro area banks shows the importance of the equity capital and reserves item amounting to nearly 7%. Most of the capital structure is composed of deposits (50%), but debt securities (11%), liabilities to other MFIs and liabilities to affiliated MFIs also play an important role. Meanwhile, the share of deposits in total liabilities in Latvia is among the highest in the euro area (70% of total liabilities or 95% of total foreign liabilities). A very small

[8] Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014 (Text with EEA relevance).
[9] About Euribor® | The European Money Markets Institute (EMMI) (emmi-benchmarks.eu)

part of funds is raised in financial markets (debt securities account for 1% in the liabilities structure). This implies that the costs of raising funds incurred by Latvian credit institutions depend largely on deposit costs for banks and only marginally – directly on developments in financial markets.

*Chart 1.1*

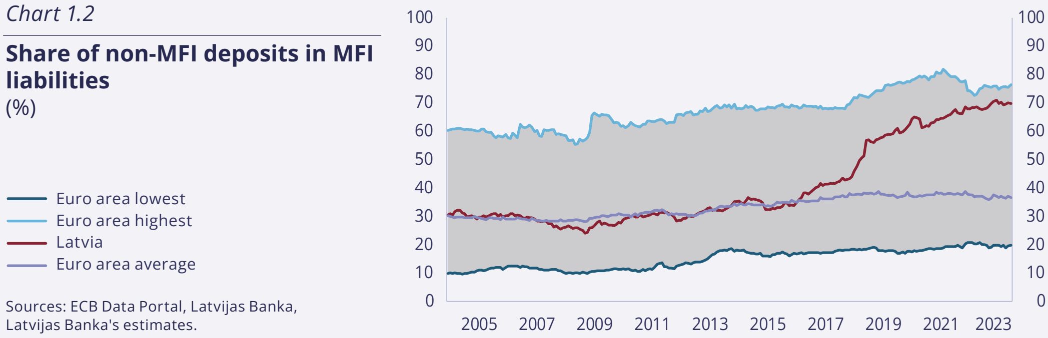
**MFIs' capital structure in July 2023**
(%)




Sources: ECB Data Portal, Latvijas Banka, Latvijas Banka's estimates.

*Chart 1.2*

**Share of non-MFI deposits in MFI liabilities**
(%)



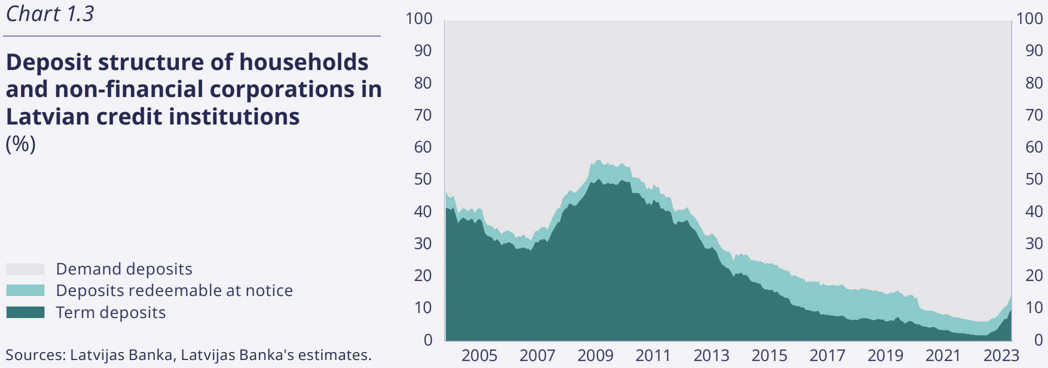

Sources: ECB Data Portal, Latvijas Banka, Latvijas Banka's estimates.

A closer look at costs incurred through attracting deposits shows that the maturity profile of deposits also plays an important role. Currently, the most commonly used type of deposits is demand deposits. They are funds held on our accounts which we can freely use at any time: make transfers, withdraw cash from ATMs, etc. From the business perspective of banking operation and in view of predictability this is the least trustworthy type of deposits. Regulators have also set higher bank liquidity requirements for covering short-term obligations. Therefore, interest paid for it is the lowest or is not paid at all. However, the Eurosystem currently pays 4.0% to commercial banks for a similar type of deposit – an overnight deposit. Deposits redeemable at notice (often also called savings accounts) are another type of deposits considered by banks to be slightly more predictable. A savings account can be supplemented on a regular basis, and it has no time limit. The deposited funds can be accessed relatively freely; however, it should be taken into account that the bank has to be informed a specified number of calendar days before the withdrawal of funds, but to have an immediate access to funds, a certain fee is charged. As funds usually cannot be withdrawn from a savings account without a prior notice and free of charge[10], from bank perspective, this source of bank funding is more predictable, and banks pay slightly higher interest on deposits held on a savings account than on demand deposits. Term deposits are the most predictable type of deposits, as the length of time the money will be held at the bank is precisely specified. Therefore, the bank pays the highest interest on them. Several factors determine the interest rate to be paid by the bank on each type of deposits and each maturity of term deposits. These factors include the price of money in financial markets (reflected by EURIBOR), the period for which money will be available to the bank, the extent to which the bank needs these funds, as well as competitiveness and the bank's assessment of dynamics of interest rates over the entire period of the term deposit.

[10] There are exceptions, for example, a savings tool offered by Swedbank AS which makes it possible to access funds free of charge and without prior notice at any time.

*Chart 1.3*

**Deposit structure of households and non-financial corporations in Latvian credit institutions**
(%)




Sources: Latvijas Banka, Latvijas Banka's estimates.

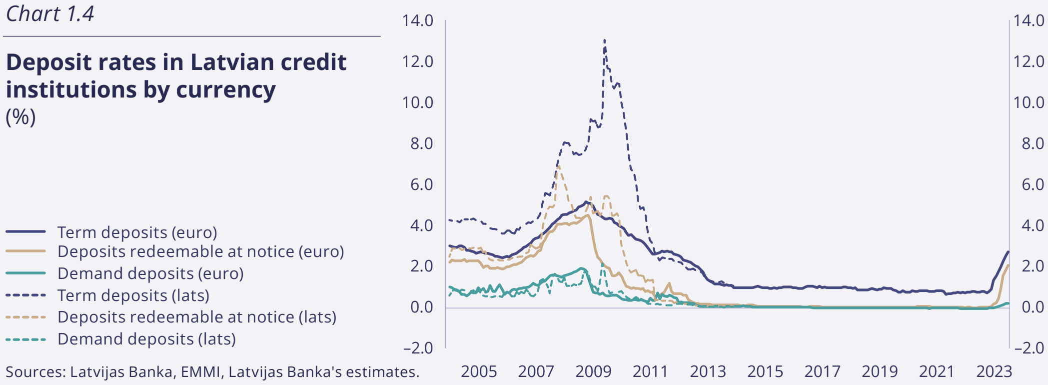
The breakdown of deposits in Latvia by type suggests that almost all deposits were held on demand deposit accounts since 2013 when the key ECB interest rates were cut to the levels close to zero and money market interest rates were approaching zero. Only in recent months, along with the raising of the key ECB interest rates, banks have gradually started to increase interest rates on term deposits, and the deposit breakdown is changing – the share of term deposits in total deposits is starting to grow. It was 14% in July this year but, if you look back over the history, the share of term deposits even exceeded 50% in Latvian credit institutions.

Unlike loan interest rates, deposit interest rates in Latvia are not usually linked to the money market index, and they are changed by the bank itself. This is mainly driven by competitive forces. Interest shown by bank customers in other deposit or investment products and a potential transfer of their funds from the bank elsewhere may exert pressure on the bank to raise interest rates it pays to customers for various types of deposits.

Against the backdrop of the low interest rates, banks paid nothing to their customers for current account balances but they paid up to 1.0% on average for term deposits. This explains depletion of term deposits in the bank deposit structure amid low interest rates and their gradual recovery under circumstances where interest rates rise. On the one hand, the upward trend in the share of term deposits means more stability in managing funds but, on the other hand, it also pushes up financing costs of banks, as they pay higher interest rates on term deposits. Currently, the average deposit rate paid by Latvian credit institutions is nearly 0.6% per year. The rise in interest rates on deposits has been very slow during this ECB monetary policy normalisation cycle. The spread with money market rates has also increased to unprecedented levels. This is due to the low competition between credit institutions and their high liquidity. It is expected that term deposit rates might grow in the future when more customers move their money from demand deposits to more remunerative savings accounts or term deposits.

*Chart 1.4*

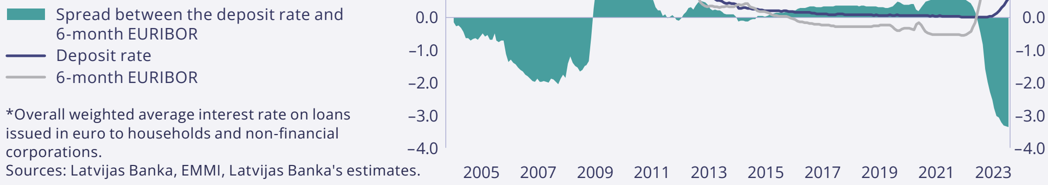
**Deposit rates in Latvian credit institutions by currency**
(%)




Sources: Latvijas Banka, EMMI, Latvijas Banka's estimates.

*Chart 1.5*

**Deposit rate in Latvian credit institutions*, 6-month EURIBOR and spread between rates**
(%; percentage points)




*Overall weighted average interest rate on loans issued in euro to households and non-financial corporations.
Sources: Latvijas Banka, EMMI, Latvijas Banka's estimates.

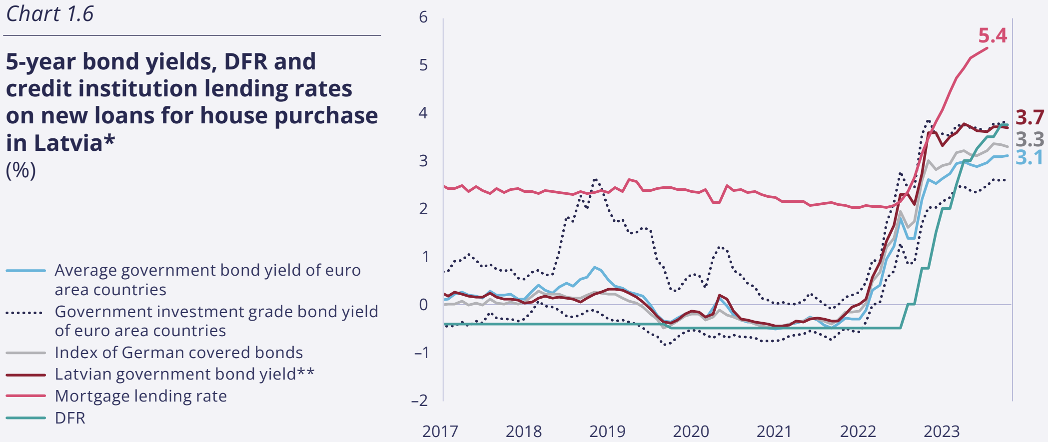
## Have Latvian credit institutions excessively raised loan interest rates?

Before deciding whether banks apply interest rates on the issued loans and how appropriate they are, it is important to realise that loans are not the only instrument used by credit institutions to invest or place the funds at their disposal. Just as private investors can choose between various investment products, banks also have other alternatives to placing the funds at their disposal, for example, deposits with the central bank, investments in debt and equity securities or in more complex financial instruments. Chart 1.6 reflects the annual returns on some potential low-risk category investment types. Mortgage lending rates compared with other types of investment are higher. This stems from a relatively higher risk and lower liquidity of mortgage loans. As regards the levels of rates, assumptions can be made regarding the level at which credit institutions might discontinue lending by giving preference to other types of investment if interest rates were curbed, for example, in relation to mortgages.

Meanwhile, to assess whether credit institutions have grounds for raising mortgage lending rates, we may look at the spread between lending rates on new loans issued by credit institutions for house purchase in Latvia and returns on alternative types of investment – between 5-year bond yields and the ECB deposit facility rate (DFR). It is obvious that this spread since mid-2022 has been narrower than during the period of the low interest rates. This would suggest that credit institutions' revenue generated from issuing mortgage loans has not increased disproportionately compared with other alternative types of investments.

*Chart 1.6*

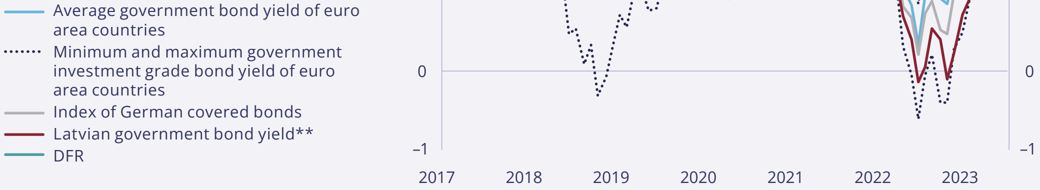
**5-year bond yields, DFR and credit institution lending rates on new loans for house purchase in Latvia***
(%)




* With interest rate fixation up to 12 months. ** The rate has been calculated using the Nelson-Siegel-Svensson model.
Sources: Bloomberg, Latvijas Banka, ECB Data Portal, Latvijas Banka's estimates.

*Chart 1.7*

**Spread between credit institutions' lending rates on new loans for house purchase in Latvia* and 5-year bond yields, DFR**
(percentage points)



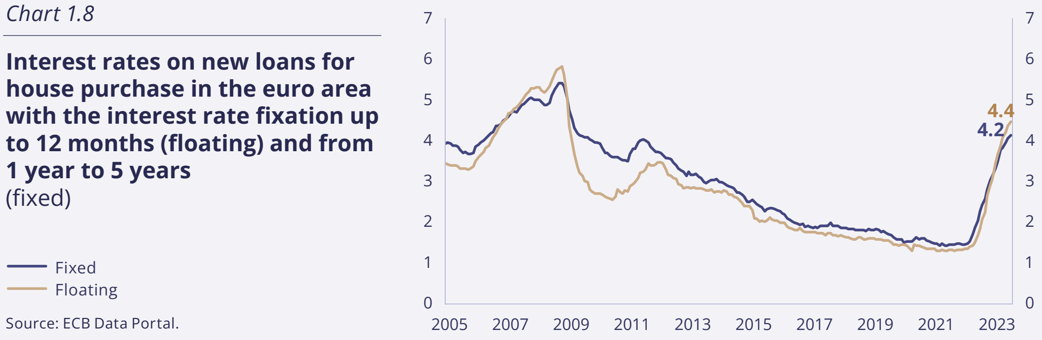

* With interest rate fixation up to 12 months. ** The rate has been calculated using the Nelson-Siegel-Svensson model.
Sources: Bloomberg, Latvijas Banka, ECB Data Portal, Latvijas Banka's estimates.

## How can borrowers protect themselves?

To protect themselves against fluctuations of lending rates, borrowers should choose a loan with a longer-term interest rate fixation. This allows for levelling out fluctuations of interest rate payments in time. Account should be taken of the fact that fixation of lending rates for a longer term allow borrowers to protect themselves in times of rising interest rates, but it prevents borrowers from benefitting from declining rates. When looking at the rates on new loans issued to households in the euro area, the following picture emerges: lending rates fixed for a longer term are generally higher than those fixed for a shorter term. This difference is modest in the euro area, and it is measured solely in some basis points. The floating rates exceed the fixed rates in periods when interest rates surge, reflecting that the fixation of interest rates for a longer term protects a borrower against fluctuations of rates. On the other hand, the fact that the fixed interest rates are higher than the floating ones seems to indicate that they perhaps might not gain popularity in times of low interest rates. In the euro area, the fixed interest rates differ only marginally from the floating ones, but this difference is substantially greater (Charts 1.8 and 1.9) in Latvia, with the spread between the fixed and floating interest rates on collateralised loans issued for house purchase reaching even more than 3 percentage points. Only in recent months, Latvia has seen the floating interest rate slightly exceed the fixed interest rate, reflecting market participants' expectations of declining interest rates in the future which are priced in longer-term financial market instruments. A reason why bank customers do not request such product from banks might also be a substantially higher fixed interest rate in Latvia.

*Chart 1.8*

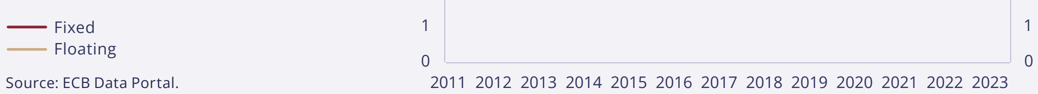
**Interest rates on new loans for house purchase in the euro area with the interest rate fixation up to 12 months (floating) and from 1 year to 5 years**
(fixed)




Source: ECB Data Portal.

*Chart 1.9*

**Interest rates on new loans for house purchase in the euro area with the interest rate fixation up to 12 months (floating) and from 1 year to 5 years (fixed)**
(%)




Source: ECB Data Portal.

Currently, possibilities of Latvian households to fix a lending rate for a period of more than a year on attractive conditions (longer-term benchmark or another impartial interest rate reflecting the price of money) that would allow for protecting borrowers from rate fluctuations are subject to severe constraints. Customer interest in the respective products and increased competition might necessitate banks to offer new products. Therefore, it is important to create a favourable environment and promote competition in the banking sector, as well as improve the population's financial literacy and stimulate interest in management of its finances.

## Conclusions

Revenue of Latvian credit institutions generated from issuing loans has grown considerably since the ECB commenced the normalisation of monetary policy in July 2022. This is because loans with a short interest rate fixation term are issued more often in Latvia, and their rates depend on the money market benchmark EURIBOR. Meanwhile, expenses of credit institutions have increased only slightly. This can be attributed to the high share of demand deposits in the bank funding structure and the weak competition between banks that hampers efficient transmission of monetary policy to the rates of deposits received. It is expected that bank financing costs might increase in the future, with the share of term deposits following an upward path. Meanwhile, an artificial intervention into setting bank lending rates might weigh on the already weak competition between banks and the development of bank lending.

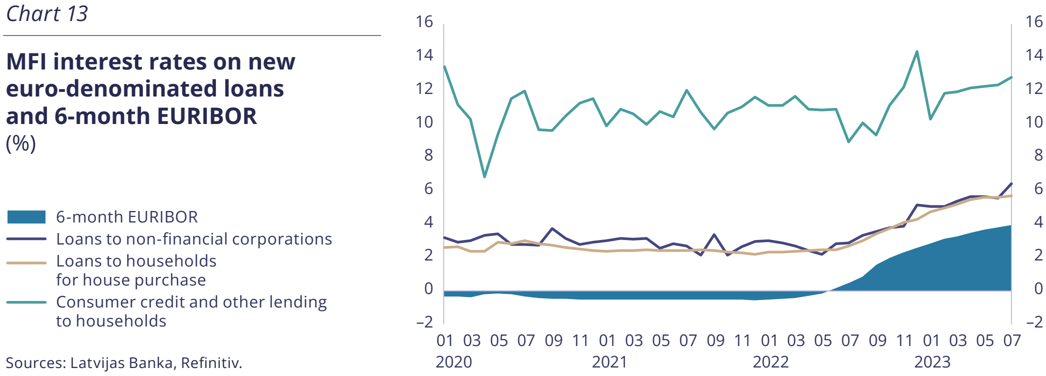
Lending to households opens up a more promising horizon, i.e. despite geopolitical risks and the economic situation, growth is set to continue modestly, taking account of the low debt burden and the need to renew the housing stock.

***The interest rate on new euro-denominated loans has increased at a slower pace than before, as money market indices grew more slowly during the reporting period (from February 2023 to July 2023) due to the ECB moderating its policy rate hikes.***

In July 2023, the interest rate on new euro-denominated loans to non-financial corporations reached 6.4% (up by 1.3 percentage points since February 2023), but the 6-month money market index edged up by 0.8 percentage points since February, reaching 3.9% in July. July saw a sharper rise in interest rates on loans to non-financial corporations. This was due to changes in the structure of monthly transactions, i.e. more active revision of risky transactions carried out by some credit institutions, applying a higher interest rate on such transactions. A month ago in June, when lending to lower-risk customers was observed, the interest rate on new euro-denominated loans to non-financial corporations rose by only 0.5 percentage points (the increase in the money market index was 0.7 percentage points at the time). This difference determines further risks related to interest rate margins. On the one hand, the fall in demand and more intense competition for lower-risk customers limit the ability of credit institutions to raise interest rates on offered loans. On the other hand, due to a persistently negative outlook for sectoral and firm-specific development and a decreasing risk tolerance, credit institutions are more prone to reject loans to riskier customers or apply a higher interest rate margin on these loans. Taking into account that credit institutions mainly grant loans to businesses with interest rates tracking money market indices, there also remains the influence of ECB monetary policy on the development of interest rates.

*Chart 13*

**MFI interest rates on new euro-denominated loans and 6-month EURIBOR**
(%)




Sources: Latvijas Banka, Refinitiv.

***The upswing in interest rates on loans to households for house purchase has decelerated, following the trends in money market indices.***

The interest rate on euro-denominated loans to households for house purchase during the reporting period increased by 0.7 percentage points, reaching 5.7% in July 2023. This means that the margin on new euro-denominated loans for house purchase has decreased by 0.1 percentage points due to pressure from competition and increased activity in the revision of loan agreements for house purchase (a lower interest rate is often applied to revised loan agreements for house purchase, i.e. it was 5.3% in June 2023, while it was 6.2% for wholly new housing loans). However, the risk persists that credit institutions can increase the margin applied on new loans driven by their deteriorating assessment of the housing market and borrowers' credit risk. Interest rates on housing loans are also closely related to money market indices. Meanwhile, the interest rate on new euro-denominated consumer credit and other lending to households edged up by 1 percentage point (to 12.8% in July 2023). This increase was due to an increase in the interest rate on other lending that does not fall under the definition of traditional consumer credit (by 1 percentage point during the reporting period; 6.4% in June 2023). Meanwhile, the interest rate on consumer credit decreased by 0.1 percentage points (13.9% in June 2023) as a result of stronger competition between credit institutions.

## Box 2. How does the increase in interest rates affect the household mortgage loan payments in the euro area countries? Share of the floating and fixed interest rate loans[11]

The interest rate on the ECB's deposit facility has increased by 4.5 percentage points, significantly affecting the household mortgage loan payments over the last two years. At individual level, the amount of the loan payment depends on the outstanding value of the loan and the maturity, the interest rate and the fixation period of the loan. Namely, the shorter the fixation period of the interest rate, the sooner households will feel the effects of the interest rate increase.

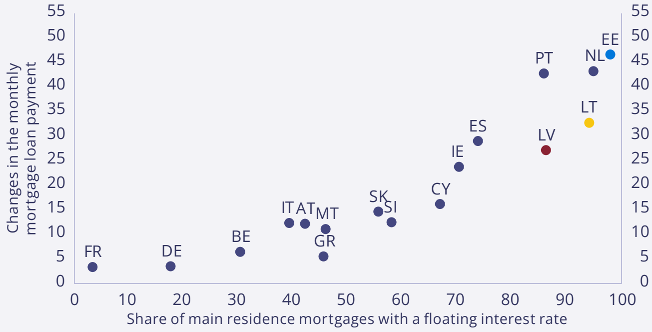
The practice of fixing mortgage lending rates vary widely across the euro area countries. In France and Germany, mortgage lending rates are mostly fixed. This means that, with the ECB's interest rates changing, household mortgage loan payments remain broadly unchanged. The advantage of this type of interest rate fixation is that the payment amount is predictable. At the same time, the disadvantage is that in periods when the central bank's interest rates are relatively low (as was the case from 2009 to 2022), households have to pay more for loans than they paid in the case of a loan with a floating interest rate.

[11] Prepared by Ludmila Fadejeva, economist of Latvijas Banka.

However, in periods when the central bank's interest rates are on average higher (as is the case now), households pay more for loans with a floating interest rate than they paid in the case of a loan with a fixed interest rate. If interest rates increase rapidly, low income households face an increased liquidity risk, and it might become difficult to pay for the loan from available savings or income, and in critical cases, this situation may even lead to insolvency proceedings. In order to avoid this, banks offer several solutions such as a temporary deferment of payments or the restructuring of a loan.

*Chart 2.1*

**Changes in the average mortgage payment due to the increase in the interest rate of 4.5 percentage points and the average share of floating interest rate loans in housing loans**
(%)




Source: Latvijas Banka's estimates, using the HFCS data for 2020.

Note. For more detailed information on the survey, see the ECB's website.

This box compares the average changes in the mortgage payments in various euro area countries. To model the increase of 450 base points in the interest rate, the 2020 Household Finance and Consumption Survey (HFCS) database has been used. The calculation has used the information on the outstanding value of loans, the maturity of loans and the interest rate in 2020 and its fixation period.

The calculations suggest that in the Baltic countries, as well as in Portugal and the Netherlands, more than 85% of the mortgage borrowers have a mortgage on their main residence with a floating interest rate (Chart 2.1). Against the background of the rising interest rate, in Latvia, the mortgage payment might on average increase by 27%, while in Lithuania and Estonia, this increase could be even higher (by 33% and 46% respectively) due to more active lending to households over the past few years, a larger loan portfolio of new housing loans in mortgages[12] and a higher average square metre price of new dwellings. In countries where the floating interest rate has been used in mortgage lending in approximately 50% of cases (in Slovakia and Slovenia), the monthly mortgage payment might on average increase by 15%. In France and Germany where fixed interest rate loans prevail, the increase in the average payment could amount to merely 3%.

According to our estimates, despite the sharp rise in mortgage payments in Latvia, the average increase in the payment in monetary terms is relatively small (approximately by 70 euro). According to the estimates based on the data from the Credit Register of Latvijas Banka and the household survey, which are reflected in the Financial Stability Report 2023[13], with EURIBOR reaching 5.0%, the increase would be up to 60 euro per month for most of housing loans (60%), and the debt service costs would exceed 40% of household income for 4% of households (the share of such households before the increase in the interest rate was 1.5%).

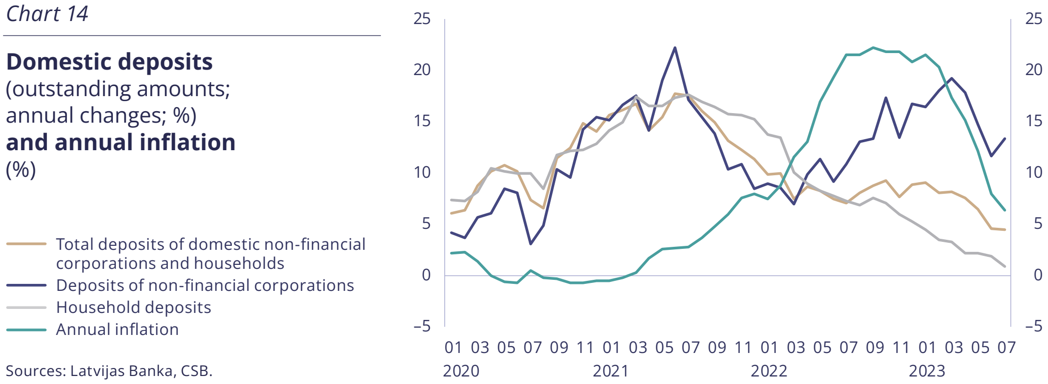
[12] EUROSTAT, House price index - Item weights [PRC_HPI_INW custom_7360879]
[13] Appendix 2 "Borrowers' ability to withstand an increase in costs and interest rates" to Latvijas Banka's Financial Stability Report 2023 (prepared by Andrejs Semjonovs, Nadežda Siņenko, Mikus Āriņš, Jekaterina Petkeviča).

***The summer spending decreased household savings but boosted corporate savings held with banks. In search of more profitable opportunities for allocation of savings, the upward trend in both the household and corporate sectors continued while current account balances followed a downward path.***

Overall, the domestic bank deposits in nominal terms have decreased by 0.6% over the past five months, including the deceleration in household savings with banks by 1.2%, but bank accounts have witnessed funds of non-financial corporations increase. Thus, the annual growth rate of domestic household deposits edged down to 0.9% in July (i.e. the lowest level since late 2012), while it remained high (13.3%) vis-à-vis non-financial corporations.

*Chart 14*

**Domestic deposits**
(outstanding amounts;
annual changes; %)
**and annual inflation**
(%)



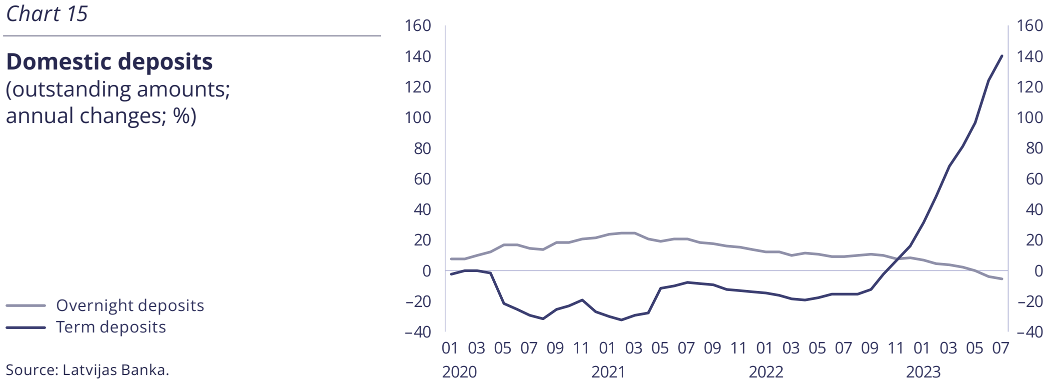

Sources: Latvijas Banka, CSB.

With inflation still exceeding 5%, the feeble increase in deposits might suggest depletion of household savings and its adverse effects on domestic demand. However, the popularity of investments in government savings bonds suggests that household wealth has not deteriorated notably. According to the Treasury data, the population has purchased savings bonds worth more than 170 million euro from the beginning of the year to 5 September, including government bonds amounting almost to 100 million euro, thus balancing the decline in deposits in practical terms. By way of comparison, the yields on savings bonds of 1-year maturity was 3.9% in mid-September, but the average bank-offered term deposit rate of 1-year maturity was 3.8%. At the same time, both businesses and households look for profitability by transferring funds from current accounts to term deposits. An upward trend in deposit rates has contributed to an increase in term deposits (in March–July by 60.3%), while current account balances have dropped by 7.0%. At the end of July, term deposits represented more than 2.4 times the balance reported a year ago and accounted for 15.4% of total deposits (6.7% in July 2022).

At the end of the year, faster growth of deposits will be hampered by both the increasing pressure from spending (including skyrocketing electricity bills and the beginning of the heating season) and the search for more attractive alternatives suitable for placing savings outside the banking sector.

*Chart 15*

**Domestic deposits**
(outstanding amounts;
annual changes; %)




Source: Latvijas Banka.

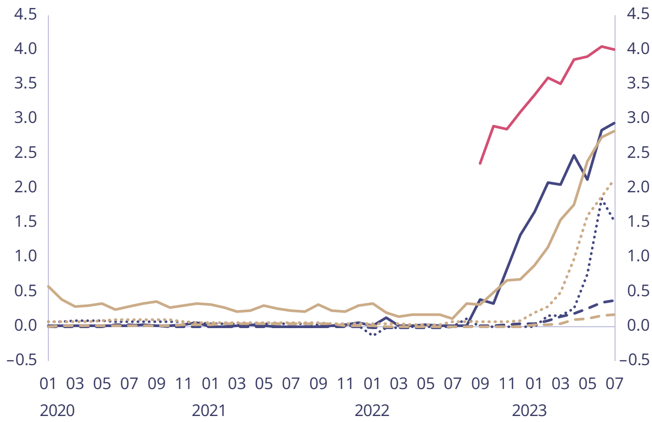
***Although credit institutions have increased their offered interest rates on new euro-denominated term deposits and deposits redeemable at notice (savings accounts), these rates continue to lag behind the rise in money market indices.***

Demand deposit rates have displayed a very modest upward path during the reporting period: households witnessed an increase of 0.2 percentage points (to 0.2%) and non-financial corporations – by 0.3 percentage points (to 0.4%). Credit institutions began to compete for longer-term deposits during the reporting period. Since March of this year, Latvijas Banka has been publishing statistics on deposit rates offered by credit institutions on a regular basis (link). Currently, most credit institutions have raised rates on new euro-denominated term deposits with a maturity of 12 months to at least 3.75%, and the average rate on new euro-denominated term deposits for households had reached 2.8% in July 2023 (up by 1.7 percentage points since February 2023), but it stood at 2.9% for non-financial corporations at the end of the reporting period (up by 0.8 percentage points).

*Chart 16*

**MFI rates on new euro-denominated domestic deposits and the 12-month rate on savings bonds**
(%)

- Demand deposits of non-financial corporations
- Deposits redeemable at notice of non-financial corporations
- Term deposits of non-financial corporations
- Household demand deposits
- Household deposits redeemable at notice
- Household term deposits
- Fixed rate on 12-month savings bonds




Sources: Latvijas Banka and the ECB SDW.

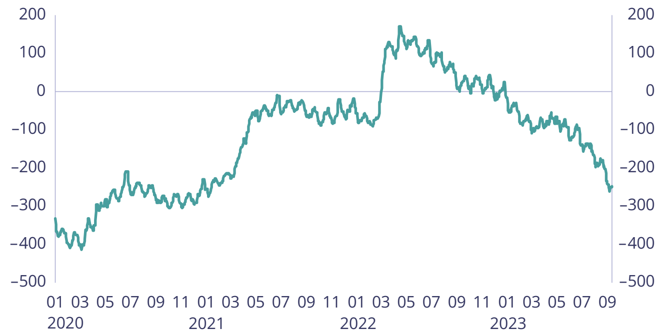
Rates on deposits redeemable at notice have also elevated steeply, i.e. by 1.8 percentage points vis-à-vis households, reaching 2.1% in July of this year and by 1.3% vis-à-vis non-financial corporations, reaching 1.5%. Sounder management of funds owned by non-financial corporations and households and their channelling to more profitable deposits or deposit alternatives can contribute to competition between credit institutions for depositors' money. Therefore, taking into account the dynamics of the key ECB interest rates, deposit rates also have the potential to continue climbing in the future, although they have lagged behind the rise in money market indices so far. It should be noted that government savings bonds (www.krajobligacijas.lv) remain a more profitable alternative to term deposits. Their interest rates for a maturity between one to ten years have even exceeded 4% during the reporting period. The Deposit Guarantee Law (link) safeguards deposits of both natural and legal persons held with Latvian credit institutions in all currencies up to 100 000 euro. Therefore, depositors are free and safe to choose the credit institution offering the best deposit terms and conditions.

***The middle of the year is characterised by a faster inflow of cash into Latvijas Banka.***

The issuance of Latvijas Banka's euro banknotes decreased from –99 million euro in late February to –241 million euro on 12 September. Ever-increasing interest rates have been another factor supporting the downward trend, and they contributed to deposit growth in credit institutions. Correspondent accounts of credit institutions and the used deposit facility with Latvijas Banka edged up from 4.7 billion euro to 5.4 billion euro on account of a fall in the government deposit with Latvijas Banka and the money inflow from the euro area via TARGET2.

*Chart 17*

**Net issuance of euro banknotes by Latvijas Banka**
(millions of euro)




Source: Latvijas Banka.

***The international rating agency Fitch Ratings maintained its credit rating for Latvia at A– level, at the same time revising the outlook from stable to positive.***

Fitch Ratings concluded that Latvia was relatively resilient to the external shocks experienced recently, i.e. the impact of the pandemic on the economy was smaller than the EU average, as well as Latvia strengthened its independence from Russian energy imports.

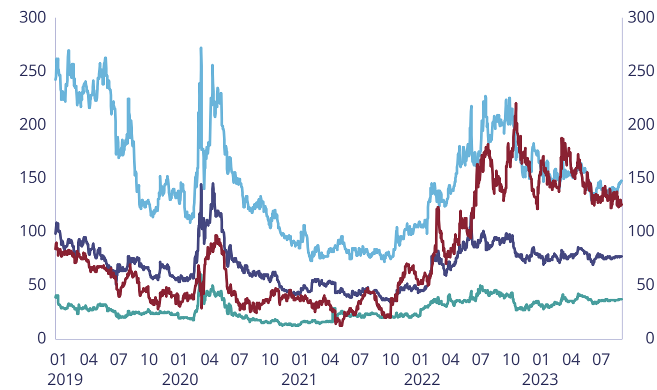
***The favourable financial market conditions coupled with the continuing upward trend in investors' demand for investment grade debt securities created favourable conditions for Latvia to issue 10-year bonds in the international market (it was in March 2021 when debt securities of such maturity were issued last time).***

The demand exceeded 3 billion euro but the sold amount stood at 750 billion euro. The initial spread over the mid-swap rate was 100 basis points, but then it decreased to 90 basis points during the primary auction and dropped to 85 basis points at the end. The interest rate of the re-offering was 3.91% but the coupon rate –3.875%.

In the secondary market, the average yield on the Latvian 8-year bonds posted minimal changes: it was 3.83% at the end of February and 3.81% on 12 September. Also, the spread between the above and the respective German government bond yield did not change materially: it narrowed from 118 to 117 basis points. Although market participants expected that the key ECB rates would reach their maximum values in this rate-raising cycle, the indicators characterising the Latvian and euro area economy and their outlook deteriorated, balancing the impact on the assessment of the 10-year bond yield.

*Chart 18*

**7-year government bond spreads relative to German government bond yields**
(basis points)

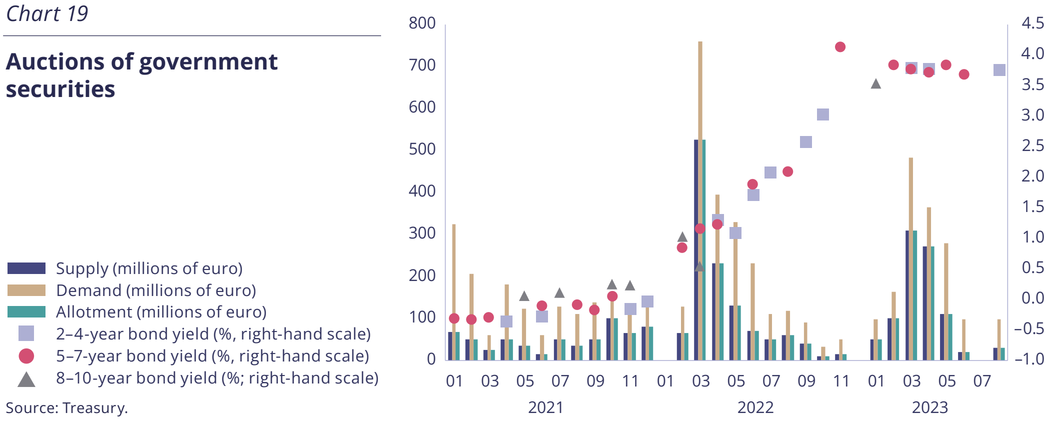



Source: Bloomberg.

From March to mid-September, the Latvian government organised 14 auctions in the internal bond market, selling its securities previously released on international markets (same ISIN for securities launched on the domestic and international markets). The supplied and sold amount was 785 million euro (it stood at 275 million euro during the preceding seven months), while demand was as high as 1478 million euro during the reporting period. Bonds with a maturity of 4 to 8 years were offered, with the 4-year bond yield edging down from 3.87% in mid-March to 3.70% in early September. At the same time, large-scale redemption also took place therefore an increase in Latvian government securities was small.

*Chart 19*

**Auctions of government securities**




Source: Treasury.

***The Ministry of Finance reported that it is willing to increase the stock market capitalisation in 2027 to at least 9% of GDP, while currently it stands at around 3%.***

It is expected that the government will offer stocks of several public companies in the initial public offering and on stock exchange. At the same time, the Ministry of Finance developed draft regulations on the procedure for the issuance of Riga municipality bonds to be used for attracting financial resources for the implementation of various development projects in the future.

***Activity of private debt security issuance somewhat declined amid rising interest rates; however, interest in mobilising funds in the capital market remained unchanged.***

In the context of the new issuances, it can be noted that Luminor Bank AS in Estonia issued 4-year unsecured bonds in the amount of 300 million euro, as well as repurchased previously issued bonds totalling 237.8 million euro with a maturity in 2024. This transaction will strengthen compliance with the minimum requirements of the respective liabilities and improve their structure. The coupon rate of the newly issued bonds was set at 7.75%. AS Storent Investments, a construction and machinery rental company issued 2.5-year bonds in the amount of 105 million euro with a yield of 11%, and these bonds were listed on the debt securities list of the stock exchange AS Nasdaq Riga. Meanwhile, the non-bank lender AS DelfinGroup issued unsecured bonds, raising 10 million euro with a maturity date on 25 September 2024, and these bonds were listed on the First North bond list of the stock exchange Nasdaq Riga. The coupon rate of these bonds is floating – 8.75% plus 3-month EURIBOR. AS DelfinGroup also issued unsecured bonds totalling 5 million euro with a coupon rate of 11.50% plus 3-month EURIBOR and registered a new issuance up to 15 million euro.

Activity of stock exchanges was fuelled by the issuance of bonds by a canned fish producer SIA Banga Ltd amounting to 2.5 million euro, and these bonds were traded on the alternative market First North. Several companies notified their plans to issue bonds. The Riga municipal company SIA Rīgas ūdens announced its intention to issue green bonds totalling 35 million euro approximately in the first quarter of the following year. A manager of environmental resources AS Eco Baltia considers the possibility to issue bonds up to 10 million euro with a maturity of up to three years in a closed offering; the new bonds might be issued by the end of the year. The AS APF Holdings group specialising in egg production announced its intention to launch in late October its initial public offering of stocks in the amount of 7 million euro and list stocks on the alternative market of the stock exchange AS Nasdaq Riga. In the second half of 2023, BluOr Bank AS plans to issue bonds totalling up to 6 million euro to be qualified as additional tier 1 instruments. Activity of the stock exchange AS Nasdaq Riga will also be strengthened by bonds (4 million euro) issued by AS GIVEN Jewellery, a company of the jewellery retail chain GIVEN by Grenardi included in trading lists of AS Nasdaq Riga, and by bonds (4 million euro) of AS Longo Group, a second-hand car seller.

***On the Latvian stock market, the stock price index OMXR increased buoyantly by 16.2% on 12 September 2023 compared with the end of February.***

It was only some stock markets that witnessed such steep growth, while the Baltic stock price index OMXBBGI declined (by 2.8%). The increase in share prices observed in Latvia was attributable to the fact that, amid higher inflation, corporate profit indicators also edged up, while risks related to Russia's impact subsided. Meanwhile, on the Baltic scale, Estonia saw a negative stock price development. The most obvious fall was experienced by stocks of clothing retailer Baltika (by 48.9%), since the company was exposed to a lasting combination of failures. As a result, the company lost its investors' confidence and left the stock exchange in August.

# 3. Sectoral Development[14]

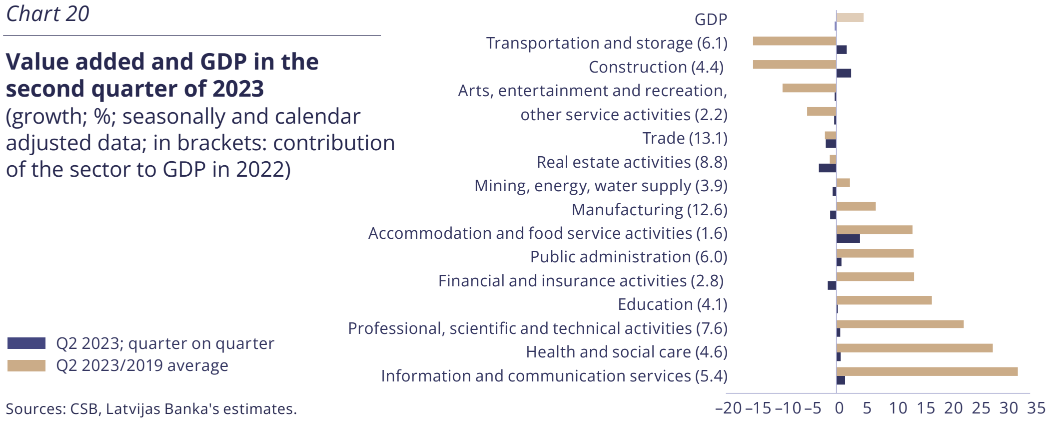
***In the first half of the year, activity of several sectors was approaching the levels reached before the pandemic or the war in Ukraine launched by Russia, but this path was different: both from low levels and from unusually high levels.***

The second quarter saw sectoral value added increase further (by 0.3% quarter on quarter); however, it was more than offset by the negative contribution of product taxes leading to a GDP decline of 0.3%. The construction, transport and accommodation and food service activities sectors caught up gradually, while activity of manufacturing and agriculture fell from unusually high levels resulting from monetary policy tightening and slower growth of trade partners' economies as well as export prices being also less attractive compared with the previous year.

Growth of the trade sector remained hampered by the drop in purchasing power and sanctions (affecting wholesale trade) coupled with adverse weather conditions which might hinder development of both agriculture and wholesale trade related to exports of agricultural products. Although the first half of the year delivered high profit indicators in the financial sector, its value added followed a downward path in the second quarter.

*Chart 20*

**Value added and GDP in the second quarter of 2023**
(growth; %; seasonally and calendar adjusted data; in brackets: contribution of the sector to GDP in 2022)




Sources: CSB, Latvijas Banka's estimates.

## 3.1 Manufacturing

***Manufacturing is weakening further, with its output remaining slightly higher than before the pandemic (in 2019).***

Turnover still significantly exceeds the indicators of 2019 owing to higher prices. The high technology sectors – manufacture of electronic, electrical and other equipment still prevent manufacturing from declining steeper. However, the capacity of these sectors to handle order backlogs accumulated during the pandemic is also waning, and sectors have to refocus their activities to attracting new orders which appears to be difficult against the background of weaker external demand. According to industrial production turnover data, both domestic and foreign markets face a decline in turnover confirming the slowdown in consumption, investments and exports on the demand side of GDP.

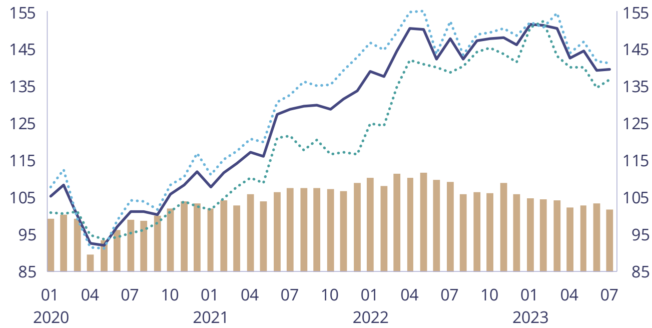
[14] This chapter analyses GDP and sectoral value added at constant prices, using seasonally and calendar adjusted data (unless otherwise specified).

*Chart 21*

**Manufacturing**
(2019 average = 100)

Production volume indices
Turnover indices
Turnover in domestic market
Non-domestic turnover

Source: CSB.




***Demand for construction-related products is falling faster***

The good times characterised by a high demand and elevated prices experienced by the wood industry are over now; the construction segment is particularly hit by more modest demand and its effects on prices. Alongside demand, storms and damage caused by pests also affect this area therefore cheap and lower quality wood increasingly penetrates the market. Demand for other construction-related products – metal constructions, non-metallic mineral products, etc. – has also edged down.

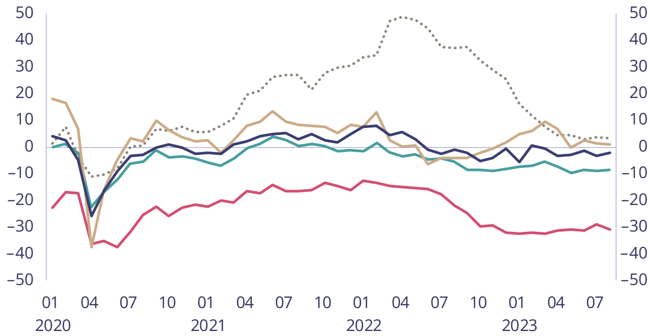
However, it should, as always, be noted that the picture is uneven, and sectoral representatives confirm that performance of the firms involved even in the production of goods for construction purposes is diametrically opposed, i.e. work buzzes in some firms, and they are unable to meet customers' demand, while production capacity shrinks and profitability deteriorates notably in some other firms.

*Chart 22*

**Industrial confidence indicator and individual assessments**
(net responses)

Confidence indicator
Outlook for export orders
Sales price outlook for the coming months
Output volume outlook for the coming months
Employment outlook for the coming months

Source: EC.




***Industry will continue to shift its activities to competitiveness-led growth in the month ahead.***

A substantial number of producers believe that weakening experienced this year is normal, and they look forward to returning to steadier and more sustainable growth resting on competitiveness and thorough assessment of costs and the prices of final products. Overall figures of producer sentiment are relatively stable.

The output estimate was atypically high in spring, but it has deteriorated over the past months. This might mean that the execution of orders delayed due to the old disruptions of supply chains has been finished, and that the time is ripe to accept new orders. At the same time, the assessment of export orders is low, albeit it has demonstrated a slight improvement dynamics over the past months.

## 3.2 Construction

***In the second quarter of 2023, the growth rate of costs stabilised and the construction sector continued to recover, but growth was somewhat slower than in the first months of the year.***

In the second quarter of 2023, the value added of the construction sector increased by 2.7% quarter on quarter and by 15.4% year on year.

The largest positive contribution to the construction sector growth came from construction of buildings and specialised construction activities. The completion of some residential building projects, as well as commissioning of the new Ogre State Gymnasium building and the completion of the reconstruction of Jelgava Technology Secondary School were the main drivers of the increase in building construction.

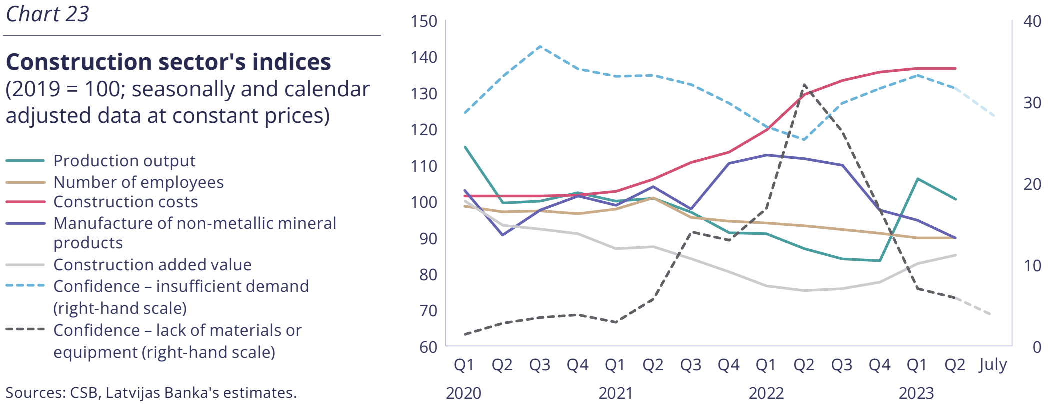
Although the rise in construction material prices has nearly come to a halt, the pressure on employees' wages and total construction costs stemming from the shortage of skilled labour is ongoing. This means that construction costs will not tumble in the near future.

Several residential buildings and large infrastructure facilities are planned to be commissioned in the second half of the year, thus also contributing to positive construction sector's growth at the end of the year. In order not to lose part of the available EU funding for this period, it is also expected that the absorption of EU funds will gain momentum at the end of the year, contributing to the construction of roads, pipelines and communication infrastructure.

In Latvia, the construction sector's growth is driven by individual large projects and, from the overall perspective of the sector, the implementation of the Rail Baltica project and construction of the associated facilities, i.e. bridges, overpasses, railroads, etc. will be in the focus of the construction sector in the coming years. However, the implementation of the above project involves risks: persistent uncertainty about the amount of the required funding and its sources and the potential rise in labour costs as simultaneous inflows of other funding (e.g. RRF (the Recovery and Resilience Facility), the EU Cohesion Fund, etc.) might cause labour shortages in the sector as a whole.

*Chart 23*

**Construction sector's indices**
(2019 = 100; seasonally and calendar adjusted data at constant prices)




Sources: CSB, Latvijas Banka's estimates.

## 3.3 Real estate sector

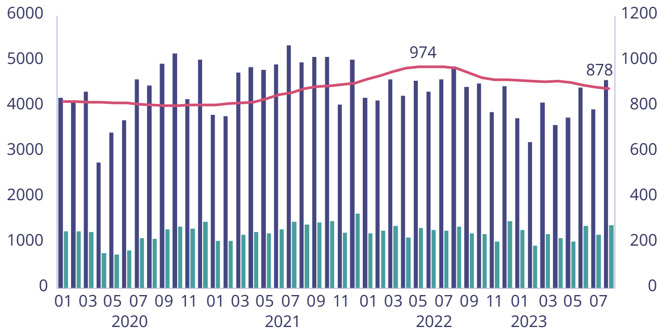
***The increase in interest rates on loans and inflation, which have reduced possibilities and willingness of Latvia's households to purchase new housing, continued to weigh on the real estate market activity.***

However, demand for new housing has not ceased, and the customers still show notable interest in energy efficient and functional housing. In the second quarter of 2023, the added value of the real estate sector decreased by 3.2% quarter on quarter. The real estate market experiences price stabilisation. The average price of standard apartments decreased for four consecutive months since May, reaching 878 euro/m2 in August. In the first seven months of the year (year on year), the number of transactions registered with the Land Register decreased by 13% in Latvia as a whole and by 8% in Riga. The rise in interest rates on loans is one of the major contributing factors having an adverse effect on the activity of the new housing market in particular.

It is expected that prices of new housing will not increase significantly in the near future, as all ongoing projects are implemented according to the costs provided for in the contracts concluded with subcontractors, manufacturers of building materials and energy suppliers. Despite the fact that prices of individual building materials have tumbled, this drop will not be accompanied by a significant fall in prices in the real estate market, since demand for housing still exceeds supply, and supply and choice continue on a downward trend in the segment of new projects.

*Chart 24*

**Average price of standard apartments in Riga (euro/m2) and the number of contracts registered with the Land Register**




Purchase contracts in Latvia
Purchase contracts in Riga
Average price (right-hand scale)

Sources: CSB, ARCO REAL ESTATE, Land Register.

## 3.4 Trade

***The effects of inflation and sanctions weigh on development of the trade sector, and these adverse factors are coupled with an unfavourable agricultural season.***

The value added of trade declined for the third consecutive quarter, including the second quarter when it shrank by 1.9% quarter on quarter.

The trade of motor vehicles was the only subsector showing rapid and positive development of real turnover. However, the above subsector's growth might slow down because the number of consumers who have managed to accumulate and preserve appropriate savings is limited and other uses of savings are becoming attractive with the increase in yields.

***Despite the substantial fall in inflation, it remained high, and the deteriorating purchasing power continued to put a brake on retail trade growth.***

Retailers of many commodity groups (including food retail trade businesses) have faced a slowdown in activity over several months this year, and retail trade turnover in real terms was on a downward trend for a period of four consecutive quarters on a quarterly basis. July also saw a drop.

The past months have seen the retailer sentiment indicator slightly deteriorate on account of the assessment of both the current activity and activity expected in the coming months. According to the data of card payments made in Latvia, retail trade is not expected to experience significant improvements in August.

However, household consumption could overall be more vigorous on account of imports. This is evidenced by a faster increase in the annual growth rate of card payments made abroad.

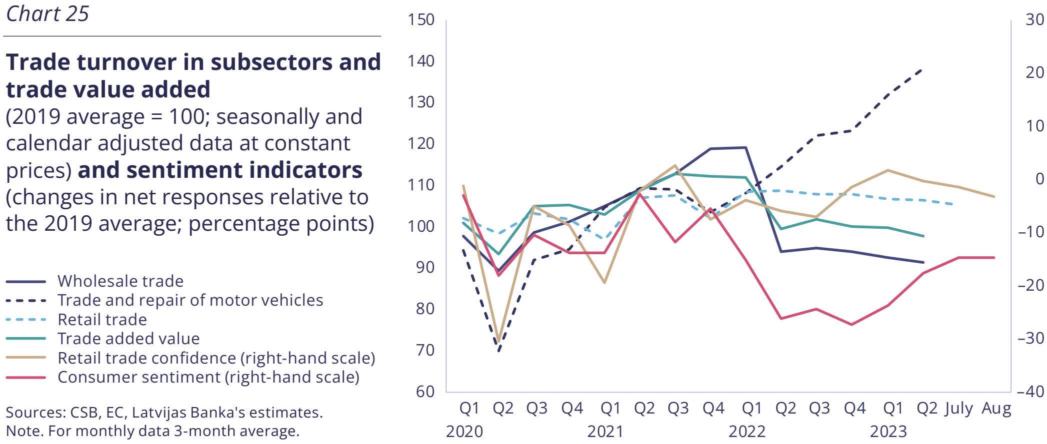
Meanwhile, amid rising interest rates, people's choice to invest their savings can partly offset the impact of improved purchasing power on more rapid development of consumption, including retail trade.

***The sanctions related to the war in Ukraine launched by Russia and the bad season for crop production will continue to weigh on the wholesale trade.***

Short-term data on the real turnover suggest that the second quarter saw activity continuing on a downward path in the specialised wholesale group where individual companies, whose owners are subject to sanctions, are registered. As the war in Ukraine continues, this subsector might not perform better in the coming quarters. Moreover, wholesale trade of agricultural products has gradually fell from unusually high levels during three quarters. The smaller grain yield caused by weather conditions and its lower quality might reduce wholesalers' activity related to exports of these products in the second half of the year.

*Chart 25*

**Trade turnover in subsectors and trade value added**
(2019 average = 100; seasonally and calendar adjusted data at constant prices) **and sentiment indicators** (changes in net responses relative to the 2019 average; percentage points)




Sources: CSB, EC, Latvijas Banka's estimates.
Note. For monthly data 3-month average.

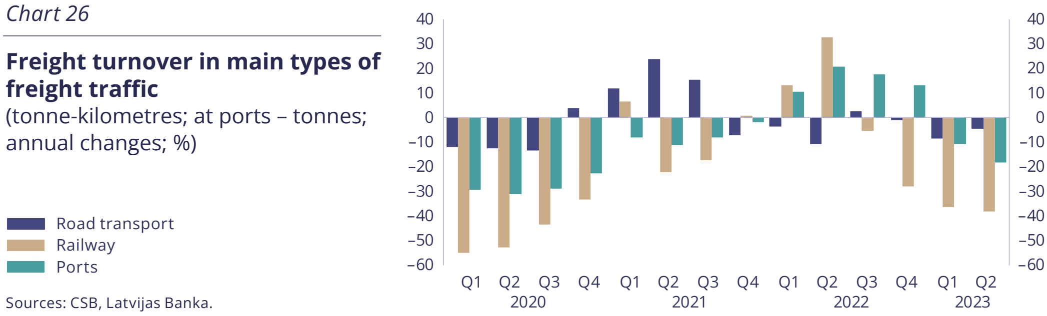
## 3.5 Transport

***The transport sector has showed a negative trend at the beginning of the first half of the year: freight transportation drifted downwards in all transport sectors.***

Cargo volumes have decreased in Latvia's largest ports and railway transport. This was mainly due to a steep contraction in freight transit in two of the major cargo groups. Regarding road transportation, international cargo volumes have notably decreased, particularly concerning imports and exports, and the number of foreign cargo transportation has also edged down. Meanwhile, the number of passengers continues to grow in air transport, but the pre-pandemic level has not yet been reached, the sector maintains a positive and optimistic outlook for the future developments.

*Chart 26*

**Freight turnover in main types of freight traffic**
(tonne-kilometres; at ports – tonnes; annual changes; %)




Sources: CSB, Latvijas Banka.

***International road freight volumes have continued to decline this year due to a weak economic growth in European countries.***

The first half of the year started with a drop in the cargo turnover by 6.5% year on year due to deceleration in international transportation. In the first quarter, the turnover of road cargoes abroad and export shipments decreased, while import shipments also declined in the second quarter due to deceleration of the economic activity in Latvia. Demand for transport services is expected to gradually move into expansionary territory at the end of the year; however, the overall growth in freight transportation will remain relatively weak.

***Cargo volumes have decreased even further in Latvia's largest ports and railway transport due to a sharp decrease in transportation of oil products and coal.***

The volumes of cargoes loaded and unloaded at ports dropped by 14.2% in the first half of the year, but the turnover of cargoes transported by railway fell by 36.7% year on year. This was due to a contraction in freight transit in two of the major cargo groups. The turnover of oil products declined notably following the ban introduced in Europe on imports of oil and oil products from Russia, while demand for coal imports has gradually decreased in European countries driven by the return of energy prices to lower levels.

The volumes of cargoes grew further in the grain and other cargo segments, the share of these cargoes has increased and will have a positive effect on the overall cargo dynamics in the second half of the year. At the same time, the geopolitical situation is still tense, and the future development of cargoes will remain subdued across Latvia's ports and in the railway transport.

***Air transport has continued to grow at a high rate, the number of passengers transported is gradually stabilising around the sector's long-term trend.***

In the first half of the year, the number of passengers transported by Latvian airlines increased by 50.3% year on year and is gradually approaching the pre-pandemic level. In the middle of the year, the Federal Aviation Administration (FAA) granted Category 1 rating in aviation to Latvia, which will positively impact the sector's future development. Meanwhile, due to the geopolitical situation, transported air cargoes decrease by 14.6% in year-on-year terms in the first half of the year. Closure of Russian airspace has had a significantly constraining effect on the flight traffic in our region, therefore, cargo volumes are not expected to notably expand in the near future.

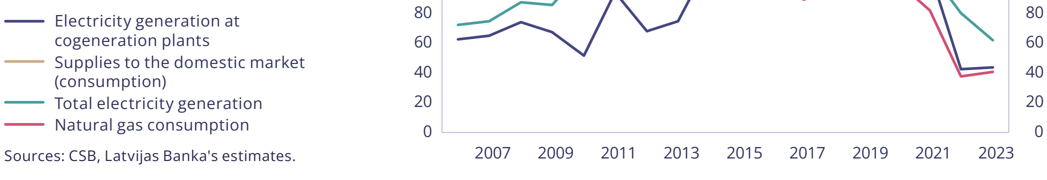
## 3.6 Energy

***The availability of primary energy sources and stabilisation of prices can provoke the return to previous consumption habits.***

As in the first quarter, floods experienced during one month (April) in the second quarter also contributed to the overall electricity generation at hydroelectric plants. However, data for the last three months (May–July) suggest that the production volume of electricity was very low both at hydroelectric plants and as a whole. The aggregate production output of the electricity and gas supply sector remained low. Normalisation might potentially be chosen as a non-word also in the energy sector. It should be noted that the customary (normal) practice might not necessarily be the desired one. With supplies of natural gas normalising and resource prices declining, there is likelihood that past practices of consumption of primary resources will be revived, including the use of natural gas for generating more electricity at thermoelectric power plants. An agreement has been reached between the Baltic states to synchronise their power networks with the continental European system in February 2025, assessing system stability risks and the price increase for customers in the event that the project is implemented earlier (Lithuania has shown such willingness).

*Chart 27*

**Electricity generation and consumption and natural gas consumption in May–July**
(long-term average of the respective season = 100)




Sources: CSB, Latvijas Banka's estimates.

# 4. GDP analysis from the demand side[15]

## 4.1 Domestic demand

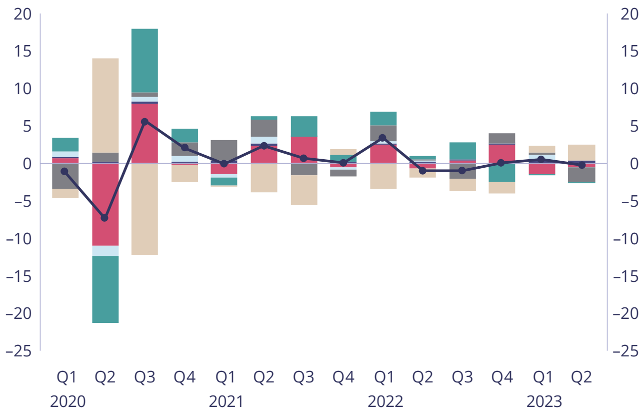
***The biggest surprise of the beginning of the year – the steep rise in investments – no longer fuelled the quarterly growth in domestic demand in the second quarter.***

Private consumption also remained weak, and GDP, lacking the support of external demand, was on a downward slope again.

*Chart 28*

**GDP and demand side by component** (quarterly changes; seasonally and calendar adjusted data; at constant prices; demand side – in percentage points)

Imports of goods and services
Exports of goods and services
Changes in inventories
Gross fixed capital formation
Public consumption
Private consumption
GDP quarterly changes (at constant prices; %)




Sources: CSB, Latvijas Banka's estimates.

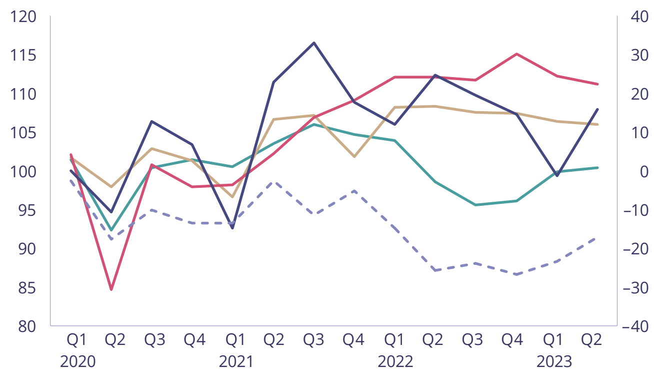
Following an unexpectedly, even unbelievably, sharp rise in 2022, private consumption grew increasingly weaker. A more substantial improvement can only be expected in autumn, when the population's purchasing power will take an upward trend.

Possibly, it is also appreciated by the people, since confidence surveys show a major improvement in the assessment of the households' financial situation for the next 12 months. The assessment of the outlook for the country's economic situation is also more optimistic. Autumn will, once again, bring the heating season's challenges; however, both the country's energy security and the energy supply of people's private homes have seen significant improvements.

*Chart 29*

**Consumption indicators**
(Q4 2019 = 100, %; sentiment – net response changes in Q4 2019 = 0)

Compensation of employees
Retail trade turnover
Private consumption
Payment card data (NSA)
Consumer sentiment (right-hand scale)




Sources: EC, CSB, Latvijas Banka's estimates.
Note. Payment card data (in Latvia and abroad, including cash withdrawals) and consumer sentiment for monthly data – 3-month moving average.

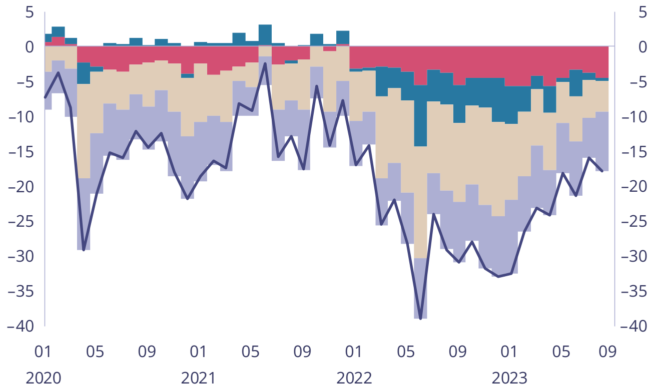
After a prolonged decline, the investment level grew rapidly in the first quarter of 2023, although it can mostly be explained by the large number of commissioned investment projects. Investments, once again, decreased in the second quarter; nevertheless, their level remained higher than in recent years. The investment amount may not be fully assessed and will be reviewed upon commissioning new larger-scale projects. Many planned investment projects offer hope that investments will expand in the future; nonetheless, in terms of

[15] This chapter analyses GDP and the demand-side components at constant prices, using seasonally and calendar adjusted data (unless otherwise specified).

investment financing costs and overall uncertainty, this is not the most favourable time to invest. Many sectoral representatives also name insufficient investments and the ongoing shortage of skilled labour as the key factors restricting growth.

*Chart 30*

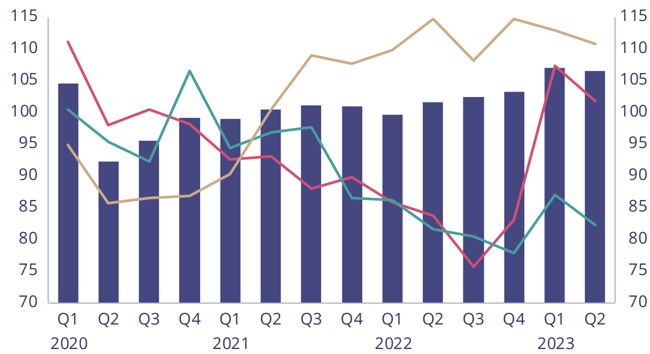
**Consumer confidence and underlying factors**
(net responses; in percentage points)




Sources: EC, Latvijas Banka's estimates.

*Chart 31*

**Investments**
(at constant prices; average level in 2019 = 100)




Sources: CSB, Eurostat. Latvijas Banka's estimates of capital goods for July.

## 4.2 Government consumption

***Despite weakening economic growth, higher tax revenue and scaled down government support programmes are facilitating an improvement in the budget balance.***

This year, the government budget balance will improve further: the general government deficit is projected to reach 3.3% of GDP. This is supported both by higher tax and non-tax revenue and a lower-than-expected rise in government expenditure. While expenditure will remain high this year, the planned support measures will be more targeted with the need for energy support significantly decreasing. The budget balance will be on an upward trend in 2024 and 2025, and the deficit will reach 3.0% and 1.7% of GDP respectively.

***In 2023, general budget expenditures will grow at a slower pace than revenue. This is facilitated by a gradual conclusion of the government support programmes.***

Over the first seven months of 2023, the expenditure of the consolidated general budget increased by 11.8% year on year and reached nearly 9.1 billion euro. Meanwhile, the rise in expenditure was driven by the government support measures (mostly a partial compensation for rising heating and electricity costs to businesses and households). With the gradual phasing out of support measures, the increase in expenditures has moderated; nonetheless, the dedicated budget expenditure on social payments has continued to rise and expenditure on compensation has substantially grown as well. This has been facilitated by the significant old-age pension indexation in 2022 and by the growing wages in the public sector mostly owing to the last year's decision on raising the lowest remuneration rate for teachers, the increase in the wages earned by the employees of public administration and local governments as well as the rise in the minimum monthly wage since the beginning of the year.

The growth in the general budget expenditure will moderate at the end of the year. This moderation will be driven by an increasingly lower growth in the prices of goods and services as well as the development of a more targeted support system in a case of rising energy prices. Moreover, expenditure on securing the national gas reserves expanded significantly in the second half of 2022 due to gas price spikes. However, for this heating season, the reserves are sufficient; furthermore, the prices have returned to lower levels.

***Although growth in consumption tax revenue is losing its momentum, the general budget revenue is still boosted by rising labour tax revenue.***

Over the first seven months of 2023, the revenue of the consolidated general budget showed an overall rise of 14.3% year on year and reached 9.1 billion euro. The growth of labour and consumption tax revenue reflects different dynamics. Following the rapid increase at the beginning of the year, growth in consumption taxes has significantly drifted downwards. It is affected both by declining household consumption and falling energy prices which made the largest contribution to VAT revenue growth over the previous year. At the same time, labour tax revenue continues to be boosted by the increasing wages in the economy. It is also partly due to a higher minimum wage since the beginning of the year. A steeper rise in corporate income tax revenue has been driven by growing distributed profits of businesses. Furthermore, the high profits of state-owned enterprises have also contributed to non-tax revenue as substantial dividend payments to the government budget.

Tax revenue is expected to increase further towards the end of the year, but the growth rate will decelerate due to weaker economic developments in the near future and gradually receding inflation.

***Despite an improvement in the budget balance, government debt is expected to be on an upward trend this year.***

While the projected trend in government debt has remained broadly unchanged, the debt level has been increased due to a more negative GDP growth forecast. As a result, the projections for government debt level have been revised to 42.0% of GDP for this year. In the following years, with a slowdown in expenditures and a gradual return to a balanced budget, the government debt level will decrease in 2024 and 2025 to 41.6% and 40.9% of GDP respectively.

## 4.3 Trade balance

***With the economic development of trade partners slowing down, Latvia's external trade has declined.***

Due to tight monetary policy, the European economy stagnated in the first half of 2023, also weighing on Latvia's external trade: over the first two quarters of 2023, exports and imports of goods and services shrank, with imports showing a steeper fall. The downturn in external demand is mostly felt by trade in goods (with both exports and imports declining), and the services sector has become the main driver of export growth.

***The falling value of exports of goods is mostly due to two commodity groups – articles of wood and mineral products (natural gas, oil products as well as electricity) – which experienced an unprecedented rise in prices and volumes in 2022.***

Both commodity groups show much lower prices this year, and demand for articles of wood has fallen, hampered by declining construction in trade partner countries. Meanwhile, an increase can only be seen in some categories of goods, such as food products, with exports of alcoholic beverages on a substantial rise owing to active ongoing trade with Russia.

***The need for imports of goods was reduced by a drop in domestic and external demand, and a lower demand could be partially compensated by previously established reserves.***

Thus, imports of goods have also demonstrated a decline in value. This was mostly on account of trade in mineral products, wood as well as various metals and their articles. Overall, this shows a return to a more typical level – the supply chain disruptions and huge demand experienced during the pandemic began to fade only in late 2022. Therefore, the decline in imports is seen as a departure from the atypical climb a year ago in terms of both volume and, particularly, prices and, thus, a return to more normal conditions.

***External trade in services is marked by an increase in tourism flow.***

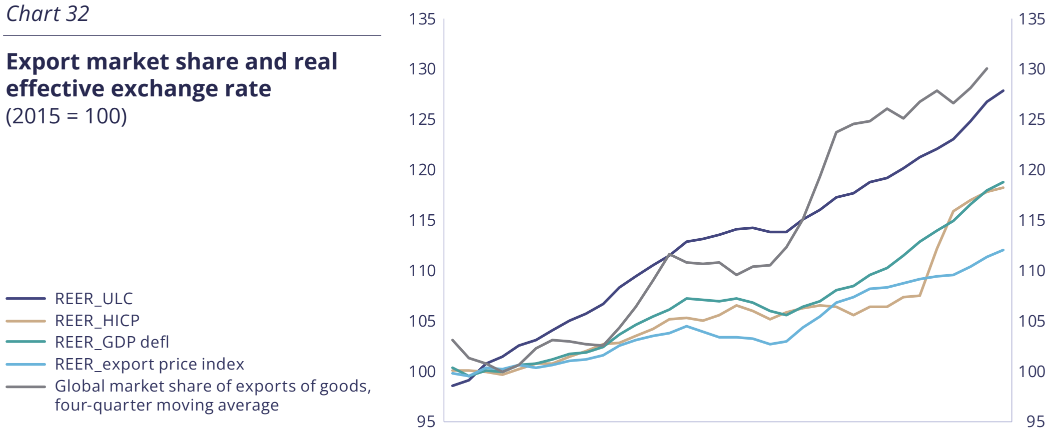
The trends in exports of services observed in the second quarter were driven by growth in air transport services and travel. As regards the geopolitical situation, tourist views on Latvia as a tourism destination may have improved slightly. The organisation of large-scale events, such as the Ice Hockey World Championships, has contributed to this improvement. As a result, the number of air passengers serviced at Riga Airport also continues on an upward path and the airline AirBaltic has shown good performance in the second quarter.

Professional, management and other business services have expanded at a slightly slower pace. Their growth might see a further slowdown since, for example, the providers of global business services tend to include more companies not planning to expand their operation in the near future. Meanwhile, the performance of rail transport and auto transport has been weaker than that of other transport sectors. This is caused by a drop in Russian cargo volumes and a not-so-positive outlook. At the same time, imports of services have increased year on year mostly owing to various business services. With outbound tourism also on the rise, the value of imports of air transport and travel has grown, in part, also on account of rising costs.

Even if external trade activity might take an upward trend towards the end of the year, when a recovery in external demand is projected, this year will, overall, have been worse than 2022 in terms of exports. It should, once again, be noted that the last year's growth could not be maintained in the longer term and we might currently be experiencing a normalisation – the volume and value of external trade still substantially exceed the pre-pandemic level. Following a steeper fall in imports, particularly import prices, external trade deficit is also starting to shrink. However, with various large-scale projects and procurements ongoing, imports of and trade deficit in goods could increase in the coming years.

*Chart 32*

**Export market share and real effective exchange rate**
(2015 = 100)




Sources: EC and World Trade Organization.

***The rise in wages and other costs brings the resilience of competitiveness into focus. However, despite the swift appreciation in the real effective exchange rate, Latvia's market shares of exports of goods have decreased neither in Europe nor worldwide.***

So far, labour costs have grown faster in Lithuania and Estonia. Thus, our losses incurred in the external market due to price competitiveness have been slightly smaller than in the other Baltic States. Terms of trade have also improved: even though export prices decreased for nine months, the fall in import prices has been much steeper. Therefore, despite falling prices and demand, market shares have remained resilient so far. This could suggest that competitiveness has not been significantly affected yet.

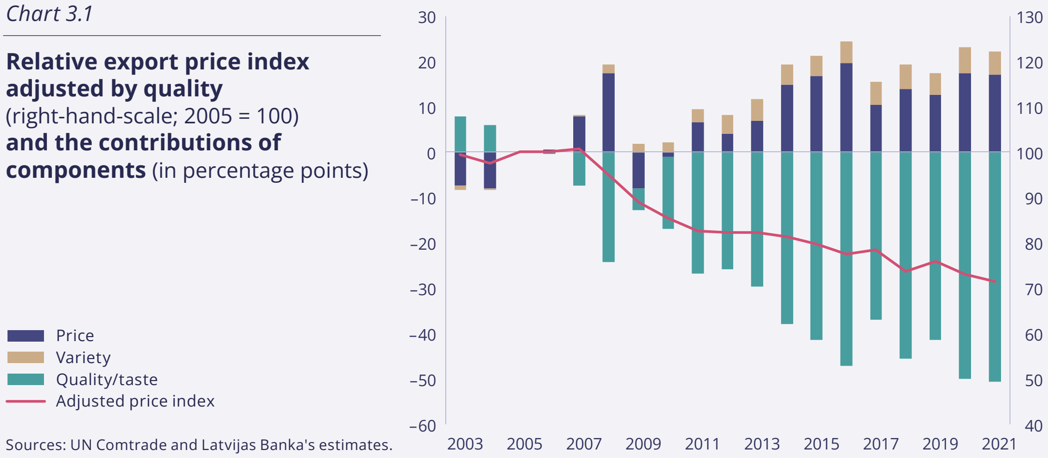
## Box 3. Non-price competitiveness and the adjusted price index[16]

This assessment of export price and non-price competitiveness calculates the relative export price adjusted by non-price factors: changes in the variety of goods on the imports side, improvements in the quality of goods and changes in consumer taste. This case uses information on the global external trade available on the UN Comtrade database at the six-digit CN level up to 2021. A previous research is available here; it also offers a more detailed description of the methodology used in this Box.

The recently observed weak exports and industrial sector provoke thoughts on the causes of the slowdown in growth. Is external demand to blame or are we losing competitiveness? As regards exports, an often-explored factor is price competitiveness, i.e. the speed of increase in costs and the final price for the produced goods compared to other countries. However, non-price competitiveness is also important and it cannot be directly observed via statistics. For instance, we cannot directly see how goods are adjusted to consumer taste and what their quality is. In Latvia's case, price competitiveness has weakened over time due to increases in various costs. Nevertheless, competitiveness has improved overall owing to the quality of goods and the fact that they have been adjusted according to the buyers' taste.

*Chart 3.1*

**Relative export price index adjusted by quality** (right-hand-scale; 2005 = 100) **and the contributions of components** (in percentage points)




Sources: UN Comtrade and Latvijas Banka's estimates.

The relative export price index adjusted by quality takes into account not only the relative price competitiveness in exports but also the variety of goods (the number of competitors) in the export market and their quality/adjustment to consumer taste. The estimate of this price index does not include oil products (CN code 2710) as their exports do not reflect the real export situation – oil products are mostly re-exported as they are not produced in Latvia.

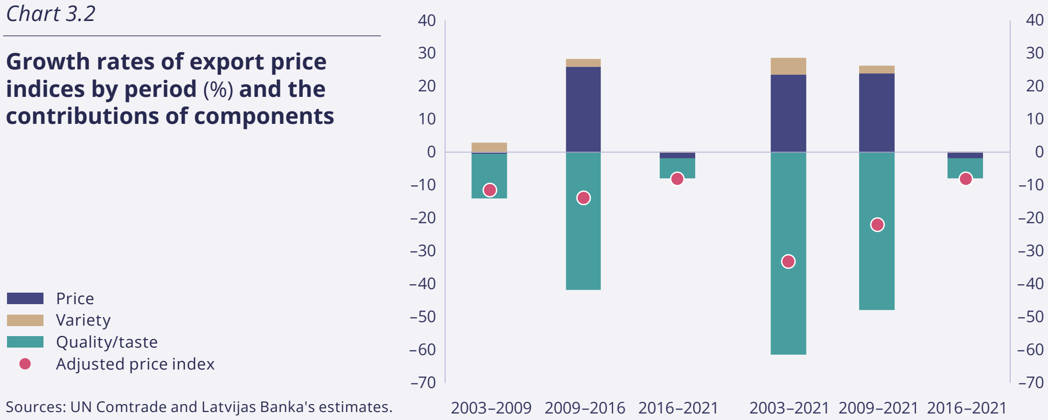
When analysing the growth since 2003, one can conclude that the lion's share of the improved competitiveness can be directly attributed to the taste/quality component,

[16] Prepared by Matīss Mirošņikovs, economist of Latvijas Banka.

significantly outweighing the negative trend in price competitiveness. The third component (with a minor effect) is variety in the export markets, i.e. the number of other exporters – competitors – in Latvia's exports. The weakening of the variety component may suggest that competition has intensified in the export markets; however, this is not impairing the competitiveness of Latvian goods anywhere near as much as the relative rise in costs in Latvia.

*Chart 3.2*

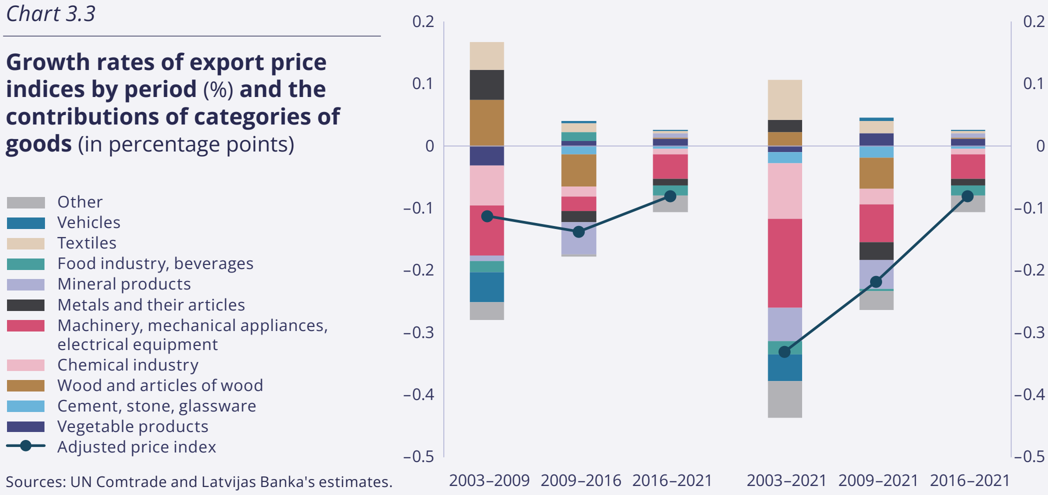
**Growth rates of export price indices by period** (%) **and the contributions of components**




Sources: UN Comtrade and Latvijas Banka's estimates.

*Chart 3.3*

**Growth rates of export price indices by period** (%) **and the contributions of categories of goods** (in percentage points)



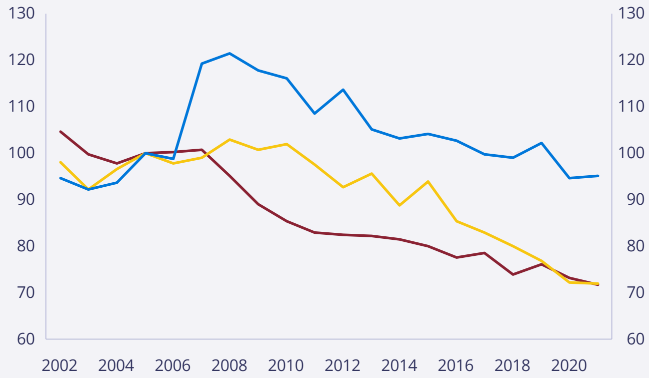

Sources: UN Comtrade and Latvijas Banka's estimates.

A more detailed analysis shows that the highest improvement in quality and, at the same time, the steepest drop in price competitiveness occurred between 2009 and 2016. Since 2016, the progress has been more moderate, driven by direct improvements in the taste component. Meanwhile, the categories of goods driving the most significant positive changes in competitiveness are machinery and electrical equipment (groups 84 and 85), i.e. technologically more sophisticated goods.

In the longer term, chemical industry, mineral products and other smaller commodity groups have also performed well with changes being positive overall. At the same time, competitiveness has basically weakened only in the group of textile articles. All in all, changes have mostly been positive. Particularly since 2009, the deterioration has been very minor and has only affected some goods, while competitiveness has increased for a wide range of goods.

*Chart 3.4*

**Relative export price index adjusted by quality in the Baltic States**
(2005 = 100)




Sources: CSB, EC, Latvijas Banka's estimates.

When comparing the performance of the Baltic States from 2008 onwards, Latvia and Lithuania have shown much better results. However, it should be noted that the export competitiveness of all three countries has improved in the long term. Although wage growth in the Baltic States has been faster than elsewhere, non-price factors have more than offset the fall in price competitiveness. Thus, conclusions about the overall competitiveness cannot be drawn solely based on the data on price competitiveness as non-price factors have proved to be much stronger drivers of exports.

# 5. Labour market, costs and prices

***Unemployment remains at one of its historically lowest levels; however, its decline has come to a halt.***

In the second quarter of 2023, the unemployment rate in Latvia remained unchanged compared to the first quarter and stood at 6.4% of the economically active population. According to the CSB data, July also saw no significant changes despite a slowdown in economic activity in the second quarter. The data from the State Employment Agency (SEA) point to similar dynamics – in July and August, the rate of registered unemployment stood at 5.6% and 5.5% of the economically active population respectively.

***Businesses' demand for employees has been declining gradually and is already lower than a year ago.***

The data characterising labour demand on the part of businesses increasingly point to negative trends in the near future; however, no signs of a rapid fall are yet apparent. The seasonally adjusted SEA data for July suggest decreases both in the total number of vacancies and in the number of new vacancies, while according to the EC data, August 2023 saw an improvement in employment expectations. Moreover, in the third quarter of 2023 the share of businesses referring to labour shortages as a production limiting factor has increased in manufacturing only, yet it remains at a considerably lower level than a year ago.

*Chart 33*

**Employment expectations of businesses for the next three months**
(net responses; seasonally adjusted data)


Source: EC.

***Economic activity in the labour market is, for the time being, on the rise and the employees' optimism about the labour market remains broadly unchanged.***

In the second quarter of 2023, the level of economic activity increased primarily on account of a decreasing number of the economically inactive persons. People still believe that it is relatively easy to find a job – the number of the economically inactive persons who have lost hope of finding a job, as well as the number of part-time workers unable to find a full-time job, has remained low.

***Labour supply constraints have eased only moderately.***

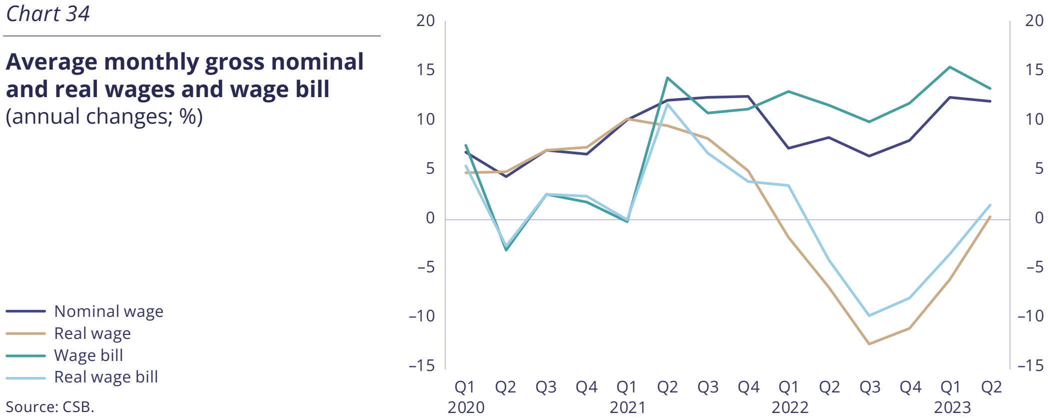
In the first half of 2023, the unemployment rate was lower than previously anticipated, and this also affects the projected dynamics of unemployment – the unemployment forecast for 2023 has been revised downwards to 6.4% (–0.3 percentage points compared to the June forecast) despite a slightly more pessimistic forecast for the second half of the year in response to declining labour demand. The forecast for 2024 and 2025 has been revised downwards to 6.2% (–0.2 percentage points compared to the June forecast).

***After declining for several quarters, real wages are finally on the rise.***

The growth rate of the average wage has accelerated significantly since the beginning of 2023, increasing to 12% year-on-year in the second quarter. The average gross wage reached 1525 euro in the second quarter of 2023. Moreover, taking into account the gradual easing of inflation, real wages increased in the second quarter of 2023, albeit only marginally. Although it will still take some time to fully recoup the loss in the purchasing power of wages, real wages will continue to rise against the background of declining inflation rates.

*Chart 34*

**Average monthly gross nominal and real wages and wage bill**
(annual changes; %)




Source: CSB.

***The rate of wage growth is expected to slow down somewhat at the end of the year; however, it will still outpace inflation.***

The inflation effect that started to affect wages even a year ago is expected to be significantly weaker in the second half of 2023. In addition, given that the number of vacancies has continued on a downward trend, while the unemployment level has stopped declining, the labour supply constraints have eased compared to those seen at the beginning of 2023 due to weaker labour demand.

Moreover, the economic growth observed in the second quarter of 2023 was negative, and this might also weigh on wage growth. Despite these factors, however, the rise in wages will remain at a relatively high level since the increase in the minimum wage at the beginning of this year will affect the annual growth rate of the average wage until the end of 2023 and positive effects will also come from some decisions regarding raising wages in the public sector (e.g. to teachers). Furthermore, although labour supply constraints are less pronounced than a year ago, their impact on the wage growth is still positive.

***Wage forecasts reflect several countervailing factors that have a neutral effect overall.***

Taking into account a somewhat higher wage increase in the first half of 2023 and a slightly more pessimistic outlook of the second half of the year, the wage growth forecast for 2023 has overall remained unchanged (12%) compared to the June forecasts. In the absence of any new information since the June forecasts that would significantly affect the wage forecasts, the forecast for 2024 and 2025 has also remained unchanged (8.2% and 7.8% respectively). Minor changes might be related to the revision of the minimum wages in 2025 based on Directive (EU) 2022/2041 of the European Parliament and of the Council of 19 October 2022 on adequate minimum wages in the European Union. The minimum wage calculation methodology would also be changed based on the average value or the median of wages (that is currently not yet known). For the time being, the government has decided to revise the minimum wage for 2025; however, the methodology has not been approved yet.

***Changes in the prices of various global resources affect inflation in Latvia in different directions; nevertheless, inflation overall continues to decline.***

In some months, the monthly growth rate of prices has even been negative. In August 2023, HICP inflation in Latvia stood at 5.6%, with prices decreasing by 0.5% during the month. Inflation is expected to decline further in the coming months and be close to 2–3% at the end of the year.

Currently, the average energy prices are lower than a year ago; however, global markets have seen a rebound in oil prices over recent months. With the heating season approaching, the approved central heating tariffs in most of Latvia's populated areas are lower than during the previous heating season. The expected heating prices are lower than in the previous year, even taking into account the fact that no comprehensive support programmes to curb energy prices, like those implemented during the previous heating season, have been planned for this year. However, the government has decided to implement some support measures aimed at strengthening the purchasing power of the population.

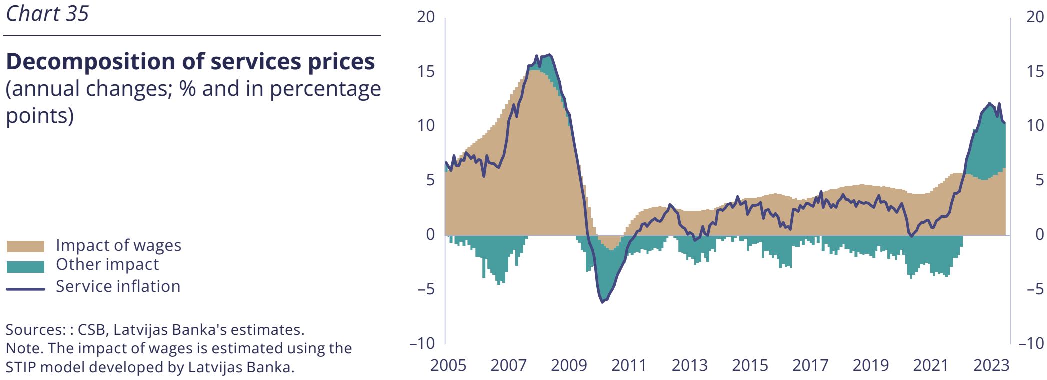
Global food prices have decreased over recent months; however, some risks to the dynamics of these prices are still present due to both the impact of weather conditions on harvests and restrictions on exports and changes in demand. The rapid food price increases have also moderated in Latvia, and the prices for different fruits and vegetables as well as those for fish and some other products have also seen a minor decline on a monthly basis since June.

***Robust wage growth is supporting the purchasing power, while pushing up production costs. The impact of wages on services prices in Latvia is intensifying.***

Although economic growth has moderated, wages continued to grow steadily in early 2023, and labour supply in Latvia's labour market is still tight. Wage increases result in higher production costs, especially those of labour intensive goods and services. Moreover, with the purchasing power recovering due to rising wages, demand is strengthening, thus contributing to upward price pressures. The wage growth has a particularly strong impact on the changes in services prices. In the first eight months of 2023, the prices of services in Latvia have increased on average by 0.8% on a monthly basis, while the overall level of prices has recorded a monthly rise of 0.3%. The decomposition of services prices shows that, although services prices were also driven by various other factors (including the elevated energy prices) at the end of the last year and the beginning of this year, the impact of remuneration on services prices is more pronounced than in 2011–2020. As wages are projected to continue to grow significantly in the years to come, their impact on the changes in services prices is also expected to be strong. Thus, core inflation in Latvia will be persistent too and, although core inflation tends to decline, it will remain high (over 4%) over the considered forecasting period (up to 2025).

*Chart 35*

**Decomposition of services prices**
(annual changes; % and in percentage points)



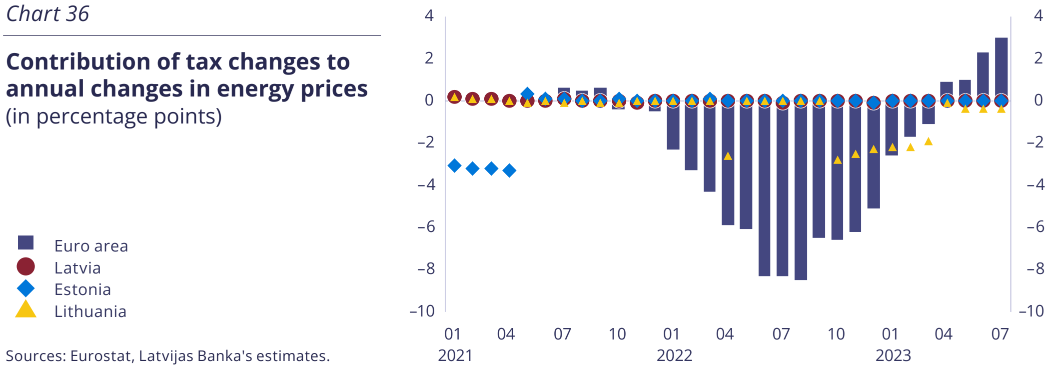

Sources: : CSB, Latvijas Banka's estimates.
Note. The impact of wages is estimated using the STIP model developed by Latvijas Banka.

***The choice of support instruments to offset the increase in energy prices in the previous year is affecting energy prices also this year.***

In 2022, in response to the sharp rise in energy prices, various euro area countries chose different strategies to limit this price increase. In Latvia, the government support provided to the population included some decisions affecting prices, for instance, a decision to partially offset the increase in some energy prices exceeding a certain level, and benefits to certain population groups. However, tax changes were not used as a tool to reduce energy prices in Latvia during this time, as opposed to several other euro area countries (e.g. Germany, Spain, Italy, etc.) which introduced tax changes through various mechanisms, such as reduced VAT rates on heating, electricity and natural gas as well as reduced VAT or excise duty rates on fuel. The tax policy changes are currently having a relatively larger price growth-enhancing impact on the energy inflation changes in other euro area countries due to the base effects and the expiration of some of these allowances. At the same time, in Latvia, without such tax rate change-related effects, the energy prices can decrease relatively faster, thus also having a stronger impact on the declining headline inflation.

*Chart 36*

**Contribution of tax changes to annual changes in energy prices**
(in percentage points)



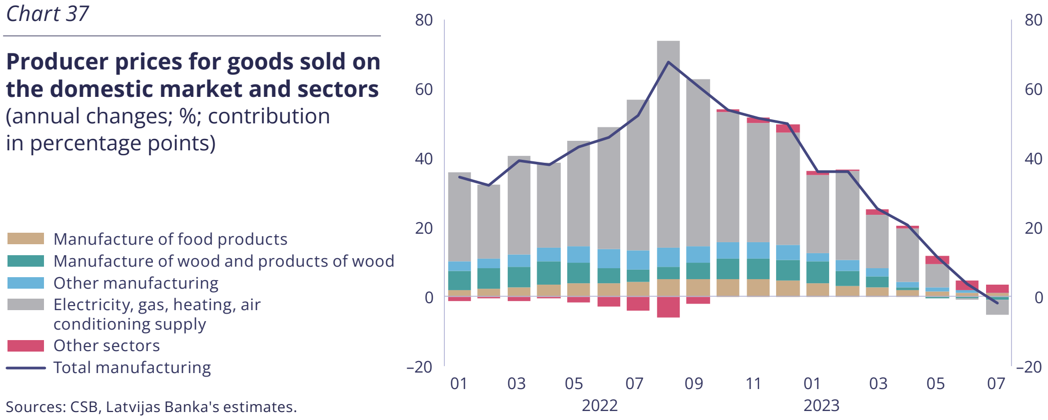

Sources: Eurostat, Latvijas Banka's estimates.

***Producer prices are lower than in the previous year; however, producer prices for goods sold on the domestic market recorded an increase in July.***

Following the steep rise in producer prices for all goods and goods sold on the domestic market in 2022, the year 2023 marked a decline in these prices. However, goods sold on the domestic market became slightly more expensive again in July compared to the situation a month ago, although the annual growth rate of producer prices was negative due to the base effects. In July, changes in producer prices for goods sold on the domestic market were related to the changes in electricity prices (due to the reviewed distribution tariffs); however, a minor increase was also observed in other sectors. Meanwhile, producer prices for exported goods remained broadly unchanged in this month.

*Chart 37*

**Producer prices for goods sold on the domestic market and sectors**
(annual changes; %; contribution in percentage points)



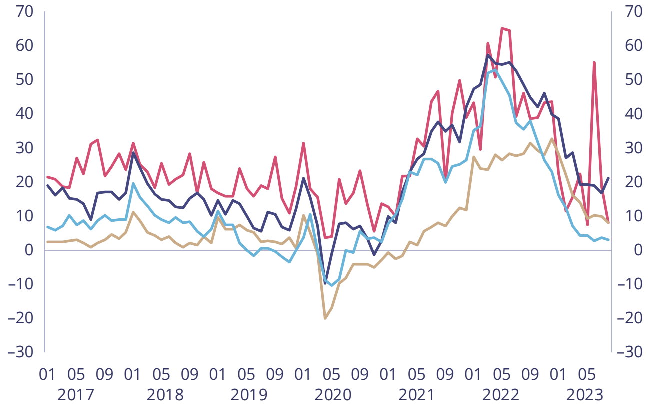

Sources: CSB, Latvijas Banka's estimates.

***The price increase expectations have decreased significantly among consumers and businesses.***

In recent months, the price increase expectations have decreased significantly among consumers. According to the EC data, two thirds of the respondents believe that, over the next 12 months, prices will edge up at a slower rate than before. Similar trends were also brought about by the businesses' perception of price changes for their goods over the next three months. Although it is estimated that prices might be on the rise, the situation is less tense than at the end of the previous year when a rapid price increase was expected by a larger share of the surveyed businesses.

*Chart 38*

**Inflation expectations (split of responses to question "How will prices change over the next 12 months")**




Source: EC.
Notes. Price change expectations among consumers for the next 12 months. Price change expectations among businesses for the next three years.

# 6. Conclusions and forecasts

The ECB continued to raise its key interest rates in response to the inflation persistence in the euro area. Tighter financing conditions observed in the euro area as a result of monetary policy tightening reduce demand, thus contributing to the easing of inflation. **Weaker economic activity of Latvia's trade partners also affects the Latvian economy. Therefore, the GDP growth forecast for 2023 has been revised down to 0.6%** (the June forecast –1.2%).

The forecasts were revised on account of lower than expected GDP growth in the second quarter of 2023 and a slightly changed outlook for the following years, but revisions of historical data also play a significant role in GDP components:

- the persistently high inflation had adverse effects on purchasing power and consumption;
- activity of several sectors, such as manufacturing and agriculture, fell from unusually high levels;
- commercial banks point to tighter credit standards and weaker demand for credits;
- the outlook for foreign demand and export opportunities deteriorated slightly;
- natural processes (heat, storms, rainfall, bark beetle damage) have adverse effects on the quality and price of timber and grain – two important commodity groups in exports.

However, economic activity might recover gradually by the end of this year, as household purchasing power is expected to recover and investments are projected to follow an upward trend:

- falling inflation along with a strong wage growth will gradually strengthen the household purchasing power. Irrespective of the economic slowdown, the unemployment rate remains low; moreover, the labour market experiences labour shortages;
- the support measures planned by the government will also strengthen the household purchasing power. Compared with the previous heating season, the government expenditure foreseen for these measures has been reduced; however, the measures are more targeted;
- sentiment among economic agents and firms' employment expectations are starting to improve gradually;
- the implementation of investment projects to be finished by the end of this year according to the financing terms of the European Union funds will maintain investment activity.

In line with the previous forecasts, it is expected that **Latvia's economic growth will accelerate in 2024–2025, with its GDP growing by 3.0% and 3.6% respectively** (according to the June forecast – by 3.1% and 3.5% respectively).

**Inflation is falling further**, with the previously observed supply-side constraints waning:

- global resource prices and commodity import prices have fallen – energy prices are lower than a year ago, global food prices have drifted downwards over the past months;
- producer prices in manufacturing are declining, and they have already fallen below the level reached last year, largely reflecting the energy price adjustment;
- the expected heating prices in most of Latvia are lower than during the previous heating season;

- the price expectations have decreased significantly among consumers and firms;
- however, there are risks of price rises and, for example, global markets have seen a rebound in oil prices recently; the impact of increasing wages on prices is also intensifying.

The most recent inflation data point to a stronger-than-projected rise in the prices of energy, services and industrial goods. Thus, the **inflation forecast for 2023 has been revised up to 9.0%** (the June forecast – 8.5%). At the same time, the core inflation is expected to remain elevated in 2023 and beyond due to the strong wage growth affecting both demand and costs in the price-setting process.

Meanwhile, assumptions about lower food and natural gas prices allow for downward revisions of **inflation forecasts** for the next years: **to 2.3% for 2024** (the June forecast – 2.4%), and **to 2.5% for 2025** (the June forecast – 3.0%). The core inflation will decrease more gradually from 8.2% in 2023 to 4.2% in 2025.

*Table 1*
**Macroeconomic fundamentals: Latvijas Banka's forecasts**

| | 2023 | 2024 | 2025 |
|---|---|---|---|
| **Economic activity** (annual changes; %; at constant prices; seasonally adjusted data) | | | |
| GDP | 0.6 | 3.0 | 3.6 |
| Private consumption | –0.5 | 4.0 | 4.4 |
| Government consumption | 4.3 | 0.2 | 0.4 |
| Investments | 6.0 | 4.9 | 5.7 |
| Exports | –1.7 | 2.1 | 3.1 |
| Imports | –1.9 | 1.8 | 3.4 |
| **HICP inflation** (annual changes; %) | | | |
| Inflation | 9.0 | 2.3 | 2.5 |
| Core inflation (excluding food and energy prices) | 8.2 | 5.3 | 4.2 |
| **Labour market** | | | |
| Unemployment (% of the economically active population; seasonally adjusted data) | 6.4 | 6.2 | 6.2 |
| Nominal gross wage (annual changes; %) | 12.0 | 8.2 | 7.8 |
| **External sector** | | | |
| Current account balance (% of GDP) | –3.1 | –3.5 | –3.9 |
| **Government finances** (% of GDP) | | | |
| General government debt | 42.0 | 41.6 | 40.9 |
| Budget surplus/deficit | –3.3 | –3.0 | –1.7 |

# 7. Scenario analysis

## 7.1 Impact of changes in labour taxes on income distribution and the economy

### Scenario analysis[17]

### Motivation

One of the most widely discussed issues of tax policy is the reduction in the labour tax burden.

There are several ways to ease the labour tax burden and each of them has a different effect on the economy as a whole and on the income of various social groups. To illustrate the disparities, Latvijas Banka has assessed the economic impact of various labour tax reduction scenarios using the DSGE model[18] and the EUROMOD microsimulation model[19] for Latvia.

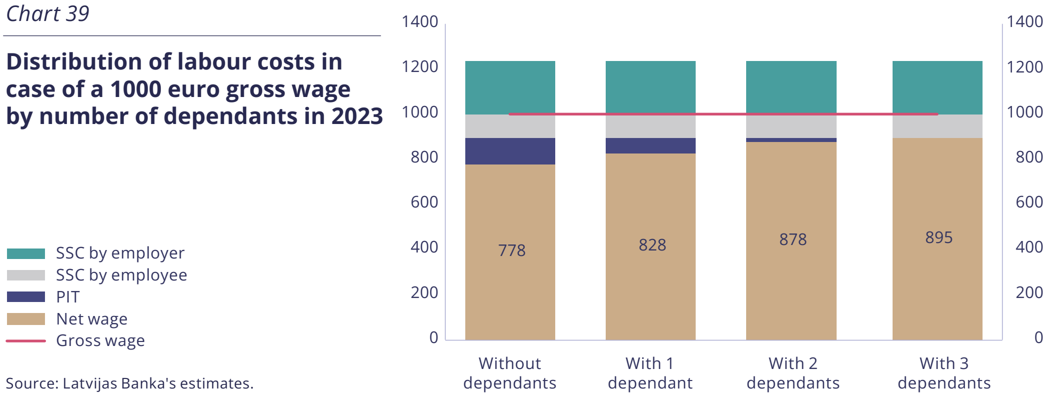
### Simulation

Most employees in Latvia face two labour taxes: the personal income tax (PIT) and the state compulsory social security contributions (SSC), together accounting for approximately 35%–45% of the labour costs. The SSC comprise contributions by employee (10.5%) and contributions by employer (23.59%). The SSC rate of the employer is applied to the gross wage (usually stipulated in the employment contract), but the employer covers it from its funds. Meanwhile, the SSC of the employee and the PIT are calculated and paid from the gross wage, thus reducing the net wage. The bulk of the labour tax burden consists of the SSC.

Moreover, in some cases, the SSC is the only labour tax applicable to the relatively low wage earners and employees with several dependants (Chart 39).

*Chart 39*

**Distribution of labour costs in case of a 1000 euro gross wage by number of dependants in 2023**




Source: Latvijas Banka's estimates.

Thus, the impact of the tax reform depends on the selected instrument. Namely, the cost of an employee to a company is proportional to changes in the SSC paid by employer; however, these changes do not directly affect the net wage of employees.[20] Meanwhile, changes in the SSC paid by employee or in the PIT have a direct impact on the net wage but no immediate

[17] Prepared by Ginters Bušs, Ludmila Fadejeva and Kārlis Vilerts, economists of Latvijas Banka.
[18] Ginters Bušs & Patrick Grüning (2023) Fiscal DSGE model for Latvia, Baltic Journal of Economics, 23:1, DOI: 10.1080/1406099X.2023.2173915.
[19] EUROMOD is a tax-benefit microsimulation model for the EU that is maintained and developed by the Institute for Social and Economic Research (ISER) at the University of Essex, in collaboration with national expert teams. The Latvian national expert team is based at the Baltic International Centre for Economic Policy Studies (BICEPS). https://www.EURmod.ac.uk/about/country-by-country/latvia.
[20] Indirectly, the effect is created over several periods by redistributing the overall impact of the tax reform between the employer and the employee. For instance, if the employer's SSC rate is raised, the overall labour costs of the company initially grow, while the net wage of the employees remains unchanged. Since the increase in labour costs limits the opportunities of companies to raise the wages of employees in the next period, the tax reform also affects employees over time.

effect on the labour costs of the company. These transmission channels of the tax reform have different macroeconomic consequences that can be illustrated with the DSGE model. We consider two scenarios of labour tax burden easing:

a) the reduction of the SSC paid by employer;
b) the reduction of the SSC paid by employee or the PIT.

In both cases, the tax burden is reduced to a level where a decrease in tax revenue would be 1.2% of the initial GDP.

The reduction in the SSC paid by employer will lead to a decline in the labour costs. The shrinking costs improve price competitiveness, thus the products of local businesses become more attractive in both domestic and export markets (relative prices fall compared to the prices set by foreign competitors); as a result, the sales of products from local businesses, including exports, increase (Chart 40). At the same time, employment is expected to grow and unemployment – to decrease owing to two reasons.

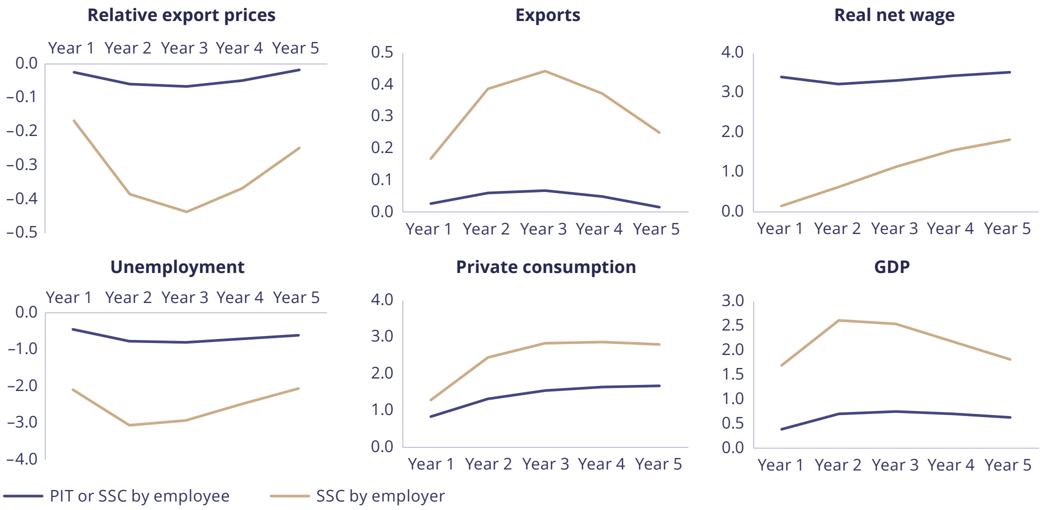
First, with competitiveness rising in the tradable sector, demand for the products of local businesses increases, thus contributing to the demand for additional labour force. Second, with labour force becoming less expensive (the SSC paid by employer are part of labour costs), there are higher incentives to use more labour comparing to capital and investments. Namely, cheaper labour force reduces the motivation to invest in new technology and automation and increases labour demand. As demand for workers grows, net wage and private consumption increase with time. The long-term impact on GDP is estimated at around 1.5–2%.[21]

Meanwhile, the reduction in the taxes paid by employee (the SSC or PIT) raises the net wage directly, contributing to an increase in private consumption and, to a certain extent, to investment activity. However, its medium-term impact on employment and GDP is lower as compared with a case in which the SSC paid by employer is reduced (by approximately 0.6%) since a large part of consumer and investment products are imported.

As a reduction in the taxes paid by employee does not directly affect the labour costs of a company, significant improvement in competitiveness and export is not expected.

*Chart 40*

**Macroeconomic impact of easing the labour tax burden**
(cumulative changes; %)




Source: Latvijas Banka's estimates using the DSGE model for Latvia (Bušs & Grüning, 2023).

[21] The macroeconomic impact of changes in labour taxes varies depending on the state of the labour market. For example, if the tax burden has been reduced at the time when there is no labour shortage (the state of high unemployment), the positive effect is much stronger than in tight labour market conditions (see here). Distinct gross wage flexibility mechanisms cause different dynamics in the model regarding the results of this scenario and that of 2020.

Thus, the macroeconomic impact of changes in the labour tax burden depends on the selected instrument. Note that, as assumed by the scenarios, taxes are reduced by raising the budget deficit. If other measures decreasing the budget deficit – for instance, the reduction in government expenditure or the raising of other taxes – were also implemented simultaneously, the positive impact on GDP would be much less pronounced.

However, the macroeconomic impact is not the only factor to consider when evaluating different scenarios of change in the labour tax burden. It is also important to understand how this tax reform will affect various population groups. The DSGE model simulations suggest that the changes in the employer's SSC rate mostly impact businesses and thus the wealth of their owners, while the changes in the employee's SSC rate and the PIT affect the income of employees. A more detailed insight into the changes in disposable income of various population groups can be obtained using the EUROMOD model which analyses the following scenarios:

- a fixed non-taxable income minimum of 600 euro is introduced for all employees and pensioners regardless of their income level;
- the maximum differentiated non-taxable minimum (DNM) is increased to 800 euro and applied fully up to income of 800 euro. The DNM rate declines gradually if income is higher and is zero if income exceeds the threshold of 3000 euro. A fixed non-taxable minimum of 800 euro is introduced for pensioners;
- the employee's SSC rate is reduced by 6 percentage points.[22]

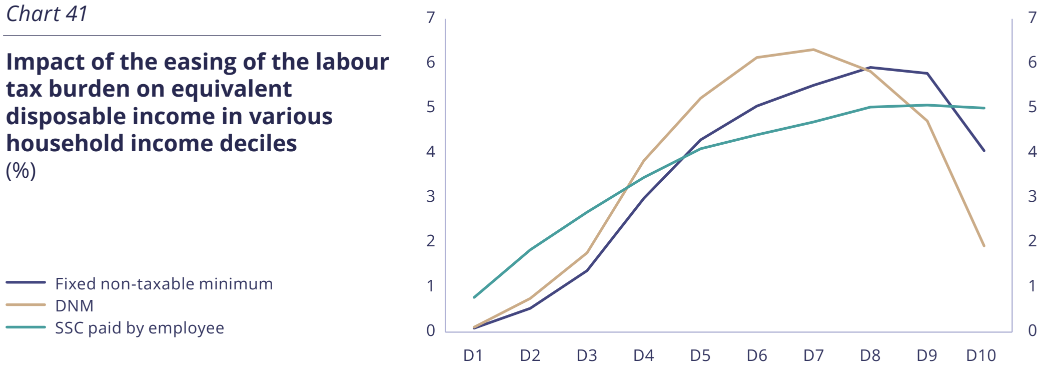
In this case, the tax burden is also eased to a level where the decrease in tax revenue would be around 1.2% of GDP.

The results show that none of the solutions ensures a substantial rise in disposable income in the lowest income deciles (Chart 41). It is because few people with the lowest income are employees or pensioners who would benefit from a higher non-taxable minimum. Many employees in the lowest income deciles are already not paying the PIT at the moment (see Chart 39), thus the positive effect of a reduced employee's SSC rate is substantially stronger than those under both scenarios of raising the non-taxable minimum.

Since the reduction in the employee's SSC rate and the introduction of a fixed non-taxable minimum concerns all employees, an increase in disposable income is observed even in the 10th income decile. This effect is to a lesser extent applicable to the raising of the DNM which has a lower impact on the relatively wealthy population.

*Chart 41*

**Impact of the easing of the labour tax burden on equivalent disposable income in various household income deciles**
(%)




Source: Latvijas Banka's estimates with the EUROMOD model.
Note. D1 reflects 10% of households with the lowest income, while D10 shows 10% of households with the highest income. The estimates use equivalent disposable income calculated per equivalent consumer, thus enabling the mutual comparison of households of various sizes. It is obtained by dividing the total household income by the equivalent household size which is calculated using the modified OECD scale (1.0; 0.5; 0.3): a weight of 1.0 is given to the first adult, a weight of 0.5 – to each subsequent household member aged 14 and over and a weight of 0.3 – to each child aged under 14.

[22] Since the changes in the employer's SSC rate have no effect on the income of most households, this scenario is not considered.

### Conclusions

The results of the scenario analysis suggest that the effect of changes in the labour tax burden is not homogeneous. There are several options for changing the labour tax burden, and each of them will result in a different macroeconomic impact and different impact on the income of various social groups.

## 7.2 Impact of monetary policy on inflation in Latvia and the euro area

### Scenario analysis[23]

### Motivation

Since the middle of 2022, the ECB has hiked its policy rates at the fastest pace in the euro area history in order to rein in price spikes unforeseen for decades. The surge in inflation has, to a large extent, been driven by the disruptions of supply chains caused by the Covid-19 pandemic and surge in energy prices due to Russia's invasion of Ukraine. In a little more than a year, the ECB has raised the costs of borrowing by 4.5 percentage points, thereby significantly increasing the loan servicing costs for firms and households in Latvia, given the large share of loans with a floating rate (for more information on this aspect, see Box 1 and Box 2). Also, the policy rate hikes are a hot topic in the public debate, questioning whether it is the right policy option as the causes of high inflation are more likely to be coming from the supply side of the economy rather than an excessive lending-driven consumption boom. However, the inflation trend in the recent months has reversed both in the euro area and Latvia, suggesting a gradual easing of inflationary pressures. This scenario assesses the contribution of the ECB monetary policy to a reduction in inflation, with a particular focus on the exchange rate channel[24].

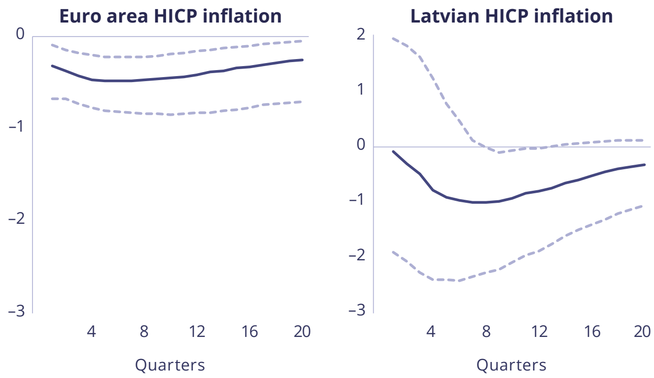
### Description of the simulation

The impact of the monetary policy measures implemented by the ECB has been estimated using an empirical, data-driven econometric model: a two-block Bayesian structural vector autoregression. This framework allows to model the dynamics of macroeconomic variables in the euro area and Latvia simultaneously, enabling us to pin down the effects of monetary policy both in the aggregate euro area as well as its transmission to Latvia's economy.[25]

Chart 42 shows the responses of inflation in the euro area and Latvia to a hypothetical 1 percentage point increase in short-term interest rates caused by the monetary policy response.

*Chart 42*

**Impact of a 1 percentage point monetary policy shock on inflation**
(in percentage points)




Source: Latvijas Banka's estimates.

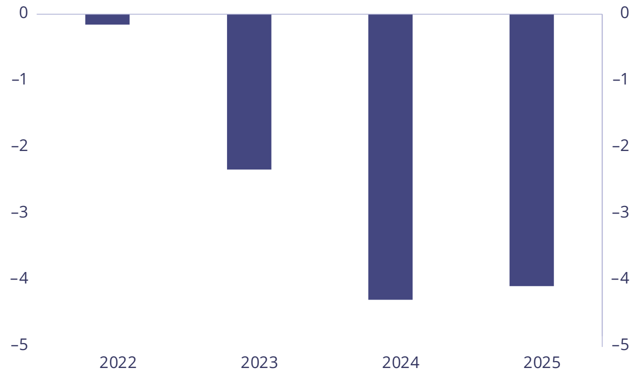
[23] Prepared by Andrejs Zlobins, economist of Latvijas Banka.
[24] For the expected impact of the interest rate rise implemented since 2022 on Latvia's real economic activity, see the scenario analysis "Impact of higher interest rates on the Latvian economy" in the "Macroeconomic Developments Report" of March 2023.
[25] Models of this type are often used in the economic literature on the macroeconomic effects of monetary policy and its transmission from a large economy to a small open economy. The effect of monetary policy has been identified via sign and zero restrictions of Arias et al. (2018) https://doi.org/10.3982/ECTA14468.

The results of the model suggest that the raising of interest rates causes inflation in Latvia to fall more steeply than in the aggregate euro area, with the effect being twice as strong.[26]

In addition, Chart 43 shows the total impact of the current interest rate rise (+4.5 percentage points) on inflation in Latvia for 2022–2025. According to our estimates, inflation in Latvia would be significantly higher if the ECB had not reacted to the shocks that substantially raised the price level. For example, inflation would reach more than 11% in 2023 instead of the currently projected 9%. Over the coming years, the impact will be even larger, suggesting that the monetary policy response by the ECB will significantly mitigate the risk of de-anchoring of inflation expectations in Latvia.

*Chart 43*

**Overall impact of the interest rate rise implemented since mid-2022 on inflation in Latvia**
(in percentage points)




Source: Latvijas Banka's estimates.

Which factors determine that the ECB's monetary policy has a relatively limited impact on the real economic activity in Latvia (see the "Macroeconomic Developments Report" of March 2023) but much stronger effect on the price formation mechanism than in the euro area? Traditionally, the exchange rate channel is considered to be an important channel of monetary policy transmission.

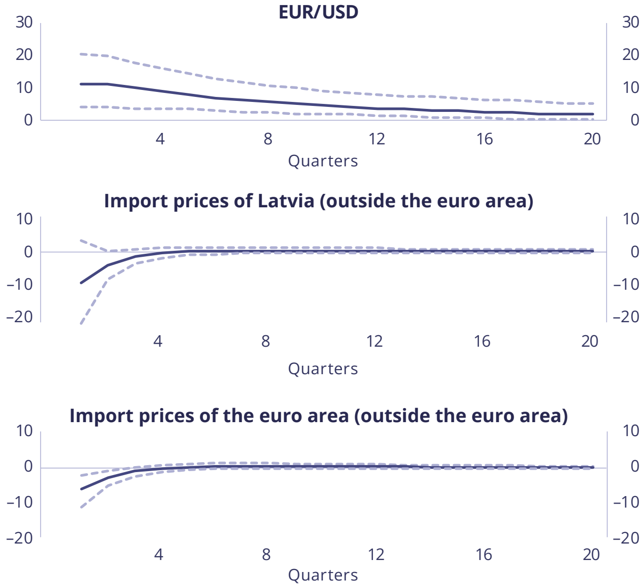
Namely, when a central bank raises its interest rates, investors are more willing to invest in the respective jurisdiction since investment becomes more profitable vis-a-vis the rest of the world. Accordingly, the inflow of capital in this jurisdiction increases the demand for its currency, thus raising its value. As a result, imported goods and services become less expensive for the firms and households in this jurisdiction as its currency has become more valuable than that of the jurisdiction these goods and services are imported from. But how important is this channel in the euro area and in Latvia?

The simulation results shown in Chart 44 suggest that a monetary policy shock of 1 percentage point increases the euro exchange rate against the US dollar by around 10%. However, the further transmission to import prices shows significant heterogeneity: this transmission is complete in Latvia, while in the euro area import prices decrease only by 5% or half the rise in the currency value.

[26] The estimated effect on inflation in the euro area is in line with the estimates of models used by the ECB (see Philip R. Lane (2023) "The euro area hiking cycle: an interim assessment", speech, 16 February 2023). Available at: https://www.ecb.europa. eu/press/key/date/2023/html/ecb.sp230216_1~f8cf2cd689.en.html.

*Chart 44*

**Response of the exchange rate and import prices to a monetary policy shock of 1 percentage point**




Source: Latvijas Banka's estimates.

This asymmetry can be explained by several factors. First, energy costs represent a higher share in the overall consumption basket in Latvia than in the euro area[27]. This structural feature is important for monetary policy transmission because payments related to energy (for instance, oil products) are largely made in US dollars, thus the exchange rate directly affects the price of these products. Second, the import share is much higher in Latvia's economy, with strong second-order effects of exchange rate dynamics on import prices in Latvia. Namely, exchange rate appreciation reduces prices of imported goods and services in the euro area – Latvia's largest trading partner –, thus also lowering the prices of goods imported from the euro area into Latvia.

## Conclusions

The results of the scenario analysis suggest that the current interest rate rise plays an important role in reducing price pressures both in Latvia and the euro area. According to our estimates, inflation in Latvia would be at least 2 percentage points higher in 2023 if the ECB had not reacted to the rapid rise in inflation. Over the coming years, the monetary policy response by the ECB will also significantly mitigate the risk of de-anchoring of inflation expectations in Latvia. Interest rate hikes mostly reduce price pressures in Latvia via the exchange rate channel, as a more valuable euro contributes to lower prices of imported goods, including energy.

[27] See Box 2 "Inflation differences across the Baltics and other euro area countries" of the "Macroeconomic Developments Report" of September 2022.