The Estonian Economy and Monetary Policy

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The Estonian Economy and Monetary Policy is an Eesti Pank review released four times a year that summarises the main recent events in the global and Estonian economies. The review also contains an economic forecast for Estonia.

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INTRODUCTION

Activity in the global economy has increased since the start of the year, but the outlook for growth remains fragile. Inflation falling slowly has led to further tightening in monetary policy, and growth in the economy is now probably being held back not only by the higher cost of borrowing but also by the reduction in the fiscal stimuluses that increased during the crises. Growth in the global economy is forecast to be below 3% this year, which is the lowest it has been since the great financial crisis, leaving aside the pandemic. Blockages in supply chains that were earlier causing bottlenecks have by now largely been resolved, but no new wave of growth has yet taken off in global trade. The changed geopolitical circumstances have encouraged companies to shorten their supply chains through nearshoring, which has pushed up inflation for manufactured goods.

The Estonian economy is doing satisfactorily overall, though the crises have hit different sectors quite differently. The Estonian economy has been sliding backwards in real value added for more than a year, but GDP at current prices has even so increased by around 30% over two years. A downturn in the economy generally causes unemployment to rise and growth in wages to slow, but the labour market has been resilient this time and unemployment is close to 5% while wage growth exceeds 10%. The lack of reaction in the labour market has been possible because wages in many sectors have still increased more slowly than the turnover and profits of companies. The greatest difficulties have been faced by manufacturing and construction, where employment has fallen, while the number employed in the public sector and in private sector services has risen.

Economic activity will pick up this year. Private consumption has been modest in the first half of the year, as it has fallen from the unsustainably high level last year that resulted from the use of pandemic and pension savings. Growth in consumption will pick up in future as purchasing power improves. The purchasing power of the average wage started to decline in 2021 and then to increase again last year, and it will have recovered in 2024 and will then continue to increase in 2025. The capacity for growth in the economy will be supported by the revitalisation of demand in the main export markets, and weaker cost pressures on export prices than before as the energy crisis fades. The position of the Estonian economy will improve over the year after declining for five quarters, and so the total volume of the economy will be 1% smaller over the year as a whole. Growth in the economy is expected to be around 3% in 2024 and 2025.

Inflation will continue its current downwards trajectory. It was down to 11.3% in May, which is mainly a consequence of the leap in the first half of last year, as the consumer basket has risen in price by around 4% over the past nine months. Inflation will be below 5% by the end of the year and will fall further next year to 2%. Inflation will be drawn downwards by falling prices for energy and the gradual pass-through of lower prices for food commodities into retail prices. Future transactions for various energy sources suggest that their price levels will remain notably lower than they were last year, but the changes to the supply channels for energy mean the risk remains of an unexpected rise in price. Inflation may also be pushed up temporarily by the rise in VAT planned by the government.

Interest rates rising will be less of a hindrance to economic growth than high inflation. Monetary policy tightening in the euro area in order to restrain inflation will push the cost of borrowing up for people and companies in Estonia, but the additional interest costs for companies will be around 10% of profits, and for households they will be less than 2% of consumption spending. Inflation remaining high would by contrast have a much more harmful impact on both purchasing power and the economy. Recent corporate survey data do not point to financial capacity being an obstacle to growth, but rather point overwhelmingly to the decline in purchasing power reducing demand. The ability to cope with loan liabilities is also indicated by the share of bad loans remaining very small.

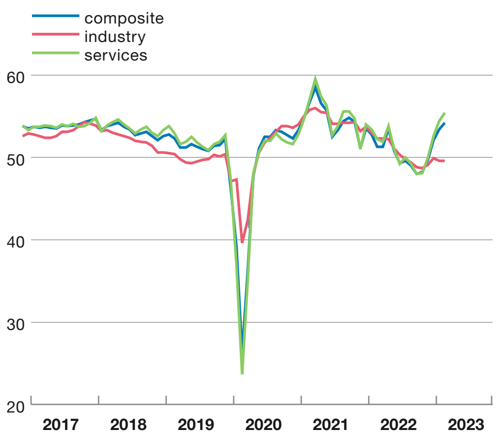
The general government budget deficit will widen sharply this year. Revenues will grow more slowly this year, while spending will grow faster, as both social benefits and the payroll for public sector employees have jumped up. The fiscal position in the years ahead and the impact of fiscal policy on the economy will depend on whether the fiscal policy measures planned by the government are enacted. Clear and precise data on the introduction of those changes were not yet available when this forecast was written, and so they are treated separately in an additional scenario. Applying all of the changes in the stability programme would lift inflation temporarily, but would reduce long-term price pressures by narrowing the deficit. A lasting reduction in the budget deficit and the reinstatement of fiscal discipline to support such fiscal policy decisions would rein in inflation and help to avoid general government debt and interest expenses increasing further at a point where pressure to increase current expenditures in areas like social and healthcare costs and national defence will only mount over time while the working age population is shrinking. In the long term, orderly state finances and a low debt level will support the competitiveness and capacity for growth of the Estonian economy.

THE EXTERNAL ENVIRONMENT

THE GLOBAL ECONOMY

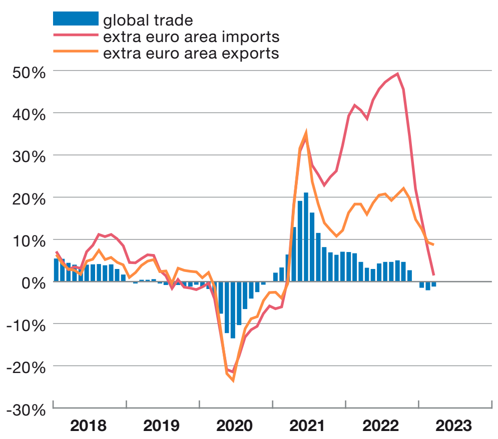
Global economic activity has increased. The composite index of global activity[1] (PMI) rose to 54.4 points in May, indicating faster growth in the global economy for the fourth consecutive month (see Figure 1). The global PMI rose in May to its highest level since the end of 2021. It is mainly the services sector that is leading the growth in global demand, while manufacturing remains weak. Global trade slipped into decline in the first quarter of the year (see Figure 2). This reflects changes in consumption patterns as consumers started to spend more on tourism, leisure services, and healthcare services after the pandemic restrictions were removed. Activity in manufacturing has been modest because demand has been weak, but the easing of tensions in supply chains has given support to manufacturing companies this year (see Figure 3). Economic activity has differed across regions (see Table 1). Activity has increased the most in Asian countries, where inflation has not been as high and consumer purchasing power has consequently not suffered as much. The recovery in the Chinese economy has also supported economic activity both in the Asian region and globally. Activity in advanced economies has in contrast been moderate, but the extraordinarily strong labour market has made it relatively resilient to higher interest rates and to the uncertain economic outlook. The International Monetary Fund (IMF) estimates[2] that labour market tightness has been caused by the fall in the labour participation rate after the pandemic, which has still not recovered to its earlier level in many countries. The pandemic pushed low-skilled workers out of

Figure 1. Purchasing Managers Indexes



Sources: J.P.Morgan, S&P Global, Markit Economics Limited

Figure 2. Yearly growth in global and euro area trade, three-month moving average



Sources: CPB, Eurostat

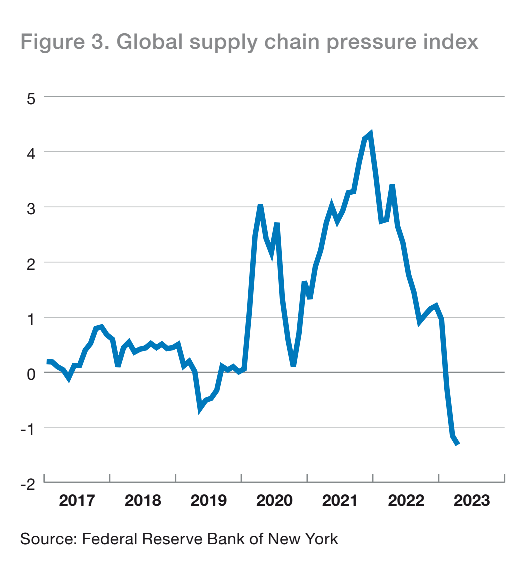
Table 1. GDP growth in different regions in 2018- 2023 (change, %)*

	2018	2019	2020	2021	2022	2022 Q4	2023 Q1	2023
World	3.6	2.9	-3.1	6.0	3.4			2.8
Advanced economies	2.2	1.7	-4.5	5.2	2.7			1.3
Emerging markets and developing economies	4.5	3.7	-2.1	6.6	4.0			3.9
Euro area	1.8	1.6	-6.1	5.3	3.5	1.8 (-0.1)	1.0 (-0.1)	0.8
United States	2.9	2.3	-2.8	5.9	2.1	0.9 (0.6)	1.9 (0.3)	1.6
China	6.7	6	2.2	8.1	3.0	2.9 (0.6)	4.5 (2.2)	5.2
Japan	0.6	-0.4	-4.3	2.1	1.0	0.4 (0.0)	1.3 (0.4)	1.3
United Kingdom	1.7	1.7	-11	7.6	4.1	0.6 (0.1)	0.2 (0.1)	-0.3

* GDP at constant prices, quarterly growth over the previous quarter is in brackets
Sources: IMF World Economic Outlook (April 2023), OECD, Eurostat, National Statistics; 2023 is IMF forecast

1 S&P JPMorgan Global Composite PMI.

2 Labor Market Tightness in Advanced Economies, IMF Staff Discussion Notes 2022/001, IMF.



the labour market and increased early retirement. School closures and limits on childcare services in some countries, such as the USA, made many mothers of small children stay at home as well. While workers have gradually returned to the labour market, there remain shortages of them in many sectors, and this has pushed unemployment to historically very low levels.

Global inflation has come down a little. The rise in prices has mainly been slowed by the fall in the prices of global commodities, which has affected the price of energy and food. The yearly rise in consumer prices in April was 4.9% in the USA, 7% in the euro area, and 8.7% in the United Kingdom. Inflation in Japan, where monetary policy still remains loose, rose to 3.5%. Yearly inflation in April was more moderate in the larger emerging economies, where inflation and monetary policy tightening started earlier, as it was 4.2% in Brazil, 4.3% in Indonesia, and 4.7% in India. However, core inflation, which excludes energy and food prices, has mainly remained high in both advanced and emerging economies and it has not substantially fallen despite the tight monetary policy of central banks.

Central banks continued to raise interest rates. High core inflation has pushed central banks to raise interest rates further, though at a slightly slower pace than before. The US Federal Reserve raised interest rates by 25 basis points in May to 5.25% and indicated that even though it was reaching the end of the cycle of rising interest rates, they would need to be kept high until inflation pressures ease. The Bank of England and the European Central Bank both also raised interest rates by 25 basis points, though they said that it may be necessary to raise them further in future. Tighter financing conditions in many advanced economies have affected real estate prices, hindered investment, and reduced the growth in bank lending.

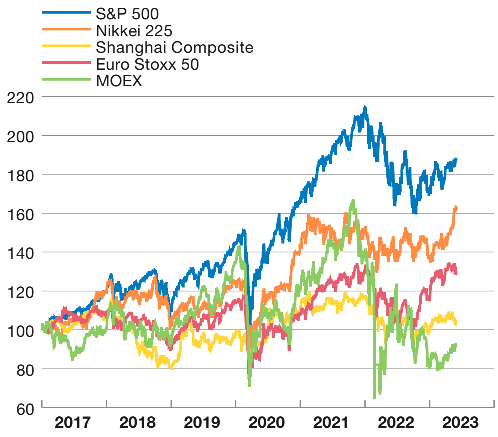
The leaders in economic growth are China and India. Chinese GDP grew by 4.5% over the year in the first quarter, which was more than markets expected. Growth in the Chinese economy has usually been driven by exports, but two thirds of the growth now came from the recovery in consumption after the removal of the pandemic restrictions. This has aided growth throughout the Asia region. Signs have recently appeared though of Chinese economic growth proving weaker than expected. Weakness in foreign demand led exports to fall by 7.5% over the year in May, while industrial production[3] fell to its lowest level of the past five months. Weak consumption is indicated by retail sales remaining below market expectations and growth in consumer prices stalling. The Chinese real estate market is showing signs of stabilising after a substantial fall last year, and real estate prices in several large cities have started to rise again. Growth in sales of new residential property has stalled recently though and circumstances are difficult for a lot of real estate developers with weak balance sheets, and so there has been no broadly based recovery in the market. The Indian economy has successfully defied the volatile external environment and economic growth in India is among the fastest in the world. Growth has been supported by increased exports, general government spending, and growth in consumption.

The prices of shares and bonds rose in April and May. The focus of markets remained on inflation and the monetary policy of central banks. Initial indications that inflation was falling have been confounded, and core inflation in the USA and the euro area has proved more persistent than expected. Attention in the USA focused on the financial results of companies, which have been satisfactory, indications that the cycle of rising interest rates is ending, and the challenge of raising the debt ceiling, which was finally agreed at the end of May. Despite the problems in the

3 China's official PMI for the industrial sector.

financial sector and the challenge of the escalating national debt, volatility calmed in the US bond markets and the interest rates on US Treasuries peaked in March. The yields on euro area sovereign bonds also mainly fell. Stock markets have generally performed positively in recent months, as share indexes in advanced markets rose a little, while those in developing markets did so a little less (see Figure 4). The best results were recorded for European shares, largely as the energy crisis was resolved. Share indexes in Asia were affected to some degree by the tensions around Taiwan.

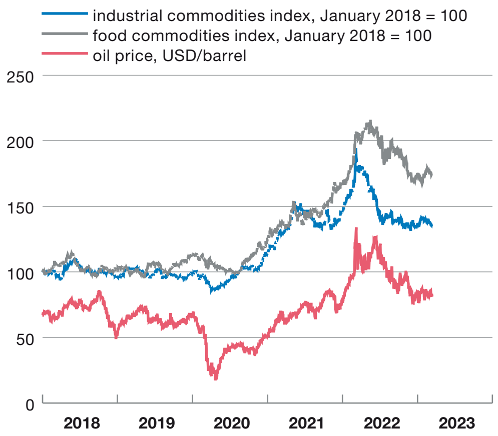
Figure 4. World stock indexes, 01 January 2017 = 100



Last observation 01.06.2023
Source: Bloomberg

Prices mainly fell in commodities markets in May. The oil price rose sharply in April after the unexpected news from OPEC+ that it was reducing production by a million barrels a day. OPEC announced specifically that it was reducing production volumes in order to keep the oil price stable at around 80 dollars a barrel. The price of Brent crude remained clearly below 80 dollars a barrel in May though, as it did after the meeting of OPEC+ in early June, when production volumes were cut further (see Figure 5). It was expected that the oil price would rise partly because of the rapid growth in air travel, and partly because of growth in demand from China, but recent data on the Chinese economy have been worse than markets expected, and demand has remained modest. Russia also succeeded in selling larger amounts of oil than previously agreed with the OPEC+ countries at below the market price. It was mainly exported to China and India. Energy prices in Europe fell by 11.3% in May with the price of natural gas taking the lead with a fall of 25.2%. Food prices fell by 3.1%[4]. The largest falls in commodities prices were of 10% in the prices of iron ore and zinc. Prices of non-energy commodities were down 3.6% in May, while prices of precious metals were down 0.5%. The gold price remained high though at a little below 2000 dollars an ounce, mainly because uncertainty remains about the future and because the dollar depreciated.

Figure 5. Commodity price indexes and the oil price



Sources: HWWI, Reuters, Bloomberg

THE EURO AREA

The economy of the euro area escaped from deeper recession thanks to the increased activity in the services sector. Euro area GDP shrank by 0.1% in the first quarter of 2023, and its yearly growth was 1.0%. Quarterly growth in German GDP was negative for the second consecutive quarter at -0.3%[5], while in France the growth was 0.2%, in Italy it was 0.6% and in Spain it was 0.5%. The economy of the euro area is currently being supported primarily by the strong services sector. Despite the recent tensions in the banking sector that caused temporary uncertainty in global financial markets, survey data show that companies in the euro area have become less uncertain about the future[6]. Concerns about access to energy have been resolved for the time being, while fuel prices have fallen, difficulties in supply chains have decreased markedly, and inflation is falling. The composite PMI index

4 Pink Sheet Data, June 2, 2023, The World Bank.

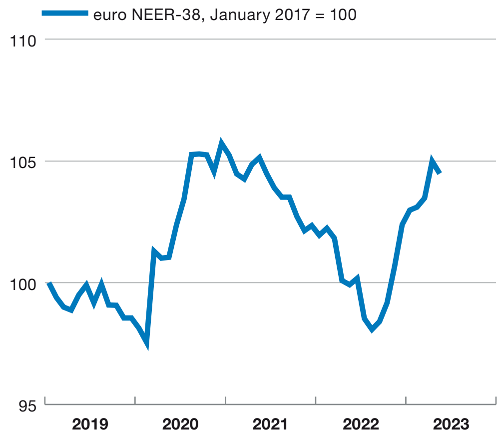
5 This means that the economy was technically in recession.

6 The European Commission's Economic Uncertainty Indicator (EUI).

shows economic activity in the euro area was a little lower in May than at the start of the year at 53.3 points[7], as the increase in activity in the services sector has not offset the weakness in the industrial sector. Constantly increasing demand for services such as travel services, including air travel, has led to a substantial increase in employment. The PMI shows that developments have been increasingly uneven across sectors, because while orders have been growing strongly in the services sector, there has been an accelerating fall in new orders in industry. The difference between the performance of the services sector and that of manufacturing is the widest it has been in the euro area since 2009.

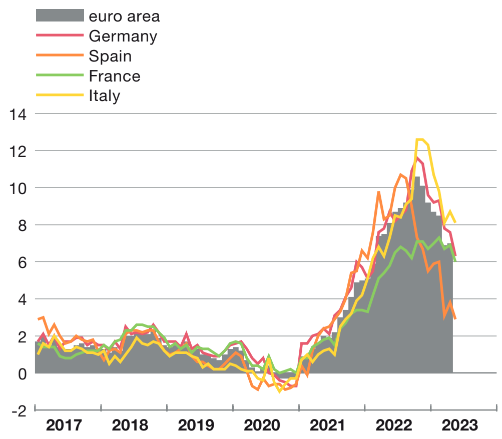
The industrial sector in the euro area is not doing well. The results of the sector were affected in the first quarter by protests and strikes against the pension reform in France, and by the weak results of manufacturing companies in Germany. The PMI for the manufacturing sector was lower in May than in April at 44.6 points, which was its lowest level for 36 months[8]. Industrial output in the euro area fell by 4.1% over the month in March, which was the largest drop since the pandemic. The biggest fall was in the production of capital goods[9], and industrial output was down by 1.4% over the year. Blockages in supply chains have continued to ease at the same time though, and prices for inputs in the industrial sector are rising more slowly. Despite this, prices for inputs and sales prices remain high in historical comparison. The euro area had a surplus in trade in goods of 25.6 billion euros in March, having seen a deficit of 20 billion euros in the same month a year earlier. This was the second surplus in goods since September 2021. The major contribution to the reduction in the deficit was the fall in energy prices. The exchange rate of the euro (NEER) strengthened against the currencies of the euro area's main trading partners until May, when it fell a little (see Figure 6). This meant the euro remains relatively cheaper than it has been in recent years, which should give a little help to exporting companies. Financing conditions are more restrictive than they were in the euro area however because monetary policy has been tightened in response to high inflation (see Box 1 on monetary policy). This makes companies less willing and able to invest.

Figure 6. Trade-weighted euro exchange rate



Source: European Central Bank

Figure 7. Inflation



Source: Eurostat

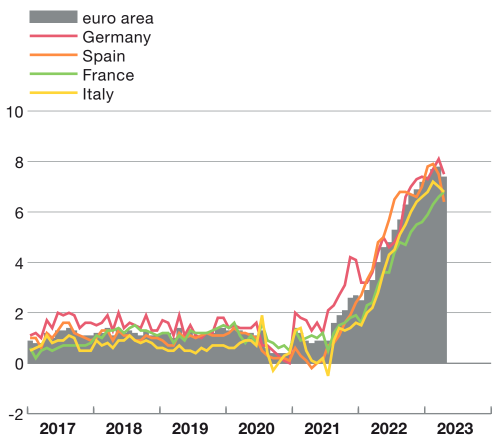
The confidence of euro area households is improving, but domestic demand remains modest. The confidence index for consumers in the euro area is strengthening, but it still remains weak in historical terms though, and is still below its average. Several euro area countries offered quite generous support for households until the spring to compensate them for the impact of high energy prices, but by now this support has been withdrawn almost everywhere. This might weaken consumer confidence a little further. At the same time, energy prices have fallen significantly, especially the price of gas, which is very important for households in the euro area. Consumption

7 HCOB Flash Eurozone PMI.

8 HCOB Eurozone Manufacturing PMI.

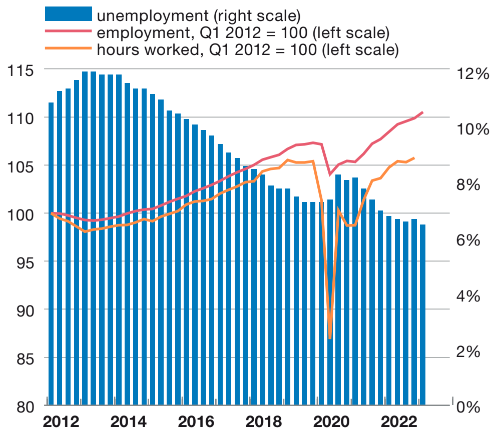
9 Such as machinery and equipment.

Figure 8. Core inflation



Source: Eurostat

Figure 9. Employment and unemployment in the euro area



Source: Eurostat

remains modest even so, and retail sales volumes in the euro area were falling in monthly comparison until April. Retail sales were down by 2.6% over the year in April, indicating that domestic demand is weak, which is a consequence of high inflation, rising borrowing costs, and the fear that a recession is coming.

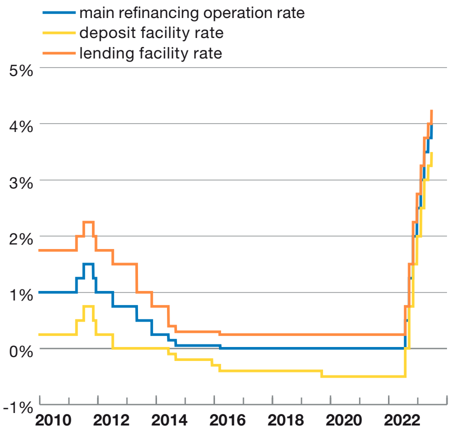
Inflation fell in the euro area. Inflation fell from 7.0% in April to 6.1% in May, which was its lowest level since February 2022. Inflation was mainly pulled back by the drop of 1.8% in energy prices, while prices also rose less quickly for food, alcohol and tobacco, and for non-energy industrial goods. Prices in May were 7.6% higher than a year earlier in Italy, 6.1% higher in Germany, 5.1% higher in France, and only 3.2% higher in Spain (see Figure 7). The highest inflation in the euro area was again in the Baltic states and Slovakia. Core inflation also fell, dropping from 5.6% in April to 5.3% in May, while the rise in the producer price index slowed further to 1.0% (see Figure 8). The risks around inflation will remain in future though, as domestic price pressures have not particularly eased even as overall inflation has calmed in recent months, and core inflation remains high. The situation in the labour market in the euro area has been good so far. The unemployment rate fell to 6.5% in April, and the number of people in employment in the first quarter of this year was 0.6% higher than in the last quarter of 2022 (see Figure 9). The performance of the labour market and high inflation have started to affect wages, and the rate of growth in compensation to employees has risen to a little over 5%.

Box 1: Monetary policy in the euro area

The key objective of the Eurosystem monetary policy is to maintain price stability in the euro area. The European Central Bank defines price stability as annual inflation of 2% over the medium term. Although inflation has fallen in the euro area in recent months, it still remains too high and price pressures are broadly based throughout the economy. The June forecast by the Eurosystem foresees that inflation in the euro area will average 5.4% in 2023, and will then fall to close to 3% in 2024 and 2.2% in 2025. This means it is still expected that inflation will remain above its target for an extended period. To bring inflation in the euro area back to close to the target of 2% over the medium term, the Governing Council of the European Central Bank has continued to tighten its monetary policy.

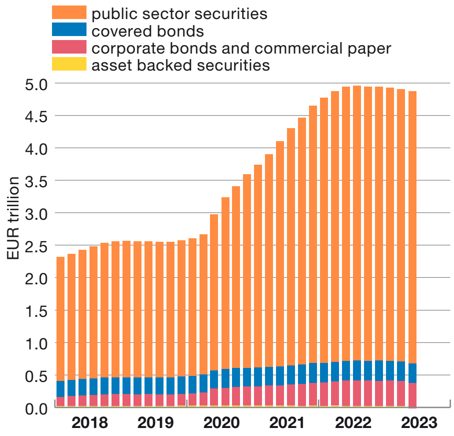
The Governing Council raised monetary policy interest rates at its most recent meetings at a slower pace than at its first meetings of the year. The three key interest rates were raised by 0.25 percentage point in both May and June. The interest rate on main refinancing operations is currently 4.0%, the marginal lending rate is 4.25%, and the deposit facility rate is 3.5% (see Figure B1.1).

Figure B1.1. Eurosystem key interest rates



Last observation 21.06.2023
Source: European Central Bank

Figure B1.2. Eurosystem holdings under asset purchase programmes (APP and PEPP)

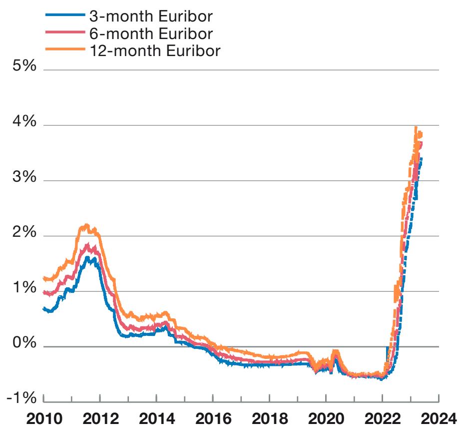


Last observation 31.05.2023
Source: European Central Bank

In its comments on future decisions about interest rates, the Governing Council stresses the importance of the data-dependent approach. The Governing Council's policy rate decisions will be determined by its assessment of the inflation outlook in light of the incoming economic and financial data, the dynamics of underlying inflation, and the strength of monetary policy transmission. However, President of the European Central Bank Christine Lagarde noted at the press conference on 15 June that if the economy develops in line with the baseline scenario of the Eurosystem projection, then interest rates will probably be raised again at the meeting in July.

It was decided to accelerate the reduction in the balance sheet of the Eurosystem[10]. The Governing Council announced in early May that reinvestment of assets under the expanded asset purchase programme (APP) would be ended from 1 July 2023. This means that from July, the central bank will stop reinvesting the principal repaid on the securities that have been bought under the APP and that are now gradually reaching maturity. Reinvestment volumes have been reduced since March 2023 by an average of 15 billion euros a month, and partial reinvestment will continue until the end of June[11]. The principal repaid on securities purchased under the pandemic emergency purchase programme (PEPP) that reach maturity will be reinvested in full until at least the end of 2024[12]. The total value of bonds purchased

Figure B1.3. Euro area money market interest rates



Last observation 02.06.2023
Source: Bloomberg

10 The balance sheet of the Eurosystem has also shrunk because the commercial banks have repaid to the central banks a large part of the longer-term loans that they took. The volume of longer-term refinancing operations on the balance sheet of the Eurosystem has fallen since the start of 2022 by around a trillion euros to 1.1 trillion euros.

11 Partial reinvestments will be conducted broadly in line with current practice, meaning the remaining reinvestment amounts will be allocated proportionally to the share of redemptions across each constituent programme of the APP. The Governing Council says that the portfolio will decline at a measured and predictable pace. By the end of 2023, the Governing Council will also review its operational framework for steering short-term interest rates, which will provide information regarding the endpoint of the balance sheet normalisation process.

12 Redemptions coming due in the PEPP portfolio are being reinvested flexibly where necessary, to counter the risks from the pandemic to the monetary policy transmission mechanism. This means that more or fewer bonds from one state or one asset class may temporarily be bought in response to market conditions.

under the APP and the PEPP on the balance sheet of the Eurosystem at the end of May was 4.9 trillion euros (see Figure B1.2)[13].

As monetary policy has been tightened, so interest rates have risen in the interbank money market. As at 19 May 2023 the 3-month Euribor was at 3.42%, the 6-month Euribor was at 3.71%, and the 12-month Euribor was at 3.88% (see Figure B1.3). Yearly growth in the money supply of the euro area has slowed in the past six months, and it was 1.9% for the broad indicator M3 in April. The yearly growth in the amount borrowed slowed in April to around 4.6% for non-financial sector companies and 2.5% for households. The European Central Bank considers that the capitalisation and liquidity of the banks in the euro area remains strong.

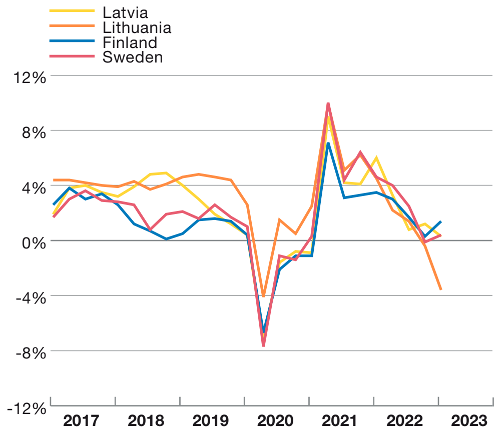
13 Net asset purchases under the APP were ended in June 2022 and under the PEPP in March 2022.

TRADING PARTNERS

The economies of the Nordic and Baltic countries performed differently in the first quarter. Economic growth accelerated in Finland and in Sweden, but it slowed in Latvia and Lithuania (see Figure 10). Quarterly growth in GDP in the first quarter was 0.2% in Finland, 0.6% in Sweden and Latvia, and -2.1% in Lithuania. Corporate confidence remained below its long-term average level in all of the countries in the first quarter and in April. The economic difficulties in the Baltic states are above all a consequence of the weakness in manufacturing. The situation is hardest in Lithuania, where growth in the economy was sharply negative for the second quarter in a row. Quarterly GDP in Lithuania fell broadly, as industrial output, especially for manufacturing, was down, as was real estate activity, retail and transport. Production of goods in Latvia was down, and trade in goods had a negative impact on quarterly GDP, while services made a positive contribution to growth in the economy. The construction industry in Latvia is recovering though. Private consumption is weak in both Lithuania and Latvia, as high inflation is reducing the purchasing power of consumers.

Manufacturing was also in difficulty in the Nordic countries, though consumer confidence is improving there. Quarterly growth in Swedish GDP was supported above all by investment in fixed assets and general government spending. The manufacturing PMI in Sweden is very low at 40.6 points[14]. Quarterly growth in GDP in Finland was supported by private consumption and by government spending. Confidence is low in manufacturing in Finland, as it is feared that orders and output will decline in the coming

Figure 10. Yearly growth rates of GDP of trading partners



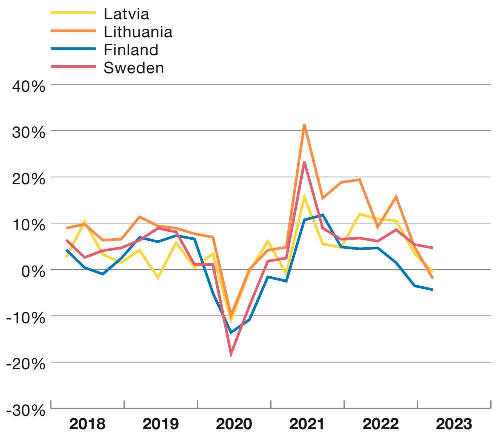
Source: Eurostat

months. The main worry in the Nordic countries is the construction sector, where confidence has been sliding rapidly since the autumn. Consumer confidence has steadily improved in the Nordic countries this year though, but still remains relatively weaker than it has been in recent years. High inflation and high interest rates are affecting the real estate market and consumption there. Private consumption has been quite modest in both Sweden and Finland this year because of the general uncertainty about the economy. Retail sales in Sweden remain down on the year, and the growth in borrowing by households is at a record low level.

Exports from the Nordic and Baltic countries were down in the opening months of the year. Export volumes from Finland and Sweden increased sharply over the month in March, largely because of growth in exports of machinery and equipment. Exports from Sweden have so far

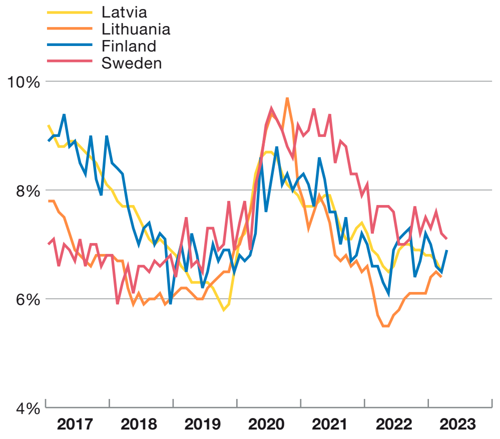
14 Swedbank Manufacturing PMI, May 2023.

Figure 11. Yearly export growth of trading partners



Source: Eurostat

Figure 12. Unemployment rates of trading partners

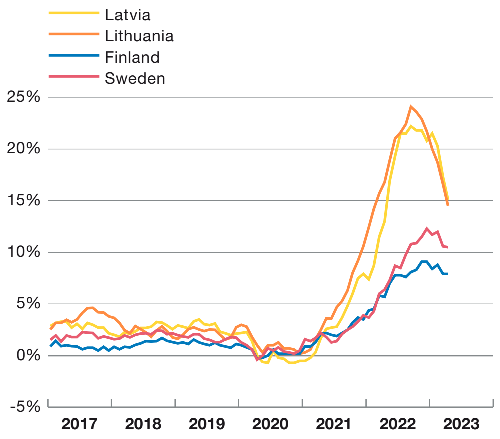


Source: Eurostat

been the most stable among those from Estonia's trading partners (see Figure 11). Imports by those trading partners have been modest, though there was some recovery in Sweden and Finland in March. The depreciation of the Swedish krona against the currencies of its main trading partners has made imports more expensive for Swedish companies though. Exports from Latvia and Lithuania were down in the first quarter. Exports from Lithuania were affected most by reduced sales of mineral fuels, mineral oils and products distilled from them, while Latvian exports were affected by wood and wood products.

The situation in the labour market in the Nordic and Baltic countries is generally good. Employment is high and unemployment is either falling or stable. The unemployment rate has started to rise only in Finland, where it reached 7.9% in April. Unemployment in Latvia was 6.4% in April, and in Sweden it was 7.5% (see Figure 12). Lithuania's unemployment rate of 9% is the highest among Estonia's export partners, Wage growth generally slowed in the Nordic countries, but collective wage agreements in Sweden that agreed wage rises of 7.4% will in future move it in the opposite direction. High inflation has pushed up wages in Lithuania and Latvia, and wage growth[15] remains fast at 12-13%. The minimum wages in the two countries were also raised this year, by 24% in Latvia and by 15% in Lithuania.

Figure 13. CPI inflation of trading partners



Source: Eurostat

Inflation is slowing as commodities prices fall and interest rates stay high (see Figure 13). Inflation in Latvia, which was the highest in the euro area for a long time, is also falling, and it reached 12.3% in May. The latest data put inflation at 5.2% in Finland, 7.7% in Sweden, and 10.7% in Lithuania, and show that inflation in Latvia and Lithuania is much higher than in Estonia's other trading partners. Core inflation is however falling more slowly, and only started to come down in some countries in January this year. Producer price inflation has been falling for almost a year. High inflation led the Swedish central bank to raise its base interest rate to 3.5% in April, and it has indicated that it will continue raising the rate further.

15 Growth in compensation per employee.

THE ESTONIAN ECONOMY

ECONOMIC ACTIVITY

Estonian GDP shrank by 3.2% over the year to the first quarter of this year in the data from Statistics Estonia (see Figure 14), and by 0.6% from the fourth quarter of last year adjusted seasonally and for the number of working days. The decline was broadly based across sectors and across expenditure components, as both exports and private consumption fell.

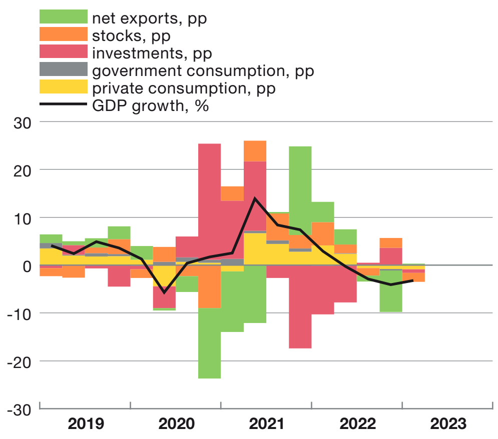
The contraction in the economy in the first quarter was similar across sectors to that at the end of 2022. A majority of sectors contracted, but branches connected to tourism contributed growth, as did agriculture (see Figure 15). The rapid growth in agriculture can be explained above all by the low reference base from last year, as value added in agriculture dropped sharply in early 2022. It is probable that the statistics for the sector will be revised over time, and so the figures for the downturn in the economy in the first quarter in yearly comparison may become worse.

The energy sector was responsible for quite a large part of the downturn, which mainly reflects the fall in competitiveness because of the changes in energy prices. The lower price of gas and the increased supply of non-fossil fuel electricity are making the traditional energy sector in Estonia less competitive. Cheaper energy benefits the majority of businesses, but old electricity power plants face reduced access to the market in consequence, and the value added of the energy sector falls.

Manufacturing is being held back by problems with raw materials and reduced demand in the Nordic countries. Manufacturing output dropped sharply last July when restrictions were introduced that made it harder to import raw materials from Russia and Belarus. These restrictions particularly affected the performance of the wood processing industry. Figure 16 shows how sales from manufacturing have fallen above all to countries outside the euro area, while sales to countries in the euro area and in the domestic market have remained notably more stable.

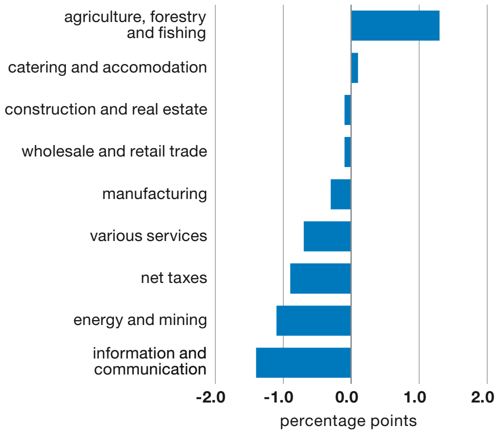
Companies have become more pessimistic about the future, which means that the risk has increased of the economy being more fragile in the coming months than was previously assumed. A large part of the contraction,

Figure 14. GDP growth



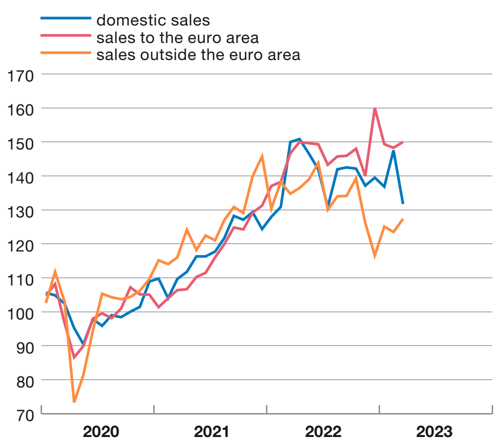
Source: Statistics Estonia

Figure 15. Contributions to GDP growth by sector in Q1 2023



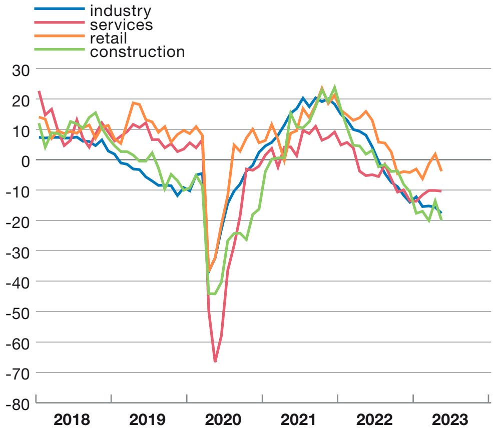
Source: Statistics Estonia

Figure 16. Sales of industrial companies, 2020 = 100



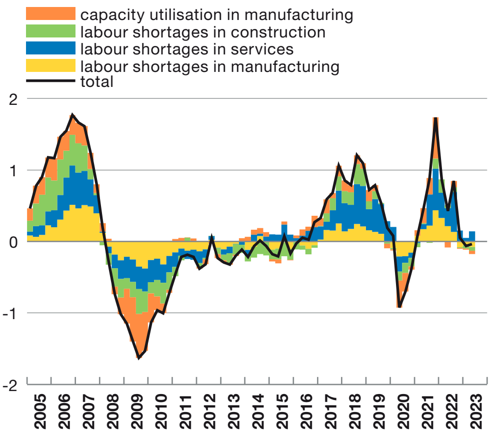
Source: Statistics Estonia

Figure 17. Economic confidence indicators



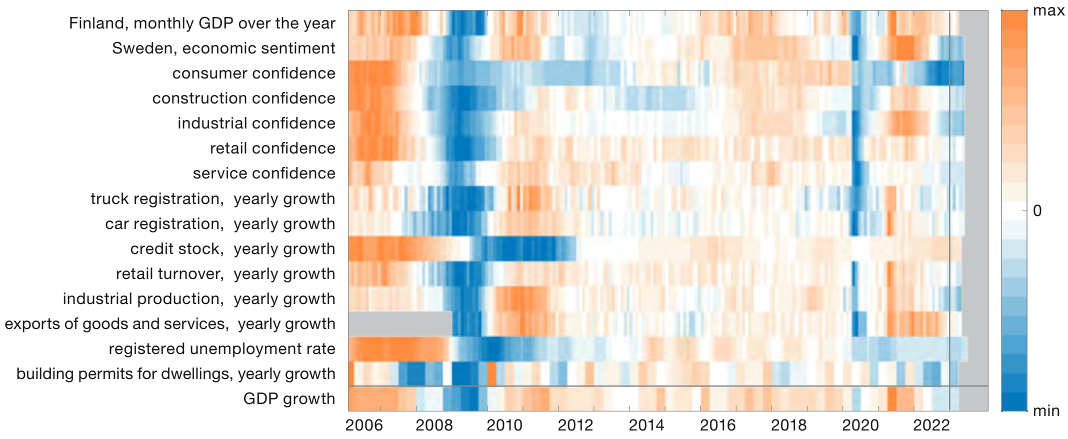
Source: European Commission

Figure 18. Standardised survey indicators of the business cycle



Sources: European Commission, Eesti Pank

Figure 19. Heatmap of the Estonian economy



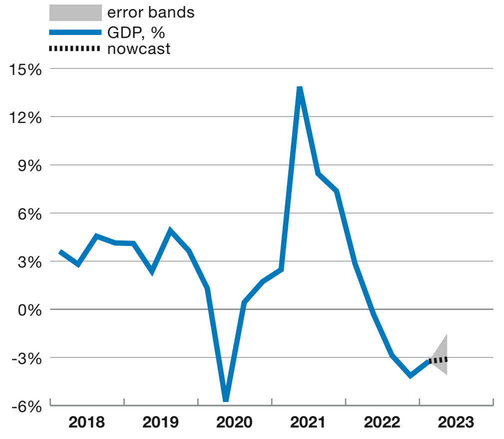
Sources: Reuters, European Commission, Eesti Pank, Statistics Estonia

which is reflected in statistics for the first quarter, actually happened last year, as manufacturing output dropped sharply in July for example, and so the economy should improve in the second half of this year, at least in terms of its yearly growth. Economic confidence indicators that aggregate business expectations for the coming months (see Figure 17) are pessimistic, and have even weakened in manufacturing and construction in recent months. The survey indicator for the recent trend in industrial production was at its lowest level in May since the pandemic, and the estimate of the outlook for output in the coming months has also fallen in recent months.

Indicators of the business cycle (see Figure 18) **point to the economy cooling.** GDP has been falling for some time, but the cyclical position of the economy is close to its historical average, as the economy was overheating somewhat until only recently. An increase in the amount of unused production capacity in manufacturing and the generally softening labour shortages indicate that the economy is cooling. The indicators for the output gap based on statistical filters and based on the production function also point to the position of the business cycle being worse than its average.

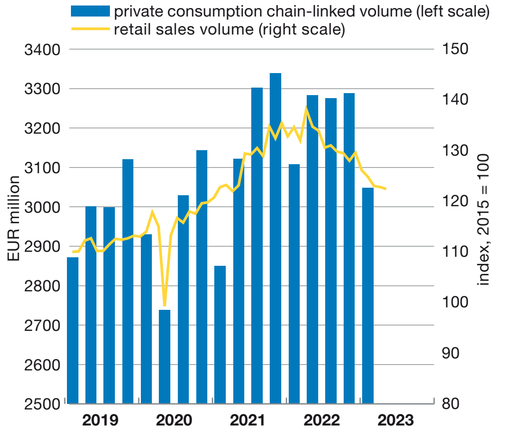
Overall it can be said that there has been no turn for the better in economic activity at the start of the second quarter, and the heatmap (see Figure 19) **is still dominated by the cool blue shades.** Confidence was weak in all sectors in April and May and expectations for the next three months do not point to any improvement. Both production and consumption volumes were down in April over the year, and the few data

Figure 20. GDP growth and current quarter nowcast



Source: Eesti Pank

Figure 21. Private consumption and retail sales



Sources: Statistics Estonia, Eurostat

points currently available suggest that a contraction of around the same size can be expected in the second quarter as that experienced in the first quarter (see Figure 20).

DOMESTIC DEMAND

The downturn that started in the economy last year, high inflation, and increasing uncertainty all combined to reduce domestic demand at the start of this year. The additional savings built up during the pandemic have been exhausted and households have been obliged to adjust their consumption, while businesses are finding it hard to make long-term decisions in a volatile economic climate. Domestic demand was supported by the general government, as the 2023 state budget saw increases in both investment and final consumption (see General government financing).

Consumers are now being more cautious, and private consumption fell in the first quarter (see Figure 21). Retail sales were 8% lower than a year earlier, though the recovery of services managed to compensate for this to some extent. The share of services in consumption has gradually increased, though it is still smaller than it was in the first quarter of 2019. Data on card payments show a large increase in people going out to eat and drink despite the rise in prices. Sales turnover fell particularly though in shops selling household goods, electronics, and building and DIY goods. Retail sales also grew extraordinarily fast at the start of last year as the savings built up during the pandemic or withdrawn from the second pension pillar were spent. After this short-term spending spree, the current retreat is more of a reversion to the usual trend of growth. Retail sales volumes did not fall any further in April, and remained at the same level as in the preceding months. The turnover for services and for purchases made abroad increased in April more modestly than in previous months. Overall the reduction in the volume of trade has been compensated for at least to some extent by the recovery of services after the pandemic, and the situation is similar in other countries.

Lower inflation will allow the purchasing power of households to recover gradually, and will let them save more. The stock of household deposits has increased every month since December. When inflation was high in summer and autumn last year, it was only larger deposits that grew, but in the first quarter of this year the amount saved in smaller deposits also increased (see Box 2).

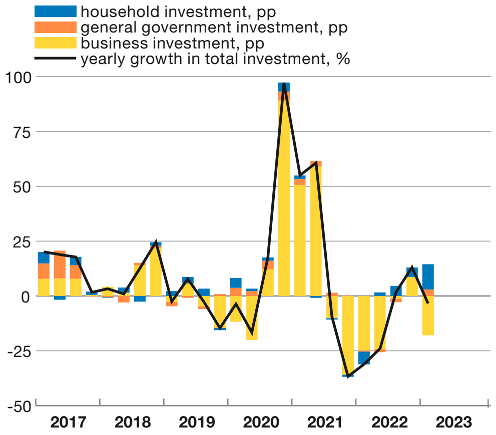
The sharp rise in interest rates, the high costs of owning and using property, and persistently low consumer confidence have all made households less interested at the moment in purchasing residential property. Housing market activity was already slowing down last year, and there have been a fifth fewer transactions in the market in the first four months of this year than in the same months of last year. The fall in the number of transactions has happened in the secondary market, and there were actually more new-build residences bought in the first quarter than in the same quarter of last year. This is largely a consequence of transactions agreed earlier, or reservations, for which construction has only now finished and the usage permit been received.

The downturn in the economy, the wide fluctuations in commodities prices, and the steep rise in interest rates have increased uncertainty about the future and made it less necessary or possible for companies to increase their production capital. Investments only increased in some individual sectors at the start of the year, notably energy and real estate. A little less, or the same amount, was invested in other sectors than at the start of last year, and overall gross fixed capital formation in the business sector was smaller than in first quarter of last year (see Figure 22).

Companies and households have maintained a cautionary stance in making decisions about investment and borrowing because of the uncertainty about the outlook for the economy and the rapid rise in prices and interest rates. Fewer loans have been taken in consequence in the first half of the year. There were some signs in the spring of some recovery in housing loans alongside the usual seasonal increase, but companies have been more reticent about taking new loans in recent months than they were before the pandemic. The assessment by companies of financing conditions has also worsened (see Figure 23). The ability of the banks to lend remains strong, as they have sufficient capital, good profitability and very few loan losses. Several banks have however had to raise their interest rates sharply on term deposits to make deposits more attractive. The rise in Euribor has led interest rates on loans to rise rapidly. New borrowers and those refinancing loans have received a little relief for this as interest margins have narrowed.

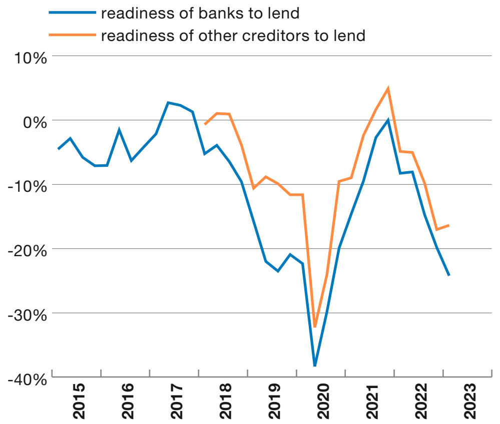
Companies bought less new inventory than a year earlier. They built up larger inventories in 2021 and 2022 because demand grew, they stocked up just in case because of difficulties in supply, and sanctions were applied to production inputs from Russia and Belarus. This trend went into reverse from last summer, and companies have rapidly reduced their inventories since then. Stocks of raw materials and goods purchased for sale declined in the first quarter of this year. The need for raw materials is probably smaller because sufficient stocks had been built up earlier, and production volumes have fallen. Difficulties in selling goods are shown by the growth in the stock of finished products, which is particularly apparent in the wood industry. This branch of industry has been affected both by reduced demand in export markets, and by a loss of competitiveness caused by prices for raw materials rising.

Figure 22. Gross fixed capital formation



Sources: Statistics Estonia, Eesti Pank calculations

Figure 23. Assessment by businesses of the lending environment



The percentage shows the difference between the shares of respondents giving favourable and unfavourable assessments
Source: Estonian Institute of Economic Research

Box 2. The change in the stock of household deposits under high inflation

Deposits are the main form of saving used by Estonian households, and they are around 70% of all the liquid financial assets of households. The change in the stock of deposits indicates whether and how much inflation has affected saving and made people use the money they had put aside earlier to maintain their consumption habits.

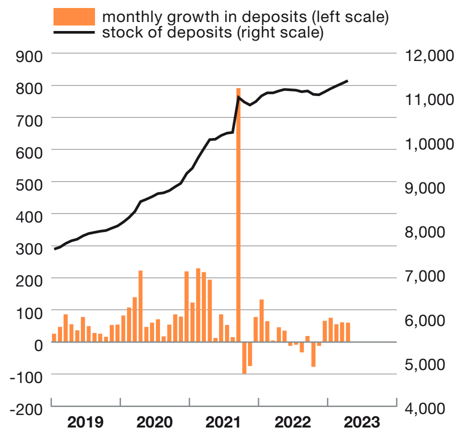
Unequal accumulation of deposits and additional savings

The pandemic made households accumulate involuntary savings for about a year and a half. These were further boosted from September 2021 by the payouts from the second pension pillar. Once the money in the second pension pillar had been spent and inflation climbed in 2022, savings were increasingly put to use. The deposits of households stopped growing and the stock of deposits fell for half a year while inflation was exceptionally high in summer and autumn last year (see Figure B2.1).

Data from the Guarantee Fund have been used to classify deposits in ranges by their amounts, where the smallest range is from 1100-2500, the next is from 2500-3000 and so on. The distribution of household deposits is very uneven, as some 10% of deposits are larger than 30,000 euros, but they account for 60% of the stock of deposits (see Figure B2.2)[16]. Wealthier households are probably less inclined than those with fewer assets to consume the savings they have built up. Assessment of the readiness to consume should focus on smaller deposits, whose owners have a greater marginal propensity to consume.

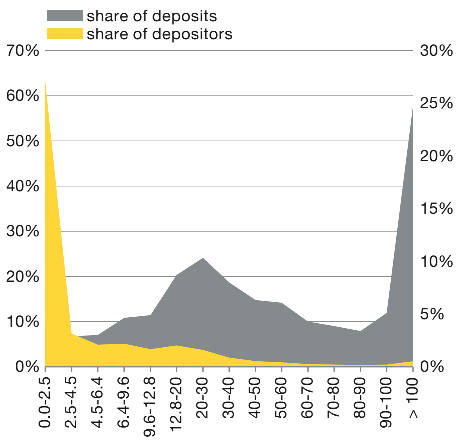
Forced saving during the pandemic increased both large and small deposits, but the deposits of more than 30,000 euros gained more than twice as much money in absolute terms from March 2020 until the third quarter of 2021. This inequality was balanced to some extent by the withdrawals from the second pension pillar, as the first payout of 1.1 billion euros in the third quarter of 2021 led deposits of less than 30,000 euros to grow faster than those of more than 30,000.

Figure B2.1. Household deposits



Source: Eesti Pank

Figure B2.2. Distribution of household deposits by deposit ranges in thousands of euros



Sources: Statistics Estonia, Eesti Pank calculations

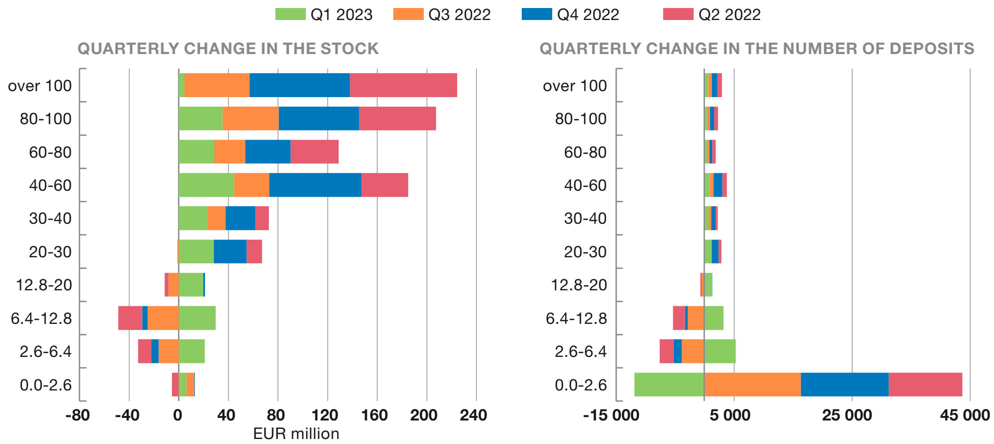
High inflation took a larger bite out of smaller deposits

Inflation took off in spring 2022 and started to eat into household deposits, but it affected deposits of different sizes differently. It was smaller deposits of less than 20,000 euros that suffered

16 The data on the stock of household deposits come from the Guarantee Fund for both guaranteed and non-guaranteed deposits, with household deposits distributed across 16 divisions. The data from the Guarantee Fund also cover non-resident deposits and multiple deposits of a single depositor in different banks, which may distort the results.

(see Figure B2.3). This is further shown by the growth in the number of deposits in the smallest division of deposits, those of up to 2600 euros, showing how deposits migrated down into groups with a lower balance range. Inflation started to push up housing-related energy costs last year, raising prices for electricity and heating, which are a larger share of total spending for households in lower income groups (for more on how inflation affects different income groups, see the Estonian Economy and Monetary Policy 2/2022[17]).

Figure B2.3. Quarterly change in the stock and number of deposits by deposit groups



Sources: Guarantee Fund, Eesti Pank

In the past two quarters the total stock of household deposits has increased, and in the first quarter of 2023 it increased for all ranges. The change in the number of deposits also points to an increase in smaller deposits (see Figure B2.3), as the number of deposits in the smallest range fell in the first quarter while the number in the next range rose. The growth in the stock of deposits in the past five months can also be seen from Estonian residents alone, meaning that the growth is not being driven by foreigners, whose deposits are generally in the higher ranges[18].

One explanation for the rapid growth in deposits in the first quarter is the timing of income tax rebates, as a larger amount in rebates was received in March than in the previous three years, and that boosted the stock of deposits at the end of the quarter.

Equally, it may be that a turning point has been passed. The purchasing power of the average wage stopped falling at the end of last year, and lower inflation has made it less necessary to use savings to cover everyday expenses. This means that even the income groups who had to tap into their savings because of inflation have again become better able to save.

17 https://haldus.eestipank.ee/sites/default/files/publications/2022/06/RPM_2_2022_eng.pdf

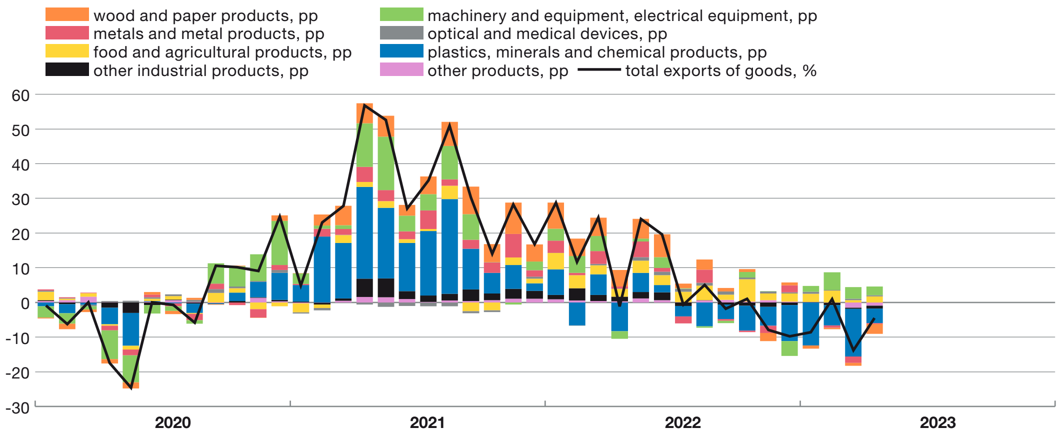
18 The average deposit held by a foreign resident is around 18,000 euros, while that of a resident of Estonia is 4000 euros.

EXTERNAL BALANCE AND COMPETITIVENESS

The drop in demand in export markets, problems in accessing raw inputs, and the continuing increase in production costs reduced foreign trade volumes in the first quarter. Exports and imports of goods and services were 7.1% less at constant prices in the first quarter of 2023 than a year previously. Exports of goods and services fell by 6.9% and imports by 7.3%.

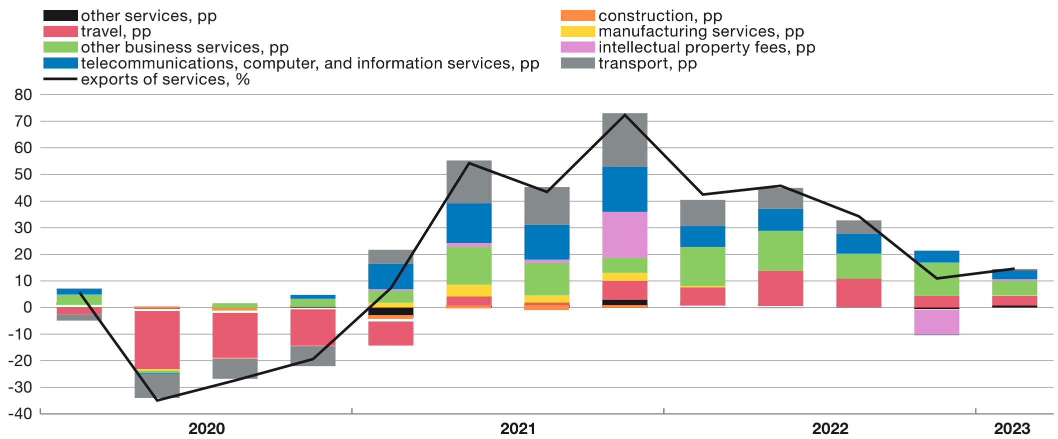
The weakness in exports came from the poor performance of manufacturing, where sales volumes fell broadly. The turnover of exports in manufacturing continued to suffer setbacks in the first quarter, as exports from most of the large groups

Figure 24. Growth in exports of goods and contributions of groups of goods



Source: Statistics Estonia

Figure 25. Growth in exports of services and contributions of groups of services



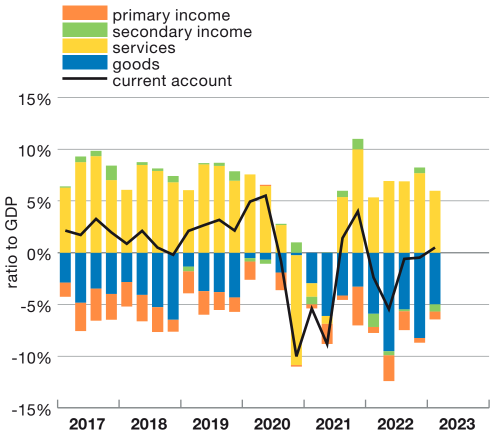
Source: Eesti Pank

of goods were less than they were in the previous year (see Figure 24). The picture varied across sectors. Exports from the wood sector are hampered by weak demand in the main markets of Scandinavia and by problems with the supply of raw materials that started in the second half of last year because of Russia's war in Ukraine. The metal industry is also confronted by similar difficulties. The only increase in exports in the first three months of the year was in agriculture and food goods and at businesses handling machinery and equipment.

Imports of goods fell not only because imports of mineral fuels declined, but also because there was a reduced need for inputs. The three main reasons for this were that businesses have earlier built up large inventories, domestic consumption is lower, and demand from abroad is weak. All these factors reduce the need to import goods. The turnover of imports of unprocessed wood and metals was down, as was that of manufactured goods. Imports of mineral fuels have been affected by the sanctions on them since the end of last year, meaning the fall in imports of goods in early 2023 was largely due to the reduction in imports of mineral fuels. The turnover of imports was also affected by a fall in the price of energy and fuels. Both the volume and the value of imports of services were also down in the first quarter.

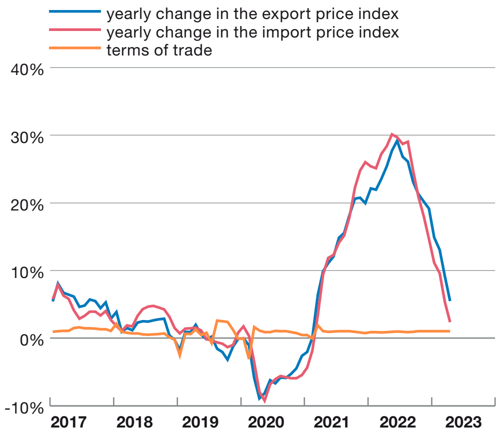
Services exports were still continuing to increase in the first quarter but were doing so more slowly than in the previous quarter. Sales volumes of services were 2.5% more than at the same time a year earlier, and the balance of payments data show the growth at current prices

Figure 26. The current account



Sources: Statistics Estonia, Eesti Pank

Figure 27. Export and import price indexes



Source: Statistics Estonia

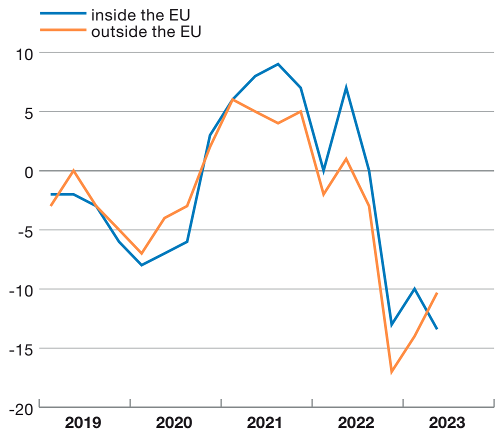
at 14.6%. Exports of services saw broadly based growth in the first quarter, as exports of almost all the main groups of services other than maintenance and repair services increased. Exports of other business services, and telecommunications, computer and information services made the largest contribution, and exports of travel services have also recovered (see Figure 25).

The current account was in surplus in the first quarter by 0.3% of GDP. The surplus on the services account gave support to the current account, while the deficit on the goods account was smaller than in the previous quarter (see Figure 26).

The exporting sector is facing heavy pressure from competition. Prices in commodities markets have been lower than a year earlier since the start of this year, which makes it cheaper for producers to buy in production inputs. Pressure still remains on the sales prices of products, as weak demand leaves exporters with a lack of room to move in price negotiations. Import and export prices have generally moved in relative synchronicity, but in April export prices rose by 5%, while import prices rose by a more modest 2% (see Figure 27). Export prices in manufacturing rose by 7.4% in April, while import prices rose by 4.3%. Import prices have started rising more slowly in most branches of manufacturing, and they actually fell in wood processing and metal production in March and April.

The continuing uncertainty in the economy is keeping the expectations of businesses pessimistic. Assessments of competitiveness

Figure 28. Assessment by businesses of their competitive position in foreign markets



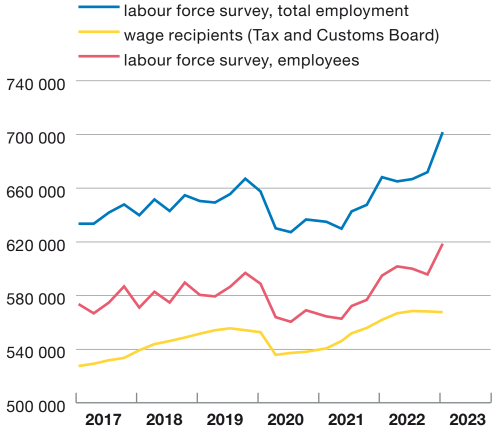
Source: Estonian Institute of Economic Research

remained low in the second quarter and the volume of export orders for the coming months is similar to what it was at the start of the year (see Figure 28).

THE LABOUR MARKET

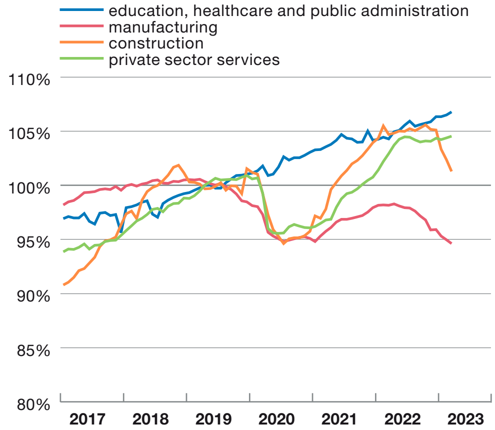
The labour market was doing well in the first quarter of 2023 and at the start of the second given the contraction in the economy. Data from the labour force survey show that employment in Estonia was up by 5% over the year in the first quarter. Data from the Tax and Customs Board show the number declared as receiving a wage under an employment contract rising by 1% in the first quarter and remaining at a very high level (see Figure 29). Employment was stable from January to April. The estimates of the labour force survey for employment are mainly high because

Figure 29. Yearly growth in employment at Estonian companies and institutions, seasonally adjusted



Sources: Statistics Estonia, Tax and Customs Board, Eesti Pank calculations

Figure 30. Declared wage recipients, 2019 = 100%



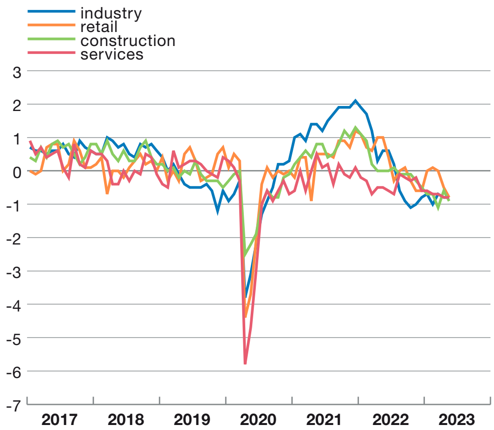
Sources: Tax and Customs Board, Eesti Pank calculations

of statistical issues with how they account for refugees[19]. The labour force survey shows major structural changes happening in the Estonian labour market. The share of waged employees among those in employment is falling, while the share of part-time workers is increasing and that of Estonian residents working abroad is decreasing. These changes may be a consequence of the business cycle or of lasting structural changes.

The labour supply has increased a lot. Data show that the working age population increased by 2.7% in 2022, mainly through the arrival of refugees from the war in Ukraine. The number of those receiving temporary protection as refugees continued to rise in the first quarter of this year, but more slowly than it did in the second half of last year. The amount of labour was also increased by a rise in the labour force participation rate of the local population, which rose from 71.1% in 2021 to 73.3% in 2022 and the first quarter of 2023. The strong growth in the labour force in Estonia made it easier than before to find new workers to hire, and eased the upwards pressure on wages.

The impact of the downturn in the economy was revealed in the employment trends in the industrial sector. Employment continued to fall in manufacturing, especially in wood and metal processing. Employment also fell in the first quarter of 2023 in transport and construction (see Figure 30). Employment in the services sector increased in branches of the public sector, while the growth in the private sector slowed.

Figure 31. Employment expectations, standardised



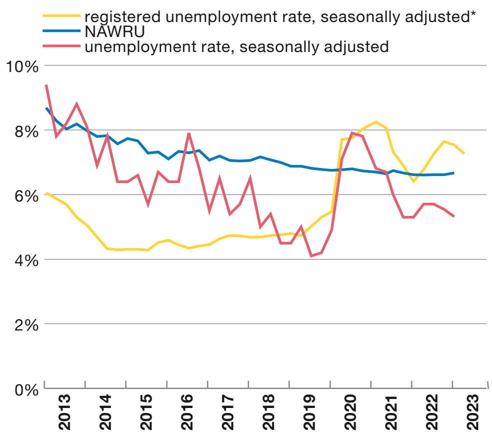
Sources: European Commission, Eesti Pank calculations

The expectations of companies for further movements in employment three months ahead were more pessimistic than their long-term average (see Figure 31). The number of jobs added to the Töötukassa database was 31% lower in the first four months of 2023 than it was in those months of 2022, but no lower than it was in the fourth quarter of 2022.

The labour force survey shows that the unemployment rate was very low in the first quarter of 2023 at 5.3%, though this figure did not cover the refugees who had entered the labour market (see Figure 32). Data from Eurostat show the unemployment rate averaging 6.1% in March, April and May 2023. The

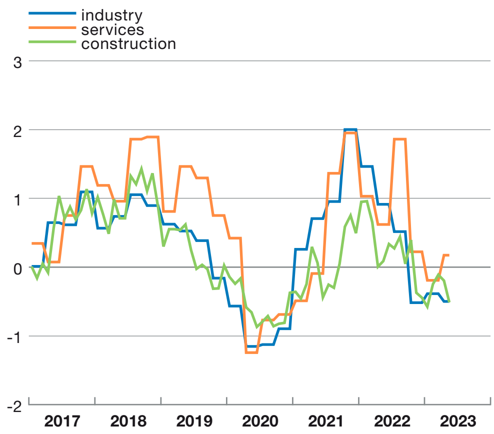
19 The probability of working estimated from the labour force survey is applied to the whole working age population in Estonia, which increased in 2023 as Ukrainian refugees from the war were added. The refugees were not surveyed, as their probability of working is lower than that of locals.

Figure 32. Unemployment



* Q2 2023 is the average of April and May
Sources: Statistics Estonia, Töötukassa, Eesti Pank

Figure 33. Labour shortages, standardised



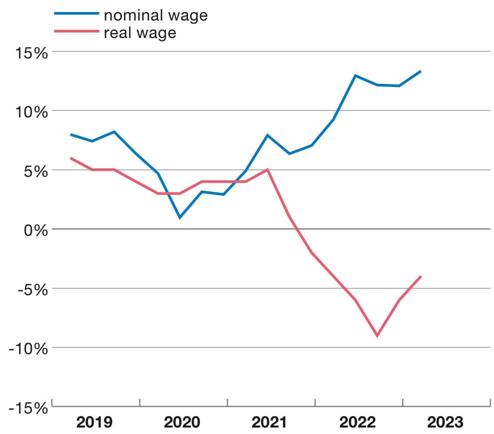
Sources: European Commission, Eesti Pank calculations

number registered as unemployed rose throughout 2022 as Ukrainian refugees were added, and as the number of unemployed local residents rose in the second half of the year. The seasonally adjusted number of registered unemployed peaked in January 2023, and started to fall from February. The number becoming newly unemployed because of redundancies has also slowed, but they are still notably more numerous than usual.

The perception of labour shortages was below its historical average level at the end of 2022 and in early 2023 in manufacturing and construction, and it was also down in the service sector (see Figure 33). This partly reflects the cyclical weakening of demand for labour, though the increased supply of labour may also be playing a role.

The average wage rose by 13.1% in the first quarter of 2023, and real wages increased in quarterly terms for the second consecutive quarter (see Figure 34). Wage growth accelerated at the start of the year in the public sector, as minimum wages for several jobs leapt up, with wages for teachers, police officers and rescue board staff rising by more than 20% for example. Wage agreements for the healthcare sector will come into force in the second quarter of the year, raising the minimum hourly wage by 20% as well. Wage growth in general was accelerated by the rise in consumer prices, which is passed over time into wages. The weakness in the economy means

Figure 34. Yearly change in average wages

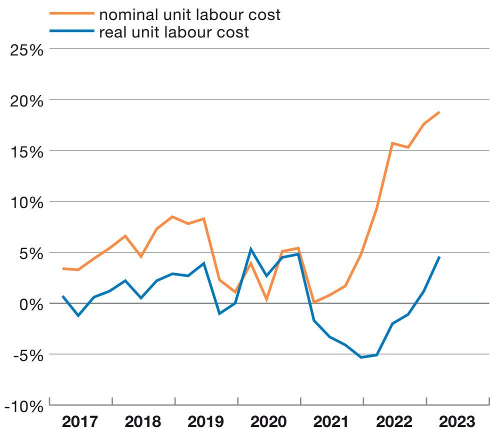


Sources: Statistics Estonia, Eesti Pank

that less of the rise is being passed through than would be the case in more stable times.

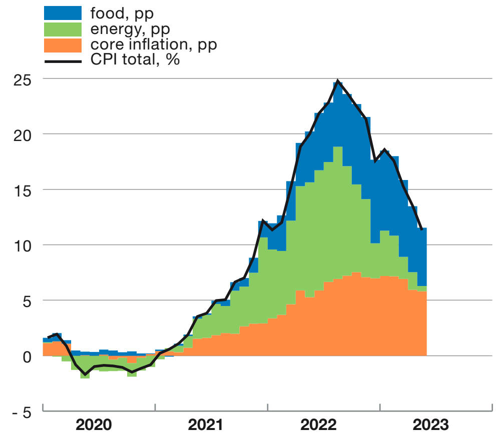
Large wage rises in 2022 were in line with the growth in value added at current prices and so the payroll did not increase as a share of GDP, but this was no longer so in the first quarter of 2023. Labour costs in the economy rose faster than business income, and the real unit labour cost rose by around 5% (see Figure 35). The quarterly growth in labour costs has been even faster than that in value added. Jobs were preserved in 2022 despite the downturn in the economy as companies were able to maintain their profits, but the rapid growth in labour costs is reducing corporate revenues and encouraging businesses to optimise production and cut jobs.

Figure 35. Growth in unit labour cost



Source: Statistics Estonia

Figure 36. CPI growth



Sources: Statistics Estonia, Eesti Pank

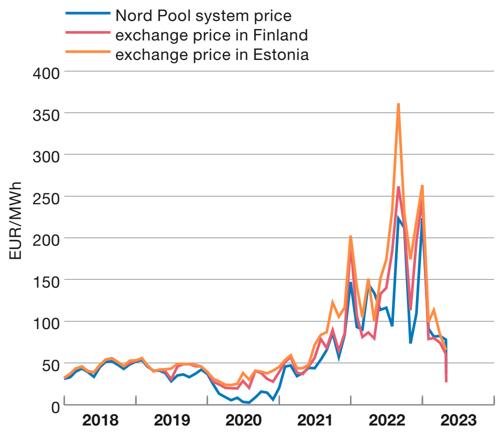
PRICES

Inflation peaked last August and then started to come down. It was still 11.3% over the year in May this year though. The main drop in inflation has been in energy prices over the year, but inflation remains high for food products and for services (see Figure 36).

Prices for natural gas and motor fuels fell in May, and the market price for natural gas is by now back where it was in the middle of 2021. Consumer prices for electricity were 30% higher than they were last year, and heat prices were 11% higher. One reason for this is that the compensation paid by the government for energy prices ended. A lot of customers are still buying electricity at the price of the universal service, though the market price for electricity has been substantially lower this year than the universal service price (see Figure 37).

Price pressures could be seen to be weaker in the producer prices for food commodities and food products, but not particularly in consumer prices. Prices of cereals have come down since the end of last year in the European Union market, as have farm-gate prices for milk. Merchants have not yet noticeably adjusted their retail prices even though demand for food products is down 8% on the year.

Figure 37. Electricity exchange prices



Source: Nord Pool

High core inflation reflects the price pressures that come above all from higher wages, though also from demand for goods. Service price inflation accelerated to 11.5% in May as medical services and public transport in particular rose in price. Rising prices for services are driven to a large extent by labour costs, and wage growth has remained strong despite the downturn in the economy (see Box 3 on the role of wage costs and profits in price rises). Inflation has gradually slowed for cars among manufactured goods as the problems in supply chains have eased, though the rise in interest rates is having an ever-increasing impact.

Box 3: The decomposition of inflation across wages and profits

Inflation has been high in the economy over the past year and corporate profits have grown in consequence. Prices of inputs becoming rapidly higher might suggest that companies do not pass the whole price rise into the prices of their products, as competition in the market makes it hard to raise prices. The goods on sale in a shop becoming more expensive does not mean that the cost to the shop of providing the service has risen in price by the same amount. A kilogram of bananas costing more does not automatically raise the wage of the shop assistant, or the rent of the shop premises.

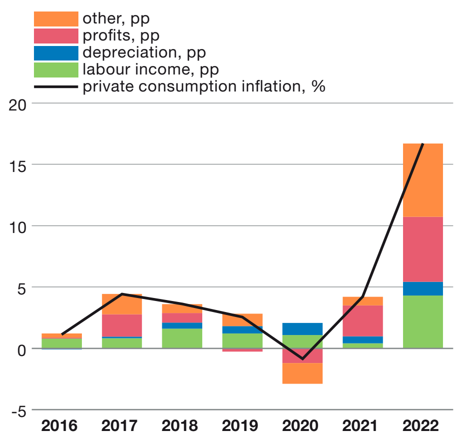
The data indicate though that profits have grown in most sectors at the same rate, or even faster, than the costs of inputs have. Operating surplus and mixed income, which is the most general indicator of profits in the economy, was 42% larger in 2022 than it was in 2019 before the pandemic. Labour income together with taxes increased by 28% at the same time, and the cost of inputs used in operations, or intermediate consumption, rose by 40%. This box analyses how much of the inflation in recent years has come from the growth in profit per unit of output.

Relating profit to turnover very probably underestimates its role in inflation. The problem is that the input for one company is the output of another, and so in a rise in the prices of inputs already contains the higher labour costs of other companies and the growth in their profit. It is important to analyse how profits have increased across the different stages of the whole value chain, and input-output tables can be used for this.

The analysis can explain how much of inflation is paid as higher wages, how much comes from the increased costs of imported goods, and how much comes from the growth in corporate profits. Using input-output tables for the whole world would make it possible to decompose all of inflation into profits and wage income. This analysis uses input-output tables for Estonia and so the part of inflation that does not come from local profits and labour costs is imported inflation, which is the profit or labour costs of some foreign company.

The analysis finds that the majority of the rise in consumer prices in 2021 came from growth in corporate profits and that in 2022, when inflation was particularly high, the growth in corporate capital income[20] accounted for around 40% of inflation (see Figure B3.1). Figure B3.1 analyses the growth in the private consumption deflator, which is the consumer price index that is closest to the statistics used in the national accounts[21].

Figure B3.1. Sources of inflation



Source: Eesti Pank

20 Capital income can be divided into two components of profit and depreciation. The statistics of the national accounts calculate depreciation as the replacement cost of capital, which rises together with general inflation. Corporate accounts, which consider acquisition cost, generally record a similar effect as profits.

21 The private consumption deflator rose more slowly than consumer price inflation last year, as the consumer basket used to calculate it is broader than that used for calculating the consumer price index. There are also differences in how frequently the two price indexes change their weights. The consumer price index is calculated using weights for the average of the year, while the private consumption deflator changes its weights every quarter. Energy prices rose particularly high at the end of summer 2022, when actual energy consumption was low. That rise in price probably lifted the consumer price index more than the private consumption deflator, which takes account of the seasonal nature of consumption.

Profits playing a large role in inflation is usually an indicator of imperfections in the market, because competition should bring prices down. It takes time for new companies to enter the market though, as the Estonian market is small and competition not necessarily as tight as in larger countries. When inflation is high, it is difficult for consumers to understand what a reasonable price for a product is, making it easier for companies to raise their prices.

The confusion caused by high inflation is probably one of the main reasons why inflation has become so broadly based. Inflation has probably also been facilitated in recent years by households having a lot of savings that they have been able to use to fund consumption. This should have changed by now, making households more reluctant to accept price rises in the future.

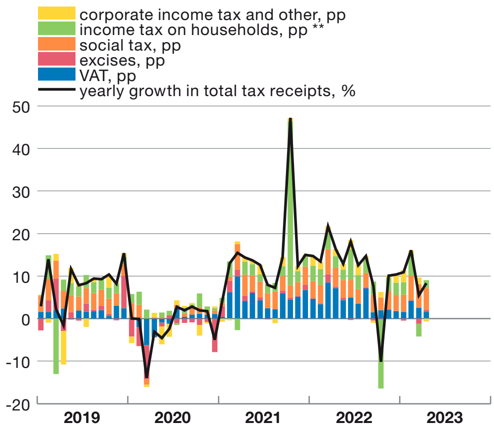
The largest part of the growth in profits in connection to inflation came in the past two years in the energy sector. Higher energy prices passed through the supply chain into the prices of many other products. Energy rose in price though because of inflation in the global market, and the growth in profits of energy companies was in its own way automatic. If the price of energy on the global market falls, it will probably put this process into reverse.

The calculation uses the most recent input-output table, which is from 2015, so the structure of the economy in the calculations is essentially anchored to that year. The annual data on the components of GDP that have been used in the calculations have also been used to update the table. The input-output table is presented by product, and so the calculation uses the simplifying assumption that the input-output connections of sectors correspond to the input-output connections of the main products of sectors.

GENERAL GOVERNMENT FINANCING

The yearly growth in tax revenues has been slower than it was last year. The growth in tax revenues was supported in the first four months of the year by receipts of labour taxes, especially social tax (see Figure 38). Social tax receipts were 12.5% more in the first quarter than a year earlier, and 12.8% more in April, and receipts of labour taxes increased with support from rapid wage growth. The growth in tax revenues is being restrained more than it was last year by the slower growth in consumption tax receipts, which reflects weaker private consumption in the first quarter and falling inflation (see Box 4 on how inflation affects the budget balance). Receipts of value added tax in the general government budget were 9.9% higher in the first quarter than a year earlier, while excise receipts were 5.5% lower. The yearly growth in VAT receipts slowed in April to 5.7% as the turnover of retail sales fell. When inflation was very high in first half of last year, the receipts of VAT were up by a fifth over the year.

Figure 38. Tax receipts*



* Accrual accounting
** Including PIT transferred to local governments
Sources: Statistics Estonia, Eesti Pank

General government spending on investment was more than a fifth larger in the first quarter than it was a year earlier. General government investment accounting for inflation was 17.5% larger in the first quarter than a year earlier. Investment increased as general government spending on investment in construction, which had been weak for long time, started to grow strongly in the first quarter. Investment in intangible fixed assets also continued to grow. The biggest contributions among general government functions to the yearly growth in spending on investment came from the increased investment in national defence and the economy.

Initial data show faster yearly growth in general government current spending, which was driven by rapid growth in wages for general government employees. Data from Statistics Estonia show that compensation to general government employees was 16.3% up on a year earlier in the first quarter. The biggest part in the rapid increase in labour costs came from the sharp rise in wages for teachers and for police officers and rescue board staff. The preliminary data show slower yearly growth in social benefits paid out. Less was paid in sickness benefit than a year earlier, but the rise in child and family support from the start of this year and an extraordinary rise in pensions increased the amount paid out in those benefits over a year earlier.

Box 4. The impact of unexpected inflation on the budget balance

Exceptionally high inflation last year meant that greater attention was again paid by various institutions and economists to how inflation impacts state finances and the budget balance. To avoid the changes caused by inflation to the fiscal position overshadowing the actual position of the state finances, it is important to understand how inflation affects those finances. It is generally considered that unexpected inflation will improve the budget balance over a short period.

High inflation meant that the budget deficits in most of the countries of the euro area and the European Union were much smaller in 2022 than they were in 2021, and in most cases smaller than was expected at the end of 2021[22]. The improvement came even though states provided various support measures to help their residents and businesses to cope with the consequences of inflation. Spending on measures to compensate for inflation in 2022 averaged around 2% of GDP across the euro area on average[23]. The figure in 2021 was only around 0.2% of GDP.

The budget deficit in Estonia was also smaller than forecast. The Ministry of Finance forecast when the state budget was written that the general government budget deficit in 2022 would be 2.2% of GDP, and inflation would be 3.7%. The December forecast 2021 by Eesti Pank expected inflation to reach 6.9% in 2022, and the budget deficit to be 2.0% of GDP. The war started by Russia against Ukraine in February 2022 caused unexpected costs, and the supplementary budget passed in May 2022 foresaw a budget deficit of 5.6% of GDP and inflation of 12.7%. Inflation actually turned out to be 19.4% in 2022, while the budget deficit was only 0.9% of GDP.

Analysis published recently in the Eesti Pank working paper series[24] of 12 countries in the euro area in 1999-2021 found that inflation being one percentage point higher improved the fiscal balance by 0.67 percentage point of GDP. Analysis published by the International Monetary Fund (IMF)[25] equally found that high inflation improves the budget balance over a short period. It found from quarterly data from 28 advanced economies in 1999-2019 that a rise of one percentage point in inflation improves the budget balance over a short period by 0.5 percentage point of GDP. The effect lasts for only a couple of quarters, after which the effect of the inflation shock disappears.

The tax revenues of a state increase when there is unexpected and high inflation, while its expenditures are limited for a short time by the budget for the year, as social transfers and public sector wages are generally adjusted after some delay and only in the next fiscal year. If prices rise

22 Comparing the forecast for 2022 made by the European Commission in autumn 2021 and the actual results for 2022.

23 Bankowski, Krzysztof, Othman Bouabdallah, Cristina Checherita-Westphal, Maximilian Freier, Pascal Jacquinot and Philip Muggenthaler (2023): *Fiscal Policy and high inflation*, ECB Economic Bulletin 2/2023.

24 Staehr, Karsten, Olegs Tkacevs and Katri Urke (2023): *Fiscal Performance under Inflation and Inflation Surprises: Evidence from Fiscal Reaction Functions for the Euro Area*, Eesti Pank working papers 3/2023.

25 Garcia-Macia, Daniel (2023): *The Effects of Inflation on Public Finances* IMF Working Paper 2023/93, International Monetary Fund, Washington, DC.

fast and people do not change their consumption habits particularly, consumption taxes bring more revenues into the budget. High inflation can also be passed through into wages, increasing receipts of labour taxes.

Staehr et al. (2023) find that inflation improves the budget balance for the same year since revenues increase as a ratio to GDP while costs diminish. High inflation brings larger revenues from income tax and indirect taxation on the income side, while the growth in expenditures remains slower throughout the year, and so expenses decrease as a ratio to GDP. Garcia-Macia (2023) finds in contrast that inflation only improves the fiscal balance by reducing costs as a ratio to GDP. State spending remains at about the same level as before in the quarters following an inflation shock, while GDP grows fast. Public sector wages and social transfers are found to remain clearly unchanged over the short term, but automatic or de facto indexing brings the real value of wages and social benefits back to their previous level over time.

Inflation in advanced economies was quite low for much of the period analysed in both Staehr et al. (2023) and Garcia-Macia (2023) and so their results are not necessarily directly applicable to periods of extremely high inflation. How inflation affects state finances may also depend on its origin, and whether it is an external supply-side price shock, such as a sudden leap in energy prices, or a domestic price shock. External supply-side price shocks may have a substantially smaller and shorter-lived positive impact on the budget balance. The analysis by Garcia-Macia (2023) considers the impact of a rise in imported inflation, which also explains why the results indicate inflation improving the fiscal position for only a very short time.

It can generally be argued then that the budget deficits in many European Union countries, including Estonia, proving smaller than expected last year may largely be a consequence of unexpected high inflation. The positive impact of high inflation on the fiscal balance was only short lived though.

THE EESTI PANK ECONOMIC FORECAST FOR 2023-2025

The Eesti Pank economic forecast is produced jointly by experts from the central bank's Economics and Research Department and Financial Stability Department. This forecast takes account of new information received since the forecast published in March on the economies of Estonia and other countries. New data on the labour market, foreign trade, the general government, the financial sector and prices as at 31 May 2023 have been taken into account. The forecast assumptions for the external environment, including main trading partners, have also been updated as at 26 May 2023. This forecast reflects the scenario considered the most likely, but the geopolitical situation and greater uncertainty than usual mean that reality could turn out better or worse. The Eesti Pank forecasts are compiled using EMMA, the macro-model of the Estonian economy developed and regularly updated by Eesti Pank.

The baseline scenario in this forecast does not consider the changes to fiscal policy planned by the government or their impact on the economy, as there was no clear and certain information about those policies being passed at the time that this forecast was produced. An impact analysis using the assumption that the legislative changes will be applied at the times and in the form foreseen in the coalition agreement is presented in the additional scenario in Box 6.

THE INTERNATIONAL ECONOMIC ENVIRONMENT

The outlook for the global economy is fragile. The year started a little more positively for the global economy than was expected, but the outlook is still poor and there are many risks threatening it. The IMF forecasts that the global economy will grow by 2.8% this year and that growth will increase to 3% next year. The outlook for the global economy is affected by tighter monetary policy, Russia's war in Ukraine and its economic impact, and greater uncertainty than usual about the future. The short-term outlook for economic growth is weaker in Europe, the USA and Latin America. The global economy will mainly grow with support from countries in Asia, as inflation pressures there have been weaker. Increased growth in the Chinese economy after the removal of the pandemic restrictions is expected to improve the opportunities for growth of the whole region, but the most recent data show problems building up in the industrial sector in China.

Inflation around the world will continue to fall this year. Headline inflation has continued to come down, but core inflation[26] has proved more persistent than expected, as the labour market has been extraordinarily strong and the full impact of central banks raising interest rates sharply has not yet materialised. Interest rates are consequently expected to remain high until it is certain that upwards price pressures are dissipating. The tight monetary policy of central banks will increasingly restrict the growth in demand over time, and so reduce inflation. The IMF estimates that inflation will remain higher than usual this year in both advanced and emerging economies, but will continue to fall in 2024.

The economy in the euro area has proved resilient to crises, and economic activity is gradually increasing. The euro area economy is now primarily supported by the service sector, as demand for various services started to increase strongly after the pandemic faded. Demand for travel services for example has already returned to where it was before the pandemic. Recovering purchasing power will give broad support to the economy, but rising interest rates and tighter lending conditions will work against this. Headline inflation, which had reduced purchasing power, has slowed, but core inflation, which is more indicative of domestic price pressures, remains high. The latest forecast from the European Central Bank expects inflation in the euro area to return to its target of 2% in 2025[27]. Unemployment remains at record low levels in the euro area and labour shortages give workers a stronger position in wage negotiations, which will keep wage growth, and consequently the inflation caused by cost pressures, fairly high in the near future.

The performance of Estonia's main export markets will be weak this year. Demand has been modest in Estonia's main trading partners in first half of the year, and recessions are forecast in Sweden, Lithuania and Finland this year.

26 Inflation in the consumer basket without food and energy.

27 https://www.ecb.europa.eu/pub/projections/html/ecb.projections202306_eurosystemstaff~6625228e9f.en.html.

Table 2. External assumptions in the forecast

	2022	2023	2024	2025	March 2023 projection 2023	2024	2025
Foreign demand growth (%)*	5.9	0.5	3.1	3.2	1.5	2.9	3.5
Oil price (USD/barrel)	103.7	78.0	72.6	70.4	82.6	77.8	73.9
Interest rate (three-month EURIBOR, %)	0.3	3.4	3.4	2.9	3.3	3.3	2.8
USD/EUR exchange rate	1.054	1.084	1.086	1.086	1.077	1.077	1.077

*Foreign demand growth is the weighted growth of imports of trading partners
Source: European Central Bank

Supply problems have eased around the globe and demand is improving, which has helped confidence recover to some extent in Europe and more narrowly in Estonia's main trading partners. This has been aided by inflation falling and the expectation that it will continue to do so. The unemployment rate in the main destinations for Estonia's exports will remain stable this year, or may rise a little. Demand for exports from Estonia will increase in the main target markets by 0.5% this year and by a little over 3% in the next two years (see Table 2 for the external assumptions in the forecast).

ECONOMIC GROWTH

The Estonian economy is adjusting to the impact of the recent crises. Growth in the Estonian economy is being shaped most by such consequences of Russia's attack on Ukraine as the energy crisis, increased uncertainty and changes in supply chains, and by adjustment of consumption and tighter monetary policy, and the recovery of purchasing power in both the domestic and foreign markets.

Table 3.Economic forecast by key indicators*

	2021	2022	2023	2024	2025
Nominal GDP (EUR billion)	31.35	36.11	39.31	41.84	44.20
GDP volume**	8.0	-1.0	-1.0	2.8	0
Private consumption expenditures***	6.9	2.5	-2.0	3.2	5.0
Government consumption expenditures	3.9	-0.1	3.9	1.1	-0.6
Gross fixed capital formation	7.4	-12.9	-3.9	2.6	4.9
Exports	20.0	4.7	-1.9	4.2	3.3
Imports	21.3	5.9	-6.1	1.1	3.8
Output gap (% of potential GDP)	3.3	0.1	-3.4	-2.6	-1.3
CPI	4.6	19.4	9.1	2.0	2.0
HICP	4.5	19.4	9.4	2.3	2.2
GDP deflator	5.8	16.4	9.9	3.5	2.0
Unemployment rate (% of the labour force)	6.2	5.5	6.5	6.9	6.0
Employment****	0.1	4.6	2.4	-1.4	1.1
Average gross wage (EUR)	1473	1645	1832	1956	2075
Average gross wage growth	6.6	11.6	11.4	6.8	6.1
GDP per employee	7.9	-5.4	-3.2	4.3	2.4
Current account (% of GDP)	-1.8	-2.2	1.0	1.2	0.3
Budget balance (% of GDP)	-2.4	-0.9	-3.4	-3.1	-2.4

* Numbers reported are annual rates of change in per cent, if not noted otherwise, ** GDP and its components are chain-linked, *** including NPISH, **** employment by domestic production units.
Sources: Statistics Estonia, Eesti Pank

Table 4. Estonian economic forecasts by other institutions

	GDP real growth, %					CPI inflation, %				
	2021	**2022**	**2023**	**2024**	**2025**	**2021**	**2022**	**2023**	**2024**	**2025**
Eesti Pank	8.0	-1.0	-1.0	2.8	3.5	4.6 4.5*	19.4 19.4*	9.1 9.4*	2.0 2.3*	2.0 2.2*
Ministry of Finance	8.0	-1.3	-1.5	3.0	2.5	4.6 4.5*	19.4 19.4*	9.2 9.3*	3.0 3.1*	2.1 2.2*
European Commission	8.0	-1.3	-0.4	3.1		4.5*	19.4*	9.2*	2.8*	
IMF	8.0	-1.3	-1.2	3.2	3.6	4.5*	19.4*	9.7*	4.1*	3.5*
OECD	8.0	-1.1	-1.3	3.2		4.5*	19.4*	9.2*	3.4*	
Consensus Economics	8.0	0.6	-0.6	3.0		4.7	19.6	9.1	3.3	
Luminor	8.0	-1.1	0.0	4.0		4.7	19.4	9.0	0.0	
SEB	8.0	-1.3	-0.4	2.5		4.5*	19.4*	9.0*	4.0*	
Swedbank	8.0	-1.3	-0.8	2.3		4.6	19.4	10.2	4.2	

* HICP
Sources: Eesti Pank, June forecast, 20.06.2023; MoF, Spring 2023 forecast, 06.04.2023; European Commission, European Economic Forecast. Spring 2023, 15.05.2023; IMF, WEO, April 2023, 11.04.2023; OECD, Economic Outlook, June 2023, 07.06.2023; Consensus Economics, Eastern Europe Consensus Forecasts, May 2023, 15.05.2023; Luminor forecast, 15.03.2023; SEB, Nordic Outlook, May 2023, 03.05.2023; Swedbank Economic Outlook 25.04.2023

The impact on the economy of Russia's war is being felt primarily through higher energy prices and changes in supply chains. One consequence of it was a sharp drop in industrial production in summer 2022. Retail sales volumes then dropped in the fourth quarter of last year, and growth in Estonia's economy will strengthen in the second half of this year as those two factors exit the reference base. Tighter monetary policy will restrain the growth in the economy at the same time though. The Estonian economy is expected to shrink by 1% this year, because although growth will increase during the year, GDP will be increasing from a much lower base than the average of last year. The economy is expected to grow by 2.8% in 2024 and 3.5% in 2025 (see key indicators for the forecast in Table 3 and comparison with forecasts by other institutions in Table 4).

The potential for growth in the economy is weaker than it was a few years ago. This is partly because of changes in supply chains, chiefly the loss of cheap raw materials from the East and subsequent loss of competitiveness in some sectors like wood and metal production, and transport and storage. At the same time, production in Estonia has become sharply more expensive in recent years, causing a loss of market share in export markets and so of potential output in the economy.

Output volumes in Estonia are below their long-term potential level, and will remain so for the next two years. Some sectors that suffered most from the changes in supply chains, including transportation and storage, may have lost their production capacity for a long time. At the same time, there are branches that also got hit hard, but where demand for output should increase substantially in the coming years and the drop will be temporary. The green transition and construction work in Ukraine will probably both increase demand for building materials and modular houses, and this then means that at least some of the problems facing the industrial sector should pass, and the underutilisation of production resources will end.

The recent downturn in the economy has had a limited impact on the labour market in Estonia, like in many other countries. Structural labour shortages and expectations of an improvement in the economy have encouraged employers to keep their workers on the payroll, especially when sales turnover has increased despite the drop in output, and as profits have increased in most sectors. The cost of increasing labour costs will be harder to pass on in future into output prices, which will push companies to bring their staffing numbers into better alignment with output volumes. This will cause some decline in employment, and unemployment will rise to almost 7% by 2024[28].

The strong growth in the labour supply will slow. The number of people of working age

28 One consideration in the employment forecast is that the labour force survey overestimated employment in early 2023, as the survey did not cover refugees from the war in Ukraine, who have a lower employment rate than local residents. The employment rate of local residents was extended to refugees, showing total employment to be higher than it actually was. The survey will start to cover refugees from the war in the second half of the year, aligning the employment statistics better with the actual state of the labour market.

increased by 2.7% in early 2023 with the arrival of refugees from the war, and will rise a further 0.7% in 2024. This has eased the pressure on companies to increase wage costs and has supported employment. The number of people of working age will in future fall gently, as migration will not fully offset the natural decline in the size of the population. The labour force participation rate is already at a historically very high level and it will be hard to raise it any further, so the increase in the participation rate will slow (see Box 5 on the forecast for the participation rate).

Inflation passing through into wages and collective wage agreements will keep wages growing fast this year. Wage rises in the public sector will be generous in 2023, as public-sector wage growth lagged that in the private sector during the crises. Expectations of employees for wage rises in the private sector will be shaped by rapidly rising consumer prices, and the share of labour costs in value added will increase. Although the level of wages in manufacturing in Estonia will still be far below those in the Nordic countries and Western Europe, the rapid growth in wage costs could still make Estonian companies less competitive.

The purchasing power of households will improve. The purchasing power of the average wage has been rising again since the fourth quarter of last year. The stock of household deposits has also been increasing since the end of last year, and there was also an increase in the first quarter of 2023 in smaller deposits. This indicates that inflation is no longer eating into purchasing power as harshly as it was last autumn, and that the ability to save has improved. As wages continue to rise and inflation to fall, the purchasing power of the average wage will also continue to recover, and it will return to where it was before the downturn by the end of 2024[29].

The improving economic environment and weakening price pressures are supporting corporate investment. The downturn has not yet caused any sharp drop in corporate investment, though the high level of uncertainty, the recent sharp rise in energy prices, and continuing labour shortages have squeezed investment plans. Corporate investment activity is expected to grow as those obstacles weaken. The amount of corporate investment is at the same time being squeezed by higher interest rates than before, which cause a reduction in the share of investment in the economy if all else remains equal.

Demand is low in the housing market, and few new residential properties are being added. The number of residential properties for which construction permits were issued in 2022 was down a quarter on a year earlier. Purchasers are maintaining their wait-and-see stance, as interest expenses are rising fast, but the slower growth in the price of real estate means that it is becoming more affordable. Housing construction volumes will increase in the coming years, but higher borrowing costs mean they will do so sluggishly.

Demand for credit will grow in the second half of the year as market expectations indicate that interest rates will not rise much further, while growth will recover in the economy and people's incomes will increase. Borrowing should be supported by the share of debt liabilities at Estonian companies being relatively low, which means that as demand recovers, those companies will be easily able to borrow to finance their activities and investments. Several banks would be happy to see their loan portfolios grow quite quickly, which means that access to loans will be maintained. Unlike those in many other countries of the euro area, the banks in Estonia do not face any substantial supply-side restrictions on their ability to lend. Interest rates being higher than before means though that the growth in credit will be generally modest.

29 The point when purchasing power recovers has been brought closer than in earlier forecasts, partly because Statistics Estonia changed its method of calculating the average wage, which retrospectively raised the growth in the average gross wage in 2022 (https://www.stat.ee/en/news/changes-methodology-average-wages-and-salaries-updated-31052023).

Box 5: The long-term forecast for labour force participation

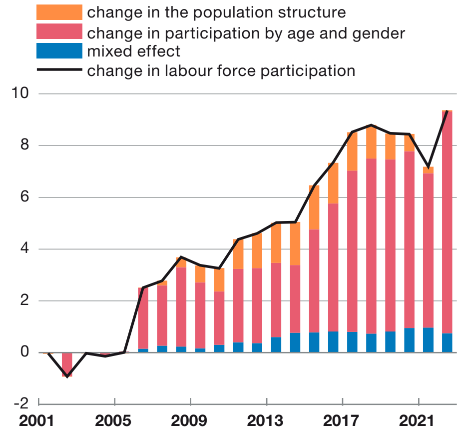
The labour force participation rate in Estonia, which is currently one of the highest in Europe, has been moving upwards for the past 20 years. The increase in labour force participation eased the decline in the supply of labour as the number of people of working age fell, and even caused the labour supply to increase in 2015-2017. This box analyses the participation in the labour force in the past, and describes the forecast for labour force participation, as this is important in defining the potential for growth in the Estonian economy.

The participation of the working age population in the labour force is partly affected by its age and gender structure, and partly by the participation rate of individuals of a given age and gender. If the share of those aged 70-74 increases within the working age population for example, it generally reduces the participation rate for the whole working age population, as most people of that age have left the labour market and retired. If the participation rate of that age group rises though, it then raises the participation rate for the whole working age population. Figure B5.1 divides the changes in the labour force participation rate from 2001 to 2022 between the impact of changes in the structure of the population and that of change in the participation rate across different groups. It emerges that it is the change in the participation rate in different groups by age and gender that explains most of the change of nearly nine percentage points in the total participation rate over the past 20 years.

The forecast for the working age population used in this economic forecast is the baseline population projection published by Eurostat in 2023, adjusted for the population statistics published in 2023 by Statistics Estonia. This takes account of the addition of refugees to the population in 2022 and 2023, but forecasts that in subsequent years more refugees will leave the country than arrive in it. The total migration balance will still be positive throughout the forecast horizon though. Life expectancy will continue to rise, and the birthrate will increase a little from its low point in 2022, but will still remain below the replacement rate over the long term. Figure B5.2 illustrates the impact of structural changes in the population in the forecast scenario for labour force participation that assumes that the participation rate remains the same across age and gender as in 2022. In this case the participation rate would fall because of the changes in the gender and age structure of the working age population by around one percentage point over the coming 6-7 years, and by 2.5 percentage points by 2050.

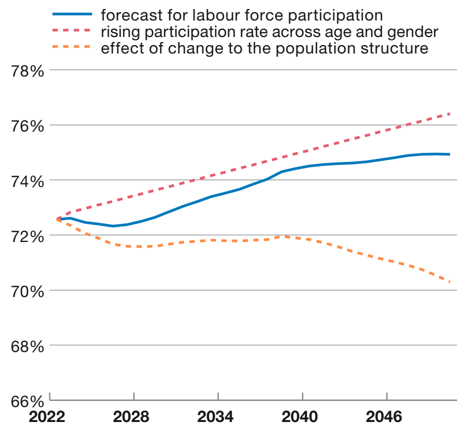
The labour force participation rate by age and gender in Estonia is already among the highest in the countries of Europe, and so it is forecast that growth will slow in future. Fewer young people participate in the labour market in Estonia than in some Scandinavian and Germanic countries, but this is because of differences in the school system that are forecast to remain the same in future. The labour force participation rate of women of childbearing age

Figure B5.1. Change in the labour force participation rate from 2001, pp



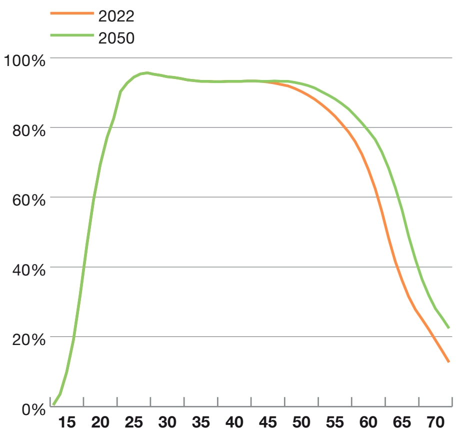
Sources: Statistics Estonia, Eesti Pank calculations

Figure B5.2. Labour force participation projection



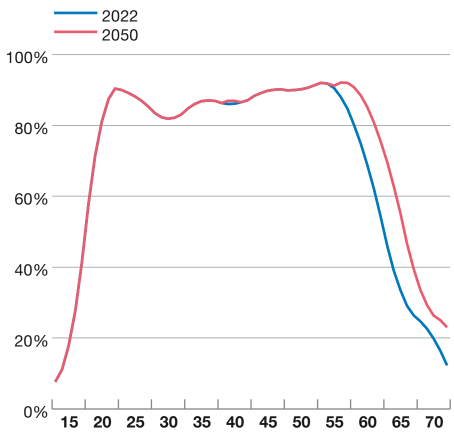
Sources: Statistics Estonia, Eurostat, Eesti Pank will also remain a little lower because of the generous system of maternity benefits and the right of mothers to return to their job three years after the birth of a child. Labour force participation will continue to grow as people delay retirement. People are retiring at an older age for several reasons, including a rise in the retirement age, better health, and changes in the labour market that allow people to work longer, such as more general acceptance of part-time work. In the forecast, the participation rate for those aged over 40 will rise linearly by 2050 to that of people three years younger, with the largest rise coming at the age when the retirement age rises (see Figures B5.3 and B5.4). Figure B5.2 shows a scenario where this affects the total participation rate of the working age population by 3.8 percentage points, assuming that the population structure remains the same as it is in 2022 throughout the forecast horizon.

Figure B5.3. Projection for labour force participation for men



Sources: Statistics Estonia, Eurostat, Eesti Pank

Figure B5.4. Projection for labour force participation for women



Sources: Statistics Estonia, Eurostat, Eesti Pank

Structural changes in the population, which are mostly the population ageing, will reduce labour force participation in the coming years, but a continuing rise in the participation rate across age and gender will raise it. These factors pulling in opposite directions are about the same magnitude, and so labour force participation will remain stable. The participation rate will rise in the longer term and so the amount of labour in the economy will increase, supporting the production potential of the economy. Many factors will affect labour force participation in the long-term, such as migration and structural changes in the labour market, meaning there is quite a lot of uncertainty around the forecast for the participation rate.

PRICES

Inflation will continue to fall, but will still average around 9% for the year. It should fall below 10% in June, and below 5% by the end of the year. It should come down to close to 2% in the next two years, but there remains a lot of uncertainty about the future development of prices. Energy may drop more sharply in price than forecast in 2024, but inflation could be given a boost by the tax rises planned by the government (see Box 6 on the impact of tax changes). The risks to the longer-term forecast for prices come from climate change and from growing conditions in agriculture, which could cause food prices to rise sharply if they deteriorate. Inflation for manufactured goods may be higher than forecast because of nearshoring, as there will be less benefit than before from cost savings made by moving production to cheaper countries.

Energy prices started to fall in yearly comparison in May, and should hit a low point in August. Compensation to households for high energy prices ended in April, causing energy prices to rise by 8% over the month and adding 1.5 percentage points to overall inflation. This effect will remain until end of the year, as the price of electricity in the consumer price statistics is largely determined by the price level of the universal service. Energy prices for households rose by 65% last year, but this year they will rise by around 1%. It is planned that network fees for electricity will be raised in the coming years because of the large need for investment. Heat may become cheaper by the end of the year as the price of wood chips falls. The price of gas remains relatively high in historical terms and so the heat produced from gas is not expected to become much cheaper. Heat producers have spoken of the need to stop using gas.

Food prices will be the biggest contributor to inflation this year. Producer prices for agricultural commodities and food products have fallen in recent months in Estonia, but it takes time for those changes to reach retail prices. Prices for food will rise quite substantially this year, by around 15%. Prices of some imports, particularly sugar, have continued to rise, and long-term contracts mean that the lower price of cereals will probably only pass into consumer prices after the next harvest. The situation in Ukraine and the harvest there and opportunities for exporting cereals also have an impact.

GENERAL GOVERNMENT FINANCING

The general government budget deficit will widen sharply this year. Revenues will grow more slowly this year than in the past couple of years, primarily because tax revenues will grow more slowly. The growth in receipts of income tax will be slower despite rapid rises in wages as the higher tax-free income threshold started to apply from the start of the year, and the average pension was made exempt from income tax. The growth in spending will accelerate at the same time, as there will be large leaps in both social transfers for pensions and child and family support and in the payroll of general government employees, as public sector wages grew by less in the past couple of years than private sector wages did.

The exceptionally high inflation of last year has also left the deficit sharply wider than it was a year previously. It is very common during episodes of high inflation that the budget balance is improved by inflation in the first year as tax revenues increase rapidly, as happened in Estonia in 2022. In the next year however, inflation passes more clearly into the growth in government spending through indexation, large wage rises, higher prices for investment and more, and so the budget deficit widens.

If no additional measures are passed, the Estonian budget deficit in 2024 will be a little more than 3% of GDP. The deficit will shrink to 2.4% of GDP in 2025 as the economy improves. The new planned fiscal rules of the European Union set a budget deficit of 3% as the limit, which will require the government to reduce the deficit at a set rate. Eesti Pank forecasts that bringing the budget deficit below 3% of GDP as soon as 2024 would require some 100 million euros of improvement in the budget balance. The budget measures currently planned by the governing coalition, mainly tax rises and cuts to family benefits, would reduce the budget deficit in 2024 by around 570 million euros, or 1.4% of GDP. The current plans are also for changes to the private income tax system in 2025 that would reduce state revenues, in contrast to the measures to be applied in 2024 (see Box 6 for an estimate of the impact of changes to the political assumptions).

Box 6: How government decisions affect the Estonian economy

The coalition agreement of the government that took office this spring contains several decisions that aim to reduce the state budget deficit, while also advancing the governing programmes of the parties. This additional scenario considers the political impact of the coalition agreement on top of the baseline scenario, and it is based on the same measures that were presented in appendix 1 to the stability programme 2023. The additional scenario consequently covers measures that the government has already sent to the Riigikogu such as a rise in VAT, a rise in the tax-free minimum threshold for income tax together with a rise in the income tax rate, and cuts to family benefits and rises in excise duties, together with measures that have not yet been fully

Table B6.1. Impact on the general government budget balance of revenue and cost measures presented in the 2023 Stability Programme, % of GDP

	2024	2025
Rise in the VAT rate	0.76%	0.76%
Abolition of the lower VAT rate on accommodation		0.05%
Changes in excise rates and gambling tax	0.06%	0.08%
Reduction of family benefits and cancellation of the indexation of family benefits	0.19%	0.21%
Changes to the personal income tax system		-0.66%
Abolition of various inome tax reductions for households		0.09%
Changes to income taxes paid by corporations	0.08%	0.21%
Car tax	0.14%	0.27%
Increase in environmental charges	0.23%	0.22%
Additional funding for science and education	-0.05%	-0.05%
Rise in social benefits	-0.05%	-0.05%
Total impact	**1.37%**	**1.13%**

Sources: Ministry of Finance, Eesti Pank calculations

clarified such as rises in car tax and environmental fees, for which the preliminary impact analysis in the stability programme is used (see Table B6.1)[30].

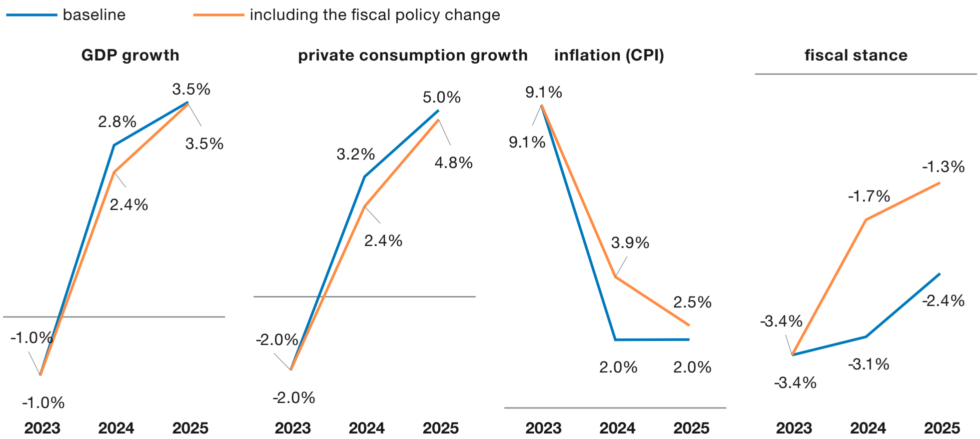
This impact analysis looks at the macro level of the economy, considering for example how an increase in the tax burden will affect the incomes of households, or how a change in public sector spending will affect various macro indicators. It does not analyse micro-level impacts. With the rise in VAT on accommodation providers for example, it is only possible to calculate how the average price level will be affected and so indirectly how consumption will be affected. The analysis does not take account however of whether the rise in VAT for hotels would affect the economy on average more than tax rises for other goods and services. This means that the impact of tax changes needs to be analysed using other methods.

The analysis finds that inflation is affected most by the policy changes, as the rise in the consumer price index is larger by around two percentage points in 2024 (see Figure B6.1). Higher inflation is primarily a consequence of the rise in VAT, though it also comes from other changes such as the increase in environmental fees. These results assume that prices and wages are sticky downwards, meaning that VAT is largely passed into prices, and companies cannot alleviate its consequences from the prices of production factors. There was a similar rise in VAT in 2009 that passed into prices, but this was followed by a period of falling labour costs that softened the impact on prices of the rise in tax. The labour market at that time was quite different to how it is now, as unemployment in early 2010 was around 20%. It may be assumed that the tax increase is unlikely this time to lead to a reduction in labour costs.

High inflation and the cuts to family benefits will reduce the growth in real household incomes, which will reduce the growth in consumption and so mean that GDP is smaller. The planned measures will however substantially cut the budget deficit, which will improve the balance in the economy and reduce risks, and also reduce price pressures over the long term. The analysis is limited to the horizon of the economic forecast and so is not able to show the long-term impact of the policy decisions.

30 Eesti Pank has calculated impact assessments for the rise in VAT, the change to the income tax system, the reduction in family benefits with the smooth exit and the removal of indexation, and the rise in excise duties. The estimates for the impact of changes to income tax for companies and the elimination of various tax breaks for individuals are the same as those given in the explanatory note to the draft law changing the Income Tax Act and the Military Service Act. The amount of additional revenue planned from the rise in car tax and environmental fees is taken from appendix 1 to the Stability Programme 2023.

B6.1. Economic impact of budget measures from the coalition agreement



Source: Eesti Pank

A model was built for the impact analysis that is based on the impulse response functions of the Eesti Pank macro model, which was made earlier to analyse the impact of fiscal policy for the joint forecasting exercise of the Eurosystem. It essentially consists of predefined scenarios for policy changes, such as increases in consumption taxes or changes to income tax, that attempt to take account of the different impact channels that the model does not normally consider when it is estimated.