

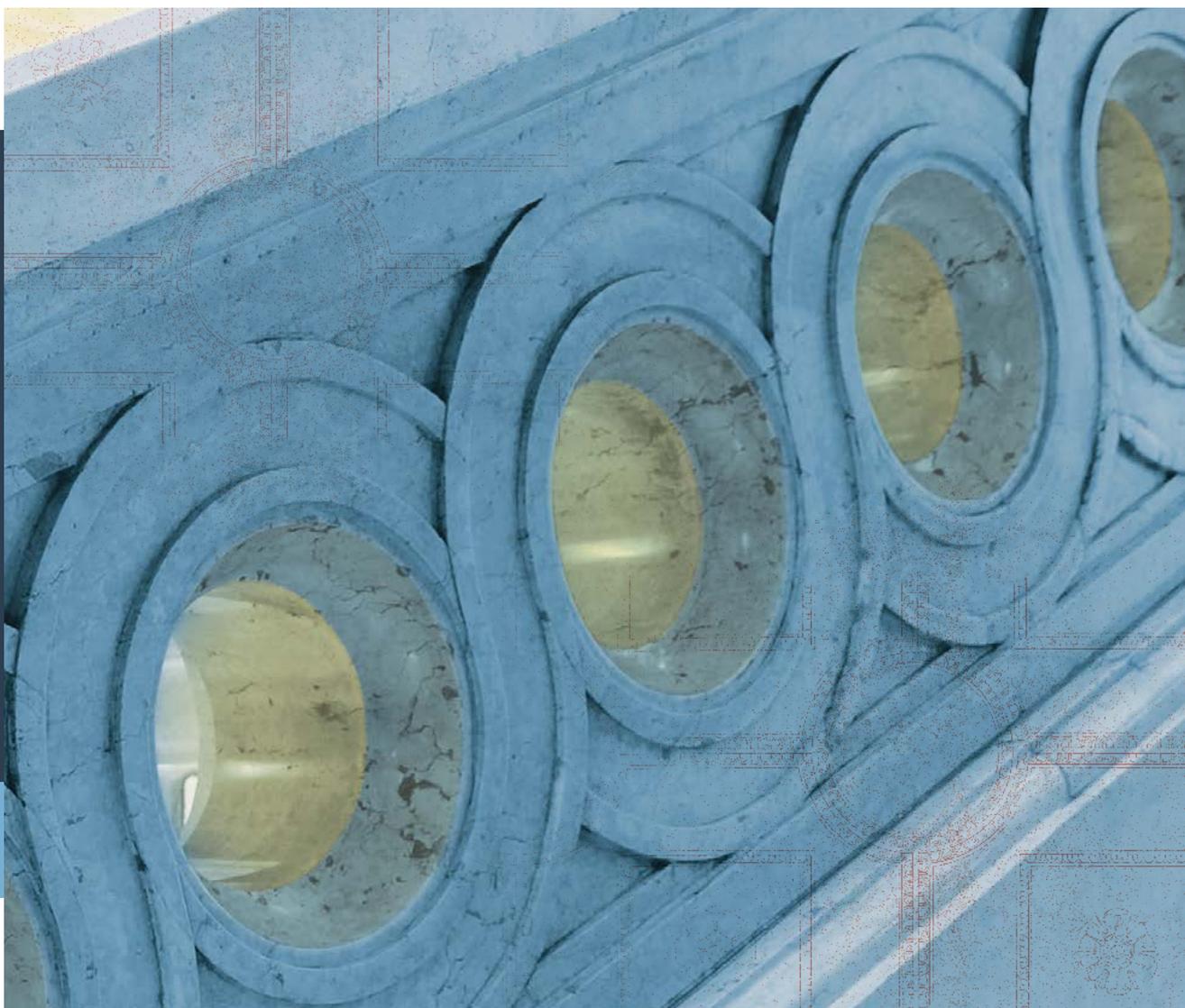


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# Macroeconomic Developments and Outlook

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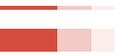
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## Summary

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**Global economic activity remained subdued in early 2024 but showed signs of improvement, particularly in the emerging market economies.** Despite geopolitical uncertainty and tightened financing conditions, global economic activity surpassed expectations. The Chinese economy grew 1.6% on a quarterly level in the first three months of 2024 owing to industrial production resilience, while the growth of the American economy slowed down to 0.4%. The global composite purchasing managers' index (PMI) additionally improved at the beginning of the second quarter, signalling further strengthening of global economic activity. Supply chains have largely normalised and global trade started strengthening, driven by the demand for energy transition goods. The prices of oil and other raw materials rose because of geopolitical uncertainties, while the prices of gas in Europe fell further. The trend of global disinflation slowed down slightly, with persistent inflation of services prices, while inflation in the prices of goods stabilised at low levels. Against such a background, most central banks kept their key interest rates at elevated levels.

**Real economic activity in the euro area was surprisingly positive in early 2024.** Although there was a slight recession in the second half of last year, real GDP grew 0.3% on a quarterly level in the first three months of 2024. All the four major economies of the euro area, including that of Germany, exceeded market expectations. Although recovery surpassed expectations, the growth was modest due to weaknesses in manufacturing, which was particularly hard hit by the energy crisis, with the services sector remaining the main generator of growth. The labour market of the euro area remained robust, with high employment, stable unemployment and growing nominal wages. Labour shortages in the industrial sector decreased but rose again in construction and the services sector. The trend of inflation slowdown in the euro area has continued, largely owing to weaker cost pressures, while the still relatively high wage growth supports the persistent inflation of services prices. The overall consumer price inflation thus slowed down from 2.9% in December 2023 to 2.6% in May 2024, and core inflation slowed down from 3.4% to 2.9%.

**The ECB's Governing Council lowered key interest rates by 25 basis points at the meeting on 6 June, after holding them steady since September last year.** The Governing Council thus decided in June to moderate the degree of monetary policy restriction, following the most rigorous cycle of tightening since the introduction of the euro, during which key interest rates rose by 450 basis points between July 2022 and September 2023. The Governing Council will keep the ECB's key interest rates sufficiently restrictive for as long as necessary for inflation to return to the target level in a timely manner, and its decisions will continue to be based on a data-dependent approach. On the bonds market, yields on long-term government bonds mostly rose until end-April and then fell slightly by mid-May. The correction was due to the publication of indicators of the situation in the

labour market in the US, which in early May were poorer than expected, and to lower oil prices, which led to a fall in yields on US government bonds.

**After peaking at the turn of last year, the interest rates on domestic banks' loans fell slightly ahead of expectations that the ECB would lower key interest rates. The interest rates on deposits are also below the maximum levels recorded.** The interest rates on pure new corporate loans and general-purpose cash loans to households have been falling gradually from their peak levels several months ago. By contrast, housing lending has not become cheaper, which is due to the specific characteristics of housing loans, primarily their long maturity and the high share of fixed interest rates, which makes them less sensitive to changes in short-term interest rates. The results of the bank lending survey also suggest a gradual weakening of the intensity of tightening of the financing conditions for corporates and households, except in the case of household consumer borrowing. The demand of corporates for loans and of households for consumer and other loans was stable and showed signs of strengthening, while the demand for housing loans continued to fall. The recovery in demand and stabilisation in the financing conditions resulted in a small acceleration in the growth of corporate lending while household loans continued to grow relatively strongly. As regards deposits, a higher level of interest rates on time deposits encouraged corporates and households to turn to time deposits, which resulted in a further increase in the share of time deposits in total deposits.

**The Croatian economy continued to grow relatively strongly at the beginning of the year and the expectations are that in 2024 real GDP might grow slightly faster than in 2023, and then slow down gradually.** According to the first estimates of the CBS, real GDP rose by 1.0% in the first quarter from the end of 2023, with service activities and construction being again the main generators of growth, reflecting strong personal consumption amid continued employment and wage growth, further investment growth and favourable developments in tourism. At the entire 2024 level, real GDP growth is expected to accelerate to 3.3% from 3.1% in 2023.<sup>1</sup> The expected acceleration in economic activity in 2024 reflects the projected further fast growth in personal consumption, partly supported by an expansionary fiscal policy, strengthening of external demand and recovery in goods exports and corporate investments. The faster annual growth is also related to developments in the year before, particularly those in personal consumption, which, after having fallen sharply towards the end of 2022, rose steadily, leading to a positive carry-over effect in 2024. In the remainder of the projection horizon, the main components of GDP are expected to grow relatively evenly owing to a further growth in external demand, favourable developments in the labour market and further relatively large inflows from EU funds, however, the total aggregate might slow down gradually towards the average rate of 2.7% amid the expected improvement in the structural balance of the general government.

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<sup>1</sup> In line with the time limits determined under the Eurosystem ECB staff June Broad Macroeconomic Projection Exercise (June 2024 BMPE), the final time limit for submitting macroeconomic projections for Croatia to the ECB was 22 May. Data published until and including 20 May 2024 were used in the final projection.

**After inflation in Croatia eased further in the first five months of 2024, at the entire 2024 level inflation is expected to be noticeably lower than in the year before and to slow down in the following two years.** Overall inflation measured by the harmonised index of consumer prices slowed down from 5.4% in December 2023 to 4.3% in May 2024, owing to a weakening of the impact of past inflationary shocks (such as the increase in the prices of energy and other raw materials and disruptions in supply chains), as reflected in low annual rates of change in producer prices of intermediate goods, food and other consumer goods. At the same time, despite having slowed down since autumn last year, the inflation of services prices remains high, mirroring a higher sensitivity of services prices to wage growth relative to other inflation components against the background of strong domestic and foreign demand for catering and accommodation services. As a result, current inflation is moderately heightened only in the services segment. At the entire 2024 level, overall inflation might fall by more than a half and stand at 3.8%, with such a dynamics mirroring a slowdown in the inflation of prices of all the main components except energy. Over the remainder of the projection horizon, inflation in Croatia is expected to slow down further to 2.6% in 2025 and 2.1% in 2026.

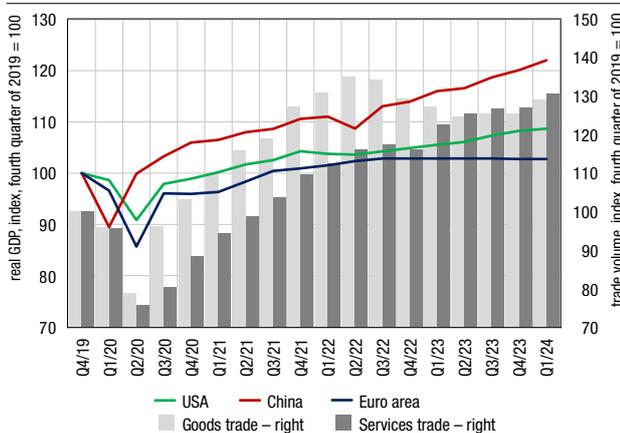
## 1 Global economy

**Global economic activity remained subdued in the beginning of 2024 but showed signs of improvement, the results somewhat outstripping earlier expectations.** Notwithstanding the heightened geopolitical uncertainty, tightened financing conditions and still present price pressures, global economic activity grew faster than expected in the first months of 2024, particularly in emerging market economies. The Chinese economy, despite problems in the real estate market and fiscal restrictions, grew by 1.6% (Figure 1.1.1) in the first quarter of 2024, mainly owing to its still resilient industrial production. At the same time, the quarterly growth of the US economy slowed down to 0.4% in the first quarter of 2024, the lowest result since mid-2022. Nevertheless, only government consumption decelerated noticeably in the US, while the momentum of personal consumption and investment activity of US companies was stronger than expected.

**The global composite purchasing managers' index (PMI) additionally improved at the beginning of the second quarter, signalling the further strengthening of global economic activity.** A slightly faster recovery in the services sector compensated for the moderate slowdown in the production sector (Figure 1.1.2). Nevertheless, the PMI index for the manufacturing sector remained in expansion territory which it entered in the beginning of the year for the first time after the start of the energy crisis in 2022. This was mostly fuelled by the decline in energy prices and the normalisation of global supply chains that had previously largely kept the production sector subdued. In addition, the gradual recovery of global demand for consumer goods helped the manufacturing sector and reduced its lag behind the services sector.

**Global trade began to strengthen with the waning of the negative effects of the shift of demand from goods to services, which had been keeping it subdued in the post-pandemic years.** Apart from the evident signs of the strengthening of global demand for

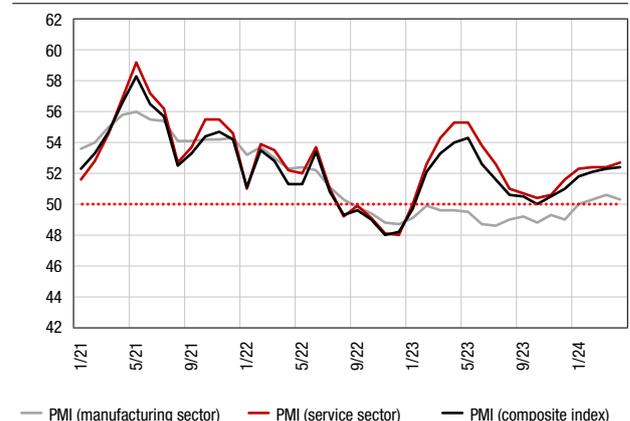
Figure 1.1.1 Economic activity in major markets and global trade



Note: The data on global trade for the first quarter of 2024 are based on UNCTAD analyses.

Sources: Eurostat, BEA, NBS and UNCTAD.

Figure 1.1.2 Confidence indicators for the global economy



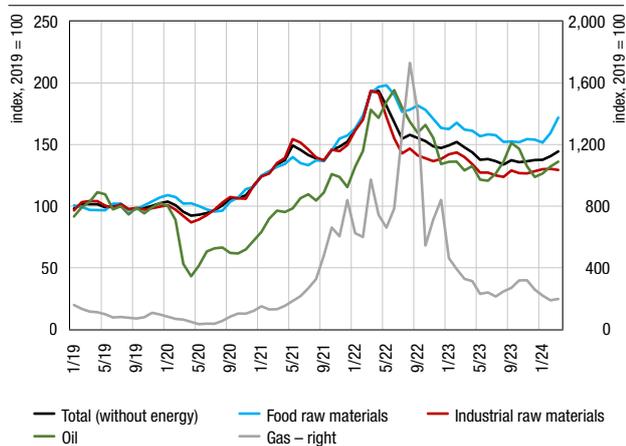
Note: Index value above 50 indicates expansion, while index value below 50 indicates contraction of economic activity.

Source: S&P Global.

goods, particularly in the segment of goods related to energy transition, the still strong demand in trade-intensive services, such as tourism, contributed to the growth of global trade. The gradual spending of inventories previously accumulated by corporations also contributed to the strengthening of both demand for imported goods and as a result of global trade. Supply chains mostly completely normalised and attacks on merchant ships in the Red Sea in January and February only contributed to a short-term rise in transportation costs and the extension of delivery times. However, this did not lead to any very great shortages of goods because shipping companies very quickly set up alternative trading routes. Despite the trends described, global trade has not yet returned to the pre-pandemic growth pattern. In the forthcoming period it might continue to be subdued by heightened uncertainty and geopolitical tensions.

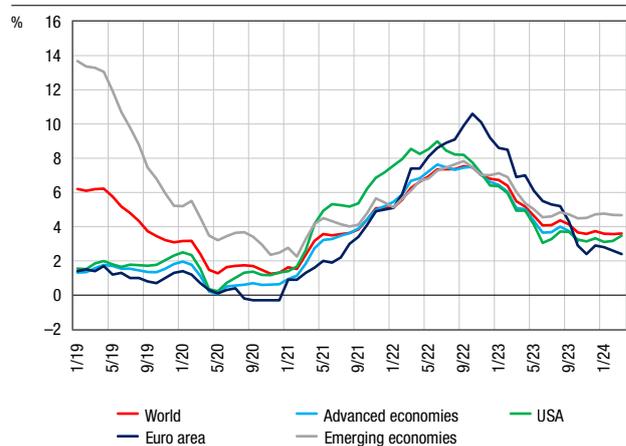
**Oil prices increased noticeably in the first months of 2024 due to the geopolitical uncertainty related to the conflicts in the Middle East and limitations on the supply side.** Oil prices were highly volatile during the mentioned period, reaching the level of about USD 85/barrel in mid-May because of concerns regarding the development of the events in the Middle East and the potential spread of the conflict to the wider region, which could significantly impact the global oil supply. At the same time, OPEC+ member countries extended the agreement to reduce production to the second quarter of 2024, which contributed additionally to price pressures. On the other hand, the still relatively weak global demand subdued a more considerable increase in oil prices. Gas prices in Europe dropped by 18% in the first four months from the end of 2023 and were relatively low at about EUR 30/MWh. Lower prices were supported by the high levels of stored gas and the fact that the demand for gas in Europe was historically low due to weak industrial activity in the sectors with intensive gas consumption, favourable weather conditions and changes in the structure of household and corporate consumption after the gas crisis. By contrast, the interrupted supply from Norway and the United States of America, as well as the restrictions of exports of liquefied natural gas from Qatar, under the effect of the disruptions in the Red Sea, created only slight pressures on the growth of prices.

Figure 1.1.3 Prices of energy and other raw materials



Source: HWWI (Euroland, EUR).

Figure 1.1.4 Global inflation



Source: Federal Reserve Bank of Dallas (adjusted by the CNB).

**The prices of other raw materials on the global market also increased, particularly the prices of food raw materials.** The increase in the prices of food raw materials mostly reflects the rise in the prices of cocoa, which more than doubled in the first four months of the current year due to the pronounced shortages in supply from West African countries caused by unfavourable climate conditions. Poor crop yields, disruptions in supply and very low global inventories were also the reason for the sharp increase in the price of coffee in the mentioned period. The rise in the price of cereals was considerably more moderate, but it continued to be supported by uncertainty over the supply from Russia and Ukraine. After the decline in the previous year, the prices of metal also increased, partly due to disruptions in the production of copper and aluminium as well as low inventories in the market accompanied by strong demand associated with the energy transition (Figure 1.1.3).

**The trend of gradual disinflation on a global level decelerated moderately in the first months of 2024.** A slight change in the trend is perceived in developed countries, particularly in the US and in some emerging market economies (Figure 1.1.4). Services price inflation proved to be particularly persistent in numerous countries as a result of labour market pressures in labour-intensive service activities and the still robust demand for services. At the same time, the global inflation of commodity prices stabilised at a very low level. In addition to the renewed growth in the prices of energy, potential new disruptions in supply chains due to geopolitical tensions contribute to the risk of rising inflation in the segment of goods. In such circumstances, most central banks did not change their reference interest rates, only a few cutting them (Switzerland, Sweden, Czech Republic and Hungary).

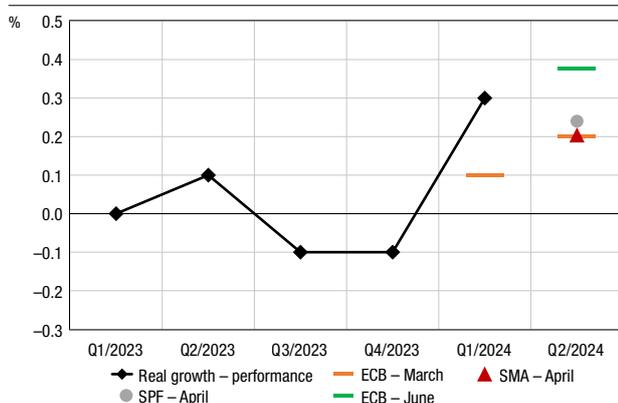
## 2 Euro area

### 2.1 Real developments

**After a slight recession in the second half of last year, the real activity in the euro area recovered in the first three months of 2024.** In the third and fourth quarter of 2023, the economy of the euro area witnessed a contraction in real GDP of 0.1% (Figure 2.1.1). The growth in economic activity of 0.3% in the first three months of this year was visibly faster than envisaged approximately by most projections, which put growth at 0.1%. The growth in all the four major economies of the euro area exceeded market expectations, including that of the German economy (0.2%), which had recorded a marked contraction in the last quarter of the previous year (−0.5%). With recovery expected to continue into the second quarter it seems likely that the euro area has dodged any very strong contraction of economic activity during the cycle of monetary policy tightening.

**Although positive, the real growth in the euro area was relatively modest due to pronounced weaknesses in individual economic sectors.** This is particularly true of manufacturing, which has recorded a prolonged period of contraction with unfavourable developments being particularly pronounced in energy-intensive industrial activities, hard hit by the energy crisis. The available high-frequency indicators, such as the purchasing manager index (PMI) and the economic sentiment index (ESI), suggest a further contraction in industry in the second quarter of 2024. The mid-term outlook for the recovery of European industry also seems modest given that the recent fall in industrial activity is probably not exclusively of a cyclical nature but partly mirrors structural weaknesses and poor competitiveness. The services sector continued to make up for the weaknesses in the production sector and remained the main driver of economic growth in the euro area (Figure 2.1.2).

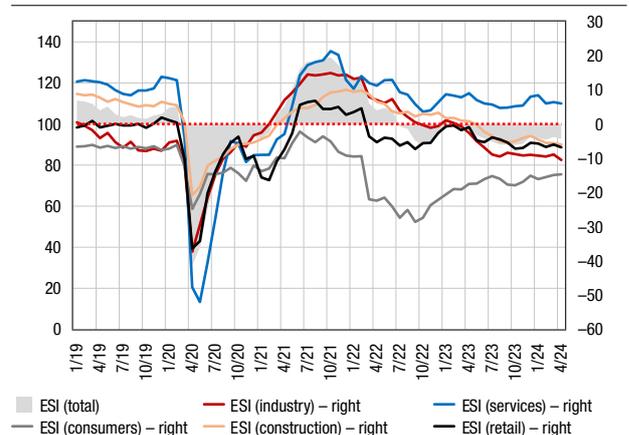
Figure 2.1.1 Economic activity in the euro area



Notes: Abbreviations ECB – March and ECB – June refer to ECB March 2024 and ECB June 2024 projections, respectively. Abbreviations SMA (Survey of Monetary Analysts) and SPF (Survey of Professional Forecasters) refer to the results of the ECB April survey of market participants.

Source: Eurostat.

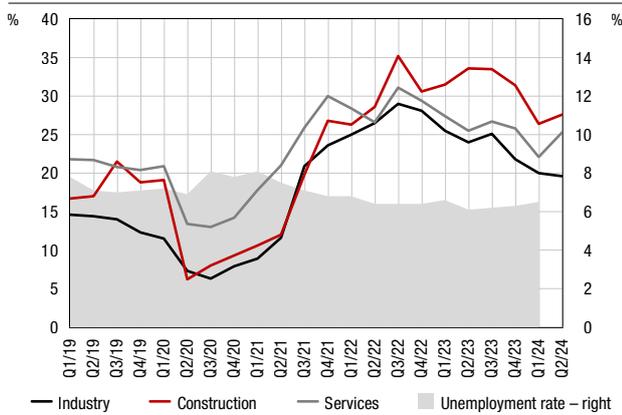
Figure 2.1.2 Euro area confidence indicators



Note: Index value above (below) 100 refers to values higher (lower) than the long-term average.

Source: Eurostat.

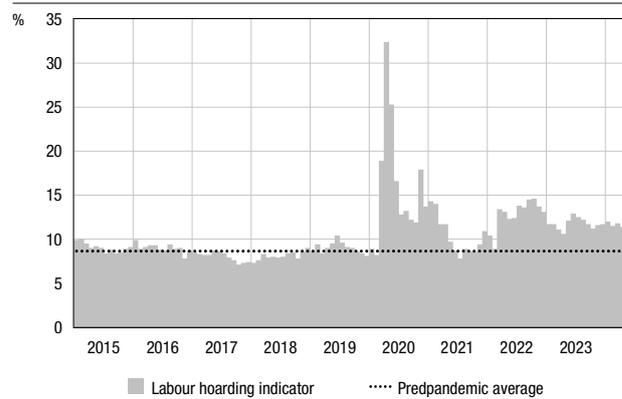
Figure 2.1.3 Labour shortage and unemployment rate in the euro area



Note: Labour shortage is measured by a quarterly survey and indicates the percentage of firms reporting labour shortage as the main obstacle for business activity.

Source: Eurostat.

Figure 2.1.4 Labour hoarding indicator in the euro area



Notes: Labour hoarding indicator is derived from firms' survey (expectations about domestic product and employment). Predpandemic average refers to average level of indicators in the period from 2015 to 2019.

Source: European Commission.

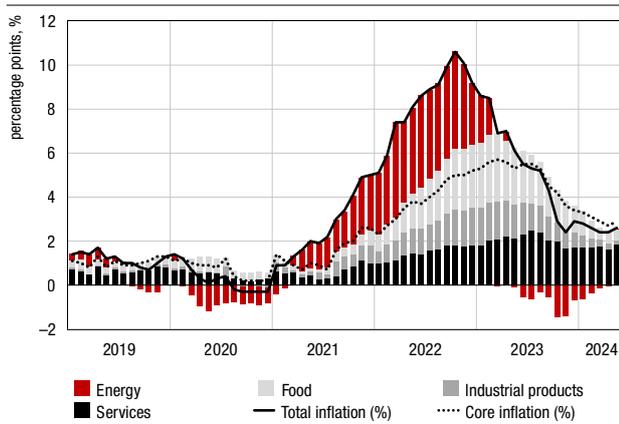
**Subdued real activity in the euro area was only partly reflected in labour market indicators.** Overall, the labour market in the euro area remains very strong with a high employment rate, stable unemployment, marked labour shortages and a noticeable rise in nominal wages. While the indicators of labour shortages in industry continued to fall from a relatively high level, shortages in construction and service activities rose slightly, in parallel with the signs of recovery in activity at the beginning of the year (Figure 2.1.3). The resilience of the European labour market during the cycle of monetary policy tightening can partly be explained by bigger than average labour hoarding on the part of corporates fearing an even greater shortage of qualified labour force in the expansion phase (Figure 2.1.4).

## 2.2 Price developments

**The slowdown in euro area inflation continued in the first five months of 2024, albeit at a somewhat weaker pace than in the previous year.** Inflation, measured by the harmonised index of consumer prices, according to Eurostat's flash estimate, fell to 2.6% in May from 2.9% in December 2023, primarily due to food inflation slowing down sharply from 2.6% in May from 6.1% in December (Figure 2.2.1) as a result of energy and food raw material prices dropping markedly from their peak levels in 2022. Energy inflation, on the other hand, went up to 0.3% from -6.7% in December, which reflects unfavourable base effects (the considerable monthly decreases in energy prices in the period from February to May 2023 no longer affect the calculation of the annual rate of change in these prices), the growth of global crude oil prices and the partial withdrawal of fiscal support to households aimed at mitigating the effects of the previous price rises in energy products.

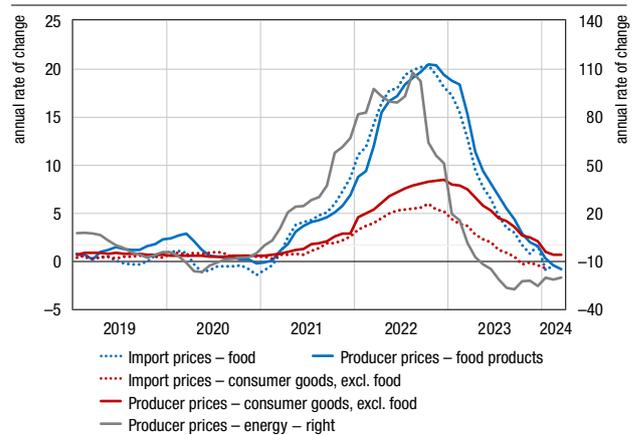
**Euro area core inflation (which excludes energy and food prices) decelerated in the first five months of 2024,** with industrial goods prices down to 0.8% from 2.5% in December and services inflation edging up to 4.1% from 4.0% in December. Although

Figure 2.2.1 Euro area inflation indicators



Note: Core inflation is measured by the harmonised index of consumer prices, which excludes energy, food, alcoholic beverages and tobacco prices.  
Sources: Eurostat and CNB calculations.

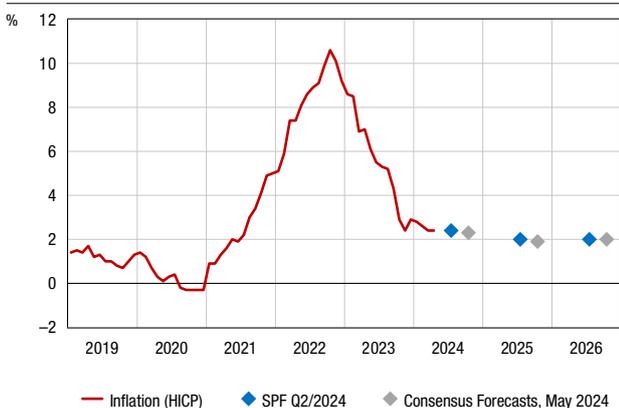
Figure 2.2.2 Indicators of price pressures along the pricing chain in the euro area



Notes: Producer prices refer to the domestic market. Food prices include alcoholic beverages and tobacco.  
Source: Eurostat.

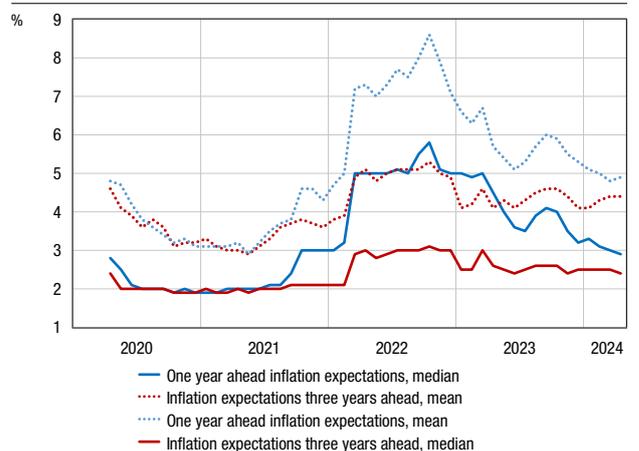
decelerating annually, euro area wage growth has remained relatively high, contributing strongly to the persistence of services inflation. Industrial goods inflation in the euro area has been slowing down mostly due to lower prices of energy and other raw materials on the global market and the easing of inflationary pressures arising in the earlier stages of the price chain, which reflects the fall in import prices and the low annual growth rates of the producer prices of consumer goods in the domestic market (Figure 2.2.2). The momentum of overall inflation, as shown by the annualised quarterly inflation rate, which is a good indicator of current inflationary pressures, decreased early in the year to as low as 0.5%, primarily due to a markedly negative momentum of energy prices. The overall inflation momentum built up afterwards, reaching 3.0% in May and exceeding its long-term average for the third month in a row. This mainly resulted from the strengthening momentum of energy inflation, rising to 3.5% in May from -11.7% in January, and services inflation, growing to 5.5% in May from 2.3% in January.

Figure 2.2.3 Short-term and mid-term inflationary expectations of professional forecasters in the euro area



Note: SPF Q2/2024 (Survey of Professional Forecasters) refer to the results of the ECB's survey of professional forecasters conducted from 18 to 21 March 2024.  
Sources: Survey of professional Forecasters, ECB and Consensus Forecasts.

Figure 2.2.4 Short-term and mid-term consumer inflationary expectations in the euro area



Source: Consumer Expectations Survey (CES) – March 2024, ECB, 28 May 2024.

**The results of the ECB's second quarter 2024 survey suggest that the average annual inflation rate in the euro area will slow down to 2.4% in 2024 and to 2.0% in 2025 and 2026.** (Figure 2.2.3). Experts consider the labour market resilience and wage growth to be high, but expect that their further slowdown will considerably contribute to the return of inflation to target levels. As regards consumers, the ECB's survey carried out in April 2024 (Figure 2.2.4) shows that short-term inflationary expectations (for a year in advance, median) amount to 2.9% and are slightly lower than those recorded at the end of 2023. In addition, mid-term consumer inflationary expectations (for three years in advance, median), edged down to 2.4% in April, having stagnated at 2.5% in the previous four months.

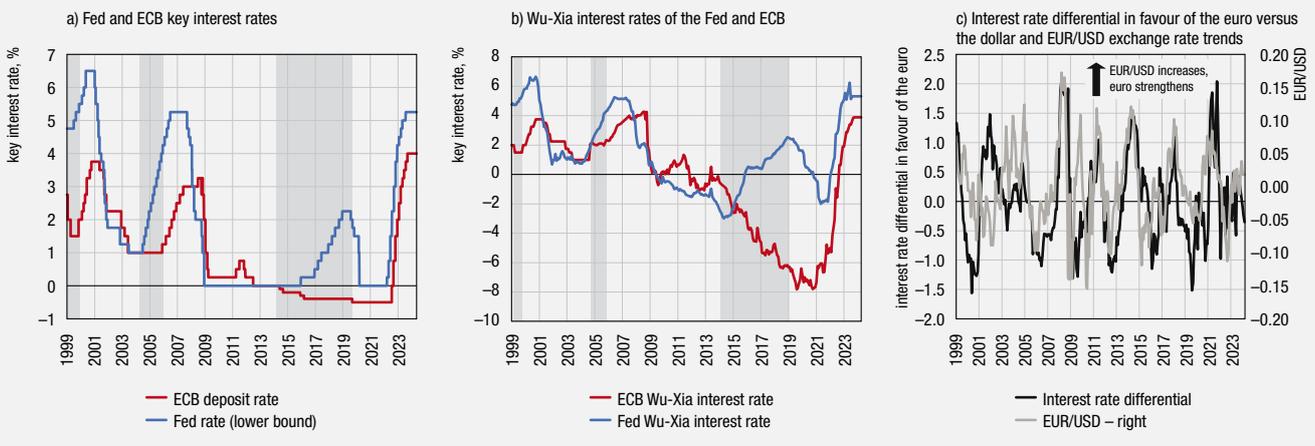
## Box 1 Effect of exchange rate fluctuations on euro area inflation under conditions of monetary policy divergence between the Fed and the ECB

A decelerated economic growth in the euro area and a faster decrease in inflation in the euro area than in the US has given rise to expectations on the financial market that the ECB will, contrary to the previous practice, start the interest rate cutting cycle and that the monetary policies of the Fed and ECB will diverge. Such a divergence in monetary policies, should it arise, can influence the euro area economy through several channels. The Fed's restrictive monetary policy and tightened financial conditions could cause euro area financial conditions to tighten too and alleviate inflationary pressures as a result. In contrast, due to the higher interest rate differential in favour of the dollar, the euro can be expected to weaken against the dollar and euro area inflation to decelerate more slowly towards the target. An analysis of the EUR/USD exchange rate pass-through to prices in the euro area confirms the previous findings that the intensity of the pass-through decreases along the pricing chain. The effect of the exchange rate pass-through is the strongest for imported prices at the border, but it is extremely weak for final consumer prices, which will probably mitigate the spillover of the tightened financing conditions from the US to the euro area. The overall effect of the potential monetary policy divergence between the Fed and the ECB is therefore likely to be very limited.

**The ECB's monetary policy has historically been mostly in tune with the Fed's monetary policy, with a certain time lag.** The increased volume of global trade, surging global financial flows and global shocks (global financial crisis, coronavirus pandemic) have in the last few decades increased countries' interdependence and the synchronisation of real and financial cycles. This has had the effect of increasingly synchronising monetary policies. The Fed has usually been first to adjust monetary policy to the state of the global economic cycle and move the key interest rate. Since the ECB was founded, the monetary policies of the Fed and the ECB have diverged significantly only a few times<sup>2</sup> and for very short periods of time (Figure 1.a and 1.b, grey areas). The first episode happened in 1999, immediately after the introduction of the euro, when the ECB after nine months joined the cycle of upping key interest rates that the Fed had commenced. In the second episode, which started in 2004, the ECB started to follow the Fed after 17 months. The only episode when the monetary policies of the two banks diverged for a longer time was the one occurring between 2014 and 2019, following the European debt crisis. At the time, the ECB additionally strengthened its already very expansionary monetary policy stance, with the aim of revitalising economic activity and pushing inflation up towards the target. The Fed, in contrast, tightened its monetary policy in order to

2 Significant divergence between the monetary policies of the Fed and the ECB are considered to be those cases when the interest rate differential has increased over 2.50% in favour of either currency.

Figure 1 Interest rates in the US and euro area



Source: Bloomberg.

Notes: Wu-Xia interest rates for the euro area are available for the period from September 2004 to August 2022 and for the US from the beginning of the observed period until June 2023. To construct the figure in the periods when Wu-Xia interest rates are unavailable central banks' key interest rates were used. Wu-Xia interest rates will start to be published again if they return to the zero interest rate environment.

Sources: Jing Cynthia Wu website and Bloomberg.

Notes: Data were smoothed by the HP filter and deducted from the original series. Wu-Xia interest rates were used for the interest rate differential; in the periods when they were unavailable central bank key interest rates were used.

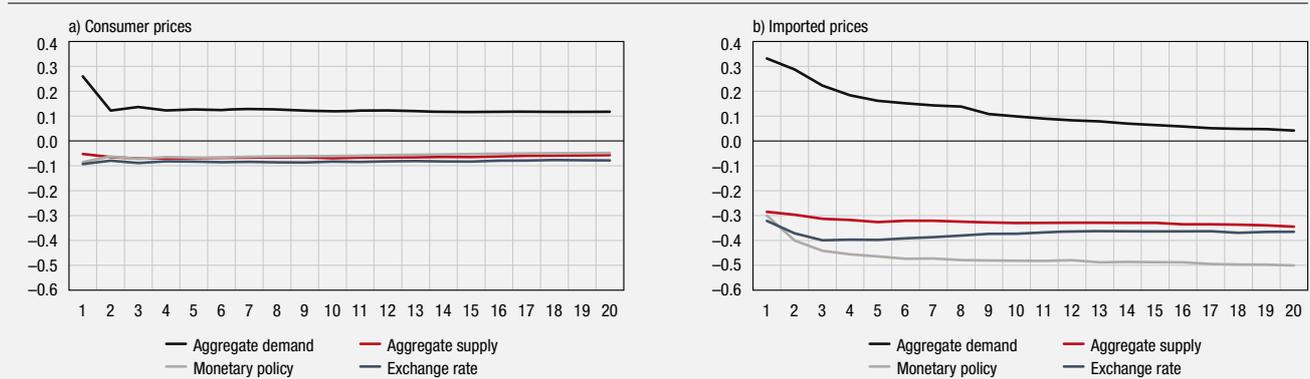
Sources: Jing Cynthia Wu website, Bloomberg and CNB calculations.

alleviate inflationary pressures that were building up in the US at that time. The divergence between the monetary policies in that period becomes even more obvious if one observes monetary policy indicators (Figure 1.b), which adjust key interest rates for the effect of unconventional monetary policy measures, such as bond purchase programmes (the shadow rate).

Due to a slower economic growth and faster decrease in inflation in the euro area than in the US, financial markets currently expect there to be a monetary policy divergence between the Fed and the ECB. The US economy is at the moment characterised by a strong labour market and buoyant demand. These trends could reflect on the euro area in such a way that foreign demand for exported goods could increase, which could result in upward pressures on euro area prices. Such an inflationary impact of the economic divergence could be accompanied by a monetary policy divergence between the Fed and the ECB, which would influence the economy of the euro area through several different channels that have different impacts on economic activity and inflation.

- **Financial channel** Any delay in the lowering of the key interest rate in the US not only influences the condition of the American economy, but it also has a significant impact on the rest of the world, due to the size of the American economy and its integration in the global financial system as well as the importance of the US dollar as a dominant global currency. It can therefore be expected that keeping the Fed's monetary policy in a more restrictive area will unfavourably affect financing conditions in the euro area, muting economic growth and inflationary pressures.
- **Exchange rate channel** The interest rate differential is an important determinant of short term changes in the exchange rate (Figure 1.c). However, the exchange rate is influenced not only by interest rates but also by many other factors<sup>3</sup> that have

Figure 2 Conditional correlation of the exchange rate and prices as a result of specific shocks



Notes: The conditional correlation of the exchange rate and prices is a ratio of cumulative responses of price changes and exchange rate changes after each identified shock. The results are based on (B)VAR models with sign restrictions on impulse response functions. The model consists of five variables: the relative GDP of the euro area and the US, relative consumer price index of the euro area and the US, relative index of imported prices of the euro area and the US, interest rate differential constructed using Wu-Xia interest rates and the EUR/USD exchange rate. The analysis included the period from Q1 1999 to Q4 2023. The identification strategy is based on empirical literature with a similar focus (see for example Communale and Kunovac, 2017).

Source: CNB calculations.

potentially decisive influences. The currency with a higher interest rate than the other, assuming that the country risk is similar, can more easily attract capital, which results in the appreciation of this currency. The divergence of monetary policies can therefore trigger exchange rate fluctuations. Should the exchange rate differential decrease in favour of the euro and this determinant decisively influences the EUR/USD exchange rate, a weaker euro would provoke inflationary pressures, an effect opposite to that from the financial channel.

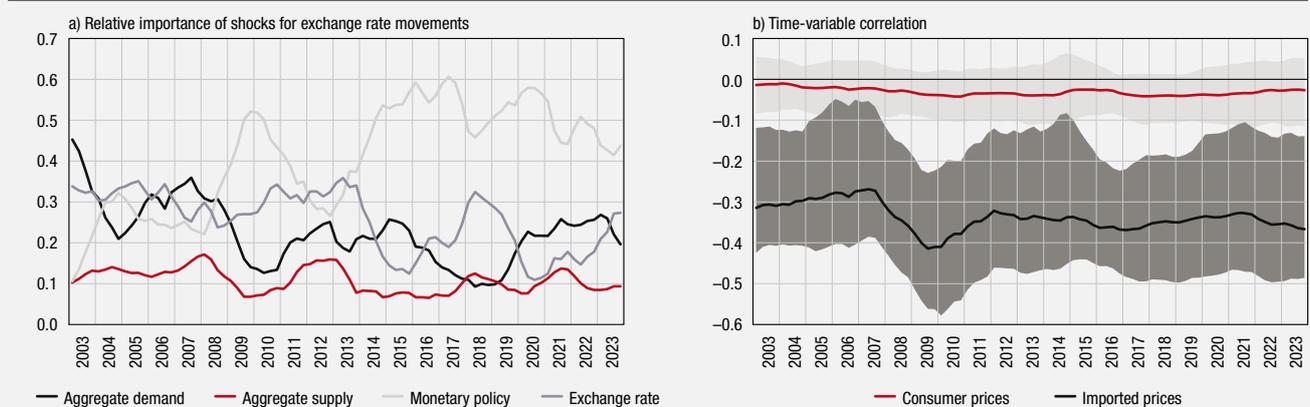
**The impact of the exchange rate channel can slow down and postpone the return of inflation to the target.** The intensity of the effect of the exchange rate channel depends on the link between the exchange rate<sup>4</sup> and prices, that is, the transmission of changes in the exchange rate to imported prices and, in turn, to inflation. The analysis conducted shows a negative correlation of exchange rate and inflation movements under conditions of monetary policy, exchange rate<sup>5</sup> and aggregate demand shocks, that is, the depreciation of the euro is accompanied with the euro area price growth. On the other hand, under conditions of aggregate demand shocks this correlation is positive, that is, an increase in demand will be accompanied by the growth of prices and the appreciation of the euro because the central bank responds to inflation growth by raising the interest rate, which causes the exchange rate to appreciate (Figure 2.a). The results are qualitatively very

3 There are numerous determinants of exchange rate movements, including the phase of the economic cycle, inflation, interest rates, monetary policy stance, productivity, foreign capital inflows, public finances, a country's political stability, investor speculations and the adoption of positions for currency risk protection. Accordingly, there are several theoretical frameworks that explain exchange rate movements in various terms.

4 This figure defines the exchange rate as the number of dollar units per a unit of the euro, which means that an increase in the exchange rate marks the appreciation of the euro against the dollar.

5 An exchange rate shock is an unpredictable change in the exchange rate that is not based on the fundamentals (e.g. the exchange rate differential). This can be a confidence shock. For example, the movements of the US dollar are often difficult to explain in terms of standard exchange rate determinants due to the dollar's status of a safe haven currency due to which its fluctuations often result from changes in the sentiment of foreign currency traders in foreign currency markets.

Figure 3 Link between the exchange rate and prices (two-year moving average)



Note: The time-variable conditional correlation of the exchange rate with consumer and imported prices is calculated as the sum of multiplications of the share of each individual shock in defining the dynamics of exchange rate movements in a given period (Figure 3.a) and the corresponding ratio of the cumulative responses of prices and the exchange rate, that is, the conditional correlations between the exchange rate and prices (Figure 2).

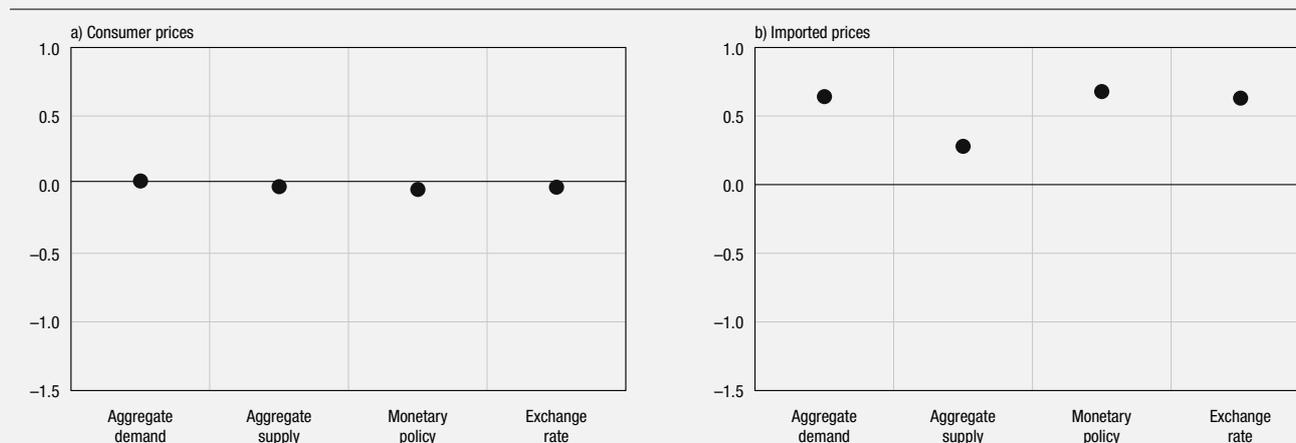
Source: CNB calculations.

similar when, instead of consumer prices, import prices are observed, with a considerably higher correlation of the exchange rate and prices in the case of monetary policy shocks (Figure 2.b). Since the correlation of the exchange rate and prices can be both positive and negative under conditions of various macroeconomic shocks, the link between the exchange rate and inflation at a given moment will depend on the kind of shocks having the most influence on the economy (Figure 3.a). For example, after 2014, in the period of the greatest monetary policy divergence between the Fed and the ECB, precisely the changes in monetary policy played the most important role in explaining the negative correlation between the exchange rate and imported prices. However, while the negative correlation with imported prices was relatively strong and mostly stable, the correlation with consumer prices ranged around zero.

**The correlation between the exchange rate and prices may signal their parallel developments under the influence of third variables, but also an actual, causal effect of exchange rate changes under various circumstances.** In order to isolate the actual impact of the exchange rate on consumer and imported inflation, a model of a hypothetical scenario was constructed, assuming that the exchange rate remained stable. The different reactions of consumer and imported inflation between the two models can be attributed precisely to the change in the exchange rate, because the hypothetical scenario assumes that the exchange rate does not respond to economic shocks, which neutralises its impact on the transmission of economic shocks to consumer and imported prices.

**The results of the analysis suggest that the changes of the exchange rate considerably increase the pass-through of economic shocks to import prices, but do not play an important role in the pass-through of shocks to consumer prices.** The assessments show that the exchange rate pass-through to imported prices is relatively strong, that is, that the depreciation of the euro of one standard deviation in the case of monetary policy

Figure 4 Exchange rate pass-through to prices



Source: CNB calculations.

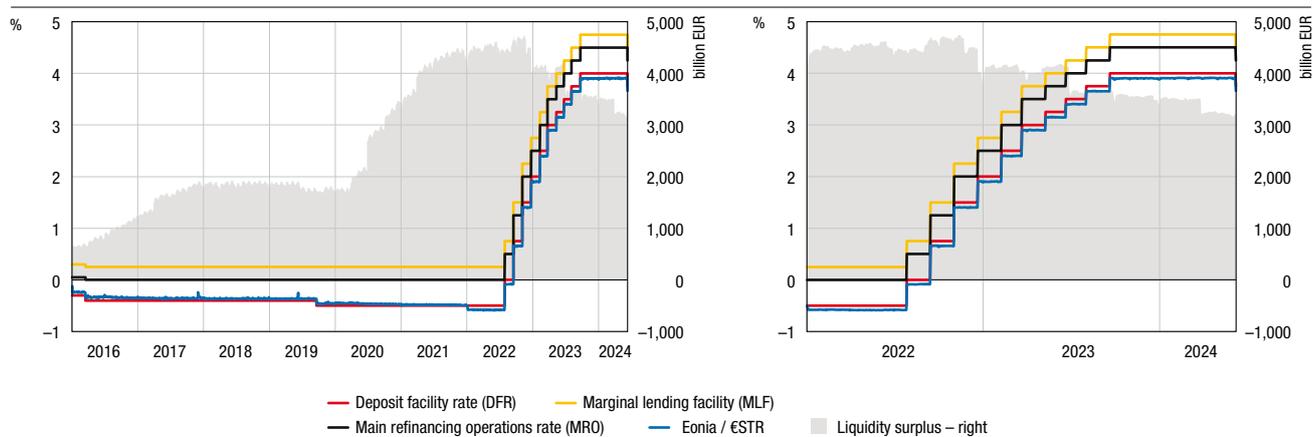
shocks causes an additional increase in prices of 0.68 percentage points and in the case of aggregate demand shocks of 0.64 percentage points in the euro area. This impact is only slightly weaker when aggregate supply shocks are concerned, where the depreciation of the euro results in an additional increase in imported prices of 0.28 percentage points relative to the scenario without depreciation. In contrast, the exchange rate does not play a significant role in the pass-through of economic shocks to consumer prices, as the differences between the response of relative inflation in the two mentioned cases are close to zero (Figure 4.a).

Consequently, the changes of the exchange rate quickly influence the prices of imports, but the influence weakens the closer we come to the prices paid by end consumers. Given that the financial channel of divergence leads to the alleviation of inflation pressures and the exchange rate channel demonstrates a very weak pass-through to the growth of consumer prices, the effect of potentially diverging monetary policies of the Fed and the ECB should prove to be very limited. However, it should be noted that the analysed period is characterised by a relatively low inflation, so that the potential effect of monetary policy divergence through the exchange rate channel in the environment of a relatively high inflation could be different. Also, a stronger demand in the US could also increase demand for European goods and services, thus prompting inflation pressures.

### 2.3 Monetary policy

The ECB's Governing Council lowered key interest rates by 25 basis points at the meeting on 6 June, after holding them steady since September last year, marking the first lowering of the rates since September 2019 when the interest rate on monetary

Figure 2.3.1 ECB key interest rates

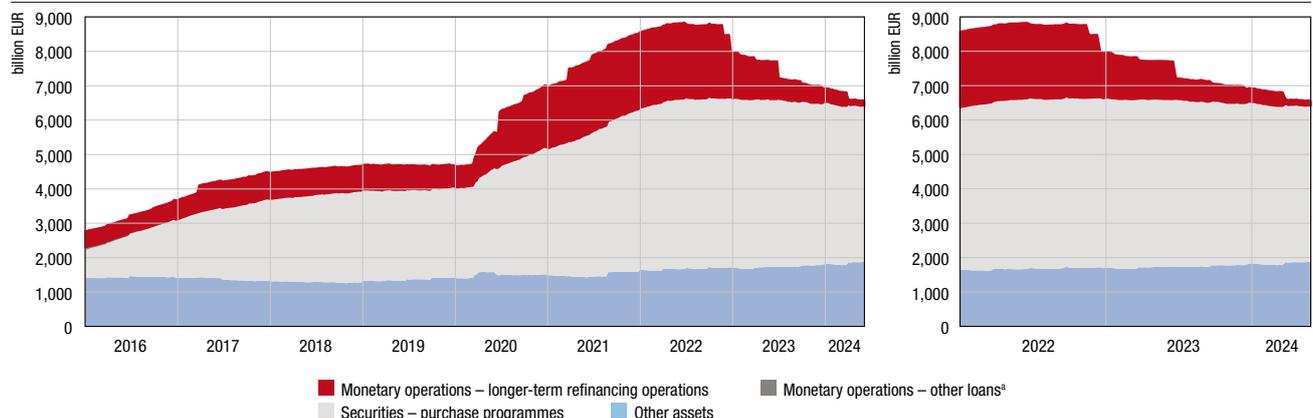


Source: ECB.

**deposits was cut.** The Governing Council thus decided in June to moderate the degree of monetary policy restriction, following the most rigorous cycle of tightening since the introduction of the euro, during which cycle key interest rates rose by 450 basis points from July 2022 to September 2023. Since the Governing Council meeting in September 2023, inflation has fallen by more than 2.5 percentage points and the outlook for inflation reaching the target level has improved. Overall inflation has also eased, reinforcing the signs that price pressures have weakened, and inflation expectations have declined also.

The Governing Council lowered the deposit facility rate (DFR) (which, in current conditions of high liquidity surpluses is a relevant indicator of surplus liquidity of the monetary policy of the ECB) from 4.00% to 3.75%, the main refinancing operations rate (MRO) from 4.50% to 4.25% and the marginal lending facility rate (MLF) from 4.75% to 4.50%. The Governing Council will keep ECB key interest rates sufficiently restrictive for as

Figure 2.3.2 Eurosystem balance sheet



<sup>a</sup> Other loans include main refinancing operations, fine-tuning reverse operations, structural reverse operations, marginal lending facility and credits related to margin calls. Note: Eurosystem monetary balance sheet asset items are shown in grey and red and non-monetary in blue.

Source: ECB.

long as necessary for inflation to return to the target level in a timely manner, and it will base its decisions on a data-dependent approach. The Governing Council is not pre-committing to a particular rate path.

**At the same time, the Eurosystem balance sheet continued to decrease gradually.**

Banks are still repaying amounts borrowed under the targeted longer-term refinancing operations, whereas the portfolio of securities purchased within the asset purchase programme (APP) is declining steadily at a measured and predictable pace, given that from July 2023 the Eurosystem no longer reinvests the principal payments from maturing securities. As for the pandemic emergency purchase programme (PEPP), the ECB's Governing Council at its June meeting confirmed that it would reduce the PEPP portfolio by EUR 7.5 billion per month on average in the second half of the year and discontinue reinvestments under the PEPP at the end of 2024. Until the end of 2024, the Governing Council will continue applying flexibility in reinvesting redemptions coming due in the PEPP portfolio, with a view to countering risks to the monetary policy transmission mechanism related to the pandemic.

## Box 2 New framework for the implementation of ECB monetary policy

The operational framework for implementing the ECB's monetary policy comprises a set of principles, procedures and instruments used for the implementation of monetary policy decisions. In March 2024, the ECB's Governing Council approved changes to the operational framework in order to bring it in line with the conditions of the Eurosystem balance sheet normalisation, that is, a gradual reduction of excess liquidity from very high levels. The deposit facility rate remains the main monetary policy instrument because short-term money market rates are expected to steer closely to that rate. The Eurosystem will provide liquidity through a broad mix of instruments, including short-term credit operations – the main refinancing operations – and three-month longer-term refinancing operations as well as, at a later stage, structural longer-term credit operations and a structural portfolio of securities. The main refinancing operations are intended to play a central role in meeting banks' liquidity needs in the years to follow. On the basis of the experience gained, the Governing Council will review the key parameters of the operational framework in 2026 and stands ready to adjust the design and parameters of the framework earlier, if necessary, to ensure that the implementation of monetary policy remains in line with the established principles.

**The excess liquidity of the euro area has been declining since November 2022 against the backdrop of the monetary policy tightening aimed at bringing inflation down to the target.** Measures adopted by the Governing Council during the cycle of monetary policy tightening will gradually reduce excess liquidity, although it could remain abundant for a few more years. However, banks' needs for central bank reserves will probably be higher than before the global financial crisis due to a number of reasons such as the increased risk aversion of banks, the segmentation of the money market, the development of payment systems and the evolution of prudential regulation. Therefore, there is a risk that the decline in excess liquidity may increase the volatility of interest rates on the overnight money market, which could have an undesirable effect on the monetary policy stance.

**In late 2022, the ECB started a review of the operational framework for implementing monetary policy precisely in order to alleviate the risk that the gradual reduction of the balance sheet may at some point of time produce undesired effects on the monetary policy stance.** The review examined the experience gained in various liquidity regimes and options that could ensure a smooth implementation of monetary policy under conditions of reduced liquidity. In mid-March 2024, the Governing Council defined changes to the operational framework to steer short-term euro area money market rates in line with the Governing Council's monetary policy decisions. The Council agreed on a set of principles, parameters and features for implementing monetary policy and providing central bank liquidity in the conditions of a gradual decrease in excess liquidity.

**Monetary policy implementation will continue to be guided by a number of key principles, such as effectiveness, robustness, flexibility, efficiency, consistency with an open market economy and the possibility of facilitating the ECB's secondary objective of supporting the general economic policies of the European Union.** The main objective of the operational framework is to ensure *the effective implementation of monetary policy* in line with the provisions of the EU Treaty, which is best achieved by steering short-term money market rates. Some volatility in money market rates can be tolerated as long as it does not blur the signal about the intended monetary policy stance. The operational framework needs to be *robust* to different monetary policy configurations as well as different financial and liquidity environments, and consistent with the use of the monetary policy instruments set out in the ECB's monetary policy strategy. The Eurosystem intends to use a broad mix of instruments in order to offer an effective, flexible and stable source of liquidity to the banking system, thereby also supporting financial stability. The euro area banking sector is large and diverse in terms of the size, business models and geographical locations of the banks, so that an elastic supply of central bank reserves based on banks' needs is therefore best suited to effectively channel liquidity across the entire banking system throughout the euro area and to contribute to flexibly absorbing liquidity shocks.

The principle of the *efficiency* of the operational framework implies that it enables the implementation of the desired monetary policy stance and does not interfere with it, respecting the proportionality principle and taking into account a minimum of net side effects, including financial stability risks. Moreover, the framework should preserve a financially sound balance sheet that supports central bank independence and allows the smooth conduct of monetary policy. The operational framework should be consistent with *the smooth and orderly functioning of markets* – including money markets, which are more closely linked to the implementation of monetary policy. This favours the efficient allocation of resources, an effective price discovery mechanism and the smooth transmission of monetary policy. To the extent that different configurations of the operational framework are equally conducive to ensuring the effective implementation of the monetary policy stance, the operational framework should facilitate the ECB's pursuit of its *secondary objective of supporting the general economic policies in the European Union*, in particular the transition to a green economy, without prejudice to the ECB's primary objective of price stability. In this context, the design of the operational framework will aim to incorporate climate change-related considerations into the structural monetary policy operations.

**In line with these principles, the Governing Council agreed on a set of key parameters and features for the operational framework.** The monetary policy stance will continue to be steered through the deposit facility rate. Short-term money market interest rates are expected to evolve in the vicinity of the deposit facility rate with tolerance for some volatility as long as it does not blur the signal about the intended monetary policy stance. The Eurosystem will provide liquidity through a broad mix of instruments,

including short-term credit operations — the main refinancing operations — and three-month longer-term refinancing operations as well as, at a later stage, structural longer-term credit operations and a structural portfolio of securities. The main refinancing operations will continue to be conducted through fixed-rate tender procedures with full allotment and are intended to play a central role in meeting banks' liquidity needs. The three-month longer term refinancing operations will also continue to be conducted through fixed-rate tender procedures with full allotment.

**The spread between the rate on the main financing operations and the deposit facility rate will be reduced to 15 basis points from the current spread of 50 basis points by adjusting the rate on the main refinancing operations.** This narrower spread will incentivise banks' bidding in the weekly operations, so that short-term money market rates are likely to remain in the vicinity of the deposit facility rate, and it will limit the potential scope for volatility in short-term money market rates. At the same time, it will leave room for money market activity and provide incentives for banks to seek market-based funding solutions. The rate on the marginal lending facility will also be adjusted such that the spread between the rate on the marginal lending facility and the rate on the main financing operations will remain unchanged at 25 basis points. These changes will come into effect in the sixth maintenance period of 2024, which begins on 18 September 2024.

**New structural longer-term refinancing operations and a structural portfolio of securities will be introduced at a later stage,** once the Eurosystem balance sheet begins to grow sustainably again, taking into account the continued reduction of the portfolios acquired under the asset purchase programme (APP) and the pandemic emergency purchase programme (PEPP). These operations will make a substantial contribution to covering the banking sector's structural liquidity needs arising from autonomous factors and minimum reserve requirements. The structural refinancing operations and the structural portfolio of securities will be calibrated in accordance with the established principles and to avoid interference with the monetary policy stance. The reserve ratio for determining banks' minimum reserve requirements remains unchanged at 1% and the remuneration of minimum reserves remains unchanged at 0%. In order for banks from various countries and with various business models to have sufficient collateral to access liquidity, a broad collateral framework of marketable and non-marketable assets will continue to be accepted.

As financial markets and institutions adapt to changes in the liquidity levels alongside the reduction of the Eurosystem balance sheet, the Governing Council will carefully monitor the evolution and distribution of excess liquidity, the formation of money market rates, the evolution of banks' demand for reserves, and the functioning of money markets and broader financial markets within the set parameters of the monetary policy implementation framework. On the basis of the experience gained, the Governing Council will review the key parameters of the operational framework in 2026 and stands ready to adjust

the design and parameters of the framework earlier, if necessary, to ensure that the implementation of monetary policy remains in line with the established principles. An in-depth analysis of the design of the new longer-term refinancing operations and the new structural portfolio will also be conducted.

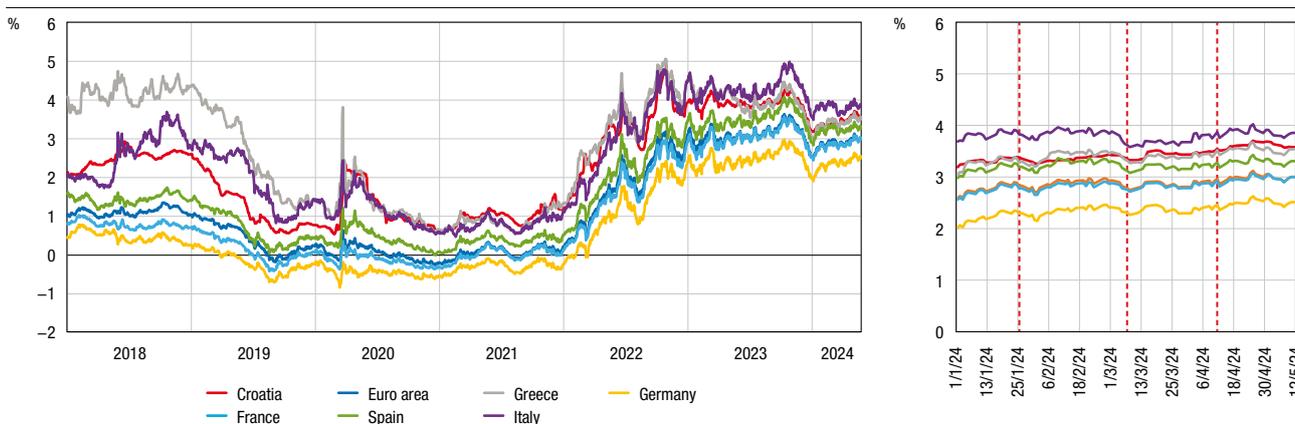
## 2.4 Financial markets and the banking system

**At its meeting in April, the Governing Council of the ECB left key interest rates unchanged and as a result the euro money market did not record any very large changes.** In the light of the decision of the Governing Council of the ECB at the meeting in April to keep the key interest rates unchanged, the overnight interest rate on the European money market, €STR, remained 3.9% (Figure 2.3.1), the level maintained since the last increase in key interest rates in September 2023. The three-month EURIBOR continued to decline gradually to 3.8% in response to the build-up of expectations that the ECB would lower its key interest rates at the next meeting. The Croatian money market also witnessed no major changes and the overnight interest rate on banks' demand deposit trading moved within a relatively narrow range of around 3.7%, amid the still high liquidity of the domestic banking system.

**After having fallen sharply towards the end of last year, yields on long-term government bonds mostly rose until end-April, but then fell, albeit slightly, until mid-May.** New statistical releases of inflation indicators have for some time captured the attention of participants on the global financial markets who expect them to foretell the time at which key interest rates will be lowered, and the pace at which this will occur. Inflation in the euro area has continued to slow down, reinforcing expectations that the ECB will cut key interest rates in June. By contrast, the indicators of inflation and employment and wage growth in the US mostly surpassed the projections, augmenting concerns about the heightening of new inflationary pressures. Geopolitical tensions, in addition to driving oil prices up, further added to these concerns and delayed the expected beginning of the process of the lowering of key interest rates in the US. Thus, the yield on long-term US government bonds mostly rose from the beginning of the year, particularly in April. Yields on long-term government bonds of euro area members also rose in such circumstances, reaching in the last days of April their highest levels since the beginning of the year (Figure 2.4.1). After that, the publication of indicators of the situation in the labour market in the US, which were in early May worse than expected, coupled with a fall in oil prices led to a fall in yields on US government bonds. The yields on government bonds in the euro area also fell, returning by mid-May to the mid-April level, which was still slightly above the level of yields at the end of last year.

**On the global foreign exchange market, the euro mostly weakened against the US dollar from the beginning of the year, however, the nominal exchange rate of the**

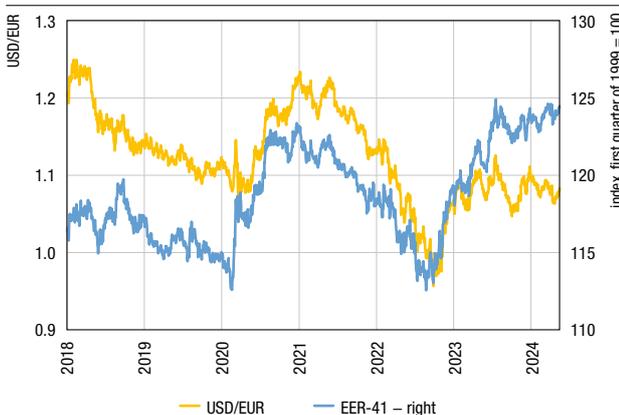
Figure 2.4.1 Yields on long-term government bonds with the remaining maturity of approximately 10 years



Notes: Yields for the euro area have been weighted by the shares in GDP of countries included. Data from the euro area do not include those from Estonia, Latvia, Luxembourg and Malta. The red dotted lines denote ECB Governing Council meetings in January, March and April. Last data is for 15 May 2024.  
Sources: Bloomberg, Eurostat and CNB calculations.

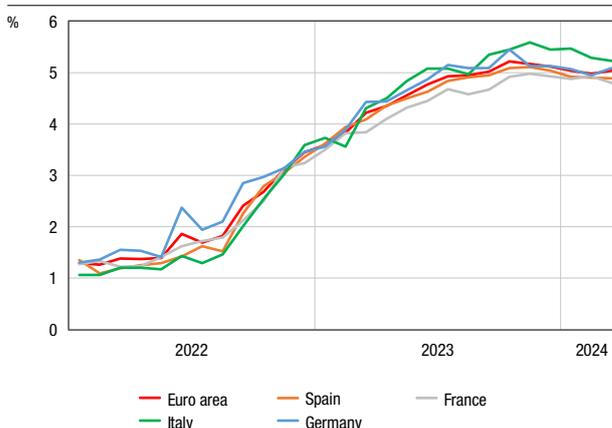
**euro was relatively stable in effective terms.** In mid-May, the nominal effective exchange rate of the euro against the basket of currencies of the euro area main trading partners was at almost the same level as at the end of the previous year (Figure 2.4.2). The weakening of the euro against the US dollar was offset by the strengthening of the euro against other major currencies, including the Japanese yen, the Swiss franc and the Swedish krona. The US dollar was supported by favourable economic developments in the US and a slower than expected fall in inflation, delaying the expected beginning of the process of key interest rates cuts. At the same time, the expectations of a relatively poor economic growth in the euro area supported expectations that the ECB might lower key interest rates at the June meeting, which created additional pressures on the weakening of the exchange rate of the euro against the US dollar. Following the meeting of the Governing Council of the ECB in April, the euro weakened further against the US dollar, but soon started strengthening, gradually, returning by mid-May to the beginning of

Figure 2.4.2 Exchange rates of selected currencies against the euro and the nominal effective exchange rate of the euro



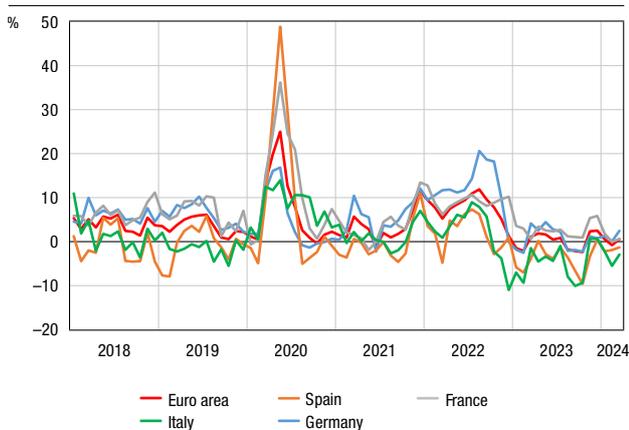
Notes: EER-41 is the nominal effective exchange rate index of the euro against 41 major trading partners of the euro area. Exchange rate increase indicates euro appreciation. Last data is for 15 May 2024.  
Source: ECB.

Figure 2.4.3 Interest rates on pure new corporate loans



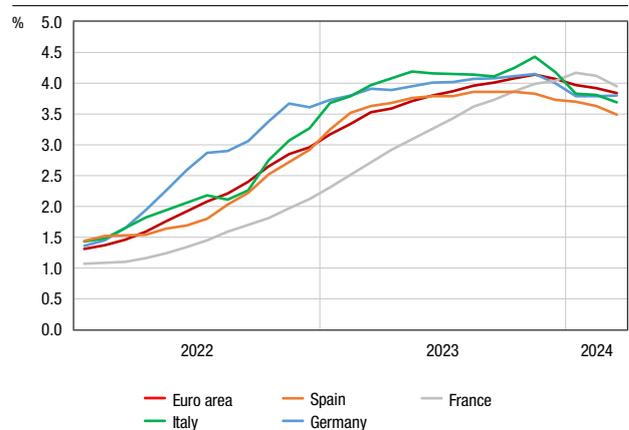
Source: ECB.

Figure 2.4.4 Lending momentum in the euro area (corporations)



Sources: ECB and CNB calculations.

Figure 2.4.5 Interest rates on pure new household housing loans

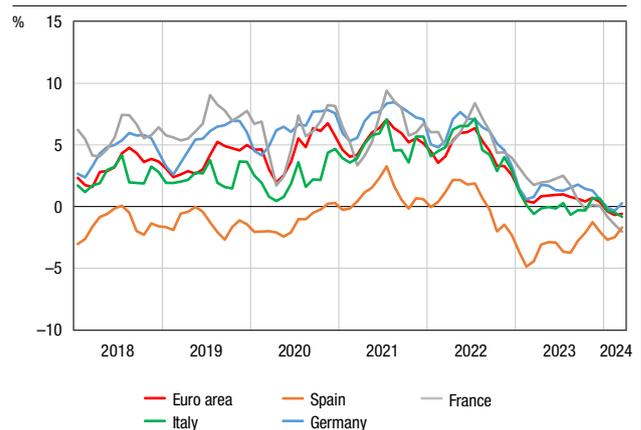


Source: ECB.

April level. The exchange rate of the euro for the US dollar stood at USD/EUR 1.08 in mid-May, having depreciated 2.0% from the end of last year. Over the same period, the nominal effective exchange rate of the euro against a basket of currencies of the euro area main trading partners appreciated by 0.5%.

**The interest rates of banks on corporate and household loans in the euro area continued to fall gradually while corporate and household lending remained subdued.** At euro area level, the average interest rate on pure new loans granted to non-financial corporations in March was 5.0% (Figure 2.4.3), down by 8 basis points from December of 2023. As regards households, the average interest rate on pure new housing loans granted to households in March was 3.8% (Figure 2.4.5), down by 23 basis points from the end of the preceding year. Corporate and household lending remained subdued. Quarterly annualised rates of growth in loans to non-financial corporations (Figure 2.4.4) and housing loans (Figure 2.4.6) were slightly above zero or negative. And in most major countries of the euro area, they fell additionally in housing loans and rose slightly in loans to non-financial corporations from their predominant levels last year.

Figure 2.4.6 Lending momentum in the euro area (housing loans to households)



Sources: ECB and CNB calculations.

## 3 Croatian economy

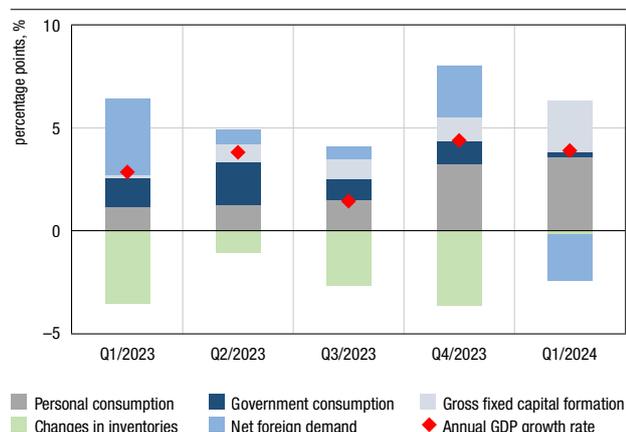
### 3.1 Real developments

The beginning of 2024 saw a further relatively strong expansion of economic activity in Croatia, with growth being again largely supported by favourable developments in service activities and construction while activity in manufacturing held steady. Economic growth slowed down at the beginning of the year from the end of last year, although it remained relatively robust, with the annual growth rate of real GDP standing at 3.9%. Further growth on a quarterly level largely continues to mirror strong domestic demand, primarily growing personal consumption and government investments, which in turn particularly fuel growth in construction and segments of the services sector. In addition, despite subdued activity in manufacturing, goods exports continued to recover. The growth of the Croatian economy thus continues to be one of the strongest in the euro area.

Personal consumption continued to grow sharply in the first quarter of 2024, following the same path as that seen in the previous year. This can be primarily associated with favourable developments in the labour market and a further growth in the real disposable income of households. Thus, employment continued to grow strongly in the first quarter, mostly in the service activities but construction and real wages also grew considerably, among other things also influenced by a considerable increase in the minimum wage and tax reliefs. Data suggest that the growth in personal consumption was slower than the growth in real disposable income, which might mean that after rising and reaching the long-term average in 2023, the household savings rate continued to grow at the beginning of this year.

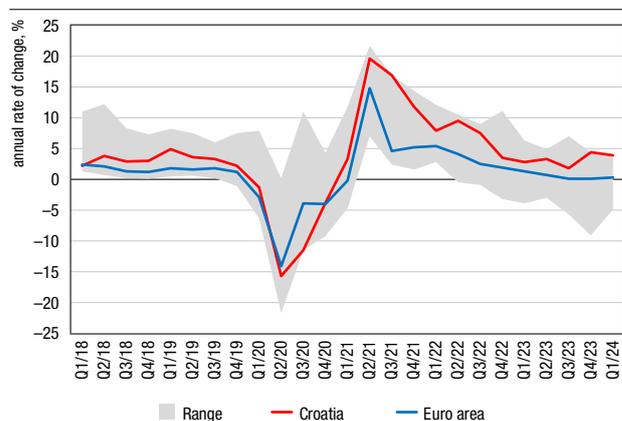
At the same time, the growth in investment activity accelerated strongly, probably mostly owing to public investments. Construction activity continued to grow fast at

Figure 3.1.1 Contributions to the change in real economic activity



Source: Eurostat.

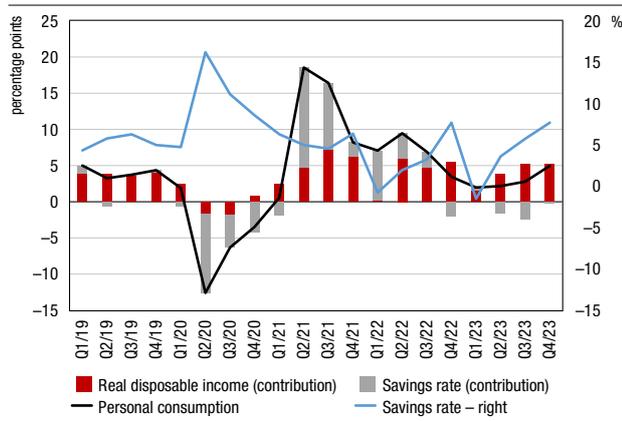
Figure 3.1.2 Trends in economic activity in Croatia and the euro area



Notes: The figure shows the range of values of real GDP growth of individual euro area member states. Data for the first quarter are not available for all eurozone countries.

Source: Eurostat.

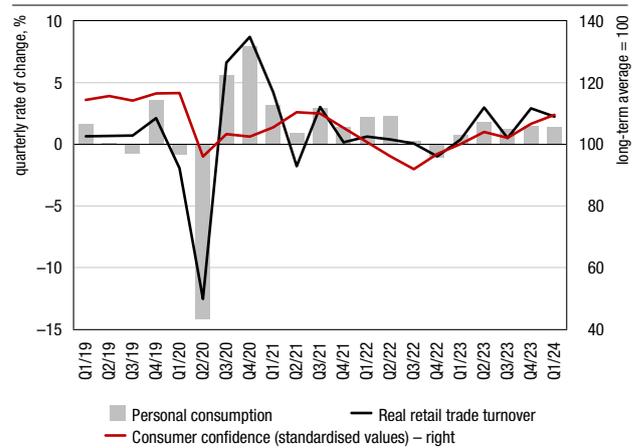
**Figure 3.1.3 Contribution of disposable income and savings rate to the annual change in personal consumption**



Note: Quarterly disposable income values have been estimated using the Chow-Lin method and series of employee compensation and gross operating surplus and mixed income as indicators.<sup>6</sup>

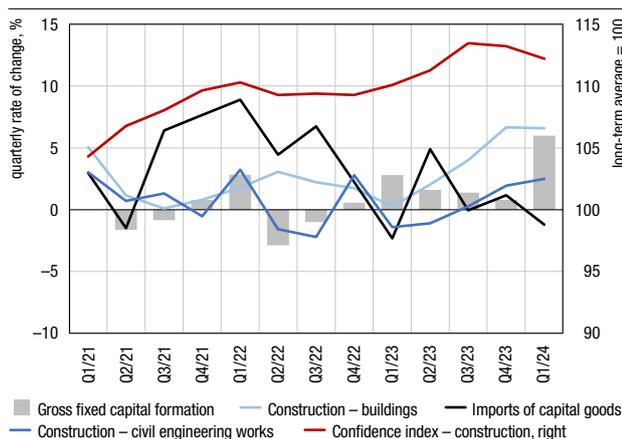
Sources: Eurostat and CNB calculations.

**Figure 3.1.4 Personal consumption, retail trade and consumer confidence**



Sources: CBS and Ipsos.

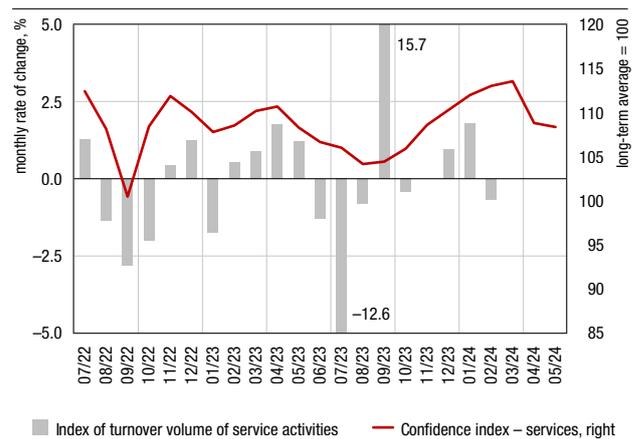
**Figure 3.1.5 Investment activity indicators and confidence in the construction sector**



Note: Data on confidence in the construction sector for the second quarter of 2023 refer to April and May.

Sources: CBS, Ipsos and CNB.

**Figure 3.1.6 Developments in the turnover volume of service activities and confidence in the services sector**



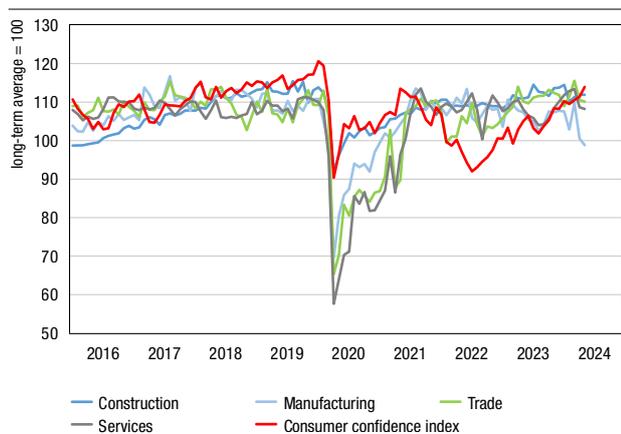
Note: Services include sectors H, I, J, L, M and N.

Sources: CBS, Ipsos and CNB.

the beginning of the year following exceptionally favourable developments in 2023, with the available data suggesting a further growth in public sector investments, which rose by over 50% in 2023. Such developments can largely be attributed to withdrawals from EU funds, post-earthquake reconstruction and faster housing construction. By contrast, the fall in imports and in the production of capital goods may suggest a relatively modest level of private sector investments in machinery and equipment.

6 It should be noted that the calculation of disposable income in the national accounts also includes imputed sources of income, such as financial services indirectly measured and imputed housing rent, which do not have a direct impact on household purchasing power. Recent developments in interest rates and rents point to the rising relative significance of imputed sources of income; however, due to limited data, it is difficult to estimate its extent. The savings rate is calculated as the ratio of the estimated nominal amount of savings and estimated disposable income and excludes adjustments for changes in pension rights.

Figure 3.1.7 Confidence of firms and consumers



Source: Ipsos (adjusted by the CNB).

**At the beginning of the year, goods exports continued to recover, while services exports dropped considerably.** The growth in goods exports, after recovering towards the end of 2023, further accelerated in the first quarter of this year. Detailed nominal data on goods trade in January and February point to a very good performance in the exports of capital goods, i.e., electrical machinery and apparatus and textile industry products in contrast with the exports of chemical and medical and pharmaceutical products, which fell from the average of the fourth quarter of 2023. By contrast, despite favourable developments in tourism, as suggested by data on

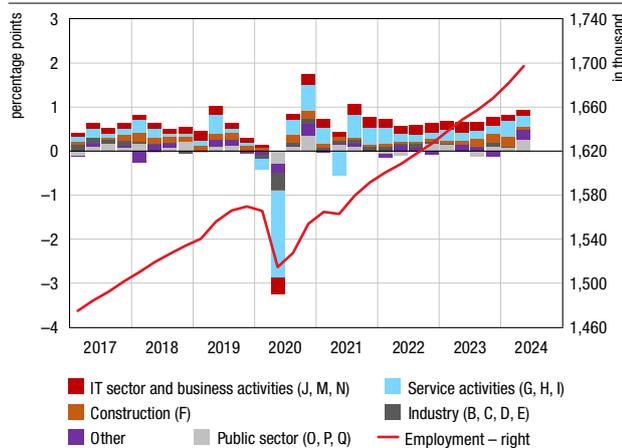
foreign tourist arrivals and stays, services exports fell noticeably at the beginning of the year, both on a quarterly and an annual level. Such developments may be attributed to a fall in the exports of manufacturing services on physical inputs. These exports rose sharply in the first quarter of 2023, surpassing the usual levels, so the fall in the first quarter of this year is the result of a negative base effect.

**It should be noted that, in contrast with consumer confidence, business confidence was relatively unfavourable in most activities in April and May, possibly signalling a slowdown in economic activity in the second quarter of 2024.** Confidence fell particularly heavily in industry, the level falling below the long-term average. The confidence of firms in trade and services also fell while it held steady at the previous quarter level in construction; however in these activities, it still stands well above the long-term averages.

### 3.2 Labour market

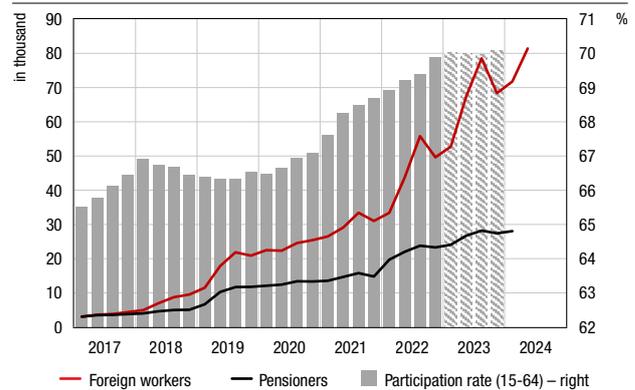
**As a result of the ongoing economic expansion, the number of employed persons in Croatia continued to grow at the beginning of 2024 at a somewhat faster rate than at the end of the previous year.** In the period from January to March 2024, employment growth accelerated to 0.8% relative to the last quarter of 2023. The increase in the number of employed persons was broadly based, with the largest contribution coming from service activities (trade, transport, accommodation and food service activities) and construction (Figure 3.2.1). The number of employed persons increased at annual rate of 2.7% in the first quarter of 2024. Data for April point to a slight acceleration in employment growth (0.9%), resulting from the number of employed persons in the public sector growing faster than the average in the previous three quarters (the final assessment will be made at the end of the second quarter) and from continued employment increases in the private sector. The increased demand for labour continues to be met by employing

**Figure 3.2.1 Employment by NCA**  
seasonally adjusted data, contributions to the quarterly rate of change



Note: Data for the second quarter of 2024 refer to April.  
Source: CPII (seasonally adjusted by the CNB).

**Figure 3.2.2 Participation rate, employed pensioners and foreign workers**



Notes: Data for the second quarter of 2024 for third country foreign workers refer to April. As regards survey data, data from the first and second quarters of 2023 are not comparable with previous quarters due to the shift to Census 2021 data for the calculation of the indicators.  
Sources: CBS and CPII.

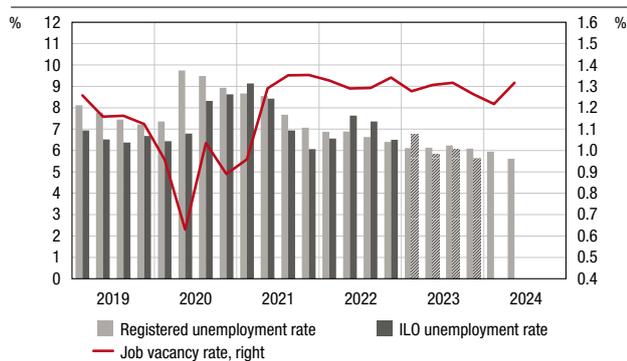
third-country workers<sup>7</sup> (from non-EU countries) and by hiring pensioners who work up to half time (Figure 3.2.2). The number of employees and the number of craftsmen and sole traders increased.

**The increase in the employment of registered unemployed persons led to a reduction in the unemployment rate.** The registered unemployment rate dropped from 6.1% of the labour force at the end of 2023 to 5.9% in the first quarter of 2024. With the continued fall in the number of unemployed persons, the registered unemployment rate stood at 5.6% in April. According to the last available data, the seasonally adjusted, internationally comparable ILO unemployment rate fell to 5.6% of the labour force in the fourth quarter of 2023, down from 6.0% in the previous three quarters (Figure 3.2.3). The job vacancy rate continued to decrease at the beginning of the current year, before jumping to above 1.3% in April, indicating a still relatively strong demand for labour. Most employers continued to report the lack of workers as the most important production-limiting factor, which was only to some extent addressed by hiring foreign workers and pensioners. The largest number of foreign workers is employed in construction and accommodation and food service activities, which have very high job vacancy rates. Health care, with the highest and the only constantly growing job vacancy rate, employs a very small number of foreign workers (Figure 3.2.4).

**Following a moderate increase at the beginning of 2024, nominal and real wages grew steeply in April.** The wage growth in 2023 was supported by strong real economic activity, the wish to compensate for the previously accumulated losses of purchasing power and substantial worker shortages. The growth of nominal gross wages decelerated further in the first quarter of 2024, following the previous year's dynamics, despite the

<sup>7</sup> Data on foreign workers referred to in the text encompass only insured persons registered with the CPII under code 37.

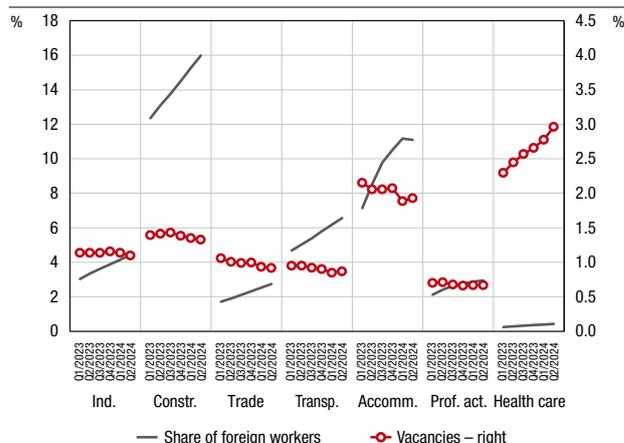
Figure 3.2.3 Unemployment and job vacancy rates, seasonally adjusted data



Notes: Data for the second quarter of 2024 refer to April. The job vacancy rate is calculated as the share of total posts that are vacant in the total demand for labour (the sum of the number of persons insured with the CPII and vacant posts). As regards the Labour Force Survey, data for the first and second quarters of 2023 are not comparable with previous quarters due to the shift to the Census 2021 data for the calculation of the indicators.

Sources: CBS, CEI and CNB seasonal adjustment and calculations.

Figure 3.2.4 Share of foreign workers in total employment and job vacancy rate by activity, four-member moving averages



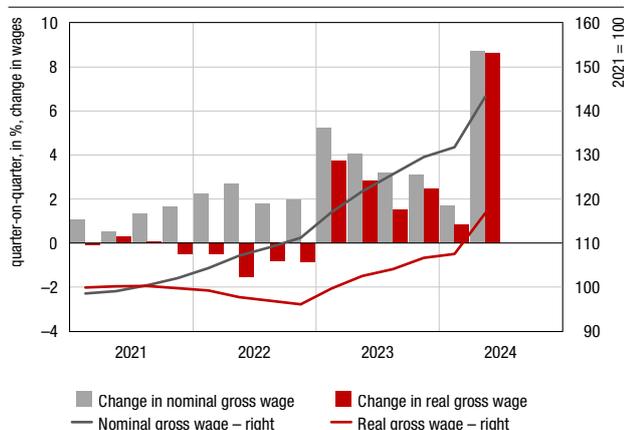
Note: Data for the second quarter of 2024 refer to April.

Sources: CNB, CEI and CNB calculations.

increase of 20% in the minimum gross wage on 1 January. The wage growth decelerated in a large number of activities, with the exception of industry, where it held steady, and finance and real estate activities, where it was substantial. As a result, the quarterly growth rate (1.7%) fell to the level last recorded in late 2021 (Figure 3.2.5). The quarterly growth of real gross wages decelerated from 0.8% in the first quarter. In contrast, the growth of net wages accelerated to some extent as a consequence of changes in the income tax system, with the result that nominal net wages and real wages increased by 3.1% and 2.2% respectively. The changes involved an increase in the personal tax exemption as of January 2024 and the tax burden in a half of local self-government units was reduced.<sup>8</sup> The average nominal gross wage jumped sharply in April 2024, primarily as a result of comprehensive wage system reforms in the government and public sectors. The wage growth

in the rest of the economy also accelerated, but at a markedly slower pace. Public sector wages grew at a monthly rate of 17.4%, which is an increase of 17.1% from the previous quarter average. Private sector wages rose at a monthly rate of 3.3%, that is, 5.3% from the previous quarter's average. Compared with April 2023, and reflecting the strong wage growth in April this year, the annual growth rate accelerated

Figure 3.2.5 Average nominal and real wage seasonally adjusted data



Note: Data for the second quarter of 2024 refer to April.

Sources: CBS and CNB calculations (seasonally adjusted by the CNB).

8 Amendments to the Income Tax Act (OG 114/2023) of 1 January 2024 increased the basic personal deduction from 530 EUR to 560 EUR and the deduction for dependent members, despite a decrease in coefficients. Surtaxes are abolished, but local authorities can increase the income tax rate and in this way compensate for the loss of surtax revenues, but without exceeding the previous tax burden.

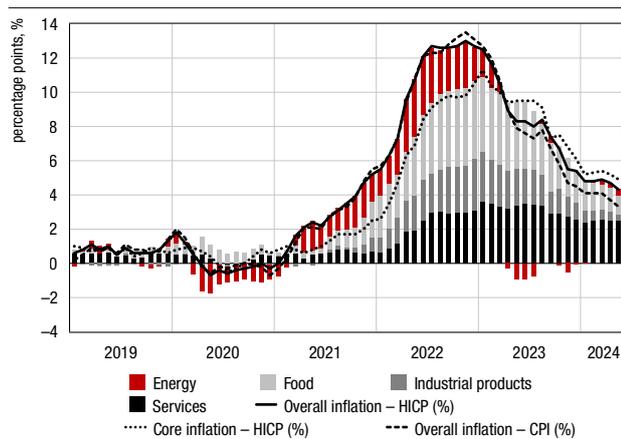
significantly, the average nominal gross wage going up by 17.9%, with public sector wages rising by 36.5% and wages in the rest of the economy by 11.5%.

### 3.3 Price developments

**After having slowed down noticeably in 2023, consumer price inflation in Croatia eased further in the first five months of 2024.** However, the intensity of the slowdown in inflation in the first half of 2024 was lower than in the previous year. According to Eurostat’s first estimate, overall inflation measured by the harmonised index of consumer prices (HICP) stood at 4.3% in May 2024, down from 5.4% in December of 2023 (Figure 3.3.1).<sup>9</sup> Overall inflation slowdown was mostly due to food prices (including alcohol and tobacco) and prices of industrial products, as a result of the weakening of the impact of past inflationary shocks (such as the increase in energy and other raw materials prices and disruptions in supply chains), which is reflected in low annual rates of change in producer prices of intermediate goods, food and other consumer goods. The inflation of food prices thus fell to 3.7% in May, continuing the trend of its slowdown from the peak of 16% towards the end of 2022. The slowdown in the inflation of service prices was less prominent due to the continuing presence of current pressures, which partly offset the favourable base effects. By contrast, the inflation of energy prices accelerated from –0.5% in December to 3.1% in May as a result of the higher prices of refined petroleum products.

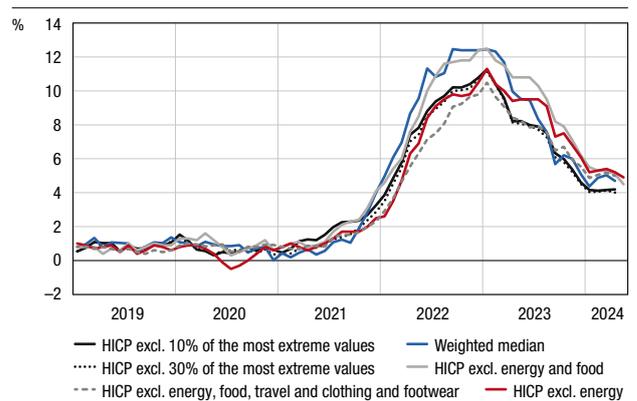
**The slowdown in core inflation was mostly driven by the prices of industrial products, while the inflation of service prices slowed down only slightly and remains**

Figure 3.3.1 Inflation indicators in Croatia



Note: Core inflation is measured by the harmonised index of consumer prices, which excludes the prices of energy, food, alcoholic beverages and tobacco.  
Sources: Eurostat, CBS and CNB calculations.

Figure 3.3.2 Core inflation indicators in Croatia



Notes: Trimmed mean eliminates 5% (15%) of components (out of a total of 87 components) with maximum and minimum annual rates of change. The weighted median excludes all values but the weighted median of the distribution of price change.  
Sources: Eurostat and CNB calculations.

9 Inflation measured by the national consumer price index, which does not cover consumption of foreign tourists and institutional households (such as educational, health and religious institutions, etc.) slowed down from 4.5% in December 2023 to 3.3% in May 2024.

**elevated.** Core inflation, which excludes food and energy prices, slowed down from 6.1% in December 2023 to 4.9% in May 2024. The inflation of the prices of industrial products mainly slowed down continuously from the beginning of 2023 and reached 1.4% in May 2024, having fallen by approximately ten percentage points from the peak towards the end of 2022. By contrast, services remain the main component with the largest individual contribution to overall inflation and are responsible for over a half of overall inflation (2.5% out of a total of 4.3 percentage points). Despite having slowed down since autumn last year, the inflation of service prices remains high, standing at 7.8% in May. The persistence of the inflation of service prices is the result of their higher sensitivity to wage growth than other inflation components amid strong domestic and foreign demand for food and accommodation services. Alternative indicators of core inflation, which exclude certain volatile components, also fell further, but at a slower intensity than in the year before and still remain at elevated levels (Figure 3.3.2). Relatively high levels of core inflation reflect domestic inflationary pressures, i.e., the pressures arising from the robust labour market, in particular wage growth and solid domestic demand (Figure 3.3.3) as well as the demand of foreign visitors for travel services.

Figure 3.3.3 Indicators of external and domestic price pressures

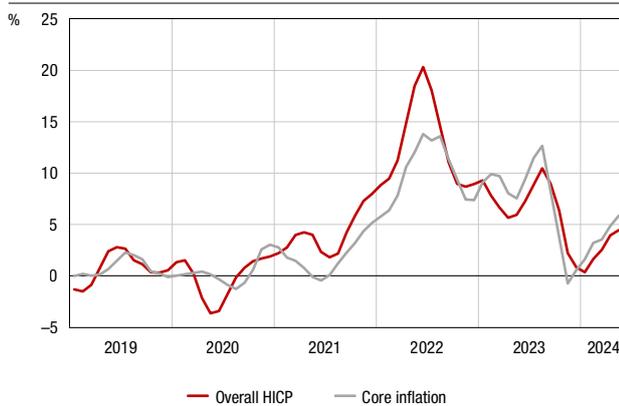
		2021	2022												2023												2024								
		X	XI	XII	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	I	II	III	IV			
External inflationary pressures	Euro area demand	PMI EA Composite																																	
		ESI EA																																	
	Energy and raw materials prices on the global market	Brent crude oil (USD/barrel) <sup>a</sup>																																	
		Natural gas (EUR/MWh) <sup>a</sup>																																	
		Electricity (EUR/MWh) <sup>a</sup>																																	
		DG Agri <sup>a</sup>																																	
		Industrial raw materials (HWWI) <sup>a</sup>																																	
	Competitiveness	EUR/USD exchange rate																																	
		Global supply chain pressure index (GSCPI)																																	
	Domestic inflationary pressures	Real activity and labour market	Retail trade <sup>a</sup>																																
Unemployment rate																																			
Nominal net wages <sup>a</sup>																																			
Labour shortage																																			
Industrial production <sup>a</sup>																																			
Business confidence in the services sector																																			
Costs		Domestic industrial producer prices <sup>a</sup>																																	
		Intermediate goods <sup>a</sup>																																	
		Energy <sup>a</sup>																																	
		Capital goods <sup>a</sup>																																	
	Durable consumer goods <sup>a</sup>																																		
	Non-durable consumer goods <sup>a</sup>																																		
Inflationary expectations	Consumers (12 months ahead)																																		
	Enterprises – industry (3 months ahead)																																		
	Enterprises – services (3 months ahead)																																		

<sup>a</sup> Annual rate of change

Notes: Labour shortage shows the ratio between the vacancy rate and the registered unemployment rate. The PMI EA Composite and ESI EA series have been corrected after standardisation so as to show the neutral value in white. The red (blue) colour indicates a positive (negative) deviation in the value in a given month relative to the 2010-2023 average (expressed by the number of standard deviations), where the intensity of the colour shade indicates the size of an upward (downward) deviation from the average.

Sources: ECB, Eurostat, Bloomberg, NY Fed, HWWI, CBS and Ipsos.

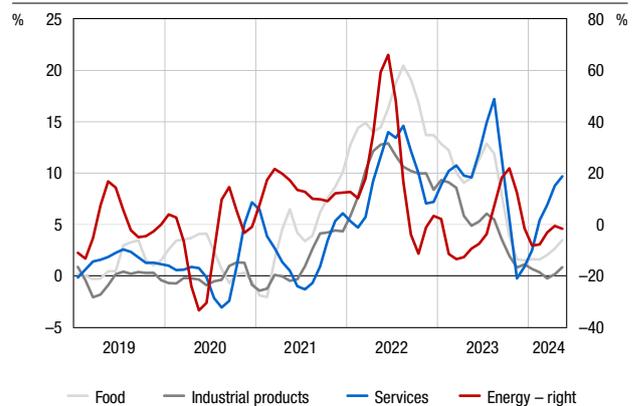
Figure 3.3.4 Momentums of overall and core inflation



Note: The quarterly rate of change on an annual level is calculated from the quarterly moving average of seasonally adjusted harmonised consumer price indices.

Sources: Eurostat and CNB calculations.

Figure 3.3.5 Momentums of main inflation components



Note: The quarterly rate of change on an annual level is calculated from the quarterly moving average of seasonally adjusted harmonised consumer price indices.

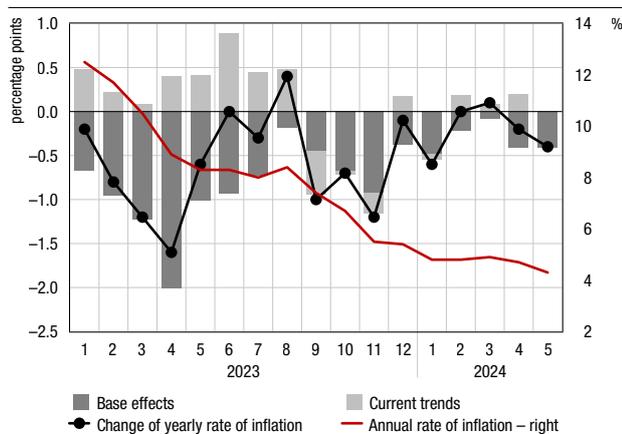
Sources: Eurostat and CNB calculations.

**Short-term indicators of overall and core inflation reflecting current developments rose in the first five months of 2024, particularly those of core inflation.** From September to December 2023, short-term indicators of inflation (so-called momentums or quarterly rates of change calculated from seasonally adjusted data and expressed on an annual level) slowed down considerably, owing to a slower momentum of the inflation of prices of all major components (food, energy, industrial products and especially services). By contrast, the momentums of overall and core inflation accelerated in 2024 (Figure 3.3.4), reflecting in particular an increasing momentum of services price inflation. Nevertheless, the momentum of services price inflation, despite growing noticeably in the first five months of 2024, remains low relative to its extremely high level in mid-2023 (Figure 3.3.5). At the same time, the momentums of the inflation of food prices and prices of industrial products fluctuated around their long-term averages, while the momentum of the inflation of energy prices, despite its growth trend, remained in negative territory, which points to a stabilisation of inflationary pressures at low levels.

**Against the backdrop of a moderately elevated current inflation, and that only in the services segment, the slowdown in the annual rate of inflation continues to be driven by favourable base effects.** The change in the annual rate of inflation month-on-month depends on the change in retail prices from the month before (the so-called current inflation) and the monthly rate of change in prices in the same month of the year before (the so-called base effects).<sup>10</sup> The slowdown in the annual rate of overall inflation in the first five months of 2024 thus reflects the favourable base effect (Figure 3.3.6) due to a high monthly price increase in the same period of the year before. At the same time current inflation was only moderately elevated and that mainly in the segment of the inflation of service prices. In contrast with services, the monthly rates of inflation of other

<sup>10</sup> For more details, see HNBlog D. Kunovac and M. Luketina, *On the way down – the role of base effects in the slowdown of consumer inflation*.

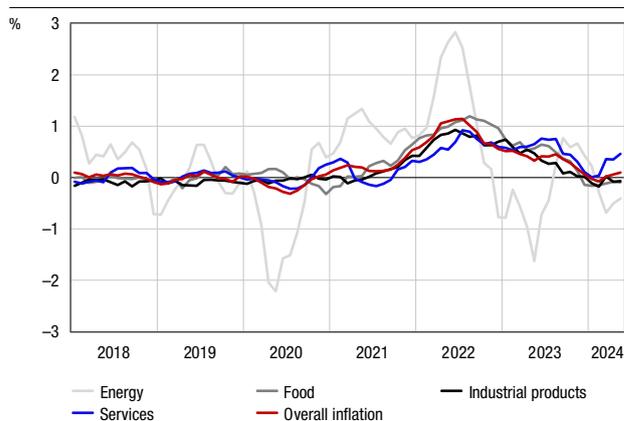
Figure 3.3.6 Contribution of base effects and current trends to change of yearly inflation



Note: Base effects and current trends are adjusted for usual fluctuations that are relatively stable and do not significantly influence yearly inflation.

Sources: Eurostat and CNB calculations.

Figure 3.3.7 Deviations of the monthly rate of change of inflation from the usual developments



Note: Data refer to six-month moving averages of the contribution of unusual developments to the monthly rate of change.

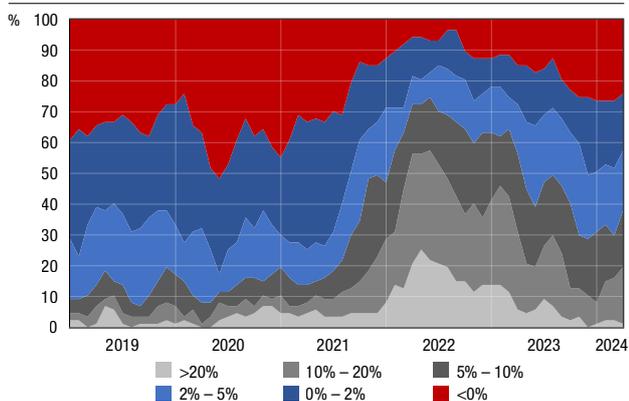
Sources: Eurostat and CNB calculations.

components currently do not deviate from their usual historical values and therefore do not have a great impact on annual inflation (Figure 3.3.7).

**The easing of inflationary pressures is also seen in a further reduction of inflation diffusion** (Figure 3.3.8), with the share of subcomponents in the consumer price index whose annual growth is above 2% standing at around 53% in the first four months of 2024, a significant fall from the 85% recorded in the third quarter of 2022 but still above the pre-pandemic level. In addition, the first five months of 2024 saw a fall in short-term inflationary expectations of consumers and corporates (Figure 3.3.9). This fall notwithstanding, short-term inflationary expectations of corporates remain elevated relative to the pre-pandemic period, particularly in the services sector.

**In the first five months of 2024, inflation in Croatia fell more than inflation in the euro area as a whole, which led to a fall in the inflation differential.** In May 2024,

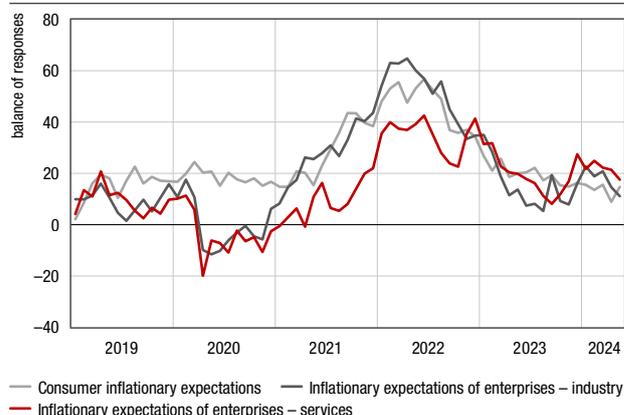
Figure 3.3.8 Diffusion of consumer price inflation



Note: The figure shows the share of the number of products whose prices changed within a defined range in the total number of products according to quarterly moving averages of annual rates of change of seasonally adjusted price indices of 87 components of the harmonised consumer price index.

Sources: Eurostat and CNB calculations.

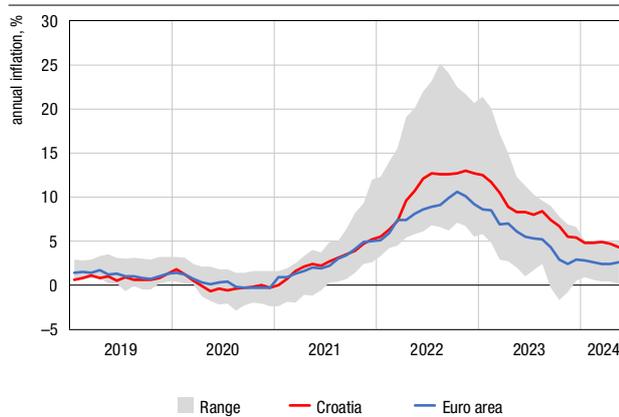
Figure 3.3.9 Short-term inflationary expectations of consumers and corporates



Note: Consumer expectations refer to a twelve-month period ahead and corporate expectations refer to a three-month period ahead.

Source: Ipsos.

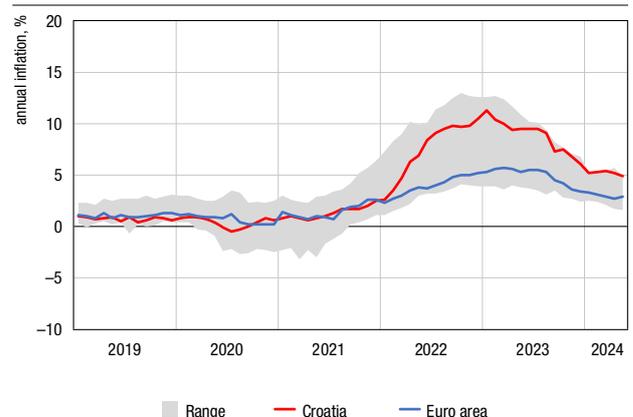
Figure 3.3.10 Synchronisation of overall inflation in Croatia and the euro area



Note: Gray areas show the range of values of individual member states of the euro area.

Source: Eurostat.

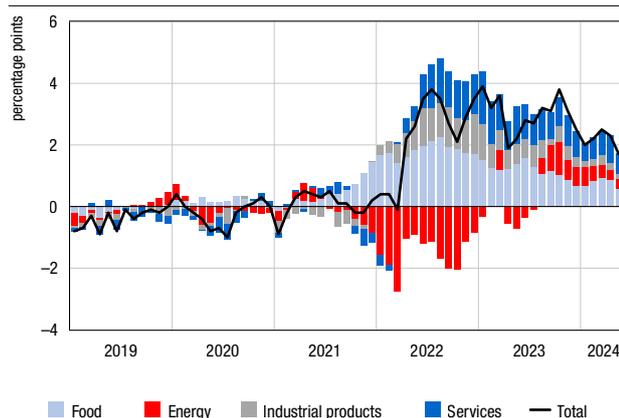
Figure 3.3.11 Synchronisation of core inflation in Croatia and the euro area



Note: Gray areas show the range of values of individual member states of the euro area.

Source: Eurostat.

Figure 3.3.12 Difference between overall inflation rates and the contributions of individual components to consumer price inflation in Croatia and the euro area



Sources: Eurostat and CNB calculations.

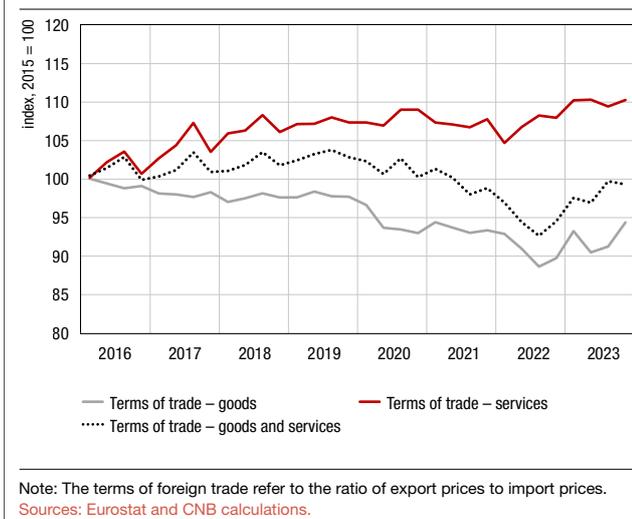
overall inflation in Croatia was 1.7 percentage points higher than the average in the euro area (Figure 3.3.10) and core inflation was 2.0 percentage points higher than that in the euro area (Figure 3.3.11), down 0.8 and 0.7 percentage points, respectively, from December 2023. The fall in the inflation differential was the result of a smaller difference in contributions of all major components of inflation (Figure 3.3.12) Higher inflation in Croatia than in the euro area average is driven by, among other factors, robust tourist demand of non-residents accompanied by an increase in economic activity and personal consumption, faster growth of labour costs, differences

in the structure of the consumer basket with food accounting for a larger share and a further process of price level convergence with the euro area average.

### 3.4 Economic relations with foreign countries

**The terms of foreign trade continued to improve in 2023, but still have not reattained the pre-pandemic level.** The improvement of terms of trade in the segment of goods was primarily the outcome of the easing of imported price pressures, i.e. the decline in the prices of energy on the global market. Although the prices of energy were still at an elevated level, if they are compared with the levels before the Russian invasion of Ukraine, their normalisation contributed to the more favourable conditions in the trade of goods and the easing of the foreign trade deficit. In 2023, the improvement of terms of trade

Figure 3.4.1 Terms of trade

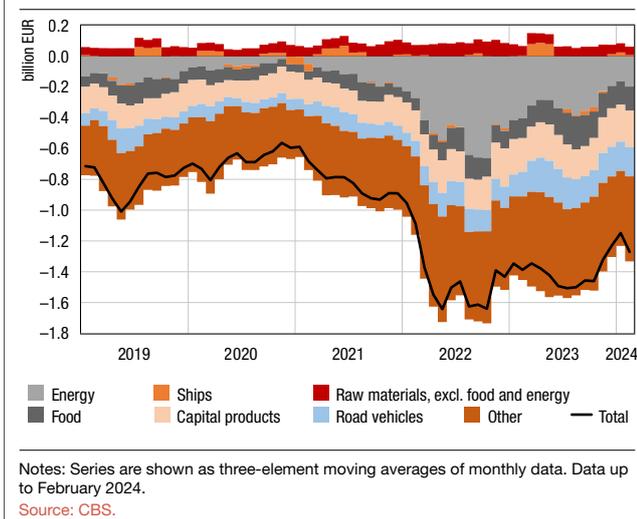


in the segment of services was largely the outcome of the pronounced increase in the export prices of services (Figure 3.4.1). With regard to the continued low industrial product inflation and persistent services inflation in the domestic economy, which was largely under the impact of a robust non-resident demand for tourist services, it was likely that the Croatian terms of trade also continued to improve in the beginning of the current year.

**Goods exports and imports shrank noticeably in the course of the previous year due to the fall in the prices of energy coupled with the simultaneous im-**

**provement in the total balance. However, the data point to a recovery in the pace of foreign trade from as early as the end of the previous year.** Although exports and imports recorded almost equal falls on an annual level in 2023 (by 5.1% and 5.8%, respectively), as a result of the perceptibly higher import base, the absolute fall in total imports exceeded the fall in exports. On the other hand, goods exports and imports (excluding energy) increased by 3.9% and 6.2% on an annual level, respectively (Figure 3.4.2). The deceleration of growth of the narrow aggregate from the year earlier was more pronounced in exports than in imports, in accordance with the decline in demand by the main trading partners from the euro area. Exports of raw materials, wood and metal industry products and particular categories of capital goods contracted the most. At the same time, the resilience of imports of other goods (excluding energy), particularly evident in imports of capital goods and road vehicles, was the reflection of a strong domestic demand. Base effects associated with cheaper energy continued to reduce the annual rates of change

Figure 3.4.2 Foreign trade balance



in the trade in energy products at the beginning of 2024. However, if the narrow aggregate is observed, which excludes the trade in energy products, the acceleration of growth in both exports and imports is visible. Seasonally adjusted quarterly data thus show that goods trade in other goods (excluding energy), after the contraction in the middle of last year, began to recover towards the end of the year, and such a trend also continued in the beginning of 2024.

**The total current and capital account balance of Croatia in 2023 recorded one**

Figure 3.4.3 Balance of payments (b.o.p.)

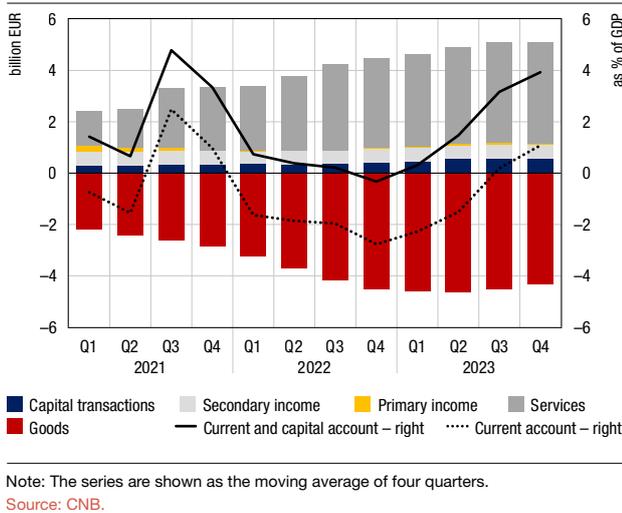
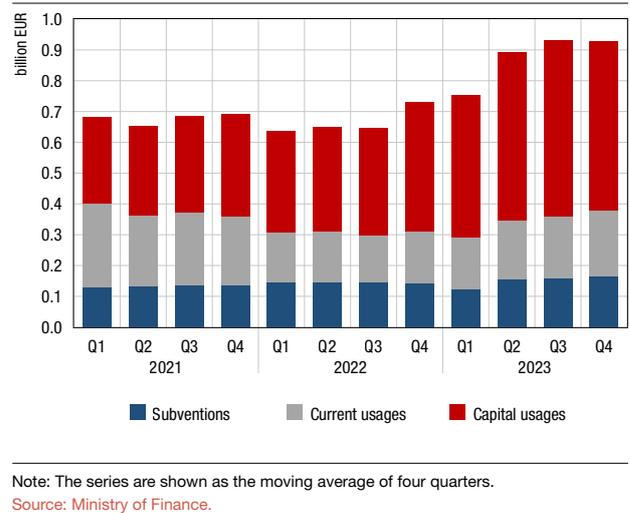


Figure 3.4.4 Utilisation of EU funds

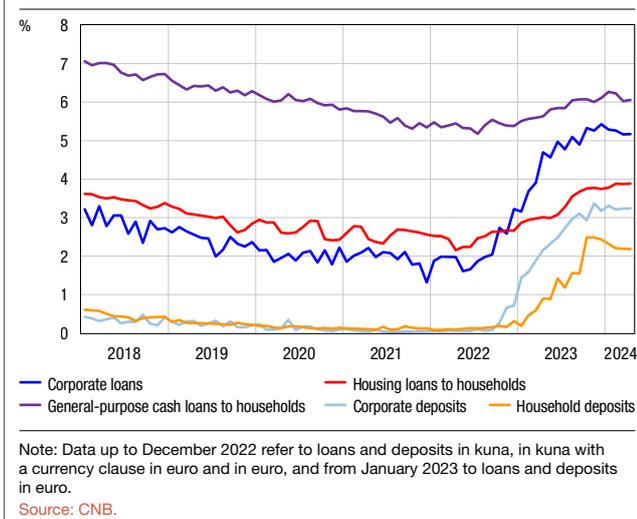


of the highest historical levels, reaching a surplus of 3.9% of GDP, following a slightly negative balance in the previous year. The improvement in the balance of trade in goods and services, due to falling energy prices and growing tourism revenues, resulted in the current account surplus of 1.1% of GDP (Figure 3.4.3). In addition to a reduction in the foreign trade deficit and record tourism revenues, the growth in disbursements from EU funds to end beneficiaries, particularly towards the end of the year, made a considerable contribution to the increase in the total current and capital account balances. Specifically, 2023 was the last year of the use of funds allocated under the previous financial envelope (which covered the 2014 to 2020 period). The utilisation of the funds from the EU Solidarity Fund to be used for the reconstruction of earthquake-hit areas in Croatia, with the end deadline for contracting in 2023, also contributed to the strong growth of disbursements. Accordingly, capital utilisations dominated the overall structure of disbursements to end beneficiaries (Figure 3.4.4). Although the experiences of the use of EU funds among EU member states have so far shown that after the closure of one multi-year financial envelope disbursements fall cyclically, in the beginning of 2024, Croatia could record relatively high inflows of EU funds as a result of the expected intensification of disbursements to end beneficiaries under the EUR 5.8bn worth Recovery and Resilience Facility.

### 3.5 Banking system

After interest rates on loans during this cycle of monetary policy tightening mostly reached the highest levels in domestic banks at the end of 2023 and in the beginning of 2024, they were perceivably moderately reduced due to the anticipated lowering of key ECB interest rates. The average interest rate on pure new loans to non-financial corporations stood at 5.2% in April, down by 26 basis points from December 2023 (Figure 3.5.1). The costs of household financing decreased at a similar pace, the average interest rate on pure new general-purpose cash loans edging down by 21 basis points

Figure 3.5.1 Interest rates on pure new loans and time deposits of corporates and households



from the highest level in January 2024 and standing at 6.1%. Borrowing through housing loans still has not become cheaper and the highest average interest rate level of 3.9% was reached in April. In the current year, the effect of the government's housing loans subsidy programme ceased, which had hitherto lowered average interest rates since housing loans under this programme were typically granted at lower than market average rates. In addition, the characteristic of housing loans also results from their long maturity and the large presence of fixed rates, which makes them less sensitive to changes in short-term interest rates.

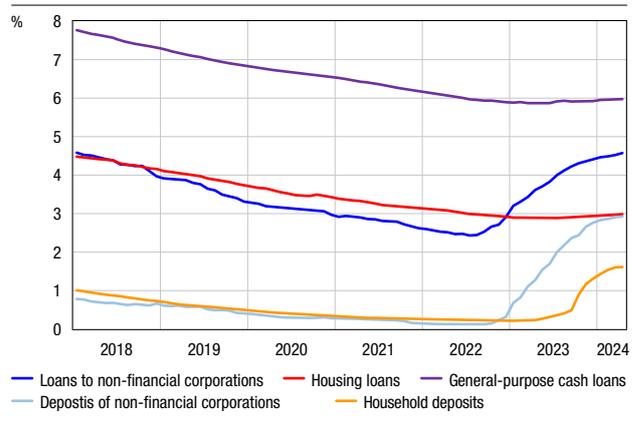
**Interest rates on time deposits were also below the maximum recorded levels.** In April, the average interest rate on pure new household time deposits was 2.2%, or 30 basis points lower than the highest level reached in November 2023 (Figure 3.5.1). At the beginning of the year, because of the decrease in interest rates on time deposits, there was a slowdown in the transfer of household deposits among the banks, which had picked up pace significantly in October 2023. The interest rate on pure new corporate time deposits also fell; in April it came to 3.2%, 13 basis points below the highest level, reached in November last year.

**Although interest rates on new loans and deposits have begun a gradual decline, they are still higher than the rates on existing loans and deposits, notwithstanding their continued slight increase.** The increase in interest rates on existing corporate loans was particularly pronounced, which in April 2024 stood at 4.6%, or up by 15 basis points from the level in December 2023. The increase in this interest rate can be explained by higher interest rates on new loans and the maturity of existing loans that were previously granted at lower interest rates. Interest rates on existing household loans increased by only 5 basis points from the end of the previous year and their very gradual increase is the reflection of a longer average loan maturity, a significant presence of fixed interest rates and the legal cap on interest rates on loans contracted at variable interest rates. In addition, the national reference rate (NRR) is dominant among the reference parameters in existing loans granted at variable rates. The NRR began its upward trajectory at the end of the previous year, so that its growth is not yet reflected in interest rates on existing housing loans. On the other hand, in the same period, the growth of interest rates on existing deposits was more pronounced in households and stood at 30 basis points, so that the interest rate increased to the level of 1.6% in April, which, with a time lag, will spill over to interest rates on existing housing loans. In the case of corporate deposits this

rate grew by 16 basis points, with the interest rate on the stock of such deposits reaching 2.9% in April (Figure 3.5.2).

**Bank lending survey results also point to the gradual easing in the intensity of the tightening of corporate and household financing conditions, except in the case of household borrowing through consumer and other loans.** Corporate lending conditions tightened very moderately in the first quarter of 2024. The tightening was much more moderate in intensity than that recorded in 2023 (Figure 3.5.3), to a very large extent owing to the more favourable risk perception and tolerance of the banks. Banks continued tightening the credit standards for household loans. In the segment of consumer and other loans, financing standards tightened more strongly than in the previous quarter, while in the segment of housing loans the tightening was somewhat milder. Competition among banks made an impact on the easing of credit standards for both groups of household loans, while higher costs of funding, balance sheet constraints and lower risk tolerance and higher risk perception by banks were among the factors that made an impact on the tightening of standards. In the second quarter of 2024,

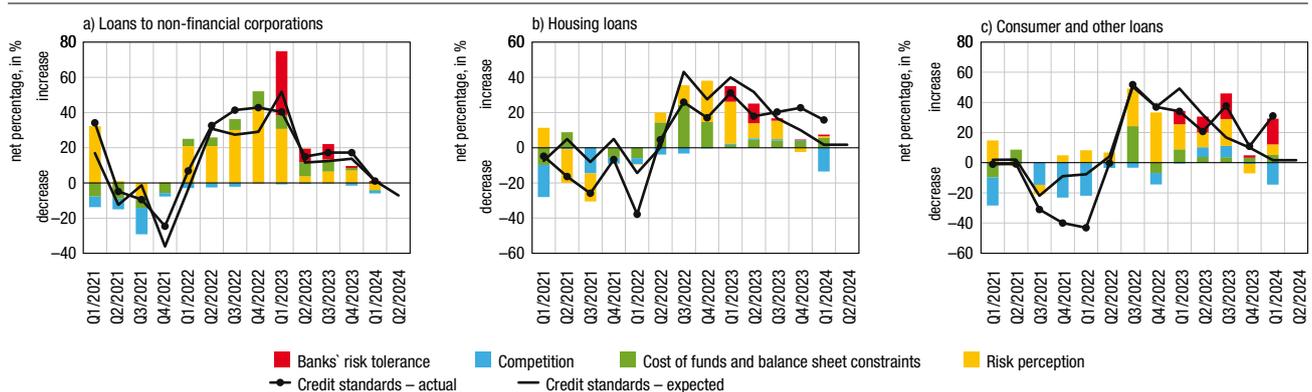
Figure 3.5.2 Interest rates on existing loans and time deposits of corporates and households



Note: Data up to December 2022 refer to loans and deposits in kuna, in kuna with a currency clause in euro and in euro, and from January 2023 to loans and deposits in euro.

Source: CNB.

Figure 3.5.3 Bank lending survey lending standards and factor contributions



Notes: "Risk tolerance" was introduced in the first quarter of 2023 and reflects a bank's tolerance to risk in its lending policy, which can change depending on changes in the bank's general business strategy. Cost of funds and balance sheet constraints are the unweighted average of the Impact of capital position, Impact of ability to access market financing and Impact of liquidity. Competition is the unweighted average of Impact of bank competition, Impact of non-bank competition and Impact of market financing competition. Risk perceptions are the unweighted average of Impact of general economic activity, Impact of industry or firm specific situation and Impact of risk on the collateral demanded.

Source: CNB.

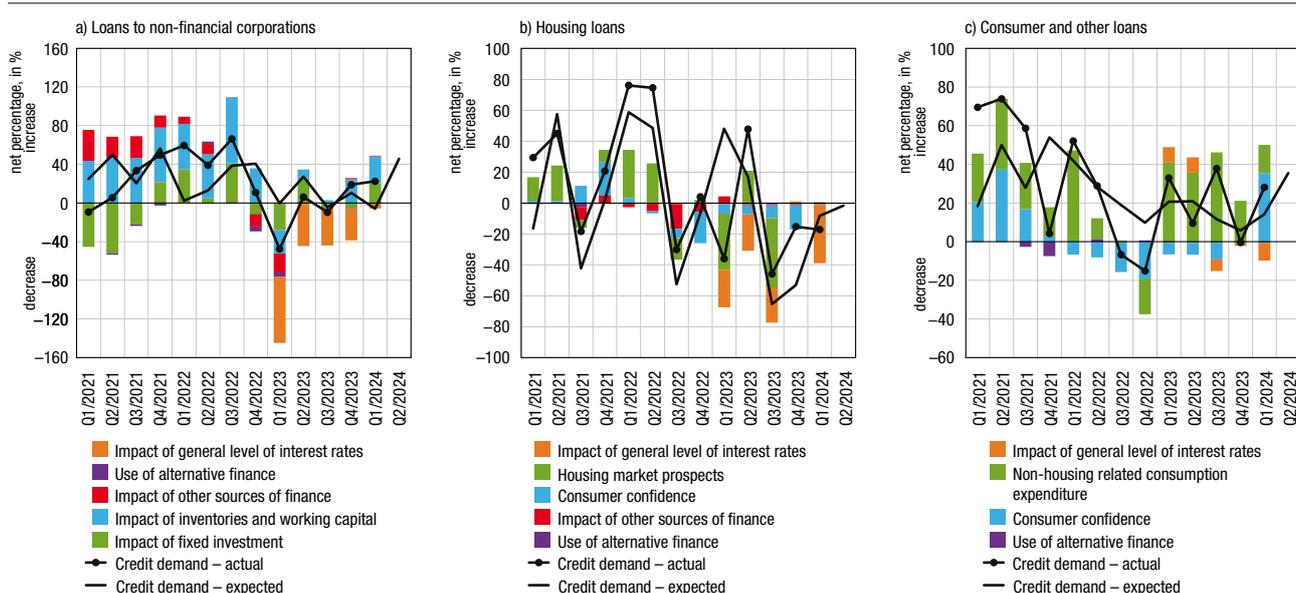
Notes: "Risk tolerance" was introduced in the first quarter of 2023 and reflects a bank's tolerance to risk in its lending policy, which can change depending on changes in the bank's general business strategy. Cost of funds and balance sheet constraints are the unweighted average of the Impact of capital position, Impact of ability to access market financing and Impact of liquidity. Competition is the unweighted average of Impact of bank competition and Impact of non-bank competition. Risk perceptions are the unweighted average of Impact of general economic activity, Housing market prospects and Borrowers' creditworthiness.

Source: CNB.

Notes: "Risk tolerance" was introduced in the first quarter of 2023 and reflects a bank's tolerance to risk in its lending policy, which can change depending on changes in the bank's general business strategy. Cost of funds and balance sheet constraints are the unweighted average of the Impact of capital position, Impact of ability to access market financing and Impact of liquidity. Competition is the unweighted average of Impact of bank competition and Impact of non-bank competition. Risk perceptions are the unweighted average of Impact of general economic activity, Borrowers' creditworthiness and Impact of risk on the collateral demanded.

Source: CNB.

Figure 3.5.4 Bank lending survey demand change and factor contributions



Notes: Interest rate level is a term introduced in the first quarter of 2023. Other sources of finance are the unweighted average of Debt restructuring and refinancing and Impact of mergers and acquisitions and corporate restructuring. Use of alternative finance is the unweighted average of Impact of internal financing, Impact of loans from other banks, Impact of loans from non-banks, Impact of debt securities issuance and Impact of equity issuance.

Source: CNB.

Notes: Interest rate level is a term introduced in the first quarter of 2023. Other sources of finance are the unweighted average of Debt restructuring and refinancing and Regulatory and fiscal framework of the real estate market. Use of alternative sources of financing is the unweighted average of Household savings, Loans from other banks and Other sources of financing.

Source: CNB.

Notes: Interest rate level is a term introduced in the first quarter of 2023. Use of alternative sources of financing is the unweighted average of Household savings, Loans from other banks and Other sources of financing.

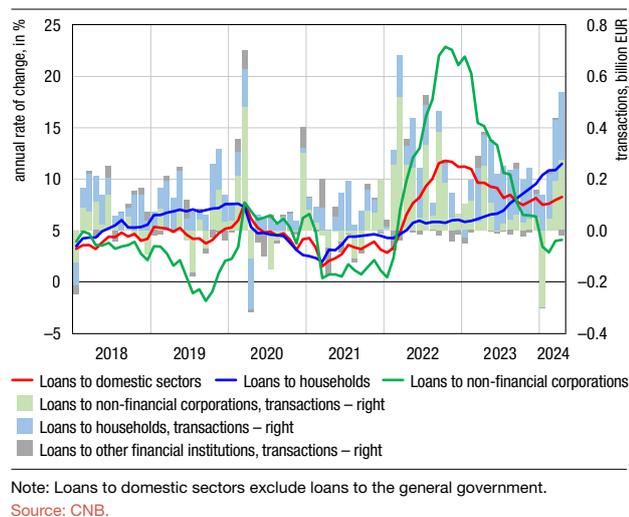
Source: CNB.

banks expect the easing of standards in the segment of corporate loans and a very moderate tightening with regard to household loans.

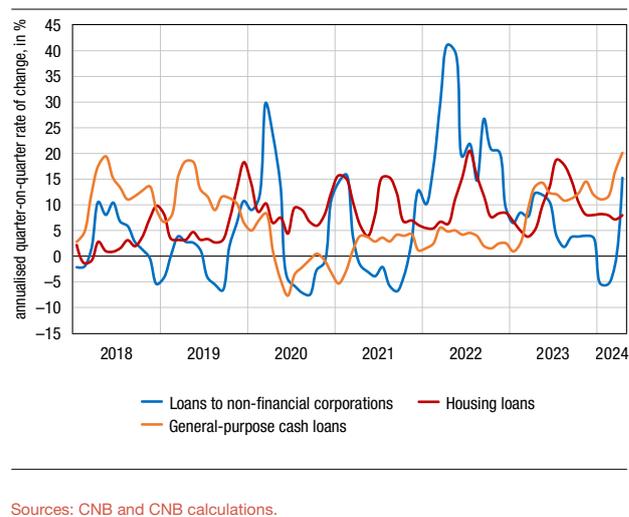
**Corporate demand for loans and household demand for consumer and other loans were stable with an indication of potential strengthening, while demand for housing loans continued to decrease.** According to the survey results, banks reported the continuation of the increase in demand for corporate loans, which was to the largest extent driven by the greater need for financing inventories and working capital, as well as for investment financing. Higher interest rates continued to contribute to a decline in demand, although their impact was significantly lower than in the previous year, when the strong cycle of the increase in interest rates had a noticeable and negative impact on demand (Figure 3.5.4). The demand of households for housing loans continued to decline in the first quarter of 2024, primarily driven by high interest rates. On the other hand, the demand for consumer loans increased despite the tightening of standards because of growing consumer confidence and the rise in household consumption. In the second quarter of 2023 banks expected the continuation of the increase in demand for corporate loans and the demand of households for consumer and other loans, while, according to banks' responses, the demand for housing loans remained subdued.

**The recovery of demand and the stabilisation of financing conditions resulted in a moderate acceleration of the growth of corporate lending, while household loans**

**Figure 3.5.5 Loans**  
annual rate of change, transaction-based



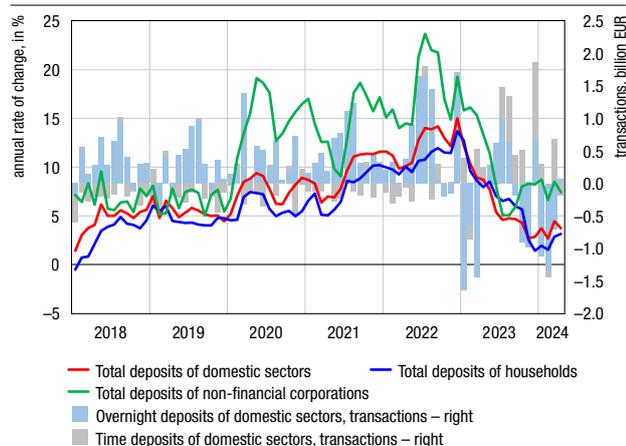
**Figure 3.5.6 Lending momentum, corporates and households**  
transaction-based



**continued to grow relatively strongly.** In the first four months of 2024, corporate loans increased by EUR 0.2bn (Figure 3.5.5). However, if the effect of the repayment of a syndicated loan of a large corporation from the energy sector in January is excluded, corporate loans increased by EUR 0.5bn, which is equal to last year's growth during those months. Broken down by activity, corporate loans in the manufacturing industry grew the most, while with regard to loan purpose, the largest growth was seen in working capital and investment loans. Following a steady slowdown from February last year, the annual growth in corporate loans accelerated in March. However, it was still more modest (4.1% in April) than in December 2023 (6.4%). In parallel, loans to households increased by EUR 0.8bn. General-purpose cash loans (EUR 0.4bn) accounted for about a half of the growth, twice as large as the amount in the same period of 2023. The growth of housing loans was also relatively strong (EUR 0.3bn) when compared with the first four months of the previous year when they only rose by EUR 0.1bn in the anticipation of the implementation of the Government's housing loans subsidy programme (APN), which will not be implemented this year. The annual growth in household loans picked up further (from 9.5% in December 2023 to 11.5% in April 2024), primarily owing to the strong acceleration in the growth of general-purpose cash loans (from 11.1% to 13.8%), while the growth of housing loans accelerated somewhat slightly (from 9.9% to 11.3%), largely due to the base effects associated with the very small growth ahead of the last year's APN implementation. The strengthening of lending in the segment of corporate loans and general-purpose cash loans is also indicated by the momentum, while in housing loans it stabilised at a moderate level (Figure 3.5.6).

**Higher interest rates on time deposits continued to encourage corporations and households to time-deposit funds with banks.** Time deposits of households grew from January to April 2024 by EUR 0.6bn with a parallel decrease in overnight deposits by EUR 1.1bn. Corporations also increased time deposits by EUR 0.4bn and decreased overnight deposits by EUR 1.8bn (Figure 3.5.7). Therefore, the balance of total time deposits

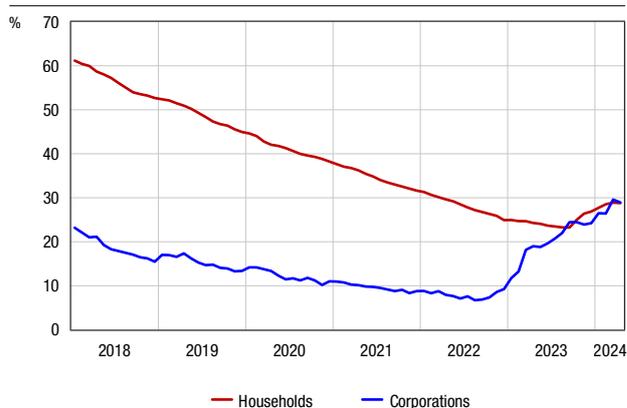
**Figure 3.5.7 Deposits transactions and annual rates of change, transaction-based**



Note: Deposits of domestic sectors exclude deposits of the general government.

Source: CNB.

**Figure 3.5.8 Share of time deposits in total deposits**



Note: Total deposits include overnight and time deposits, deposits redeemable at notice and repurchase agreements.

Source: CNB.

continued to rise and in April was EUR 0.7bn higher than in December 2023, while the balance of overnight deposits decreased by EUR 3.1bn. Interest rates on time deposits fell slightly from the highest levels recorded at the end of the previous year. In such circumstances, corporations and households continued to transfer funds from transaction accounts to time deposits, so that the share of time deposits in total deposits continued to increase and in April stood at 28.9% for corporations and 28.8% for households (Figure 3.5.8). The decrease in the average interest rate on time deposits was attributable to the slowdown in the transfer of deposits among banks, or the increasingly higher amounts of time deposits with banks offering interest rates below the average.

## 4 Projections for Croatia

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### 4.1 Baseline assumptions

**According to the assumptions about the international environment and the prices of raw materials used by the CNB as the basis for its June projection, global economic activity is expected to be subdued and inflationary pressures are expected to ease further.** Although the beginning of the year brought about slightly more favourable developments in major global economies than expected, the projections for the global economic activity for the current year have not changed much. Thus, global growth (the euro area excluded) is still expected to stand at 3.3% in 2024, with only a slightly slower growth in the following two years. Economic developments in the US have proved more robust than initially expected, owing to strong investment and buoyant consumer sentiment, however, growth is expected to slow down gradually in the forthcoming period. Although economic activity in China also exceeded expectations, unfavourable developments in the real estate sector might have a more pronounced impact on its real dynamics in the remaining part of the year. The expectations for Central and Eastern European countries, important trading partners of Croatia, have worsened slightly, which might have an unfavourable impact on foreign demand for Croatian goods and services.

**The prices of energy and other raw materials on the global market in the last few months were somewhat higher than expected, with their developments until the end of the projection horizon also being slightly more unfavourable.** In the last two months, crude oil was traded on the global market at prices higher than initially expected. According to forward agreements, oil prices might go down from the current USD 90 per barrel to USD 75 per barrel by the end of the projection period. However, despite the expected decrease across the projection horizon, crude oil prices were higher than under the March projection. The expectations regarding the prices of other energy products have not changed much from the previous projection. Largely due to a pronounced increase in the price of cocoa, the projected prices of food raw materials that are imported into the euro area have been revised upwards by as much as a fifth. As for prices of industrial raw materials (mostly metal), they are still expected to grow moderately, primarily due to restrictions on the supply side and increased demand to cater to the needs of the energy transition.

**The expectations regarding economic growth in the euro area in the current year have improved slightly from the March projection, but inflation projection has also been revised upwards.** According to the latest ECB projections, the expected overall inflation in the euro area in 2024 and 2025 amounts to 2.5% and 2.1%, respectively. When compared to March projections, overall inflation for both years has been revised upwards by 0.2 percentage points, mainly on account of higher energy prices but also a somewhat higher outturn for core inflation and somewhat stronger pressures on the labour market.

Table 4.1.1 Projection assumptions regarding the international environment and prices of raw materials

	Current projection				Deviations from the previous projection				
	2023	2024	2025	2026	2023	2024	2025	2026	
<b>International environment</b>									
Global economic growth (excl. EA)	3.5	3.3	3.3	3.2	0.0	0.0	0.0	0.0	
USA	2.5	2.5	1.8	1.8	0.0	-0.1	0.0	-0.1	
China	5.2	4.6	4.0	3.8	0.0	0.2	-0.1	-0.1	
Global trade	1.0	2.6	3.3	3.3	-0.1	-0.1	0.2	0.0	
Foreign demand (EA)	0.8	2.1	3.4	3.3	0.2	-0.3	0.3	0.1	
Foreign demand (HR)	-0.4	1.7	3.5	3.5	0.3	-0.4	0.1	0.0	
<b>Prices of raw materials</b>									
Prices of oil	USD	83.7	83.8	78.0	74.5	0.0	4.0	3.1	2.3
	EUR	77.5	77.7	72.4	69.2	0.0	3.9	3.1	2.3
Prices of electricity	EUR/MWh	103.5	73.0	87.7	72.8	0.6	-1.4	9.4	1.5
Prices of gas	EUR/MWh	40.6	30.8	35.4	29.9	0.0	0.8	3.3	0.4
Prices of raw materials (excl. energy) % of change	USD	-12.5	11.4	3.9	0.9	0.0	10.8	1.9	0.8
prices of food raw materials	USD	-9.3	20.1	0.4	-2.0	0.0	20.8	1.4	1.6
prices of other raw materials	USD	-14.4	5.7	6.4	3.1	0.0	4.2	2.2	0.2
<b>Euro area</b>									
Economic growth		0.6	0.8	1.4	1.6	0.1	0.2	-0.1	0.0
Inflation		5.4	2.5	2.2	1.9	0.0	0.2	0.2	0.0

Note: Projection assumptions refer to the ECB June projection cycle (June 2024 BMPE) as at 16 May 2024.

Source: ECB.

Nevertheless, supported by restricted monetary policy the process of inflation deceleration has continued and it is estimated that inflation will reach the target level of 2% as soon as the middle of next year. The projected economic growth of the euro area in 2024 has been upped to 0.8% (up 0.2 percentage points from the previous projection), mainly owing to favourable outturns in the first quarter in major member states, partly driven by more dynamic global demand. However, relatively unfavourable financing conditions coupled with heightened uncertainty will continue to weigh on economic activity, with more dynamic growth not being expected before next year. The gradual fall in inflation and recovery of real income supported by a strong labour market should spur personal consumption, while the strengthening of foreign demand and the decrease in uncertainty might contribute to the recovery of the manufacturing sector.

## 4.2 Macroeconomic variable projections

**The annual growth of the Croatian economy could accelerate slightly in 2024 before decelerating gradually afterwards.** The expected intensification of the economic expansion in 2024 reflects the projected prolongation of the strong growth in personal consumption, partially supported by an expansionary fiscal policy, as well as the strengthening of foreign demand and the recovery of goods exports and corporate investments, following their slump in 2023. The noticeable strengthening of the personal consumption growth in 2024 is also partly related to developments in the previous year, when personal

consumption increased steadily after having decreased sharply at the end of 2022. The remainder of the projection horizon is expected to see a relatively uniform growth of the main GDP components, but the total aggregate could decrease gradually amid a fall in the structural general government deficit.

**Real GDP could increase by 3.3% in 2024, having risen by 3.1% in the previous year.**

The greatest contribution to growth in 2024 could come from personal consumption, which is supported by ongoing favourable developments in the labour market and the growth of general government social benefits. In addition to personal consumption, other domestic demand components are also expected to grow, although at a slower rate than in 2023. Total investments could grow at an almost halved rate, due primarily to a slowdown in public sector investments, following an increase of over 50% in general government investments in 2023. In 2023, public investment trends were to a large extent determined by the required finalisation of EU projects financed from the old several-year-long financial perspective, whereas the use of funds from the current financial envelope is expected to gather momentum only gradually. In addition, by the end of last year, Croatia had to use funds from the EU Solidarity Fund intended for the reconstruction of earthquake-affected areas. Corporate investments, which decreased considerably in 2023 according to available projections, are expected to build up amidst the strengthening of foreign demand and favourable economic developments. The recovery of foreign demand could boost goods exports, which weakened sharply in 2023, and services exports are expected to continue their growth, but at a slower pace than in the previous year, given the already high tourism activity levels. With import growth expected to outstrip export growth due to a relatively strong domestic demand, net exports could make a negative contribution to growth in 2024.

**Table 4.2.1 Key macroeconomic variable projections**  
annual rates of growth

	2022	2023	2024	2025	2026
<b>Real GDP</b>	<b>7.0</b>	<b>3.1</b>	<b>3.3</b>	<b>2.8</b>	<b>2.6</b>
Personal consumption	6.7	3.1	4.9	2.9	2.7
Government consumption	2.7	6.6	3.0	2.7	2.2
Capital investments	0.1	4.2	2.4	2.4	3.1
Exports of goods and services	27.0	-2.9	2.5	2.4	2.4
Imports of goods and services	26.5	-5.3	3.6	2.6	2.5
<b>Contributions to GDP growth<sup>a</sup></b>					
Domestic demand	4.4	4.0	3.9	2.8	2.7
Exports of goods and services	13.3	-1.7	1.4	1.2	1.3
Imports of goods and services	-13.8	3.4	-2.0	-1.4	-1.4
Inventories	3.1	-2.6	0.1	0.1	0.0
<b>Labour market</b>					
Change in employment	2.3	2.5	2.0	1.5	1.4
Unemployment rate (ILO) <sup>b</sup>	7.0	6.1	5.8	5.5	5.3
Nominal gross wage	8.3	14.7	10.4	5.1	3.6
Real gross wage	-2.7	6.4	6.5	2.4	1.5
Unit labour cost	6.0	14.1	9.0	3.8	2.4
<b>Inflation (HICP)</b>					
<b>Total</b>	<b>10.7</b>	<b>8.4</b>	<b>3.8</b>	<b>2.6</b>	<b>2.1</b>
HICP excl. energy and food	7.6	8.8	4.3	2.7	2.2
Food	12.9	11.5	3.9	2.6	2.0
Energy	19.2	0.0	1.0	2.1	2.1

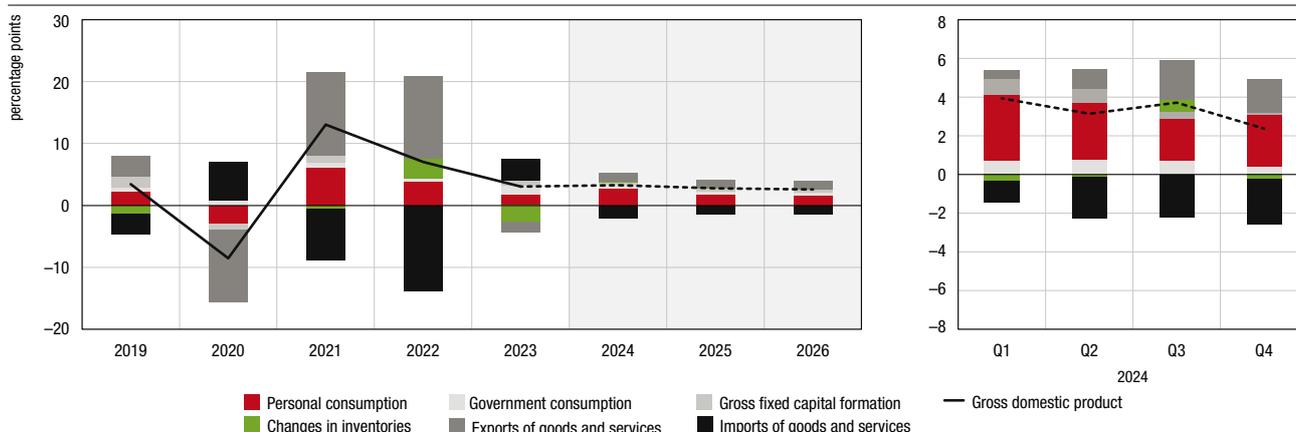
<sup>a</sup> In percentage points.

<sup>b</sup> As % of labour force.

Notes: Table 4.2.1 sums up the estimated and projected values of key variables for Croatia resulting from the inclusion of baseline assumptions and historical results in the short-term and medium-term macroeconomic models used by the Croatian National Bank, subject to corrections of model estimations based on the judgement of experts for individual economic areas. In accordance with the deadlines set in June 2024 BMPE, the final date for sending macroeconomic projections for Croatia to the ECB was 22 May, with the final projection taking into account data published until (and including) 20 May 2024.

Sources: CBS, Eurostat and CNB estimations and projections.

Figure 4.2.1 GDP and GDP components, contributions



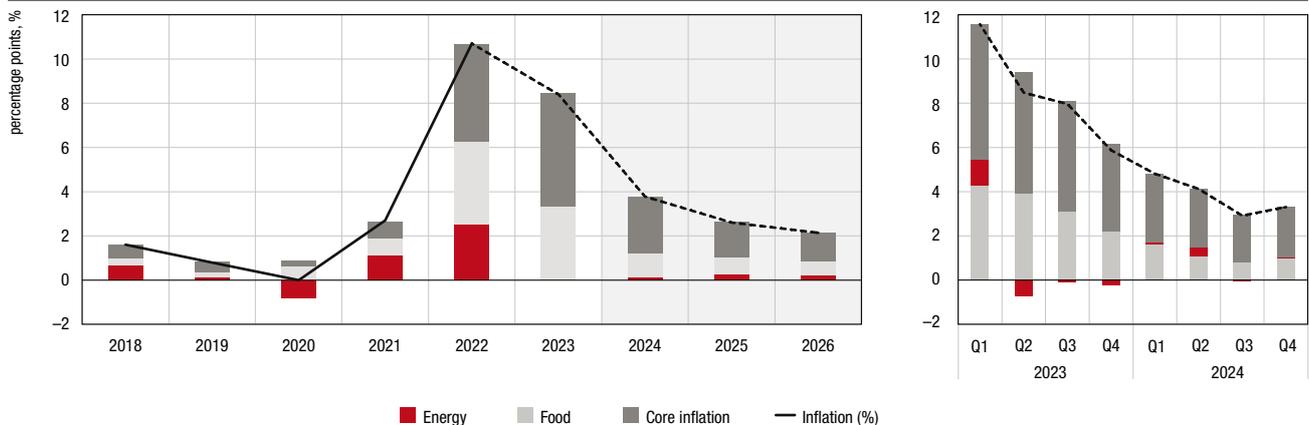
Sources: CBS and CNB estimations and projections.

**Economic activity growth is expected to slow down slightly to an average rate of 2.7% in 2025 and 2026.** This primarily reflects the expected slowdown of personal consumption deriving from the decreased pass-through effect and the effects of expansionary fiscal policy pursued in 2024. The real wage growth could decelerate too, although a strong labour market could keep the growth rates above pre-pandemic averages. Investment growth could accelerate somewhat towards the end of the projection horizon amid the growth of public sector investments, with an increasingly larger contribution coming from the Recovery and Resilience Facility funds that have to be utilised by the end of 2026. In addition, favourable financing conditions are expected to support the continued growth of private sector investments. In line with the expectations of the further recovery of foreign demand, goods and services exports should continue to grow, with net exports likely to make a slightly negative contribution to the growth.

**Risks associated with Croatia's central real growth projection seem to be balanced.**

Due to ongoing and potentially escalating geopolitical tensions, economic developments in the international environment and developments in the prices of raw materials and energy have remained highly uncertain. Although Croatia's current overall activity trends are still relatively favourable, especially those in trade and construction, weak manufacturing and diminished business confidence in industry at the beginning of the second quarter signal negative risks to goods exports. Moreover, the projected investment growth will largely depend on the ability of the public sector primarily, and then of the private sector, to successfully absorb EU funds. However, should geopolitical tensions de-escalate, foreign demand trends could outstrip expectations and favourably impact goods exports. Developments in the labour market, wage developments in particular, could be more favourable than expected and spur personal consumption growth.

Figure 4.2.2 Projection of harmonised index of consumer prices



Sources: Eurostat and CNB estimations and projections.

Having grown at the highest average annual rates since 1995 in 2022 and 2023 (10.7% and 8.4% respectively), inflation is expected to decelerate to 3.8% in 2024 (Figure 4.2.2). Food inflation and core inflation could slow down markedly due to the normalisation of supply chains, decreases in the prices of energy, food and other raw materials relative to their record highs in 2022 and the restrictive monetary policy stance with tightened financing conditions, coupled with favourable statistical base period effects stemming from the strong growth of prices in 2023 and the carry-over (the end-2023 inflation rate was lower than the 2023 average inflation rate)<sup>11</sup>. However, core inflation could remain elevated due to strong domestic and foreign demand, especially demand for travel services, a robust labour market and the carry-over of sharp wage increases to consumer prices, in particular prices in the service sector. A comparison of year-end performances shows that inflation deceleration in 2024 could be less pronounced than the decrease in the average annual inflation rate and weaker than in the previous year because inflation had already decelerated markedly in the period from the end of 2022, when it peaked, to the end of 2023. Moreover, in contrast with 2023, when it fell steadily from one quarter to another, the annual inflation rate is expected to edge up and stabilise slightly above 3% towards the end of 2024 under the strong influence of an unfavourable base effect, caused by the waning of the effect of a steep monthly decrease in the prices of a large number of products and services in September 2023 on the annual inflation rate.

**Inflation deceleration in 2024 could primarily reflect a considerably lower core inflation (which excludes energy and food prices), which could stand at 4.3% in 2024 relative to 8.8% in 2023.** Having moved within a narrow range around an average of 5.2% in the first five months of 2024, core inflation is expected to decelerate towards the end of the year, but at a considerably slower and somewhat volatile pace near the year

<sup>11</sup> For more details on the carry-over effect, see Box 1 The carry-over effect on average annual real GDP growth rate, Macroeconomic developments and outlook, No 15, 15 December 2023.

end. Both core inflation components are expected to decelerate in 2024. The fall in industrial inflation should reflect the easing of imported pressures and a noticeably slower consumer price growth. Service inflation could remain elevated and continuously make up more than half of total inflation, despite the expected slowdown caused by favourable base effects, due primarily to strong domestic and foreign demand for services, especially tourism services. Another factor keeping service inflation up throughout 2024 could be the strong growth of nominal wages spilling over to consumer service prices, whose total costs are mostly dominated by the cost of labour. However, pressures on service prices could be weaker than in the previous year, with the result that average service inflation could be much lower in 2024 than in 2023.

**In addition to core inflation, another factor contributing to the overall inflation slowdown in 2024 could be food inflation dropping sharply from 11.5% in 2023 to 3.9% in 2024.** The food inflation slowdown, caused by the spillover of decreased energy and food raw material prices and alleviated supply side pressures, for the most part occurred as early as in 2023. Positive trends continued in the first five months of 2024, with food inflation likely to decrease further amid low expected current pressures. However, with favourable base effects disappearing in the second half of the year, the slowdown in annual food inflation could stop.

**In contrast with core inflation and food inflation, average annual energy inflation could accelerate from 0% in 2023 to 1.0% in 2024.** Geopolitical tensions and war conflicts as well as the expected strengthening of global economic activity boosted the price of crude oil from EUR 71 per barrel at the end of 2023 to EUR 80 per barrel in May 2024. The growth of crude oil prices spilled over to retail refined petroleum product prices, leading to a sharp spike in energy inflation early in the year. Nevertheless, energy inflation could decelerate towards the end of the year due to unchanged household gas and electricity prices and the expected slight drop in crude oil prices on futures markets.

**Over the remainder of the projection horizon, inflation is expected to slow down to 2.6% in 2025 and 2.1% in 2026.** The inflation slowdown towards the ECB's target, assuming the absence of external shocks, could reflect a reduced growth of demand caused by increases in interest rates. Energy inflation could stabilise at 2.1%, whereas food inflation could slow down to 2.0% in 2026. Despite the expected slowdown, over the remainder of the projection horizon core inflation could remain slightly above overall inflation at 2.7% in 2025 and 2.2% in 2026.

**Risks to the achievement of the projected inflation are still pronounced, but mostly balanced.** Geopolitical tensions still pose challenges to the supply of energy and other raw materials in the world market, which could result in the growth of the main inflation components, especially energy and food. An additional risk to food inflation stems from potentially unfavourable weather conditions. Risks to forecast core inflation are also significant and tilted to the upside, primarily due to risks related to service inflation. The

tight labour market and the pronounced growth of nominal wages could spill over to consumer prices, especially in the service segment, at a stronger pace and/or for a longer period. This could be especially pronounced should the still high perceived consumer price inflation result in demands for wage increases. Inflation could also be higher if corporate profits fail to offset the impact of the strong wage growth to a certain extent. In contrast, risks that could contribute to inflation being lower than projected include a weaker economic growth and, consequently, a weaker demand, the stronger impacts of monetary policy tightening and a more intensive than expected spillover of the fall in the prices of energy and other raw materials in the global market on the consumer prices of goods and services.

**In comparison with the CNB's September projection, Croatia's real GDP growth was revised mildly upwards for 2024 and slightly downwards for 2026 (Table 4.2.2).**

The upward revision of GDP in 2024 primarily reflects more favourable developments in the labour market, which could have a positive impact on personal consumption trends. In contrast, assumptions related to energy price developments, external demand and financial conditions are somewhat less favourable over the whole projection horizon, which is why growth for 2026 was revised downwards.

**In comparison with the previous projection, average annual inflation could be 0.2 percentage points higher in 2024 and**

**2025 as well as 0.1 percentage point higher in 2026,** primarily due to a better-than-expected performance and higher-than-expected nominal wage growth. The core inflation and energy inflation projections are revised upwards over the whole projection horizon, whereas the food inflation projection was revised downwards because the performance in the first few months of 2024 was worse than expected.

**Table 4.2.2 Deviations from the CNB projection of March 2024**

	2022	2023	2024	2025	2026
<b>Real GDP</b>					
June 2024	7.0	3.1	3.3	2.8	2.6
March 2024	6.3	2.8	3.2	2.8	2.7
<b>difference (p. p.)</b>	<b>0.7</b>	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.1</b>
<b>Inflation (HICP)</b>					
June 2024	10.7	8.4	3.8	2.6	2.1
March 2024	10.7	8.8	3.5	2.4	2.0
<b>difference (p. p.)</b>			<b>0.2</b>	<b>0.2</b>	<b>0.1</b>

Sources: CBS, Eurostat and CNB estimations and projections.

## Abbreviations and Symbols

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### Abbreviations

APN	– Agency for Transactions and Mediation in Immovable Properties
APP	– Asset Purchase Programme
BEA	– U. S. Bureau of Economic Analysis
BLS	– bank lending survey
BMPE	– Broad Macroeconomic Projection Exercise
bn	– billion
BVAR	– Bayesian vector autoregression model
CBS	– Croatian Bureau of Statistics
CES	– Croatian Employment Service
CNB	– Croatian National Bank
CPI	– consumer price index
CPII	– Croatian Pension Insurance Institute
DFR	– deposit facility rate
EA	– euro area
EC	– European Commission
ECB	– European Central Bank
EER-41	– nominal effective exchange rate index of the euro against 41 major trading partners of the euro area
ESI	– Economic Sentiment Indicator
€STR	– euro short-term rate
EU	– European Union
EURIBOR	– Euro Interbank Offered Rate
Fed	– Federal Reserve System
G7	– advisory forum consisting of seven major industrial countries of the world
GDP	– gross domestic product
GSCPI	– Global Supply Chain Pressure Index
HICP	– Harmonised Index of Consumer Prices
HWWI	– Hamburgisches Weltwirtschaftsinstitut
HZZO	– Croatian Health Insurance Fund
ILO	– International Labour Organization
IMF	– International Monetary Fund
Ina	– Industrija nafte d.d.
ind.	– industrial
LSI	– loan supply indicator
m	– million
MLF	– medium-term lending facility
MoF	– Ministry of Finance
MRO	– main refinancing operations rate

Mwh	– megawatt hour
NCA	– National Classification of Activities
NDA	– net domestic assets
NFA	– net foreign assets
OECD	– Organisation for Economic Co-operation and Development
OPEC+	– Organisation of the Petroleum Exporting Countries
PEPP	– Pandemic Emergency Purchase Programme
PMI	– Purchasing Manager Index
pp	– percentage points
Q	– quarter
RC	– Republic of Croatia
SDR	– special drawing rights
SMA	– Survey of Monetary Analysts
SPF	– Survey of Professional Forecasters
thous.	– thousand
TLTRO III	– third round of targeted longer-term refinancing operations
TPI	– Transmission Protection Instrument
UBS AG	– United Bank of Switzerland
UNCTAD	– United Nations Conference on Trade and Development
USA	– United States of America
VAT	– value added tax

### Three-letter currency codes

CHF	– Swiss franc
CNY	– Yuan Renminbi
EUR	– euro
GBP	– pound sterling
JPY	– yen
USD	– US dollar
XDR	– special drawing rights

### Two-letter country codes

AT	– Austria
BE	– Belgium
BG	– Bulgaria
CY	– Cyprus
CZ	– Czech Republic
DE	– Germany
DK	– Denmark
EE	– Estonia
ES	– Spain

FI	– Finland
FR	– France
GB	– Great Britain
GR	– Greece
HR	– Croatia
HU	– Hungary
IE	– Ireland
IT	– Italy
LT	– Lithuania
LV	– Latvia
MT	– Malta
NL	– The Netherlands
PL	– Poland
PT	– Portugal
RO	– Romania
SI	– Slovenia
SK	– Slovakia
UK	– United Kingdom

## Symbols

–	– no entry
....	– data not available
0	– value is less than 0.5 of the unit of measure being used
a, b, c,...	– indicates a note beneath the table and figure
*	– corrected data
()	– incomplete or insufficiently verified data



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