LATVIJAS BANKA
EIROSISTĒMA

MACROECONOMIC DEVELOPMENTS REPORT

2022

SEPTEMBER

ISSN 1691–5925

MACROECONOMIC DEVELOPMENTS REPORT
September 2022

MACROECONOMIC DEVELOPMENTS REPORT
September 2022, No 35

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Abbreviations

€STR – euro short-term rate
AS – joint stock company
EC – European Commission
ECB – European Central Bank
EONIA – euro overnight index average
EU – European Union
EURIBOR – Euro Interbank Offered Rate
FRS – US Federal Reserve System
GDP – Gross Domestic Product
HICP – Harmonised Index of Consumer Prices
IMF – International Monetary Fund
SEA – State Employment Agency
US – United States of America
VAT – value added tax

Additional information

Unless specified otherwise, the cut-off date for the information used in the publication Macroeconomic Developments Report (September 2022, No 35) is 12 September 2022. The cut-off date for the information used in the forecasts is 12 September 2022, and 15 August for the information used in some technical assumptions.

Data sources for charts are Bloomberg (Charts 1 and 5–9), Refinitiv (Charts 2, 10 and 14), the EC (Charts 3, 4, 20, 27–29, 33, 36 and 2.1–2.7), Latvijas Banka (Charts 5, 11–16, 18, 20, 23, 25–28, 1.1, 33–35, 2.3–2.5, 2.7 and 37–41), the Central Statistical Bureau (Charts 12, 15, 18–20, 22–26, 28 and 30–32), the Treasury (Chart 17), SIA ARCO REAL ESTATE (Chart 21), the State Unified Computerised Land Register (Chart 21), the World Trade Organisation (Chart 29), Brent (Chart 34), Title Transfer Facility (Chart 35), the ECB (Chart 2.4) as well as the Ministries of Economics, Welfare and Finance (Chart 37).

Statistical data are available at: https://www.bank.lv/en/statistics/stat-data/key-macroeconomic-indicators.

Topical issues in brief

The rise in energy and food prices triggered by the war, as well as the disruption of gas supply in Europe have led to sharp inflation hikes. Hence, the inflation forecast for Latvia has also been revised upwards.

The high inflation dampens growth across the world, including Latvia. As the population's purchasing power and consumption decline, a short-lived recession is impending.

Central banks, including the ECB, are on the way to removing monetary policy accommodation.

Inflation in Latvia exceeds the euro area average, reflecting a higher share of food and energy in consumption, a sharper increase in their prices as well as in wages.

Exports are constrained by weaker demand, falling wood prices and large stocks of raw materials.

The tight labour market will mitigate the impact of the crisis on unemployment and maintain wage increases in companies even in the context of rising energy costs.

Government support and spending of household savings will partly absorb the effects of the energy price crisis on the economy.

The issues of energy independence and energy efficiency have become more relevant.

1. External Demand

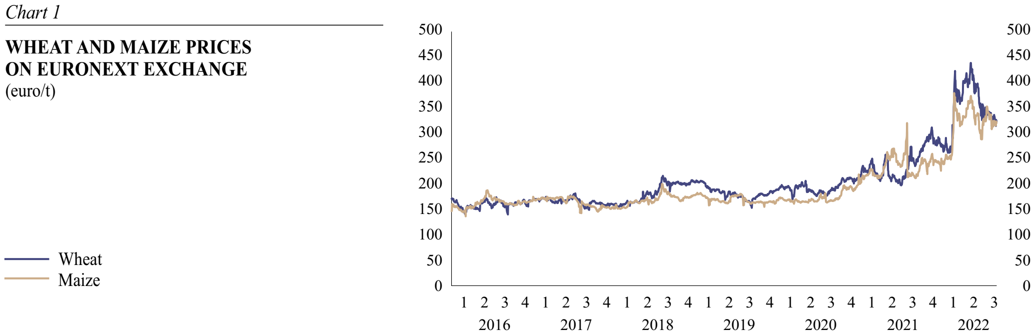
High inflation has become the main downside risk to growth. Lower imports of natural gas from Russia and record-high prices create uncertainty about both prospects for economic activity and the heating season in Europe. Meanwhile, limited exports of agricultural commodities from Russia and Ukraine contribute to food price inflation. High energy and food prices limit household consumption and create an undesirable risk of de-anchoring of inflation expectations, forcing central banks to tighten their monetary policy. According to the IMF, significant downside risks to growth also include China's zero-Covid policy and the crisis in China's real estate sector, as well as a higher risk of default in developing countries, driven both by high food prices and higher interest rates due to tighter monetary policy of major central banks. The war in Ukraine and the escalated relations between the US and China pose significant geopolitical risks that may result in further adjustments to the development of the global economy.

According to the latest forecast of the IMF[1] published in July 2022, global growth will reach 3.2% this year, i.e. 0.4 percentage points less than projected in April. It will slow down further to 2.9% in 2023 (a negative revision of 0.7 percentage point). Meanwhile inflation could reach 8.3% in 2022 and 5.7% in 2023 (0.9 percentage point higher than projected in April). In emerging market and developing economies, where energy and food expenditure accounts for a larger share of the consumption basket, inflation is expected to be higher in 2022 and 2023 than in developed countries.

Energy and food prices remain stubbornly high. Although the price of natural gas on the Dutch TTF trading point stabilised around EUR 80–100 per MWh in May and June, later it rose rapidly, reaching even more than EUR 300 per MWh. The main reason for these fluctuations is the growing concerns about the ability of European countries to fill sufficient gas reserves for the upcoming heating season, with Russia constantly reducing supply volumes. These concerns reached another turning point in early September, when Russia completely stopped supplies via Nord Stream 1 pipeline and announced that the resumption of supplies is possible only if the EU sanctions put in place after the beginning of the war were lifted. The current level of natural gas prices is about 18 times higher compared to September 2019[2], although it is also characterised by a very high volatility in response to the incoming information on the sufficiency and availability of natural gas.

Chart 1

WHEAT AND MAIZE PRICES ON EURONEXT EXCHANGE
(euro/t)

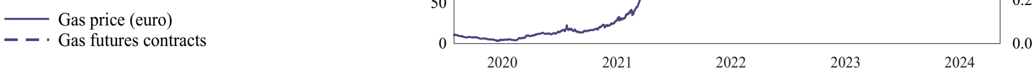


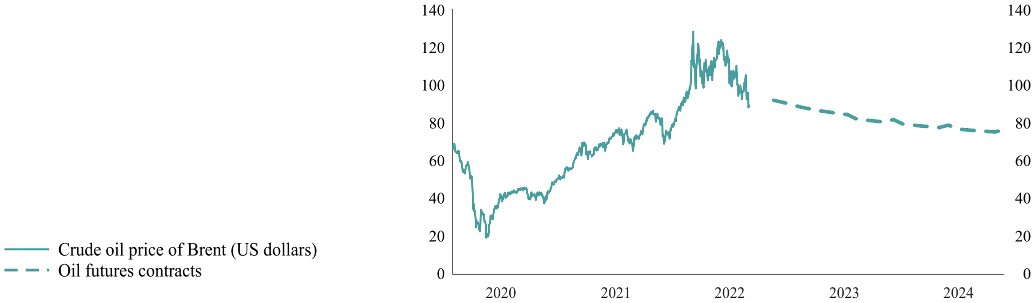
In the oil market, however, the situation is much less dramatic. Consumer sentiment there was more positive on account of the oil prices falling to pre-war levels (around USD 90 per barrel), driven by the rising global economic recession expectations. This happened despite the agreement reached by the EU countries to ban Russia's oil imports by sea at the end of 2022. Lower oil prices are reflected in cheaper fuels, easing inflationary pressures. As Ukraine's grain exports partly resumed, wheat and maize prices also fell, but they remained high at around 14% above pre-war levels.

[1] International Monetary Fund. World Economic Outlook Update, July 2022.
[2] Based on monthly averages (in 2022, from 1 to 8 September inclusive).

Chart 2

GAS PRICES ON DUTCH TTF TRADING POINT AND BRENT CRUDE OIL ACTUAL AND FUTURE PRICES
(euro/MWh; US dollars/barrel)





The US economy continues to be underpinned by sustained demand and strong labour market; at the same time, it is also experiencing high inflation. Although the US is not directly dependent on Russia's natural gas, the increase in consumer prices reached its highest level over the last 40 years in June (9.1% in annual terms) and fell to 8.5% in July. The economic growth rate was negative in both the first and the second quarter (–0.4% and –0.2% quarter-on-quarter[3]), but on its own this indicator may provide an incomplete picture of the dynamics of the real economy. Private consumption increased by 0.5% and 0.4% quarter-on-quarter respectively, while investment grew by 1.2% and –3.5%. Changes in inventories and external balance also play a role. Changes in inventories have been negative in both quarters of this year, reducing GDP growth rates by 0.1 and 0.5 percentage points respectively. This could be explained both by supply chain disruptions (unfinished goods are not included in inventories) and by strong restocking in the last quarters of 2021. Instead of GDP growth, the FRS in its comments refers more frequently to the strong labour market data: the unemployment rate remained historically very low (3.7%) and employment continued to grow in August. High inflation and a strong labour market have enabled the FRS to increase the federal funds rate cumulatively by 225 basis points this year. Further hikes are expected. The IMF forecasts that the US GDP will increase by 2.3% in 2022 and 1.0% in 2023.

China's zero-Covid policy, challenges in the real estate sector and relatively low inflation allow its monetary policy to move in the opposite direction from the one prevailing globally. The People's Bank of China has decided to cut its interest rates. This could be explained both by the crisis in the real estate sector, which started in 2021 when the largest real estate developer Evergrande had difficulties covering its liabilities, and the ongoing Covid-19 outbreaks that lead to mass testing and local lockdowns. This, in turn, leads to a decline in manufacturing output and hinders the functioning of global supply chains. Covid-19 had a particularly strong impact on growth in the second quarter of 2022, when GDP increased by only 0.4% year on year (–2.6% quarter on quarter). Retail trade turnover in April and May was 11.1% and 6.7% lower than a year ago respectively, but with a gradual improvement of the epidemiological situation in July the annual growth reached 2.7%. China's economy grew by 2.5% in the first half of 2021 year on year, and most analysts

[3] In the United States, the quarterly growth rates are officially published in annual terms. To improve comparability with showings of other countries, all quarterly growth rates in the US have been recalculated from annual terms to quarterly terms. This report presents all quarterly growth rates in quarterly terms.

believe that China will not achieve the government's 5.5% yearly GDP growth target this year (the IMF's June forecast for China is an increase of 3.3%). Economic difficulties in China significantly slow down the growth of the global economy through a weaker supply.

Japan's recovery after the pandemic is more stable but at the same time more temperate. The GDP remained almost unchanged in the first quarter of 2022, but in the second quarter it increased by 0.9% quarter on quarter. Private consumption increased by 0.3% and 1.2% respectively, while the external sector did not provide a significant support; this is partly explained by the slowdown in China. Both in Japan and China, inflation remains much lower than in the rest of the world. Weaker consumption and cultural background do not allow producers to raise prices faster; therefore, the annual consumer price inflation was only 2.6% in Japan and 2.7% in China.

In the euro area, strong recovery in the first half of the year is overshadowed by recession expectations. Despite the geographical proximity of the war, the euro area economy convincingly expanded after the easing of Covid-19 restrictions, rising by 0.7% and 0.8% quarter on quarter in the first two quarters of 2022. In the first three months, trade balance provided the largest contribution to growth (0.65 percentage point). This was mainly due to a very large surplus in Ireland, where exports of multinational corporations have a strong impact. In the second quarter, growth was much more evenly distributed across Member States, with private consumption accounting for 0.6 percentage point.

Deferred consumption as Covid-19 restrictions eased provided an additional boost to inflation, consumer prices being 8.9% higher in July than a year ago. 4 percentage points of this figure were driven by energy, 2 percentage points by food and the rest – by goods and services. Core inflation also accelerated, reaching 4%. Concerns about high energy bills and geopolitical instability are the main reasons why the Consumer Uncertainty Sub-Index reached its historic peak in March and continues to grow also in August. On the other hand, economic sentiment indicators have declined significantly.[4] So far, the only substantial evidence of slower expected growth in the third quarter is provided by the Purchasing Managers' Index (PMI) fallen below 50 in July and August, pointing to a decline in economic activity month-on-month (keeping in mind that part of the PMI is still constituted by the sentiment assessment).

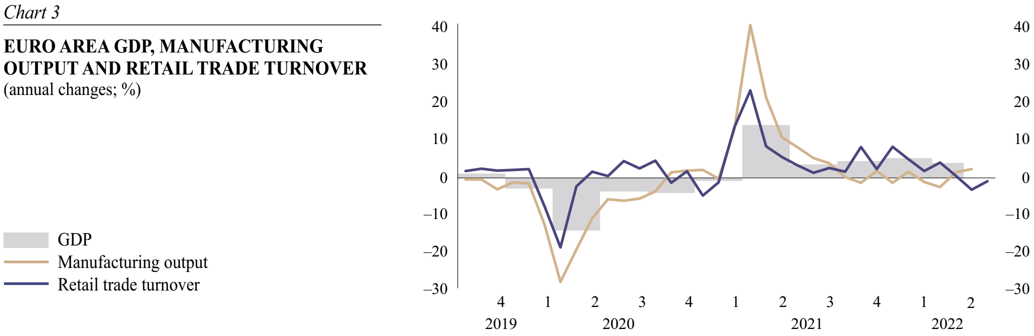
In response to the high inflation, the ECB raised its policy rates by a total of 125 basis points at its July and September meetings. In the latest projections published in September, the ECB forecasts the GDP increase of 3.1% in 2022, 0.9% in 2023 and 1.9% in 2024. Inflation is expected to reach 8.1%, 5.5% and 2.3% respectively. Compared to the June forecast, the annual growth rate of 2022 has been revised upwards by 0.3 percentage points (due to a faster-than-expected growth in the first half of the year), but lowered in 2023 (–1.2 percentage points) and 2024 (–0.2 percentage point) due to high inflationary pressures weighing on consumption, disruptions in supply chains and gas supplies, and a weak sentiment. At the same time, inflation is projected to be higher than expected in June by 1.3, 2.0 and 0.2 percentage point respectively, with energy and food exerting longer-persisting pressures on prices, with spillovers to other sectors.

The ECB has also prepared a downside scenario, which assumes almost a full cut-off from Russia's gas supply and inability to replace it with other supplies, an extremely cold winter and limiting industrial capacity to save energy, as well as significantly higher energy and food prices. This scenario expects a drop in output in 2023 (–0.9% year on year) and expansion in 2022 and 2024 (2.8% and 1.9%).

[4] Business and Consumer Survey (August 2022).

Chart 3

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

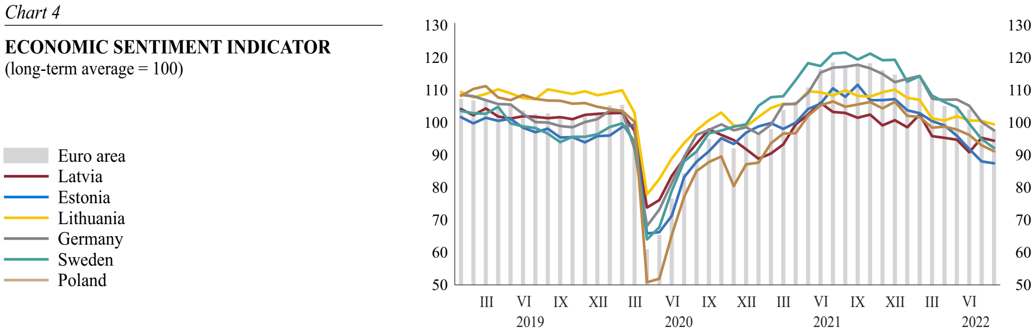


Inflation in the Baltic countries, the highest in the EU, weakens economic activity to the point of recession*[5]*. After the first quarter of 2022, Lithuania's relatively strong economic growth declined in the second quarter. In Estonia, the weakening of the economy has already been evident since the beginning of the year. This was determined by the impact of the war initiated by Russia, with the decrease in trade with Russia as well as the rise in energy prices, leading to very high inflation, which is significantly higher in the Baltic States than in the rest of the EU. At the end of the year, an economic recession is projected in both Estonia and Lithuania, reducing the growth of the two Baltic States in 2022. Although in the year as a whole growth is observed due to the successful first half of the year, it is significantly lower than previously. Significantly more pessimistic growth is projected for 2023, with a decelerating growth rate in the first half of the year. Inflation in the Baltic countries is projected to decline in 2023 and a gradual normalisation of fossil fuel prices will facilitate the recovery towards the end of the year.

The high energy prices and the deteriorating sentiment of economic agents suggest a recession also in other major trade partner countries in the second half of 2022. In the first quarter, the economic growth of Germany was slightly above the rate projected previously, but already in the second quarter it fell slightly below the forecasts of the Deutsche Bundesbank, with the economy growing only marginally quarter on quarter. As a result of rising energy prices, Germany, which has largely depended on Russia's natural gas, recorded a deficit in its external trade balance for the first time. Both the high energy prices and a weaker global demand scale down production, thus leading to a decline in exports. At the same time, imports will also weaken due to the high energy prices, along with a decreasing domestic demand.

Chart 4

ECONOMIC SENTIMENT INDICATOR
(long-term average = 100)



Sweden has sustained its economic growth in the first two quarters of 2022. In the second quarter, it grew faster than previously expected, with a slight improvement in the annual GDP growth forecast, while 2023 is expected to be worse. The beginning of 2022 has marked a recovery from the pandemic in the economy, along with an increase in demand. Given that the supply, in part, falls short of demand due to rising energy prices and disruptions in supply chains, like elsewhere in Europe, higher than expected price increases

[5] In the preparation of the analysis of economic growth in Latvia's trade partner countries, the forecasts of the central banks were used.

have been observed. Sweden's economy is facing a recession in the future, with a recovery expected in the second half of 2023.

The UK is experiencing challenges similar to the rest of Europe, with the GDP falling slightly in the second quarter after rising at the beginning of the year. The trade volume is declining, while the value of exports and imports increases on account of prices. As the real income and demand dwindle, a recession is expected at the end of the year, significantly deteriorating the GDP forecast for 2023, and economic recovery is not expected until 2024.

Russia's economy is experiencing a more moderate downturn instead of the projected huge decline. With the continuation of the war in Ukraine initiated by Russia and the introduction of sanctions, Russia's trade with Western countries is encumbered in many product groups, however, the value of energy exports has increased significantly. The high prices and the dependence of European countries on Russia's natural gas, which cannot be easily replaced in the short term, suggest that trade in energy is still ongoing. Trade in other product groups also has not stopped completely; for example, Latvia's exports to Russia have even increased slightly. In the future, however, the trade volumes will decrease when reaching the deadlines for the full entry into force of sanctions and gradually replacing Russia's products with imports from other countries. This will reduce the income of Russia. Economic downturn is also projected in 2023, with a slight economic recovery in 2024, but not returning to pre-war levels for a long time ahead.

2. Financial Conditions

In response to the soaring inflation, major central banks have begun rapidly removing their previously particularly accommodative monetary policies since the end of March. The FRS and the Bank of England continued to raise their policy rates. After the end of net asset purchases, the ECB also increased its monetary policy rates. At the same time, despite the skyrocketing global commodity and energy prices, the Bank of Japan does not expect inflation in Japan to stay high for long and continues with its particularly accommodating monetary policy.

2.1 Decisions of the ECB and other major central banks

The Governing Council of the ECB has continued with decisive normalisation of its monetary policy since the end of March. Net asset purchases under the Asset Purchase Programme (APP) ended at the beginning of July. The Governing Council decided on the lift-off of the key ECB interest rates, implementing a 50 basis points raise at the July meeting, in line with its previous signals and forward guidance, yet at a faster rate than priced in by financial markets. This decision was made seeing that inflation rates continue to reach new peaks. In September, the Governing Council increased the key ECB interest rates by a further 75 basis points. Consequently, the interest rate on the deposit facility, the main refinancing operations and the marginal lending facility have reached 0.75%, 1.25% and 1.50% respectively. The Governing Council also notified that it would continue to raise interest rates over the next several meetings, yet any future decisions on the scale would follow a meeting-by-meeting approach. In addition to that, a new non-standard monetary policy instrument, the Transmission Protection Instrument (TPI), was also announced at the July meeting, which will ensure a smooth transmission of the monetary policy stance across all euro area countries during the monetary policy normalisation. From the Governing Council's point of view, singleness of its monetary policy is a precondition for the ECB to be able to deliver on its medium-term price stability mandate. The TPI is an addition to the Governing Council's toolkit and can be activated to counter unwarranted, disorderly market dynamics that pose a serious threat to the transmission of monetary policy across the euro area. The scale of TPI asset purchases depends on the severity of the risks facing monetary policy transmission. Purchases are not restricted ex ante. In any event, the flexibility in reinvestments of redemptions coming due in the pandemic emergency purchase programme (PEPP) portfolio remains the first line of defence to counter risks to the transmission mechanism related to the pandemic.

After the Governing Council's September meeting, ECB's President Christine Lagarde indicated that, while buoyant tourism has been supporting economic growth during the third quarter, the economy can be expected to slow down substantially over the remainder of this year. There are four main reasons behind this. First, high inflation is dampening spending and production throughout the economy, and these headwinds are reinforced by gas supply disruptions. Second, the strong rebound in demand for services that came with the reopening of the economy will lose steam in the coming months. Third, the weakening in global demand, also in the context of tighter monetary policy in many major economies, and the worsening terms of trade will mean less support for the euro area economy. Fourth, uncertainty remains high, and household and business confidence is falling sharply. With regard to risks to the growth of the euro area economy, it is noted that, in the context of the slowing global economy, risks to growth are primarily on the downside, in particular in the near term. At the same time, the risks to the inflation outlook are primarily on the upside. In the same way as for growth, the major risk in the short term is a further disruption of energy supplies.

Analysts forecast that the interest rate on the ECB's deposit facility could rise to 1.50% in early 2023 and the main refinancing rate could climb to 2.00%.

At the same time, in early September financial markets priced in a potential rise to 2.30% over the next 12 months for the ECB's main refinancing rate.

Chart 5

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

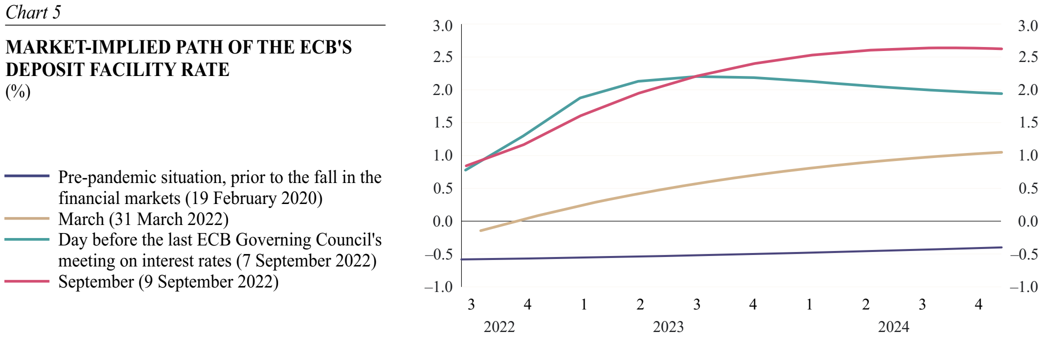
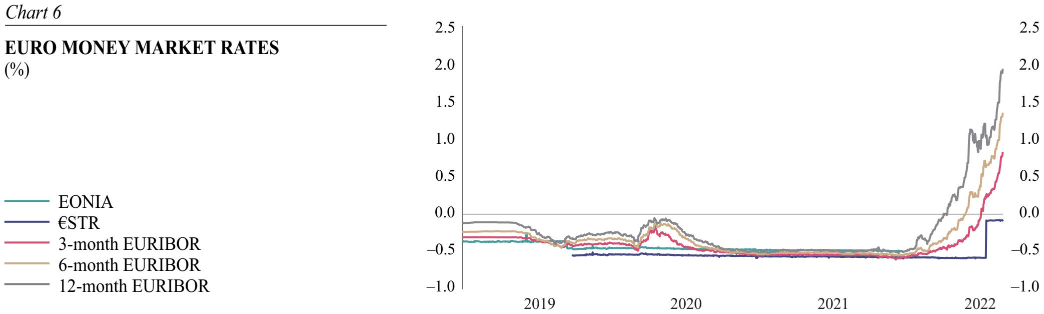


Chart 6

EURO MONEY MARKET RATES
(%)



The FRS continued to raise the target range for the federal funds rate. At its May meeting, it increased the target range by 50 basis points, and at June and July meetings by further 75 basis points each (to 2.25%–2.50%). In addition, in early May, the FRS published detailed information on the expected balance sheet reduction. It indicated that the balance sheet reduction would primarily take place by adjusting the amounts reinvested and much more aggressively than previously expected. As of 1 June, for the FRS reinvestments of the principals of maturing US Treasury securities, the cap was set at 30 billion US dollars per month, whereas for agency debt and agency mortgage-backed securities, the cap was set at 17.5 billion US dollars per month. In September, these caps were increased to 60 billion US dollars and 35 billion US dollars respectively. The FRS also notes that, to ensure a smooth transition to the level the FRS judges to be appropriate to the financial market needs, it intends to slow and then stop the decline in the size of the balance sheet. At the same time, it is prepared to adjust any of the details of its approach to reducing the size of the balance sheet in light of economic and financial developments. With regard to the US economy, the FRS notes that the incoming data show a weakening of consumption and output. At the same time, job creation has continued to be healthy in recent months and unemployment remains low. Inflation has remained elevated, reflecting the mismatch between supply and demand linked to the pandemic, high energy and food prices, as well as broader upward price pressures.

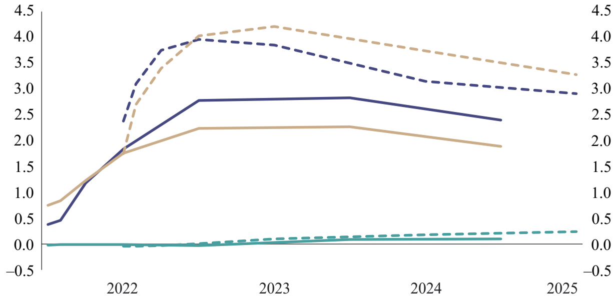
In addition, at the end of the summer at Jackson Hole's economic forum, the Chair of the FRS Jerome Powell pointed out that the FRS should continue on its course aimed at bringing inflation down to the FRS target level. He also suggested that a successful reduction in inflation is likely to result in lower economic growth, but for inflation to be normalised, policy rates should remain restrictive for some time.

On 7 September, financial markets expected the FRS target range to peak after 6 months within the current rate-hike cycle. At the same time, financial markets also expect it to be the first of the major central banks to start lowering interest rates, with the first reduction of the target range expected already after 12 months.

Chart 7

MARKET-IMPLIED CENTRAL BANK POLICY RATES
(%)

US (March 2022)
UK (March 2022)
Japan (March 2022)
US (September 2022)
UK (September 2022)
Japan (September 2022)



Like the FRS, the Bank of England continued to raise its Bank Rate. At each of its meetings in early May and mid-June, the Monetary Policy Committee (MPC) decided to increase the Bank Rate by 25 basis points, but, as inflation continued to reach new peaks, at the August meeting it decided to step up and to raise the Bank Rate by 50 basis points, to 1.75%. In its August Monetary Policy Report, the Bank of England points out that the upward inflationary pressures in the United Kingdom have intensified in the summer months. This is mainly due to the wholesale price of natural gas, which has risen sharply due to Russia's restrictions on supply. As the high wholesale prices feed through to retail energy prices, it will exacerbate the fall in the households' real incomes and further increase inflation in the near term. Inflation could remain elevated throughout 2023, before returning to the Bank of England's 2% target in a two years' time. The economic activity is slowing. The latest rise in natural gas prices has led to significant deterioration in the outlook for activity, and the UK is projected to enter into a recession in the fourth quarter of 2022.

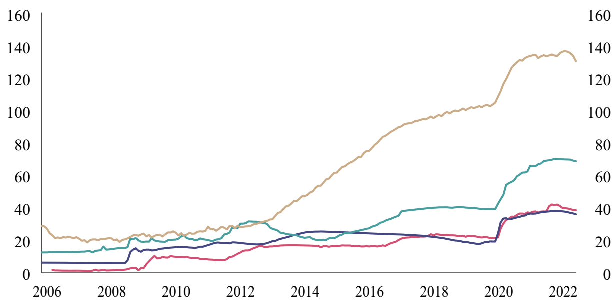
Financial markets have priced in that the Bank of England's Bank Rate could reach 4.5% over the next 12 months, representing the highest level in this policy rate hiking cycle.

The Bank of Japan is maintaining the short-term policy interest rate at –0.1% and the target level of 10-year government bond yields at around 0.0%, thereby continuing its yield curve control policy. According to the Bank of Japan, the economy is likely to continue recovering, with the impact of Covid-19 and supply-side constraints waning. At the same time, the negative effects of the downward pressure stemming from a rise in commodity prices is also noted. Financial markets expect that the Bank of Japan's target rate could be increased to 0.1% over the next 12 months, yet the management of the Bank of Japan points out that no revision of the rates is foreseen for the time being and it is committed to keeping the rates at the current level.

Chart 8

CENTRAL BANK ASSETS
(relative to GDP; %)

United Kingdom
US
Euro area
Japan

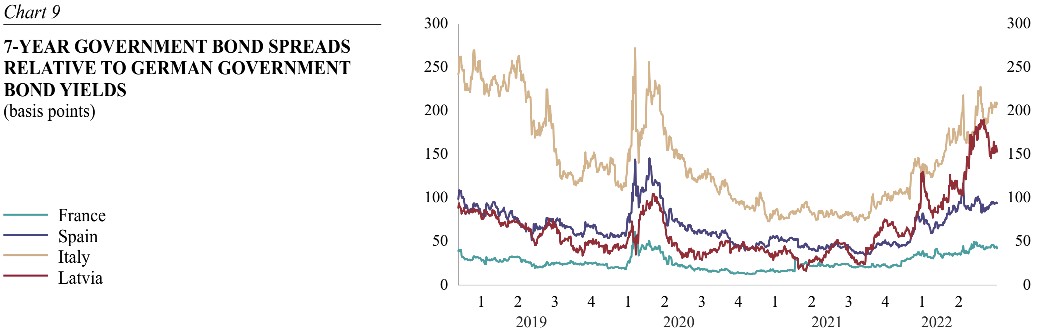


2.2 Global financial market developments

The increase in the interest rates of the major central banks was reflected in a substantial rise in government bond yields. As inflation rates continue to grow and are increasingly moving away from the targets of the major central banks, thereby increasing the risk of inflation expectations becoming unanchored, the rhetoric and actions of the major central banks aimed at containing inflation and avoiding second-round inflation effects have also become more resolute. As a result, the yields on government bonds of developed countries also rose significantly, with only a few episodes of decline, when the market participants' sentiment was clouded by concerns that the sharp increase in interest rates could lead to a slowdown in economic growth. This contributed to higher volatility in government bond markets, also affecting the deterioration of the liquidity. The yield on German ten-year government bonds increased by 109 basis points, to 1.63%, during the review period (31 March–6 September), temporarily rising even above 1.77% in mid-June and reaching the historical levels of the end of 2013. The yields on ten-year government bonds in France, Spain, Greece and Italy rose by 125 basis points, 138 basis points, 157 basis points and 194 basis points respectively. A higher increase in debt security yields in Spain, Italy as well as Greece compared to that in Germany could be explained by a more prudent investors' assessment of the sovereign debt sustainability in a context of rising interest rates. The political turmoil in Italy also contributed to an increase in the yields on its government securities. At the same time, the flexible approach to reinvesting the maturing principals of the PEPP portfolio to the benefit of the southern countries as well as the announcement of TPI prevented uncontrolled increases in the yields of the government securities in these countries. The yields on US Treasury debt securities rose more slowly this time, given that in the past they increased faster than those on German debt securities. The future evolution of the government bond yields will largely depend on the overall inflation and economic developments and on the central banks' monetary policy stance in response to these changes.

Chart 9

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



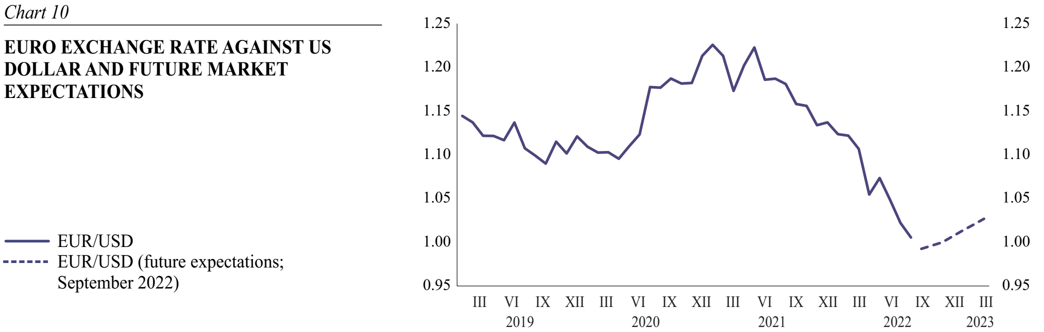
The yields on corporate debt securities also increased as well as their spreads relative to the risk-free rates. The yields in the euro area and US corporate debt securities markets generally moved in line with the sovereign bond yields. They increased significantly both for investment-grade corporate debt securities and high-yield debt securities, thus further increasing the financing costs of businesses, which in turn contributed to an increase in spreads relative to the risk-free rates, especially for high-yield debt securities. The soaring commodity prices, especially those on natural gas, also contributed to the widening of spreads in Europe. However, the borrower's default rate remains very low. With central banks winding down their government bond purchases and the yields on government bonds rising, investors' appetite for higher-risk and higher-yield corporate debt declined, which was also reflected in the rise in the yields on corporate debt securities. Moreover, the increase in yields was more pronounced in the high-yield debt securities market and it was observed across all high-yield credit rating categories. Despite the rising corporate yields, investment-grade companies continued to issue new debt securities, while the riskier high-yield companies were very reluctant to raise new market-based financing. In the coming months, the yields on corporate debt securities will remain dependent on the pace of the central banks' monetary policy normalisation, overall economic growth and commodity price developments as well as the sectoral outlook, and most likely will also remain sensitive to the incoming inflation data.

Stock markets fell, with the sharpest price declines experienced by the technologies and the health care sectors which had gained most during the Covid-19 pandemic. Following a small episode of calm in mid-summer, stock markets continued to fall. Particularly, the hawkish stance of the FRS in containing the inflation, with the policy rate lift-off on 16 March and further rapid normalisation of its monetary policy, had a negative impact on stock market sentiment. Market concerns about the rapid rise in interest rates potentially leading to an economic downturn were coupled by expectations of a gradual containment of inflation. In addition, the high energy prices, especially in Europe, exerted an additional downward pressure on stock prices. However, the fall was slowed down by the still solid earnings of the second quarter. Stock valuations in both the euro area and the United States continued to decline. The US technology industry repeatedly suffered the biggest losses. The NASDAQ-100 index characterising the US tech stock market fell by 19.1% between 31 March and 6 September. The persistently high oil prices, the uncertainty caused by the war in Ukraine and the new outbreaks of Covid-19 in China also had a negative impact on the overall sentiment and contributed to investors turning away from stocks. Stock markets remained highly volatile, with the mood swinging in a broad range within a day and the sell-off episodes replaced by price increases during the next trading sessions. The implied volatility indices, both the European VSTOXX and the US VIX, developed in opposite directions. While the European VSTOXX index declined by 1.6 percentage points compared to its spike at the end of February, the US VIX index rose by 6.4 percentage points. The EuroStoxx index characterising the euro area stock market has declined by 10.9%, whereas S&P 500 index characterising the US stock market contracted even more sharply, by 13.7%. During the period under review, only the stock prices of energy sector companies rose in the euro area (by 5.0%). The technology sector (by 16.4%), the health care sector (by 14.3%) and the insurance sector (by 13.4%) experienced the biggest decline in their stock prices. Looking at the euro area stock market at a country level, it appears that the decrease in the Italian FTSE MIB index, the German DAX index and the French CAC 40 index (by 14.2%, 10.7% and 8.3% respectively) were larger than that of the Spanish IBEX 35 index (by 7.1%). Further developments in the stock markets will continue to largely depend on the pace of economic development and on the ability of policy makers to balance decisions and measures, so that to contain the rising inflation without leading to a significant economic downturn and subsequent revaluation of financial assets. The supply of natural gas during the heating season in Europe and the possible need for coercive energy saving measures, as well as the level of the natural gas price, will also have a significant impact on the further development of stock prices.

A more aggressive US monetary policy and the natural gas price shock in Europe are putting downward pressure on the euro. From the beginning of March to 6 September, the euro depreciated further by 10.5% against the US dollar, trading below parity and reaching 0.9904 US dollars per euro. The main developments that contributed to the weakening of the euro were a faster normalisation of US monetary policy than in the euro area, leading to a widening of the difference between the two policy rates, and the exceptionally rapid increase in natural gas prices in Europe. The war in Ukraine and political problems in Italy also contributed to the depreciation of the euro. Sell-off episodes in high-risk investments (stocks) contributed to the demand for US dollars, thus weakening the euro. Analysts expect the euro to gradually appreciate to 1.03 against the US dollar by the end of March 2023. Future developments in the euro exchange rate will depend on the dynamics of the monetary policy decisions of the FRS and the ECB and future outlooks. The uncertainty and consequences of the Russian-Ukraine war on the development of the euro area and the global economy, in particular the future of gas supply in Europe, will undoubtedly also have an impact on the future prospects of the euro exchange rate.

Chart 10

EURO EXCHANGE RATE AGAINST US DOLLAR AND FUTURE MARKET EXPECTATIONS

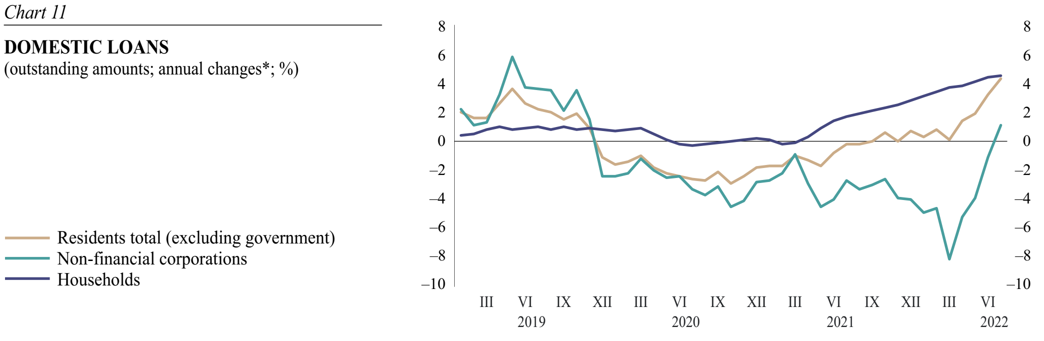


2.3 Financing conditions in the Latvian economy

The decline in the sentiment caused by the hostilities, soaring inflation and the lift-off of the euro base rates will have a negative impact on Latvia's financing conditions and long-term borrowing; the prevailing high uncertainty has already discouraged businesses from borrowing in the long term. Lending was dominated by short-term loans related to energy shortages and preparations for the heating season. Consequently, the increase in the corporate loan portfolio was driven by short-term loans to companies in the energy sector. At the same time, the growth of household loans for house purchase and consumer credit continued to be robust. The domestic loan portfolio (excluding loans to the general government) increased by 4.8% in March–July 2022, driven by both growth in household loans (by 2.6%, including a 2.4% rise in loans for house purchase and a 7.4% increase in consumer credit) and loans to non-financial corporations (by 5.5%, including a 27.6% increase in short-term loans). The adjusted annual growth rate of domestic loans (excluding loans to general government) increased to 4.3% in July, the highest level since early 2017, with the annual growth of loans to non-financial corporations (1.1%) becoming positive and the annual growth in household loans reaching 4.5% (5.0% for loans for house purchase).

Chart 11

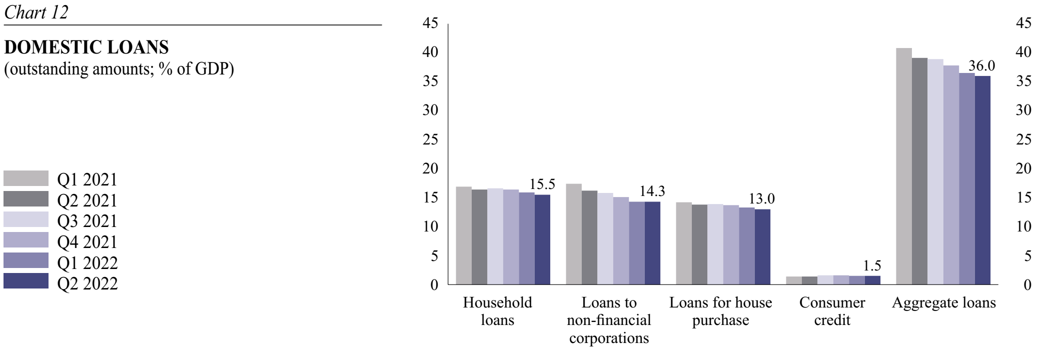
DOMESTIC LOANS
(outstanding amounts; annual changes*; %)



* For the sake of comparability, the effects related to the restructuring of the banking sector and one-off factors have been excluded.

Chart 12

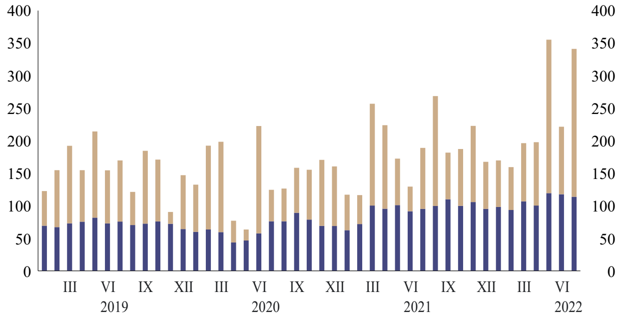
DOMESTIC LOANS
(outstanding amounts; % of GDP)



Nominal GDP growth continued to weigh on the already low ratio of domestic loans to GDP, pushing it down to 36.0% in the second quarter (37.8% in 2021).

Chart 13

NEW DOMESTIC LOANS
(flows; millions of euro)



Households
Non-financial corporations

The interest rate on corporate loans remained broadly unchanged from February to July: after falling at the beginning of the period under review, with the ECB gradually normalising its monetary policy, it returned to the previous level. The interest rate on new corporate loans in euro remained broadly unchanged (2.9% in both February and July), as it was affected by countervailing factors. On the one hand, the rising corporate demand of short-term loans for inventories and working capital had a downward effect on the interest rate on loans to enterprises. Credit institutions granted more short-term corporate loans with an interest rate lower than the long-term lending rate, including to a number of large companies with low credit risk. For example, in May 2022, AS Latvenergo concluded two short-term loan agreements for the financing of current assets and liquidity management for a total amount of 200 million euro. On the other hand, the increasing euro money market indices had an upward effect on the corporate lending rates. The uncertainty related to the Russian war in Ukraine contributed to a slight increase in the credit risk premium for long-term corporate loans during the reporting period.

In 2022 and 2023, corporate loans are at a high risk of rising interest rates. As the majority of corporate loans have been issued at a variable rate, the September decision of the ECB's Governing Council on a 75 basis points increase of the key ECB interest rates and the financial market expectations of further rate increases will quickly be reflected in the interest rates on new corporate loans and, after the next regular revision of lending rates, also in the rates on existing loans. At the same time, the negative impact of the soaring energy prices caused by the Russian military aggression may strengthen if the development or sales prospects of the Latvian economy, individual sectors or enterprises weakens and the risk tolerance of credit institutions decreases.

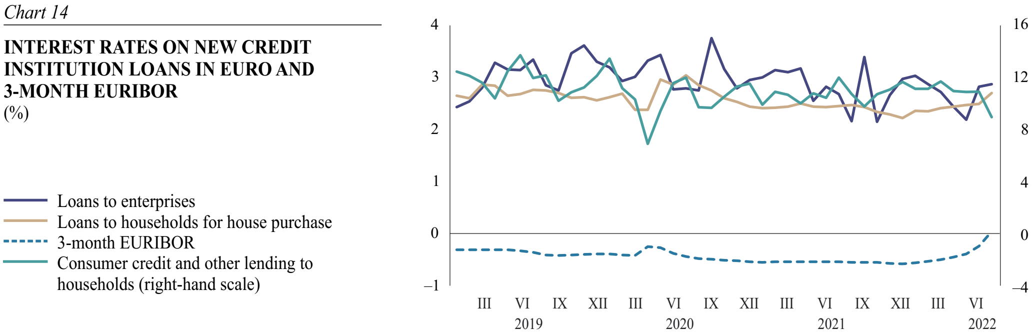
The interest rate on household loans for house purchase tended to rise as money market indices increased and the composition of lending flows changed. The interest rate on new household loans for house purchase in euro gradually increased from 2.3% in February to 2.7% in July. Since the start of spring, in the housing loan segment, mainly the interest rates on unsecured loans, usually provided for housing repairs and improvements, increased, and the overall lending composition was also influenced by the rising demand for measures to improve the energy efficiency of housing. Loans of this type often carry a higher interest rate than traditional mortgage-backed housing loans. At the end of the period under review, as money market indices of different maturities gradually turned positive, their upward effect on interest rates on housing loans strengthened. Interest rates on housing loans will continue to rise in the near future, mainly due to further ECB's monetary policy normalisation. In a context of soaring inflation, as households' real purchasing power declines and their credit risk grows, the priced in credit risk and credit risk premiums may increase.

The interest rates on consumer credit and other lending to households declined as a result of stronger competition between credit institutions and changes in the composition

of lending flows. The weighted average interest rate on consumer credit and other lending to households declined gradually over most of the period under review (down from 11.1% in February to 10.9% in June), with an exceptional fall to 8.9% in July. Stronger competition among credit institutions, as well as households giving preference to credit institutions offering more favourable interest rates contributed to the rate reduction in this lending segment. During the period under review, the conclusion of study and student loan agreements had a downward impact on interest rates in the particular lending segment. Despite a fall in the past six months, the interest rate on consumer credit and other lending to households could rise in the coming year if inflation continues to undermine households' purchasing power and increases credit risk.

Chart 14

INTEREST RATES ON NEW CREDIT INSTITUTION LOANS IN EURO AND 3-MONTH EURIBOR
(%)

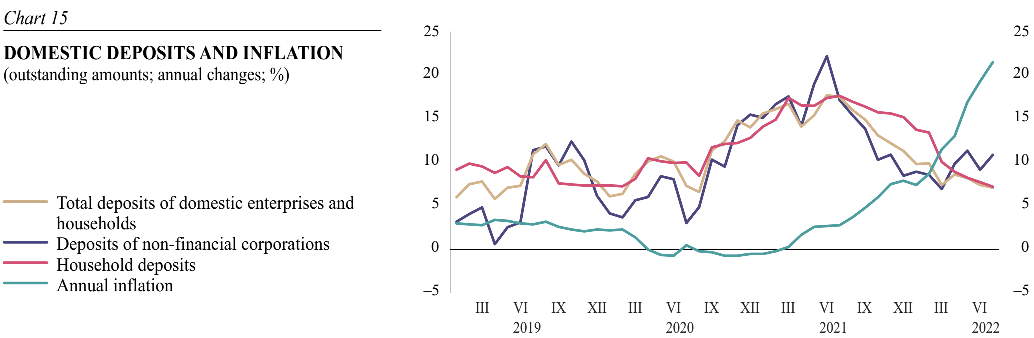


High inflation significantly increased household spending, mostly depleting the savings accumulated during the pandemic. Not only has the upward trend in household deposits observed for two years slowed down, but it has reversed even in nominal terms in recent months. With annual inflation above 20% in July, consumer spending also reduced the total stock of domestic deposits. The annual growth rate of deposits is only 7%, and the real decline in savings is accelerating: for example, in July, the real decline in deposits has been at least 2% in monthly terms and more than 10% year on year. The fall in real incomes of the population, as wage growth lags behind inflation, is no longer allowing a large part of households to build up precautionary savings, although several factors (e.g. expected record-high utility payments in the winter period and the impact of the expected recession) could encourage them to do so.

As a result, the annual growth rate has slowed more for household deposits but has been volatile with no visible downward trend for corporate deposits. In July, the annual growth rate of domestic household deposits stood at 7.2%, whereas that of corporate deposits was 6.9% (including a 10.9% rise for deposits by non-financial corporations). In nominal terms, the growth of deposits in the five months from March to July stood at 2.8% (5.7% and 1.3% rise in deposits by non-financial corporations and household deposits respectively, including a 5.5% fall in fixed term deposits). This indicates that at least part of the population had to tap into the savings made for a rainy day. The expected recession in autumn and winter will reduce the overall income level, so the stock of deposits will decrease.

Chart 15

DOMESTIC DEPOSITS AND INFLATION
(outstanding amounts; annual changes; %)

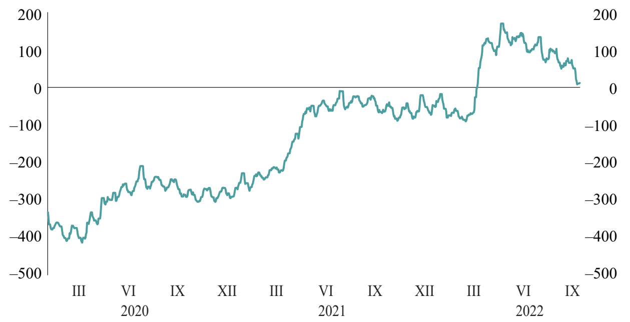


Higher money market indices have been poorly reflected in interest rates on deposits. The overall weighted average interest rate on euro deposits remained close to zero, although the rate on corporate demand deposits turned positive. At the same time, the interest rate on new fixed-term deposits of households and enterprises in euro even decreased, as the flow of new business in credit institutions offering relatively higher interest rates declined (from 0.2% in February to 0.1% in July). In the future, however, the growth of deposits and interest rates on new fixed term deposits will be supported by a faster increase in money market indices.

Households also spend their cash savings accumulated during the Covid-19 pandemic for consumption needs in a context of rising inflation. As a result, the net issuance of cash decreased from 101 million euro to 12 million euro between the end of March and the beginning of September. The population was able to spend public support received during the peak of the pandemic.

Chart 16

NET ISSUANCE OF EURO BANKNOTES BY LATVIJAS BANKA
(millions of euro)

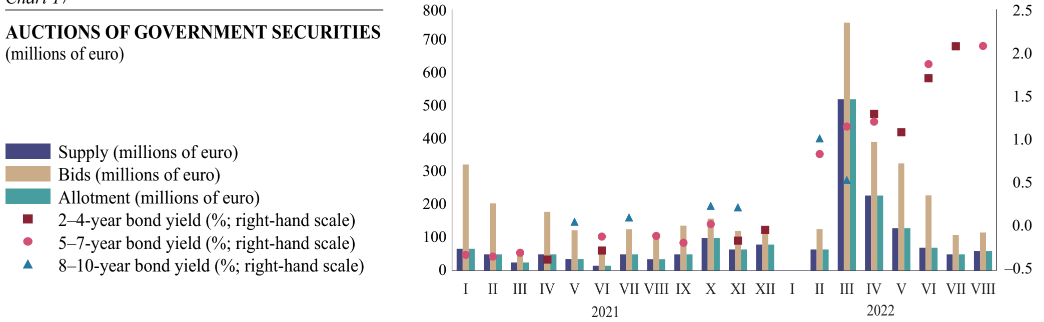


Government financing conditions also deteriorated due to the rising interest rates. On the secondary market, Latvia's government bond yields increased, following the overall trend of the euro area sovereigns. The average yield on 9-year bonds increased from 1.34% at the end of March to 2.69% on 6 September. The spread vis-á-vis the German government bonds of an equivalent maturity widened from 86 basis points to 115 basis points. This can be explained by a higher vulnerability of the Baltic economies and the border with Russia.

At the same time, the Latvian government continued to place its securities that were previously released on international markets on the domestic market (same ISIN for securities launched on both the domestic and international markets). 11 auctions were held in April–August, where due to higher interest rates the supply in recent months was lower than in spring. The total supply was 540 million euro, whereas the bids amounted to 1179 million euro, resulting in full allotment of the supply. 2 to 6-year bonds were offered at the auctions.

Chart 17

AUCTIONS OF GOVERNMENT SECURITIES
(millions of euro)



Since March, all three leading international credit rating agencies affirmed the previous Latvian credit ratings and maintained a stable outlook. Agencies (Moody's, S&P Global Ratings, Fitch Ratings) stressed that Latvia is reducing its energy dependence on Russia, the country has a moderate level of sovereign debt, as well as stability is ensured by its NATO and EU membership. Consequently, the impact of the Russian-induced war in Ukraine on the Latvian economy as well as the fiscal situation will be relatively limited.

Despite the expectations of rising interest rates, private sector debt issuers have been able to raise financing. AS Latvenergo issued 5-year green bonds in the amount of 100 million euro at a fixed annual interest rate of 2.42%, rolling over the previous issue. BluOr Bank AS issued 7-year unsecured subordinated bonds at a fixed annual interest rate of 7% and an issue amount of 4.9 million euro. The self-service coffee service provider in the Baltic States, SIA Coffee Address Holding, in cooperation with Signet Bank AS, carried out the issue of unsecured bonds in the amount of 5 million euro. Signet Bank AS, in cooperation with its subsidiary car leasing company AS Primero Finance, carried out the first securitisation issue in Latvia. The Bank helped its subsidiary to issue asset-backed securities in the amount of 9.5 million euro. AS Conexus Baltic Grid announced its intention to issue and list unsecured bonds of up to 80 million euro on the stock exchange this year. The investment management company IPAS Indexo raised the planned 7.5 million euro in the initial public offering of stock. These stocks were listed on Main List of the stock exchange AS Nasdaq Riga. Online building materials and lifestyle goods trader prof.lv, SIA and car wash network AS Puto plan to list their stocks on the stock exchange and concluded agreements with the Central Finance and Contracting Agency on attracting EU co-financing for this purpose.

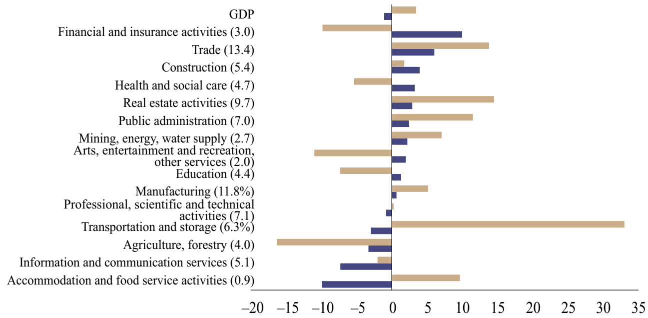
The decrease in stock prices and indices was determined by the war in Ukraine, which negatively affected the cooperation of Latvian companies with partners in Ukraine, Russia and Belarus, as well as by changes in the business environment. On the Latvian stock market, the stock price index OMXR decreased by 2.9% on 6 September 2022 compared to the end of March 2022 and the Baltic stock price index OMXBBGI decreased by 7.7%. These developments were similar to those on the major global stock markets when the risks of the global recession increased. An increase in stock prices of AS DelfinGroup by 7.1% and a rise in the stock prices of AS Virši-A by 2.3% are worth a special mention. At the same time, the stock prices decreased for AS MADARA Cosmetics (by 25.2%), AS Latvijas Gāze (by 13.0%) and IPAS Indexo (by 3.8%). AS DelfinGroup announced that it is forecasting stable development in the next three years, and its revenue increased by 46% in the second quarter compared to the corresponding period of the previous year. AS Virši-A acquired 20% of the stock of AS Skulte LNG Terminal. AS MADARA Cosmetics reduced its future growth goals, whereas AS Latvijas Gāze will most likely have to undergo reorganisation.

3. Sectoral Development[6]

The rise in energy prices and the impact of sanctions imposed on Russia have already started to erode economic growth. The lifting of restrictions related to the Covid-19 pandemic in the second quarter helped the sectors like accommodation and food service activities, art, culture and entertainment services as well as air transport services to recover substantially from a low level. While higher demand for many services already contributed to price hikes, consumers' purchasing power was partly supported by their savings accumulated during the pandemic. The actual ties of economic cooperation with the aggressor countries were not severed immediately, thus enabling build-up of inventories and delaying or slowing down the decline in activity in a number of sectors (e.g. industry, construction, transport). However, activities of certain companies (including wholesale companies) were already restricted by the sanctions imposed on their owners because of the war in Ukraine. At the same time, the current and expected cost increases caused many economic operators to act with more caution, which materialised gradually until July in household real spending (affecting development of retail trade), industry and energy. According to EC survey data, several services sectors have witnessed the optimism related to the expectations of lifting pandemic restrictions wane and pessimism strengthen in relation to the development outlook over the next three months, albeit not reaching the lows seen during the pandemic.

Chart 18

VALUE ADDED AND GDP IN THE SECOND QUARTER OF 2022
(changes; %; in brackets: contribution of the sector to GDP in 2021)



Q2 2022 compared to the pre-pandemic level (Q4 2019)
Q2 2022 quarter on quarter

3.1 Manufacturing

The slowdown in the development of manufacturing is mainly driven by the decline in the wood industry owing to decreasing demand and profitability. In manufacturing, a monthly drop was increasingly observed during the second quarter. Although prices and demand for wood products remain higher than before the pandemic, after a period of high growth the wood industry experiences a decline affecting the overall performance of manufacturing. A more significant decline is exhibited by the export value where construction-related wood products prevail. With construction activity decreasing, demand for these products is also shrinking. The sharp drop in demand and prices is also driven by overstocked warehouses in Europe. The desire to fill up warehouses was caused by supply chain disruptions during the pandemic, and it was further amplified by the upcoming sanctions on wood products originating in Belarus and Russia, as well as by concerns regarding the shortage of fuel wood. The fuel wood segment, which accounts for a higher share domestically, remains strong and is also projected to be robust in the coming years.

The main source of concern regarding further development of both the wood industry and other manufacturing sectors pertains to energy costs. Production was already ceased in many companies when the high electricity prices reached the peaks. With profitability following a downward path and savings accumulated in previous periods shrinking,

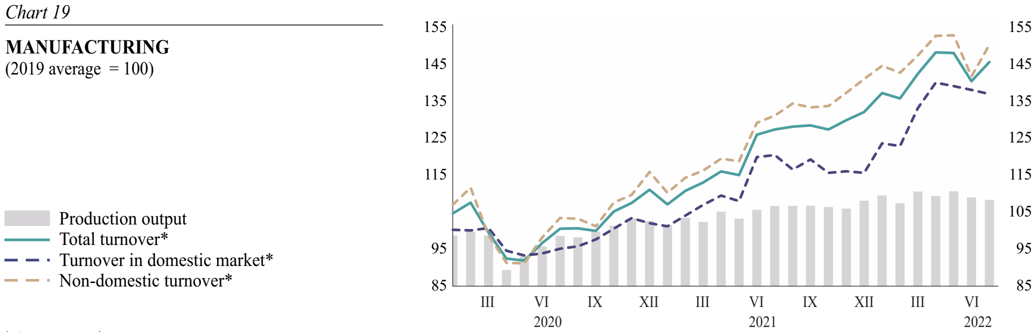
[6] This chapter analyses GDP and sectoral activity at constant prices, using seasonally and calendar adjusted data (unless otherwise specified).

the situation will deteriorate further. State support helps, but it will not succeed in fully addressing the problems.

The increase in energy costs affects every producer, but there are also other areas of concern in each sector. Engineering industries experience easing in metal prices and, out of concern for its availability, they find alternatives to metal supplies (concerning future transactions, currently warehouse stocks are increasingly used) or replacement of this material following the collapse of Russian imports. Building materials are still in demand, but the decline in construction activity in the region raises concerns about future demand. Demand for food production is more resilient, but costs (also those of grain, including feed grain) are growing and the issue of competitiveness is becoming more acute. Productivity of fragmented and relatively small firms is lower than that of rivals, and vulnerability is higher. Overall, manufacturing is expected to contract further in the second half of the year.

Chart 19

MANUFACTURING
(2019 average = 100)



* At current prices.

3.2 Construction

The price hikes of commodities and construction materials have significantly increased the costs of ongoing construction projects. This led to a fall in real volume in the construction sector and financial losses to builders. The performance of the construction sector was weaker than expected in the first half of 2022. Value added in the construction sector continued to decline in the second quarter of 2022 and decreased by 3.3% quarter on quarter.

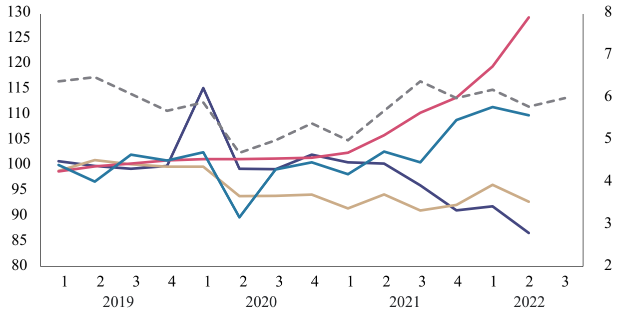
Risks related to climbing prices and costs continued to weigh on the construction sector. The increase in construction costs, challenges as regards access to construction input materials and supply chains have been affected by both the Covid-19 pandemic and the Russian war in Ukraine. In the second quarter, the overall level of construction costs increased by 22% year on year. This is mainly due to a sharp increase in prices of building materials (metal, cement, glass, thermal insulation materials, expanded polystyrene, polymers). The mounting prices of building materials have been beneficial to their producers whose production volumes and turnover have increased notably, but the turnover of other sectors of the construction industry has been adversely affected by rising construction costs. Therefore, construction activity and volumes continued to decline also in the second quarter, significantly hampering the sector's growth, including the implementation of public sector projects. The upward trend in construction costs has had a negative impact not only on investors' interest in making new investments but also on the execution of the existing contracts and the implementation of the ongoing construction projects, leading to a significant risk that construction merchants might unilaterally terminate works contracts and withdraw from them. As a result, buildings will not be completed and/or they will be frozen. The government has approved rules on standard contracts in relation to public construction projects and guidelines for assessing the rising costs of building materials, but unfortunately these indexation mechanisms have not been fully used by the sector. The building permits issued in the second quarter reveal that the size of the areas intended for construction continued to contract, and this also offers no hope of rebound in construction activity in the coming quarters.

The Rail Baltica multi-annual project, demand and the need to renew the housing stock, as well as the available financial resources in the form of various EU funds for the implementation of public sector projects (the Recovery and Resilience Facility funding and the European structural funds within the multi-annual budget) provide opportunities for the construction sector to boost its growth, while the drop in real construction volumes for the fourth consecutive quarter raises concerns that the construction sector may lack sufficient capacity for the delivery of the available investments and acceleration of growth.

Chart 20

CONSTRUCTION SECTOR'S INDICATORS
(2019 average = 100; sentiment – net responses)

Production output
Number of the employed
Construction costs
Manufacture of non-metallic mineral products
Sentiment (right-hand scale)



3.3 Real estate sector

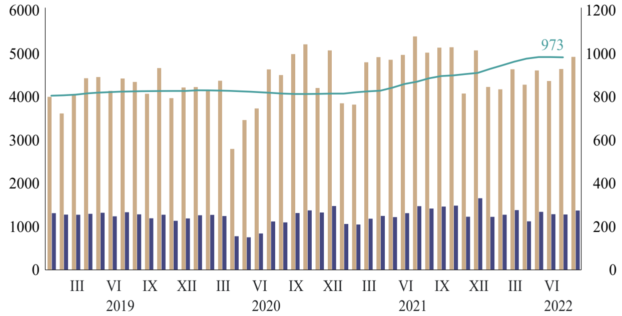
Inflation and the soaring energy costs have contributed to changes in the real estate market: the share of transactions involving energy efficient housing is constantly growing. In the second quarter of 2022, the value added of the real estate market sector, following a minor increase registered at the beginning of the year, decreased by 0.8% quarter on quarter. Although the real estate market experiences price stabilisation (the average price of standard apartments was 973 euro/m² in July), transaction dynamics have been put on a declining path compared with the last year. This was driven by price hikes and the decrease in household savings. In the first eight months of this year, the number of transactions registered with the Land Register recorded a decline of 4.7% in Latvia but an increase of 3.2% in Riga.

The secondary market witnessed changes in summer compared to the situation at the beginning of the year. In 2021 (during the Covid-19 pandemic), business class housing was more preferred, and transactions with land and private houses in Pieriga picked up driven by the need to perform remote work from home. Meanwhile, with energy prices surging in 2022, the supply of standard apartments took an upward trend in Riga in summer months as the population, in anticipation of the new heating season, started to look more actively for possibilities to change the existing housing to a new one – smaller and more energy efficient. Demand for housing remains above supply. In the segment of new projects, the supply and choice also continue to decrease, as an uptrend in construction costs leads to the postponement of residential projects, reducing very substantially the number of new project proposals.

Chart 21

AVERAGE PRICE OF STANDARD APARTMENTS IN RIGA AND THE NUMBER OF CONTRACTS REGISTERED WITH THE LAND REGISTER

Purchase contracts in Latvia
Purchase contracts in Riga
Average price (euro/m²; SIA ARCO REAL ESTATE; right-hand scale)



It is expected that the real estate market will continue to face a number of problems in the second half of 2022: the increase in borrowing interest rates and prices of energy resources (higher expenditure on heating and electricity) and inflation, which will reduce the population's savings and, consequently, the possibility to purchase new housing.

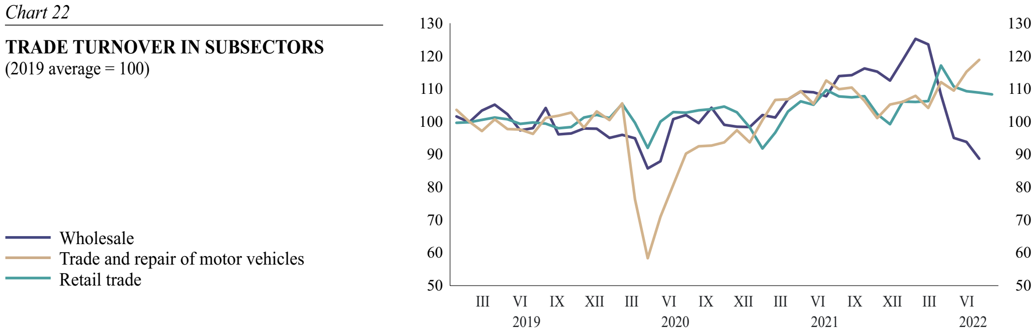
3.4 Trade

The decline in trade was driven both by the impact of sanctions on wholesale and by more cautious household spending on retail goods. The development of the trade sector deteriorated significantly in the second quarter of 2022. This was partly due to the normalisation of retail trade volumes observed already in April following the post-pandemic shopping boom in March, when consumers made pent-up purchases. However, the effects of the rising price levels also gradually translated into the fall in real spending, and these effects continue to take their toll in the third quarter, as evidenced by both retail trade data until July and card payment data for most of the weeks of the third quarter. The fall in specialised wholesale and belonging of the wholesale companies owned by sanctioned owners to this subsector suggest that these could be the factors contributing to the decline in the trading sector observed in the second quarter. As a result of these factors, the total value added of the trade sector was 7.3% lower than in the previous quarter. On the other hand, car sales saw a pickup in the second quarter, and this increase could have been driven by pent-up spending during the pandemic. At the same time, the number of newly registered cars is no longer increasing.

Despite the availability of government support to compensate the exceptional increase in energy prices, the decline in real purchasing power and the soaring housing maintenance costs will likely continue to limit household spending on retail goods. Recovery of wholesale dented by the sanctions is not expected either. Thus, the trade sector is still expected to experience a decline in the coming quarters.

Chart 22

TRADE TURNOVER IN SUBSECTORS
(2019 average = 100)



3.5 Transport

The transport sector has managed to avoid the worst case scenario for the time being, but the sector's future development will no longer be so positive. In the first half of 2022, the transport sector saw a steady increase in freight traffic by rail and in volumes of cargoes loaded and unloaded at Latvia's ports, as well as a significant uptrend in air passenger flows at Riga Airport. Although the worst case scenario for freight transport has not materialised following the Russian invasion of Ukraine, freight transport activity is expected to decline in the second half of the year. Geopolitical tensions continue to raise concerns about the future dynamics of the transport sector.

The slowdown in the road transport sector was driven by both the restrictions introduced on the Russian market and the new mobility package conditions for freight transport in Europe. In the first half of the year when road freight transport decreased significantly, affecting primarily international transport flows, the total freight circulation fell by 7.3% year on year. Road transport flows to Russia are expected to continue on a downward trend in the second half of the year, but the role of the region in Latvia's road transport structure has been gradually declining since 2014 (currently less than 10% of total freight turnover).

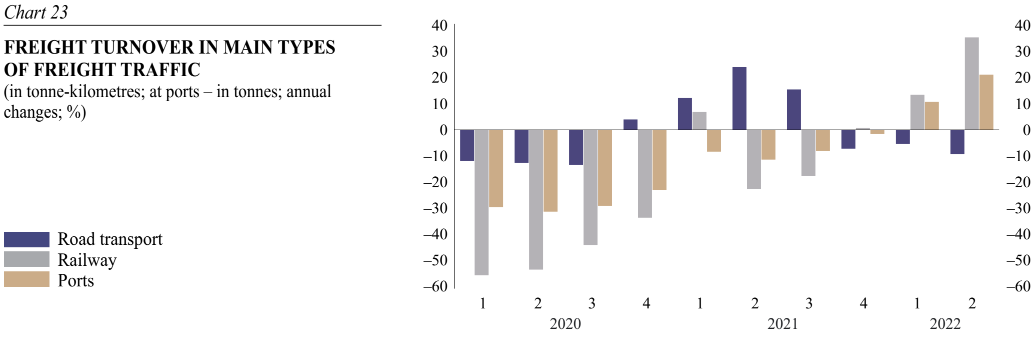
The volumes of cargoes loaded and unloaded at ports and rail freight showed a surprisingly good performance, contrary to concerns about retaliatory sanctions or even general cargo blockade from the Russian side. The volume of cargoes loaded and unloaded at ports increased by 15.3% in the first half of the year, while rail freight turnover increased by about 21% year on year. This can be explained by the desire of companies to get their cargoes out of Russia as quickly as possible after the Russian invasion of Ukraine for fear of possible sanctions and safety of their cargoes in the territory of Russia. The volume of coal cargoes from Kazakhstan has also increased. This has been driven by the growing demand for cheaper fuels in Europe as a result of soaring energy prices.

While coal transit volumes are expected to climb at the end of the year, other cargo segments will inevitably see a drop in cargo volumes as the transitional period during which goods subject to EU sanctions could be imported from or exported to Russia under earlier contracts has expired. The transitional period for transportation of iron, steel and ferrous metals ended in June, while that for transportation of wood, potassium-containing fertilisers and cement – in July, and the ban on coal and other fossil fuels entered into force in August. The consequent drop in freight volume is expected to unfold in the second half of the year, and the rail transport, where the share of Russian origin cargoes accounts for about half of all cargoes transported, will be most affected. In addition, a further decline in cargo volumes will be supported by the ban on imports of Russian oil and oil products to Europe, which will enter into force at the beginning of next year.

The expansion of demand was driven by buoyant growth in air transport, but the industry has failed yet again to reach the pre-pandemic levels. In the first half of the year, the number of passengers transported by Latvian airlines multiplied by around four year on year. It is important to note that the availability of labour currently substantially limits the ability of the air transport sector to meet the rapidly growing demand for flights, the number of which the sector had to reduce during the pandemic. The air cargo industry performed not so well, as it was severely affected by the ban on international flights over the Russian airspace. In the first half of the year, the volumes of cargoes transported by Latvian airlines reached about 11 thousand tons (a year-on-year decrease of 11%).

Chart 23

FREIGHT TURNOVER IN MAIN TYPES OF FREIGHT TRAFFIC
(in tonne-kilometres; at ports – in tonnes; annual changes; %)

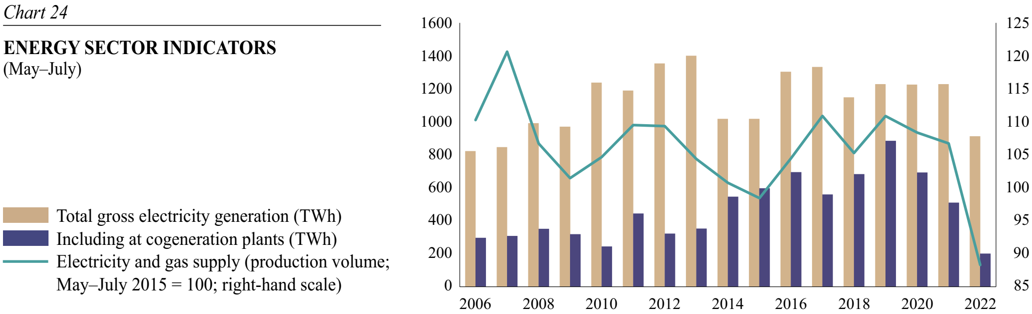


3.6 Energy

The energy sector is gradually embarking on austerity. According to industrial statistics, output of the energy sector increased slightly in the second quarter, albeit this rise was driven solely by the indicators achieved in April. Over the following months (May–July), the output of electricity, particularly in cogeneration plants, decreased notably, and the production volume of the electricity and natural gas supply sector, measured at constant prices, was also historically low if a comparison is made of the respective months in the longer term. These dynamics are in line with the high prices of fossil fuels (natural gas) and the ongoing search for alternative supply channels and thus the need to save these resources. The high energy prices faced by final consumers and uncertainty regarding the supply of fossil resources will encourage economic agents, at least during the current heating season, to curb energy consumption both in dwellings and companies, thus reducing energy demand and significantly limiting the sector's growth.

Chart 24

ENERGY SECTOR INDICATORS
(May–July)



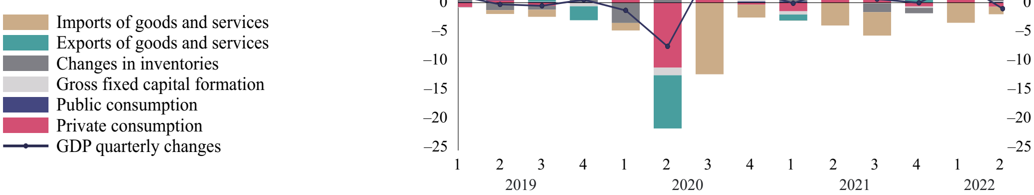
4. GDP Analysis from the Demand Side[7]

4.1 Domestic demand

Although the most challenging period – the heating season with high costs at the end of the year and the beginning of next year – is still ahead, spending is already being affected by precaution and high inflation. In the second quarter, GDP contracted by 1.0% quarter on quarter, maintaining a positive annual growth at 2.9%. The fall in the quarterly pace was determined by a decrease in private consumption and an increase in imports. The contraction in private consumption was affected by the decline in purchasing power and precaution. On the other hand, the increase in imports was driven by the uncertainty caused by the war, the expected restrictions imposed by sanctions, as well as price hikes. This has contributed to filling warehouses with raw materials and finished products: imports of all types of goods, particularly intermediate goods, have increased. Imports of capital goods for investment purposes have also followed an upward path.

Chart 25

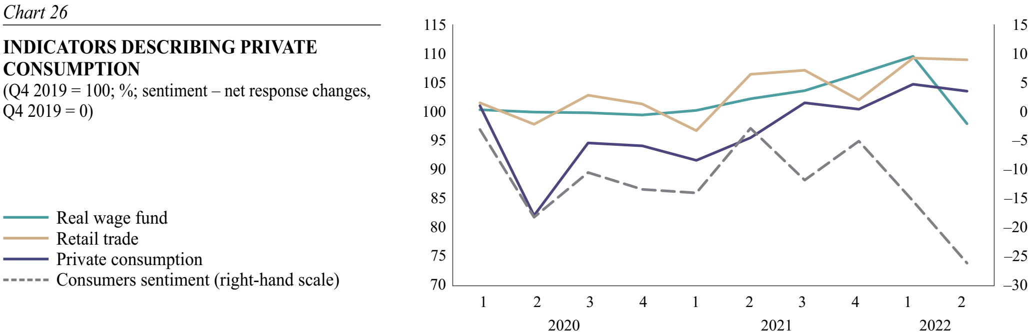
GDP AND DEMAND SIDE COMPONENTS
(quarterly changes; %; demand side – percentage points)



As a result of the heightened uncertainty prevailing since the beginning of the war and the rapid price rises, the population faces a decision-making dilemma: whether to spend the savings reduced by inflation or save more by way of precaution? Data for the second quarter reveal that private consumption has started to decline, as income and savings made during the previous periods do not fully offset spending of the population. While household deposits were still growing in nominal terms year on year and data from various surveys suggest that, in general, the population is cautious when it comes to spending, and this caution may also persist in the third quarter as the heating season is approaching, deposits have started to fall not only in real but also in nominal terms during recent months. However, behaviour of the population is not homogeneous: the mentioned frugality and the increasing desire to spend the savings due to their falling value as well as to implement travel plans after lifting the restrictions imposed during the pandemic (as evidenced by a sharp increase in consumer credit, mainly for travel purposes).

Chart 26

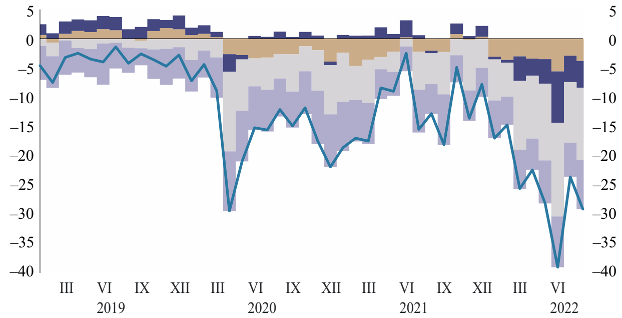
INDICATORS DESCRIBING PRIVATE CONSUMPTION
(Q4 2019 = 100; %; sentiment – net response changes, Q4 2019 = 0)



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

Chart 27

CONSUMER CONFIDENCE AND UNDERLYING FACTORS
(net responses; percentage points)

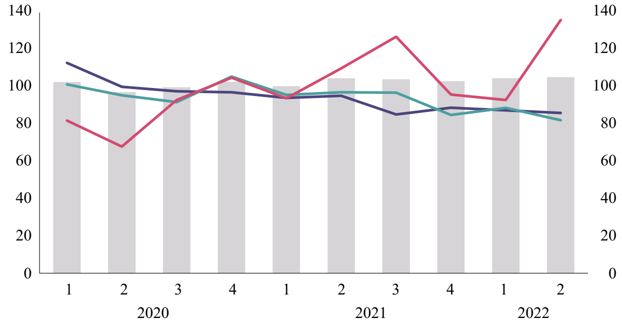


Investment was maintained by imports of capital goods – machinery and transport equipment. Investment in construction is hampered by both uncertainty and an increase in costs, in particular by rising prices of building materials, which have led to a review of already prepared or even launched investment plans. The rise in credit interest rates gradually pushes up costs, while the implementation of new investment projects is hampered by war-induced insecurity, weakening the attractiveness of the regions closest to the aggressor states.

With the risks of the global recession increasing, private investment may fall, and public infrastructure projects will take over the key role of heating the economy. On the other hand, additions to vehicle (trains, planes) equipment and machinery dominate in the investment projects requiring imports of capital goods. Currently, alternative power supply equipment and energy efficient equipment to reduce energy costs, i.e. solar panels, heating boilers, heat pumps, allocators, thermostatic radiator heads, etc. are particularly sought after.

Chart 28

INVESTMENT
(2019 average = 100)



* According to Latvijas Banka's estimates of capital goods for June.

4.2 Government consumption

Government support provided during the energy crisis by the end of the year will result in a larger budget deficit. Meanwhile, in the seven months of 2022, the general government deficit reached 98.2 million euro, significantly less in year-on-year terms. This was driven by higher budgetary revenues, mainly – by higher-than-expected tax revenue growth. However, in the second half of the year, the budget balance is expected to deteriorate due to both the weakening economic activity and the government spending to offset the increase in energy prices and mitigate the impact of inflation. The general government budget deficit for this year is estimated at 7.9% of GDP, increasing by 2.2 percentage points compared to the June projections. The budget deficit projections for 2023 and 2024 have been increased to 3.5% and 2.6% of GDP respectively, taking into account both the sluggish economic growth and additional measures promoted by the government on the expenditure side of the budget.

The rapid increase in energy prices will reduce the real purchasing power of the population, which, as the heating season resumes, will have a negative impact on economic activity, and the growth rate of tax revenues will decline by the end of the year.

In the seven months of 2022, general government revenue increased by 11.5% year on year to around 8 billion euro. The increase was mainly driven by high tax revenues supported by the recovery of economic activity and the growth of private consumption (both owing to lifting the restrictions imposed during the Covid-19 pandemic), as well as the rising prices of goods and services, coupled with increases in employment and wages in the economy. In seven months, the consumer tax revenue grew by 17.1%, while the revenue from labour taxes – by 30.0% year on year. As a result of the decline in economic activity, overall tax revenue growth by the end of the year will moderate.

Meanwhile, budget expenditure this year is driven by state support measures to mitigate the increase in energy prices, provide assistance to Ukraine and its people and strengthen defence and internal security. Overall, during the seven months of this year general government expenditure increased only by 0.7% year on year. Expenditure on social benefits declines, as support measures and investment linked to the Covid-19 pandemic have diminished. On the other hand, it has been intended to allocate more than 1 billion euro for energy crisis support measures between 2021 and 2023, with the largest share earmarked for the 2022–2023 heating season. The support package includes a number of consumption-enhancing measures: an earlier pension indexation, social support and compensation for part of the increase in heat supply and heating costs for households. The government support designed to partially compensate for the effects of the increase in energy prices is also intended for companies. Due to these measures and other steps, budget expenditure will increase faster in the second half of the year, exceeding 15% increase year on year at the end of the year. The rise in budget expenditure is expected to continue also in the coming years, including a significant increase to strengthen internal security and defence. With deadlines of the absorption of EU funds approaching, faster flows are expected, which will continue to boost overall government consumption and public investment.

Despite the deterioration of the budget balance, the lower debt level is driven by GDP growth in nominal terms and by the liquidity accumulated so far. In 2022, the government debt level will reach 45.0% of GDP, falling by 1.5 percentage points compared to the June projections (46.5%). In 2023 and 2024, the government debt level will continue to decline gradually, while in the coming years, a more moderate economic growth will keep government debt at 44.4% and 42.9% of GDP respectively.

4.3 Trade balance

The increase in the value of exports and imports in the first half of the year was already dominated by the price effect, and the approaching recession and contraction in demand will reduce both exports and imports. Contrary to the initial forecasts that foreign trade would weaken due to the sanctions, exports and imports of goods and services increased in the second quarter. Concerns about the shortage of certain raw materials and price rise intensified trade. Stocks in warehouses, which were already full due to the disruptions of supply chains caused by the pandemic, were replenished. As the pandemic-related restrictions were eased, the services sector also became more active.

However, most of the increase was due to the price effect, while in real terms, exports of goods and services grew by 0.7% compared to the first quarter, with the volume of both goods and services increasing at a similar pace. Imports saw a faster increase in the volume of goods (goods and services in real terms constituted 1.7%) securing energy for the future and importing goods from Russia prior to the entry into force of the sanctions.

In the second quarter, exports of goods continued to grow due to rising prices, with articles of wood, machinery and electrical equipment predominating. Export value of agricultural products and products of the chemical industry remained high. Due to the dominance of the price effect, the value of exports of mineral products doubled in the first half of 2022 year on year, with re-exports accounting for the bulk of it. However, as early as in June, the value of exports fell as wood prices decreased due to a shrinking external demand and deteriorating overall future outlook, thus signalling a turning point in exports.

In the second quarter, imports of goods were dominated by mineral products whose value appreciation was driven by both high prices and efforts to secure natural gas reserves for the future. The increase in imports was also driven by machinery, electrical appliances and vehicles (mostly planes), as well as wood whose imports slightly picked up in April and May before the sanctions against Russia and Belarus came into force.

In the second quarter, exports and imports of services rose well above the pre-pandemic levels. Most of these exports and imports are made up of various business services and information and communication services. Travel exports also recovered in May and June.

Overall, during the first half of the year, the increase in exports of goods and services has not been able to offset the import growth, thus creating a significant deficit in the trade balance of the first half of the year.

Concerns about the future development of foreign trade are mainly related to the impending recession, the continuation of Russia's war in Ukraine and the energy price crisis. In the second half of the year, amid a weakening demand, both exports and imports of goods and services will decline in Latvia as well as in its trade partner countries. The export value of goods will be reduced by the decrease in wood prices, while the increase in natural gas prices, which has a more significant impact on the import side, is likely to persist for a longer period. However, the gas reserves already in place and the decline in domestic demand will significantly reduce the need for imports, to be reflected in a lower deficit in the trade balance in the second half of the year. In the second quarter, the terms of trade in goods that play a major role both in exports and imports, i.e. wood and mineral products respectively remained favourable. However, already in June when wood prices started to fall but energy prices continued on an upward path, there was a shift towards deteriorating trading conditions. As regards trade in services, the export side will also be weakened by the lack of development opportunities for rail freight.

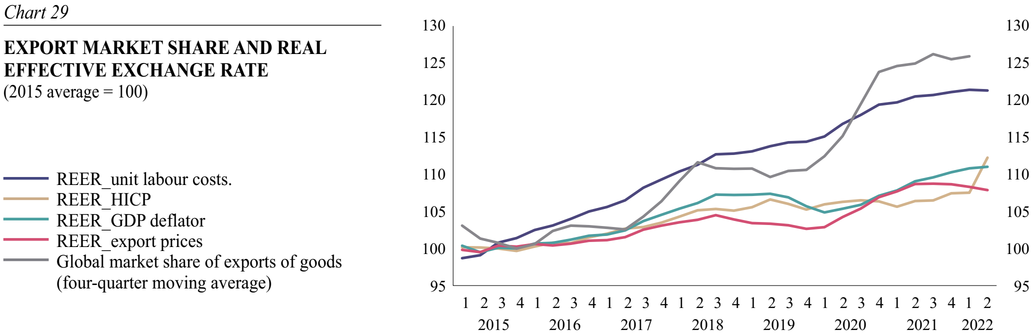
Export ties with Russia have not weakened since the outbreak of the war as previously expected. At the same time, imports from Russia have decreased significantly. A further decline in imports is expected in view of the entry into force of the sanctions and the end of contract execution. For example, imports of mineral products and base metals from Russia have already decreased which is reflected in lower re-export volumes. In general, imports from Russia have been partly replaced by products from other countries, e.g. other countries play a stronger role in imports of natural gas.

The rapidly increasing energy and labour costs in Latvia may weaken competitiveness, particularly in non-EU countries. In the first half of 2022, an increase in the cost competitiveness indicator – the real effective exchange rate (REER), which includes 37 national currencies and is deflated by the unit labour costs (ULC) and the export price index, has slowed down, while the REER, deflated by the HICP and the GDP deflator, continues to increase. Latvia's share of exports in world imports is stable, and this share also shows a slight long-term growth trend and some seasonal fluctuations in imports of most of Latvia's major partner countries. Competitiveness analysis is also important from the point of view of government support provided during the energy crisis.

The profitability level of the traditionally exporting sectors, i.e. manufacturing and agriculture, remains close to the pre-pandemic level (on average in 2017–2019). It should be noted that profitability in the manufacturing industry remained stable during the pandemic as the export structure was dominated by goods still in demand on export markets. The lifting of pandemic restrictions contributed to a rapid rebound in economic activity in a number of services sectors engaged in services exports (e.g. accommodation, catering, air transport); the production volume in catering services even exceeded the pre-pandemic levels. Meanwhile, the profitability level of these services continued to lag behind significantly, suggesting a sharp increase in costs.

Chart 29

EXPORT MARKET SHARE AND REAL EFFECTIVE EXCHANGE RATE
(2015 average = 100)

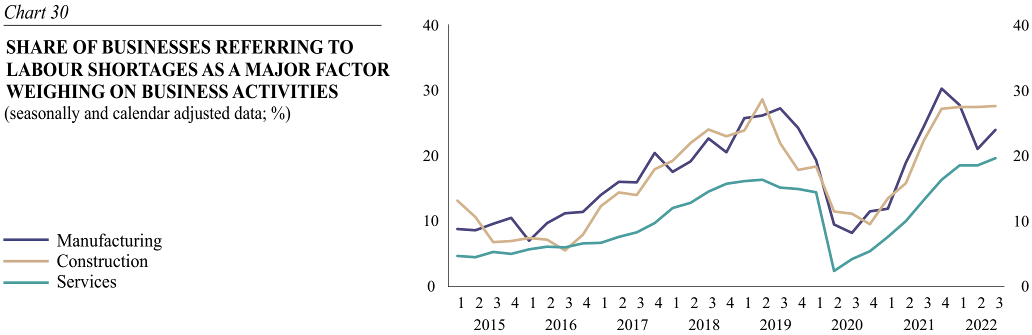


5. Labour Market, Costs and Prices

With unemployment declining after the Covid-19 pandemic, the labour market remains tight. In the second quarter of 2022, the unemployment rate in Latvia decreased to 6.6%, as did the unemployment rate registered with the State Employment Agency in August (to 5.8%). Although household concerns about the increasing rate of unemployment are lower than during the pandemic, they still remain relatively high[8]. Following a leap at the beginning of the year after the end of the pandemic, employment expectations of businesses have stabilised. Labour shortage in manufacturing as a factor weighing on business activities has declined somewhat since the beginning of the year, while remaining at its elevated pre-pandemic level – it is still high in construction and even increased in the services sector.

Chart 30

SHARE OF BUSINESSES REFERRING TO LABOUR SHORTAGES AS A MAJOR FACTOR WEIGHING ON BUSINESS ACTIVITIES
(seasonally and calendar adjusted data; %)



Refugees from Ukraine continue to participate in Latvia's labour market, but they do not have a significant impact on the overall rate of unemployment or employment. According to the data from the State Employment Agency, approximately six thousand refugees from Ukraine (less than 1% of the number of employed persons) had found a job over the period from the outbreak of the war until the end of July. From the beginning of June to the end of July, the State Employment Agency received weekly about 300 applications for job vacancies from Ukrainian refugees, which is a relatively small fraction considering that the total number of unemployed persons exceeds 52 thousand. Moreover, labour demand is significantly higher – according to the data from the State Employment Agency, the total number of the current vacancies was 30 thousand in July 2022, with nine thousand new vacancies being registered in the same month.

The rate of unemployment is expected to increase somewhat during the recession. In the first half of the year, a lower than previously anticipated rate of unemployment reduces the unemployment forecast for 2022 to 6.7% (–0.6 percentage point compared to the June forecast). The projected weakening of activities of several sectors will also find reflection in a minor increase in the rate of unemployment around the turn of the year. In the short run, the sharp rise in unemployment will be hampered by the high number of vacancies and, consequently, businesses might initially decide not to search for employees, without laying off the current employees. Therefore, unemployment would remain at the level of 2022 (6.7%; –0.4 percentage point) in 2023. The forecast scenario assumes a rebound in economic activity in the second half of the next year, which would be positively reflected in a slight decline in the unemployment rate (to 6.3%) in 2024 as also previously projected.

The sectors with lower average wages are recovering from the pandemic crisis, which is a factor weighing on the average wage growth. In the first half of this year, the services sectors were recovering from the pandemic crisis, with the number of persons employed in these sectors increasing rapidly. This also affected the average wage in the country. A striking example is the accommodation and food service activities sector, where in the first half of 2022 the number of employed persons rose by 80% year on year. As wages in this

[8] Unemployment expectations of households, employment expectations of businesses and the assessment of labour shortages based on the EC business and consumer survey. Available at Time series (europa.eu).

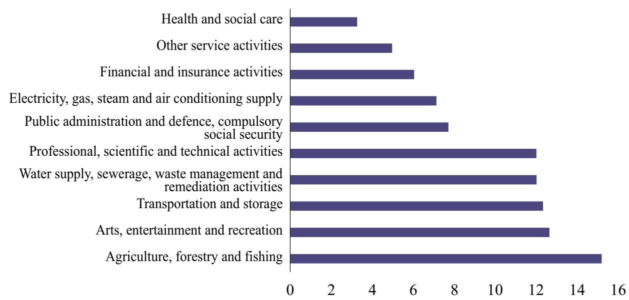
sector are lower than the average in the country, this had a dampening effect on the average wage growth. In the second quarter of 2022, the average wage increase reached 8.3% year on year. The rise in prices was faster; therefore, the purchasing power of employed persons decreased already for the second consecutive quarter. The wage bill also declined in real terms in the second quarter.

Chart 31

AVERAGE MONTHLY GROSS WAGE AND WAGE BILL
(annual changes; %)

Chart 32

FIVE SECTORS WITH THE HIGHEST AND LOWEST GROSS WAGE GROWTH RATES IN THE SECOND QUARTER OF 2022
(annual changes; %)



Inflation and labour market tightness will further increase the wage growth. Moreover, discussions on the increase in the minimum wage (16% of employed persons currently receive the minimum wage or less) are underway. At the beginning of the year, lower than expected wage growth contributes to a downward revision of the wage growth forecast for 2022 (up to 8.5% (–1.8 percentage points)). The major constraint to the wage increase is the steep rise in energy prices, which forces businesses to spend more on other production resources instead of the labour force. The increase projected for 2023 is 7.2% (+0.5 percentage point). In 2024, with the economy recovering, labour shortages will again be a factor contributing to wage growth (forecast for 2024 is 7.5%).

BOX 1. WHICH SECTORS WILL BE MOST AFFECTED BY THE INCREASE IN THE MINIMUM WAGE?[9]

In April 2022, the Ministry of Welfare proposed to raise the minimum wage to 640 euro per month as of 1 January 2023.[10] This would imply that the minimum wage is likely to reach a level close to 60% of the median wage, slightly exceeding the OECD average.

The raising of the minimum wage is one of the tools for a country to reduce poverty and income inequality among the employed. However, such a step may also have certain side effects. A higher minimum wage can reduce employment, especially among younger and low-paid employees. Namely, if employee productivity is below the minimum wage level, the employer has no economic justification for retaining the job (position).

Latvijas Banka's calculations using the CGE and EUROMOD models show that, in the long term, the raising of the minimum wage contributes to lower inequality in income (as measured by the Gini index) and a minor increase in private consumption. Meanwhile, as

[9] Prepared by Oļegs Tkačevs, economist of Latvijas Banka.
[10] "Ministrija piedāvā no 2023. gada vismaz līdz 640 eiro celt minimālo algu cenu kāpuma dēļ", lsm.lv, 21.04.2022.

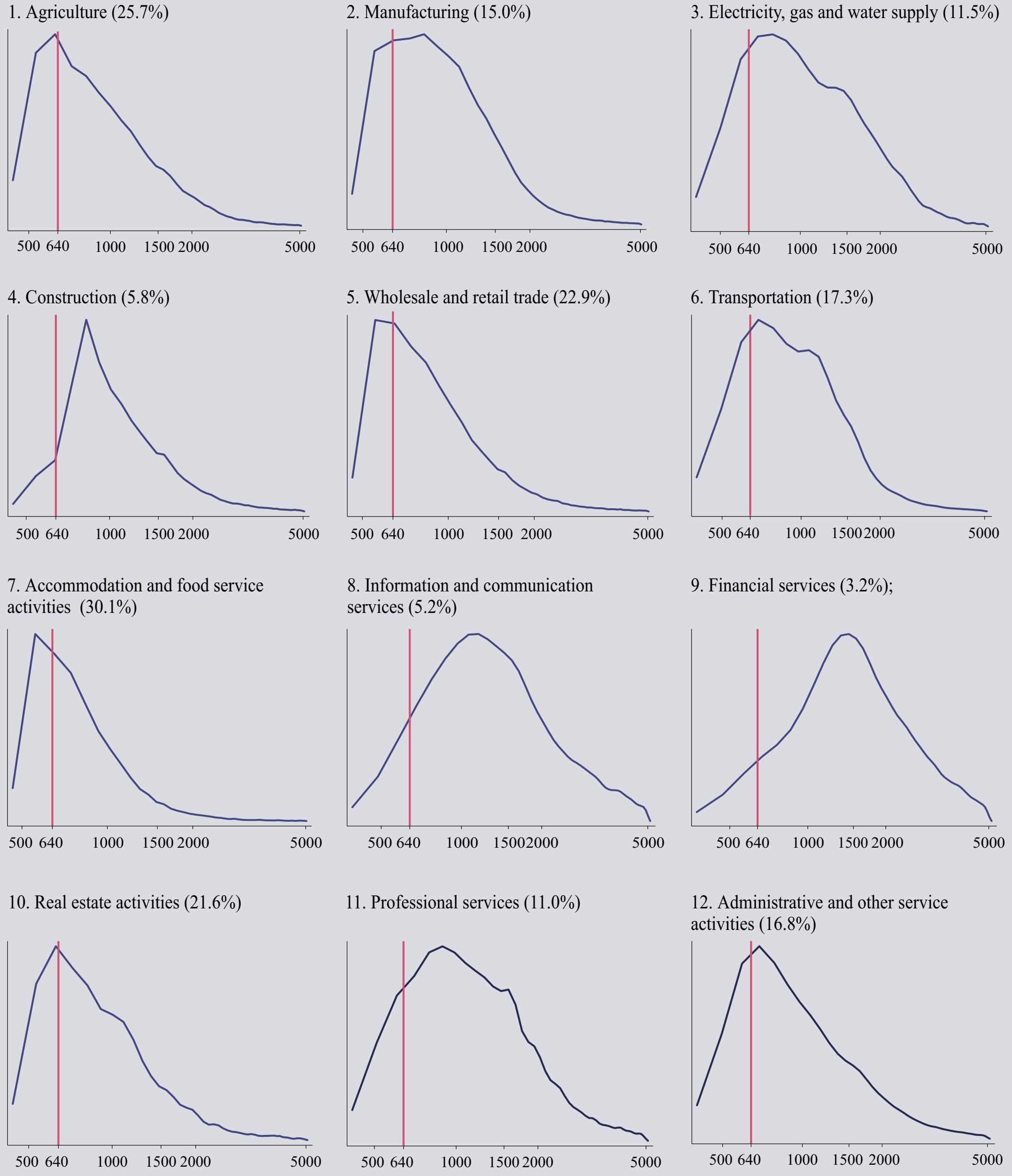
labour costs, especially the costs for low-skilled workers, pick up, labour is replaced by capital or a company does not cope with the competition and goes bankrupt. Moreover, the rise in labour costs worsens the competitiveness of businesses in external markets, leading to a decline in exports. The overall long-term impact on employment and GDP is estimated to be negative (for more details, see the study to be published soon). However, the impact on Latvia's economy overall masks significant differences in the breakdown of economic sectors.

Chart 1.1 shows that the highest share of employees earning a wage below the set minimum might be recorded by the accommodation and food service activities (30.1%)[11],

Chart 1.1

GROSS MONTHLY WAGE IN 2021
(frequency; the share of employees who earn a monthly wage of less than 640 euro is given in brackets)

The wage level is 640 euro
Gross monthly wage (frequency)



[11] The share of employed persons per sector has been calculated using the wage statistics for 2021, i.e. excluding the wage increase in 2022. Assuming that the wage growth by sector will be even in 2022, the calculated share will be lower in 2023, with the indicated differences across sectors persisting.

agriculture (25.7%) and wholesale and retail services (22.9%) sectors, while their lowest share would be reported by construction (5.8%)[12], information and communication services (5.2%) and financial services (3.2%) sectors.

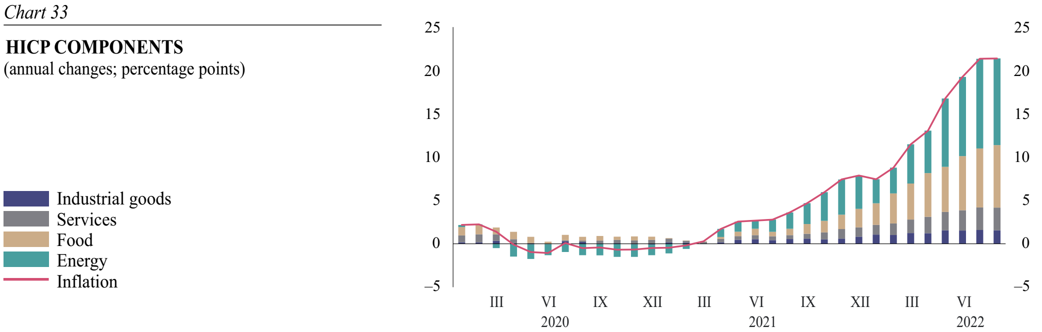
Thus, although the increase in the minimum wage will overall have a relatively weak impact on the economy, it may pose additional challenges to individual sectors.

[12] The collective agreement in the construction sector setting the minimum wage for the construction sector and concluded between the Trade Union of the Latvian construction sector and several construction companies has been in force since 2019. According to this agreement, the minimum wage in the construction sector is 780 euro.

The surge in inflation is driven by a sharp rise in the prices of energy resources, in particular natural gas, and food products, but it is slowed down by the government support provided to households to compensate for higher energy prices. In August, HICP inflation in Latvia stood at 21.4%. Although concerns about the surging energy prices reported already since the beginning of the Russian-Ukrainian war (and even before that due to the pandemic) are nothing new, these prices have, however, risen faster than expected. Over the last months, the increase in inflation has been most affected by rising energy and food prices. The dynamics of the prices of services and industrial goods has been more moderate and more in line with the previous forecasts.

Chart 33

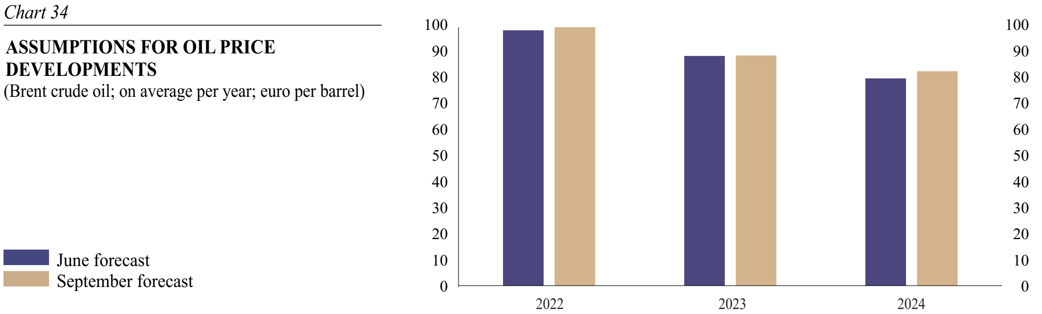
HICP COMPONENTS
(annual changes; percentage points)



Based on the new forecast assumptions, energy and food prices are expected to be higher than before. The oil price increase seen over the forecast horizon is more driven by the euro's exchange rate vis-à-vis the US dollar, while natural gas prices as well as global food prices have increased significantly. Given the trade links and the need for various resources in the production process, these global prices affect the level of inflation in Latvia. The price pass-through effect depends on both the structure of the contracts and the peculiarities of the goods – for example, the pass-through to fuel prices is seen over a period of about a month, while it may be different in case of food products (e.g. it is faster for milk as it is short-dated, but longer for oils)[13].

Chart 34

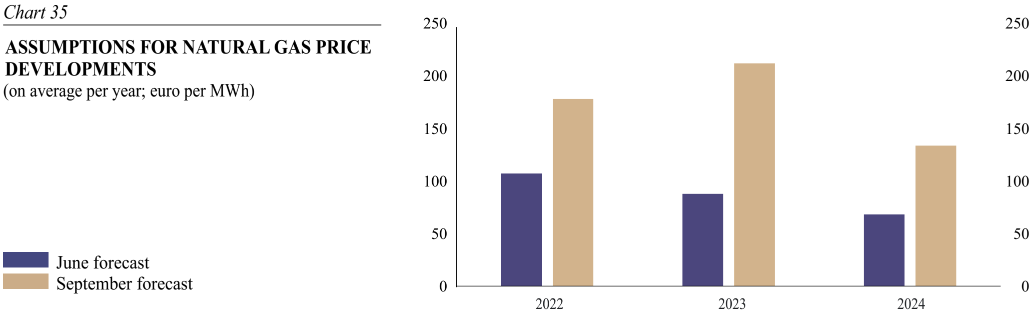
ASSUMPTIONS FOR OIL PRICE DEVELOPMENTS
(Brent crude oil; on average per year; euro per barrel)



[13] For more information on the effects of global prices on inflation, see the Working Paper: Bessonovs, A., Krasnopjorovs, O. Short-Term Inflation Projections Model and Its Assessment in Latvia. Latvijas Banka Working Paper 1/2020.

Chart 35

ASSUMPTIONS FOR NATURAL GAS PRICE DEVELOPMENTS
(on average per year; euro per MWh)

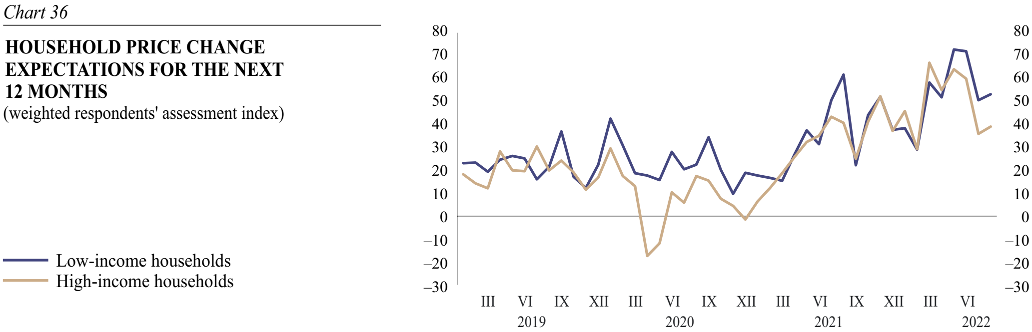


With some lag, the rise in natural gas prices affects both electricity and heating prices. A growing number of new increases in heating tariffs are also currently announced in various locations in Latvia. A large part of them were, however, already included in the previous inflation forecasts of Latvijas Banka as they take into account not only the actual approved tariffs, but also the above pass-through effect of the increasing prices of global resources and the rising production costs of heating providers.

Although household inflation expectations for the next 12 months have declined over recent months, people with lower income are much more worried about the future price rises. The government support will be key to reduce the rapid surge in prices (see Section 7 for its impact on the inflation forecast).

Chart 36

HOUSEHOLD PRICE CHANGE EXPECTATIONS FOR THE NEXT 12 MONTHS
(weighted respondents' assessment index)

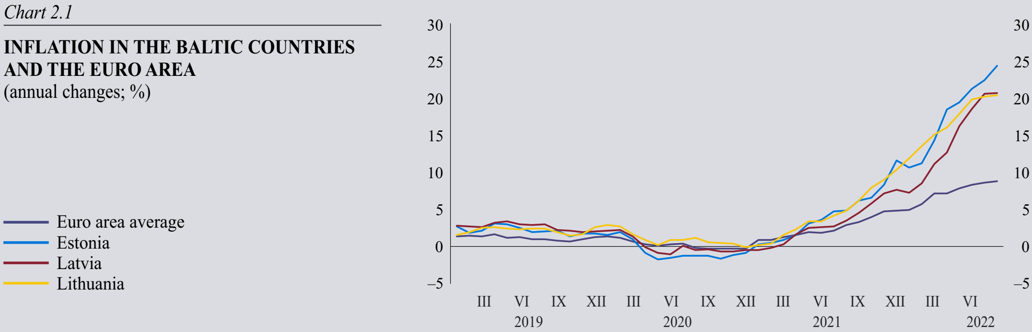


BOX 2. INFLATION DIFFERENCES ACROSS THE BALTICS AND OTHER EURO AREA COUNTRIES[14]

Already since the second half of 2021, inflation in the Baltic countries rose much faster than the euro area average; moreover, inflation differences have become even more apparent in 2022 (see Chart 2.1). In August 2022, the price level in Latvia increased by 21.4%, in Lithuania by 21.1% and in Estonia by 25.2%, while in the euro area – by merely 9.1% on average over the year. Therefore, this box discusses somewhat in more detail the factors determining such significant differences in inflation rates.

Chart 2.1

INFLATION IN THE BALTIC COUNTRIES AND THE EURO AREA
(annual changes; %)

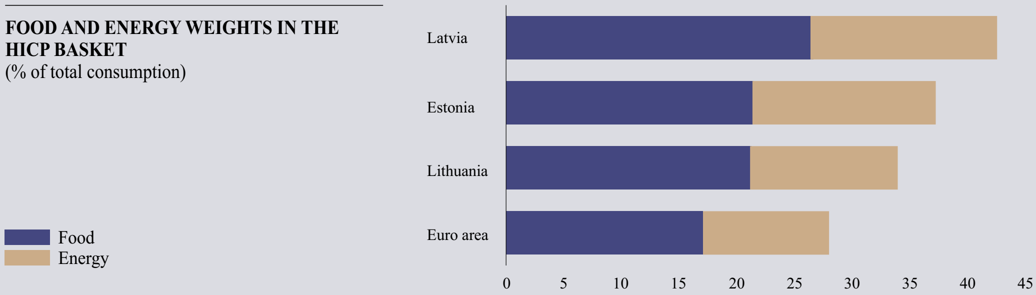


[14] Prepared by Ieva Opmane and Oļegs Krasnopjorovs, economists of Latvijas Banka. The estimates by Andrejs Bessonovs, economist of Latvijas Banka, have been used in the preparation of Chart 2.4.

The Baltic countries account for a higher share of food and energy consumption. Food and energy prices are the ones that have recorded the most rapid increase over the last year, thus reflecting the global price trends in both the euro area and the Baltic countries. However, their impact on inflation growth has varied across countries due to differences in the consumption structure. In the Baltic countries, household expenditure for food and energy accounts for a much larger share of the overall expenditure structure (see Chart 2.2). In Latvia, this represents even 42% of the total expenditure, while in the euro area – on average merely 27%.

Chart 2.2

FOOD AND ENERGY WEIGHTS IN THE HICP BASKET
(% of total consumption)



In August 2022, the impact of the difference in direct consumption weights on the inflation difference between Latvia, Estonia and Lithuania and the euro area was 4.0 percentage points, 2.3 percentage points and 0.9 percentage point respectively. With energy and food prices rising faster, the contribution of the impact of the weights is increasing (see Chart 2.3); however, this does not explain all inflation differences between these countries. Energy and food prices in the Baltic countries have also increased more rapidly.

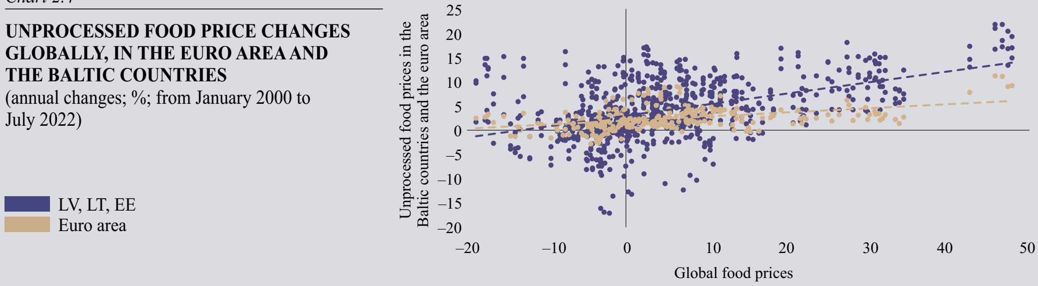
Chart 2.3

IMPACT OF THE DIFFERENCE IN CONSUMPTION WEIGHTS IN LATVIA AND THE EURO AREA ON INFLATION IN LATVIA
(percentage points)

With global food prices soaring, prices in the Baltic countries are picking up faster than in the euro area. The Baltic countries see a faster and stronger pass-through of global food prices to domestic prices. In periods of sharp increases of global food prices, the Baltic countries have recorded steeper rises in unprocessed food prices (see Chart 2.4; similar trends are also observed for the prices of processed food).

Chart 2.4

UNPROCESSED FOOD PRICE CHANGES GLOBALLY, IN THE EURO AREA AND THE BALTIC COUNTRIES
(annual changes; %; from January 2000 to July 2022)

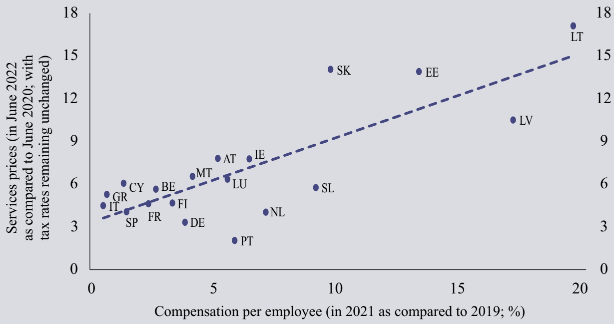


A recent study[15] shows that the frequency of price changes in Latvia is, on average, almost twice as high as in the euro area countries. In Latvia, various promotional offers are more often used for food products, while there is also a trend towards increasing prices more frequently, which is on the downside elsewhere due to higher competition between traders. Price differences are also affected by other factors, including faster rises in energy prices and wages for the employed, which push up the production costs, support additional demand and stimulate price increases.

With labour costs rising, prices go up. The rise in labour costs has the strongest impact on the services prices[16] since the provision of services is usually more labour intensive than the production of goods. Over the past two years, the prices of services posted the highest increase in the euro area countries with the steepest rises in wages (see Chart 2.5). Moreover, the prices of industrial goods and food products are also responding to wage increases by posting the most rapid rises in the countries with stronger increases in labour costs.

Chart 2.5

COMPENSATION PER EMPLOYEE AND SERVICES PRICES IN THE EURO AREA COUNTRIES



The amount and frequency of price rises are also determined by their administrative framework. Certain prices are administratively regulated, but the categories of administered goods and services prices vary across countries. For instance, in most euro area countries, the prices of water supply (19 countries), sewage (18 countries), postal services (17 countries) and waste management prices (16 countries) are subject to regulation. At the same time, natural gas prices are fully or partially administratively regulated in eight euro area countries, electricity prices are subject to some form of administrative regulation in nine euro area countries, heat energy prices are administratively regulated in seven euro area countries, while Malta is the only euro area country with an administered fuel price.

The differences in regulation may cause a temporary impact on inflation: in countries with tighter regulation and less frequent price changes, inflation may be "delayed" or be particularly high in certain periods when prices are revised. For example, the price of natural gas for households in Latvia is regulated and changed twice a year – in January and July[17].

It is the administered energy prices in the Baltic countries that have increased much faster than the euro area average (see Chart 2.6). In July, these prices even recorded an increase of 122% in Estonia compared to the situation a year ago, while in Latvia and Lithuania, they followed a more moderate upward trend, representing rises of 86% and 82% respectively, which is, however, a much faster rate of growth in prices as compared to the euro area where administered energy prices have picked up by merely almost 33%. In this case, the different impact of the pass-through of global energy prices to final prices is also visible: on

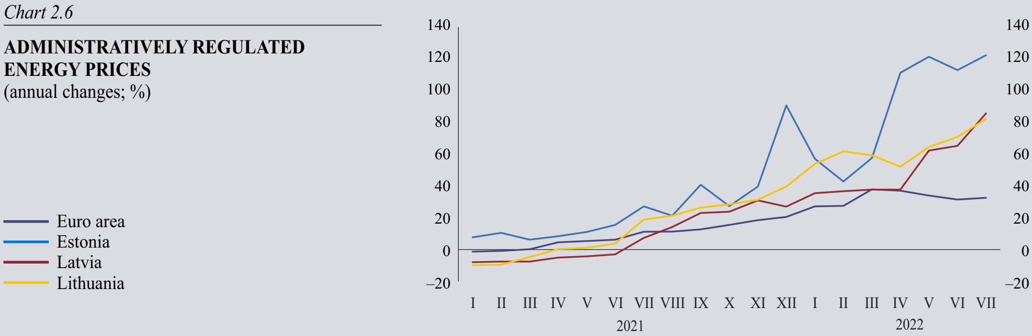
[15] Gautier, E. et al. 2022 *New Facts on Consumer Price Rigidity in the Euro Area*. Latvijas Banka Working Paper No 3/2022.
[16] Krasnopjorovs, O., Bessonovs, A. (2019). Wage increases result in higher prices: Empirical investigation.
[17] In 2022, tariffs have been changed more often in line with the government support mechanisms.

the one hand, administrative regulation may prolong this pass-through period, but the effect is more pronounced with a lag. What is also important in this context, however, is that in the past, the Baltic countries accessed relatively cheaper energy resources the replacement of which with alternatives also implies higher costs and steeper price increases.

Administratively regulated non-energy prices in the Baltic countries have recorded more moderate rises (of 6%–8%) over the year, while in the euro area they have on average even decreased somewhat (–0.2% year on year). The rise seen in Latvia was mainly due to an increase in water supply and sewerage services and waste management tariffs, while in the euro area, the decrease was underpinned by various factors – the nine euro monthly summer transport pass for public transport passengers introduced in Germany is one of the most important ones.

Chart 2.6

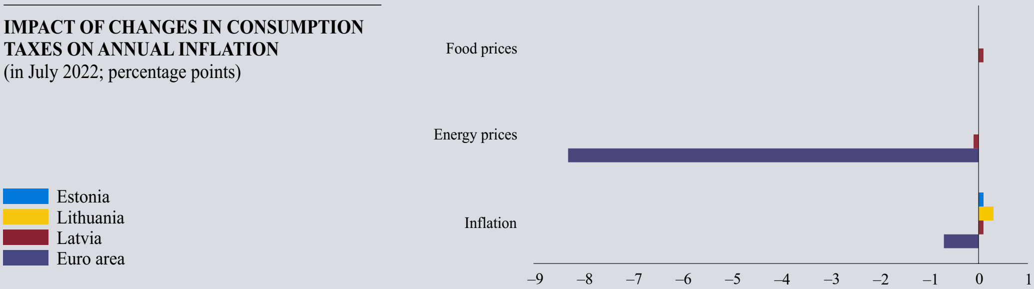
ADMINISTRATIVELY REGULATED ENERGY PRICES
(annual changes; %)



Tax changes also contributed to a steeper rise in inflation in the Baltic countries. In the Baltic countries, consumption taxes have increased slightly over the last year (e.g. the rate of the excise duty for tobacco products has been raised and the procedures for the application of the excise duty on non-alcoholic beverages according to their sugar content have been changed in Latvia), while the euro area has, on average, seen a minor impact of the tax reduction (–0.7 percentage point; see Chart 2.7).

Chart 2.7

IMPACT OF CHANGES IN CONSUMPTION TAXES ON ANNUAL INFLATION
(in July 2022; percentage points)



However, energy products have had a more significant impact of tax changes. In Estonia and Lithuania, the tax rates have remained unchanged over the last 12 months, the impact seen in Latvia has been modest (–0.1 percentage point), while in the euro area, the impact of changes in taxes on energy prices has, on average, been –8.3 percentage points. This has been a result of the reduction in different tax rates in some euro area Member States (including Germany, Spain, Italy and the Netherlands) through various mechanisms, namely reduced VAT rates on natural gas, electricity, heating, lower VAT or excise duty rate on fuel. Most of these tax cuts are in place until the end of 2022 (in some cases for longer). While changing taxes leads to lower energy prices, this has a significant impact on budget revenue, but it is more likely to be felt by the wealthiest households with higher energy consumption.

Similar trends are also evident among the non-euro area countries. The Baltic countries are not the only ones that see a rapid rise in inflation. Several central and eastern European countries outside the euro area (e.g. Romania, Bulgaria, Hungary, the Czech Republic and Poland) also face inflation that exceeds the euro area average. As in the case of the Baltic countries, this is due to a number of factors, including a higher share of energy and food products in the consumption basket, a lower reduction in consumption taxes (except Poland, where taxes have been reduced faster) and an increase in wages, which is on average twice as fast as in the euro area.

6. Conclusions and Forecasts

High energy prices significantly hamper economic activity, and the baseline scenario of Latvijas Banka's forecasts provides for a short-lived recession. GDP contracted already in the second quarter, and it is estimated that the second half of this year and the beginning of the next year will see an even stronger slowdown of economic growth. Owing to the very high economic activity in the first quarter, the GDP forecast for 2022 points to a relatively high growth (**3.0% in 2022**) and is close to the previous forecast (+0.1 percentage point compared to the previous forecast). While the future prospects have deteriorated, the growth rate in the first half of the year exceeded projections overall.

The decline in economic activity will mainly be driven by the fall in private consumption triggered by the deteriorating purchasing power of the population. The decrease in private consumption will be partly mitigated by government support measures and by spending the savings accumulated during the pandemic. The increased costs and investor cautiousness will have a negative impact on investment dynamics, while public investment related to EU funds is expected to grow sharply in 2023–2024. The fall in exports of goods and services will be driven by both weak demand in trading partner countries due to the declining purchasing power and the already stocked European warehouses (e.g. with wood products related to the construction segment). The dates of entry into force of the sanctions, which are constantly supplemented, and the termination of previous contracts will be particularly relevant with regard to the range of imported goods (wood products, metal, oil products, coal), reducing the inflow of imported goods from Russia and Belarus. Imports of goods into Latvia will also be reduced by the overstocked warehouses. It was due to stockpiling that the ratio of imports to GDP reached a new record in the first half of 2022, and it will start to decline in the future. The drop in imports is estimated to be more significant than the decrease in exports. This will reduce the current account deficit in 2023–2024.

With the impact of adverse factors persisting at the beginning of 2023, the economy will experience stagnation next year. Cautious household spending and the postponement of the implementation of investment plans in the corporate sector are still projected to persist. Thus, the **forecast for 2023 has been significantly revised downwards to –0.2%** (–0.6 percentage point compared to the previous forecast).

It is expected that the economy will start its recovery as of the second half of 2023, with inflation returning to lower levels. **In 2024**, GDP is projected to post a **4.4%** rise (+0.2 percentage point compared to the previous forecast), yet not reaching the level projected in June 2022. Stabilisation of price dynamics both on the external and domestic markets is expected to improve the sentiment of economic agents and increase demand, thus supporting both exports and production for domestic consumption as well as the implementation of investment projects.

The degree of uncertainty surrounding the GDP forecasts remains high. Household cautiousness and business downtime both triggered by the high energy prices may limit private consumption, manufacturing, profitability and thus also investment more severely than foreseen in the baseline scenario. Competitiveness of manufacturers, in particular that of European manufacturers compared to the rest of the world, may deteriorate due to higher costs. At the same time, investment in reducing energy dependence on natural gas and in enhancing energy efficiency can make a stronger contribution to the financial stability of the population and businesses.

Inflation is expected to be higher over the projection horizon, and it is mainly driven by higher food and energy prices. The inflation forecast **for 2022 has been revised upwards to 16.9%** (+2.1 percentage points compared to Latvijas Banka's June forecast), **to 9.2% for**

2023 (+2.2 percentage points) and **to 3.4% for 2024** (+1.0 percentage point). The upward revision of forecasts is affected by higher current food and energy prices and by the outlook that the future level of these prices will nevertheless exceed previous assumptions. While the rise in inflation is somewhat delayed by government support, its impact on the average price level in the country is low, as it is the objective of supporting the low-income households that is mainly pursued. The increase in the inflation forecast for 2024 is affected by a higher increase in average wages projected against the backdrop of a tight labour market.

The uncertainty surrounding the inflation forecast is mainly caused by energy price fluctuations. They affect the level of consumer prices for these products directly and, given the role of energy in the production and supply of different goods and services, they will eventually be incorporated in the prices of other goods and services as well. In addition, the upward risk to the inflation forecast is linked to the possibility of relatively faster wage growth that could stem from both rises in the minimum wage and pressures to accelerate wage increases due to the current inflation.

Table 1
MACROECONOMIC FUNDAMENTALS: LATVIJAS BANKA'S FORECASTS

	2022	**2023**	**2024**
Economic activity (annual changes; %; at constant prices; seasonally adjusted data)			
GDP	3.0	–0.2	4.4
Private consumption	4.8	–4.7	5.9
Government consumption	3.4	–2.7	1.8
Investment	1.9	1.2	6.0
Exports	5.3	0.0	3.2
Imports	6.3	–3.5	3.7
HICP inflation (annual changes; %)			
Inflation	16.9	9.2	3.4
Core inflation (excluding food and energy prices)	6.9	4.5	4.4
Labour market			
Unemployment (% of the economically active population; seasonally adjusted data)	6.7	6.7	6.3
Nominal gross wage (annual changes; %)	8.5	7.2	7.5
External sector			
Current account balance (% of GDP)	–5.2	–2.9	–3.4
Government finances (% of GDP)			
General government debt	45.0	44.4	42.9
Budget surplus/deficit	–7.9	–3.5	–2.6

7. Analysis of Scenarios

7.1 Assessment of the impact of government support provided during the energy price crisis[18]

Motivation

Due to the surge in energy prices and high inflation, the government decided to extend the government support package in summer and autumn of 2022 to mitigate the negative effect of the exceptional increase in energy prices on the economy. As a result, the total amount of the government support measures over a three-year period (2021–2023) will exceed 1 billion euro.

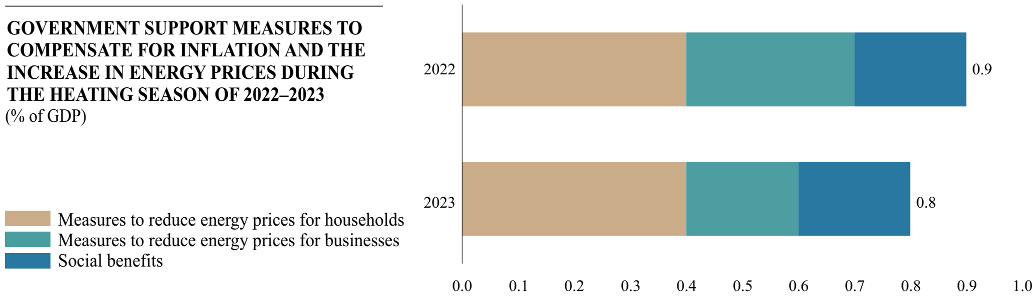
In order to assess the impact of the support measures on the disposable income of different population groups, economic development and inflation, Latvijas Banka has carried out a scenario analysis using the Latvian EUROMOD[19], CGE-EUROMOD[20], DSGE[21] and STIP[22] models.

Simulation

In the heating season of 2022–2023, a fiscal support of almost 700 million euro is envisaged. The government will partially compensate households for the increase in energy prices for central heating, as well as electricity used for heating, natural gas, pellets, briquettes and firewood. Meanwhile, the support provided to businesses will include the waiving of the electricity system service fee as well as grants to energy-intensive businesses. It has been intended to waive the mandatory procurement component of electricity (MPC) for all consumers. Additional benefits over a seven-month period and faster pension indexation are planned for the recipients of smaller pensions, while opportunities to receive housing benefits are also being expanded. The implementation of these additional measures is spread over a period lasting from July 2022 to May 2023.

Chart 37

GOVERNMENT SUPPORT MEASURES TO COMPENSATE FOR INFLATION AND THE INCREASE IN ENERGY PRICES DURING THE HEATING SEASON OF 2022–2023
(% of GDP)



Simulation of models

A. Assessment of the impact on the disposable income of different population groups

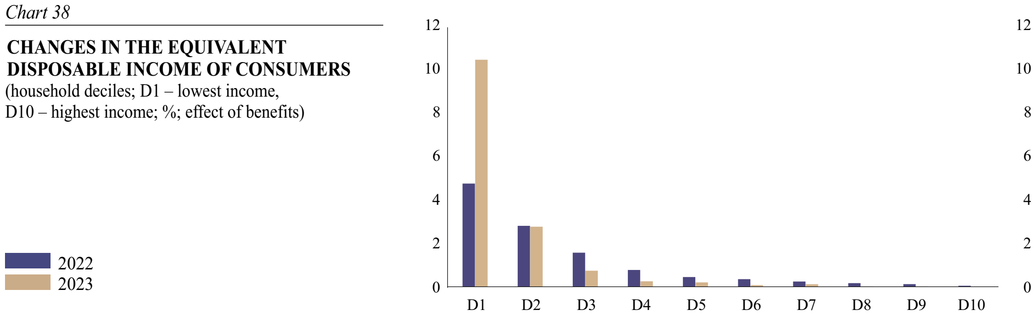
In order to assess the impact of the government support measures in the form of social benefits on different population groups, the EUROMOD and CGE-EUROMOD models were used, allowing both to look at the impact of targeted benefits on total disposable income and to better understand who will benefit most from such benefits. During this heating

[18] Prepared by Baiba Brusbārde, Ludmila Fadejeva, Andrejs Zlobins, Konstantīns Beņkovskis and Ieva Opmane, economists of Latvijas Banka.
[19] EUROMOD – Tax-benefit microsimulation model for the European Union, see Pluta A., Recchia P., Zasova A. (2017). EUROMOD country report: Latvia 2014–2017.
[20] Beņkovskis, K., Goluzins, E., Tkačevs, O. CGE Model with Fiscal Sector for Latvia, Working paper No 1/2016 of Latvijas Banka.
[21] Bušs, G., Grüning, P. Fiscal DSGE Model for Latvia. Working paper No 5/2020 of Latvijas Banka.
[22] Bessonovs A., Krasnopjorovs O. Short-Term Inflation Projections Model and Its Assessment in Latvia. Working paper No 1/2020 of Latvijas Banka.

season, additional social benefits are aimed at supporting more vulnerable households; this is also reflected in the estimated results of the models. The equivalent disposable income[23] of households included in the decile with the lowest income will rise by approximately 5% in 2022 and by approximately 10% in 2023. The impact will be more noticeable in 2023 as there are more months during which the benefits will be available. Meanwhile, the impact on the average Latvian household in both years stands below 1%. Thus, while the average impact is low, the effect of benefits will be mainly felt by households in the lower income groups and the benefit objective to support the less wealthy households will be achieved.

Chart 38

CHANGES IN THE EQUIVALENT DISPOSABLE INCOME OF CONSUMERS
(household deciles; D1 – lowest income, D10 – highest income; %; effect of benefits)

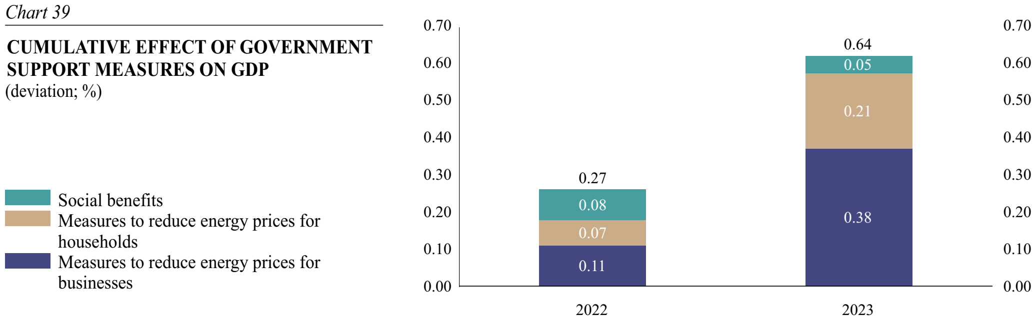


B. Assessment of the impact on economic development

The impact of the government support measures to reduce the exceptional increase in energy prices on Latvia's economy has been assessed using the Latvian DSGE model, supplemented by detailed modelling of the fiscal sector. In the simulation, the fiscal support measures are divided into three groups: measures to reduce the exceptional increase in energy prices for households, support to businesses and benefits for the socially more vulnerable population. The measures to reduce the exceptional increase in energy prices for the population are simulated in the model through similar channels of the economic impact in the form of taxes, while social benefits for the more vulnerable population are modelled as government transfers to households.

Chart 39

CUMULATIVE EFFECT OF GOVERNMENT SUPPORT MEASURES ON GDP
(deviation; %)



The simulation results shown in Chart 39 suggest that the government support measures will overall increase Latvia's real GDP by 0.64%, with the largest contribution (approximately 60%) coming from the support provided to businesses. The government covers part of the energy-related costs, thus contributing to the competitiveness of businesses in external markets. Against the backdrop of a tight labour market and high inflation, as employees increasingly demand higher wages to compensate for the decline in real purchasing power increase, part of the resulting cost reduction is also passed on to employees' remuneration. Household consumption will also be strongly supported by measures directly aimed at reducing heating expenses, thus allowing funds to be redirected to the consumption of other goods and services.

[23] The disposable income of a household is calculated per equivalent consumer. It is obtained by dividing household income by equivalent household size which is calculated using the modified OECD scale (1.0; 0.5; 0.3): a weight of 1.0 is given to the first adult, a weight of 0.5 – to each subsequent household member aged 14 and over and a weight of 0.3 – to each child aged under 14.

C. Assessment of the impact on inflation

The impact on inflation has been assessed using the short-term inflation projections model of Latvijas Banka. Consumer price inflation is directly affected by price-reducing support measures (support for payments for natural gas and heat energy, waiving of the MPC). Indirectly, with an increase in demand, inflation is affected by the benefits and indirect price reduction mechanisms that entail submitting an application for receiving support rather than automatically reducing the price. Given the consumption structure, inflation will be most affected by the partial compensation of district heating tariffs (50% for tariffs above 68 euro per MWh). Although some populated areas in Latvia will see the heating tariff fall below the specified threshold, in most large cities, including Riga, the set tariff will be exceeded and support mechanisms will be activated. Support for natural gas heating has already been put into effect and statistically started to hold back inflation growth already in August. Meanwhile, the effect of waiving the MPC, taking into account its small share (below 5%) in the electricity bill, will be insignificant. Owing to the support measures, in 2022, inflation will be 0.72 percentage point lower than in the scenario without the support measures, in 2023 – 0.57 percentage point lower and in 2024 – 0.47 percentage point higher due to the base effect.

Table 2
ASSESSMENT OF THE IMPACT ON INFLATION

	2022	2023	2024
Effect of price-affecting mechanisms	–0.74	–0.57	0.47
Effect of benefits	0.02	0.00	0.00
Total impact	–0.72	–0.57	0.47

Conclusions

Estimates suggest that the equivalent disposable income of households will grow by less than 1% on average due to targeted social benefits, with the highest increase being recorded by households in the lowest income decile (by 5% in 2022 and by 10% in 2023). The total impact of all measures on Latvia's real GDP will amount to 0.64%.

Although the impact of support measures on inflation may seem modest (they reduce inflation by 0.72 percentage point in 2022 and by 0.57 percentage point in 2023), their main objective in this case is to help the less wealthy population, which, as shown in the estimates of changes in disposable income, is being accomplished. In addition, the support provides a positive boost to consumption and economic development.

7.2 Impact of restrictions on the availability of natural gas on Latvia's economy[24]

Motivation

Due to Russia's invasion of Ukraine, the economies of the euro area countries are currently experiencing the most challenging energy price crisis in their history. Energy prices have fluctuated in a wide range and have risen very rapidly and significantly. The price increase has been particularly sharp in the natural gas market. At the beginning of February 2022, the market price of 1 megawatt hour of natural gas stood at 75 euro, but at the end of August the maximum price reached almost 340 euro (about 200 euro in September) for 1 megawatt hour of natural gas.

However, high prices are not the only challenge the euro area countries might face. Russia is an important supplier of natural gas to a large number of EU countries, accounting for

[24] Prepared by Konstantīns Beņkovskis, Dzintars Jaunzems, Oļegs Matvejevs and Kārlis Vilerts, economists of Latvijas Banka.

almost 40% of total gas consumption in 2021.[25] In some countries (including Latvia) the gas supplied by Russia accounted for almost all (> 90%) of the natural gas consumed. Although since 24 February some work has been done in Latvia to diversify supply sources and create reserves for the next heating season, Russia's decision to use its energy supply as an instrument of economic war also calls for an evaluation of hypothetical scenarios under which the availability of gas is limited.[26] To understand the impact of restricting energy availability on Latvia's economy, Latvijas Banka has carried out a scenario analysis, using the CGE-EUROMOD model for Latvia.[27]

Simulation

In 2021, natural gas accounted for about 21% of the total energy consumption in Latvia (i.e. 40 460 TJ out of 192 946 TJ). About 60% of all natural gas is used in the energy transformation sector (i.e. in district heating boiler houses and cogeneration plants, Riga TEC-1 and TEC-2, etc.), while about 12% is consumed by households and 10% – by manufacturing companies.[28] More than half of the total natural gas consumption by manufacturing companies is used for the production process (i.e. for ensuring the production processes). Although the Cabinet Regulation[29] provides for a detailed plan for the supply of energy to Latvian households and businesses in a crisis situation, this scenario analyses which economic sectors are more sensitive to reducing natural gas consumption and will have a greater negative impact on economic activity. The scenario therefore makes a simplified assumption that the amount of natural gas available to the Latvian manufacturing sector (NACE Rev. 2, categories 01–32) is reduced by 15%.[30] This reduction shall be achieved by each sector as follows:
1) reducing heat consumption by 10% (the direct impact on output is low);
2) reducing consumption of natural gas as a production resource.

Simulation of the model

The results show that reducing the availability of natural gas by 15% for the economic sectors covered by the scenario would also significantly reduce their output. This saving of gas during one heating season will lead to a contraction of GDP of about 3.4% in the medium term, which includes both direct effects (decreasing output in a given sector) and indirect effects (decreasing demand for output from other sectors). The decline in output would result in a significant reduction in real exports and employment. This would also reduce the household disposable income and private consumption.

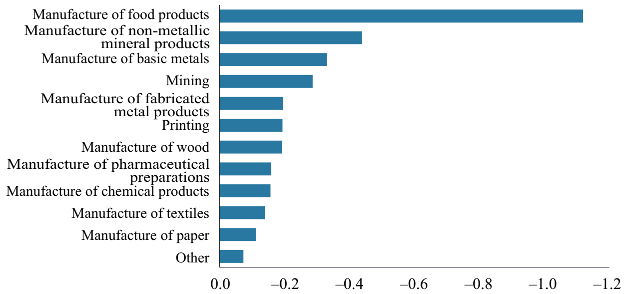
The contribution of specific sectors to the decline in GDP depends on a number of factors, including the weight of the sector in value added, the links with other economic sectors, the consumption of natural gas and the extent to which natural gas is used as a production factor. By ranking the sectors according to their contribution to GDP decline, the manufacture of food products – a major sector of Latvia's economy with relatively high natural gas

[25] Extra-EU Imports of Natural Gas by Partner, 2020 and 2021. Eurostat.
[26] To determine whether a shortage will occur and how severe it would be, a series of assumptions should be made; therefore, the scenario is solely hypothetical.
[27] CGE-EUROMOD is a model developed by Latvijas Banka and BICEPS, combining the general equilibrium model (CGE) based on Latvia's cost and output database with the tax-benefit microsimulation model (EUROMOD) based on microdata from the EU-SILC survey. See https://www.macroeconomics.lv/sites/default/files/wp_2016_01_.pdf and https://www.euromod.ac.uk/about/country-by-country/latvia.
[28] Energy balance, TJ, thsd toe (NACE Rev. 2) 2008–2021.
[29] Cabinet Regulation No 312 of 19 April 2011 "Procedures for the Supply of Energy Users and Sale of Heating Fuel During Declared Energy Crisis and in Case of Endangerment to the State". *Latvijas Vēstnesis*, 69, 05.05.2011.
[30] The 15% reduction does not entail indirect effects of, for instance, falling supplies of electricity and a lower gas consumption in the energy sector.

consumption – shows the largest contribution. The manufacture of non-metallic mineral products and the manufacture of basic metals also represent an important contribution.[31]

Chart 40

RESULTS OF THE SCENARIO ANALYSIS: CONTRIBUTION OF MANUFACTURING SECTORS TO GDP DECLINE, ASSUMING THAT THE AVAILABILITY OF NATURAL GAS IS LIMITED
(percentage points)

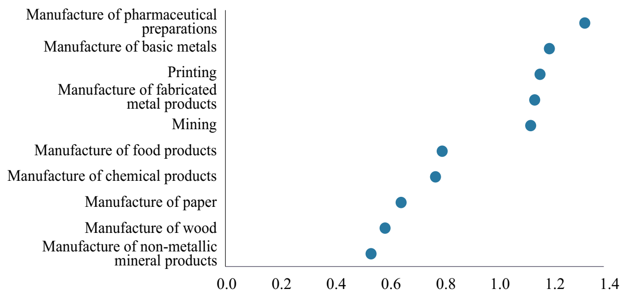


The vulnerability of certain sectors is better characterised by their contribution to the GDP decline as a ratio to the sector's contribution to the total gas savings. It reveals the economic side effects of the saving of natural gas. The higher this indicator, the more expensive the saving of natural gas in a particular sector.

This indicator shows the highest sensitivity in the pharmaceutical sector, where the value added per natural gas unit used is higher. Additionally, the production conditions, including temperature, humidity, pressure and the degree of sterilisation, are very demanding in this sector. The saving of natural gas is also relatively expensive in the sectors of the manufacture of basic metals and metal products, as well as printing. There may be various reasons for that, including the greater importance of natural gas in the production process or the fact that it is more complicated to replace it with other energy resources.

Chart 41

ECONOMIC SIDE EFFECTS OF NATURAL GAS SAVING
(rate of decrease (in %) in GDP if on account of the particular sector natural gas savings in the economy reach 1%)



Conclusions

One of the most important channels through which Russia's invasion of Ukraine affects the economy of Latvia (and also the euro area as a whole) is related to energy sources. It mostly stems from the lower purchasing power of the population related to very high energy prices (see the "Macroeconomic Developments Report" of March 2022). If, in addition to high prices, Latvia's economy was also affected by energy availability problems, it would be necessary to take into account the additional decline in economic activity in several economic sectors that would also affect the overall economic activity in the country. This means that, in the event of energy unavailability, the government should carefully assess in which economic sectors first to limit energy consumption and in what amounts, and decide on the provision of macroeconomic support to stimulate economic activity through fiscal policy levers.

However, the results of the scenario should be interpreted with caution. They identify the

[31] The model is based on Latvia's most recent Supply-Use and Input-Output tables, starting with 2015. Even though the model is adjusted to the shifts in the economic structure, it does not take into account the shifts in the cost structure of some sectors. For instance, the table of 2015 includes AS Liepājas Metalurgs in the sector of the manufacture of basic metals. Therefore, when interpreting the results, it should be taken into account that the 2022 cost structure of the manufacture of basic metals included in the model can differ from the actual situation.

impact channels and the most sensitive sectors of Latvia's economy rather than provide accurate quantification. While the CGE-EUROMOD model incorporates a detailed energy consumption mix, which also simulates substitutability between different energy resources, it builds on correlations assessed over previous years which could have changed in the meantime as businesses invest and adapt their activities to changes in the energy market.