

**MACROECONOMIC
DEVELOPMENTS
REPORT**

2022



MARCH

MACROECONOMIC DEVELOPMENTS REPORT

March 2022

MACROECONOMIC DEVELOPMENTS REPORT
March 2022, No 34

© Latvijas Banka, 2022

The source is to be indicated when reproduced.

Latvijas Banka
K. Valdemāra iela 2A, Rīga, LV-1050, Latvia
Tel.: +371 67022300 info@bank.lv
<https://www.bank.lv>; <https://www.macroeconomics.lv>

Contents

Abbreviations	3
Additional information	3
Introduction	4
1. External demand	5
2. Financial conditions	9
2.1. Decisions of the ECB and other major central banks	9
2.2. Global financial market developments	11
2.3. Financing conditions in the Latvian economy	13
3. Sectoral development	19
3.1. Manufacturing	19
3.2. Construction	20
3.3. Real estate sector	21
3.4. Trade	22
3.5. Transport	24
3.6. Tourism	25
3.7. Energy	26
4. GDP Analysis from the Demand Side	27
4.1. Domestic demand	27
4.2. Government consumption	28
4.3. Trade balance	29
5. Labour Market, Costs and Prices	33
6. Conclusions and Forecasts	36
7. Analysis of Scenarios	39
7.1. The impact of the energy price increase on Latvia's economy.	39
7.2. Impact of Russia's invasion of Ukraine on energy prices. What are the alternative inflation scenarios?	40
Box	
1. The use of payment card data to forecast retail sales	23
2. Exposure of Latvia's economy to Russia, Belarus and Ukraine	30

Abbreviations

AS – joint stock company
CSB – Central Statistical Bureau of Latvia
DSGE model – Dynamic Stochastic General Equilibrium Model
EC – European Commission
ECB – European Central Bank
EONIA – euro overnight index average
EU – European Union
EURIBOR – euro interbank offered rate
FCMC – Financial and Capital Market Commission
FRS – US Federal Reserve System
GDP – Gross Domestic Product
HICP – Harmonised Index of Consumer Prices
IMF – International Monetary Fund
OPEC – Organisation of Petroleum Exporting Countries
OPEC+ – OPEC Member States and the Russian Federation, the Republic of Azerbaijan, the Kingdom of Bahrain, Brunei Darussalam, the Republic of South Sudan, the Republic of Kazakhstan, Malaysia, the United Mexican States, the Sultanate of Oman and the Republic of Sudan
PEPP – Pandemic Emergency Purchase Programme
SEA – State Employment Agency
TLTRO – targeted longer-term refinancing operation
UK – United Kingdom
US – United States of America
VAT – value added tax

Additional information

The cut-off date for the information used in the publication Macroeconomic Developments Report (March 2022, No. 34) is 18 March 2022. The cut-off date for the information used in the forecast is 15 March 2022, and 11 March for the information used in some technical assumptions.

Data sources for charts are the EC (Charts 1, 2, 8 and 21) Bloomberg (Charts 3–6, 12, 26 and 31), Refinitiv (Chart 7), Latvijas Banka (Charts 3, 9, 10, 20, 23–32 and 1.1, 2.1, 2.2, 2.3, 2.4), CSB (13–19, 21–25 and 27–29), the Treasury (Chart 11), SEA (Chart 23), the ECB (Charts 8 and 31) and SRS (Chart 23).

Statistics tables will no longer be published together with the Macroeconomic Developments Report. For statistical data, see <https://www.bank.lv/en/statistics/stat-data/key-macroeconomic-indicators>.

Introduction

Hopes of a swift global economic recovery in the wake of the Covid-19 pandemic have been dashed away by Russia's invasion of Ukraine. Although the adverse effects from the pandemic are fading, the global economic growth and that of the euro area and Latvia will be hampered by both the imposed sanctions and rising inflation. Higher energy and other commodity prices will be the main channels of influence hindering growth, since the failure of Russia and Ukraine to continue foreign trade will exacerbate the supply chain problems that had already emerged during the pandemic.

Latvia's GDP growth forecast for 2022 has been revised downwards to 1.8% due to the negative impact the escalation of the geopolitical situation has on the economy as exports to the aggressor countries are falling, supply chain disruptions are increasing, ways to replace the imported commodities and materials need to be found, global prices are rising and confidence is deteriorating. Growth projections for 2023 have also been revised downwards (to 3.2%), and faster growth is expected to gain momentum only in 2024 when sentiment among economic agents is likely to improve owing to the rebound in consumption and private investment.

The budgetary implications of the sizeable spending aimed at coping with the consequences of the pandemic will be complemented by both support measures in the energy field and aid for war refugees, thus increasing the expected fiscal deficit. At the same time, it will also promote economic activity.

The effects of Covid-19 restrictions on the labour market were relatively small, but it could be more affected by the limitation of certain firms' business activity as Latvia has suspended trade with Russia and Belarus. Therefore, the unemployment forecast for 2022 and 2023 has been revised upwards. The strong wage growth will be robust, since structural imbalances in the labour market and the pressure on wages will persist, even if the unemployment rate increased.

The surge in the prices of a wide range of goods and services has been reinforced by additional war-induced pressures on the soaring global energy and food prices. With inflation rate gaining momentum, annual inflation reached 8.8% in February 2022. Inflation is expected to rise further and, moreover, this increase will be steeper than previously projected due to the war. The effect of the war is expected to be the strongest in the first half of the year. Therefore, the inflation forecast for 2022 has been revised upwards to 9.5% in 2022 and to 3.7% in 2023, while inflation is projected to decline to 2.1% in 2024 owing to the expected fall in energy prices.

1. External demand

The Russian invasion of Ukraine has undermined all hopes for a fast and robust global economic recovery after the Covid-19 pandemic. It will be hindered by the imposed sanctions, the economic depression in Russia and increasing inflation.

At the end of 2021, the world was shaken by the news about the rapid spread of Omicron, a new Covid-19 variant, followed by tighter national restrictions. However, lower severity of the new variant enabled countries to start easing these restrictions as early as at the beginning of 2022. According to January 2022 IMF projections, the main downside risks to growth included the epidemiological situation, continued supply chain problems and economic slowdown in China sustained by the tight Covid-19 containment measures and financial challenges in the Chinese real estate sector.

With the aggressive attack of Russia on Ukraine, the largest military conflict in Europe since WWII, the above problems became secondary. To respond to the Russian aggression, the European countries and the US imposed strict sanctions against Russia and Belarus that supported these attacks. The imposed sanctions are extensive and affect numerous areas such as central banks and government transactions, banking sector activity, trade and shipping. In addition, freezing of assets, closing the air space and sanctions against various individuals have also been imposed. To show their solidarity with the people of Ukraine and to condemn the Russian aggression, many companies from developed economies have discontinued doing business in Russia and Belarus. Imminent economic downturn in Russia, Ukraine and Belarus, and the impact of war on the already high energy prices, new supply-chain disruptions and decisions on comprehensive sanctions affecting the entire world have ruined hopes for a fast and robust recovery of the global economy after the pandemic. In the preliminary assessment of analysts from OECD and other countries that did not even include the full scope of sanctions the global growth was expected to suffer a drop of up to one percentage point due to this war.

The main impact channels that will slow down the growth will be higher energy prices, as well as other commodity prices, in particular wheat prices. The failure of Russia and Ukraine to continue normal foreign trade will clearly aggravate the already severe supply chain problems. These factors will result in significant upward pressure on worldwide prices that creates a major challenge for monetary and fiscal policy decision-makers to design policies that cut inflation but do not undermine growth.

As the war in Ukraine continues, the response of financial markets to events and announcements significantly fluctuates in a large range. The start of the war, the US and UK announcements and the imposed sanctions resulting in discontinued imports of energy products from Russia significantly increased oil and gas prices, as Russia plays a particularly important role in the global raw materials supply chains. Since 24 February, when Russia invaded Ukraine, within just a few days the price of Brent crude oil rose to 133 US dollars per barrel, while the price of natural gas reached record highs in the Dutch exchange: 315 euro per MWh. During their meeting in March 2022, the OPEC+ group of oil-producing countries decided to continue their plan for a gradual increase in oil production despite higher tensions in the oil market. Having explored the spare capacities of oil-producing countries, analysts expect Iran to receive a permission to return to the market quite soon, and initial tensions have eased. Information about possible compromises between Ukraine and Russia provided by their negotiators allowed the oil price to fall to 100 US dollars per barrel in mid-March. The price of natural gas fell to approximately 115 euro per MWh. Uncertainty about the current energy supply flows and solutions for future flows suggests that energy prices will continue to exhibit greater volatility.

High inflation is already one of the most important factors holding back global growth. US

inflation reached 7.9% in February 2022, which is the largest increase since the beginning of 1982. In view of concerns about rapidly rising inflation, during its monetary policy meeting in March 2022 the FRS decided to gradually discontinue policy support and start increasing its interest rates. At the same time, growth in the US remained stable irrespective of the Covid-19 outbreak caused by the Omicron variant and grew by 1.7% quarter-on-quarter in the fourth quarter of 2021. Overall, the US economy quickly recovered (5.7%) in 2021 after the turmoil caused by the Covid-19 pandemic. The FRS expects the GDP to increase by 2.8% in 2022, 2.2% in 2023, and 2.0% in 2023. The inflation could reach 4.3%, 2.7% and 2.3% respectively.

China and Japan have a relatively low inflationary pressure. In February 2022, the annual inflation amounted to 0.9% both in China and in Japan. As China's growth relied heavily on rapid development of the construction sector, financing problems in real estate have become one of the largest negative risks for further strong growth in China. When Evergrande, the second largest real estate developer in China, almost became insolvent in 2021, many other real estate developers also faced significant deterioration of financial situation and inability to meet their liabilities. China's strict approach to containing Covid-19 also continued weighing down on the national economic activity. As a result, in the fourth quarter of 2022 China recorded the lowest annual growth of 4.0% though it expanded by 8.1% in 2021. Japan's recovery has been more sluggish, with the overall growth of only 1.6% in 2021 and a year-on-year increase of 0.5% in the fourth quarter of 2021. In Japan, the economic growth was mainly driven by a stronger recovery of private consumption.

The uncertainty and raising energy prices caused by the Russian aggression along deteriorating consumer sentiment will significantly undermine economic growth in the euro area.

Economic activity in the euro area started to recover after the new Covid-19 outbreak at the end of 2021. Preliminary surveys indicate that both manufacturing and retail trade, as well as the services strongly recovered in February 2022. Euro area GDP grew by 4.6% year-on-year and 0.3% quarter-on-quarter during the fourth quarter of 2021. It is more than expected by ECB in its December 2021 projections. Investments and government spending accounted for the bulk of quarterly growth, while the private consumption and trade balance had a negative contribution due to new outbreaks and supply chain disruptions. Euro area price increase in February 2022 was the fastest ever (5.9%). It was stimulated by all components of inflation, however, energy and food prices contributed the most. Higher prices are also reflected in the deteriorated consumer sentiment, which is mainly dragged down by a component describing the current financial situation.

In its latest (March) projections, the ECB takes into account higher uncertainty and the lack of clarity concerning the escalation of war in Ukraine and has developed three scenarios: the baseline scenario, the adverse and the severe scenarios. The baseline scenario assumes that the war in Ukraine will be short-term, and takes into account the negative impact of information available up to 2 March 2022. In this scenario, the ECB expects the euro area GDP to grow by 3.7% in 2022, 2.8% in 2023 and 1.6% in 2023. At the same time, the inflation will reach 5.1%, 2.1% and 1.9% respectively. The adverse scenario assesses the impact of potential sanctions that various countries may still impose and the longer-term impact on global value chains. If this scenario materialises, in 2022 the euro area growth would decrease by 1.2 percentage points more than expected under the baseline scenario, while the inflation would increase by 0.8 percentage points. The third – severe – scenario includes a very rapid and negative response of financial markets to measures included in this unfavourable scenario, as well as significant energy price shocks to the economy. In this case, euro area GDP would be 1.4 percentage points lower than in the baseline scenario in 2022, while inflation would be 2.0 percentage points higher.

Chart 1

EURO AREA GDP, MANUFACTURING OUTPUT AND RETAIL TRADE TURNOVER
(annual changes; %)

■ GDP
— Manufacturing output (right-hand scale)
— Retail trade turnover (right-hand scale)

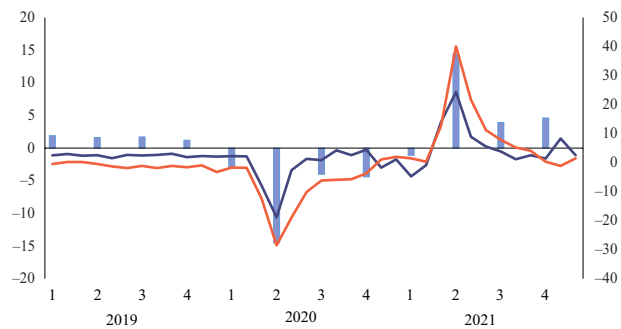
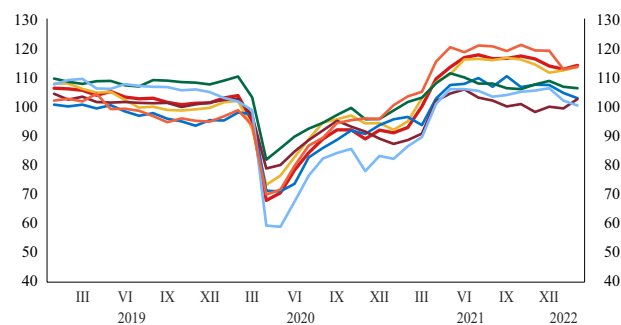


Chart 2

ECONOMIC SENTIMENT INDICATORS
(long-term average = 100)

— Euro area
— Germany
— Estonia
— Latvia
— Lithuania
— Poland
— Sweden



Due to comprehensive sanctions, the Russian economy will face a recession. At the same time, other trading partners of Latvia will also face obstacles to economic growth, in particular due to their dependency on energy resources, disruption of supply chains of commodities and deterioration of confidence levels.

In the Baltic States, growth slowed down during the second half of 2021, though export growth remained buoyant, and private consumption also continued to grow. According to the EC, in 2022 the Baltic neighbours were expected to grow slightly slower than in the euro area on average, though both countries have developed faster than most euro area countries in the past. At the end of February, the military attacks on Ukraine by Russia rapidly changed the balance of factors affecting the economy in the region. It is expected that the economic confidence will significantly decrease in the Baltic States, and it will affect the economy in short-term, though it will be possible to assess longer-term impact only as the conflict develops. The immediate effects will become noticeable when the number of economic transactions with Russia and Belarus subject to international sanctions sharply decreases. Among Latvia's trading partners, the Baltic States have the most exposure to trade with Russia, though these links have been largely cut after the previous aggression of Russia that started with the annexation of Crimea in 2014. Most severe challenges will be caused by the substitution of commodities imported from Russia (gas, oil, metals, etc.) that will increase production costs and hinder production, as well as by reduction in exports to the countries involved in the war, logistical problems and a decline in confidence in the areas close to the warfare.

Germany continued to fall short of the Deutsche Bundesbank forecast, as its economy contracted during the fourth quarter of 2021. The persistent supply chain bottlenecks and re-escalation of the pandemic also led to a downward revision of forecasts for the first quarter of 2022. Changes in the production logistics due to supply chain bottlenecks (resulting in a need to accumulate larger inventories) coupled with the impact of climate change mitigation policies and increasingly adverse demographic effects are a precondition for higher inflation rates in the country and in the euro area. The war in Ukraine will result in additional supply chain disruptions, energy supply challenges and price pressures making the forecasted growth increase after the first quarter of 2022 unlikely.

During the second quarter of 2021, the Swedish economy grew faster than expected, and all expenditure components kept increasing to return to the path of long-term growth. The main driver of growth was private consumption that fully recovered, including in the hotel and catering sector. Faster recovery of the economy was also expected in Sweden during the second quarter of 2021 as the pandemic alleviated. However, like in other countries both the consumption and important industrial sectors will face new challenges as there is a fading hope of quick end to price increases and supply disruptions.

In 2021, the UK economy expanded by 7.5%, recovering from a steep decline in 2020. As private consumption weakened, growth in the last quarter was moderate and supported by public spending and investments. At the end of February, the positive impact on consumption due to the removal of Covid-19 restrictions was undermined by rising inflation and expected tax increases, while supply chain bottlenecks and ongoing trade disputes with the EU will hinder international trade.

It is expected that the Russian economy will face immediate and dramatic effects of sanctions and the boycott of private companies with long-term consequences. However, it is difficult to assess their severity due to unforeseeable secondary effects. After the invasion of Russia in Ukraine, most of the world's developed economies rapidly, uniformly and comprehensively imposed economic sanctions on Russia. Trade with a large number of core economic sectors is prohibited, removing the possibility to generate export income and to receive components required for the industrial production. Introduction of new sanctions continued in March by imposing new types of sanctions and including additional sectors, companies and individuals. The sanctions have made it difficult for Russia to access the global financial system, and Russia risks technical default, should it fail to pay interest on government debt. Before the invasion in Ukraine, the Russian economy had started to recover with the GDP growing for three consecutive quarters on account of recovering domestic demand. Now, the economy is expected to fall into recession in 2022 instead of continued growth. The main source of Russian income – energy exports – that has not been made subject to a direct trade ban yet will also be increasingly undermined though it is already significantly affected by the unavailability of the global financial system, major businesses leaving Russia and rapid re-orientation of most countries to other energy suppliers.

2. Financial conditions

As inflation rose to unprecedented levels, major central banks gradually moved towards normalisation of monetary policy.

Considering the strength of the labour market and rising wages in the US and the UK, the FRS and the Bank of England completed net asset purchases and started raising interest rates. The ECB is also preparing for this gradual move, although completing net asset purchases and the first interest rate hike will take some time, while the Bank of Japan still continues its supportive monetary policy and does not yet plan to phase out its support. While central banks continue to signal that high inflation is temporary and premature, monetary policy tightening may significantly hamper the economic growth and central banks' ability to achieve the medium-term inflation target, they all agree that high inflation will continue longer than initially expected.

2.1. Decisions of the ECB and other major central banks

Having assessed the economic outlook, the Governing Council of the ECB continued its very supportive monetary policy. Key interest rates remained at historically low levels. Net purchases under the pandemic emergency purchase programme (PEPP) were completed by the end of March. However, in the first quarter of 2022 the volume of PEPP purchases was smaller than during the previous quarter. At the same time, the regular asset purchase programme (APP) has continued net purchases at a monthly pace of 20 billion euro. However, as in December the ECB had already approved a plan to discontinue PEPP net purchases at the end of March, the ECB also decided to temporarily increase net APP purchases as of April to ensure phasing out net asset purchases and avoiding turbulence in financial markets. In winter, the inflation remained higher than expected by most analysts. In addition, Russia's war in Ukraine exerted additional upward pressure on inflation making the Governing Council of the ECB decide in March to revise the agreed plan for net APP purchases. It was shortened and provides for net APP purchases in April, May and June for 40 billion euro, 30 billion euro and 20 billion euro respectively, and for discontinuation of net purchases under this programme if the expected inflation does not subside in the medium term. The Governing Council of the ECB also revised its forecasts stating that the primary ECB interest rates would be increased some time after the discontinuation of net asset purchases and that this process will be progressive. This adjustment of monetary policy instruments reflects the concerns of the Governing Council of the ECB about inflation. At the same time, the Russia-Ukraine war contributes to uncertainty that makes the ECB act cautiously and move towards normalisation of monetary policy while maintaining the possibility to adjust its policy depending on the economic developments.

In the March press conference Christine Lagarde, President of the ECB, indicated that the Russian invasion of Ukraine was a turning point. The war will have a significant impact on the economic activity and inflation, resulting in higher energy and commodity prices, and causing disruptions to international trade and deteriorating sentiment. The extent of these consequences will depend on the evolution of the conflict, the impact of current sanctions and future measures. Overall, what concerns the euro area economy, it was stated that at present the recovery was still driven by the disappearance of the Omicron variant. As regards inflation, the ECB noted that the rise in inflation had surprisingly continued due to unexpectedly high energy costs. Price hikes had also spread. However, it is expected that inflation will gradually ease and return to the target ECB level in 2024. As to risks to euro area economic development, the ECB notes that the risks to the economic outlook have significantly increased upwards in the wake of the Russian invasion of Ukraine. Analysts expect that the ECB will discontinue net asset purchases in summer and that the first rate

increase by 25 basis points will be made during the December meeting. Moreover, as early as in the middle of March the financial markets already were of the opinion that at the end of the year the ECB policy interest rate will reach 0.25%.

Chart 3

MARKET-IMPLIED PATH OF THE ECB'S DEPOSIT FACILITY RATE (%)

- Pre-pandemic situation, prior to the fall in the financial markets (19 February 2020)
- September (15 September 2021)
- Day before the February meeting of the ECB's Governing Council (2 February 2022)
- Day before the March meeting of the ECB's Governing Council (9 March 2022)
- March (17 March 2022)

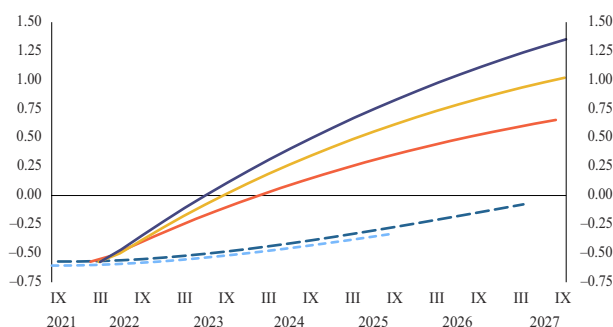
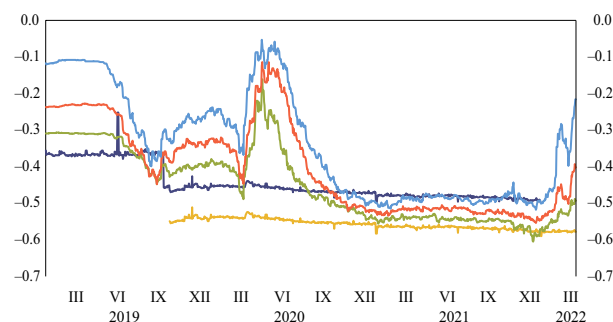


Chart 4

EURO MONEY MARKET RATES (%)

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



During its March meeting, the FRS decided to increase the target rate by 25 basis points to 0.25%–0.50%. The increase in the target interest rate corridor followed the decision of the FRS to faster discontinue net asset purchases already in late November as inflation continued to unexpectedly rise and the labour market remained robust. The FRS stopped net asset purchases at the beginning of March. At the same time, the FRS signalled that the interest rate hikes will continue and that more details about balance sheet reduction will already be released in May.

With regard to the US economy, the FRS indicates that economic activity and employment indicators have continued to strengthen. Job creation has been quite strong in recent months, and unemployment rates have fallen substantially. Inflation has remained high, reflecting the supply and demand imbalance related to the pandemic, higher energy prices and more extensive price pressures. The FRS also indicated that the impact of the Russian invasion of Ukraine on the US economy was very uncertain; however, in the near term, events related to the invasion were likely to exert additional upward pressure on inflation and downward pressure on economic activity. Six further increases in the FRS base rate corridor by the end of 2022 are currently already priced in by the financial markets.

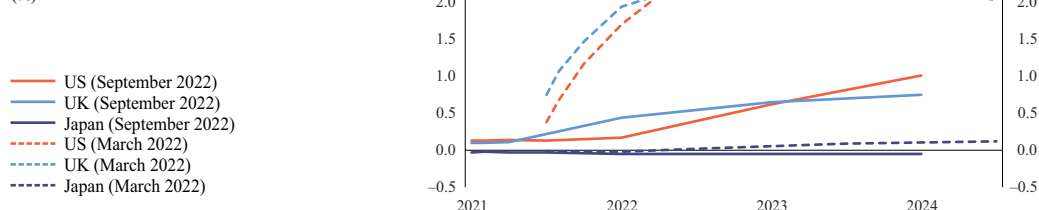
Since the end of September, the Bank of England has raised the base interest rate three times (during its December, February and March meetings), and currently it stands at 0.75%. The asset purchase programme of the Bank of England had already reached the ceiling of 895 billion pound sterling in December, and new net asset purchases are no longer made. In its reports, the Bank of England suggests that even before the Russian invasion of Ukraine it already expected economic activity to slow down to low levels in 2022. This is mainly due to rising energy and trade commodity prices that have a negative effect on real revenues and spending in the United Kingdom. At the same time, it was expected that inflation would peak in April and then remain slightly above 2% during two years. In view of the Russian invasion of Ukraine, the Bank of England expects these negative trends to aggravate, namely, the rising inflation will have a negative effect on household income and also the economic activity. The Bank of England expects that inflation will increase to 8% in the

second quarter of 2022 and possibly even higher during the second half of the year, however, as the impact of energy prices decreases a significant reduction in inflation is expected.

The financial markets expect that the base interest rate of the Bank of England monetary policy will be 2.2% at the end of the year, i.e. the financial markets expect close to six 25 basis point increases.

Chart 5

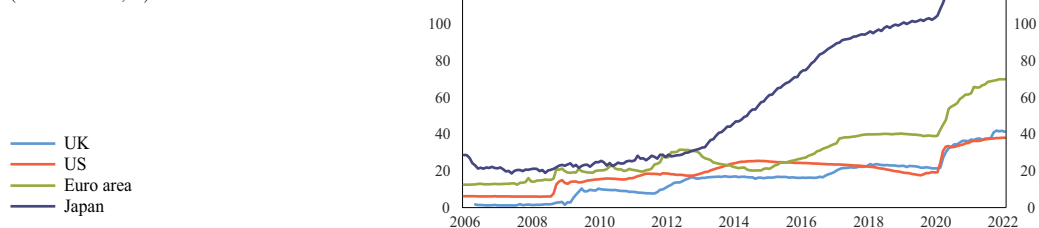
MARKET IMPLIED CENTRAL BANK POLICY RATES (%)



The Bank of Japan maintains its short-term target of -0.1% , and the 10-year government debt securities will have a 0.0% yield thus continuing its policy of yield curve control. As regards the Japanese economy, the Bank of Japan indicates that it continues to recover. The global economy has also recovered. The Russian invasion of Ukraine has caused volatility in financial markets and has contributed to the rise in oil prices that requires additional attention. Against this background, despite supply chain restrictions, the Japanese industrial production and exports have continued to grow. Although the situation improved in some sectors of the labour market, the employment rates and wages remained relatively weak. The consumer price index (excluding food) has stalled at approximately 0.5% . While it is expected that high raw material and energy prices will hit the Japanese economy, the Bank of Japan expects that as the adverse effects of the Covid-19 pandemic alleviate and the external demand improves, the recovery will continue. Financial markets do not expect any changes in the Bank of Japan's target rates during this year.

Chart 6

CENTRAL BANK ASSETS (relative to GDP; %)



2.2. Global financial market developments

As the Russian invasion of Ukraine started, yields from debt securities sharply decreased, though they soon resumed their upward trend reflecting the impact of the war on the still high inflation and the inevitable phasing out of monetary support.

Yields from government bonds in developed economies moderately fluctuated between the end of September and mid-December 2021, as major central banks continued their very supportive monetary policies though inflation rates continued to increase. Central banks explained the rise in inflation rates by sharply rising energy prices as economic activity recovered from the crisis caused by the Covid-19 pandemic, and believed it to be transitory. However, inflation rates increasingly differed from the forecasted trends of leading central banks. Market participants ever more often priced higher interest rates in future instruments. In the middle of December, yields from government bonds of developed economies also

started to increase. Yields on the euro area government bonds sharply rose after the meeting of the Governing Council of the ECB at the beginning of February. As the Russian invasion of Ukraine started, they decreased again, but quickly returned to pre-invasion levels and continued to rise. During the review period (30 September 2021 to 16 March 2022), yields on 10-year German government debt securities rose by 59 basis points to 0.39% becoming positive at the end of January. These changes were more noticeable in the US, where the yield on comparable US Treasury debt securities rose by 70 basis points, and at the end of 16 March trading session reached 2.18%. The higher increase in yields on debt securities on both sides of the Atlantic Ocean reflects the faster rise in inflation and the willingness of central banks to increase base interest rates earlier and faster. Yields on 10-year sovereign debt of France rose by 69 basis points, by 88 basis points in Spain, by 180 basis points in Italy and by 104 basis points in Greece. The higher increase in yields on debt securities in Spain, Italy and Greece versus those in Germany indicate that investors appreciate the phasing out of the presence of the Eurosystem in the secondary market and are more cautious concerning the sustainability of their debts. Future developments in yields on government debt securities to a large extent will depend on decisions of central banks, inflation and economic developments in the environment of considerable uncertainty.

Expectations as to increasing interest rates of central banks are also reflected in yields on corporate debt securities along spreads above the risk-free yields though they still continue to be historically low.

In corporate debt markets in the euro area and the US, yields generally follow the dynamics of the government debt yields. They increased both for investment-level corporate debt securities and high-yield debt securities, making corporate financial resources more expensive. Understanding that yields will increase in a foreseeable future, in particular investment-grade firms tried to borrow as much as possible. As central banks cut back on the purchase of government bonds and yields on government bonds increased, investors' appetite for higher-risk and yield corporate debt securities declined that was also reflected in the rise of corporate debt yields. Moreover, yields in the high-yield debt securities market have increased more rapidly, and this pickup was observed in all categories of high-yield credit rating. In the coming months, yields on corporate debt securities will still depend on both the pace of discontinuation of supportive monetary policies of central banks, as well as the overall economic performance and sectoral outlook that will likely remain sensitive to the received inflation data.

Stock markets significantly fluctuated, and the technology sector that rapidly grew before now experiences a decline.

Between the end of September and the end of the year, share markets still experienced growth (though with some sell-off episodes, e.g. when the Omicron variant was discovered) and stock indices reached new historical highs. This was further boosted by the still supportive monetary policy of central banks, as well as by the solid earnings figures for the third quarter. Moreover, Omicron happened to be less deadly than previous variants of the virus. However, at the beginning of the year, the hawkish approach of the FRS resulted in revaluation of shares by market participants. The rising inflation in the US made the FRS to discontinue monetary policy support earlier, shifting the focus of the FRS from stimulating the economic growth to reducing inflationary risks. Expectations of faster interest rate hikes and FRS balance sheet normalisation had a negative impact on share prices, with technology shares suffering the most. During the period considered (from 30 September 2021 to 16 March 2022), the NASDAQ 100 share index of US technology companies decreased by 5.0%. Stock markets were further boosted by still positive earnings figures for the fourth quarter of 2021. The Russian invasion of Ukraine triggered new sell-offs in stock markets, as investors relocated investments to safe-haven shares. Volatility in stock markets increased, with sentiments rapidly fluctuating during the day. Indices that describe future fluctuations –

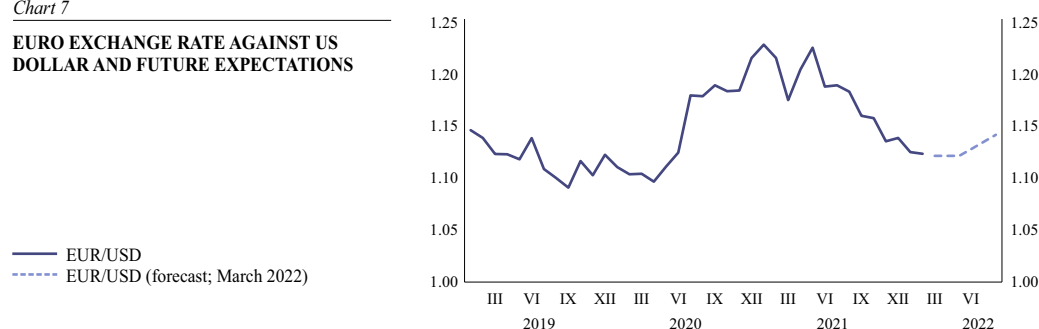
both European VSTOXX and the US VIX – also increased significantly. The European EuroStoxx dropped by 4.9%, while the US S&P 500 slightly increased (by 1.2%). During the period considered, euro area corporate share prices increased in the following sectors: insurance (+5.2%), basic resources (+5.2%) and energy (+3.1%), while corporate share prices mostly decreased in retail (–26.3%), travel and recreation (–20.6%) and technology (–11.5%). As to national euro area stock markets, the German DAX (–5.4%), the Italian FTSE MIB (–5.4%) and the Spanish IBEX 35 (–4.7%) indices decreased, while the French CAC 40 (+1.1%) index increased. Further developments in the stock market will continue to largely depend on the pace of economic expansion and the ability of policy-makers to balance decisions and measures to contain a further rise in inflation and avoid recession risks and a significant revaluation of financial assets.

There is a downward pressure on the euro due to earlier normalisation of the US monetary policy and uncertainty caused by the Russian aggression.

From the end of September 2021 to 16 March 2022, the euro to US dollar significantly decreased (by 4.7%) reaching 1.1035 US dollars per euro. The main events that contributed to weaker euro were a faster revision of the US monetary policy and the war in Ukraine. As the US inflation continued to rise and the labour market substantially recovered from the fallout of the pandemic, the FRS started pointing to the need to review the supportive monetary policy sooner than the ECB. Incoming data also made market players to include a faster rise in the FRS basic interest rates. Meanwhile, in its communication on phasing out the supportive monetary policy the ECB was quite cautious until its Governing Council meeting at the beginning of February that contributed to weaker euro. At the same time, the subsequent Russian invasion of Ukraine caused additional flight of assets to safe-haven countries that are further away from the warfare that, in turn, further weakened the euro. Analysts expect the euro to US dollar exchange rate to fluctuate at approximately 1.12 until June, and to rise slightly further thereafter. The future of the euro will depend on the monetary policy decisions of the FRS and the ECB and the future outlook. Undoubtedly, also the uncertainty and the effects of the Russia and Ukraine war on the euro area and global economic development will have implications for the future outlook and decisions.

Chart 7

EURO EXCHANGE RATE AGAINST US DOLLAR AND FUTURE EXPECTATIONS



2.3. Financing conditions in the Latvian economy

The deterioration of sentiment on the background of ongoing war in Ukraine will have a negative effect on financing conditions in Latvia.

The domestic loan portfolio (excluding loans to the government) increased just by 0.3% from September 2021 to February 2022 – mainly due to an increase in the household loan balance (by 2.0%, including a 2.7% increase in household mortgage balance), as well as one-off structural factors. For example, in October the Latvian Branch of OP Corporate Bank Plc was merged with SIA OP Finance, including its loan portfolio, in December a transaction between AS Citadele banka and ABLV Bank AS undergoing liquidation was completed to purchase its mortgage portfolio. The adjusted annual increase in domestic lending (excluding

the government) was 0.8% in February, though it remained negative (−4.6%) for loans to non-financial corporations and rose by +3.4% for loans to households (+4.5% for mortgage loans). Non-financial corporation and household loan-to-GDP ratio remained one of the lowest in the EU in 2021 and decreased to 33% (36% in 2020), making Latvia move to the penultimate position in the EU. Developments in the loan portfolio were also confirmed by changes in new loans: from September 2021 to February 2022 the volume of new loans decreased by 12.2% in comparison to the previous six months (including to non-financial corporations: 26.1% fewer, households: 3.4%).

Chart 8

LOANS TO NON-FINANCIAL CORPORATIONS AND HOUSEHOLDS
(outstanding amounts at the end of 2021; % of GDP)

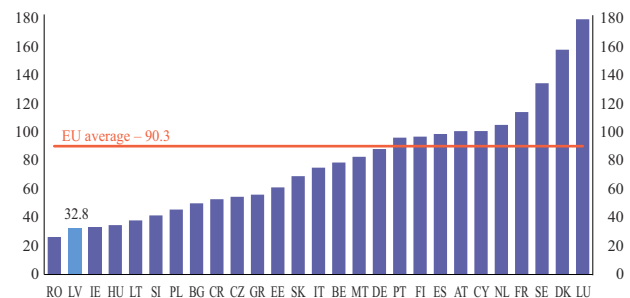
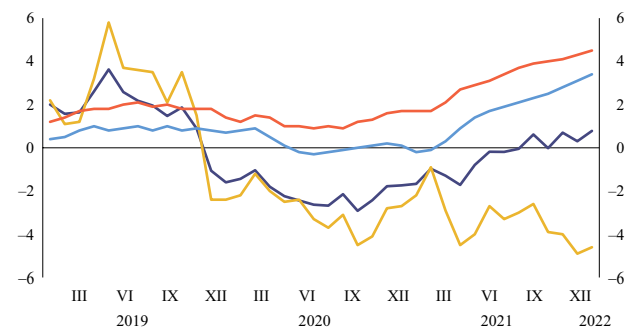


Chart 9

DOMESTIC LOANS
(outstanding amounts; annual changes*, %)

— Total (excluding government)
— Non-financial corporations
— Households
— Loans for house purchase



* Excluding the effect of credit institution sector restructuring.

As inflation rises and as there are increasing expectations of phasing out the ECB monetary policy support, the lending rates somewhat increased and in the future this rise can be further stimulated by a higher credit risk.

The euro interest rate for corporate loans in Latvia remained one of the highest in the euro area. However, it was not stable: in October 2021, it reached the lowest level during the last three years (2.1%), while in the following months it increased close to the level in the previous review period (2.9% in February 2022 and 3.0% on average in 2021). This rate was the most volatile for large loans that also form the largest share of overall loans to businesses. At the same time, for small and medium-sized loans it decreased (4.2% in August 2021, 3.7% in February 2022). During the second half of 2021, the rapid expansion of the Latvian debt and equity markets, fiercer competition between banks and several large transactions mainly had a downward impact on the interest rates of corporate loans. The expected positive impact of the third series of the ECB's targeted longer-term refinancing operations on the respective interest rates was dampened by insufficient corporate demand at the end of the additional reference period for assessing the results of lending operations (in December 2021). At the same time, at the end of the last year and at the beginning of this year, higher inflation in the euro area and expectations on ECB monetary policy tightening in the future had an upward impact on corporate lending interest rates. In the coming months, corporate lending interest rates of banks will likely increase, as banks will price in the impact of the Ukraine and Russia war on the economy and its outlook, as well as will decide about a higher credit risk premium due to uncertainty about further developments and lower risk tolerance.

Interest rate on mortgage loans to households mainly decreased during the second half of

2021, when banks offered more favourable borrowing conditions to households. According to the euro area bank lending survey, during the third quarter one in four and during the fourth quarter two in four surveyed credit institutions in Latvia cut their margins on mortgage loans to households due to increasing competition. The surveyed banks also reported less stringent collateral requirements and a reduction in the collateral-to-loan ratio in the above lending segment. The respective interest rate on loans to households slightly increased during the first half of 2022 as banks expected a less supportive ECB monetary policy in the future and a higher credit risk. Despite the reversal of the declining interest rate trend, the euro interest rate on new transactions decreased in this lending segment during the reviewed period (2.5% in August 2021, 2.3% in February 2022). However, in the following quarters the interest rate on mortgage loans to households may increase, as the ECB tightens its monetary policy and the uncertainty regarding further developments in the Russia and Ukraine war, as well as the prudence of banks increase.

Interest rates on consumer credits and other corporate loans decreased in the banks that were reviewed earlier, as banks eased their lending terms and conditions due to fiercer competition. However, in the respective lending segment the inclusion of a new market participant (TF Bank AB Latvia Branch) in the interest rate statistics determined the increase in the amount and corresponding rate of newly issued loans. Thus, for consumer credit and other lending to households, the interest rate increased during the reviewed period (to 10.7% in August 2021 and 11.1% in February 2022). Looking ahead, the interest rates on consumer credit and other lending to households could rise as banks price in a higher credit risk and as the demand recovers when the epidemiologic situation improves.

In the coming months, no substantial positive change can be expected, as the impact of alleviating pandemic may be counterbalanced and even outweighed by the impact of the war started by Russia. As a result, parties will be particularly prudent in making new investments, and in these circumstances the recovery of the risky corporate crediting is quite unlikely. At the same time, the rise in mortgages may slow down, as due to uncertain prospects and rising inflation individuals may reassess their borrowing capacity.

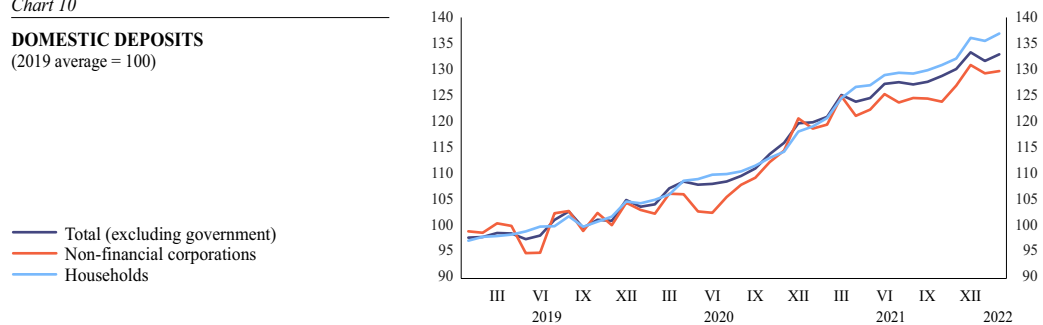
Though the Russia and Ukraine war has highlighted the need to make savings, high inflation and consumption needs will slow down any increase in deposits.

As tensions resulting from the Covid-19 pandemic alleviated and restrictions on the economy were gradually lifted, where possible, resulting in recovering or better consumption and expanding imports, the focus on precautionary savings had become less topical for several months. At the same time, the rising prices encouraged spending of accumulated savings. The rise in spending gradually slowed down the very buoyant increase in deposits that became evident during the first waves of the pandemic.

As a result, the annual growth in domestic deposits has decreased from 15% on average in 2021 to below 10% during the first two months of this year, with household savings declining more moderately. In February, the annual growth in domestic deposits was 9.9% (compared to 13.4% for household deposits and 5.0% for business deposits, including deposits by non-financial corporations that stood at 8.6%). However, in nominal terms, the growth in deposits remained fairly strong: between September 2021 and February 2022, the domestic deposits (excluding government deposits) grew by 4.1% compared to 4.2% for deposits of non-financial corporations and 5.4% for households.

Chart 10

DOMESTIC DEPOSITS
(2019 average = 100)



The interest rate on deposit balance that drives the financing costs of banks remained close to zero. It was made possible by the supportive ECB monetary policy and still negative money market interest rates. Euro interest rates on new household and business fixed-term deposits fluctuated depending on the share of new transaction at relatively higher rates (0.04% in August 2021, 0.2% in February 2022).

As the rise in savings has gradually subsided due to high inflation and consumption needs, the current deposit dynamics will continue, though the Russia and Ukraine war will also highlight the need to make savings.

The balance in credit institutions' correspondent accounts with Latvijas Banka increased from 5.4 billion euro at the end of September 2021 to 5.8 billion euro on 16 March 2022. While the cash in circulation increased from -76 million euro to +116 million euro becoming positive in March as individuals stocked cash fearing possible cyberattacks; considering the war in Ukraine, this possibility has become much more probable.

Russian aggression undermined financial conditions, in particular in the Baltic region, by increasing interest rates and lowering the value of businesses.

Even before the aggression, the leading credit rating agencies (Moody's, S&P Global, Fitch Ratings, R&I) had informed that they maintained the credit rating of Latvia at the current level, including a sound future outlook. The agencies indicated that the Latvian economy was stable amid the Covid-19 pandemic, and was supported by public support measures, private consumption and stable exports.

In December, Latvia issued the first sustainability euro bonds with a maturity period of eight years, raising 600 million euro with the yield of 0.263% and fixed coupon rate of 0.250%. The spread over the swap rate was 26 basis points. Revenue from bonds will be allocated to measures and priorities that aim to mitigate climate change and contribute to climate neutrality and increased welfare. Latvia was the first in the Baltic and Scandinavian region to issue sustainability bonds. These bonds were purchased by more than 110 investors (mainly asset managers from European countries) with the aggregate demand exceeding 2.5 billion euro.

The government of Latvia continued to place its securities that were previously issued on international markets on the domestic market (same ISIN for securities launched on the domestic and external markets). From October 2021 to 16 March 2022, nine auctions took place, with the Treasury increasing its offering in March. The increase in supply was related to the expected larger redemption of bonds in the domestic market in March (401.5 million euro), as well as to the Russian military aggression that in the foreseeable future will result in slower European economic growth and higher government expenditure. 2-, 4-, 7- and 9-year bonds were offered in auctions. The demand was as high as 951.6 million euro, while the sales amounted to 610.0 million euro. Against the background of rising inflation and expectations of a more restrictive monetary policy, interest rates rose. Yields on 7-year bonds were negative in September 2021, while in February they increased to 0.84%.

Chart 11

RESULTS OF AUCTIONS OF GOVERNMENT SECURITIES
(millions of euro)

■ Bids
■ Demand
■ Sold
■ 2–4-year bond yield (%; right-hand scale)
● 5–7-year bond yield (%; right-hand scale)
▲ 8–10-year bond yield (%; right-hand scale)

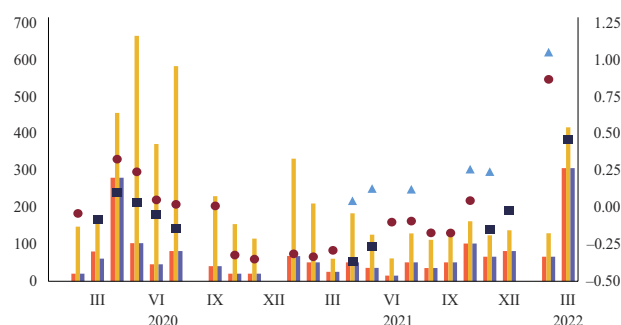
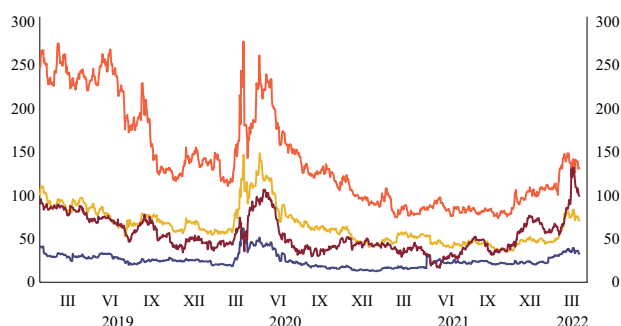


Chart 12

7-YEAR GOVERNMENT BOND SPREADS RELATIVE TO GERMAN GOVERNMENT BOND YIELDS
(basis points)

— France
— Spain
— Italy
— Latvia



In the secondary market, the average yield from 9-year government bonds in Latvia increased faster, i.e. from 0.11% to 1.27% (on 16 March). In the summer of 2015, long-term yields from the Latvian government bond stood above 1.20%, when the Eurosystem had just launched the public sector securities purchase programme. The spread between the above yield and the yield on the German government bonds with the same maturity period also increased faster during the period considered, rising from 40 basis points to as many as 96 basis points. Earlier, such difference was recorded in May 2020 as a result of the Covid-19 pandemic. The war in Ukraine has had a more noticeable adverse effect in the Baltic region, with growing concerns about the security of all countries neighbouring Russia, and in combination with expectations of a more restrictive monetary policy in an environment of high inflation this resulted in ever faster increase in yields in the bond market.

During the last few months, the domestic bond market was actively benefiting from the still favourable bond pricing in the euro area. In October, AS Augstsprieguma tīkls issued 5.25-year green bonds for 100 million euro with the coupon rate of 0.5%. In October, the non-bank lender Elevation Group (before Mogo Finance) issued 5-year secured bonds for 150 million euro with the annual interest rate of 9.5%. In November, AS Citadele banka issued 5-year unsecured bonds for 200 million euro with the coupon rate of 1.625% and in December – 10-year bonds for 40 million euro with the coupon rate of 5%. The bonds were offered to investors in Latvia, Lithuania and Estonia.

In December, AS Longo Group, a second-hand car seller, issued its first secured bonds for 3 million euro with the coupon rate of 6% and maturing on 30 November 2024. In December, the non-bank lender Elevation Group also issued 10-year subordinated bonds for 25 million euro with the coupon rate of 12%.

In November, petrol retailer AS VIRŠI-A launched its initial public offering and issued shares for 7.8 million euro. The shares were listed on the alternative market of Nasdaq Riga First North.

In December, the shareholders of AS PATA Saldus and in January the shareholders of AS Olainfarm decided to de-list their corporate shares.

In the Latvian stock market, on 16 March 2022 the OMXR price index had decreased by

12.3% in comparison to the end of September 2021, while the Baltic stock price index OMXBBGI had decreased by 8.3%. The steepest decrease in share prices was recorded for AS HansaMatrix (by 23.4%) and AS Rīgas kuģu būvētava (by 21.1%). The share prices of AS Latvijas Gāze also fell (by 15.9%). As to major companies, the share price of AS SAF TEHNIKA increased (by 5.5%). Share prices and indices were brought down by the war in Ukraine, as it affected cooperation of Latvian businesses with their partners in Ukraine, Russia and Belarus, built up expectations of higher energy prices and made investors believe that all regions neighbouring the warfare region were less secure.

3. Sectoral development¹

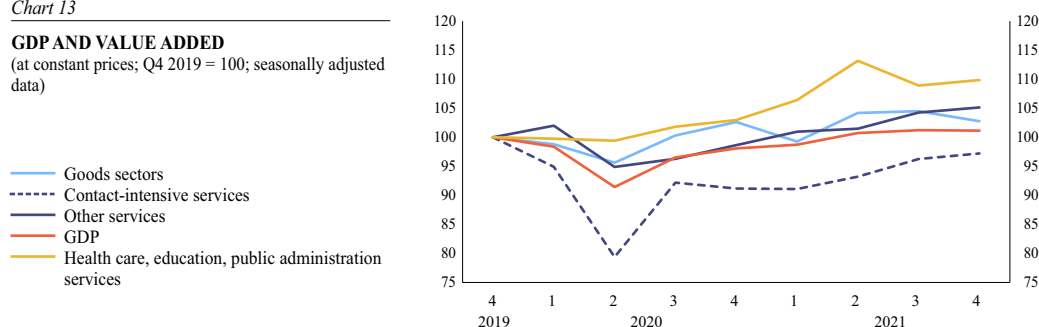
The warfare in Ukraine has sharply damped down the relevance of the Covid-19 pandemic. However, the two factors will constrain economic growth.

The tight restrictions, including the curfew which was in force for several weeks in October and November 2021, notably affected changes in Latvia's GDP in the fourth quarter of 2021. In the fourth quarter, Latvia's GDP contracted by 0.1% quarter-on-quarter. Overall, GDP stood above the pre-crisis level, but growth has not yet recovered materially in the so-called contact-intensive group of services. The fourth quarter saw restrictions dampen activity of accommodation and food services, as well as impeded industrial and retail trade development.

The breathing space that the termination of the state of emergency, declared due to the Covid-19 pandemic, and the related easing of restrictions would have given to the Latvian economy had not occurred yet when the war in Ukraine sharply damped down the relevance of the pandemic. Shifting away from economic cooperation with Russia and Belarus (due to both the sanctions and the initiative of economic agents), as well as hindrances to cooperation with Ukraine (owing to the ongoing warfare and the restrictions on exports of goods of strategic importance imposed by Ukraine) will profoundly change supply of global energy, commodities and components. This in turn will also have adverse effects on Latvia's economic growth in 2022 and 2023, as well as will translate into price rise.

Chart 13

GDP AND VALUE ADDED
(at constant prices; Q4 2019 = 100; seasonally adjusted data)



3.1. Manufacturing

The Russia-Ukraine war swept away the promising rapid growth of industry at the beginning of the year, mainly due to the problems related to the replacement of imports of raw materials and climbing prices.

The dynamic manufacturing growth observed earlier in the year was impeded by the adverse effects of pandemic containment measures on demand at the end of the year. It was mainly due to these measures that retail activity and demand for manufacturing production plunged, resulting in significantly different dynamics in the industrial turnover data: the domestic market declined, while revenues from foreign sales continued to grow. With the value of the produced goods rising rapidly and the volume indices and changes in volume of industrial production contracting, price increases have also led to substantial differences in output and turnover changes.

Although the year 2022 started against the backdrop of elevated energy prices and a rise in the number of new Covid-19 infections, manufacturing merged its efforts to make a swift leap forward in January. However, Russia's attack on Ukraine and the subsequent sanctions posed new, even tougher challenges.

¹ This chapter analyses GDP and sectoral value added at constant prices, using seasonally and calendar adjusted data (unless otherwise specified).

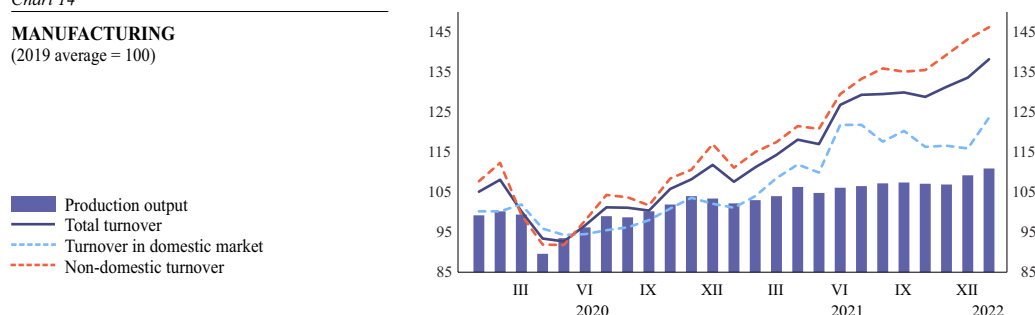
The main observations on the strengths and weaknesses of manufacturing growth under the current circumstances are as follows:

- overall, nothing threatens the survival of manufacturing and its subsectors. Certain businesses whose commercial activities were based on cooperation with Russia and Belarus will be hit. However, a significant proportion of these firms were largely engaged in re-exports or processing of cheaper materials for sales with low value added, with a relatively small contribution to employment and tax payments;
- the manufacture of pharmaceutical products (owing to more important shares of exports), chemical industry, metalworking and mechanical engineering (due to the problems related to the replacement of imports of raw materials) might find themselves in a more difficult situation;
- replacement of imported intermediate goods is seen as an important risk to ensuring production. Replacement alternatives exist, but it takes time and money to refocus. Thus, the supply chain disruptions that began during the pandemic will persist. Positive news: supply disruptions experienced over the past two years have made producers build up larger stocks of raw materials, which provide additional time needed for seeking alternatives.

The soaring energy prices remain a pressing and amplifying problem. With the presence of transit operators diminishing in Latvia, the country might face logistical challenges.

Chart 14

MANUFACTURING
(2019 average = 100)



3.2. Construction

The imposed sanctions reduce the availability of building materials, most notably metals, thus reinforcing the already observed increases in construction costs and postponement of investment projects.

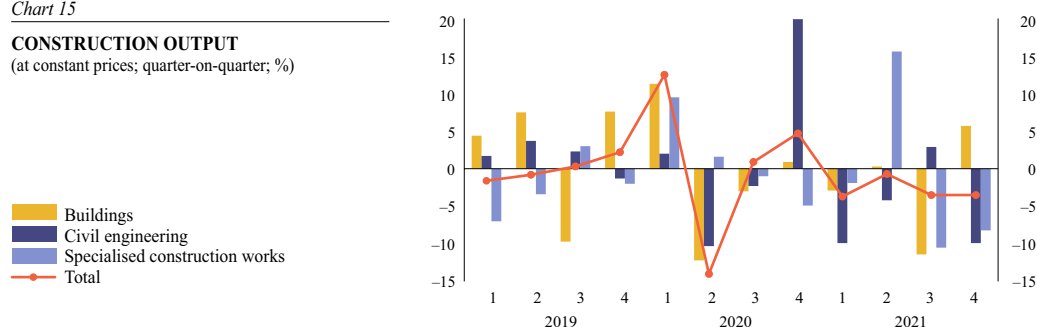
The sharp rise in construction costs, logistical problems, limited supply of building materials, adverse weather conditions affecting construction in December, as well as the increased spread of Covid-19 infections and the restrictions imposed by the country in the context of the spread of the Covid-19 virus significantly hampered activity of the construction sector in the second half of 2021.

In the second half of 2021, real construction production contracted by 8.4% year-on-year, while construction costs elevated by 10.4%. A pickup in global demand and limited production capacity observed since the second quarter of 2021 contributed to a rapid rise in prices of building materials (metal, wood, glass, dolomite chippings, sand, etc.), which gained momentum in the second half of the year. The increase in the average wage of those employed in construction remained similar to the average wage growth in the economy, but the shortage of skilled labour, coupled with the rising demand, climbing building material prices and tight supply led to a significant uptrend in overall construction costs. Thus, the implementation costs of construction projects mounted, which in turn reduced activity not only in the ongoing construction projects and increased the number of postponed

planned projects but also reduced investors' interest in launching new projects. Although the construction volume of both buildings and specialised construction works followed an upward path in the fourth quarter of 2021, it could not offset the significant decline in the construction volume of engineering structures, and the output of the construction sector declined at constant prices.

Chart 15

CONSTRUCTION OUTPUT
(at constant prices; quarter-on-quarter; %)



In 2022 and beyond, a sizeable inflow of funds intended for the implementation of the Rail Baltica project, financing provided by the Recovery and Resiliency Facility for the construction of various infrastructure, state and local facilities, as well as the resources from the European structural funds under the multi-annual budget are expected to reach the construction sector. The need to renew the housing stock and the demand for apartments made it possible to project healthy growth in construction of residential buildings.

The Russian army's invasion of Ukraine on 24 February 2022 has changed both the political and economic situation worldwide, triggering downward revisions to construction growth as well. The war in Ukraine and the related imposed sanctions will materially affect imports of building materials, mainly metals, since around 50% of the market depend on Russia. Imports of raw materials, such as wood and chemical products, will also experience a negative impact, but the rising energy prices (gas, fuel, electricity) and potential problems relating to the availability of energy will continue to push up production costs of building materials. The protracted period of the warfare and sanctions will further exacerbate the existing supply chain bottlenecks, and the number of postponed investment projects will increase.

3.3. Real estate sector

The record highs in the real estate sector's activity may be tempered by the impact of price rises on savings.

The real estate sector recorded a high level of activity in 2021, benefiting from the strong demand, capital availability, household savings and positive sentiment prevailing in the real estate market.

Despite the uptrend in real estate prices, the number of real estate transactions registered with the Land Register increased significantly in 2021 year-on-year (by 28% in Latvia as a whole and by 32% in Riga). The housing market saw activity and demand grow in all segments. International investors focused more on investment in the segments of logistics, rental of offices and housing, while private capital investors were more interested in small commercial buildings, such as neighbourhood-type shopping centres or retail parks. Activity in the office segment has not decelerated either despite teleworking opportunities. This segment also sees a shortage of buildings for sale alongside the change in the office concept.

The year 2021 was characterised by a rise in real estate prices, which climbed by 12% in the course of the year. The average price of standard apartments rose to 902 euro per square metre in December. These price increases were related to the growing demand and higher

construction costs, as well as to changes in construction regulations requiring greater energy efficiency of buildings.

The real estate market activity is projected to remain sustained in the first half of 2022 due to the inertia experienced last year, but the real estate market could face several challenges in the second half of the year. Information on the developments related to the war in Ukraine, where the large cities are most affected first and foremost, could reduce people's willingness to live and purchase residential space in the large cities and renew interest in purchasing real estate in the countryside (outside the big cities), which waned in favour of the Riga premium segment apartments at the end of 2021. On the other hand, the surge in energy and food prices can significantly reduce the amount of people's savings generated during the pandemic and intended for the acquisition of property.

3.4. Trade

The effects of the Russia-Ukraine war will be harder felt by the wholesale sector due to the sanctions imposed on Russian and Belarusian companies and by the trade of motor vehicles on account of disruptions to supply of the components necessary for production.

Despite the substantial restrictions that were applied to face-to-face retail trade (a portion of points of sale were not available during the lockdown in October and November, and following its end, customers had to present the Covid-19 certificate to access many points of sale), the trade sector continued to grow in the fourth quarter overall. According to turnover statistics, wholesale on a contract or fee basis², which more than doubled in December month-on-month, played a certain role in sustaining the sector's total growth.

In nominal terms, trade development can be estimated from short-term statistics on payments made with payment cards, and these statistics are available before the release of other data. The above statistics suggest that people's spending abroad picked up during the weeks of the strict lockdown when curfew was also in force, but this spending only partly offset the decline in domestic payments (including in the trade sector), as the volume of payments made abroad is not a decisive part of the overall structure. The situation improved rapidly during the year-end holidays when Covid-19 restrictions were eased; however, payment dynamics slowed in the weeks following the holidays, which was also reflected in the January retail trade data.

With both the unusually strong wholesale increases observed in December ebbing away and the gradual pass-through of the sanctions imposed on Russia and Belarus, growth in the trade sector might weaken in the first half of 2022. There are certain wholesalers with substantial turnover among the companies subject to sanctions; however, they employ relatively few employees in Latvia, limiting the impact of such businesses on the value added in the trade sector overall. Traders of motor vehicles most likely also worked on execution of previous orders in the first quarter of 2022, but Europe's automotive industry might encounter shortage of components in the near future, thus increasing the likelihood of delayed deliveries.

Inflation will hamper retail trade growth.

Despite the sanctions, as well as the initiative from several businesses to suspend immediately or gradually trade in goods produced in Russia and Belarus, retail trade development might be affected to a relatively small degree. Account should be taken of both the available stocks and the fact that the initiative to terminate cooperation with Russian

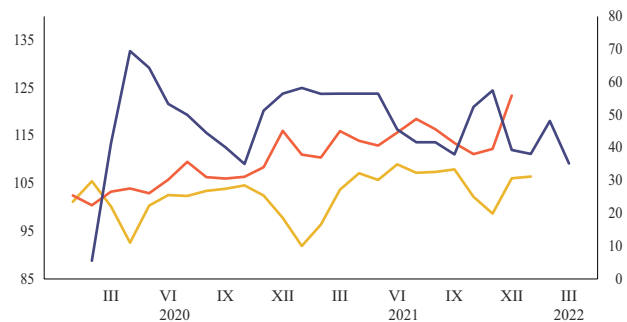
² This group comprises: activity of commission agents, commodity brokers and all other wholesalers who trade on behalf and on the account of others; activity related to bringing together sellers and buyers or undertaking commercial transactions on behalf of the distributor, including on the internet; activities of wholesale auction houses, as well as internet wholesale auctions.

and Belarusian producers was first voiced more vigorously by traders having a small share of such goods. Retailers specialising in the distribution of goods produced in Russia and Belarus will be more affected, but the coming months will see purchases of primary goods for the benefit of Ukrainian people and refugees offset these changes, at least partially. Latvia has already welcomed several thousands of Ukraine's population whose daily consumption will maintain activity in a number of sectors in the coming months, including trade (by replacing, to some extent, the lack of potential tourists' interest in visiting Latvia). Price dynamics might also affect real growth in retail trade, particularly in the light of the expiration of the government support aimed at reducing household energy costs

Chart 16

RETAIL TRADE TURNOVER, WAGES AND RESTRICTIONS STRINGENCY INDEX

— Retail trade turnover index (average level in 2019 = 100; at constant prices)
— Real net wage (average level in 2019 = 100)
— Covid-19 restrictions stringency index* (right-hand scale)



* Restrictions stringency index in March (until 9 March).

BOX 1. THE USE OF PAYMENT CARD DATA TO FORECAST RETAIL SALES³

Latvijas Banka has started to compile data on payments made with payment cards, using daily transactions of four major Latvian banks. The dataset covers around 98.0% of all domestic card payments, and they are employed to forecast retail trade turnover.

Developments in the retail trade sector give a fairly clear picture of the card payment dynamics (see Chart 1.1.). Moreover, these data are available much earlier than the official statistics on retail trade turnover. In January 2022, data on card transactions covered 52.9% of the total retail trade turnover.

The ARDL (AutoRegressive Distributed Lag) model with payment card data and three benchmark models (SRWM, ARIMA, RETA⁴), which exclude card transaction data, are used to assess the usefulness of payment card statistics in forecasting. When comparing the forecasting performance of models, it can be concluded that the model containing card transaction data can forecast retail trade turnover (its level, as well as monthly and annual rates of change) more accurately than benchmark models (see Table 1). Thus, payment card statistics make it possible to understand developments in the retail trade sector in a more precise and timely manner.

Chart 1.1

CARD PAYMENT AND RETAIL TRADE TURNOVER
(month-on-month; %; at current prices; seasonally adjusted data)

— Retail trade turnover
— Card payments in Latvia



³ Prepared by Anete Briņķe, an economist of Latvijas Banka

⁴ The Seasonal Random Walk Model (SRWM), the AutoRegressive Integrated Moving Average (ARIMA) model and RETA, the forecasting model containing European Commission retail confidence data.

Table 1
FORECASTING ACCURACY INDICATORS

	Level	Monthly rate of change	Annual rate of change
Models	MAPE*	RMSFE**	RMSFE
SRWM	7.05	8.73	9.98
ARIMA	5.74	6.56	6.63
RETA	5.68	6.81	7.75
ARDL	2.66	3.75	4.23

Notes. The lower the forecast indicator, the more accurate the forecasts of the respective model are.

* MAPE – Mean Absolute Percentage Error (%).

** RMSFE – Root Mean Square Forecast Error.

3.5. Transport

The growth of transportation by road will be hampered by cost increases due to the provisions of the mobility programme; the effects of the sanctions imposed on the aggressor countries will be limited.

In 2021, the transport sector recovered perceptibly from the negative shock of the pandemic. Real value added generated by the sector grew by 5.9%. In the first half of the year, it was driven mainly by transportation by road, while the second half of the year witnessed the passenger flows increase sharply at the airport. Transport by road experienced a strong growth in the turnover of freight transported by road in 2021; moreover, the volume of both domestic and international freight mounted. However, the sector is expected to undergo substantial changes in 2022. As shipments to/from Russia and Belarus represent a relatively small proportion of the overall cargo turnover structure, the most substantial impact will stem from the new rules of the mobility programme. The new requirements include important changes to road transport in Europe, including both the requirements providing for the return of vehicles to their countries of origin, and restrictions on cabotage services, as well as minimum wages for drivers abroad. The long-term impact of the new regulation cannot be fully predicted yet; however, transport costs are already expected to increase in the near future.

The restrictions on cooperation with Russia and Belarus arising from the sanctions will be critical for freight transportation by rail that will also have a material effect on port activity.

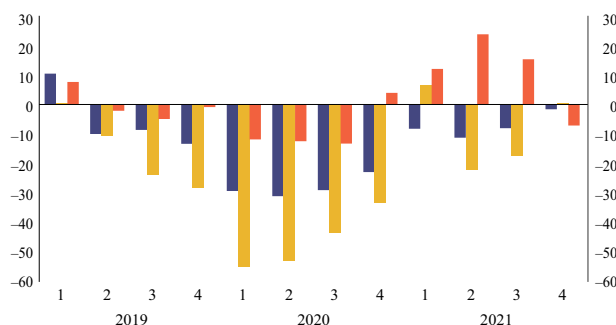
In 2021, the long-lasting decline in freight turnover continued at Latvian ports and in rail transport. Overall, the volume of cargoes loaded and unloaded at ports decreased by 7%, while the volume of freight transported by rail shrank by up to 14% year-on-year. The deceleration in freight turnover was mostly driven by a decline in the freight transit flows of coal and oil products through Latvia. The volume of general cargoes at ports increased in 2021, mainly on account of the rising volumes of ro-ro and wood cargoes. The volume of cargos loaded and unloaded in Liepāja and at the small ports of Latvia grew relatively rapidly. The volume of Russian and Belarusian cargoes reached around 90% and 80% of all cargoes respectively in the structure of import and export cargoes transported by rail through Latvia. The drop in Russian cargo volume will also have a material impact on the volume of loaded and unloaded cargoes at Latvian ports, with the most significant effect on the port of Ventspils, since about half of all cargoes in its structure are related to transit of Russian oil products.

Chart 17

FREIGHT TURNOVER IN MAIN TYPES OF FREIGHT TRAFFIC

(in tonne-kilometres; at ports – in tons; annual changes; %)

■ Ports
■ Railway
■ Road transport



With epidemiological restrictions easing, the suspended flights to Russia will not give rise to a significant impediment to recovery of the air transport sector.

The air transport sector experienced a rebound in 2021. The number of passengers of Latvian airline flights increased by 20% year-on-year (although it is still far below the pre-pandemic level). Omicron, which was less dangerous, became the dominant strain of the coronavirus causing Covid-19, and countries slowly began to ease or remove epidemiological restrictions. Passenger flows at Riga Airport are already expected to increase in the near future. The suspended flights to Russia and Belarus will be an exception (previously the volume of these passenger flows accounted for around 9% of all passengers).

The past few years have seen buoyant growth and development of the postal and courier sector where a variety of innovations have been introduced and new technical solutions have been put in place. Moreover, this sector has experienced significantly faster development during the pandemic. The sector of warehousing and transport support activities has also experienced growth during the pandemic. This sector prepares everything needed for transport logistics, transportation and the transport infrastructure.

Geopolitical developments and the sanctions imposed by Western countries on trade and cooperation with Russia and Belarus will slow down further development of the Latvian transport sector. Moreover, the overall performance of the sector still falls below the pre-pandemic level.

3.6. Tourism

The limited travel opportunities of Russian tourists, their falling solvency and concerns about security in the region make hopes for recovery of the tourism sector fade away.

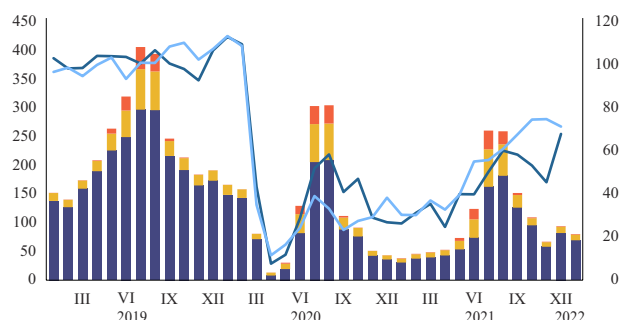
In 2021, the upsurge in Covid-19 infections at the year-end and the restrictions introduced in the country in relation to the spread of Covid-19 continued to weigh on the tourism sector both at global and local levels. The number of tourists remained on a declining path, thus moving the sector's performance and income further away from the pre-pandemic levels. Despite the growing infection rates and restrictions, firms serving outgoing tourism flows were better off in the third and fourth quarters, owing to people's increasing willingness to travel for leisure outside Latvia.

Chart 18

TOURISM

(number of visitors served at places of tourist accommodation; thousands)

■ Camping grounds, recreational vehicle parks and trailer parks
■ Holiday and other short-term accommodation
■ Hotels and similar accommodation
— Accommodation (turnover index in the tourism sector; 2019 = 100; right-hand scale)
— Travel agency, tour operator and other reservation service and related activities (turnover index in the tourism sector; 2019 = 100; right-hand scale)



Along with Russia's invasion of Ukraine and the imposition of sanctions, the tourism industry's hopes that its "large customer" – Russian travellers – will soon return to Latvia are fading; in 2019, the share of Russian tourists accounted for 15% of the number of visitors served. In addition, visitors from Russia used to stay longer and spend more. The warfare in Ukraine will affect not only direct flows of tourists from Ukraine, Russia and Belarus but will also make potential tourists of other countries cautious due to security concerns.

3.7. Energy

The war in Ukraine highlights energy independence issues.

The war in Ukraine brings the issue of continuity of energy supply in many parts of Europe, including Latvia, to the fore. The abandoning of fossil fuels supplied by the aggressor countries, as well as the supply disruption risk during the term of existing contracts primarily affect imports of natural gas and oil products. Short-term solutions mostly involve the provision of alternative sources of supply. However, rearrangement of supplies has to take place simultaneously in a number of countries, which takes time and feeds into higher prices. Alternative supplies of natural gas can reach Latvia through the Klaipeda liquefied gas terminal located in Lithuania, but the transmission capacity is yet to be increased.

Risks related to continuity of energy supply and energy price hikes remind of the need to step up the pace of energy efficiency measures, including renovation of buildings.

The current situation is fostering interest in both individual solutions for microgeneration of energy and faster progress towards the implementation of projects aimed at increasing energy independence and sustainable energy generation. In February, the government conceptually supported the intention of AS Latvenergo and AS Latvijas valsts meži to establish a joint venture for the development of wind farms in Latvia in this decade. The planned investment and construction will take some time; moreover, these projects are to be implemented without any support mechanisms.

4. GDP Analysis from the Demand Side⁵

4.1. Domestic demand

Higher expenditure stemming from price rises will continue to weigh on private consumption and hinder investment plans this year.

The lockdown aimed at restricting the spread of Covid-19 introduced in October and November 2021 slowed down economic growth, which was even more adversely affected in December when the requirement to have a Covid-19 certificate was extended to more workplaces. Costs also continued on an upward path, particularly those of energy, reducing consumption opportunities for households and increasing producers' costs. Therefore, a weak performance witnessed in the fourth quarter did not come as a surprise.

Only a year ago, with a view to impetus for faster economic growth, hopes were pinned on household savings built up during the period of pandemic-related restrictions. However, these expectations were met only marginally, since:

a) part of savings was taken to foreign economies, as people travelled more often and visited places less affected by restrictions. This is confirmed by payment card statistics (although spending abroad is negligible compared with total payments);

b) part of savings lost its nominal value as prices rose, particularly those of energy. In other words, one could buy less for the same amount of money than before. Thus, real private consumption declined by 1.3% in the fourth quarter in quarter-on-quarter terms.

Chart 19

GDP AND DEMAND SIDE COMPONENTS
(quarterly changes; at constant prices; percentage points)

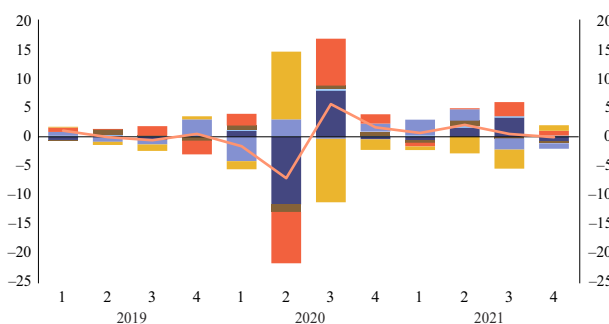
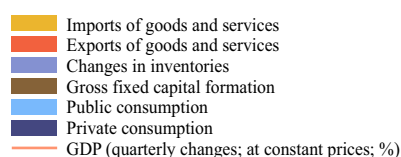
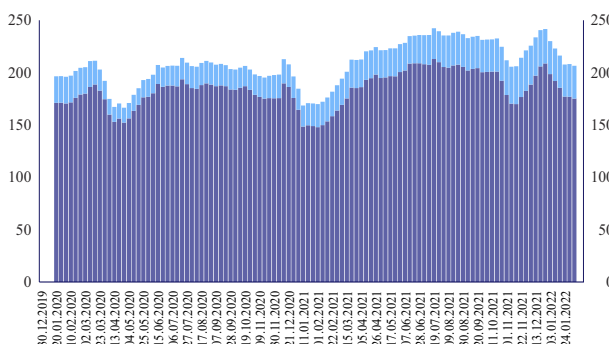


Chart 20

SENT CARD-BASED PAYMENT TRANSACTIONS
(four-week average; amount; millions of euro)



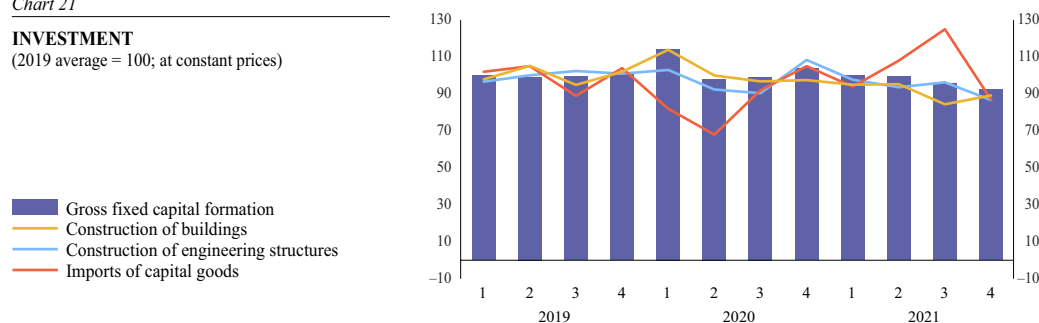
Rising costs also hampered investment plans, since construction workers were no longer able to keep projects within the budget assigned to them. There was a substantial increase in money terms, but real projects were implemented in a more moderate manner. Moreover, it was not only construction activity that contracted but also imports of capital goods. Overall, investment fell by 1.4% in the fourth quarter compared to the previous one. Despite the ample amount of funding provided by European funds and the state, rising costs could lead to a further decline in

⁵ This chapter analyses GDP and the demand side components at constant prices, using seasonally and calendar adjusted data (unless otherwise specified).

investment, which will be further hindered by the uncertainty arising from geopolitical shocks dampening the risk appetite of private investors. On the other hand, projects replacing Russian natural gas and oil could provide a positive impetus to investment, and the need and urgency of such projects are at the top of priorities to ensure further growth.

Chart 21

INVESTMENT
(2019 average = 100; at constant prices)



4.2. Government consumption

The sharp rise in inflation, support in the energy price crisis, as well as support to Ukraine's refugees are major expenditure-increasing factors this year.

In 2021, the general government budget deficit is projected to be 8.7% of GDP. However, more accurate information on the budget deficit will be available at the end of April. The budget was mainly affected by higher expenditure aimed at reducing the fallout from the Covid-19 pandemic. Support to the economy amounted to around 2.2 billion euro, and the most important measures were related to the health sector and support to businesses. The projected government deficit for 2022 is 5.9% of GDP, mainly on account of faster growth of expenditure aimed to implement the planned support measures in the energy sector and due to additional spending related to the warfare in Ukraine.

Budget revenue reached almost 12.6 billion euro in 2021, representing a year-on-year increase of 11.1%. The easing of epidemiological restrictions and adjustment to the new situation contributed to the expansion of economic activity, resulting in a positive effect on all kinds of tax revenues allocated to the central government budget. The revenue from labour taxes grew by 6.2%, driven by buoyant wage growth and rising employment. With the economy recovering and people's purchasing power and consumption picking up, the total consumption tax revenue increased by 7.3% in the central government budget. This was mainly driven by a rise in VAT revenue in the trade sector, while tax revenue generated by the sectors subject to the most restrictive measures decreased significantly last year, particularly in the sector of accommodation and catering services, as well as in the arts, entertainment and recreation sector. In 2022, revenue from labour and consumption taxes will also continue to grow, albeit at a slower pace than previously expected due to the slowdown in economic growth.

In 2021, budget expenditure reached 14.4 billion euro (rising by 15.5%). This was the result of government support provided to deal with the fallout from the Covid-19 pandemic, which significantly increased public expenditure – both by way of social benefits and extensive support provided to businesses in the form of various subsidies and grants. In 2022, budget expenditure will grow faster than projected in December 2021, mainly driven by a sharp rise in inflation, additional support to reduce the exceptional increase in energy prices, as well as support to Ukrainian refugees. Moreover, budget expenditure may be supplemented by other economic support measures owing to the warfare commenced by Russia.

In 2021, the overall public debt level increased due to borrowing on the financial markets aimed at extending various economic support measures, and the debt could amount to 45.1% of GDP. The debt has been revised upwards to 48.3% of GDP in 2022 on the back

of government expenditure for the implementation of support measures. However, with the fiscal discipline improving, the coming years might see debt decline due to economic growth.

4.3. Trade balance

The value growth of exports and imports was mainly driven by price hikes, which will also be reinforced by geopolitical tensions this year in relation to imported energy and the major groups of export goods – wood and agricultural products.

Real exports of goods and services continued to grow in the fourth quarter of 2021 (1.3% quarter-on-quarter), with services exports recovering more rapidly. Although value of goods exports reached new record highs, the increase was solely due to price rises, with real volume even declining. Real imports also saw a drop in the goods sector and an increase in the services sector, however, the overall quarterly volume edged down by 1.4%.

Export growth slowed down in the fourth quarter of 2021, as supply chain bottlenecks remained entirely relevant and economic disruptions stemming from the Covid-19 pandemic picked up again. However, the sustained increase in prices of goods continued to boost the value of goods exports. Exports of chemical and metal products grew rapidly, with exports of wood products continuing to generate the highest revenue. Meanwhile, the value of exported agricultural products exceeded that of the fourth quarter of 2021, although the volume of exported products was smaller. On account of the rapid upward trend in prices and demand, the export value of metal, wood and chemical products also grew fastest throughout 2021 (excluding exports of mineral products dominated by re-exports).

Chart 22

EXPORTS OF GOODS AND GROUPS OF EXPORT GOODS (annual changes; millions of euro)



In the fourth quarter, the price effects also prevailed in imports of goods, with expenditure on imports of mineral products, metals and chemical products rising most.

As regards services exports, the fourth quarter of 2021 witnessed the development of various economic services and information and communication services accelerate and almost offset the decline generated by transport services and tourism exports.

With imports of goods contracting vis-à-vis the third quarter of 2021 and exports of services surging, the trade balance of goods and services was close to balance in the fourth quarter. However, in 2021 as a whole, the rebound in goods imports brought about a deficit in the trade balance.

The ability of Latvia's exporters to switch the focus of their activities will mitigate the adverse effects stemming from the sharp fall in trade with Russia and Belarus, and the existing inventories will weigh on imports, yet prices will rise rapidly.

The military conflict triggered by Russia introduces major adjustments to the future development of Latvia's international trade. Successful export development will continue,

particularly in the sectors using local resources, i.e. in the wood processing and agricultural sectors. Meanwhile, exports to Russia and Belarus are expected to decline rapidly, but this will be gradually reversed as Latvian businesses adapt to the situation and focus their activity in other markets. However, export development will be hampered by the need to find other suppliers of fossil fuels and metals, as well as by rising prices. The higher weight of imports of goods from Russia and Belarus compared to exports to these countries and reorientation to other markets will contribute to a temporary slowdown in imports, leading to an improvement in the trade balance in 2022. At the same time, the need for imports will be somewhat reduced by the level of inventories built up in 2021, since businesses accumulated excess stocks amid supply chain disruptions. As regards trade in services, the lasting gradual decline in exports of transit services will turn into a steeper fall. However, development of modern services has largely offset the decline in recent years, and these services are expected to continue expanding strongly.

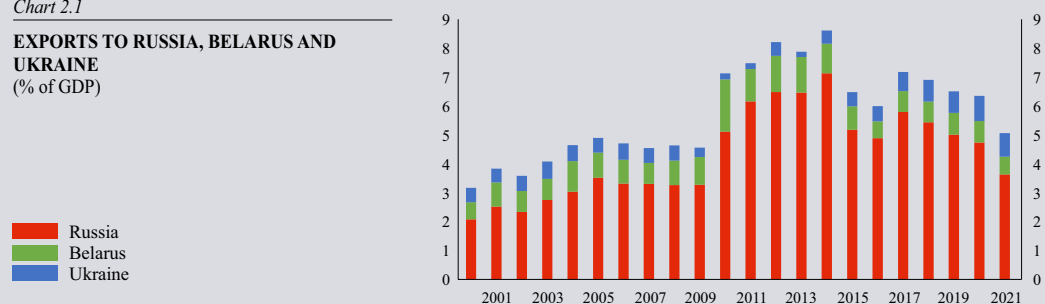
BOX 2. EXPOSURE OF LATVIA'S ECONOMY TO RUSSIA, BELARUS AND UKRAINE⁶

The invasion of Ukraine has altered the economic relationships with Russia and Belarus, undermining the availability of commodities on the global stage and sending their prices surging. The reduction in economic cooperation with Russia and Belarus is driven by both the imposed sanctions that affect trade in certain products and payment problems, as well as the refusal by firms to cooperate with partners in Russia. Economic cooperation with Ukraine will also be affected in view of the ongoing warfare in its territory.

The previous episodes of external shocks showed that resilience of Latvian firms is relatively high, they find new markets and shift the focus towards them. Trade exposure to Russia and Belarus has also declined significantly since 2014. Exports of Latvian goods and services to Russia⁷, Belarus and Ukraine amounted to 7.9% of total exports in 2021, accounting for 5.1% of GDP, which is almost twice as low as in 2014 (Chart 2.1).

Chart 2.1

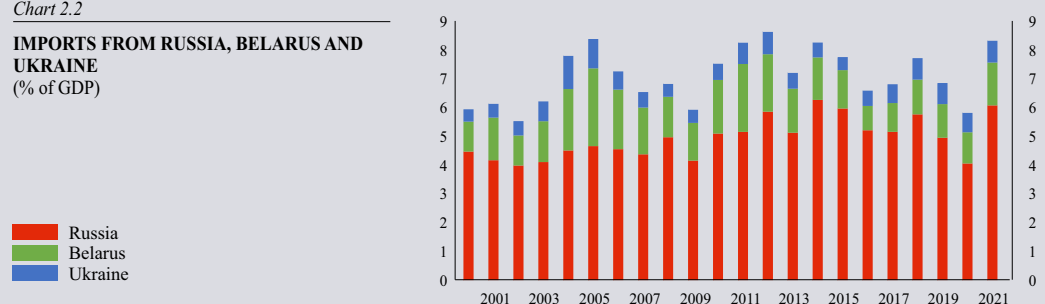
EXPORTS TO RUSSIA, BELARUS AND UKRAINE (% of GDP)



A similar pattern can be observed for imports, while the price hikes of fossil fuels and wood in 2021 led to a pickup in imports from Russia and Belarus (Chart 2.2).

Chart 2.2

IMPORTS FROM RUSSIA, BELARUS AND UKRAINE (% of GDP)



⁶ Prepared by economists of Latvijas Banka: Santa Bērziņa, Guntis Kalniņš, Olga Lielkalne and Andrejs Zlobins.

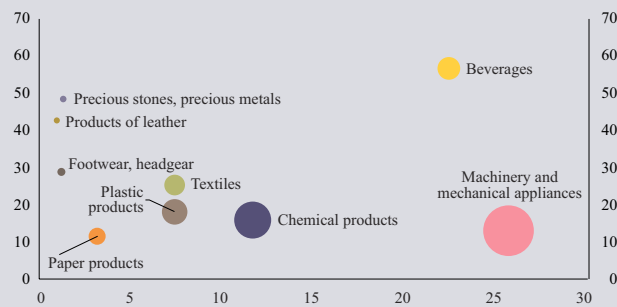
⁷ Russia's share in exports is likely to be slightly larger, taking into account the fact that part of transportation services by sea and rail that have been attributed to other countries according to payment origin are actually provided as transit services mainly to the geographically adjacent Russia and Belarus.

Alcoholic beverages (a substantial part of them is re-exported), machinery and mechanical appliances, electrical equipment and pharmaceutical products represent the vast majority of Latvia's goods exports to Russia. As regards transactions involving goods exports to Russia and Belarus, the volume of re-exported goods has reached an average of 34%⁸ and 54% of exports respectively over the past five years. Although re-export transactions also contribute to Latvia's GDP, these transactions have traditionally involved fewer employees. Thus, the disappearance of flows of goods re-exported by businesses would affect Latvia's population to a lesser degree than the operating restrictions imposed on the businesses producing goods or providing services.

Chart 2.3

SELECTED GROUPS OF GOODS EXPORTS HIGHLY EXPOSED TO RUSSIA AND BELARUS

(X-axis: the share of the respective group of goods in the total exports to Russia and Belarus; %; Y-axis: the share of the Russian and Belarusian direction in exports of the respective group of goods; %; the circle area = relative importance in Latvia's total exports)

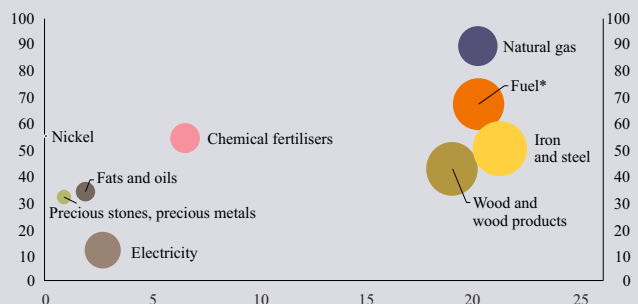


It is mainly commodities that Latvia imports from Russia and Belarus; moreover, Russia plays a predominant role in providing fossil fuels to Latvia. Over the past five years, 89% of natural gas has been imported from Russia, and a large part of fuel products also come from Lithuania, which processed Russian oil. Since the beginning of Russia's military aggression, Lithuania both as a country and the owner of the oil refinery has stated its readiness to fully replace supplies of Russian oil and natural gas with imports from other countries. Although Latvia imports all the natural gas it needs, an alternative to Russian natural gas supply is available from Klaipeda liquefied natural gas terminal whose capacity corresponds roughly the consumption in the Baltic States. This year, pumping of natural gas into the Inčukalns storage facility has been started earlier than usual, as well as purchases of liquefied natural gas ensuring its availability to meet the needs of the economy have been gradually made. Part of the mineral fertilisers, metals and other raw materials imported by Latvia from other countries originate in Russia or Belarus or they are made of Russian or Belarusian commodities, and Latvia will also continue to encounter problems concerning rearrangement of their supplies.

Chart 2.4

SELECTED GROUPS OF GOODS IMPORTS HIGHLY EXPOSED TO RUSSIA AND BELARUS

(X-axis: the share of the respective group of goods in Latvia's total imports from Russia and Belarus; %; Y-axis: contribution of Russia and Belarus to imports of the respective group of goods imports; the circle area = relative importance in Latvia's total imports)



* To reflect imports of fuel of Russian origin, fuel imports from Lithuania have been added to those from Russia.

Services provided to or by Russia and Belarus are closely related to goods trade dominated by transport and production services. Most of Latvia's transit services (rail and port freight) provided to Russia and Belarus by 2021 followed a gradual downward trend (a decline of around 60% since 2013).

⁸ According to Latvijas Banka's assessment, re-exports to Russia may be underestimated, considering the fact that company-level data on external trade do not identify re-exports in the event that transactions between businesses, following goods imports and prior to their exports, have been made domestically.

The unacceptable aggression of Russia in Ukraine and the support provided by Belarus to Russia go hand in hand with suspension of economic cooperation and economic relations with the aggressors. Permanent cessation of Latvia's export transactions with Russia and Belarus (exports of goods and services accounted for 4.3% of GDP in 2021) would slow down Latvia's economic growth, but this would not lead to recession. The results generated by the DSGE⁹ model show that Latvia's economic losses would be close to 2% of real GDP during the first year on the assumption that exports to the above countries cease, but half of the production is absorbed by other markets within the first year. However, the firms' ability to refocus their activity would gradually lessen the negative effects, amounting to just 0.5% of real GDP within three years.

The negative impact will materialise not only directly through the suspension of Latvia's export transactions but also indirectly through scaling back economic cooperation between other EU countries and their allies¹⁰ and Russia and Belarus. This will be ramped up by the shrinking Russian economy and its domestic demand. This will also put a downward pressure on demand in the countries that have not imposed sanctions on Russia and Belarus, since they are also part of global production chains.

The level of direct exposures by Latvian credit institutions to Russia, Belarus and Ukraine is overall low; moreover, it has fallen significantly since 2015 when credit institutions' exposure to the region reached its peak. In January 2022, the above investment represented only 0.8%¹¹ of total assets (mainly loans and modest amounts of claims on credit institutions) and 1.5% of liabilities (mainly deposits). This compares with 3.7% and 5.9% respectively in 2015. Although direct exposures by some Latvian credit institutions to Russia, Belarus and Ukraine are notable, these credit institutions represent a small share of the credit institution sector as a whole. Thus, the Latvian credit institution sector is not expected to see significant direct effects. At the same time, the geopolitical situation may affect the profitability of credit institutions indirectly via the confidence and macroeconomic channels, with negative implications for credit risk, profitability and lending to the economy. Overall, the resilience of the credit institution sector to potential shocks remains good.

⁹ Bušs, Ginters, Grüning, Patrick (2020). Fiscal DSGE Model for Latvia. Latvijas Banka Working Paper No. 5/2020.

¹⁰ The US, the United Kingdom, Canada, Japan, Korea, Norway and Australia

¹¹ 1.2% of assets, if information on the beneficial owner is taken into account.

5. Labour Market, Costs and Prices

The Covid-19 restrictions and the requirement to have a Covid-19 certificate for on-site workers had a minor effect on the labour market; however, it may be strongly influenced by the limited operations of individual businesses cutting trade ties with Russia.

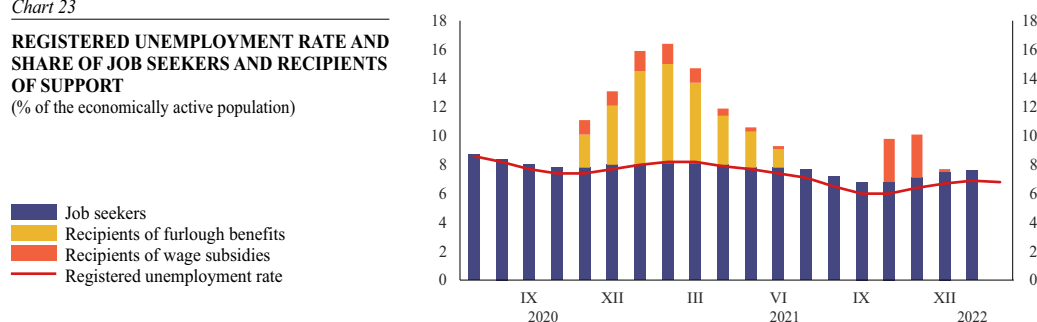
Labour demand in Latvia remained high at the end of 2021. In fact, even during the state of emergency and given the employment constraints in place due to the requirement to have a Covid-19 vaccination or recovery certificate, unemployment rose only marginally, representing an overall quarter-on-quarter decline.

In the fourth quarter of 2021, the unemployment rate fell to 7.1% of the economically active population, reaching 7.6% overall in annual terms. At the same time, the data from the State Employment Agency on registered unemployment in February 2022 suggest a drop to 6.8% (seasonally adjusted data on the registered unemployment rate signal an even faster decrease).

More stringent rules, including a requirement for a Covid-19 vaccination or recovery certificate, were introduced in public administration and for on-site workers at the end of 2021. Already the first data on employment in public administration suggested that the impact on the unemployment rate would be minimal. Private sector businesses were also able to adapt as employees made progress with vaccinations and new ways of their employment (e.g. working remotely) were found. Thus, the increase in the unemployment rate was insignificant, despite these requirements. At the same time, the impact of the state of emergency on the rise in unemployment was mitigated by the fact that the period of tight restrictions was relatively short and the government support was available, i.e. approximately 30 thousand people (3.5 % of the economically active population) received wage subsidies in the fourth quarter.

Chart 23

REGISTERED UNEMPLOYMENT RATE AND SHARE OF JOB SEEKERS AND RECIPIENTS OF SUPPORT
(% of the economically active population)



Meanwhile, the perception of the unemployment rate has changed significantly due to the war in Ukraine in 2022. Labour demand in Latvia remains high. Many businesses also express their readiness to employ refugees of the Russia-Ukraine war (according to the data from the State Employment Agency as at 13 March 2022, already more than 500 businesses overall offered more than 4.2 thousand vacancies to refugees). However, over the coming months the foreign trade restrictions and the breaking of the economic ties with Russia might adversely affect both the demand for goods and services produced and provided by individual businesses and the opportunities to provide the raw materials needed for the production, thus exerting pressure on some businesses to reduce or terminate their activities and lay off workers. Although it is not a mandatory requirement for the war refugees to register as unemployed to seek a job, they might well contribute to higher unemployment levels. The unemployment forecasts for 2022 and 2023 have been revised upwards to 8.1% (+1.0 percentage point) and 7.1% (+0.3 percentage point) respectively, while the one for 2024 has been revised downwards to 6.0% (-0.6 percentage point) as the economy adapted to the new circumstances.

The strong wage growth will follow a robust path as structural imbalances in the labour market persist, even with the unemployment rate rising.

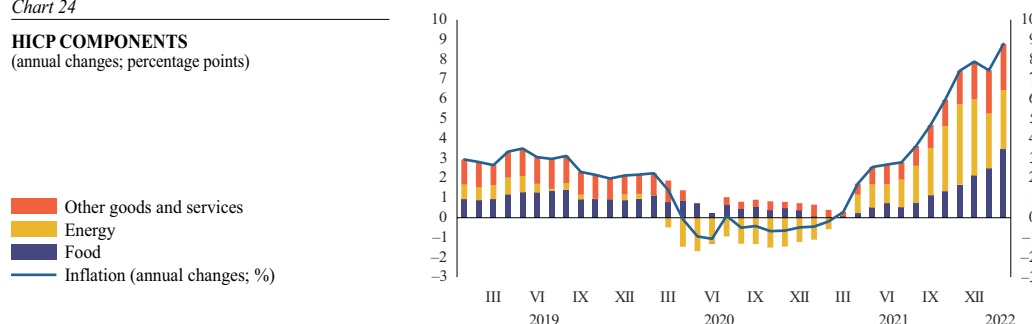
Last year, Latvia saw rapid wage increases both in the private and public sectors. In 2021, the average gross wage grew by 11.8%, reaching 1277 euro per month.

Those employed in the health care sector enjoyed the fastest remuneration growth, and this sector also experienced an increase in the number of employees. The number of full-time employees also edged up in the sectors like mining and manufacturing, as well as information and communication services, but wage rises there were more moderate. Other sectors recorded increases in wages over the previous year, but the work was carried out by fewer employees. Although the rise in the unemployment rate triggered by the Russia-Ukraine war and additional opportunities to employ the war refugees reduce labour market tightness, both regional disparities and skill mismatches between skills offered and skills needed still persist. Due to more rapid wage increases in 2021 and persistent wage pressures, the wage growth forecast for 2022 has been revised upwards to 9.7% (+1.2 percentage points), although this rise is lower than if the economy had not faced the devastating effects of the war in Ukraine. The wage growth forecast for 2023 has been increased to 6.4% (+0.3 percentage point). The wage rise is expected to moderate somewhat (+5.7%; -0.2 percentage point) in 2024 due to the base effect.

The rapid surge in the prices of a wide range of goods and services is reinforced by additional pressures on the soaring global energy and food prices from the ongoing war in Ukraine.

Chart 24

HICP COMPONENTS
(annual changes; percentage points)



With inflation rates picking up, average annual inflation (calculated based on HICP) increased by 3.2% year-on-year at the end of 2021. At the same time, in early 2022 inflation was held back by the government support measures that dampened consumer spending on the use of some energy resources (the annual HICP growth rate stood at 7.5% in January, but 8.8% in February). Although sharp price increases were recorded for a very broad range of goods and services, the rise in inflation was mainly fuelled by the surges in food and energy prices. Moreover, following the outbreak of the war in Ukraine, the prices of these resources in the global markets have picked up again. The forecast for oil and gas prices for 2022 has been revised upwards, also leading to increases in the prices of other energy resources and, over the medium term, to those of other goods due to higher production and transportation costs.

Services prices have evolved along the expected path, posting a year-on-year rise (4.8%) in February. The restrictions on the number of customers and the so-called "green pass" restrictions affected the costs of services per customer. With the rules being eased from March 1, the pressure on the rise of services prices will also diminish. Service providers are also affected by soaring energy prices, although they are typically affected less than producers of goods.

Chart 25

DECOMPOSITION OF HICP CHANGES
(over 12 months; by 163 product groups; %)

90% of products
75% of products
50% of products
HICP
Fuel

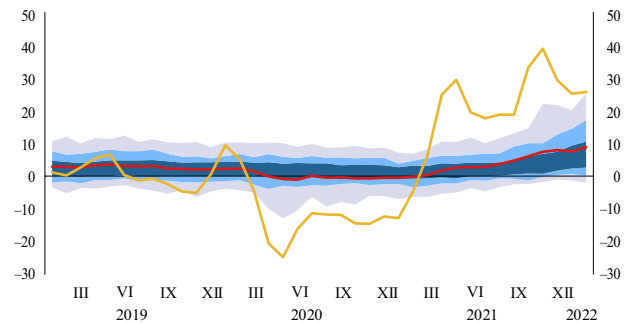
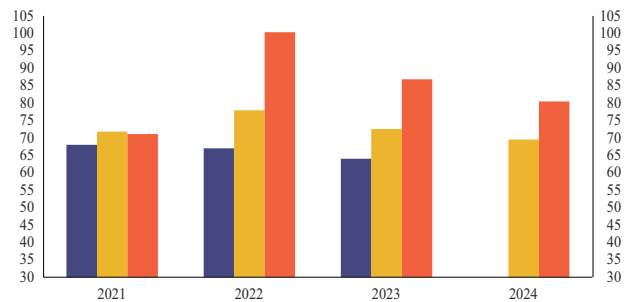


Chart 26

OIL PRICE FORECAST
(Brent crude oil; on average per year; US dollars per barrel)

September 2021
December 2021
March 2022

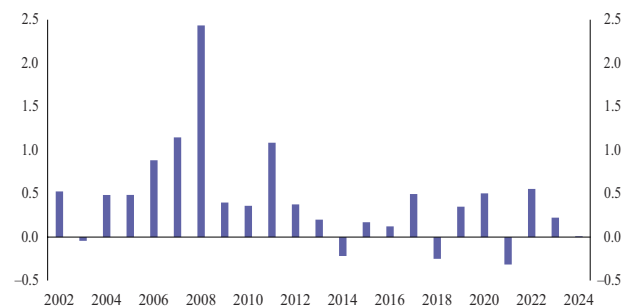


Low-income households spend a higher proportion of their budgets on food and utilities. In 2022, the prices of these groups of products will record the most notable surges; therefore, low-income households will experience higher inflation rates. However, 2022 is expected to see rises in the prices of a wide range of products. As a result, in 2022 households in the first quintile (lower income households) may see 0.6 percentage higher (but not significantly higher) inflation than those in the fifth quintile (higher income households). Higher inflation (by 0.6 percentage point in 2022) might be faced by pensioner households (compared with households working for a wage).

Low-income and pensioner households perceive inflation to be systematically higher than the average in Latvia. Since 2001, the price level of consumer goods purchased by low-income households (Quintile 1) has increased much faster than that of consumer goods purchased by high income households (Quintile 5; by 103% and 86% respectively). Likewise, the price level of consumer goods purchased by pensioner households has risen more than that of consumer goods purchased by households working for a wage (by 114% and 91% respectively since 2001).

Chart 27

INFLATION DIFFERENTIAL
(households with lower income (Quintile 1) – households with higher income (Quintile 5); 2022–2024: forecast)



6. Conclusions and Forecasts

While many sectors might see a strengthening of their activity as a result of the easing of the Covid-19 containment measures, the impact of the pandemic on the economic growth has been largely overshadowed by the escalation of the geopolitical situation, i.e. Russia's invasion of Ukraine. 24 February 2022 has changed the perception of the economic environment: in conditions of high uncertainty, GDP growth is estimated to moderate due to the cutting of economic ties with Russia and Belarus, lower availability of global resources and rising prices. This exerts an upward pressure on inflation – inflation is expected to reach higher levels and persist.

The GDP growth forecast for 2022 has been revised downwards to 1.8%. The negative economic impact of the escalation of the geopolitical situation will manifest itself mainly through the following channels:

- 1) falling exports to the aggressor countries;
 - 2) supply chain disruptions and seeking for alternative solutions;
 - 3) rising global prices and
 - 4) deteriorating confidence and growing uncertainty in the region.
- The shifting away from the economic cooperation with Russia and Belarus will weigh on foreign trade flows already in the coming quarters due to direct trade sanctions, settlement problems, as well as suspension of the cooperation that is not affected by sanctions.
 - The restructuring of supplies of imported commodities and components received from the countries engaged in the war through finding alternative suppliers will force some businesses to scale down production and will translate into higher prices.
 - As a result of the war, the previously rising global energy prices will stabilise at high levels. Along with substantial increases in energy and commodity prices, the terms of trade are expected to deteriorate, which can be offset by the projected pick-up in the prices of wood and grain – two products that are important for exports. The higher prices weighing on the purchasing power of households will also dampen the recovery of real private consumption.
 - More pessimistic sentiment, heightened uncertainty and higher costs are expected to lead to a strong and negative impact on investment flows. The change in sentiment will also contribute to reduced consumption.

The forecast for 2023 has also been revised downwards to 3.2%, and this is determined by the time span required for the restructuring of energy and commodity supply chains, as well as for the rearrangement of export markets. Growth is expected to accelerate (to 4.1%) in 2024, spurred by the improving sentiment of economic agents, the rebound in consumption and private investment.

Although the GDP forecast may be affected by both the growth enhancing and growth restricting factors, the risks to the economic growth forecast are overall tilted to the downside.

Upside risks to growth:

- the demand in several manufacturing sectors might be higher than in the forecasts to find substitutes for the goods from Russia, Belarus and Ukraine that are currently not available in Latvia and the Western markets, e.g. in the textile industry, the manufacture of wood and articles of wood and food products;

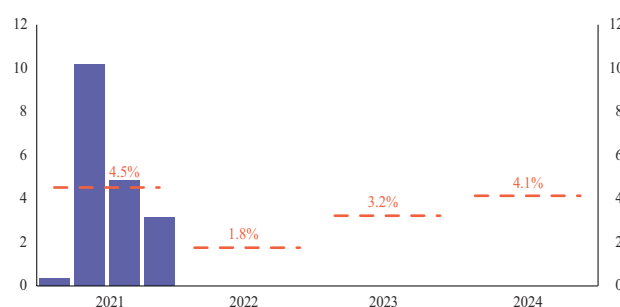
- in the short term, the flow of refugees from Ukraine may support the demand in the apartment rental market in Riga. The involvement of Latvia's population in supporting refugees may also boost consumption;
- in the long run, after the end of the war, external demand may grow faster than previously estimated, owing to the rising demand, particularly to support the reconstruction of the infrastructure and buildings in Ukraine.

Downside risks to growth:

- slower growth might be related to more significant supply chain disruptions that may arise if alternative ways of substituting some imported commodities and components are not found in a timely manner, which in turn may push several businesses to cease their activity or even force some industries such as construction, metalworking, mechanical engineering, manufacture of electrical and electronic equipment to scale back;
- it is hard to assess the impact of precautionary considerations of consumers and investors, and it may be more significant than estimated; the impact of the price surge on investment decisions may be more negative than expected, prompting postponement of projects and – in the area of private consumption – major purchases;
- a further escalation of the geopolitical crisis may amplify all the above negative shocks, thus postponing the economic recovery.

Chart 28

GDP
(at constant prices; seasonally and calendar adjusted data; 2022–2024 – Latvijas Banka's forecast; %)



Inflation growth is expected to continue in the coming months. Moreover, the rise will be steeper than previously projected on the back of the surge in global food and energy prices triggered by the Russia-Ukraine war. The impact is expected to be most pronounced in the first half of 2022. Annual inflation is likely to exceed 10% during the second quarter.

The inflation forecasts for 2022 and 2023 have been revised upwards to 9.5% and 3.7% respectively, while the inflation forecast for 2024 has remained unchanged (2.1%). The upward revision to the forecast is primarily driven by the strong increase in energy prices in early 2022 and after the outbreak of the war in Ukraine when they gained momentum. Due to rising global resource prices, the estimate of the increase in food prices has also been raised, while the estimate of the rise in the prices of industrial goods has also been increased due to supply chain bottlenecks and soaring energy prices.

The energy market is currently surrounded by considerable uncertainty, and there are sharp movements in oil and gas prices, posing upward risks to the inflation forecast. As the prices of these resources are an important component of headline inflation, uncertainty surrounding the range of inflation growth is also rising; therefore, an additional analysis of the forecast scenarios was carried out (for the analysis of scenarios, see Section 7.2).

Chart 29

HICP
(annual changes; 2022–2024 – Latvijas Banka's
forecast; %)

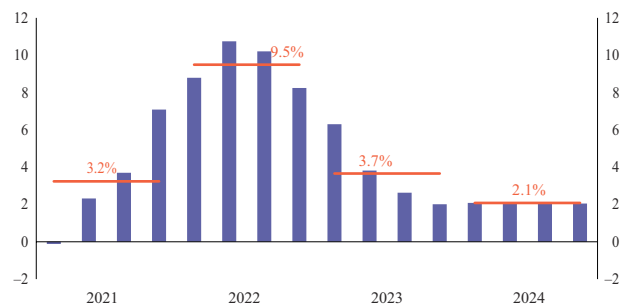


Table 2

MACROECONOMIC FUNDAMENTALS: LATVIJAS BANKA'S FORECASTS

	2022	2023	2024
Economic activity (annual changes; %; at constant prices; seasonally adjusted data)			
GDP	1.8	3.2	4.1
Private consumption	5.4	4.7	4.4
Government consumption	2.7	0.4	0.6
Investment	-0.3	4.0	5.7
Exports	-0.5	2.4	3.2
Imports	-4.7	2.7	4.1
HICP inflation (annual changes; %)			
Inflation	9.5	3.7	2.1
Core inflation (excluding food and energy)	4.1	3.5	3.7
Labour market			
Unemployment (% of the economically active population; seasonally adjusted data)	8.1	7.1	6.0
Nominal gross wage (annual changes; %)	9.7	6.4	5.7
External sector			
Current account balance (% of GDP)	0.4	-0.3	-1.0
Government finances (% of GDP)			
General government debt	48.3	45.8	43.1
Budget surplus/deficit	-5.9	-1.8	-1.1

7. Analysis of Scenarios

7.1. The impact of the energy price increase on Latvia's economy.¹²

Motivation

Even before Russia's invasion of Ukraine, energy prices globally soared quite rapidly, significantly pushing up household spending and operational costs of businesses. This was due to a number of reasons, including higher global demand for energy resources, with the economies recovering from the pandemic. Russia's invasion of Ukraine is only making matters worse as Russia is an important exporter of oil and natural gas, which affects global energy prices. The scenario analysis assumes that oil and natural gas prices will be on average 50% and 140% higher than in 2021 in the future (according to the prices of future contracts and Latvijas Banka's estimates as of 14 March 2022). Higher energy prices will also feed into higher prices of other goods and services, reducing the purchasing power of households and thus weighing on economic activity.

Further energy price developments will depend on a wide range of factors; however, prices are likely not to return to their levels of 2021 in the future. European countries, being aware of the risks arising from the dependence on Russia's resources, will be forced to seek alternatives which, for the most part, are more expensive. Therefore, to understand the impact of persistently high energy prices on Latvia's economy, Latvijas Banka has carried out a scenario analysis, using the CGE-EUROMOD model for Latvia.¹³

Simulation

The analysis assumes that oil and natural gas prices will be on average 50% and 140% higher than in 2021 in the years to come. Hence, contrary to Latvijas Banka's forecasts, it is assumed that energy prices will persistently remain at a relatively high level.

Simulation of the model

The results obtained suggest that higher energy prices will also push up the prices of other goods and services quite significantly, leading to a substantial decline in the number of goods and services people will be able to purchase. Thus, real private consumption will decline by approximately 6.5%. The deteriorating purchasing power of households will not only reduce business investment, but also businesses' demand for employees, leading to lower employment and higher unemployment.

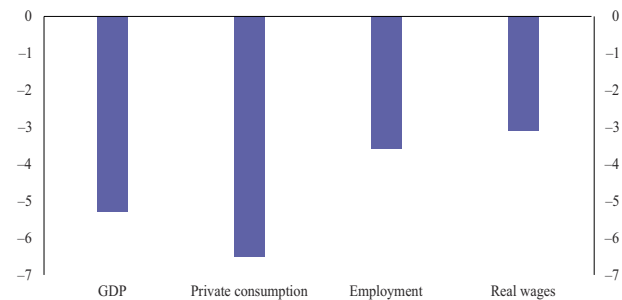
In addition to the above, it should be taken into account that the surge in energy prices will push up the cost of other goods and services and weigh on economic activity not only in Latvia, but also in other countries, including our trade partner countries. This will also contribute to a rise in import prices of other goods and services and will thereby further reduce the purchasing power of households. Moreover, economic activity abroad will also moderate, thus to some extent also reducing demand for Latvia's exports. The direct impact of the aggregate price increase on Latvia's GDP in the medium term (with the model converging to the new steady state) is estimated to be -5.3%.

¹² Prepared by Konstantīns Beņkovskis and Kārlis Vilerts, economists of Latvijas Banka.

¹³ CGE-EUROMOD is a model developed by Latvijas Banka and BICNP, combining the general equilibrium model (CGE) based on Latvia's cost and output database with the tax-benefit microsimulation model (EUROMOD) based on micro data from the EU-SILC survey. https://www.bank.lv/images/stories/pielikumi/publikacijas/petijumi/p_1_2016.pdf; <https://www.euromod.ac.uk/about/country-by-country/latvia>.

Chart 30

RESULTS OF SCENARIO ANALYSIS
(changes in selected economic indicators, assuming that oil and natural gas prices will rise significantly over the medium term; %)



Conclusions

Our estimates suggest that, with oil and natural gas prices remaining at very high levels also after 2022, the purchasing power of households and hence also economic activity would decline considerably. Over the medium term, Latvia's GDP would be approximately 5.3% lower, as compared with a case where energy prices remain at the level of 2021.

These results cannot be interpreted as a comprehensive assessment of the economic impact of Russia's invasion of Ukraine due to several reasons. First, the rise in energy prices coincides with the increase in the prices of grain and wood, which, given the positive trade balance, will have a favourable impact on Latvia's economy. Second, to mitigate the impact of the energy price surge on households, the Latvian government has provided various types of financial support, which significantly reduces the negative impact on economic activity. Third, Russia's invasion of Ukraine also affects the economy through other channels, including direct trade and confidence channels.

7.2. Impact of Russia's invasion of Ukraine on energy prices. What are the alternative inflation scenarios?¹⁴

Assumptions about energy prices have a great importance for inflation projections. We already see that Russia's invasion of Ukraine has significantly contributed to an increase in oil and natural gas prices; however, there is a risk that prices might increase further. Based on the risk scenarios prepared by the ECB and foreseeing a steeper rise in the prices of oil and natural gas¹⁵, two scenarios for inflation projections were developed in addition to the baseline scenario described in this Macroeconomic Developments Report:

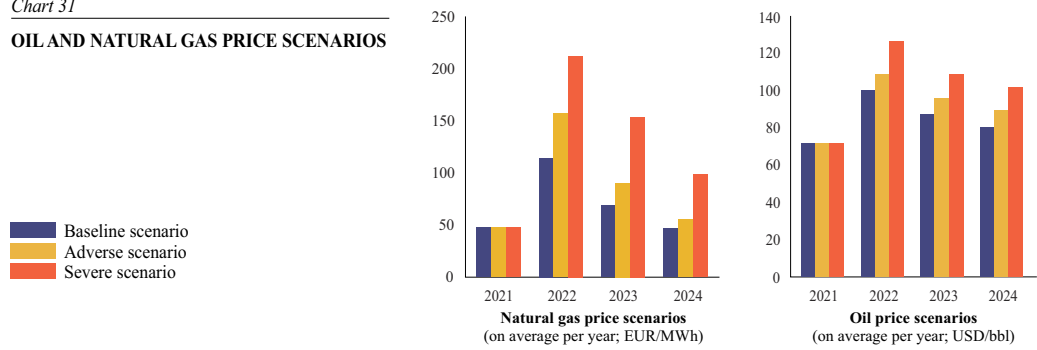
- the adverse scenario envisages possible disruptions in energy supply from Russia to euro area countries. These disruptions would contribute to faster increase in the prices of both energy products and other goods whose production can be affected by energy prices and its availability.
- the severe scenario foresees the conditions included in the adverse scenario, as well as a stronger reaction of global oil and gas prices to energy supply disruptions and difficulties the global markets face over the projection horizon in relation to energy replacement (see Chart 31).

¹⁴ Prepared by Andrejs Bessonovs and Ieva Opmane, economists of Latvijas Banka.

¹⁵ https://www.ecb.europa.eu/pub/projections/html/ecb.projections202203_ecbstaff-44f998dfd7.lv.html

Chart 31

OIL AND NATURAL GAS PRICE SCENARIOS



If the adverse scenario materialises, inflation in 2022 and 2023 would be 1.3 percentage points and 1.0 percentage point higher than in the baseline scenario respectively. Meanwhile, according to the severe scenario inflation would rise by 3.6 and 2.7 percentage points this year and next year vis-à-vis the baseline scenario, reaching 13.1% in 2022 and 6.4% in 2023 and declining to 1.7% in 2024.

Chart 32

IMPACT OF RISK SCENARIOS ON INFLATION COMPARED WITH THE BASELINE SCENARIO
(percentage points)

