

Macroeconomic Developments Report

March

2023

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MACROECONOMIC DEVELOPMENTS REPORT
March 2023, No 36

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Latvijas Banka
K. Valdemāra iela 2A, Rīga, LV-1050, Latvia
Tel.: 67022300 info@bank.lv
<https://www.bank.lv>; <https://www.macroeconomics.lv>

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Abbreviations

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
ROE – return on equity
SEA – State Employment Agency
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 (March 2023, No 36) is 27 March 2023. The cut-off date for the information used in the forecast is 23 March 2023, and 15 February 2023 for the information used in some technical assumptions.

Topical issues in brief



Global resource prices are easing, but uncertainty remains high, and inflation is receding slowly.



The major central banks, including the ECB, continued to move towards restrictive monetary policy. At the same time, they monitor the turbulences in the banking sector to ensure price and financial stability.



The resilience of Latvian economy allows us to project the GDP growth this year. However, low investments in the long term increase concerns about the competitiveness of the national economy.



Despite the decline in the purchasing power of households, the strong private consumption was sustained by both the government support and savings; the depletion of the latter could affect the level of consumption.



The decrease in labour demand is noticeable, however, taking into account the short-lived recession and the tight labour market, unemployment will remain moderate.



Expectations of energy and food price decline allow one to project a faster reduction of high inflation in Latvia, while wage growth will determine the persistence in core inflation.



On the way to transformation of the national economy, the challenges are related to delays in the absorption of EU funds, investments in human capital to promote research and innovation, protracted reforms to improve the quality and availability of public services, as well as low lending to companies.

1. External Demand

The global economy was resilient last year, but inflation is receding slowly and represents the main risk to growth.

As strong demand in the US and euro area went hand in hand with the rising core inflation, the FRS and ECB continued to raise interest rates. This added pressure on economies of the US and the euro area, as well as on the economies of developing countries, where borrowing is becoming more expensive. The reversal of the zero-Covid policy by the government of China paves the way for faster growth and improvement in the functioning of global supply chains. Russia's war in Ukraine remains a source of significant downside risk to the global economy. Positive news comes from energy markets, where both natural gas and oil prices have returned to pre-war levels.

According to the IMF's latest forecast, published in January 2023, global growth will reach 2.9% this year, which is 0.2 percentage points higher than projected in October, and reflects sustained growth in 2022. In 2024, growth will be stronger at 3.1%; however, this forecast is 0.1 percentage points lower than in October, as it takes into account the expectation of tighter financial conditions. Inflation could reach 6.6% and 4.3% respectively (0.1 and 0.2 percentage points higher).

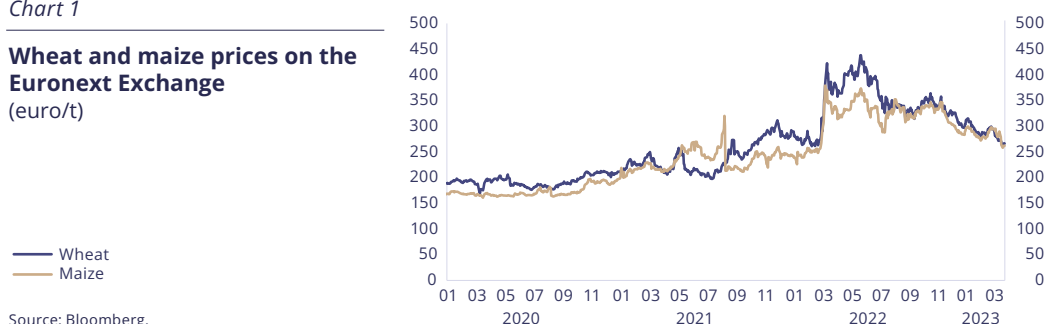
Energy and food prices are returning to pre-war levels, but uncertainty remains high.

Compared to previous years, the consumption of natural gas in the EU countries has significantly decreased in the last heating season. This has been achieved through energy saving measures. The weather was also favourable – the average winter air temperature was above the climatic standard norm. We were able to avoid forced austerity measures this winter.

In addition, relatively large reserves of unused natural gas at the end of the heating season mean that smaller volumes of natural gas will be needed to fill storage for the following winter. Due to these factors, the Dutch TTF natural gas price has gradually decreased to the pre-war level (around 50 euro per MWh). However, natural gas prices in Europe can change rapidly due to weather conditions, consumption and the availability of liquefied natural gas.

Chart 1

Wheat and maize prices on the Euronext Exchange
(euro/t)



Source: Bloomberg.

The price of oil in the first months of 2023 has stabilised and was around USD 80 per barrel. It is even lower than it was before the outbreak of the war; moreover, it has not been significantly affected by the ban introduced by the EC on the seaborne imports of crude oil (in force since December 2022) and oil products (in force since February 2023) from Russia. Lower oil prices have made fuel cheaper, and inflationary pressure has eased. Wheat and maize prices continue to decline due to the continued grain export of Ukraine, drop in natural gas prices, and setting in of favourable weather. They are approaching the pre-war level, but remain significantly higher than before the Covid-19 pandemic.

Chart 2

Natural gas prices on the Dutch TTF trading point and Brent crude oil actual and futures prices
(EUR/MWh; US dollars/barrel)



Source: Refinitiv Datastream.

The US economy is supported by robust demand, facilitated by a strong labour market and the gradual easing of inflation.

After reaching the highest pace in the last 40 years (9.1% per year) in August 2022, consumer price growth decreased to 6.0% in January. This was mainly driven by the energy component, both as prices decreased, and were compared to the increasingly higher prices of last year. At the same time, solid economic expansion continues: GDP in the third and fourth quarters increased by 0.79% and 0.67% respectively quarter on quarter.¹ The unemployment rate remained historically very low (approximately 3.6%), and wages grew significantly. Due to the increase in costs, mainly wages, and persistent private consumption, the services inflation (except for services related to energy supply) reached a new peak in January – 7.2% per year. In order to restrain rising prices, the FRS continued to raise base interest rates, with the cumulative increase since the start of last year reaching 450 basis points. Given the time needed for monetary policy transmission, the FRS slowed the pace of interest rate hikes. Market participants' expectations of future monetary policy decisions are changing rapidly in response to the economic indicator data. The IMF projects a slower growth in 2023 than in 2022 – 1.4% (2.1% last year) – partly due to weaker external demand. In the fourth quarter of the last year, US exports declined marginally, and fixed investments decreased for the third quarter in a row.

The reversal of the zero-Covid policy by China paves the way for faster growth in 2023, although its potential may be limited.

The economy of China has paid a heavy price for the tight Covid-19 containment measures in 2022. Its annual growth was 3.0%, which, excluding the pandemic period, was the slowest pace since 1976 and well short of the government's 5.5% target. In December, the government drastically changed its stance on the Covid-19 spreading risks and lifted several restrictions. The IMF accordingly revised the 2023 GDP forecast up by 0.8 percentage points, but the expected 5.2% growth is still relatively slow by historical standards. Slower development of the rest of the world, which has reduced the demand for Chinese exported goods, and the crisis in the real estate sector, are the key headwinds. Investments in real estate decreased by 10% in 2022, and sales volumes decreased by 27% in US dollar terms.

¹ In the United States, 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 report presents all quarterly growth rates in quarterly terms.

The volume of exports in February was down 6.8% year-on-year. Consumer price inflation, which decreased to 1.0% in February, also shows weak domestic demand.

Although Japan relaxed entry conditions in October and implemented a domestic tourism support programme, its GDP declined by 0.3% in the third quarter compared with the previous quarter and remained almost unchanged in the fourth quarter. This can be explained by weaker external demand, including from the main trade partner – China – and historically high inflation, which reached 4.3% in January. For now, wages are growing slowly, reducing the

real purchasing power of households. Thus, in contrast to most other central banks, both the Japanese and Chinese central banks continue to pursue expansionary monetary policies.

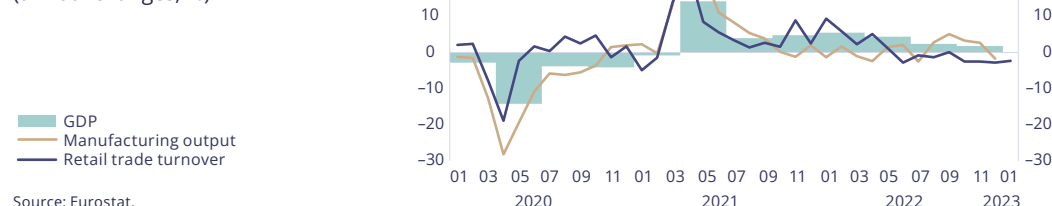
The euro area economy showed resilience and grew in the second half of 2022.

In the third quarter, GDP increased by 0.4% quarter-on-quarter, but in the fourth quarter GDP flatlined. Private consumption, which was expected to weaken due to high inflation and uncertainty, even increased in the third quarter, but declined by 0.9% in the fourth quarter, as households saw energy bills increase. The Purchasing Managers' Index (PMI), the evidence of which was relatively pessimistic in 2022, currently indicates possible growth of the national economy in the first two months of 2023. The EC's Economic Sentiment Indicator (ESI) improved in November, December and January, but was almost unchanged in February. The retail trade turnover also slightly increased in the first month of the year after a significant decline in December. The improvement in sentiment over time has coincided with the slow retreat of inflation – after reaching the highest point of 10.6% in October, it declined to 8.5% in February. However, core inflation proved to be solid and continued to accelerate, reaching 5.6% in February. In response to high inflation and its spillover from the energy and food sectors to other sectors, the ECB raised key interest rates by a total of 300 basis points in 2022 and announced that all future monetary policy decisions will be taken meeting-by-meeting based on incoming macroeconomic data and without providing explicit forward guidance.

In the latest forecasts published in March, the ECB expects GDP growth of 1.0% in 2023 and 1.6% in 2024. Compared to the December forecast, growth has been revised up for this year, reflecting the decline in energy prices and the overall resilience of the economy to external shocks. However, growth is expected to be slightly slower in 2024 due to restrictive monetary policy. This year and next year inflation could reach an average of 5.3% and 2.9%, which is less than projected in December, while core inflation is projected to be more persistent – 4.6% and 2.5%. The ECB expects both headline inflation and core inflation to approach, but not yet reach 2% in 2025.

Chart 3

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



Source: Eurostat.

Although the year 2022 generally demonstrated development in the Baltic States due to the strong economic growth in its first half, its fourth quarter saw a sizeable decline.

Last year, the Baltic States were among the leaders of inflation indicators in the euro area. Factors such as consumption basket composition and high energy dependence on Russia

played an essential role in inflation, which was above its average level in the euro area.

High inflation has thus significantly reduced the real personal income by eroding purchasing power and demand. High energy prices and a drop in demand have reduced production volumes, and the real estate market also has cooled at the end of the year. There was considerable heterogeneity across the Baltic States in growth of consumption of goods and services in the fourth quarter of 2022. For example, in Estonia, while the service sector was still recovering from the pandemic, it showed growth, even though the actual consumption of goods declined. Accordingly, when domestic and foreign demand declined, similar to the situation in Latvia, exports subdued, and imports growth also slowed down. Gross domestic product of Lithuania declined by 1.7% compared to the third quarter, while in Estonia it declined by 1.6%.

Economic growth of Sweden in 2023 is assessed very cautiously, expecting a recession in annual terms.

Situation at the end of the year in Sweden is similar to the situation in other European countries: the Statistics Bureau of Sweden reported a 0.5% drop in GDP compared to the third quarter of 2022, which is below the 1.4% decline in gross domestic product previously projected by Sveriges Riksbank. The economic slowdown was mitigated by reasonably good export performance, while consumption and domestic demand declined due to inflation and rising interest rates. Sweden is one of the countries with the highest ratio between household debt and disposable income, so higher interest rates in these countries, including Sweden, affect them more strongly. Also, the real estate sector faces a significant impact of monetary policy, with real estate prices falling to the level of 2020. Accordingly, investments in construction will decrease, thus the demand for construction materials will dampen, and the real estate supply shortage will still remain unsolved.

As energy prices fall, the situation in industry will improve, however, as the fight against high inflation continues, overall improvement of the economic situation in Germany is only expected in the second half of 2023.

German economy grew by 1.8% in annual terms; however, as previously expected, growth of national economy has slowed significantly at the end of 2022, with GDP decreasing by 0.4% in the fourth quarter of 2022 compared to the previous quarter. High inflation has significantly affected household consumption, while due to high energy costs, the output of energy-intensive manufacturing sectors has significantly decreased. Rising interest rates dampened activity in the real estate market, and a multitude of factors held back the construction sector. Despite a significant fiscal state aid, disposable income increased slower than costs, with the money spent eating away at savings.

According to the Bank of England, a moderate recession is expected in the UK economy in 2023.

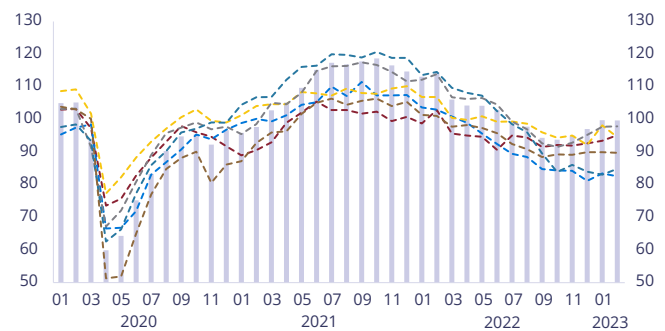
The UK is the only G7 country whose gross domestic product remains below pre-pandemic levels. High energy prices continue to reduce production output. As the purchasing power and external demand decrease, the volume of foreign trade falls, with especially the export of goods and services shrinking. As the situation in lending changes, the volume of construction in the UK falls similarly to other countries, and the investments declines, significantly affecting the demand for various investment goods. Due to the surge in inflation and high energy prices, actual income continues to decline and demand decreases, therefore a rapid recovery of demand is not envisaged in the near term, rather expecting it closer to 2024.

Chart 4

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

Euro area
 Latvia
 Estonia
 Lithuania
 Germany
 Sweden
 Poland

Source: EC.



The decline in the Russian economy has not been as sharp as expected.

According to the statistical data published by Russia, the GDP decline was only about 2% in 2022. This number may be meaningless, as Russia may use economic indicators for disinformation purposes. The impact of the sanctions is feeding through, as trade flows to and from Russia decline. Various fossil fuels accounted for the bulk of total trade, so, as trade decreases, Russia's export income experiences a fall. As Russia's invasion of Ukraine continues, the country's military spending is high, which dampens the overall growth of its economy. On both economic and moral grounds, the Western countries no longer consider Russia a reliable trading partner.

2. Financial Conditions

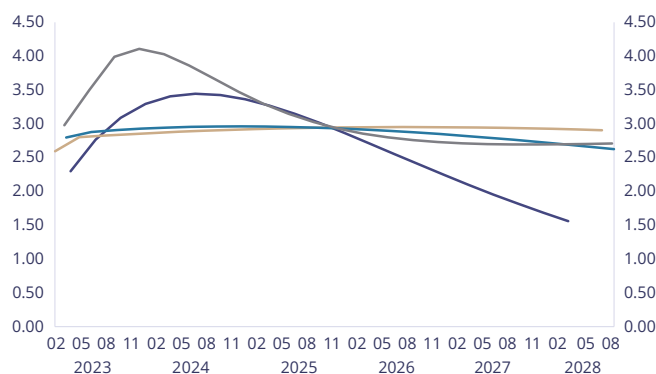
Since the beginning of September, leading central banks have continued to significantly raise key interest rates in response to the rapid rise and persistence in inflation.

The pace of hikes slowed towards the end of the year, but central bank governors announced that the fight against inflation was not over and interest rate hikes continued. As core inflation turned out to be more resilient than expected, interest rate peaks moved further into the future. However, solvency problems of US regional banks and the looming liquidity crisis of Swiss bank Credit Suisse Group AG (before it was acquired by UBS Group AG) have caused high degree of uncertainty surrounding the further course of interest rate developments. Furthermore, the FRS and Bank of England not only continued to raise key interest rates, but also reduced their asset portfolios. The Governing Council of the ECB has also decided to reduce gradually its asset portfolio by not reinvesting a part of its redemption volumes. On the other hand, the Bank of Japan, despite the rapid increase in prices in the world, expects that the increase in inflation in Japan will not be sustainable, and therefore continues its very supportive monetary policy.

Chart 5

ECB's deposit facility rate in the future (financial market assessment)
(%)

— September (30.09.2022)
— Day before the last ECB Governing Council's meeting on interest rates (1 February 2023)
— March (14 March 2023)
— The day before the US banking turmoil (7 March 2023)



Source: Bloomberg, Latvijas Banka's estimates.

2.1 Decisions of the ECB and other major central banks

Since early September, the Governing Council of the ECB has continued to move towards restrictive monetary policy at a rapid pace.

At the September and October meetings, the interest rates were raised by 75 basis points each time, while at each of the next three meetings – by 50 basis points more, thus the interest rate on deposit facility, the interest rate on the main refinancing operations and the interest rate on marginal lending facility reached 3.00%, 3.50% and 3.75% level respectively. The Governing Council of the ECB provided forward guidance on the ECB interest rates by stating that the high uncertainty reinforces the importance of a data-based approach to decision-making on policy interest rate changes, meaning that such a decision is taken meeting by meeting. Furthermore, the Governing Council of the ECB already in December decided on the modalities for reducing the Eurosystem's holdings of securities under the asset purchase programme (APP): from the beginning of March until the end of June 2023, the APP portfolio will decline by 15 billion euro per month on average, and the subsequent pace of portfolio reduction will be determined over time. Regarding the euro area economy, the ECB communicated that it stagnated in the fourth quarter of 2022, thus avoiding the previously projected economic recession. At the same time, it indicated that, although private consumption declined sharply, the base scenario projects that the economy will start on a recovery path in the coming quarters. It communicated that wage growth and declining energy prices will partially make up some of the previous decline in purchasing power. Also, despite the weakening of economic activity, it highlighted the strong labour market. Analysts

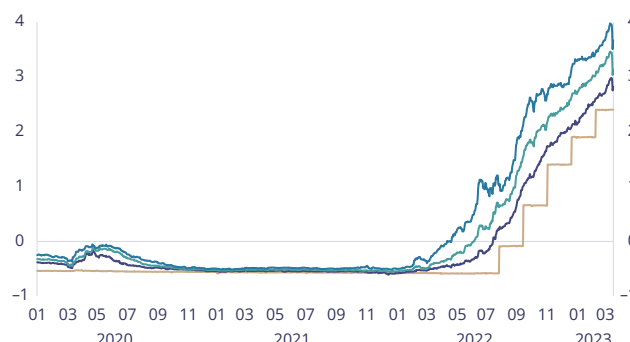
expect the ECB's deposit facility rate to peak at the end of summer 2023, rising to 3.75%, while the main refinancing rate – to peak to 4.00% level. At the same time, on 15 March, the financial markets expect the ECB's main policy rate to approach 3.5% by the beginning of summer 2023, which would also be the highest point in this rate-raising cycle. With the initiation of US bank insolvency proceedings, financial market projections for the peak of the interest rate on the ECB's deposit facility (previously slightly above 4.0%) have lowered significantly.

Chart 6

Euro money market rates (%)

— €STR
— 3-month EURIBOR
— 6-month EURIBOR
— 12-month EURIBOR

Source: Bloomberg.



After the fast interest rate hikes at its autumn meetings, the FRS slowed the interest rate hiking pace at the end of the year.

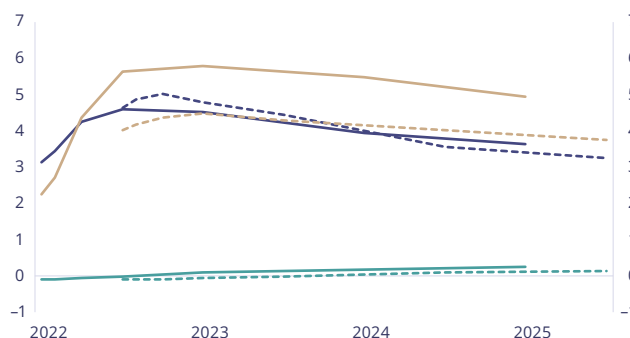
At the September and November meetings, the FRS increased the federal funds target range by 75 basis points each time, while in December and February, the pace of interest rate hikes slowed down, and the federal funds target range was increased accordingly by 50 and 25 basis points until it reached the level of 4.50-4.75%. Comments by the FRS and its members before the start of insolvency proceedings for the two regional banks indicated that interest rate hikes will continue and may even require a resumption of faster interest rate hikes in response to persistently high core inflation. However, the declaration of insolvency of regional banks at the beginning of March led to some uncertainty surrounding the further course of interest rate developments. To address the financial stability aspects, the FRS decided to establish a new bank term funding program for one year. At the same time, the FRS continues to reduce its balance sheet according to the plan announced in May 2022. As regards the US economy, the FRS communicates that the latest data indicate modest growth in consumption and production. New job creation has continued in recent months, and thus unemployment remains low. Inflation has moderated slightly but remains elevated. According to the 15 March forecast, the FRS's target interest rate in this rate-hiking cycle will peak in May and will be slightly below the 5% level. At the same time, financial markets are also expecting the FRS to be the first of the leading central banks to start cutting interest rates, and the first cuts are expected as early as the end of the summer. Here, it is important to note that bank insolvency processes have significantly reduced financial market expectations for future interest rate increases.

Chart 7

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

— USA – September 2022
— UK – September 2022
— Japan – September 2022
--- USA – March 2023
--- UK – March 2023
--- Japan – March 2023

Source: Bloomberg.



The Bank of England has continued to raise interest rates since early September.

In September and November, it increased the base interest rate by 50 and 75 basis points, respectively, while in December and February – each time by another 50 basis points.

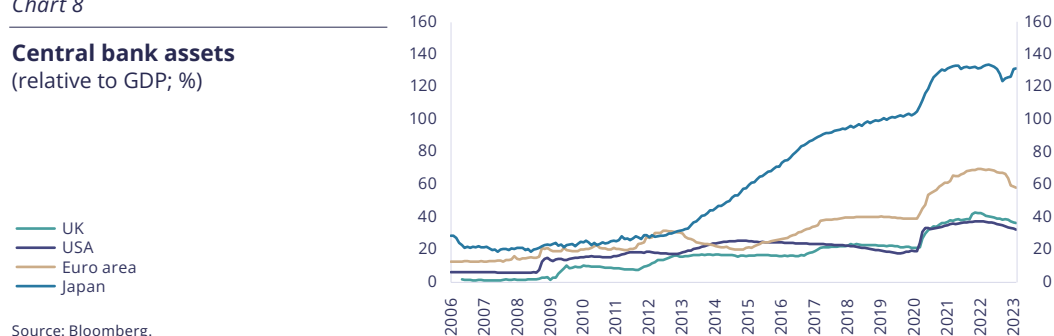
The base interest rate of the Bank of England has currently reached the level of 4.00%. In a report released in February that included the latest forecasts, the Bank of England communicated that retail prices had fallen significantly since the previous forecast, whereas domestic inflationary pressures had been stronger than expected. Despite such conclusions, analysts project that significant interest rate increases will not follow in the future. In addition, the Monetary Policy Committee of the Bank of England decided at the end of September to reduce the holdings of UK government debt securities by 80 billion pounds over the next 12 months until levels decrease to 758 billion pounds. This complies with the plan previously announced in August; however, the practical implementation of this plan had to be postponed until the beginning of November due to a brief period of volatility in the UK government debt securities market caused by the mini-budget brought forward by the government of Liz Truss. Stability returned to the debt securities market with the temporary support of the Bank of England and the change of the government, as well as the changing plans for the UK budget. At the beginning of November, the auctions of the UK government bonds held by the Bank of England resumed, and at the end of November, the sale of the portfolio of securities purchased for financial stability purposes was also started. On 14 March, the financial markets projected that the base interest rate of the Bank of England monetary policy could reach 4.4% at the end of the summer, which would be the highest point in this rate hike cycle.

The Bank of Japan, contrary to the other leading central banks, continues a supportive monetary policy.

Financial markets expect that the Bank of Japan short-term target interest rate could be increased to 0.1% (currently –0.1%) over the next 12 months, yet, the management of the Bank of Japan says that no interest rate revision is foreseen for the time being, and the Bank of Japan is committed to keeping rates at the current level.

Chart 8

Central bank assets
(relative to GDP; %)



Source: Bloomberg.

2.2 Global financial market developments

The increase in the key interest rates of the major central banks was also reflected in the sovereign bond yields increase, although their growth rate was more moderate.

This was driven by market participants' expectations of slower interest rate increases in the future, especially after the December decision by the FRS to reduce the pace of interest rate hike. But a slower decline in inflation indicators and an improvement in overall economic sentiment at the beginning of the year, as well as indications by central banks that the terminal rate of this interest rate hiking cycle could become even higher, contributed to a further rate increase. At the beginning of March, however, turmoil in the US banking sector caused a sharp drop in interest rates. Investors, concerned about the safety of

their investments, increasingly shifted their investments to relatively safe government debt securities, causing a sharp rise in the prices of these securities and a fall in yields. For example, during the 13 March trading session, one of the most significant one-day declines (since 1987) in the 2-year US government bond yield was recorded, falling by 61 basis points. This contributed to the increase in volatility in sovereign bond markets.

As shorter-term bond yields rose ahead of longer-term bond yields, the already negative inversion of the government bond yield curve widened in both the euro area and the US.

The yield on German 10-year debt securities increased by a total of 88 basis points (to 2.41%) during the reporting period (31 August 2022 – 14 March 2023), even briefly exceeding 2.75% in early March and reaching the mid-2011 historical level. In France, the yield on 10-year debt securities increased by 79 basis points, in Spain by 75, and in Italy – by 38 basis points. In Greece, the yield on 10-year debt securities increased the most moderately – only by 22 basis points. The more moderate increase in Greece could be explained by the market's expectations of a relatively soon credit rating upgrade and the recovery of the investment-level credit rating. On the other hand, the yield on the US Treasury debt securities increase has been more flat this time – by 50 basis points. Further development in yields on government debt securities will largely depend on the dynamics of the received inflation and overall economic development indicators and the indications given by the central banks on the further monetary policy. A new factor influencing it may also be the reduction of the securities portfolio initiated by the ECB, although market analysts project its relatively calm and gradual course.

Yields on corporate debt securities rose, although the spreads of the investment-grade corporate debt securities above the risk-free yield remained solid, while it declined for high-yield debt securities.

The yields in the euro area and US corporate debt securities markets generally moved in line with the sovereign bond yields. As market sentiment improved in favour of risky assets, the spread over the risk-free yield declined in the high-yield debt security segment. The decline in prices of raw materials, especially natural gas, contributed to the drop in spreads in Europe. The level of corporate defaults also remains very low. Despite the rising yield on corporate debt securities, investment-grade companies continued issuance of new debt securities, especially at the beginning of the year, while the riskier high-yield companies were more reluctant to raise new market-based financing. In the coming months, the yields on corporate debt securities will remain dependent on the central banks' monetary policy normalisation pace, both from the overall economic growth and commodity price developments as well as the sectoral outlook, and most likely will also remain sensitive to the incoming inflation data.

Investors are returning to the stock markets as concerns about a slowdown in the pace of economic development subside.

Equity markets initially continued to move downwards, but with the prospect of a more moderate pace of monetary policy normalisation, especially from the FRS, they began to recover sharply. Economic growth data in both the euro area and the US brought positive surprises. The lifting of Covid-19 restrictions in China at the end of the year raises hopes that supply chain problems could be resolved sooner, and the recovery of consumption in China will additionally stimulate global growth. The still good fourth quarter corporate earnings supported stock price increases. Declining energy prices, especially in Europe, also contributed to the upward trend in stock prices. However, in March, the stock market also experienced stress due to the turmoil in the banking sector, with the banking sector stocks suffering significant losses. In general, the EuroStoxx index, characterising the stock market of the euro area, increased by 15.0%, while the S&P 500 index, characterising the US stock market, experienced a slight decline (–0.9%). Weakness in the US tech sector continued to hamper growth in the US stock market. S&P 500 price-to-earnings ratio experienced

an insignificant decline, although in the euro area, EuroStoxx price-to-earnings ratio rose slightly. Indices characterising future fluctuations – both the European VSTOXX and the US VIX – declined, with the European VSTOXX (-18.6%) index being ahead of the US VIX index (-8.3%) in terms of decline.

During the period considered, in the euro area the retail sector (+38.1%), the banking sector (+36.0%), as well as the travel and leisure sector (+25.8%) demonstrated a positive performance.

In turn, the stock prices of real estate companies experienced the biggest losses (-11.5%). Although bank stock experienced a significant decline in early March due to the turmoil in the US banking sector, the overall positive performance of the euro area stock was driven by an increase in net interest income, which was reflected in strong bank earnings in the fourth quarter.

As to national euro area stock markets, the Italian stock market FTSE MIB (24.3%), Germany's DAX (18.7%), France's CAC 40 (16.6%) and Spain's IBEX 35 (16.1%) index demonstrated the best performances. Further developments in the stock markets will continue to largely depend on the pace of economic expansion and on the ability of policy makers to balance decisions and measures to contain a further rise in inflation and avoid a notable recession and a following revaluation of financial assets. The energy price may also significantly steer the future moves of stock prices.

Prospects for a more cautious pace of the US monetary policy normalisation and inflation containment as well as a decrease in natural gas prices in Europe contribute to the appreciation of the euro.

The euro exchange rate against the US dollar rose by 6.8% from the end of August to 14 March, returning above the parity level and reaching 1.073 US dollars per 1 euro. The main factors contributing to the strengthening of the euro were the prospects for a more subdued normalisation of the US monetary policy, as well as the improvement in the prospects for natural gas supply in Europe. Greater investor interest in riskier investments such as stocks also reduced demand for the US dollar in favour of the euro exchange rate. Looking forward, analysts expect that the euro exchange rate against the US dollar will continue to rise until the end of September (up to 1.10). Future developments in the euro exchange rate will depend on the dynamics of the monetary policy decisions of the FRS and the ECB and future outlooks. Undoubtedly, the uncertainty caused by the war in Ukraine and its consequences for the development of the euro area and the world economy, especially the future situation with natural gas supply in Europe, will have an impact on the future prospects of the euro exchange rate. The trajectory of China's development after the lifting of Covid-19 restrictions will also affect the future dynamics 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

With increased bank and corporate caution, the persistence of high geopolitical risks in the region, and the ECB's accommodative monetary policy to raise borrowing interest rates and avoid inflation, the lending markets are again showing more negative trends.

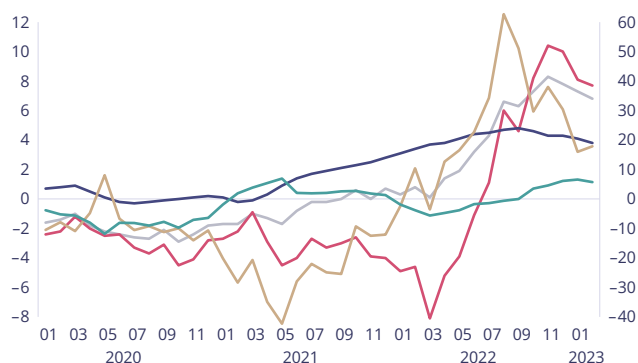
Chart 10

Domestic loans (outstanding amount; annual changes; %)

— Total residents (excluding the government)*
— Non-financial corporations*
— Households*
— Short-term loans to non-financial corporations (right-hand scale)
— Short-term loans to non-financial corporations (right-hand scale)

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

Source: Latvijas Banka.



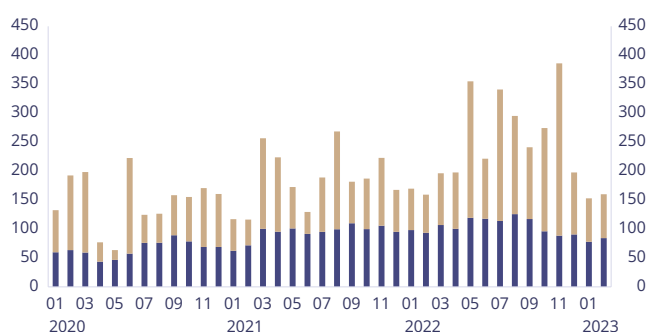
Due to the repayment of previously issued short-term loans, as well as the decrease in the banks' risk appetite and companies' demand for long-term loans, the corporate loan portfolio decreased in recent months. Domestic loan portfolio (excluding loans to the government) decreased by 0.7% in September 2022 – February 2023. This decrease was determined by the drop in loans to non-financial corporations (by 2.7%, including a decrease in short-term loans by 22.7%), while loans to households only increased by 0.6% (including housing loans by 0.8% and consumer loans by 3.2%; the growth rate was almost three times slower than in the first half of 2022). The adjusted annual growth rate of domestic loans (excluding loans to the government) was 6.8% in February, with loans to non-financial corporations growing by 7.7% and loans to households growing by 3.8% (housing loans – by 3.7%). The volume of new loans also decreased. For example, in January, it was the lowest for non-financial corporations in the last 10 months, and for households it was the lowest in the last two years, with slight increase in February.

Chart 11

New domestic loans
(flows; millions of euro)

■ New contracts – households
■ New contracts – non-financial corporations

Source: Latvijas Banka.

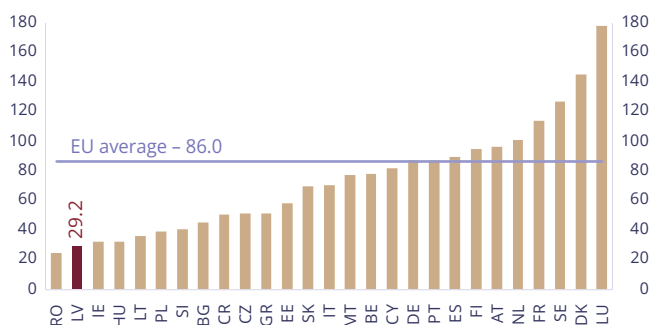


Nominal GDP growth and restrained lending continued to dampen the already low loan-to-GDP ratio: in 2022, it decreased to 34.3% (in 2021 – 37.0%). The ratio of loans issued to non-financial corporations and households to GDP in Latvia is still the second lowest among the countries of the European Union, with Latvia being only ahead of Romania.

Chart 12

Loans to non-financial corporations and households in the EU countries in 2022
(outstanding amount; % of GDP)

Source: ECB, Eurostat.



As credit resources flow into the national economy in limited amounts only, the growth potential of the national economy could decrease.

While in some credit institutions and some lending segments – for example, housing loans for households – lending growth continues due to inertia, albeit slower, in other credit institutions and lending segments, the uncertainty and the increase in risks have a negative impact on lending conditions and demand. Both banks' risk appetite and willingness of businesses to borrow, especially for investment purposes, are decreasing.

The increase in key ECB interest rates and the subsequent rise in money market indices were quickly reflected in loans with floating interest rates, while loans with fixed interest rates and deposit interest rates rose less and more slowly.

The margin could potentially increase in the future, supporting the concerns of credit institutions about the outlook of the general economic situation, certain sectors and companies, the weakening of creditworthiness of borrowers and the rise of credit risk, as well as the increasing caution of credit institutions.

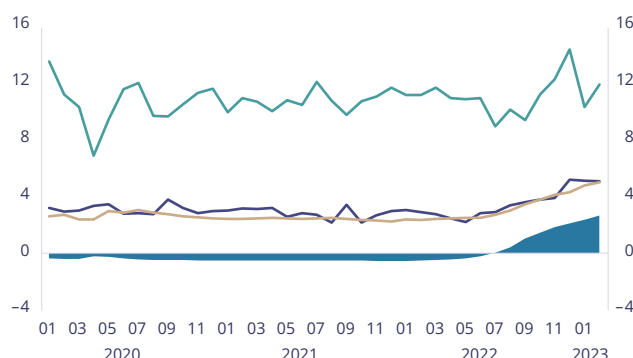
The majority of new loans to firms in euro are at floating interest rates, so during the reporting period, when the ECB's monetary policy became more restrictive, the rise in money market indices had a significant upward impact on interest rates on loans to firms.

The euro interest rate on new loans to firms increased almost as much as the 3-month money market index (by 2.2 and 2.6 percentage points, respectively), reaching 5.1% in February (2.9% in July 2022). The margin priced into loan rates decreased as the pressure on interest rates eased due to the drop in demand, as well as credit institutions restricted new loans to high-risk customers, which are usually charged higher interest rates. The increase in interest rates during the reporting period was equivalent to small and medium-sized (up to 1 million euro) loans to firms and large (over 1 million euro) loans to firms. In the future, interest rates on loans to firms will continue to closely follow the dynamics of money market indices, while the markup risk will remain on the upside.

Chart 13

Interest rates on MFI's new euro loans to enterprises and households and 3 month EURIBOR (%)

Source: Latvijas Banka, Refinitiv.



The interest rate on housing loans to households continued to rise, with the money market indices increasing as a result of the restrictive monetary policy of the ECB.

The euro interest rate on new housing loans to households increased by 2.3 percentage points during the reporting period, reaching 5.0% in February 2023. In the near term, interest rates on housing loans will depend mainly on the monetary policy of the ECB. There is a risk that as the situation and outlook of the general economic situation, certain sectors or companies weakens, as well as the real purchasing power of households shrinks and their credit risk increases in conditions of high inflation, the credit risk priced into the interest rate of housing loans and the credit risk premium may increase. The interest rate on consumer loans and other loans to households increased (in February 2023 – 11.8%, in July 2022 – 8.9%), driven by the increase in financing costs of credit institutions and the increase in the credit risk of households, as inflation weakened the purchasing power of households.

In general, holdings of deposits by banks in nominal terms continue to increase, however, the amount of funds at the disposal of businesses grew much faster than household savings in banks.

On the other hand, the annual growth rate of household deposits has been slowing down for the third year and was only 3.4% in February, which is the lowest rate in the last 10 years. This suggests that the financial safety cushion of households is getting thinner in an environment of high inflation, which could reduce domestic demand as well.

Chart 14

Domestic deposits (outstanding amount; annual changes; %)
and annual inflation (%)

— Total deposits of domestic non-financial corporations and households
— Deposits of non-financial corporations
— Household deposits
— Annual inflation



Source: Latvijas Banka, CSB.

With annual inflation still exceeding 20%, the total annual growth of deposits by 8% and the growth of household deposits, which is twice as slow, indicate a significant decline in real savings.

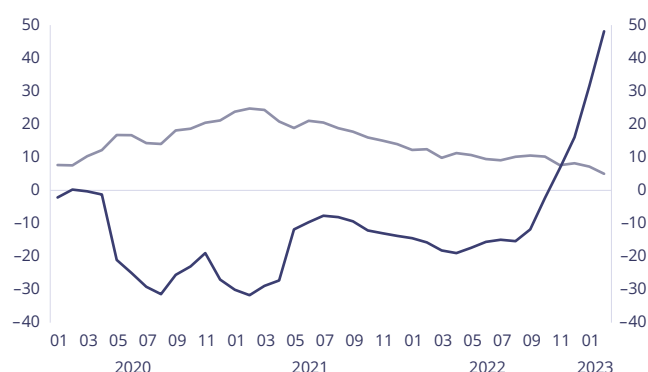
The annual growth rate on deposits of non-financial corporations alone remained rapid (18.0% in February); however, this too could not keep up with the surge in inflation. In nominal terms, the increase in the volume of deposits during the last six months – from September 2022 to February 2023 – was 4.5% (for deposits of non-financial corporations it was 8.7%, whereas for household deposits it was 2.5%). It is noteworthy that for the time being the small but already noticeable increase in interest rates on deposits (in February, the average interest rate on term deposits of non-financial corporations reached 2.1% and the interest rate on household term deposits reached 1.2%, which is the maximum of more than the last five years, although it still lags behind the average of the euro area level) has stimulated the growth of term deposits (by 52.0%), while current account balances grew by only 1.2% during this period.

Chart 15

Domestic deposits
(outstanding amount;
annual changes; %)

— Overnight deposits
— Fixed-term deposits

Source: Latvijas Banka.



Notable differences remain in the society in terms of income level; however, as interest rates on deposits increase, one can expect the continuation of the trend observed in January, i.e., the wealthiest households will increase their term deposit balance, at least partially offsetting the crushing force of inflation, while the poorest will spend their current account balances to cover living expenses. Thus, the total deposit balance might not change significantly in the near term.

The rise of money market indices has had less impact on deposit rates, taking into account the significant excess liquidity in the system, weak lending, as well as low bank competition.

The rates on demand deposits and deposits redeemable at notice grew more slowly, while the rates on term deposits grew faster. The euro interest rate on new household deposits in February 2023 reached 1.1% (in July 2022 – 0.1%), whereas interest rates on firm deposits reached 2.1% (in July 2022 – 0.0%). The further development of deposit rates depends on the credit institutions' assessment of the dynamics of the ECB's official interest rates and money market interest rates in the coming months.

Box 1. The impact of interest rates on the profit figures of commercial banks²

The rapid shift in the monetary policy stance in 2022, with the ECB continuing to increase interest rates in 2023 as well, and this gradually – with a delay – being reflected in the deposit rates offered by banks in Latvia, will force households and non-financial corporations to more skilfully deposit the funds accumulated over time in banks or place them in savings bonds offered by the Latvian State and earn more significant interest income. At the same time, the delayed pass-through of interest rates by banks to deposits of households and non-financial corporations, the increasing interest income of banks from their funds kept with Latvijas Banka, the use of EURIBOR index as a reference on bank loans and their relatively quick pass-through to borrowers means a significant increase in income for banks in 2023.

In recent years – the era of low interest rates – one could observe that simultaneously with the slow crediting of households and non-financial corporations and the faster growth of deposits of households and non-financial corporations, the loan-to-deposit ratio was constantly decreasing, and at the end of 2022, for every euro deposited, the banks had paid out just under 69 cents in loans to households and non-financial corporations. In the last three years until July 2022, when the interest rate on the ECB's deposit facility reached zero for the first time since 2014, credit institutions have kept an average of more than 5 billion euro in current accounts with Latvijas Banka.³

² By Gunārs Bērziņš and Vija Mičūne, economists of Latvijas Banka.

³ By keeping current accounts with Latvijas Banka, credit institutions fulfil the minimum reserve requirements. During the reserve maintenance period, their total average was over 170 million euro.

Previously, during the period of negative interest rates, keeping such a large surplus of liquidity with the central bank caused additional costs, but the situation has changed dramatically in the past year. As the ECB rapidly raises its interest rates to a significant level⁴, the remuneration of deposits by commercial banks with the central bank has also increased accordingly. It should be noted that the interest expense on deposits with Latvian commercial banks was significantly lower than interest revenue even during the period of negative interest rates, and the profitability of commercial banks remained relatively high.

Borrowers whose loan payments are tied to the EURIBOR index have also noticed an increase in interest rates. From euro area perspective, the growth of loan interest rates in Latvia and the rest of the Baltic States has been rapid, and currently loan interest rates are among the highest in this group of countries.

Chart 1.1

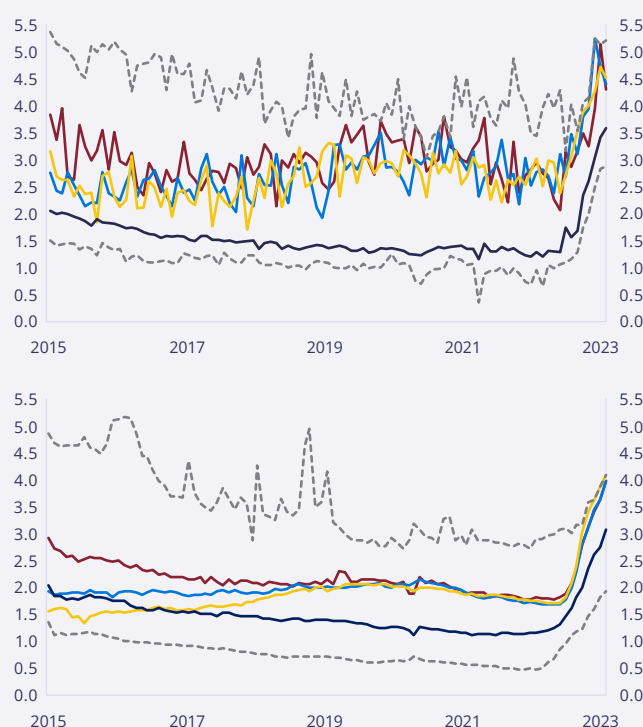
Interest rates on new euro-denominated loans to households and non-financial corporations

Loans to non-financial corporations – new euro-denominated loans with a floating interest rate and interest rates with the initial rate fixation period of up to 1 year (%)

Loans to households for house purchase – new euro-denominated loans with a floating interest rate and interest rates with an initial rate fixation period of up to 1 year (%)

— Latvia — Euro area average
— Estonia — Min.
— Lithuania — Max.

Source: ECB SDW.



However, there is also the other side of the story: the total amount of deposits with Latvian commercial banks in monetary terms significantly exceeds the loan portfolio. The total amount of deposits of households and non-financial corporations with commercial banks in January 2023 was 15.7 billion euro (outstanding loan was 10.9 billion euro).

The long-lasting era of low interest rates has gradually made us forget about such financial literacy wisdom as term deposits and deposits redeemable at notice (also called savings accounts). Despite the first signs of interest on the supply side by the banks and on the part of depositors, depositors should nevertheless revise their savings habits more actively and more quickly, by investing their accumulated cash more skilfully in term deposits or Treasury savings bonds, thus reducing the share of non-interest-bearing overnight deposits in total stock of deposits.

⁴ At its March meeting, the Governing Council of the ECB raised the interest rate on the deposit facility to 3.0% per annum.

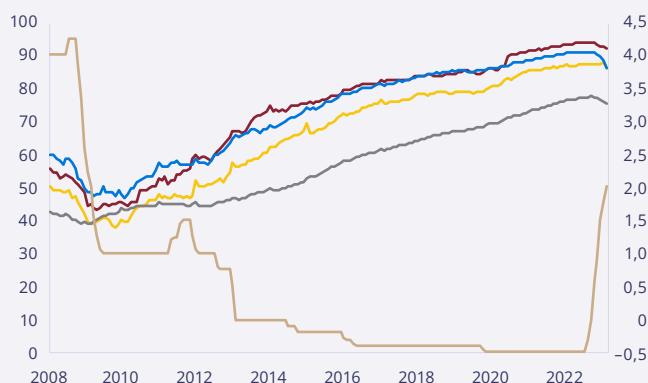
Chart 1.2

Share of euro demand deposits of households and non-financial corporations in their total deposits and the ECB interest rate (%)

— Latvia
— Lithuania
— Estonia
— Average among euro area countries
— ECB interest rate (right-hand scale)*

* Until 21 December 2011, the interest rate on the main refinancing operations, thereafter – the interest rate on the deposit facility

Source: ECB SDW.



Latvian commercial banks have started to raise the interest rates on fixed-term deposits. Nonetheless, in overnight deposit interest rate data, Latvian commercial banks are at the lowest end in terms of performance. Although the interest rates on fixed-term deposits offered by commercial banks have increased, the interest rates offered by Latvian commercial banks in this segment are still lower than the average interest rates in the euro area, so the question arises as to how justified is the delay of commercial banks in raising interest rates for household and non-financial company deposits.

Chart 1.3

Interest rates on eurodenominated overnight deposits of households and non-financial corporations in the euro area and Latvia

Non-financial corporations (%)

Household (%)

— Latvia
— Estonia
— Lithuania
— Euro area average
--- Min.
--- Max.

Source: ECB SDW.

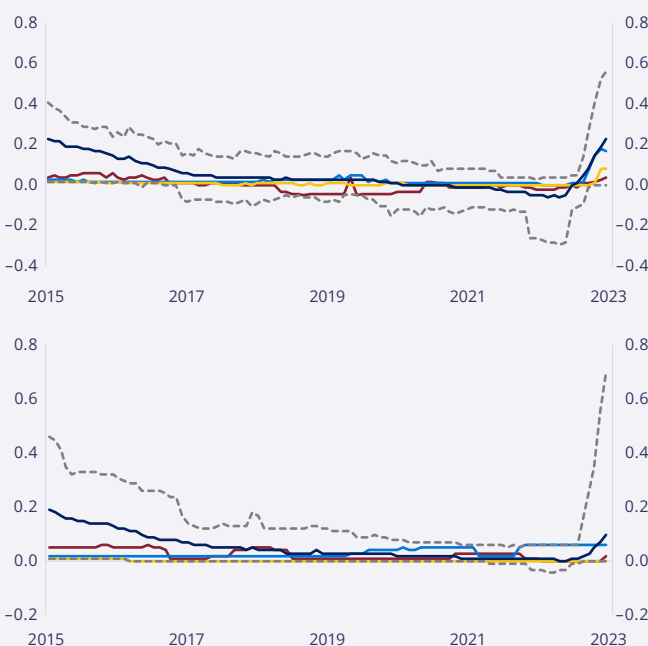


Chart 1.4

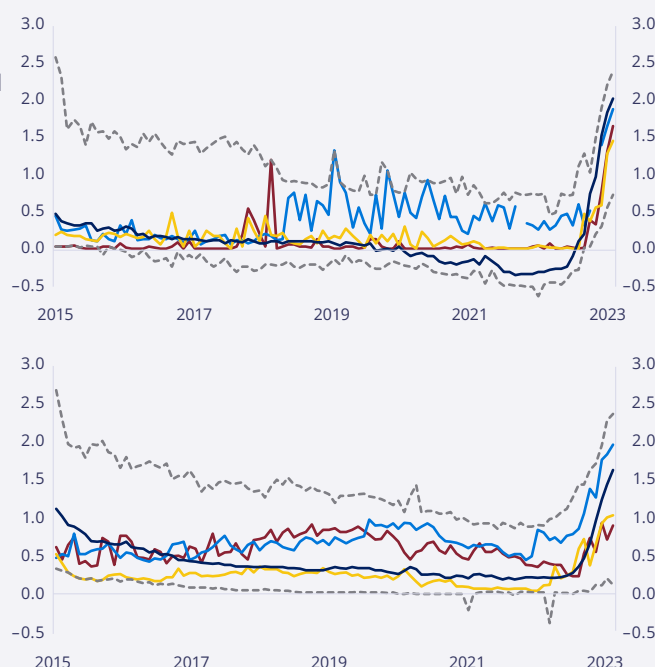
Interest rates on new euro-denominated household and non-financial corporation fixed-term deposits in the euro area and Latvia

Non-financial corporations (%)

Household (%)

— Latvia — Euro area average
— Estonia — Min.
— Lithuania — Max.

Source: ECB SDW.



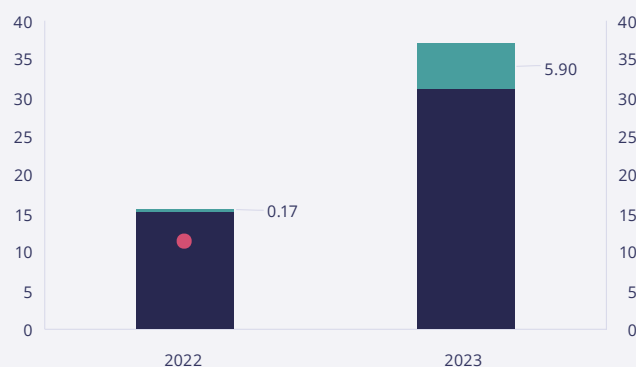
Rising ECB and money market interest rates promise better profitability for the commercial banking sector. As money market interest rates rise, interest income from the loan portfolio increases. In Latvia, where the variable part of the interest rate on most loans is tied to the EURIBOR index, the transmission of money market interest rates to loan interest rates occurs very quickly – not only to the interest rates on new loans, but to the interest payments on all loans included in the loan portfolio. At the same time, the remuneration offered in Latvia for deposits, which lags behind the average remuneration in the euro area, and the interest payments of the Latvijas Banka for placing the funds of commercial banks in the ECB deposit facilities allow commercial banks to earn considerably more this year. Assuming that commercial banks continue placing euro resources at the ECB's deposit facility with Latvijas Banka as passively as before (i.e., without looking for more profitable investment opportunities), and taking into account the dynamics of the interest rate priced for this year by financial markets at the beginning of March, in 2023 Latvijas Banka will have to pay commercial banks in interest payments 136 million euro more than in 2022, which, provided that other conditions remain unchanged, would ensure an increase in the ROE of credit institutions by 5.9 percentage points. Rising EURIBOR indices (in 2023, the EURIBOR values priced by financial market will be more than 3 percentage points higher than the average values in 2022) and their relatively quick transmission on borrowers will bring additional revenue, thus the contribution to the ROE will increase to 31 percentage points, provided that other conditions remain unchanged. Thus, if the interest payments made by Latvian commercial banks (expenses of banks) on deposits do not increase at the same pace, we can expect a significant increase in the profitability of the banks. Taking into account the fact that interest rates on term deposits offered by banks have already started to rise in recent months, the overall profitability of banks this year will also depend on the activity of households and non-financial corporations and the willingness to increase the proportion of term deposits in their total deposits profile.

Chart 1.5

Contribution of bank interest income from deposits with Latvijas Banka and euro interest income from loans issued to households and non-financial corporations in ROE (percentage points)

■ Latvijas Banka's interest payments for current account and deposit facilities
■ Interest income from loans issued to households and non-financial corporations
● ROE (2022)

Source: Latvijas Banka's MBP, Latvijas Banka's estimates.



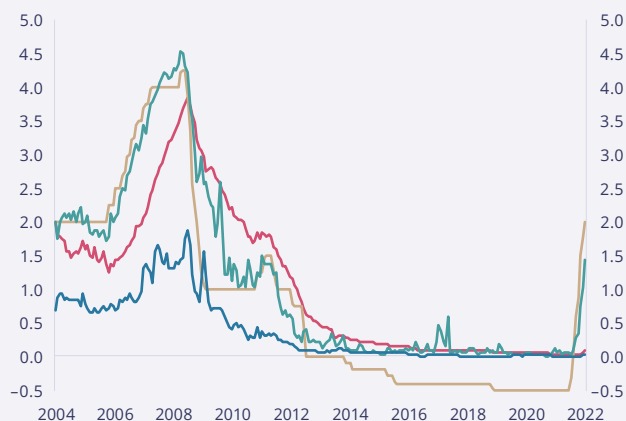
As suggested by experience, the interest rates on fixed-term deposits with maturity of up to 1 year offered by Latvian commercial banks have been more sensitive to the rise of central bank and money market interest rates and have followed it with 2 to 3 months delay.

Chart 1.6

Euro interest rate on deposit balance of households and non-financial corporations, interest rates on new fixed-term deposits and the ECB interest rate (%)

— Interest rate on outstanding amount of deposit
— ECB interest rate*
— Interest rate on new fixed-term euro deposits with a maturity of up to 1 year
— Interest rate on outstanding amount of overnight deposit

* Until 21 December 2011, the interest rate on the main refinancing operations, thereafter – the interest rate on the deposit facility.
Source: ECB SDW.



Data from January of this year show that the activity of fixed-term deposits is slowly resuming; however, their low share (4% of all euro-denominated deposits) should be significantly increased. For example, in order to reach the share of the fixed-term deposits observed before the "era of low interest rates" (over 40%) at the end of this year, more than 0.5 billion euro would have to be deposited every month with a maturity of up to 1 year. In such a scenario, assuming that the interest rates on fixed-term deposits offered by the Latvian commercial banks will follow the rising ECB and money market interest rates with a delay, the interest paid on the fixed-term deposits raised will constitute only 3.6 percentage points of the contribution of expenses to the commercial banks' ROE.

On the other hand, it is essential for commercial bank depositors to compare the fixed-term deposit rates offered by different banks during periods of rising interest rates. The range of their offer significantly expands in periods of rising interest rates, taking into account the drastically different reaction of commercial banks to the increase in the price of money in the financial markets. So, for example, at the beginning of March, the interest rate on the fixed-term deposits offered by Latvian commercial banks for a 1-year deposit was in the range of merely 0.01% to 2.50% per year, while savings account options are only offered by a few Latvian commercial banks, and their offer was in the range of 0.2% to 0.5% per year.

For households, it is worth remembering about savings bonds – a Latvian state securities intended for the population as a safe investment and savings tool, for the use of which you do not even need to open a securities account in a commercial bank (the purchase takes place on the website www.krajobligacijas.lv) and you do not need to start with large sums of money. Although the phrase "savings bond" sounds similar to "bond", it is important to understand that as regards conditions, a savings bond is similar to a bank fixed-term deposit, not a bond, and to some extent it could be considered a fixed-term deposit in the Treasury. Three maturity terms are offered for savings bonds – 12 months, 5 years and 10 years.

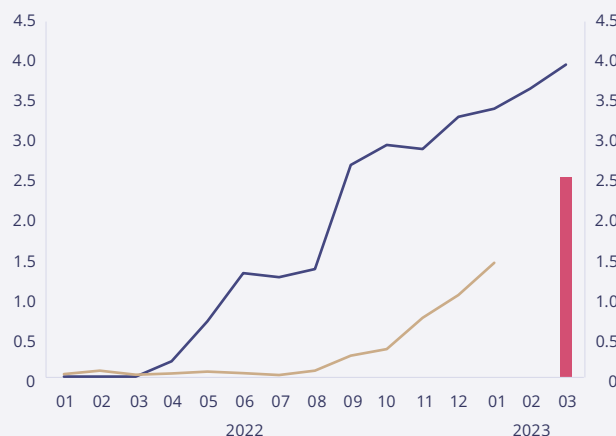
Taking into account the fact that the savings bond rate correlates with the yields on government bonds, in recent months, savings bonds have become a very attractive savings instrument even compared to the best fixed-term deposit interest rate offers by Latvian commercial banks.

Chart 1.7

Interest rates on fixed-term deposits of households and non-financial corporations, interest rates offered by commercial banks and savings bonds (%)

- Fixed income rate of savings bonds with a maturity of 12 months (at the end of the month)
- Fixed-term deposits of households and non-financial corporations with an initial maturity of up to 1 year (average monthly interest rate)
- Interest rate range of fixed-term deposits offered by commercial banks operating in Latvia (with a maturity of 1 year)

Source: Latvijas Banka, websites of commercial banks, krajobligacijas.lv.



From September 2022 to February 2023, we could observe an increase in spending in connection with the rise in prices.

The net issuance of Latvijas Banka's euro banknotes decreased from 17 million euro at the end of August to -96 million euro on 14 March; in addition, cash could also be reduced by cross-border transactions. Also, the outstanding amount of the credit institutions' current accounts and used deposit facilities in Latvijas Banka decreased from 5.5 billion euro to 4.2 billion euro. As money market interest rates grew, credit institutions placed more funds abroad.

Chart 16

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

Source: Latvijas Banka.



The active raising of interest rates by central banks in order to limit aggregate demand, and thus inflation, also worsened the government's financial conditions.

This meant that the mobilisation of funding became more expensive. In the secondary market, the average yield on the Latvian 8-year bonds increased from 2.58% at the end of August to 3.82% on 14 March. The spread vis-à-vis the German government bonds of an equivalent maturity widened from 118 basis points to 145 basis points. The still increased interest rate spread was determined by a higher vulnerability of the Baltic states' economy and the proximity of the border with Russia.

In October, the Latvian government issued 4.5-year bonds in the international financial markets, raising 850 million euro with a yield of 4.21%. The total demand for Latvian eurobonds exceeded 2.1 billion euro, with the spread of 105 basis points over the mid-swap rate. In January, the Latvian government decided on the offer of 5-year bonds in

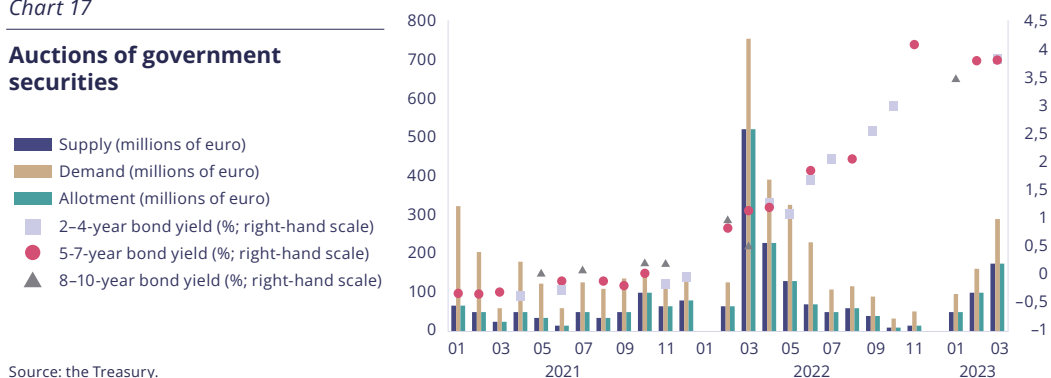
the international markets. It resulted in the sale of bonds worth 750 million euro, and the average yield was set at 3.69%. The demand exceeded 3.7 billion euro, but the spread over the mid-swap rate was 75 basis points.

In the second auction, the yield decreased, as inflation growth in Latvia moderated, and it has also slowed down in the euro area for several months.

From September to the middle of March, the Latvian government placed its securities that were previously released on international markets on the domestic market (same ISIN for securities launched on both the domestic and international markets). Eight auctions were held; the supply and the sold amount totalled 390 million euro, while the demand stood at 724 million euro. Bonds with a maturity of 3 to 8 years were offered. The 6-year bond rate increased from 2.25% at the end of August to 3.83% in February.

Chart 17

Auctions of government securities



Private debt securities were issued more actively in January and February.

AS Latvenergo issued 6-year green bonds in the amount of 50 million euro. The demand reached 133 million euro, while the coupon rate and the yield were 4.952%. AS CleanR Grupa issued bonds in the amount of 15 million euro. The bonds were offered in a closed offering, had a 3-year maturity, and the coupon rate was set at 6.5% + 3-month EURIBOR. The demand was one and a half times greater than the supply. AS Eco Baltia issued 3-year bonds worth 8 million euro with a coupon rate of 8%. The issuer has the right to redeem them before the maturity – after two years. The demand reached 28 million euro. In all three mentioned cases of bond issuance, the issued bonds were listed on the stock exchange AS Nasdaq Riga.

On the Latvian stock market, the stock price index OMXR increased by 8.9% on 14 March 2023 compared to the end of August 2022. The Baltic stock price index OMXBBGI also grew by 8.9%. At the same time, global stock markets were volatile, with stock indices falling in some countries and rising by more than 20% in others. Large fluctuations in the development of indices determined changing forecasts concerning the rise in central bank interest rates in the future.

The growth of the Latvian stock index was ensured by AS HansaMatrix (+20.1%), AS Rīgas kuģu būvētava (+19.0%), AS Latvijas Gāze (+16.1%). On the other hand, the stock price of AS MADARA Cosmetics decreased (–15.0%). AS HansaMatrix reported the historically highest annual revenues, which were ensured by the growing demand for electronic products; a voluntary offer to buy back the shares of AS HansaMatrix was also made. Despite fluctuations in natural gas prices, the impact of geopolitical events and changes in the regulatory framework both in Latvia and the European Union, AS Latvijas Gāze also reported high profits in 2022.

Box 2. Is it possible to explain the increase in the yields on Latvian government securities in 2022?⁵

Inflation in the euro area exceeded 2% in August 2021, after being below the ECB's target level for a long period. Along with inflation indicators rising above the ECB's target level, the yields on the euro area government debt securities have increased significantly. Since Russia invaded Ukraine, a divergence between diverse government security yields has been increasing, i.e. Latvian and Lithuanian government bond yields have risen faster than yields in other euro area countries. In this box, we will investigate whether the ongoing increase in yields has been justified based on macroeconomic and other indicators.

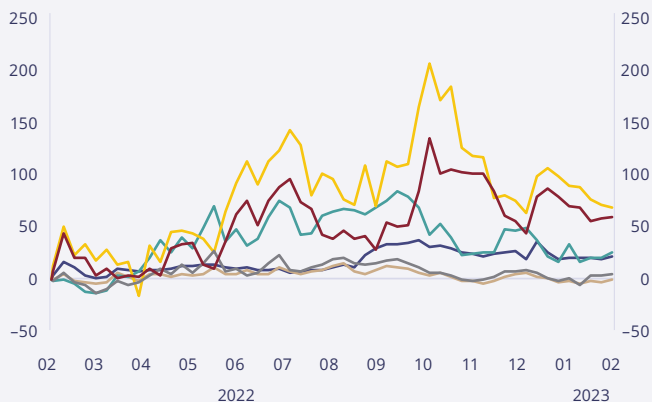
Since the end of August 2021, the yields on 10-year euro area government securities have moved up by 2.9–4.6 percentage points. One of the sharpest increases was recorded by the Latvian government bond rates: the 10-year estimated yield rose by 3.9 percentage points during this period. The fastest yield increase was observed in Lithuania, while the slowest – in Germany. The overall sentiment of market participants was determined by inflation forecasts that has resulted in a monetary policy tightening, and later by the geopolitical uncertainty following the Russian invasion of Ukraine. The impact of the war has not only put pressure on energy prices and inflation in general, but has also lowered the perspective of the economic growth, creating preconditions for national governments to increase fiscal support, which can lead to a rise in budget deficits and higher debt levels. The increase in yields has varied across different countries and has intensified since the Russian invasion of Ukraine, with the Latvian and Lithuanian government bond yield spreads vis-à-vis the corresponding German government bond yields widening more rapidly (see Chart 2.1).

Chart 2.1

The spread between the 10-year government bond yield of individual euro area countries and the corresponding German government bond yield, changes since the Russian invasion of Ukraine
(in basis points)

— Finland — Lithuania
— France — Spain
— Italy — Latvia*

*The Latvian government 10-year bond yield is estimated using the Nelson-Siegel-Svensson model.
Source: Refinitiv, Latvijas Bankas estimates.



This box provides an assessment of the Latvian government 10-year security yields, which corresponds to the country's macroeconomic, liquidity and risk sentiment indicators.

For this purpose, the econometric model of the euro area countries is used, in which the euro area country spreads vis-à-vis the corresponding German government bond rate are explained by the following indicators: the government debt-to-GDP ratio, the GDP growth rate forecast, the estimated market volatility index, the spread between the demand and supply rates of the corresponding securities and the ratio of the value of assets purchased under the public sector purchase programme (PSPP) to GDP.

Dynamics of the yield on Latvian government debt securities

Chart 2.2 reflects the spread between the Latvian government 10-year securities yield and the German securities yield from 2018 to the end of 2022 and also shows what part of this spread is explained by the aforementioned macroeconomic, risk sentiment and other indicators. Crucially, the ability of these factors to explain the dynamics of the spread varies over time.

⁵ Prepared by Anete Kravinska, Oļegs Tkačevs and Jānis Mauris, economists of Latvijas Banka.

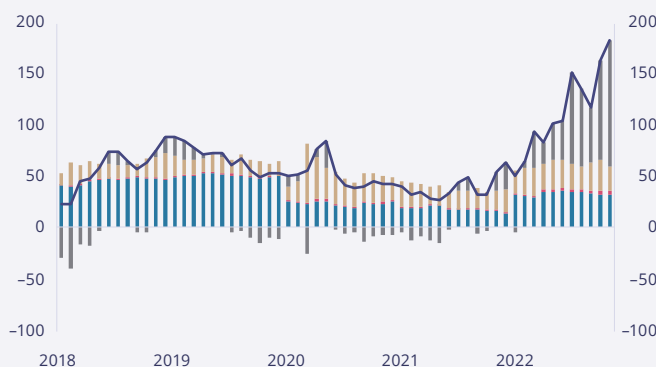
In recent history – at the beginning of 2020 – due to the spread of the Covid-19 pandemic and the measures taken by the government, the spread between the yields on the Latvian and German government securities increased significantly, but over the subsequent months and until the end of 2021, this was followed by a decrease in the yield spreads. The ability of the above factors to explain the reduction in the spread over this period was quite significant. Namely, the decrease was driven by a lower market volatility (as concerns about the spread of Covid-19 eased), the recovery of GDP growth and the dynamics of government debt. On the other hand, the contribution of the unexplained component was quite stable during this period.

In comparison, in 2022 the yield spreads rose rapidly, but only a very small part of the increase can be explained by the deterioration in risk sentiment, leaving the majority unexplained. In the case of other euro area countries, such as Italy, France, Spain and Finland, the macroeconomic, liquidity and risk factors included in the model can help to characterise the widening of the yield spreads in 2022 quite accurately (see Chart 2.3). In these countries, the increase in the yield spread was determined by the rise in the debt burden (facilitated by the measures introduced by governments to overcome the Covid-19 crisis) and the deterioration in risk sentiment. On the other hand, the dynamics of the Lithuanian government securities yield spread and the contribution to it by the mentioned factors are quite similar to the case of Latvia.

Chart 2.2

The spread between the yields on the Latvian and German 10-year government bonds and its decomposition
(basis points)

■ Macroeconomic Indicators
■ Liquidity indicator
■ Risk sentiment
■ Unexplained component
— Yield spread

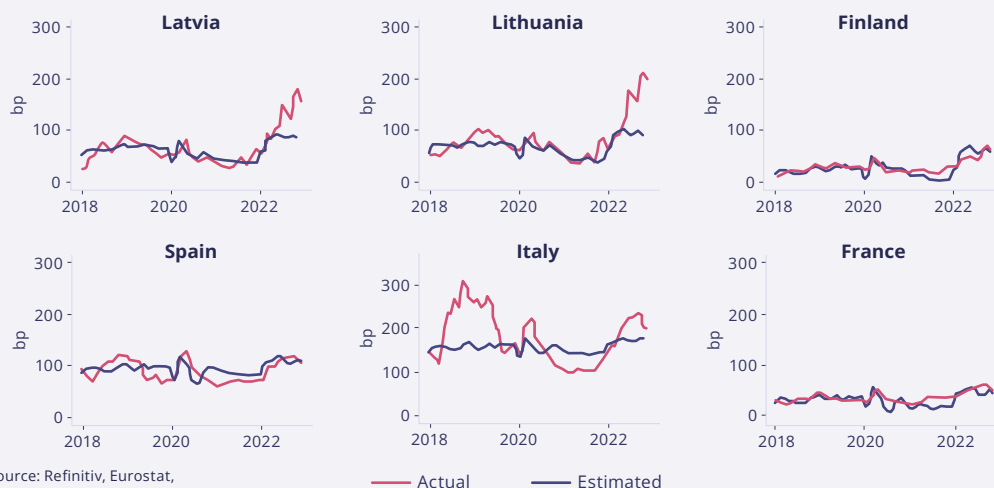


Source: Refinitiv, Eurostat, Latvijas Banka's estimates.

In general, this leads to the conclusion that the war caused by Russia in Ukraine has had a significant impact on the rapid increase in yields on the Latvian government bonds, which, in the perception of investors, makes the Baltic States much more sensitive to potential risks.

Chart 2.3

Spread between the 10-year government securities yields in certain euro area countries and Germany (actual and estimated by the econometric model)



Source: Refinitiv, Eurostat, Latvijas Banka's estimates.

3. Sectoral Development⁶

The government support to overcome the energy price crisis and savings accumulated during the pandemic, combined with concerns about their value shrinking due to inflation, have supported the level of consumption in the second half of 2022, preventing a sharper GDP decline.

Several service sectors continued to recover from the low activity during the pandemic; growth in the arts and entertainment services sector continued in the fourth quarter. The development of ICT and professional services was also particularly successful throughout the year, which could partly be explained by export opportunities. After two years of restrictions during the pandemic, the tourism sector is gradually recovering, and it is expected that this recovery will continue in 2023. Meanwhile, the growth in goods sectors has been weaker. The low output of the energy sector could be largely affected by saving resources and reducing energy consumption due to costs. The decline in construction continued in the fourth quarter and the decline was not stopped by the increase in government capital expenditure at the very end of the year. The still high level of uncertainty and costs as well as the slow absorption of EU funds hinder investment growth and, therefore, construction.

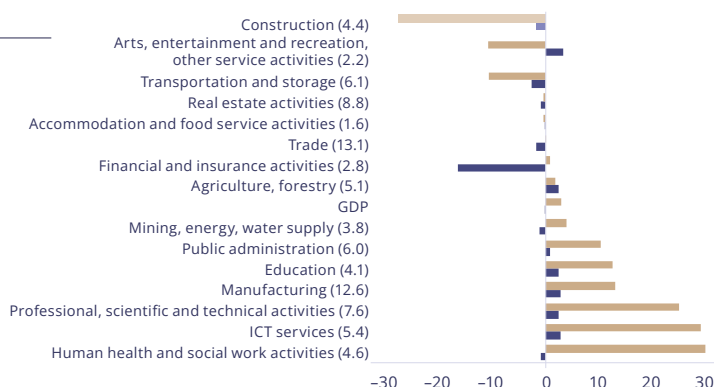
Chart 18

Value added and GDP in the fourth quarter of 2022

(growth; %; seasonally and calendar adjusted data; in brackets: contribution of the sector to GDP in 2022)

■ Q4 2022/2019 average
■ Q4 2022; quarter-on-quarter

Source: CSB, Latvijas Banka's estimates.



3.1 Manufacturing

The output of manufacturing remains stable; however, the drop in new orders calls for caution.

Despite the decrease in orders, the output estimate for the following months has risen – this can be explained by the fulfilment of previous orders, as supply chain disruptions ease. Such short-term factors were already mentioned by manufacturers last year, and the increase in manufacturing volume in the fourth quarter in these sectors (for example, manufacture of electronic products, electrical equipment, parts for motor vehicles and beverages) confirms this. The overall manufacturing performance in the fourth quarter also resulted in a slight increase.

The performance of the two largest subsectors of manufacturing gives hope for stable future development.

Representatives of the wood processing sector believe that they could have overcome the greatest difficulties, and in the second quarter, they can hope for a renewed growth of the sector, as both demand and prices rise. This hope is strengthened by observations that customer warehouses filled with wood products are starting to empty, and despite the slowdown in the construction segment, demand is starting to recover. The situation in the

⁶ This chapter analyses GDP and sectoral value added at constant prices, using seasonally and calendar adjusted data (unless otherwise specified).

second largest subsector of the manufacturing sector – manufacture of food products – is also relatively favourable.

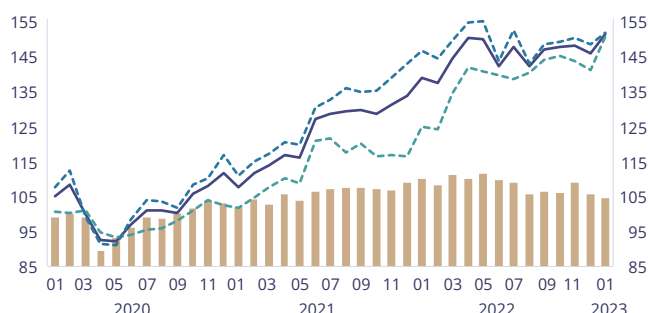
The main aggravations are observed in operation of dairies, causing conflicts between milk producers, processors and traders. In other segments, the situation is relatively calm. A further increase in the profit margins of food producers could be observed in the fourth quarter, as the prices of raw materials remained low and energy costs decreased, while the prices of final products remained high.

Chart 19

Manufacturing
(2019 average = 100)

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

Source: CSB.



Another reason for the stubborn persistence of industry is not so flattering – the cooperation with Russia is still quite close.

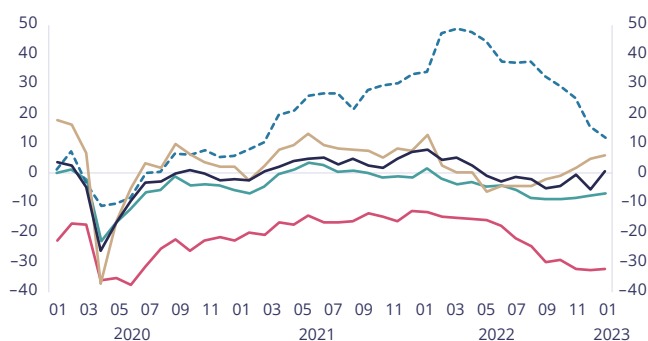
Direct export deliveries with prior contractual reservations and rapidly growing export flows to the neighbouring countries of Russia (probably not end-users) continued in the sanctioned goods segment. In addition, the export portfolio also includes Latvian products not subject to sanctions, for example, in the field of pharmaceuticals, which maintain their exposure to risk due to the large share of Russia and Belarus in the export market of Latvian pharmaceutical companies

Chart 20

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.



There are still many challenges in industry; however, there is no crisis, nor will there be any in the near future.

This hope for the future is most strengthened by the fact that energy costs have declined, since their rise was one of the most significant threats to industrial companies. However, there are still concerns about development – high uncertainty and growing lending rates do not encourage new investments, and the threat of recession has not disappeared.

3.2 Construction

The mounting energy prices and building material prices, the shortage of qualified labour, the difficult process of coordinating construction projects and the reduction in investments are hindering construction growth for the sixth consecutive quarter, reducing the real volume of the sector.

The added value of the construction sector in the fourth quarter of 2022 decreased by 1.8%

quarter-on-quarter. Owing to the increase in energy prices and building material prices, construction costs have risen by 19.7% in 2022, causing significant problems in the execution of previously concluded construction project contracts.

As investments in construction decrease, as well as due to the slow inflow of EU funds into the sector, in connection with heavy bureaucracy in the approval and coordination of projects, the real volume of construction output in 2022 has fallen by 11.3% (seasonally adjusted data) year-on-year.

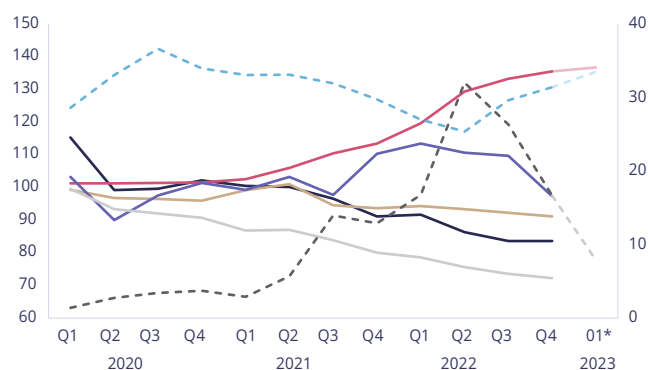
Chart 21

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

- Production output
- Number of employees
- Construction costs
- Manufacture of other non-metallic mineral products
- Construction added value
- - - Confidence – insufficient demand (right-hand scale)
- - - Confidence – lack of materials or equipment (right-hand scale)

* Data of January 2023

Source: CSB, Latvijas Banka's estimates.



The climbing construction costs have not only reduced activity in the already started construction projects, but together with the rise in interest rates and the uncertain geopolitical and economic situation related to the war started by Russia in Ukraine have also increased the number of postponed planned projects to a greater extent and weakened investor interest in the implementation of new projects. This is evidenced by the decline in the number of building permits and the areas intended for construction.

Looking into the future, the construction confidence indicator remains negative, but the grounds for pessimism that existed until now – concerns about the shortage of materials, equipment and workers – have diminished, while the outlook for upcoming demand has worsened.

As the pressure of building material prices is gradually decreasing and the activities of the new EU funds programming period begin, it is expected that the construction sector will already resume a positive growth rate this year.

Both this year and in the following years, public investments will retain the decisive role in construction growth, as the tense geopolitical situation and the related economic uncertainty will continue to weigh on private investments in the sector. The expected increase in public sector funding, simultaneously with the implementation of the ambitious Rail Baltica project for the construction sector, can both ensure a climb in the real volume and create a series of problems related to the construction sector's capacity and shortage of qualified labour. In addition, a rapid increase in construction volume will put upward pressure on labour wages, again raising overall construction costs.

3.3 Real estate sector

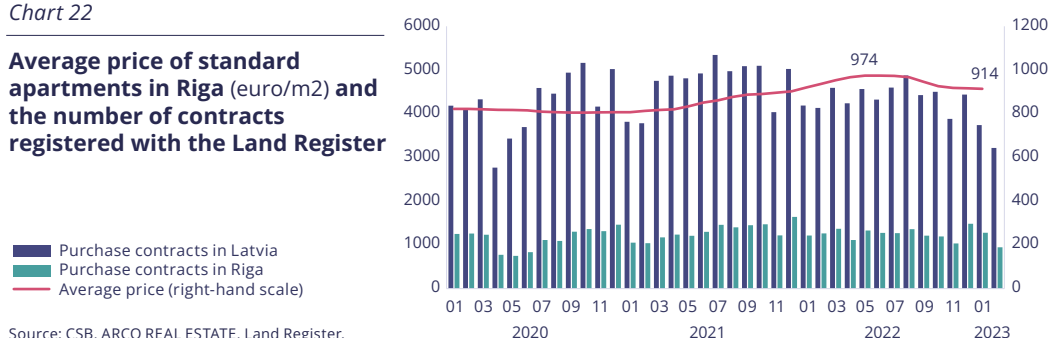
Despite the decrease in real estate prices, real estate market activity has contracted. This was driven by the reduction in household savings owing to inflation, the increase in utility payments and the rise in lending rates.

The added value of the real estate market sector, after increasing in the third quarter, started to shrink at the end of the year, and in the fourth quarter decreased by 0.9% quarter-on-quarter. Although there is a drop in prices in the real estate market (the average price of standard apartments decreased to 916 euro/m² in December), compared to the middle of the

year, the pace of transaction activity has started to slow down. This was on account of several factors: the rise in energy and food prices, the fall in household savings and the increase in lending rates. In 2022, the number of transactions registered with the Land Register decreased year-on-year – by 6.6% in Latvia and by 3.5% in Riga. In 2022, the number of new projects offered on the real estate market and under construction shrank. This shows that the supply of apartments in the real estate market will be lower in 2023. The rapid rise in the supply of energy-inefficient standard apartments observed in 2022 in Riga did not continue at the beginning of 2023, and thus the pressure on prices in this housing segment decreased.

Chart 22

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



Source: CSB, ARCO REAL ESTATE, Land Register.

The war in Ukraine, the rise in interest rates, and the increase in energy prices have also reduced the interest of Western investors in the Baltic region. The amount of investments in commercial properties in 2022 shrank twice year-on-year, slightly exceeding 300 million euro (in 2021, however, several large-scale transactions took place, including the change of owners of the Alfa Shopping Centre and the Jaunā Teika Office Complex). The largest investments in 2022 were made in commercial facilities and office complexes. This is explained by the fact that the demand has been higher than the supply in the market, which encouraged investors to also choose riskier projects with higher returns.

It is expected that in 2023, due to the deterioration of the population's purchasing power and the increase in interest rates on housing loans, the activity in the real estate market will continue decreasing, maintaining a downward pressure on real estate prices, although a very rapid drop in prices is not expected.

3.4 Trade

Although none of the trade subsectors (wholesale trade, retail trade and trade of motor vehicles) showed negative changes in real turnover in the fourth quarter, the added value of the trade sector decreased by 1.7% during the quarter.

The government's support to overcome the impact of rising energy prices has not only prevented a further decline in consumer sentiment, but also stabilised consumption and retail trade.

Although consumer sentiment remained longer as pessimistic as it was briefly at the beginning of the pandemic, activity in retail trade in the fourth quarter remained at the level of the previous quarter.

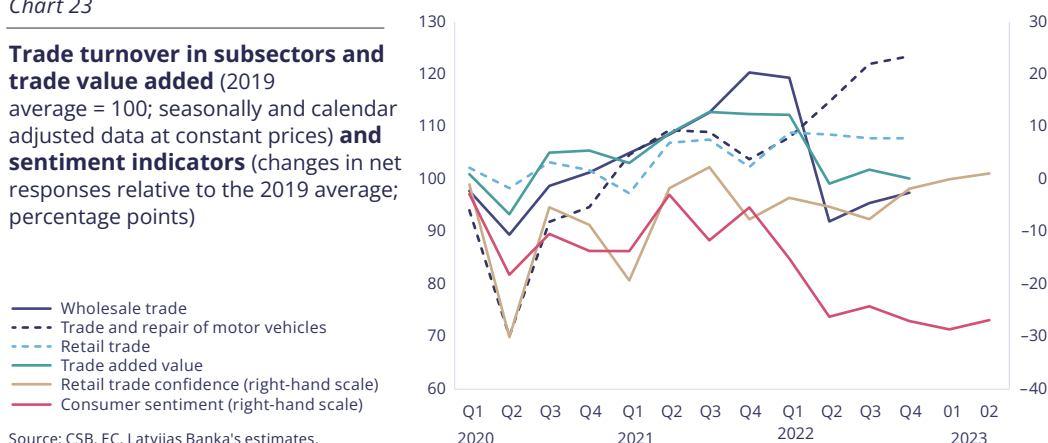
In December, a significant negative contribution to the dynamics of retail sales was made by the segment of goods related to housing, and this suggested caution in spending due to increased housing maintenance expenses; however, the caution was not confirmed by the private consumption data. At the end of the year, the turnover of retail trade of food at constant prices also decreased, indicating that prudence in spending prevailed over the absence of pandemic restrictions during the year-end holidays (unlike the two previous years). These effects were short-lived, and an increase is already visible in the January data. On the other hand, current payment card data rather indicate the stagnation of the sector in the first two months of 2023 compared to the corresponding period of last year.

Overall, the trade of motor vehicles grew rapidly in 2022, which could reflect purchases delayed or stuck in supply chains during the pandemic.

At the same time, in the second half of the year, the dynamics of motor vehicle repair services began to lag noticeably. This can lead to thinking both about whether consumers are postponing certain services that are not primary, and whether the share of the shadow economy in the sector has increased. Meanwhile, the increase in retail sales of fuels in constant prices suggests that the population's driving habits have not become more modest.

Chart 23

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)



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

A slight increase in activity can be observed in wholesale trade after the drop of the turnover that was recorded in the first half of 2022 and most likely resulted from the exposure of several business owners to sanctions related to the war initiated by Russia in Ukraine.

In the second half of the year, the wholesale turnover of agricultural products at constant prices exceeded the level observed in previous years, and this was facilitated by both a good grain harvest and the still favourable price level of grain in the export markets compared to the previous season. Specialised wholesale trade, which includes some companies whose owners became subject to sanctions, continues to fluctuate at a low level.

3.5 Transport

The last few years have been challenging for the transportation sector; however, last year's performance was better than initially expected.

Development of the transport sector has been slower than that of the Latvian economy as a whole for a longer period of time, but after the Russian invasion of Ukraine, the outlook of growth has weakened even further.

Despite the gloomy perspective and broad development risks, the added value of the transport sector increased by 2.3% in 2022. However, the growth of the sector will continue to be limited this year due to the events in the external environment, which will negatively affect international transportation services, and Latvia's weak economic growth will also have a limiting impact on the sector's development.

In road transport, the last year ended up with a decline in cargo turnover, which was affected by a decrease in transported volumes abroad, however, a slight increase was observed in domestic and export cargos.

The first half of 2022 in road transport began with a drop in the cargo volumes, which was determined by a weaker cargo turnover in an international haulage. A negative impact on cross-border haulage was caused by both the conditions of the EU mobility package, which

was introduced at the beginning of 2022 for transportation services in the European markets, and by the retaliatory sanctions introduced by Russia on transportation services within the territory of Russia. However, in the second half of 2022, with the increase in volumes of domestic and export transportation, the movement of cargo slightly recovered, and the total turnover of road cargoes decreased by only 3.5%. This year, the development of the road transport sector will be hindered by a weaker economic growth in Latvia and European countries, however, cargo volumes could gradually recover in the second half of the year.

At the end of the last year, there were unprecedented differences in the cargos transported by railway and via the largest seaports of Latvia; it is expected that the future development of cargo volumes will continue to be on a downside.

After the invasion of Ukraine by Russia, the gloomiest scenario took shape in the railway sector and the largest seaports of Latvia, taking into account the high proportion of transit transportation in these sectors.

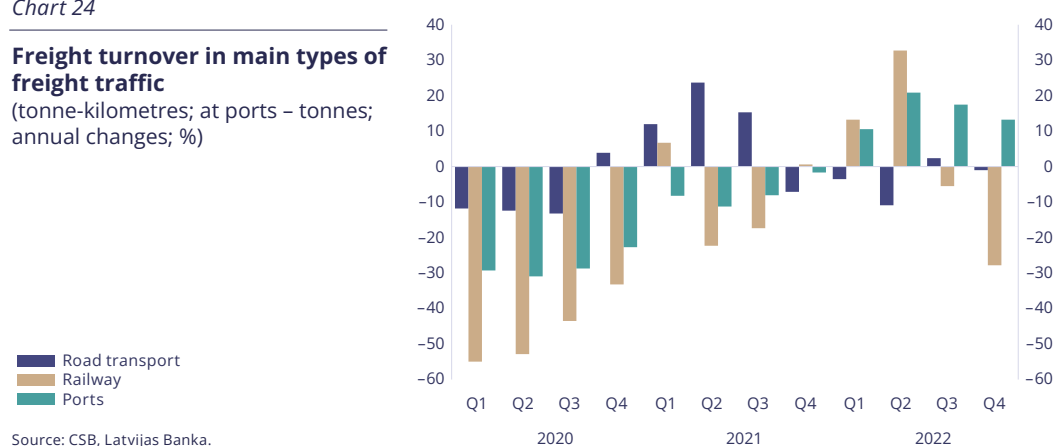
There was an upward trend in cargoes by railway until the middle of the previous year, when sanctions had not yet fully entered into force for certain product groups of the Russian origin. However, cargo turnover decreased quite rapidly in the second half of the year by 18.8% compared to the corresponding period of the previous year. On the other hand, cargo volumes in seaports continued to grow until the end of the year, showing the opposite dynamics to the transportation by railway. Although the geopolitical situation has marked some changes in the logistic flows, risks in seaports remain high due to continuously falling cargo volumes transported by railway. The total amount of cargo volumes transhipped via seaports increased by 15.2% last year compared to the previous year. This continued to be facilitated by the large coal cargoes, and a significant contribution was provided by the growth in container cargoes and ro-ro cargoes. This year, the ban on oil and oil products from Russia, which entered into force in February, will continue to reduce cargo volumes in seaports and by railway.

Air transport continues to recover from a steep decline during the pandemic, the number of passengers will continue to grow this year.

The year of 2022 marked a rapid air transport recovery from a deep decline caused by the pandemic. The number of passengers transported by Latvian airlines increased approximately twice compared to previous year. It is expected that the growth of the sector will continue this year, however, the increase will gradually decrease. Also, the sector's growth continues to be limited due to the insufficient availability of labour and spare parts, as well as the tense geopolitical situation, thereby the level prior to the pandemic will not be reached this year.

Chart 24

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



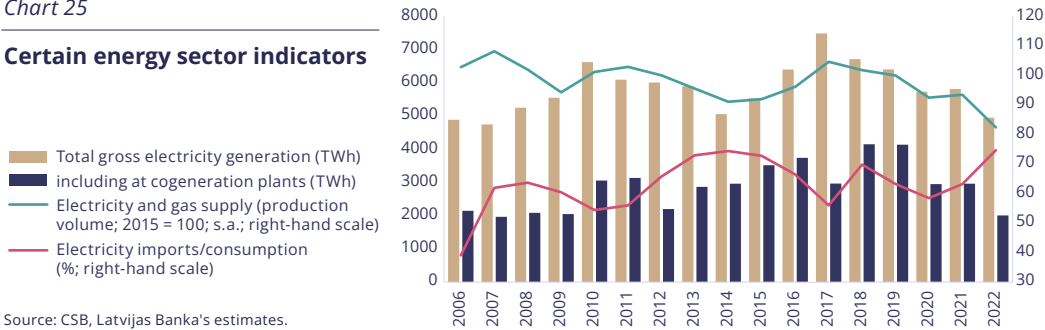
Source: CSB, Latvijas Banka.

3.6 Energy

According to industrial data statistics, the output of the energy sector in the fourth quarter did not reach the usual seasonal volume and remained at the level of the third quarter. Presumably, some influence was due to a more economical use of energy by consumers. In general, the year was spent saving primary resources. This is partly evidenced by an increase in the ratio of electricity imports to its consumption. At the beginning of 2023, under the influence of high water inflows, the electricity generation reached a historically high level (compared to the corresponding periods of other years), however, its contribution to the overall development of the sector may be overshadowed by a slightly higher average air temperature than typical for the season, which reduces the total energy demand. This is also indicated by the data of AGSI Ltd. on the levels of stocks of the Inčukalns underground gas storage facility until mid-March, which is above the average level of the previous five years.

Chart 25

Certain energy sector indicators



Source: CSB, Latvijas Banka's estimates.

4. GDP analysis from the demand side⁷

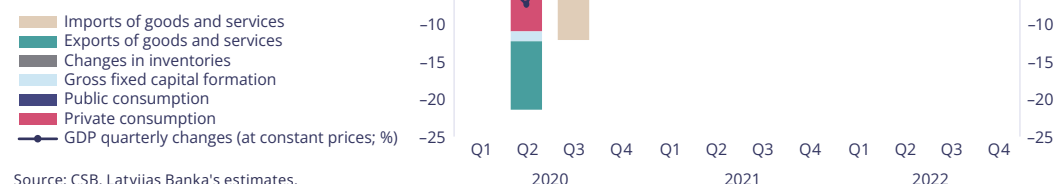
4.1 Domestic demand

GDP remained resilient, with its main surprise being a substantial increase in real private consumption. It rather had a predictable decline due to the deterioration of the purchasing power of the population.

Despite the expenses in the heating season and increased prices in stores, real consumption in the fourth quarter increased by 3.9% compared to the previous quarter.

Chart 26

GDP and the demand side by the component breakdown
(quarter-on-quarter changes; seasonal and calendar adjusted data; in comparable prices; demand side – in percentage points)



An important boost for maintaining consumption amid high inflation was the support provided by the government for covering energy costs, as well as the savings made during the pandemic, allowing part of the population to maintain the same lifestyle or feel more secure when spending without an additional safety cushion. Some part of the population even managed to save – household deposits in credit institutions reached a new record in December, however, inflation has reduced the value of these savings.

However, deposits in the accounts of credit institutions may not reveal the full picture of savings. During this period, a major decline may have occurred in cash reserves. Besides, consumption is also boosted by the presence of Ukrainian refugees and their cash savings. Although there are factors that could promote private consumption, overall growth in the fourth quarter might be overestimated – the substantial increase is not justified by any of the indicators characterising private consumption.

Chart 27

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



Investments during crises are particularly sensitive – it is not a primary need, but an investment for the future.

⁷ This chapter analyses GDP and demand components in comparable prices, using seasonally and calendar adjusted data (unless otherwise specified).

Under conditions of a high uncertainty, when interest rates on loans increase, potential investors often choose to wait, especially when construction costs in Latvia remain relatively high.

While wood product and metal prices are known to have declined after being record high, the return to lower construction costs is reluctant. According to these considerations, expectations for a growth in investments were not high, however, public investments, projects financed by EU funds and large orders for capital goods (electric trains, aeroplanes) cushion the fall. Therefore, the investment level remained unchanged in the fourth quarter of 2022.

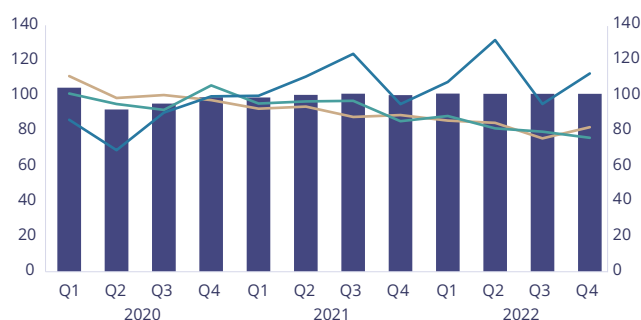
Chart 28

Investments

(2019 average = 100; seasonally and calendar adjusted data; in comparable prices)

■ Gross fixed capital formation
— Construction of buildings
— Civil engineering
— Imports of capital goods

Source: CSB, Eurostat.



4.2 Government consumption

Government implemented three support programmes at once in 2022, and the amount of budget expenditures increased significantly, but due to a strong increase in tax revenues, budget deficit was lower than initially expected.

In autumn, when the heating season begun, the general government budget balance deteriorated due to increased support measures in order to stabilise the energy costs in the country. However, budget deficit was smaller than initially projected due to both higher tax revenues throughout the year and lower budget expenditures, mainly owing to smaller provisions of energy support and a slower implementation of projects financed by EU funds. The latest assessment shows that the general government budget deficit was less than 5.0% of the GDP last year (the official data will be announced in the second half of April 2023).

This year, although budget expenditures will remain at a high level, deficit forecasts have been improved to 4.0% of GDP due to a faster growth in budget revenues than previously projected. In the following years, with a more moderate increase on the expenditure side, the budget balance will improve and could reach -2.7% and -1.5% of GDP in 2024 and 2025 respectively.

Budget expenditures grew rapidly during the last year – this was due to extensive support programmes provided by the government, and budget expenditures will remain high this year.

Expenses of the consolidated general budget in 2022 were 9.2% higher than the previous year and reached 15.7 billion euro. At the beginning of the year, government expenditures remained high in order to limit the spread of Covid-19. However a further increase in budget expenditures was facilitated by the energy support measures for the past year's heating season, which included measures to compensate price increases and also income stabilisation measures. In the second half of 2022, the amount of budget expenditures increased at a higher rate due to an earlier indexation of pensions and the purchase of gas reserves, as well as extended and more precisely targeted government support for a partial compensation of the increase in electricity and heating costs for households and companies. This year, due to renewed energy support, the implementation of the priority measures set

out in the budget and an increase in activity of the use of EU funds, the budget expenditure growth will remain high, but will become more moderate in the following years.

Last year, budget revenues were boosted by a rapid increase in tax revenues, which was facilitated by both the increase in the wage fund and rapidly growing consumer prices.

Total revenues of the consolidated general budget increased by 13.7% in 2022 and reached almost 14.3 billion euro. This was due to a rapid increase in tax revenues, which reached a 15.2% growth last year compared to previous year.

The increase in labour tax revenue was driven by the increase in the wage fund, as the average salary level in the economy increased by 7.5% compared to the previous year. The increase in consumption tax revenue was mainly determined by higher VAT revenues driven by continuously rising prices of goods and services throughout the year, as the inflation level reached 17.3% last year. Also, the non-tax revenue increased, which was facilitated by interest incomes and incomes from auctioning emission quotas allocated to Latvia. It is expected that consumption and labour tax revenues will continue to grow this year, however, the growth rate will gradually slow in the second half of the year.

Last year, the macroeconomic situation made it possible to maintain the national debt at the previous levels to GDP, however, the amount of debt will increase this year as the budget expenditures will continue to grow.

Despite an additional borrowing in the external markets, GDP growth in nominal terms has had a positive effect on the trend of public debt. Government debt level for 2022 will be announced in April 2023, it is expected to stay below 42% of GDP. As economic growth is slowing and the government continues to support the economy, the government debt will slightly increase this year. Government debt will decrease in the following years due to lower forecasts of budget deficit, which will allow debt to maintain a downside path and will approach 40% of GDP in 2024 and 2025. The future developments regarding government debt will also be influenced by the ability to absorb EU funds, especially within the framework of the Recovery and Resilience Facility, which, unlike in previous years, is facilitated by the achieved indicators, and not the spent budget funds. Thus, any delays may negatively affect revenues from the EC budget, this in turn may increase the need to borrow on international markets.

4.3 Trade balance

External trade was generally active in 2022. Although the major contribution to the increase in the value of exports and imports was provided by the rise in prices, the real volume also grew.

At the end of the year, the slowdown in global and regional economic development affected external trade, with the total volume of exports decreasing by 3.6% compared to the second quarter. On the other hand, the increase in imports was maintained until the end of the year (1.7% compared to the third quarter) – although the abundant warehouses of stocks created since the pandemic encouraged the estimation of a sharper decline in imports, this has still not materialised.

There are significant differences in the dynamics of trade in goods and services, with trade in services continuing to grow significantly also in the fourth quarter. Both import and export volumes grew at a similar pace to the third quarter (by 3.8% and 3.7% respectively), as the sectors of transport and travel continued to recover from the pandemic; development also continues in the various remotely provided service sectors. In goods trade, the trend is the opposite; after an increase in the first three quarters of the year, a 6.5% drop in exports followed in the fourth quarter. Meanwhile, the real import of goods increased only slightly – by 1%.

In the second half of 2022, the significant impact of prices on the external trade of Latvia continued, raising nominal export and import values to record high levels; however, at the end of the year, the value of export began to fall, slowing down the growth rate of imports as well.

In the second half of the year, trade in mineral products had a huge impact on the value of export and import, with active re-export taking place. However, at the end of the year, the impact of the deterioration of the economic situation in the most important partner countries was felt, as the external trade of goods decreased. The service sector, on the other hand, continues to recover from the pandemic.

The value of export of goods in the second half of 2022 was higher than in the 1st half of the year, however, it decreased at the end of the year. The increase in the second half of the year was determined by a large export value of agricultural products, with food prices on world markets still high.

A significant contribution to the value of exports was also provided by export and re-export of mineral products, the value of which is beginning to fall due to the decrease in global energy resource prices. A decline can also be observed in the export of wood. The increase in prices, which caused a significant rise in exports, is beginning to decrease; as the economic situation elsewhere worsens, the demand is shrinking, thus a significant increase in the value of exports is not expected in the near future.

Still high prices also have a significant impact on the import of goods, with a huge contribution by mineral products. A large part of the increase was determined by high energy prices, but at the end of the year, when, e. g., natural gas prices began to fall, the total value of energy resource imports also began to decrease. The balance at the end of the year was also worsened by large purchases of vehicles (mostly aeroplanes). In the near term, import of goods should decline with the domestic demand decreasing, as well as high prices and high uncertainty should decline.

In the trade of services, development continues in the field of various economic services; it is growing both in the terms of export and import, as well as tourist trips and air transport continue to recover after the pandemic. Thus, on the export side, large income is generated by road transport and telecommunication and information services. In general, the trade balance remained negative, as the surplus of the balance of services could not cover the deficit of the balance of trade in goods.

It is expected that as the import of goods decreases, both in terms of prices, particularly of energy resources, and volume, mainly due to previously created stocks, the deficit in the balance of goods and services will decrease.

As the prices of energy resources fall, the value of the import of goods will significantly decrease, but, e. g. the decrease in prices in the export of wood might already be over. This would potentially mean only growth with the external demand recovering. This will not happen right away, as, in 2023, recession is expected in many of the external trade partners and the national economy will recover only at the end of the year. Trade in services, air transport and travel have not yet reached pre-pandemic levels. This is made difficult by the closeness of the war and the decrease in the number of tourists due to the loss of tourists from Russia, however, e. g. the plans of the airline Air Baltic Corporation AS are rather ambitious. Growth in other business services is also expected, as various business service providers expand their scope of operation.

Instead of the expected decline in the annual perspective, only a decrease in imports has taken place in the trade with Russia, while the value of exports remained unchanged.

The volume of the trade with the CIS countries has increased significantly, especially with regard to those product groups that are subject to sanctions for export to Russia. It should be noted that not all goods subject to sanctions are prohibited in terms of export, as the ban is applied to luxury products when the product exceeds a certain unit value threshold. Thus, export of beverages, clothing, perfumery and other goods are allowed to be continued, and it constitutes a large part of the total export to Russia.

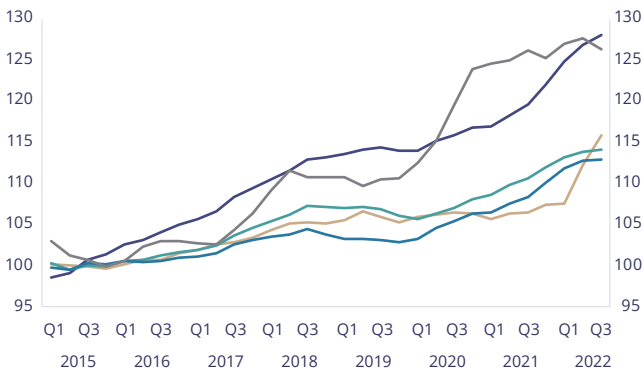
The terms of trade remain to be favourable, although they deteriorated slightly in the second half of 2022. They are expected to improve with the decline in energy prices. The price reduction in the market of wood has probably already taken place, and improvements may be expected in exports as well. The market share of Latvia's exported goods in world imports is still at a historically high level.

Chart 29

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

- REER_UCL
- REER_HICP
- REER_GDP defl
- REER_export price index
- Global market share of exports of goods, moving average of Q4

Source: EC, World Trade Organization.



5. Labour market, costs and prices

The unemployment rate remains relatively low, however, there are signs that its dynamics are approaching a turning point – unemployment could grow slightly.

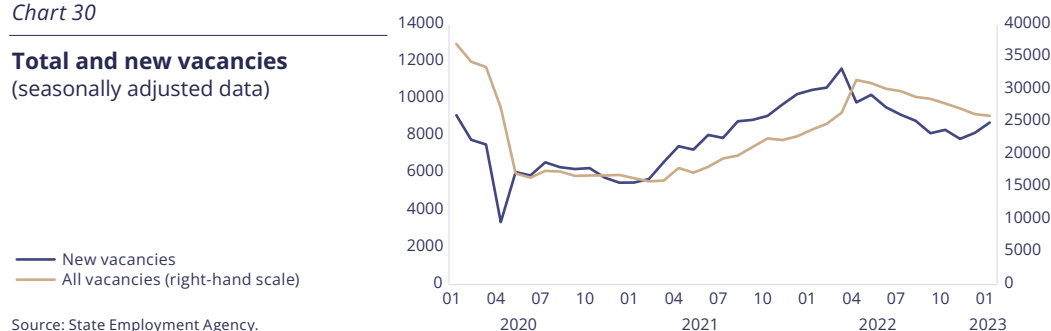
In the fourth quarter of 2022, the unemployment rate in Latvia was 6.7%, and in 2022 as a whole – 6.9%. An increase in unemployment was not observed at the beginning of 2023 either – according to the data by the State Employment Agency (SEA) the registered unemployment rate in February was 6.3%. However, a gradual decrease in the demand for workforce by employers is evident – both the total number and the number of new vacancies continue to decrease since the beginning of the second half of 2022. The decline in demand for workforce is also evidenced by the fact that in 2022 the proportion of businesses considering the lack of labour to be a production limiting factor has slightly decreased.

Despite the dynamics in the number of vacancies and the sentiment of businesses, the employment rate has been growing so far.

Businesses are not actively looking for new employees, and for the time being the currently employed tend to work without mass layoffs. The employment rate was higher in each quarter of 2022 compared to the corresponding quarter of the previous year. Even the information and communication services sector, where the increase in the number of employees was one of the fastest since the beginning of the pandemic, continues attracting new employees, albeit more slowly. Besides, in 2022, the total number of hours worked, as well as the number of hours worked per employee, increased. Due to the mentioned factors, at least in the near term, the labour market has reserves to absorb the negative effects.

Chart 30

Total and new vacancies
(seasonally adjusted data)



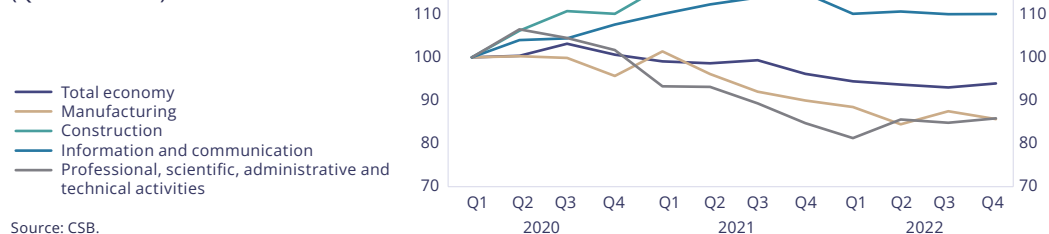
Source: State Employment Agency.

So far, the more favourable situation in the labour market is also reflected in the unemployment forecast.

Although a more pessimistic business sentiment and a decrease in the number of vacancies are negative factors, unemployment at a lower level than previously projected determines the decrease in the unemployment forecast. For 2023, the unemployment forecast was reduced to 7.4% (–0.4 percentage points compared to the December forecast). Further improvement of the situation is predicted in 2024 with unemployment falling to 7.3% (0.2 percentage points), while the forecast for 2025 is 7.0% (–0.2 percentage points).

Chart 31

Labour costs per unit produced
(Q1 2020 = 100)



Source: CSB.

While concerns remain about the possibility of formation of a wage-inflation spiral, the pace of salary growth remains moderate.

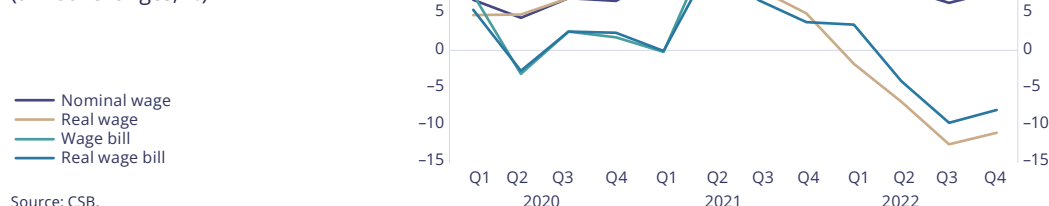
In 2022, the average salary growth rate was 7.5% – much lower than inflation in the corresponding period. Although the impact of inflation on the pace of salary growth did increase in the second half of 2022, low unemployment is still the main factor affecting the pace of salary growth. Labour costs per unit produced were also relatively stable. Although there was a slight increase in the fourth quarter of 2022, in general, the year ended up with lower labour costs per unit produced than 2021 and 2020.

A relatively low unemployment rate will continue to be the main driver of wage growth.

A lower rate of salary growth in the public sector has the opposite effect and will also affect overall salary growth. The salary growth forecast for 2023, 2024 and 2025 has remained almost unchanged – respectively 9.1%, 8.8% and 7.8%.

Chart 32

Average monthly gross nominal wages and wage fund
(annual changes; %)



Source: CSB.

The decrease in inflation is determined by the decline in global energy and food prices, however, the impact of wage growth on the persistence of price increases remains.

As the global prices of energy resources have decreased, inflation in Latvia has reduced slightly. However, compared to other countries of the euro area, annual price increases in Latvia have been the fastest in recent months. In February 2023, the harmonised consumer price inflation in Latvia was 20.1%, with prices increasing by 0.6% during the month.

In the latest forecast assumptions, global food prices are estimated to be slightly lower than expected during the preparation of the December 2022 forecast. Prices of energy resources, actual and anticipated, based on the concluded futures, have also decreased, particularly for natural gas. The impact of the decline in natural gas prices on Latvian inflation is not immediate due to the peculiarities of the market. However, the first signals are already evident, e. g. of a decrease in the prices of centrally supplied heat energy in several populated areas of Latvia, where it is possible for heat energy producers to conclude contracts for lower natural gas purchase prices or to change the resources used in the production of heat energy, using relatively cheaper alternatives.

However, the prices of natural gas supply to households are still determined by the tariffs approved at the beginning of the year. In May 2023, with the completion of the liberalisation of the natural gas market in Latvia, natural gas prices for the end user will continue to be affected by fluctuations in prices for this resource in the global markets in the longer term – depending on when and under what conditions the suppliers concluded their contracts.

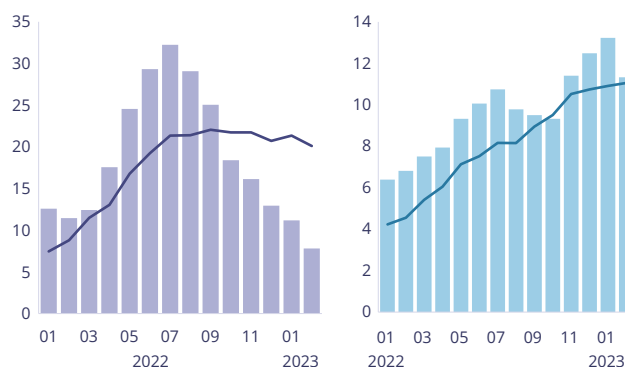
Chart 33

Components of the Harmonised Index of Consumer Prices
(annual change; three-month-on-three-month increase in annual terms; %)

■ Momentum
— Total inflation
■ Momentum
— Core inflation

Notes. The momentum is calculated as three-month-on-three-month changes in annual terms. The last date is February 2023.

Source: Latvijas Banka's estimates.



Currently, the main focus should be on core inflation, which describes changes in inflation without taking into account the effects of fluctuating energy and food prices. Although core inflation has started to decrease slightly in the euro area and also in the neighbouring countries (Lithuania and Estonia), an upward trend is still observed in Latvia. However, in Latvia, the core inflation momentum or core inflation three-month changes compared to the previous three months, in annual terms, already showed a decline in February. This decrease in the core inflation momentum is mainly driven by the price developments in services, but the momentum of industrial goods price growth has also decreased slightly.

The increase in core inflation may be affected by global supply chain disruptions, but this factor has lost relevance due to the easing of pandemic-related restrictions. Industrial and service prices are slightly affected by the development of energy prices. Developments in global food prices can also be significant for certain services (e.g. catering). However, these price changes are driven most strongly by demand and wage dynamics. Following the lifting of the pandemic-related restrictions, the demand for catering and accommodation services has increased, and the prices of these services have also hiked.

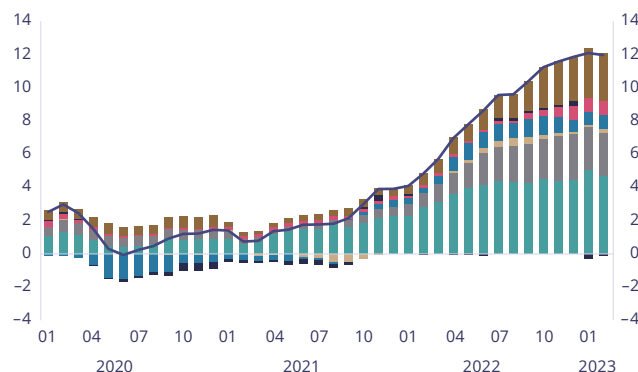
In the provision of services, a large part of the costs is made up of wages, especially in various labour-intensive fields. Therefore, according to the average wage growth and the increase in the minimum wage in the country, the rise in service prices has also been relatively rapid.

Chart 34

Service price changes and contributions
(annual changes; percentage points)

■ Various services
■ Tourism services
■ Communications
■ Administrative services
■ Catering
■ Accommodation
■ Air transport
■ Services

Source: Eurostat, Latvijas Banka's estimates.



Over the past year, core inflation has been significantly affected by energy price hikes, while the impact of wage growth on core inflation has been small. With the prices of energy resources decreasing, the pressure on the price increase of various services and industrial goods also follows a downward path.

Chart 35

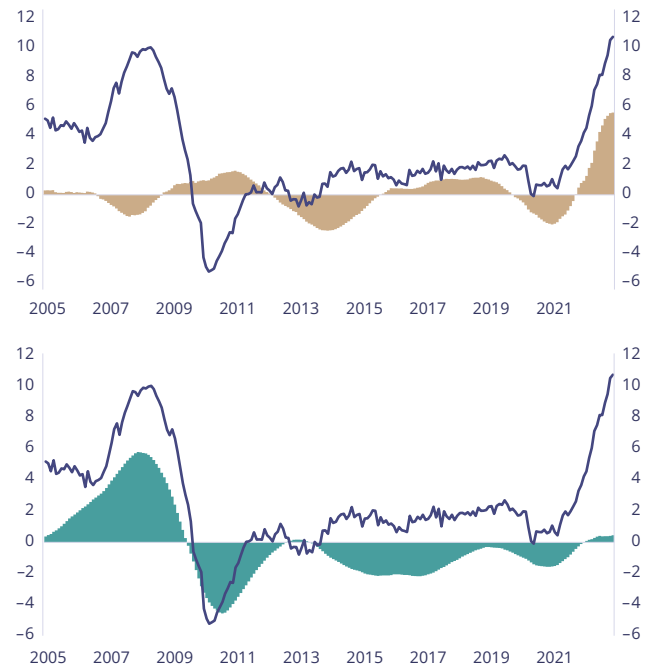
Impact of energy and wage shock on core inflation
(annual changes; percentage points)

Impact of energy shock
Core inflation

Impact of wage shock
Core inflation

Notes. The charts show the contributions of energy and wage shocks to HICP inflation (excluding food and energy prices) (core inflation). Based on the BVAR model, shocks were evaluated with 5 indicators: HICP energy price inflation, HICP food price inflation, HICP inflation (excluding energy and food prices), unemployment rate (%) and wage rate. All indicators, except the unemployment rate, are expressed in annual growth rates. Shocks are identified based on the Cholesky decomposition, and indicators are arranged in the order mentioned above.

Source: Eurostat, Latvijas Banka's estimates.



Producer price growth in Latvia is decreasing: it reached its highest growth rate in the summer of 2022. After rapid fluctuations, which were particularly affected by changes in producer prices for products sold on the domestic market due to a large share of the energy sector, currently even some price reductions can be observed here as a result of the decrease in global energy prices.

Chart 36

Producer prices
(annual changes; %)

Total industrial production
Production for domestic market
Production for exports

Source: CSB.



In recent months, the price increase expectations for the next 12 months have decreased significantly among the population. Although only an insignificant part of the respondents expect a fall in prices, about half of them believe that prices will edge up more slowly in the next 12 months than before, and this also corresponds to Latvijas Banka's outlook regarding price dynamics.

6. Conclusions and forecasts

Economic development, particularly private consumption, has been more robust than could have been expected due to high energy costs.

The main justification for the previous forecasts was the deteriorating purchasing power of the population. So far, it has not materialised – on the contrary, private consumption became the main determinant of growth in the fourth quarter. Although the government support, savings and the participation of Ukrainian refugees in the Latvian economy will continue to sustain private consumption, the decrease in purchasing power and depletion of savings in a number of households will not allow the private consumption to thrive in the near future. The high uncertainty and increased interest rates also encourage caution when making decisions on larger purchases and investment. These factors could hinder, for example, the growth of the trade and real estate sectors, as well as the increase in investments and rebound in construction activity, which will be additionally hampered by the slow absorption of EU funds in the coming quarters.

Although the GDP growth in 2022 was close to the forecast made in December, the quarterly dynamics in the updated CSB data are more even, having a smaller negative pass-through effect to 2023. As a result of the above factors, **the updated GDP growth forecast for 2023 is 0.5%** (from a decline of 0.3%).

The economic growth is expected to be 3.7% in 2024. The currently sluggish absorption of EU funds will gradually improve, and it is expected that after the reorganisation of energy and material supplies, the level of costs and their fluctuations will have normalised.

The expected GDP growth in 2025 is 3.3%. The increase in consumption and investments will also be accompanied by more vigorous import dynamics, while the accumulated resource costs will maintain cost competitiveness challenges for exports.

The main concerns about Latvia's economic growth are related to the persistently low investment level and deteriorating competitiveness. While generally the economic development in the main trade partner countries has been more resilient than expected, the confidence indicator of Latvia's industry shows a decrease in export orders. Due to cost increases, export growth could lag behind the external demand.

The downward revision of the inflation forecast throughout the entire projection period is mainly driven by lower energy and food prices and assumptions about the development of these prices in the coming years.

The inflation forecast for 2023 has been revised downwards to 10.0% (–0.9 percentage points compared to Latvijas Banka's forecast of December 2022), **for 2024 – to 2.7%** (–1.7 percentage points), and **for 2025 – to 2.6%** (–0.4 percentage points). The view on how price changes will be affected by the government support due to high energy prices or wage dynamics has not changed significantly.

The core inflation forecast has only been reduced slightly: for 2023 to 7.7% (–0.1 percentage points), for 2024 – to 5.8% (–0.2 percentage points) and for 2025 – to 4.8% (–0.2 percentage points). The decrease in core inflation is driven by the indirect effect of lower energy prices, though this is not the determining factor in core inflation dynamics. In the coming years, since the pressure of energy price hikes is decreasing, the persistence of wage growth will be important for the development of both headline inflation and core inflation, affecting prices both on the supply side (as the costs of goods production and the provision of services edge up), and on the demand side (which is affected by changes in the population's purchasing power).

Table 1

Macroeconomic fundamentals: Latvijas Banka's forecasts

	2023	2024	2025
Economic activity (annual changes; %; at constant prices; seasonally adjusted data)			
GDP	0.5	3.7	3.3
Private consumption	0.7	4.2	4.1
Government consumption	-2.0	0.5	0.8
Investments	0.8	5.1	6.0
Exports	-0.4	2.9	3.3
Imports	-4.3	3.0	4.1
HICP inflation (annual changes; %)			
Inflation	10.0	2.7	2.6
Core inflation (excluding food and energy prices)	7.7	5.8	4.8
Labour market			
Unemployment (% of the economically active population; seasonally adjusted data)	7.4	7.3	7.0
Nominal gross wage (annual changes; %)	9.1	8.8	7.8
External sector			
Current account balance (% of GDP)	-2.8	-3.2	-3.8
Government finances (% of GDP)			
General government debt	41.6	40.0	39.8
Budget surplus (+)/deficit (-)	-4.0	-2.7	-1.5

7. Scenario analysis

7.1 The impact of foreign financial assistance on Latvia's GDP

Scenario analysis⁸

Motivation

It has been planned that the Latvian economy will receive a large-scale foreign financial assistance (hereinafter FFA), including inflows of EU funds, in the coming years. According to the budget plan, the increase will be from 1.4 billion euro in 2022 to more than 2 billion euro in 2023, maintaining a high level in the following years.

In order to assess the impact of FFA on GDP of Latvia, Latvijas Banka has carried out a scenario analysis using the DSGE model for Latvia.⁹

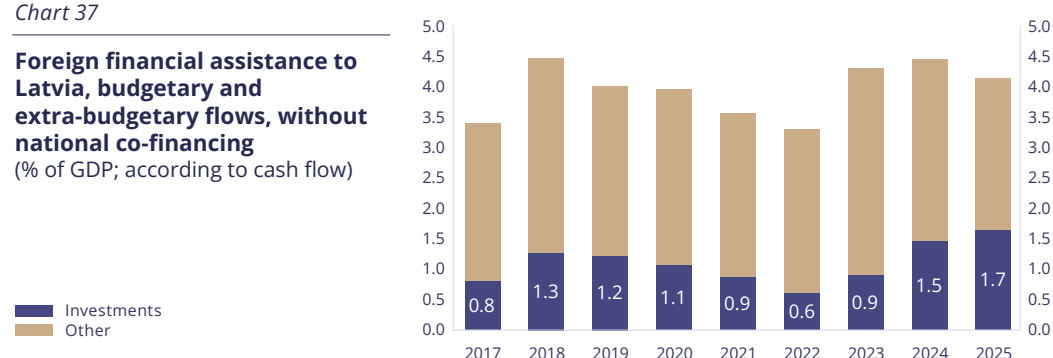
Description of the simulation

The FFA flow for 2017–2025 was created for the purposes of the evaluation. This mainly means transfers of EU funds, including both funding redistributed within the budget (Cohesion Funds, Rural Development Funding, the funds provided by the Recovery and Resilience Facility and the Rail Baltica project, etc.) and direct transfers to project implementers in Latvia from the European Union budget (to businesses, local governments, etc.).¹⁰ To assess the impact of only FFA for the purpose of the simulation, the national public co-financing was removed from the total financing flow. The funding was split into two components: investments and other (subsidies, wages, goods, transfers).

The amount of FFA reaches an average of 3.8% of GDP in the period from 2017 to 2022, and investments constitute one quarter of it. It is expected that in the period ahead, as the implementation of large projects and the absorption of economic reconstruction funds intensify, the amount of FFA in the economy will take an upward trend, at the same time significantly increasing the share of investments in the total amount of financing, reaching almost 40%.

Chart 37

Foreign financial assistance to Latvia, budgetary and extra-budgetary flows, without national co-financing
(% of GDP; according to cash flow)



Source: [Spending and revenue \(europa.eu\)](#), [general budget execution reports \(Treasury\)](#), non-bank external payment data (Latvijas Banka), Latvijas Banka's assessment.

Simulation of the model

Contributions to investments are modelled as government investments. Other funding is modelled as government transfers by dividing them equally between optimising and financially constrained households.

⁸ Prepared by Ginters Bušs and Baiba Brusbārde, economists of Latvijas Banka.

⁹ Ginters Bušs & Patrick Grüning (2023) Fiscal DSGE model for Latvia, *Baltic Journal of Economics*, 23:1, DOI: [10.1080/1406099X.2023.2173915](https://doi.org/10.1080/1406099X.2023.2173915)

¹⁰ Data sources used – EC financial reports, Eurostat, reports of the Treasury and Latvijas Banka. Estimates for the projection horizon (2023–2025) are based on the assessment by Latvijas Banka carried out in December 2022.

It is assumed that fiscal rules are practically not binding on the government,¹¹ thus a free inflow of money into the economy is simulated. The increase in total capital is taken into account in the calculation of the potential output.

The simulation was carried out for 2017–2025. Since the projects supported by the FFA have a medium-term nature, and the calendar of FFA flows may not exactly correspond to the actual contribution to the economy, the accumulated impact of the FFA since 2017 is measured. Thus, the funding of the previous periods may contribute to the economy in the following periods as well (this is particularly true of investment projects).

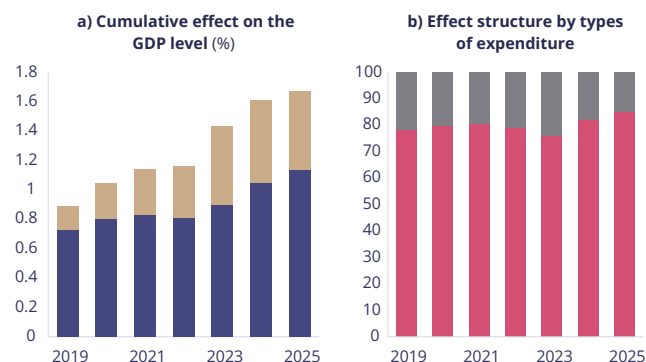
The simulation results show that the impact of FFA on Latvia's GDP level has increased since 2017, and it is expected to rise particularly during the forecasting horizon, reaching 1.7% in 2025. About two thirds of this impact consist of an increase in the potential output of Latvia, while the remaining part is the contribution to the output gap (Chart 38, left panel). Although public investments account for only up to 40% of the FFA flow, its impact on GDP is larger than that of the rest of FFA contribution (Chart 38, right panel). This can be explained by the investment multiplier, which is higher than that of other expenditures in the medium term.

Chart 38

The impact of foreign financial assistance on Latvia's GDP (%)

■ Output potential
■ Output gap
■ Investments
■ Other

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



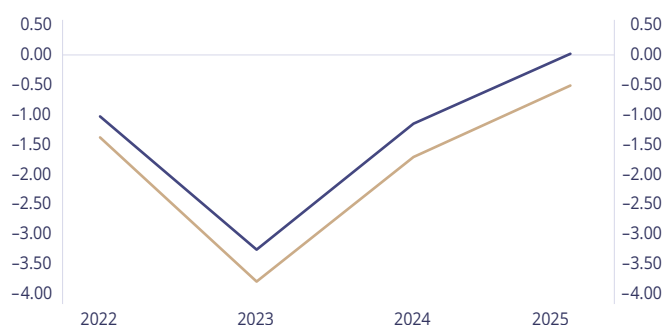
The assessment of the output gap shows that, using the FFA financing fully, in 2025, the economic development could be in line with the potential output, without showing signs of either cooling or overheating. On the other hand, either the postponement of or incomplete absorption of EU funds would mean a contraction of economic activity, placing it below the potential output.

Chart 39

Latvian economy output gap with and without foreign financial assistance (% of the potential output)

— Output gap with FFA
— Output gap without FFA

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



Conclusions

Estimates show that the impact of FFA, especially that of contributions to investments, on the Latvian economy is significant. In addition, it will grow in the coming years, both by contributing to the potential output and by warming the economy in the form of an increase in the output gap. Overall, it can be concluded that in the absence of the FFA flow in Latvia, additional fiscal stimulus (or other types of support) would be needed to close the negative output gap and promote economic growth.

¹¹ In particular, fiscal rules are suspended for the first two years after the fiscal stimulus; after this period, a weak lump-sum tax is assumed for wealthy households.

7.2 Impact of higher interest rates on the Latvian economy

Scenario analysis¹²

Motivation

Due to the Covid-19 pandemic and Russian invasion of Ukraine, inflation in almost every developed country of the world has reached high levels not seen in decades. At the end of 2022 and at the beginning of 2023, the Baltic States also experienced very high inflation, which exceeded 20% for several months in a row. Due to the rapid rise in prices, national governments have introduced various measures to help people cope with the rising costs of living, including price caps and various subsidies to help with daily expenditures. At the same time, the ECB has significantly increased interest rates in order to reduce inflation.

Since July 2022, the interest rate of the ECB's deposit facility has been raised from –0.5% to 3.0%, which is the highest level since 2008. The future dynamics of interest rates will be determined by how high and persistent inflation will be. In mid-March 2023, financial markets expect that interest rates will peak in the middle of 2023 – around 3.5%–4.0%.

To understand the impact of higher interest rates on the Latvian economy, Latvijas Banka has conducted scenario analysis using the DSGE model for Latvia.¹³

Simulation

Higher interest rates affect the Latvian economy through several channels.

- **Household budget channel.** Since household loan payments in Latvia are mostly linked to the short-term EURIBOR rate, higher interest rates mean larger loan payments every month, which put pressure on households to reduce spending on other categories of goods and services.
- **Investment cost channel.** The rise in interest rates makes potential investment projects more expensive, reducing new investment activity.
- **Government debt service cost channel.** Higher interest rates mean more expensive borrowing for the government and higher interest expenses for its budget. The analysis assumes that the government compensates for this increase by reducing consumption, transfer and investment expenses in a uniform manner.
- **Consumption postponement channel.** The increase in interest rates motivates part of the population to postpone consumption in favour of interest-earning savings. This reduces private consumption. In the case of Latvia, the effect of this channel is limited by the persistently sluggish growth of deposit rates.¹⁴
- **Foreign demand channel.** The rise in interest rates also affects our trade partner countries, slowing down their economic activity and thus also the demand for Latvia's exports.

According to the calculations made by Latvijas Banka using the Credit Register data, the increase in the household loan payments can be estimated at approximately 0.23% of GDP. As this increase makes some households review other expenses,¹⁵ higher interest rates reduce private consumption.

¹² Prepared by Ginters Bušs and Kārlis Vilerts, economists of Latvijas Banka.

¹³ Ginters Bušs & Patrick Grüning (2023) Fiscal DSGE model for Latvia, Baltic Journal of Economics, 23:1, DOI: [10.1080/1406099X.2023.2173915](https://doi.org/10.1080/1406099X.2023.2173915).

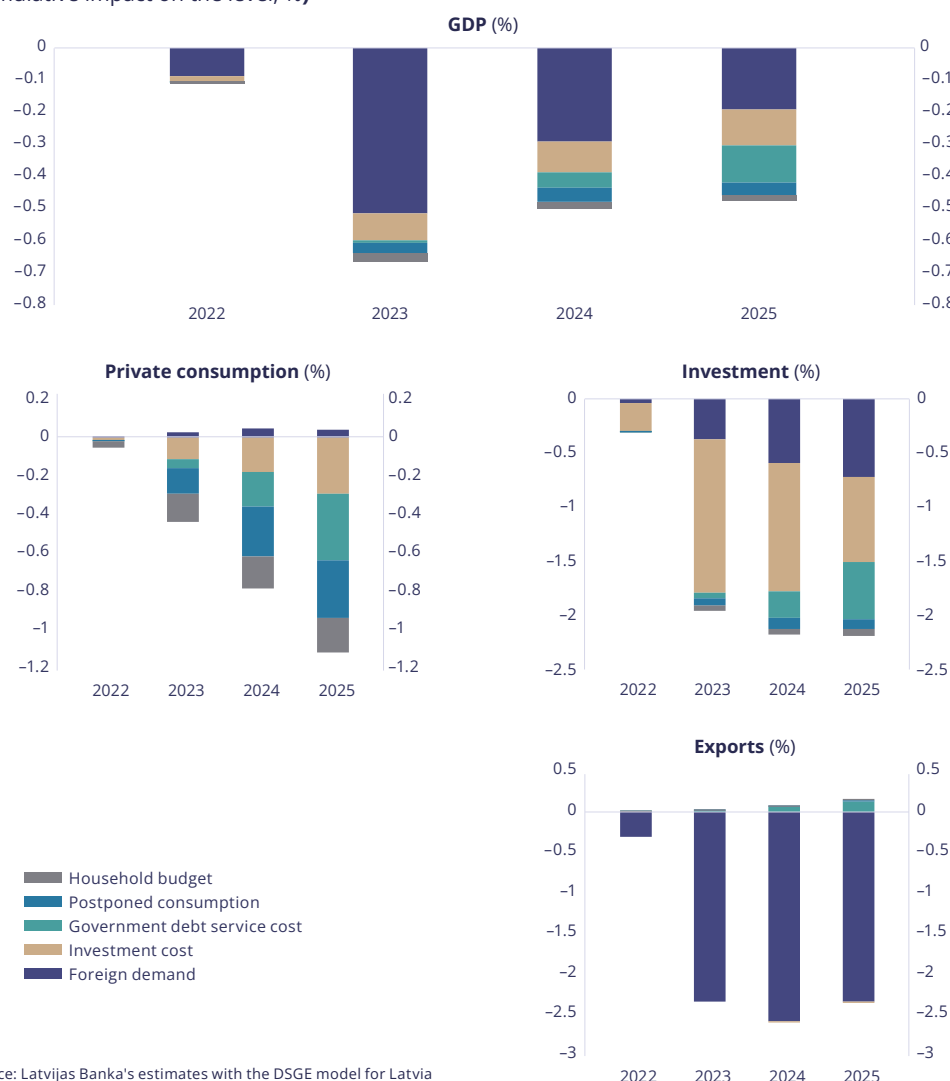
¹⁴ See box 1.

¹⁵ The household budget channel is modelled as a lump-sum tax that reduces the real income of households. It is assumed that most households are financially constrained and do not make savings.

However, taking into account the relatively low credit burden of Latvian households, as well as the fact that a significant part of private consumption is imported, the impact on Latvia's GDP is quite limited (Chart 40).

Chart 40

Impact of higher interest rates on the Latvian economy (cumulative impact on the level; %)



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

The increase in interest rates also makes the financing of new investment projects more expensive, significantly reducing the activity of investing.¹⁶ Thus, the investment cost channel is also reflected in lower GDP by approximately 0.1%.

Rising interest rates also mean higher public debt service cost. The calculations by Latvijas Banka show that the debt service cost of the Latvian government could gradually climb, and in 2025 be by approximately 0.7% of GDP higher than in the scenario without an interest rate increase. To keep the budget balance unchanged, the scenario assumes that higher debt service cost is offset by reducing other government spending. This, in turn, is reflected in approximately 0.1% lower GDP.

¹⁶ In order to assess the impact of the investment cost channel, the increase in loan interest rates for investment financing is separated from the effect of a general rise in interest rates. It is assumed that the new loans related to new investments amount to 6.25% of GDP. Thus, the channel does not take into account the increase in the existing monthly loan payments made by businesses and higher interest rates applied to working capital loans.

An increase in interest rates may motivate the wealthier part of society to build up savings and thus reduce consumption, which in turn would hamper economic activity. In the case of Latvia, the effect of this channel is limited by the persistently low deposit interest rates. According to the calculations by Latvijas Banka, the weighted average interest rate on deposits made by households and businesses in euro currency in January 2023 was only 8 basis points higher than before the interest rate hikes in June 2022. In this scenario, an assumption is made that the weighted average interest rate of the deposit balances in Latvia gradually approaches 25 basis points, which corresponds to approximately half of the deposit interest rate applied to deposits in the euro area on average at the beginning of 2023.¹⁷ Considering the limited increase in interest rates on deposits, the economic impact of this channel is small.

The increase in interest rates also affects our trading partners. According to ECB estimates made using several quantitative models,¹⁸ a 100 basis point increase in the ECB's policy rate reduces euro area GDP by 0.25–1.25%, depending on the model. Assuming that the changes in external demand of Latvia are the same as changes in the GDP of the euro area,¹⁹ the foreign demand of Latvia would decrease by approximately 3% as a result of the interest rate increase. Such a drop in foreign demand reduces Latvia's exports by approximately 2.5%, with the largest negative impact on GDP occurring in 2023 (approximately 0.5%).

Conclusions

The results of the scenario analysis show that higher interest rates will hinder the economic activity of Latvia through various channels. Among them, the most important ones are the weakening of economic activity in our trading partner countries leading to the contraction of foreign demand, as well as the postponement of new investments and government spending due to higher borrowing costs.

At the same time, higher interest rates will also help limiting the rapid inflation, which reduces the population's purchasing power and creates additional uncertainty in the economic environment. ECB calculations show that inflation in the euro area will return to the level of 2% on average already in 2025.²⁰

¹⁷ In this scenario, the impact of raising the deposit interest rate is separated from other channels of raising the interest rate.

¹⁸ Philip R. Lane (2023) "The euro area hiking cycle: an interim assessment ", speech, 16 February 2023.

¹⁹ The assumption that Latvia's foreign demand would change at the same rate as the euro area GDP is close to the estimated elasticities of the models available to Latvijas Banka.

²⁰ https://www.ecb.europa.eu/pub/projections/html/ecb.projections202303_ecbstaff-77c0227058.en.html#toc7