

# Global Economic Outlook

———— January 2024



# Foreword

Dear GEO Readers,

In front of you is this year's first issue of Global Economic Outlook, the CNB Monetary Department's long-running publication. This year we will celebrate several important anniversaries in the economic area. The first, and probably the closest to us all, is the 20th anniversary of the Czech Republic's accession to the European Union, which can no doubt be considered beneficial to our country. At the start of January, most EU countries celebrated an equally important anniversary – 25 years since they deepened their integration by adopting the euro. This milestone is thus also being commemorated by our partner ECB. But the list does not end there. The Bretton Woods institutions – the World Bank and the International Monetary Fund, which contributed significantly to creating the global monetary and financial infrastructure after World War II – will celebrate turning 80. I have the honour to represent the Czech Republic in the IMF. It's a challenge I gladly took on and a role I am trying to live up to as best I can.



The work of the above institutions regularly features in GEO, where, alongside other sources of information from around the world, the Czech National Bank provides you – the readers of GEO – with a clear comparison of the latest macroeconomic outlooks. In addition to key variables such as inflation, interest rates, exchange rates and GDP growth, a range of leading indicators and interesting thematic charts are presented. These, along with targeted economic comments on the key countries, regions and markets monitored, help me personally gain a quick overview. Readership statistics show that the analytical *Focus* section is popular. In this part of GEO, my colleagues from the Monetary Department zoom in on issues that affect our economy, as well as giving their traditional assessment of the forecasts covered in GEO. The January issue focuses on what the authors call the “inflation tsunami”, namely the factors behind the recent surge in the price level around the world. It makes for an informative read...

Wishing you a successful 2024

Karina Kubelková,

CNB Bank Board member

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#### Cut-off date for data

12 January 2024

#### CF survey date

8 January 2024

#### GEO publication date

19 January 2024

#### Notes to charts

ECB, Fed, BoE and BoJ: midpoint of the range of forecasts.

The arrows in the GDP and inflation outlooks indicate the direction of revisions compared to the last GEO. If no arrow is shown, no new forecast is available. Asterisks indicate first published forecasts for given year. Historical data are taken from CF, with exception of MT and LU, for which they come from OE.

Leading indicators are taken from Bloomberg and Refinitiv Datastream.

Forecasts for EURIBOR and LIBOR rates are based on implied rates from interbank market yield curve (FRA rates are used from 4M to 15M and adjusted IRS rates for longer horizons). Forecasts for German and US government bond yields (10Y Bund and 10Y Treasury) are taken from CF.

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## I. Introduction

**Sadly, the war in Ukraine and the conflict following the attack on Israel by Hamas continue in 2024.** The estimated number of soldiers killed and injured in the war in Ukraine now exceeds a chilling 500,000. And that’s not to mention defenceless civilians and material damage. Presidential elections in Russia (17 March) and the USA (5 November) will be crucial for this conflict. Those in Ukraine (31 March) will also be important, of course, although no change in leadership is expected in Ukraine or Russia for many reasons. Elections to the European Parliament will also be held this year (6–9 June). Belgium has taken over the EU presidency and will be succeeded by Hungary in the second half of the year. As mentioned in the foreword, we have entered a year of many anniversaries (25 years of the euro, 20 years of EU enlargement by ten countries, 80 years of the Bretton Woods institutions).

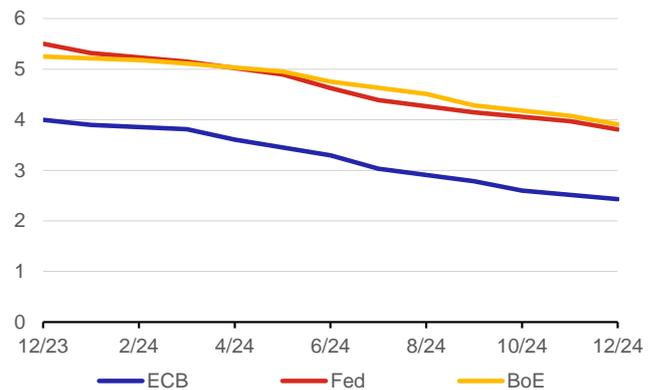
**What will the January [World Economic Forum](#) bring this year?** This traditional January meeting of heads of government, international organisations, business and civil society in January takes place during a polycrisis (a term describing the interplay of multiple crises, such as the climate and biodiversity crises, the COVID-19 pandemic, the energy crisis and the wars in Ukraine and the Middle East). The Forum will distil the above economic topics and trends into a “report” on the state of the world and the priorities for 2024.

**The outlooks for 2024 should show a definitive fade-out of the inflation tsunami.** Inflation will be only slightly above target in advanced economies. Fiscal consolidation is also set to continue across countries, especially in Europe. It had seemed that the normalisation of relations in global production chains would be another positive trend. However, recent events around the attacks on commercial ships off Yemen have significantly undermined this optimism. They are already having consequences in the form of reported reduced production and rising international shipping prices. If the tensions become more pronounced or prolonged, we could see new price pressures on the supply side.

The **chart in the current issue shows** how markets view the key central banks’ rates this year. Interestingly, they expect the same pace of rate cuts in Europe and the USA, even though the ECB and the Fed are currently communicating their positions slightly differently. It is also worth mentioning that the policy rate differential remains almost constant, although the ECB and Fed outlooks see inflation only just above the 2% target. According to the CF and Bloomberg surveys, financial market analysts are a little more cautious about rate cuts, seeing rates higher than the market, especially in the euro area.

**The current issue also contains an analysis:** “[The fading out of the inflation tsunami: Causes and outlooks](#)”. The article summarises the factors underlying the unusually strong surge in inflation in recent years and, using the available data on firms’ pricing behaviour in the euro area, demonstrates that the receding wave of inflation should now be over unless another external shock occurs in the near future.

Market outlook for key central banks’ rates, %



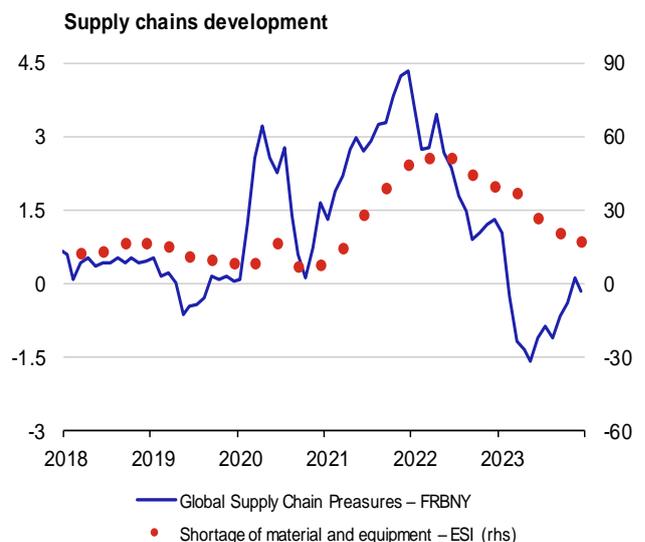
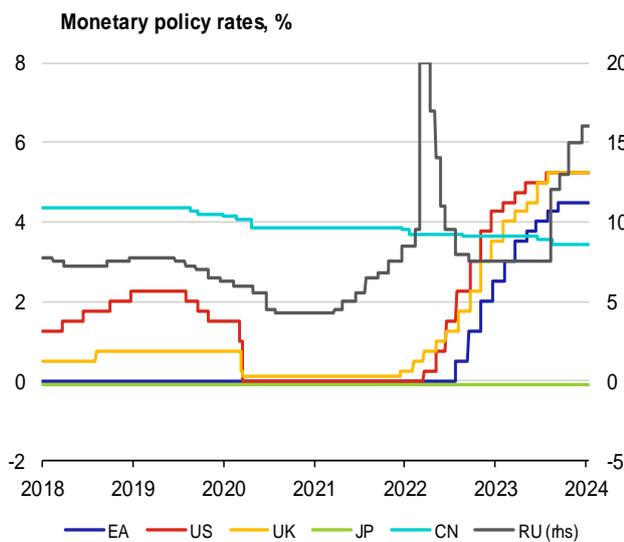
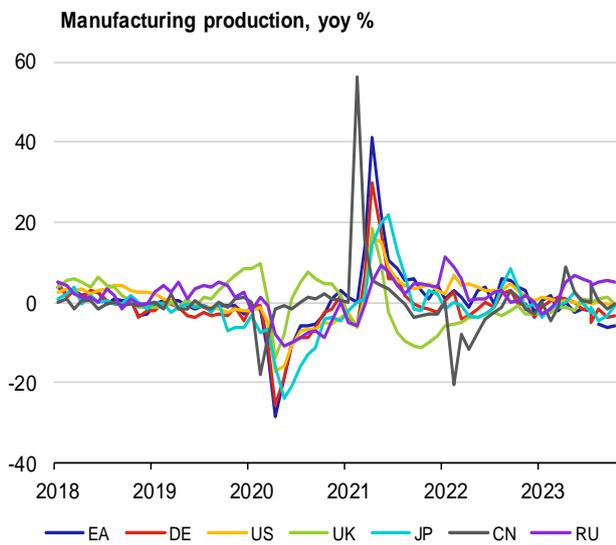
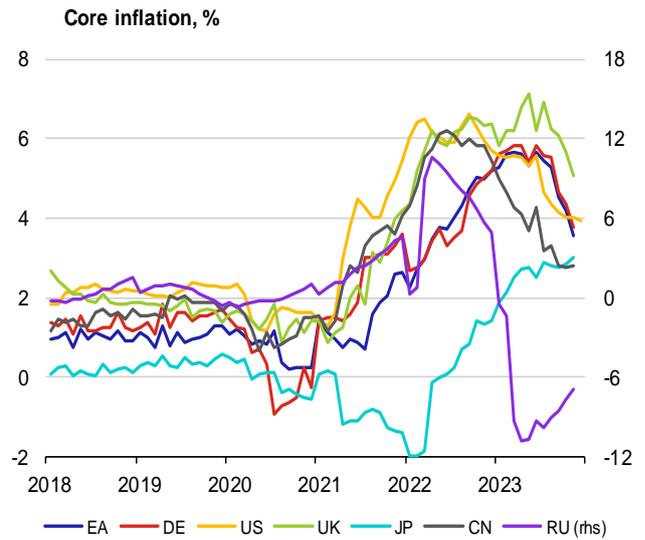
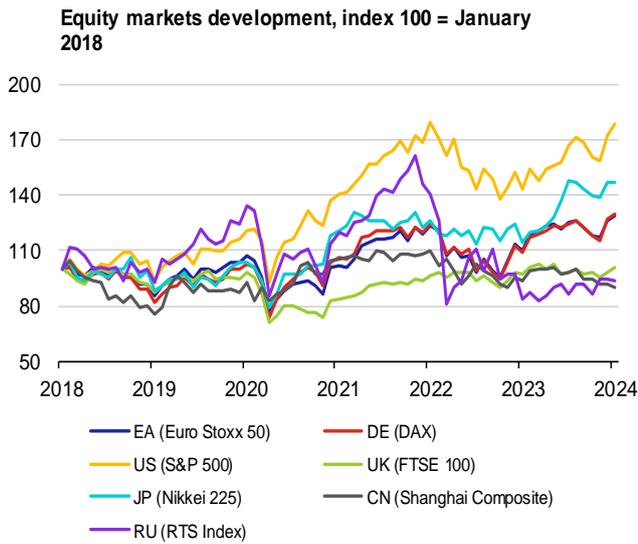
Source: Bloomberg  
Note: Rate outlook based on OIS; data as of 12 January 2024

### GEO barometer for selected countries

		EA	DE	US	UK	JP	CN	RU
GDP (%)	2024	0.5 ➡	0.3 ➡	1.4 ➡	0.2 ➡	0.8 ➡	4.6 ➡	1.7 ➡
	2025	1.3 ★	1.2 ★	1.7 ★	1.0 ★	1.0 ★	4.3 ★	1.3 ★
Inflation (%)	2024	2.2 ➡	2.5 ➡	2.6 ➡	2.7 ➡	2.2 ➡	1.2 ➡	5.1 ➡
	2025	2.0 ★	2.1 ★	2.3 ★	2.2 ★	1.5 ★	1.7 ★	4.5 ★
Unemployment (%)	2024	6.8 ➡	5.9 ➡	4.2 ➡	4.7 ➡	2.5 ➡	3.4 ➡	2.6 ➡
	2025	6.8 ★	5.7 ★	4.2 ★	4.7 ★	2.4 ★	3.4 ★	3.6 ★
Exchange rate (against USD)	2024	1.11 ➡	1.11 ➡		1.27 ➡	135.0 ➡	7.04 ➡	95.6 ➡
	2025	1.14 ★	1.14 ★		1.31 ★	125.8 ★	6.82 ★	96.9 ★

Source: Consensus Forecasts (CF)  
Note: The arrows indicate the direction of the revisions compared with the last GEO.

## II. Macroeconomic barometer



Source: Refinitiv Datastream, European Commission.

### III.1 Euro area

**The ECB slightly reduced its euro area growth outlook – the economy will grow by less than 1% and not see a better rate of growth until next year.** The ECB’s December forecast predicts GDP growth of 0.8% this year, rising to 1.5% in 2025. The CF analysts again remained more cautious in their January forecasts. The latest monthly data are far from impressive. Retail sales fell month on month in November and thus failed to live up to the positive impression they gave in October. The decline was particularly pronounced in Germany, whereas sales in France increased this time. However, economic sentiment continues to recover slightly. According to the ESI, sentiment improved in all the categories monitored. The composite PMI suggests a slight economic contraction in 2023 Q4, which would send the euro area economy into a technical recession. By contrast, the ECB President said at the press conference following the December meeting that the ECB forecast did not expect a recession in the euro area. As regards new data, the labour market is fostering a higher growth outlook. Year-on-year wage growth amounted to 5.3% in 2023 Q3. Wages thus also rose in real terms last summer for the first time in a long time. This will boost household consumption but also further reduce exporters’ competitiveness.

**The inflation outlooks for this year were lowered further, but consumer price inflation will not converge to the target until next year.** The ECB and the January CF lowered their HICP growth outlooks for this year, while those for next year remained unchanged. According to preliminary data, consumer price inflation rose temporarily (to 2.9% year on year) in December as expected, owing to base effects. This is because some of the measures to counter the high growth in energy prices were put in place a year ago. The year-on-year drop in energy prices has therefore slowed sharply now. By contrast, growth in food and industrial goods prices fell in December. As a result, core inflation declined to 3.4%. The persistence of domestic inflation pressures was one of the reasons why the ECB left its key rates unchanged in December and why it emphasised in its communications, in contrast to financial market expectations, that it is cautious about them decreasing soon.

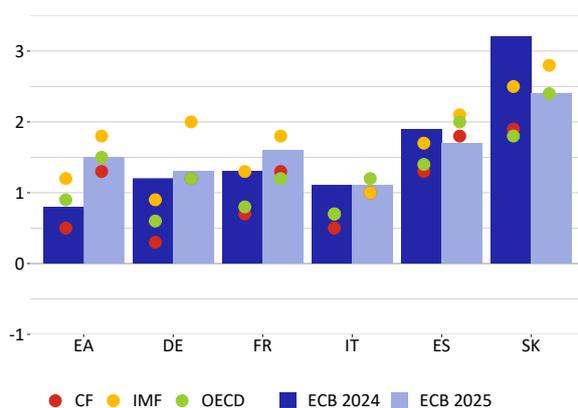


### III.2 Germany

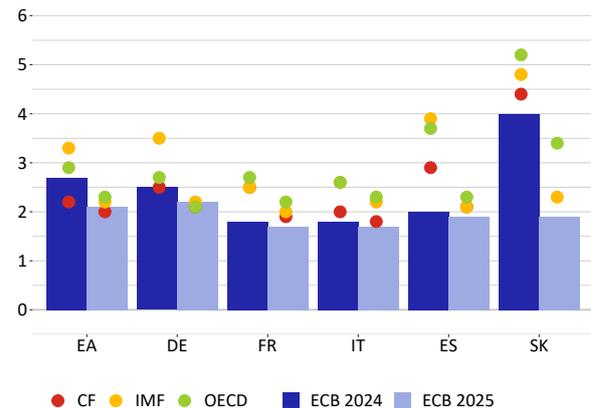
**The German economy is recovering with a lag and its growth outlook has been lowered significantly.** According to the Bundesbank, industry (hence weak foreign demand), restrained private consumption and subdued investment due to higher financing costs are the main drag on the economic recovery. Looking at leading indicators, there are concerns that the German economy remained weak and could record falling activity in Q4. Although the ZEW index slightly edged up in December, business sentiment fell according to the Ifo index, with both the assessment of the current situation and the outlooks for the first half of 2024 being more pessimistic. The composite PMI, according to which German private sector activity fell further, is also indicating an economic downturn at the end of last year. The December figure of 47.4 points represented a sixth consecutive monthly decline, with both services and manufacturing remaining in the contraction band. However, the outlook seems no better, especially for this year. The new Bundesbank and CF forecasts agree that GDP growth will not exceed 0.5% this year (0.4% and 0.3% respectively). In 2025, both institutions see GDP growing by 1.2%.

**Harmonised inflation reached a three-month high at the end of last year.** Consumer prices rose by 3.8% in December (up from 2.3% in November), with inflation mostly driven by energy prices. Specifically, the base effect of one-off government measures, which had a dampening effect on headline inflation in December 2022, switched to an upward effect in December 2023. By contrast, core inflation declined further to 3.5%. Annual inflation is expected to have averaged around 6% in 2023. According to the Bundesbank, inflation is showing an improvement and was revised down in the new December forecast to 2.7% this year and 2.5% in 2025, due to an expected marked decline in energy and food price inflation. The new CF outlook is somewhat more optimistic, with prices expected to rise by 2.5% this year and 2.1% next year. Industrial producer prices fell again in year-on-year terms in November (namely by almost 8%).

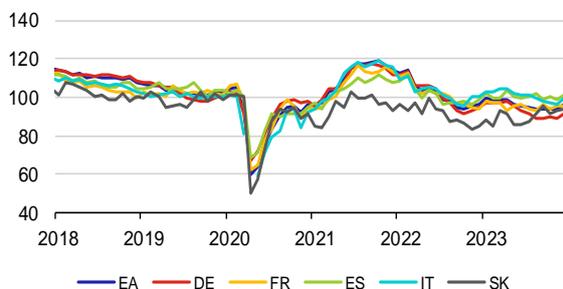
GDP growth in selected euro area countries in 2024 and 2025, %



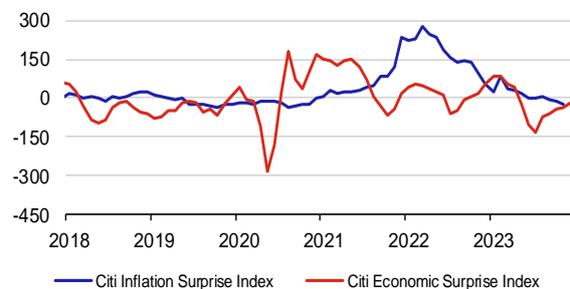
Inflation in selected euro area countries in 2024 and 2025, %



ESI leading indicators



Economic and inflation surprises in the euro area, %



Inflation expectations based on 5 year inflation swap and SPF

	EA	DE	FR	ES	IT	SK
10/23	93.7	89.8	94.1	100.4	97.1	91.5
11/23	94.0	89.2	95.9	99.0	96.7	93.5
12/23	96.4	91.6	95.4	101.4	99.3	94.2

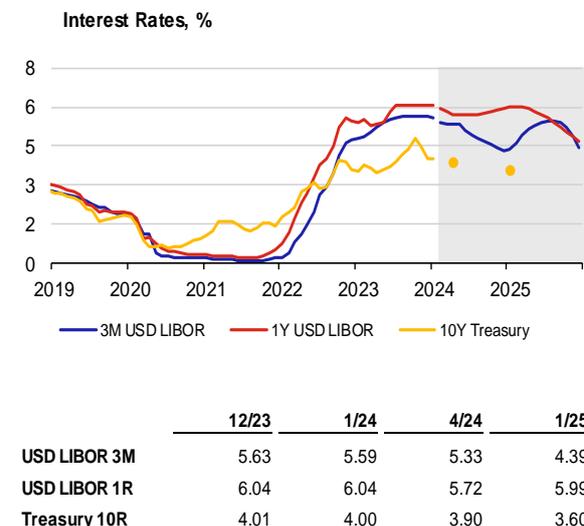
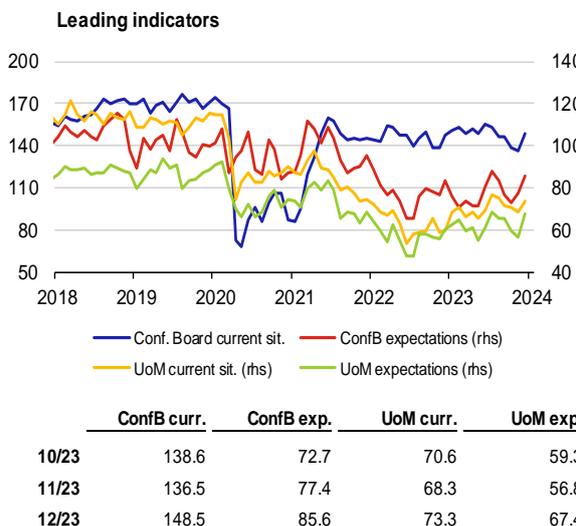
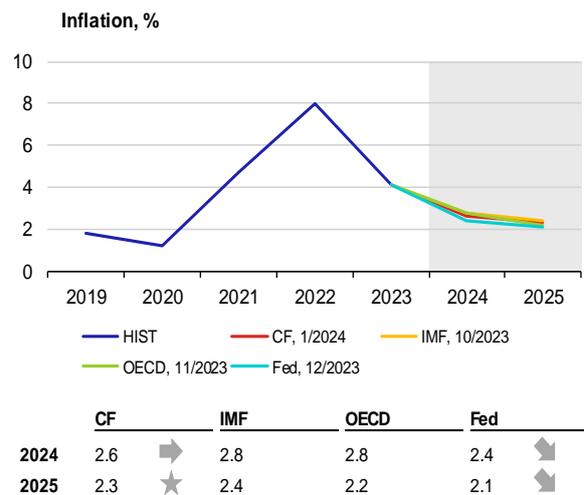
	5y5y	SPF
10/23	2.51	2.14
11/23	2.42	2.14
12/23	2.37	2.14

### III.3 United States

**The USA is trying to defend trade routes through the Suez Canal.** Geopolitical tensions are rising in the Middle East. US President Joe Biden has labelled the Yemeni rebels supported by Iran as terrorists, as they have been attacking commercial ships in the Red Sea since November because of the Israeli operation in the Gaza Strip. The USA, in cooperation with other countries, is calling for respect for international law and the protection of trade routes.

**The US economy is expected to grow by around 1.4% this year and accelerate slightly in 2025.** Many analysts had expected a recession in the USA in 2023, but in the end this did not happen and the economy conversely grew at a very solid pace compared with other advanced economies. Consumption by households, who were willing to draw on their reserves, played an important role, as did government investment. Presidential elections will be held this autumn, so the fiscal stimulus can be expected to continue. The currently restrictive monetary policy stance should meanwhile be eased as inflation and inflation expectations come down gradually.

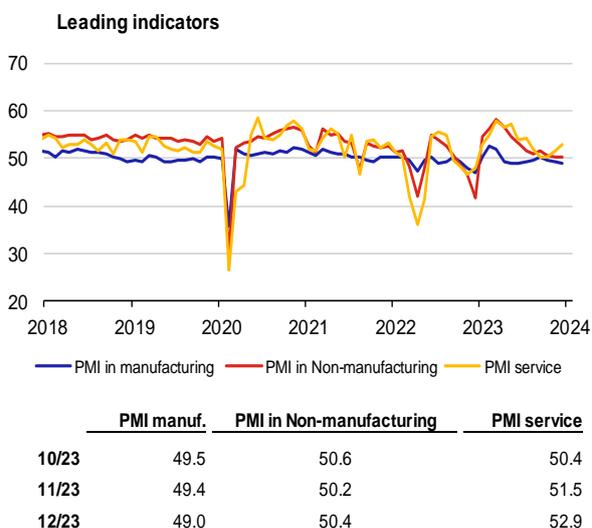
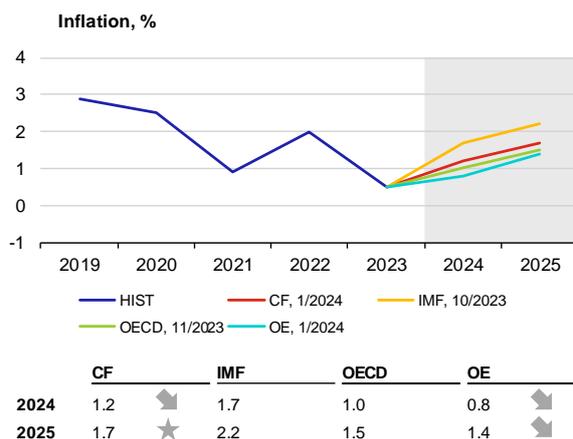
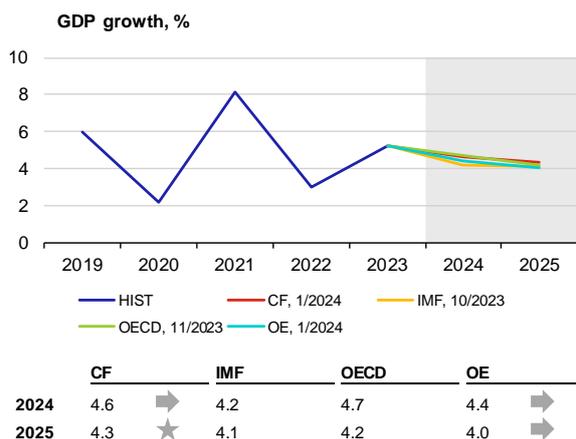
**The Fed would like to achieve a soft landing this year and is preparing the markets for rate cuts.** As expected, the central bank left rates unchanged at its December meeting, and Fed Chairman Jerome Powell's speech was dovish. The incoming inflation figures were very positive, but the labour market has not cooled markedly so far. This is increasing the upside risks to inflation and the uncertainty regarding the timing of monetary policy easing. The markets expect the first rate cut to come in March, although the November inflation figure of 3.4% took them by surprise (3.2% had been expected) and gave them the jitters. The CF analysts most frequently expect the first cut to be made in June. The monitored institutions' inflation outlooks are similar – inflation is expected to be around 2.5% this year and to fall closer to the inflation target but remain above it next year..



### III.4 China

**China's economy grew by 5.2% in 2023, in line with the government's target, despite weak external and domestic demand.** Chinese exports recorded a year-on-year decline last year for the first time since 2016. In addition, China faced rising local government debt and a property crisis. Expectations that a post-pandemic reopening of the Chinese economy would drive the global economy thus ultimately failed to materialise. The manufacturing PMI was below 50 points, i.e. in the contraction band, for most of the year, including December. A trend of weakening economic activity was also observed in non-production sectors, where the PMI index stood at just 50.4 points at the end of last year. By contrast, the service sector was the best performer last year. According to the Caixin index, it rose further to 52.6 points in December, its highest level in seven months. Although the anti-pandemic restrictions were lifted at the end of 2022, consumer confidence remains subdued. This also reflects the economic priorities of the Chinese government for this year, set in December, namely supporting domestic demand, developing strategic sectors and dealing with the property crisis. According to the CF analysts' July outlook, the annual growth rate of the Chinese economy will reach 4.6% this year and slow to 4.3% next year.

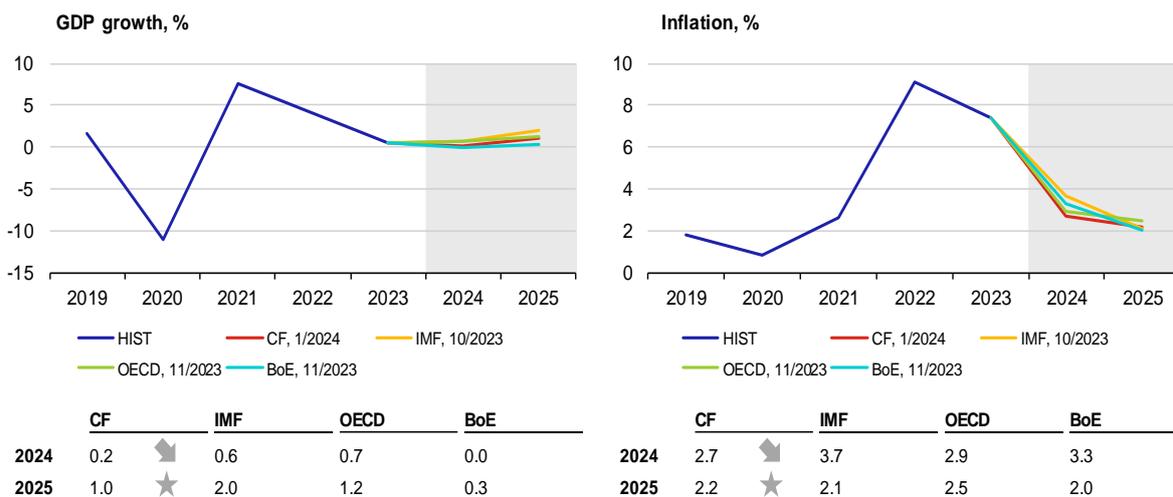
**Consumer prices were flat last year, while producer prices fell significantly further.** The Chinese government introduced a number of minor stimulus measures in 2023, including easing policy rates and improving access to credit in strategic sectors. The Chinese economy fell into deflation in July. Since then, prices have been flat or falling every month except August. Consumer prices decreased by 0.3% year on year in December and the inflation rate for 2023 as a whole was just 0.2%, well below the Chinese central bank's target of 3%. The January CF outlook expects consumer prices to grow by 1.2% this year and 1.7% next year. Producer prices, which have been strongly affected by global commodity prices, have been falling year on year since October 2022. The end of last year, when they declined by 2.7%, was no exception. In 2023 as a whole, producer prices fell by 3% on average.



Source: Bloomberg

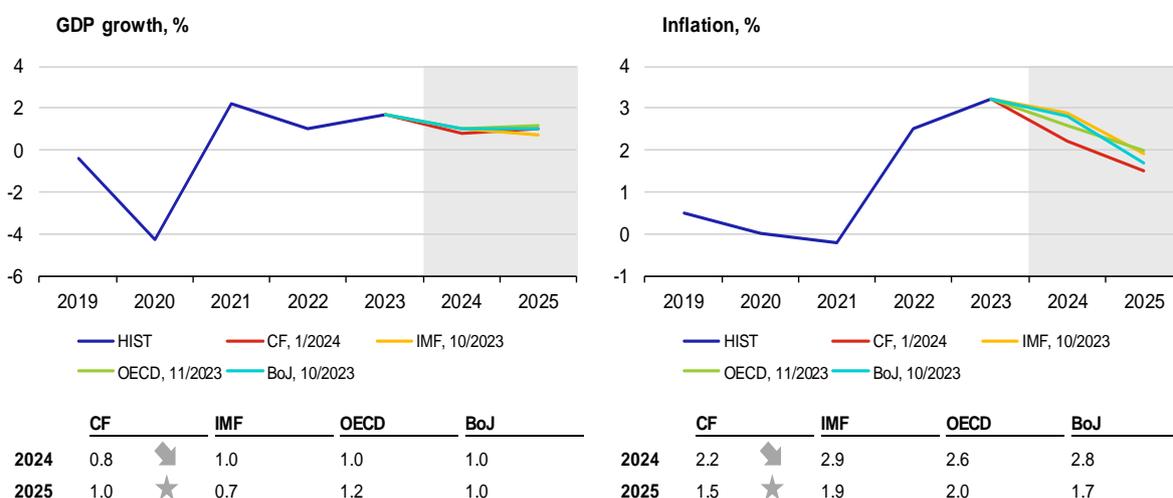
### III.5 United Kingdom

**The slight economic downturn in Q3 ultimately implies an increased risk of a technical recession in the second half of 2023.** The downward revision from stagnation to a 0.1% decline in GDP was due mainly to lacklustre business investment and weak consumer spending. The pressure on the BoE to start easing monetary policy is thus increasing, also due to falling consumer price inflation. However, the policy rate was left at 5.25% at the December meeting. In addition, the BoE pointed out that it would not cut rates hurriedly given its efforts to hit the 2% inflation target. Annual inflation stood at 3.9% in November, pushed down mainly by transport, recreation and culture and by food. Core inflation slowed to 5%. According to the new CF forecast, inflation will slow from almost 3% this year to 2% next year. The composite PMI rose to 52.1 points at the year-end. Growth in private sector production thus reached a six-month high. Faster output growth in sector offset a further decline in manufacturing.



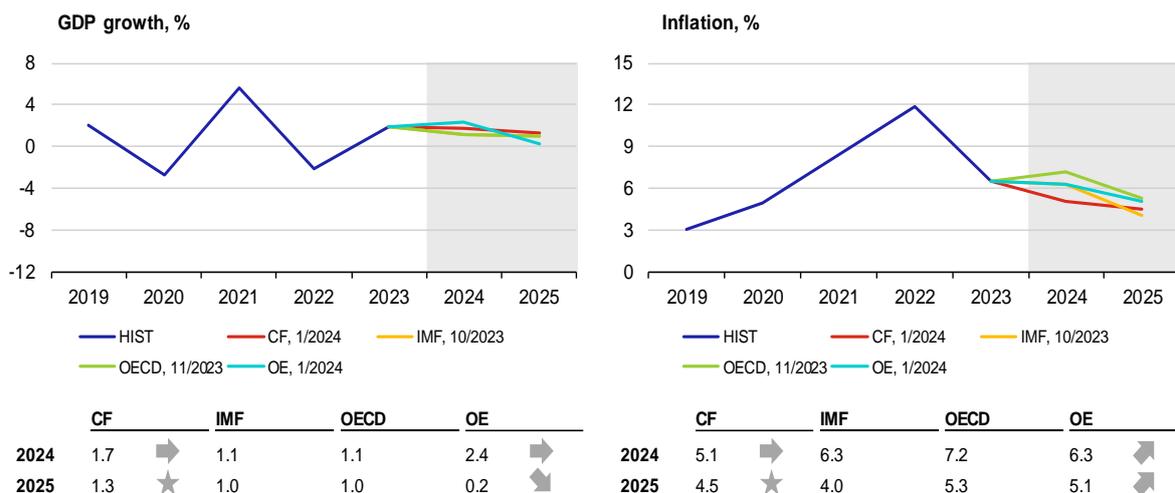
### III.6 Japan

**Core inflation in Japan climbed to a 32-year high, but the first signals of easing domestic price pressures are emerging.** At 2.5% in November, headline inflation was well below its January 2023 peak. However, it is being strongly affected by declining growth in prices of imported energy commodities and food. Fundamental domestic price pressures have generally been mounting, peaking in November with year-on-year growth in core prices (excluding food and energy) exceeding 3% for the first time since April 1992. Other indicators of fundamental price growth are also close to long-term highs, but median inflation and the share of consumer basket items whose prices went up dropped slightly for the first time in November. The six-month moving average of (year-on-year) wage growth slowed again to 1% in November following growth of over 2% in spring 2023. In December, the BoJ decided to leave monetary conditions extremely accommodative. The market response was a weakening of the yen and further growth in Japanese stock prices to historical highs.



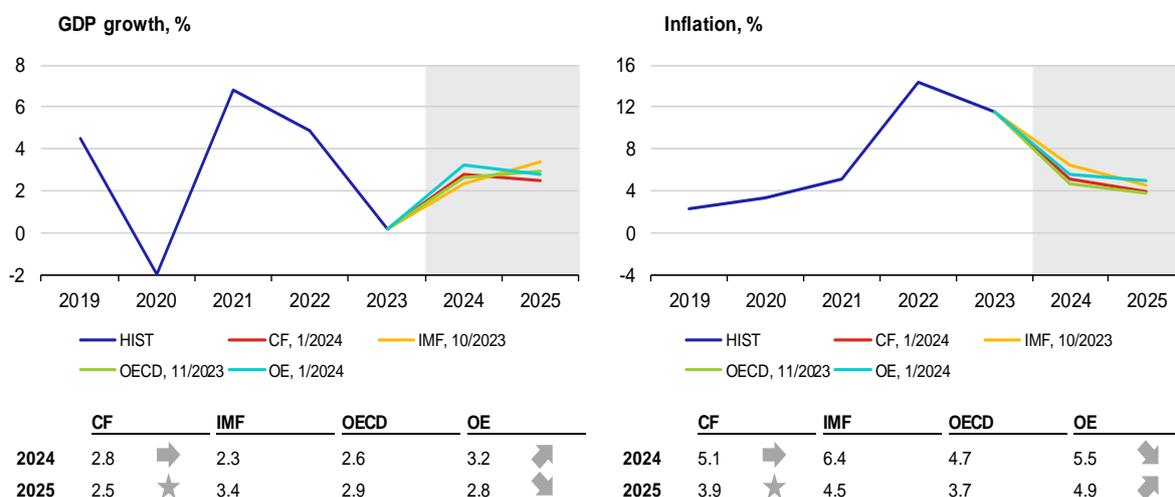
### III.7 Russia

**Inflation in the Russian Federation is not only a political, but also a major economic topic again.** Inflation continues to accelerate. Its annual rate was 7.5% in November, while the central bank’s inflation target is 4%. In month-on-month terms, consumer prices rose by 1.1%, and their growth has been elevated since the summer. The same is true of core inflation. The central bank raised its key rate to 16% at its December meeting in response to the growth in prices. A presidential election is to be held in Russia early this year. As a result, the incumbent president Vladimir Putin is focusing on the issues troubling households the most – inflation, unemployment and low wages. According to CF estimates, the economy grew by 1.9% last year. The growth is expected to slow slightly to 1.7% this year and then to 1.3%. However, the war is making estimates very uncertain. A survey of Bloomberg analysts, for example, suggests that real GDP grew by as much as 3% in 2023.



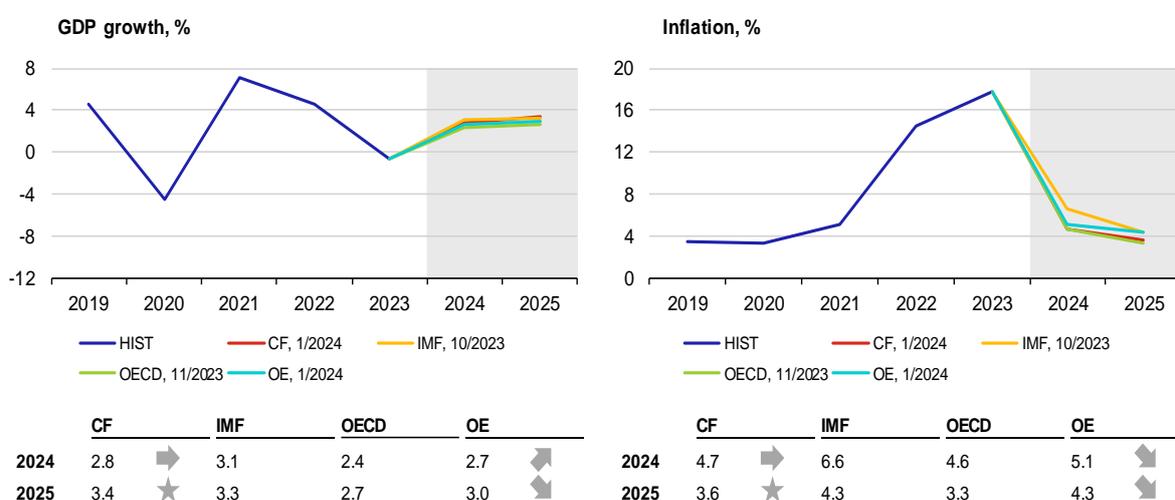
### III.8 Poland

**The Polish central bank left its reference rate at 5.75% in January due to an uncertain inflation outlook.** This decision was mostly expected by analysts. Inflation slowed from 6.6% to 6.1% in December, but the re-introduction of VAT on food and the government’s unclear stance on the regulation of energy prices remain risks. Annual food price inflation slowed and fuel prices continued to fall, while growth in electricity and gas prices picked up. In month-on-month terms, prices went up by 0.1%. Producer prices fell for the fifth consecutive month in November (by 4.7% year on year), most of all in manufacturing (by 7.2%). According to the S&P Global PMI leading indicator, the situation in manufacturing was improving rapidly in the second half of 2023 but deteriorated in December. The indicator has thus been in the contraction band for 20 months now. GDP rose by 0.5% year on year in 2023 Q3 following two previous declines. According to CF, economic growth will pick up further to 2.8% and 3.5% on average this year and the next respectively. According to CF, inflation will slow from 11.5% last year to an average of 5.1% this year and continue to decline to 3.9% next year.



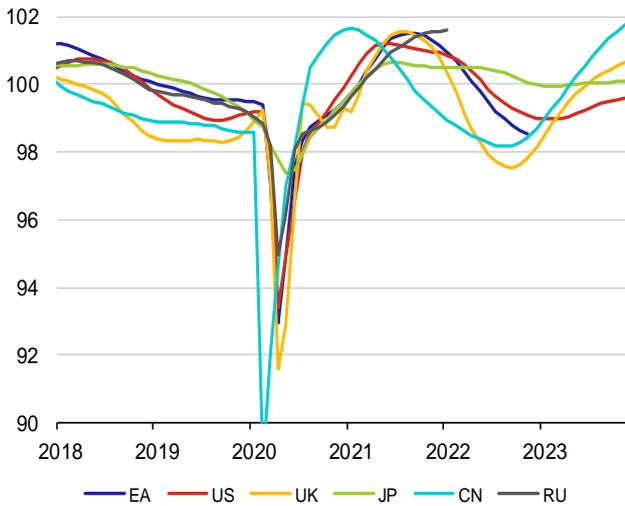
### III.9 Hungary

**In line with market expectations, the Hungarian central bank cut its key interest rate by a further 0.75 pp to 10.75% at its December meeting in response to favourable price developments.** Annual inflation slowed from 7.9% to 5.5% in December, the lowest level since September 2021. Energy prices declined and growth in food prices slowed sharply. Core inflation fell to 7.6%. Unemployment stood at 4.3% in September–November, up from 3.8% a year ago. Annual wage growth slowed only slightly to 14% in October. The current account showed a surplus in 2023 Q2 and Q3. Although the Hungarian PMI has been improving since July, staying at slightly expansionary levels since October, industrial production fell for the eleventh consecutive month in November (the year-on-year decline deepened from 3.2% to 5.8% and the month-on-month one was 2.3%) in most sub-sectors. Retail sales dropped year on year for the twelfth month in a row in November (but the pace of decline slowed from 6.5% to 5.4%, while in month-on-month terms the sales volume rose by 0.8%). Producer prices recorded the fourth successive year-on-year drop (of 6.6% in November, the same as the previous month; prices rose by 0.8% month on month). Prices in manufacturing fell by 3.5% year on year. The annual decline in GDP slowed from 2.4% to 0.4% in Q3. According to the December CF, GDP will switch to growth at the end of 2023. The growth will strengthen further to 2.8% in 2024 and 3.4% in 2025 on average. CF expects inflation to fall from 17.6% to 4.7% in 2024 and 3.6% in 2025.

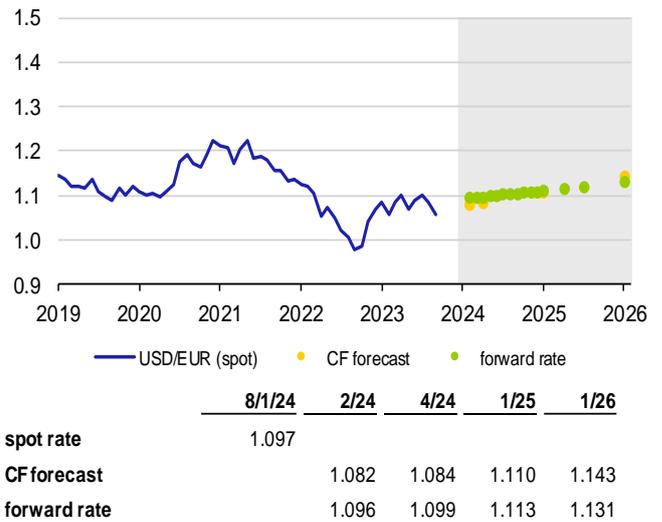


### IV. Leading indicators and exchange rate outlooks

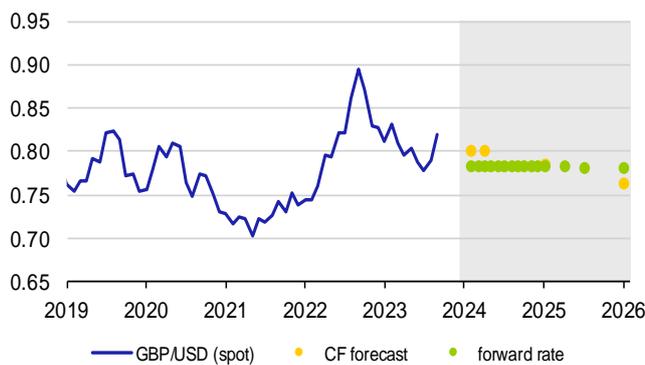
OECD Composite Leading Indicator



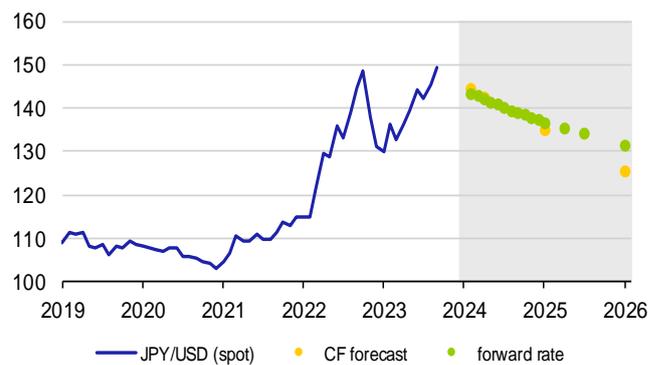
The US dollar (USD/EUR)



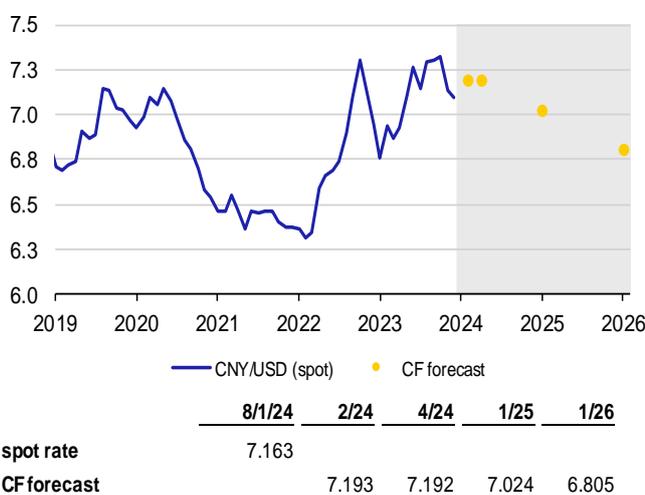
The British pound (GBP/USD)



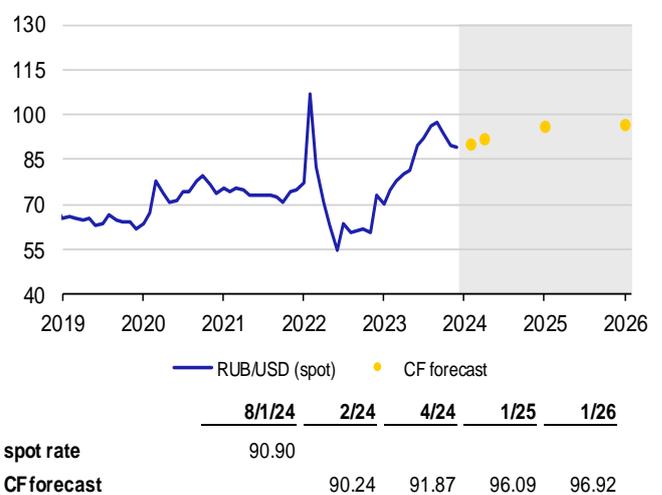
The Japanese yen (JPY/USD)



The Chinese renminbi (CNY/USD)



The Russian rouble (RUB/USD)



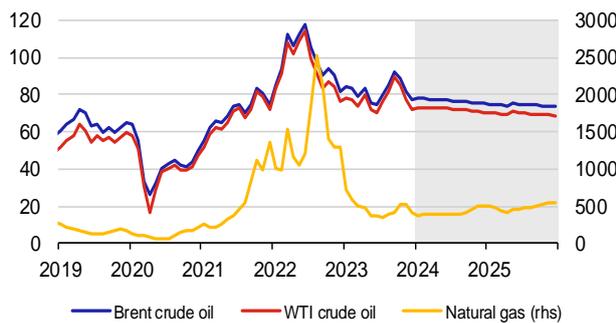
Note: Exchange rates as of last day of month. Forward rate does not represent outlook; it is based on covered interest parity, i.e. currency of country with higher interest rate is depreciating. Forward rate represents current (as of cut-off date) possibility of hedging future exchange rate.

### V.1 Oil

**The Brent crude oil price has been fluctuating mostly between USD 75 and USD 80 a barrel since December, but its outlook remains falling.** In the first half of December, oil prices were pushed down by unexpectedly strong oil exports from non-OPEC+ countries (the USA, Brazil and Guyana) and Iran and by concerns about weakening demand. There was also a lack of trust that OPEC+ countries would comply with their commitment to cut production further. The IEA lowered its outlook for oil demand in 2023 Q4 by almost 400,000 barrels a day due to weakening economic activity. It expects growth in demand for oil to drop to one-half on average in 2024 (i.e. around 1.1 million barrels a day). In the second half of December, by contrast, the oil price was supported by attacks on ships in the Red Sea by Yemeni rebels, which led to an increase in shipping costs. The higher prices were also due to signals that the Fed had ended the cycle of interest rate increases. At the start of this year, however, oil prices came under pressure again. Concerns arose due to a sharp cut in selling prices for February by Saudi Arabia, which may indicate a deterioration in market fundamentals. However, this was counteracted by a drop in oil production in Libya and an escalation of tensions in the Middle East. Large banks are mostly lowering their oil price forecasts for this year. The analysts cannot agree on how long OPEC+ will have to maintain reduced production.

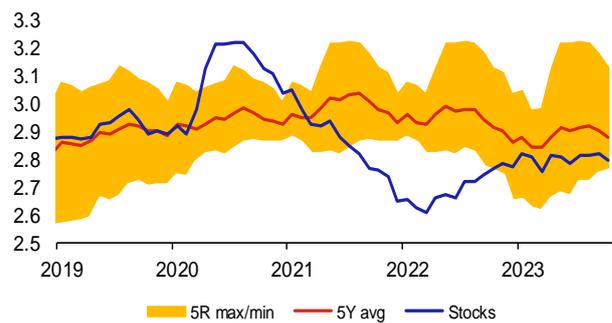
In early January, the market curve for Brent crude oil futures was signalling prices of USD 75 and USD 72 a barrel at the end of this year and the next respectively. The EIA continues to expect an oil shortage on the market in February and March due to limited production by OPEC+, which will cause the price to rise gradually to USD 85 a barrel in March and April. This will be followed by a period of relative balance between supply and demand, followed by a slight excess of oil in the market in 2025. According to the EIA, the Brent price will thus fall to USD 81 a barrel at the end of this year and USD 78 a barrel at the end of next year. The January CF expects a Brent price of USD 79.6 a barrel one year ahead.

**Outlook for prices of oil (USD/barrel) and natural gas (USD / 1000 m<sup>3</sup>)**

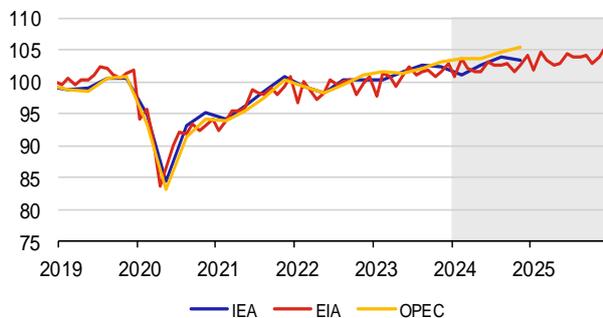


	Brent	WTI	Natural gas
2024	76.65	72.04	421.03
2025	74.37	69.65	488.10

**Industrial stocks of oil and oil products in OECD (bil. barrel)**

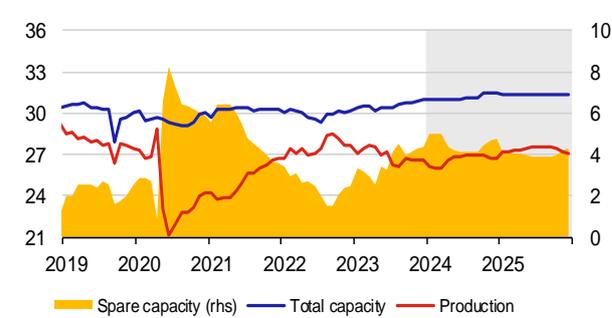


**Global consumption of oil and oil products (mil. barrel / day)**



	IEA	EIA	OPEC
2024	102.80	102.47	104.35
2025		103.68	

**Production, total and spare capacity in OPEC countries (mil. barrel / day)**



	Production	Total capacity	Spare capacity
2024	26.63	31.12	4.49
2025	27.35	31.37	4.02

Source: Bloomberg, IEA, EIA, OPEC, CNB calculation

Note: Oil price at ICE, average natural gas price in Europe – World Bank data. Future oil and gas prices (grey area) are derived from futures. Industrial oil stocks in OECD countries – IEA estimate. Production and extraction capacity of OPEC – EIA estimate.

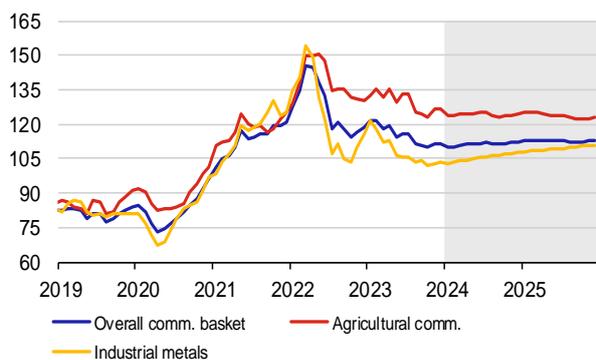
## V.2 Other commodities

**The price of natural gas in Europe was mostly just above EUR 30/MWh in the first half of January.** The short spell of icy weather has not led to a major price rise so far. LNG supplies are stable and European gas stocks remain at comfortable levels thanks to an above-average warm start to the winter. Demand from the chemical industry also remains weak. Rising demand for natural gas in China remains a risk to gas prices in Europe. This could increase tensions in the global LNG market, which would lead to a rise in gas prices in Europe. The price of coal for the European market has been falling steadily since mid-October, in line with the decline in gas prices.

**The industrial metals price index has been fluctuating with no trend within a narrow band since November.** Prices of most basic metals rose slightly in December as signals started to emerge that the Fed had ended the cycle of interest rate increases. The US dollar weakened as a result, and both these factors generally boosted demand for commodities. However, the J.P.Morgan Global Manufacturing PMI cooled down the optimism in early January, as it decreased again in December following a previous promising increase. Prices of iron ore and steel also fell. They had risen sharply in November and December in response to the Chinese government's policy of stimulating investment in infrastructure. However, Chinese steelmakers' margins are currently narrowing, signalling a slowdown in demand.

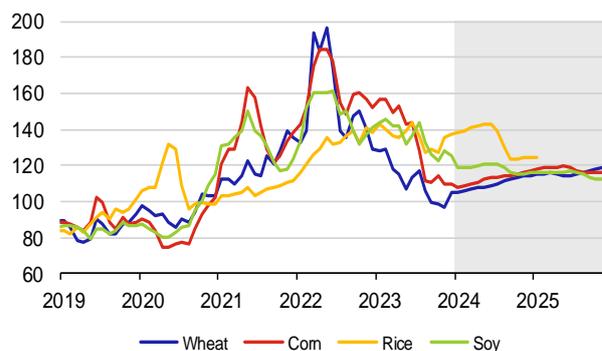
**The food commodity price index remained elevated in December but dropped sharply in the first half of January.** Despite high demand from China, wheat prices fell in January due to strong exports from the USA and Russia. Good weather in Brazil led to a decline in prices of sugar, coffee, corn and soy.

Non-energy commodities price indices



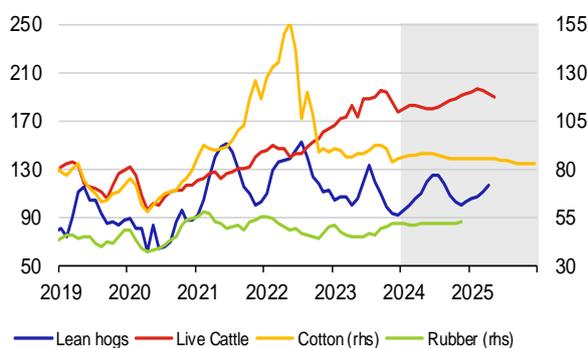
	Overall	Agricultural	Industrial
2024	111.3 ↘	124.2 ↘	105.5 ↗
2025	112.7 ★	123.7 ★	109.5 ★

Food commodities



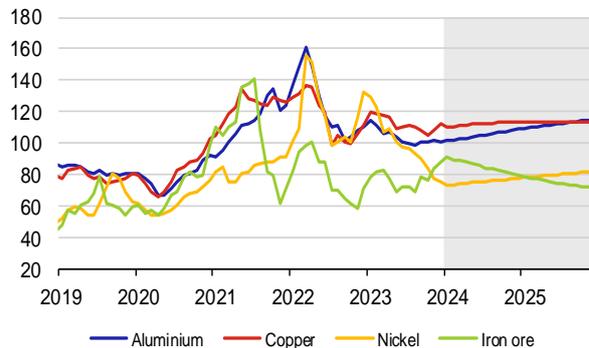
	Wheat	Corn	Rice	Soy
2024	109.8 ↘	112.9 ↘	134.3 ↗	118.4 ↘
2025	116.3 ★	117.6 ★	124.9 ★	115.1 ★

Meat, non-food agricultural commodities



	Lean hogs	Live Cattle	Cotton	Rubber
2024	109.0 ↘	184.0 ↘	86.4 ↗	51.6 ↗
2025	109.4 ★	193.6 ★	84.1 ★	

Basic metals and iron ore



	Aluminium	Copper	Nickel	Iron ore
2024	105.4 ↗	112.3 ↘	75.9 ↘	85.3 ↘
2025	112.6 ★	113.4 ★	80.3 ★	75.1 ★

Source: Bloomberg, CNB calculations.

Note: Structure of non-energy commodity price indices corresponds to composition of The Economist commodity indices. Prices of individual commodities are expressed as indices 2010 = 100.

## The fading of the inflation tsunami: Causes and outlooks<sup>1</sup>

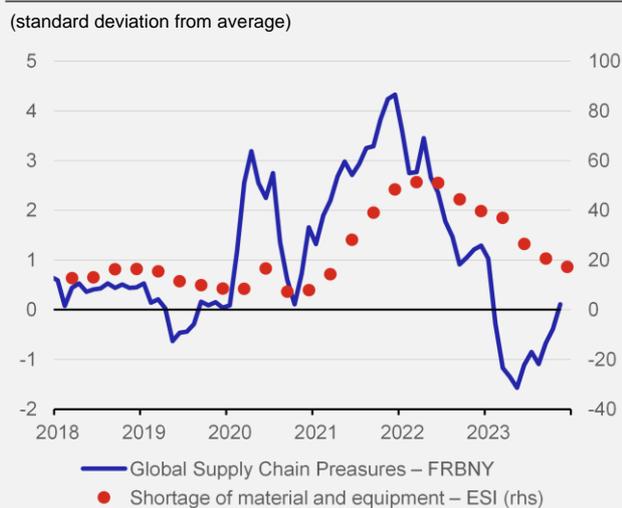
The early 2020s saw a series of long-unseen shocks in rapid succession that caught us off guard (the Covid-19 pandemic, the energy and security crises related to Russia's attack on Ukraine). They resulted in an unprecedented surge in prices. On the supply side, the main causes of this surge include problems in global supply chains and massive increases and subsequent volatility in energy and commodity prices. Price increases were also stimulated by the demand side of the economy due to the shift in demand from non-tradables (part of the closed services sector) to tradables (electronics, for example). Demand stimuli were supported not only by a generous and relatively broad-based expansionary fiscal policy, but also loose monetary policy. Firms passed the price shock on to their customers in the form of higher prices and consumer sentiment deteriorated due to high inflation. This article sets out to give a brief summary of the factors underlying the unusually strong surge in inflation and, using the available data on firms' pricing behaviour, demonstrate that the subsiding wave of inflation should really be a thing of the past unless another external shock hits in the near future.

### Why was there an inflation tsunami?

A period of relative calm came to an end in early 2020. The Covid-19 shock followed by the energy shock – amplified by Russia's aggression in Ukraine – led to an unprecedented sharp rise in prices. In the language of meteorologists, the shocks in the commodity, production and distribution sectors across countries and continents triggered an inflation tsunami. The tsunami swept through the majority of countries in the world, hitting Europe perhaps even harder than elsewhere. There are two main reasons for this: First, the vast majority of European countries are net importers of energy and commodities (which are traded on world markets in dollar and not in euro, the domestic currency of most European countries). Second, European countries are geographically closest to the war in Ukraine and, at the same time, were (perhaps irresponsibly) dependent on energy supplies from Russia. However, it is important to look at the detailed causes of extreme price growth in the evolution of supply (particularly by firms) and demand (from households, firms and the state) and their interaction amid a highly visible role of governments and central banks<sup>2</sup>.

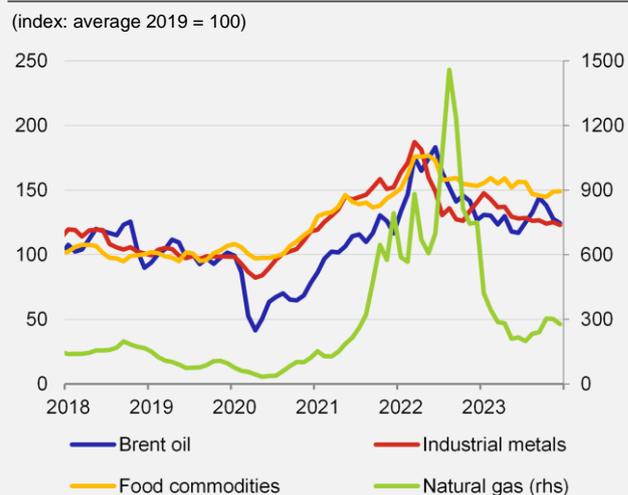
**On the supply side, global inflation was at first triggered by gradually increasing problems in global supply chains.**<sup>3</sup> These had already started to appear just before the outbreak of the global Covid pandemic. They mainly involved problems in container transport, which were magnified by the temporary obstruction of the Suez Canal. The closure of plants during anti-pandemic shutdowns led to shortages of some components, especially chips. However, the growth in chip prices was also adversely affected by fires at chip manufacturers in Japan and Taiwan. This also showed that quickly building a chip-producing plant is not a matter of months, but of years. Chart 1 shows the monthly index of global supply

**Chart 1 – Supply chain pressure indices**



Source: Fed, European Commission.

**Chart 2 – Prices of selected commodities**



Source: Bloomberg.

<sup>1</sup> Authors: Luboš Komárek and Petr Polák. The views expressed in this article are those of the authors and do not necessarily reflect the official position of the Czech National Bank. The authors would like to thank Soňa Benecká, Jan Hošek, Filip Novotný for their inspiring comments and discussions.

<sup>2</sup> Different views on shocks caused by covid-19 are presented by e.g. Kucharčuková a kol. (2022), González-Torres a kol. (2023) nebo De Santis (2023).

<sup>3</sup> Firms worldwide applied the just-in-time delivery system, which they have now replaced with the just-in-case model.

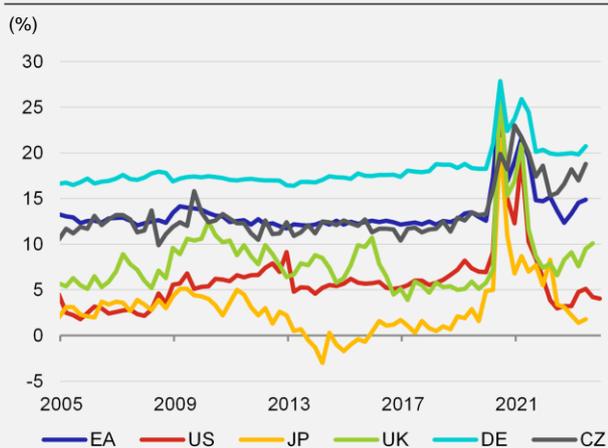
chain pressures compiled by the New York Fed<sup>4</sup> and the sentiment index compiled by the European Commission. The chart shows that the start of 2020 saw the first, very severe supply chain crisis which peaked in late 2021 and early 2022. Pressures have gradually eased since then and the situation only returned to normal at the start of 2023.<sup>5</sup>

**The second major factor underlying the inflation tsunami on the supply side was a surge in prices of commodities** (industrial metals and food commodities) and energy (natural gas, oil and electricity accompanied by a sharp increase in prices of emission allowances). The growth in energy prices escalated mainly due to Russia's attack on Ukraine on 24 February 2022. This growth was also stimulated by increased demand, or rather, forced demand amid faster replenishment of gas storage facilities in individual countries. The demand was fuelled by concerns about keeping households and industry running, especially during the heating season. Chart 2 shows that the highest price increases were observed at the start of the second half of 2022. Countries ended their strong commodity dependence on Russia within a short period of time (this dependence was almost 100% for some countries and commodities), most of them doing so surprisingly quickly and successfully.

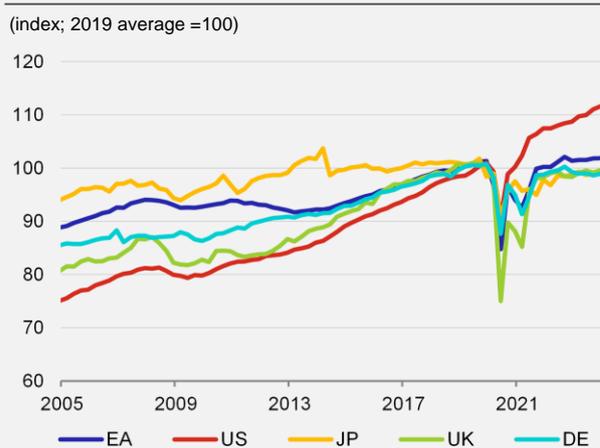
### Increased demand continued to stimulate inflation

**Epidemiological restrictions during Covid led to a sharp drop in demand for non-tradable goods** and activities involving larger numbers of people. The services sector was hardest hit. For a certain period of time, people were unable to travel, go to restaurants, attend sports events or meet up... The money saved as a result turned into "forced savings" and households' saving rate increased significantly (see Chart 3). People subsequently used these funds for items they had put off buying for a long time or things they urgently needed for day-to-day life during the Covid pandemic (such as laptops and other devices for childrens' online lessons during Covid, working from home, etc.). Following a forced decline in consumption due to shutdowns, consumption was re-channelled to the tradables sector which was, however, already burdened by the above-described problems on the supply side of the economy. This again stimulated inflation.

**Chart 3 – Household saving rate**



**Chart 4 – Household consumption**



**Demand was also significantly boosted by governments with their generous and overly broad-based support of households and firms** that received "free" money without having to produce anything. Increased government support, which is necessary and natural in times of crisis, and not only from the point of view of mainstream economics, had to be "by definition" reflected in a deterioration in public finances. However, to finance this support of households and firms, governments borrowed funds on financial markets at a non-zero interest rate, which raised their deficits and hence also debt burden. A look at the soundness of public finances across European countries shows that all countries have slipped into the "sick" category. For this reason, countries in the EU have temporarily stopped being assessed in terms of their compliance with the fiscal deficit criterion (the EC started to apply the general escape clause (GEC), as de facto all countries ceased to comply with the criterion by a significant margin and would thus be subject to excessive deficit procedures (EDP)). The central banks were not left behind with their support either, having loosened the monetary policy probably too much.<sup>6</sup>

<sup>4</sup> It uses data on sea and air transport costs, the Purchasing Managers' Index (PMI) and the ISM manufacturing index for seven economies (the euro area, China, Japan, South Korea, Taiwan, the UK and the USA) adjusted for demand effects.

<sup>5</sup> Pressures are currently rising due to the attack on Israel by the terrorist organisation Hamas, which indirectly led to assaults on cargo ships in waters near Yemen.

<sup>6</sup> See [https://www.cnb.cz/cs/o\\_cnb/cnblog/Menova-politika-centralnich-bank-v-reakci-na-epidemii-koronaviru/](https://www.cnb.cz/cs/o_cnb/cnblog/Menova-politika-centralnich-bank-v-reakci-na-epidemii-koronaviru/) for the overview of the measures.

The previous crises had a more or less symmetrical effect on economic sectors and had no clear “winners” and “losers”. However, the Covid period and the energy and security crises had a different effect.<sup>7</sup> We can see – and this is something we all vaguely remember – that there have been clear winners and losers since 2020. The losers are those parts of the services sectors which were particularly hard hit by the shutdowns, i.e. the above-mentioned travel and hospitality sectors, sports matches, cultural performances and other events for the public. The winners – some deservedly, others whose growth in profitability did not correspond to increased investment or other efforts – include the pharmaceutical industry (vaccines and medicines), the IT sector (hardware and software, including programmes for remote communication) and partly also the energy and banking sectors.<sup>8</sup> Price rises triggered by a drop in supply amid an almost simultaneous rise in demand were used by some firms to increase margins and their profitability disproportionately. As a result, a new entry was added to economic dictionaries – *greedflation*. The term expresses firms’ excessive profit-seeking at a time of steeply rising prices and a misuse of a specific market situation (where there are no other suppliers or at times of extreme demand compared to other times). Firms can afford to raise prices in such situations, as their market share does not decrease at the same time. Price increases were also “abnormally” accepted by consumers, which brings us to another new dictionary entry – *sympaflation*, i.e. shoppers’ empathic understanding of price increases. This higher tolerance of price increases was as a result of people’s understanding (keeping local bakeries and restaurants afloat, for example) of the difficult situation faced by entrepreneurs due to shutdowns during the Covid-19 pandemic (exhaustion of financial reserves) and their understanding of price increases (growth in commodity and energy prices).

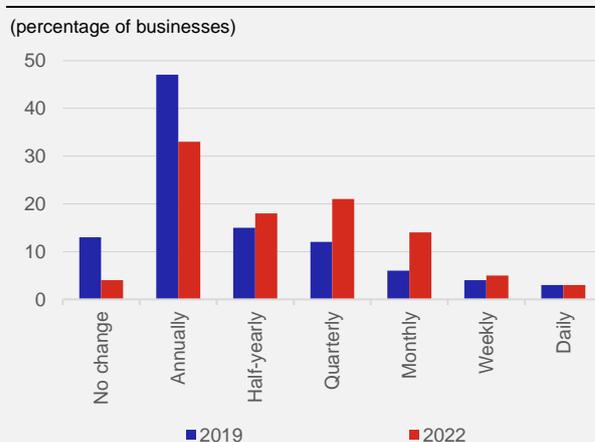
### Firms’ pricing policy

**The available literature shows that firms’ pricing policy used to be broadly stable but the period of high inflation led to visible changes in pricing.** The behaviour of firms in the euro area is documented in great detail in a study by Fabiani et al. (2005), which drew on a questionnaire survey among more than 11,000 firms from the entire euro area. The study finds, among other things, that about one-third of firms applied time-dependent rules in price setting, while the rest used state-dependent factors. At the same time, it was more important to look to the future than the past when setting prices, so expectations played a big role here. Most firms in the euro area changed their prices less often than three times a year, with changes being less frequent especially in the services sector. When GDP weights are applied, the study finds that around 40% of firms changed their prices once a year. It may come as a surprise to economists that firms relied mainly on mark-ups and less on competitors’ prices in setting prices. The results of the survey also confirmed that prices are rigid to a certain extent, as firms changed their prices less often than they reviewed them. The results of a microeconomic survey by Alvarez et al. (2006) reveal that prices in the euro area change at less than half the frequency<sup>9</sup> of those in the USA. Putting it simply, in both economies, price changes were most frequent in the energy and food sectors and least frequent in the services sector. According to the study, there is no evidence that downward price rigidity is more marked than upward price rigidity in the two economies (the exception being the services sector). If prices do change, the changes are significant.<sup>10</sup> The study also shows that firms consider implicit contracts and interactions on the market to be more important than menu costs.

**High inflation has forced firms to change their price more often, which is consistent with rational behaviour.**

Unfortunately, more recent surveys of price setting in the euro area are not available, and it would be too naive to expect nothing to have happened in the past 20 years. We can thus look for some indications in Bunn et al. (2023), who use data from surveys conducted regularly in the now non-EU Member State – the UK. The results of this survey show that even in 2019 (i.e. before the surge in inflation), the behaviour of firms in the United Kingdom was very similar to that of firms in the euro area. We can thus assume that company behaviour will be similar now and apply the results from the UK to the euro area. For example, the proportion of firms which set prices regularly and those which adjusted them in response to changes in external conditions was the same. Likewise, firms most often changed prices on an annual basis. However, the results of the 2022 survey showed that firms had started to change prices more often, with almost a quarter of companies stating that they change prices quarterly (see Chart 5).

**Chart 5 – Typical price change frequency**



Source: Bunn et al. (2023), Figure 3  
Note: UK data

<sup>7</sup> See, for example, the prestigious annual symposium of central bankers in Jackson Hole, which was devoted to [macroeconomic policy in an uneven economy](#) in 2021. The symposia held in 2022 and 2023 also touched upon this “uneven” effect from various perspectives.

<sup>8</sup> The proponents of windfall tax also used this argument to justify its introduction.

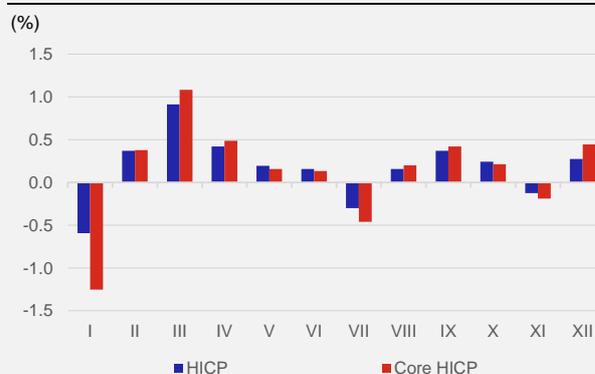
<sup>9</sup> The exception is (consumer electronics) prices in online shops; see Lünemann and Wintr (2011).

<sup>10</sup> The study also argues that the empirical results do not confirm the hypothesis of downward price rigidity.

**Firms that change prices more frequently also make more significant price changes.** However, price changes are applied with higher frequency in both directions, as these firms also lower their prices if inflation decreases. This is in line with the previously mentioned factor of mark-ups being crucial in determining pricing for firms. If prices of some inputs increase rapidly and firms want to maintain their mark-ups, they also raise their prices quickly, and vice versa. The high inflation observed in recent years resulted mainly from growth in commodity and energy prices. If we look at producer price inflation, we can see a very similar trend stemming from energy prices.

**The turn of the year may be the ideal time for a change in prices but historical evidence tells a different tale.** If up to now firms have changed prices most often once a year and 40% of them still do so regularly, we could assume that prices will always increase at the turn of the year and we will be able to observe the changes in the January inflation. However, this phenomenon does not apply to the euro area as a whole, although the situation varies from country to country. Nevertheless, a look at data makes it clear that month-on-month inflation follows a seasonal pattern (see Chart 6), i.e. there are months in which prices increase and months in which, conversely, they fall slightly. Paradoxically, on average, prices go down in January, which could be due to January sales. However, similar and even sharper decreases are observed in the case of core prices and there is no such thing as sales when it comes to services. The average month-on-month price change shows that upward repricing occurs most often in March.

**Chart 6 – Seasonality of month-on-month inflation in the euro area**



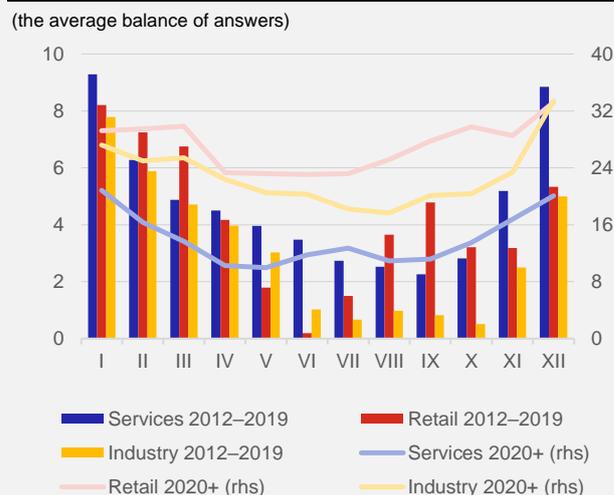
Source: Eurostat, authors' calculation  
Note: Seasonally unadjusted data.

**Electronic vignettes and their use – a solution for the future?** If electronic shelf labels linked to a retailer's information system were used on a larger scale, this may result in prices being changed more often and probably by smaller amounts on average, as the well-known effect of menu costs would be tied to minimum costs (for example, according to the price elasticities obtained for individual products with the aim of maximising a retailer's profit). One of the leading manufacturers of this system (Store Electronic System) sees the main benefit of the system in the above-mentioned guarantee of uniform prices in a shop and across shops (error minimisation), a reduction of operating repricing costs and above all the possibility of dynamically optimising everyday price strategies.

### Future price expectations

**The European Commission's survey may provide a forward-looking indicator of price changes in the euro area.** Chart 7 shows how firms' price expectations have changed over the recent inflation years. In the long period before the inflation wave caused by the Covid and energy crises, firms expected price changes to occur usually in spring. In addition, this share of companies was small overall, so the situation is different now. Not only has the share of firms expecting growth in prices in the next three months increased markedly in all the sectors under review and now represents about one-third of firms in retail, but expectations about price increases have been largely seasonal over the past three years and have been constant over time. The good news for price stabilisation is that if we look at seasonally adjusted data, we can see that no further price increases are expected in industry, for example, and those in retail fell sharply last year, and the situation is gradually returning to normal.

**Chart 7 – Firms' expectations about price changes**



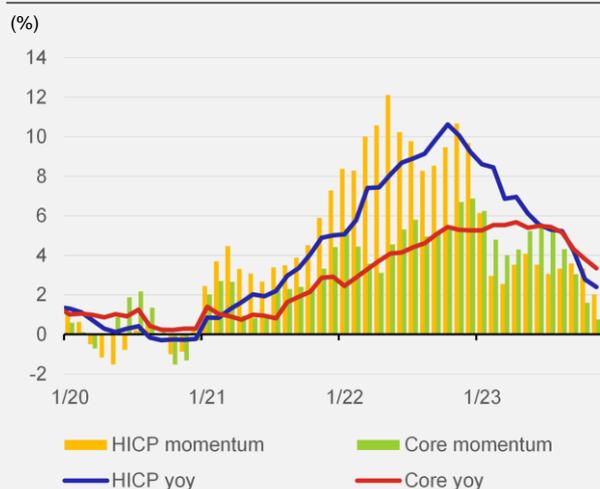
Source: European Commission, authors' calculations  
Note: Expectations about price changes in the next three months.

**The fact that the situation is returning to normal is evidenced by inflation momentum (see Chart 8).** In the previous paragraphs, we looked in detail at inflation in individual months from the perspective of month-on-month data. However, such data may contain large swings and high-frequency noise, and isolated effects may distort the overall view of price signals. The second view most often followed by the media is conversely the annual price change (i.e. current prices versus prices a year ago). With annual inflation, however, there is the risk that one-off changes, for example, would affect the figure for the whole of next year. As a result, annual inflation may not give an accurate picture of the actual price situation. The middle-of-the-road approach adopted by economists is the monitoring of the inflation momentum in the form of, for example, average month-on-month inflation for three months or

inflation over the past three months as compared to the previous three months. Such a view looks at short term developments and indicates the direction of price growth. Headline inflation in the euro area is thus beginning to approach the 2% inflation target and, from the point of view of the inflation momentum, it has already reached the target. Core inflation remains higher, but its momentum has also slowed very quickly.

**So how big will the next January repricing be in the euro area?** The data on retail price expectations from October 2023 can provide us with some clue (see Chart 9), as we found that, historically, these expectations have been a good indication of the actual January repricing in the past. The more retailers expected prices to go up, the bigger the price hikes. In October 2022, for example, almost 80% of firms in Germany expected prices to rise and the actual seasonally adjusted growth in the HICP was one of the highest since 2005 (+1.7% month on month). By contrast, prices in Germany usually grew at a rate of one-third to one-quarter in this period. The data would then suggest that the pace of repricing would return closer to the historical average in January 2024 (the arrow is pointing down and to the left), although it will remain slightly elevated (outside the main cluster of dots). A similar shift compared to January 2023 is also observed in other countries. The January repricing will thus be noticeably significant but no longer historically high.

**Chart 8 – Inflation momentum in the euro area**



Source: Eurostat, authors' calculation  
Note: Seasonally adjusted data. The momentum is the ratio of average inflation for three months to the average for the previous three months.

**Chart 9 – Expected January repricing in the euro area**



Source: Eurostat, European Commission, authors' calculations  
Note: Seasonally adjusted data.

## Conclusion

**The inflation tsunami was a result of the Covid, energy and security crises**, i.e. extreme shocks. The price growth was driven by factors underlying supply-side constraints (problems in global production chains, sharp growth in energy and commodity prices) and a shift in demand from non-tradables to tradables. The demand side of the economy was further boosted by too generous and broad-based fiscal policy, for which governments had to borrow funds. Public finance deficits rose sharply, which led to a renewed discussion about their sustainability in some overindebted euro area countries. The economy was also stimulated by a very loose monetary policy – the rates were not only low globally, but key central banks used unconventional policy measures as well.<sup>11</sup>

**Firms' pricing policy has changed compared to the pre-Covid period.** External factors forced firms to change prices more often, which resulted in a high pace of price changes. Some firms probably took advantage of reduced supply and elevated demand to raise prices disproportionately (greedflation). Anecdotal evidence also indicates that consumers' tolerance to price movements was higher than it would have been in "normal times". The good news for future inflation is that adverse external effects are already gradually fading, as is the inflation wave. Firms' expectations about price changes are thus also gradually changing. However, the current situation has implications for the future, when firms can be expected to change their prices more often.

**The forward-looking indicators show that inflation not only in the euro area has already eased.** If we look at firms' expectations in the euro area about price changes in the next three months, we can assume that the situation is gradually returning to normal and that firms are no longer worried about further major changes. At the same time, the inflation momentum is falling and inflation is expected to return to the ECB's 2% inflation target soon. Similar development can be seen also in other parts of the world, where the inflation is getting back to inflation targets.

<sup>11</sup> See e.g. [https://www.cnb.cz/cs/o\\_cnb/cnblog/Jak-hluboko-vlastne-klesly-urokove-sazby-a-co-bude-dal/](https://www.cnb.cz/cs/o_cnb/cnblog/Jak-hluboko-vlastne-klesly-urokove-sazby-a-co-bude-dal/)

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## Keywords

Inflation, pricing, price shocks

## JEL Classification

D23, E31, L11

## A1. Change in predictions for 2024

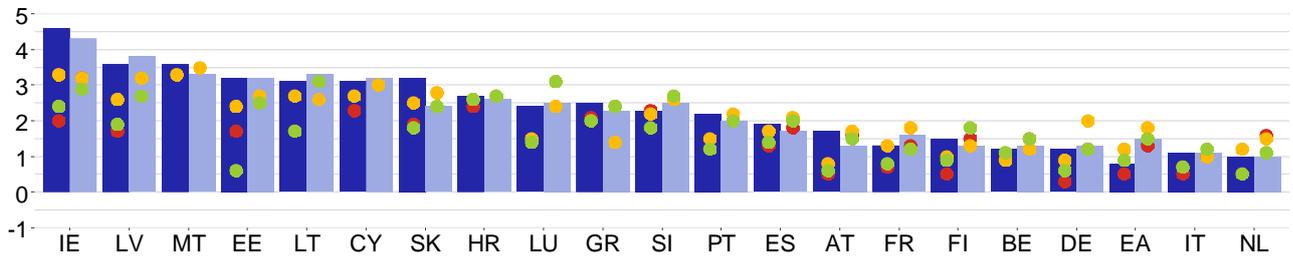
	GDP growth, %				Inflation, %			
	CF	IMF	OECD	CB / OE	CF	IMF	OECD	CB / OE
EA	0	-0.3	-0.2	-0.2	-0.2	+0.4	-0.1	-0.5
US	+0.2	+0.5	+0.2	-0.1	0	+0.5	+0.2	-0.1
UK	-0.1	-0.4	-0.1	-0.5	-0.4	+0.7	0	+1.0
JP	-0.1	0	0	-0.2	-0.1	+0.7	+0.5	+0.9
CN	0	-0.3	+0.1	0	-0.2	-0.5	-0.3	-0.7
RU	0	-0.2	+0.2	0	0	+1.7	+1.7	+0.2

## A2. Change in predictions for 2025

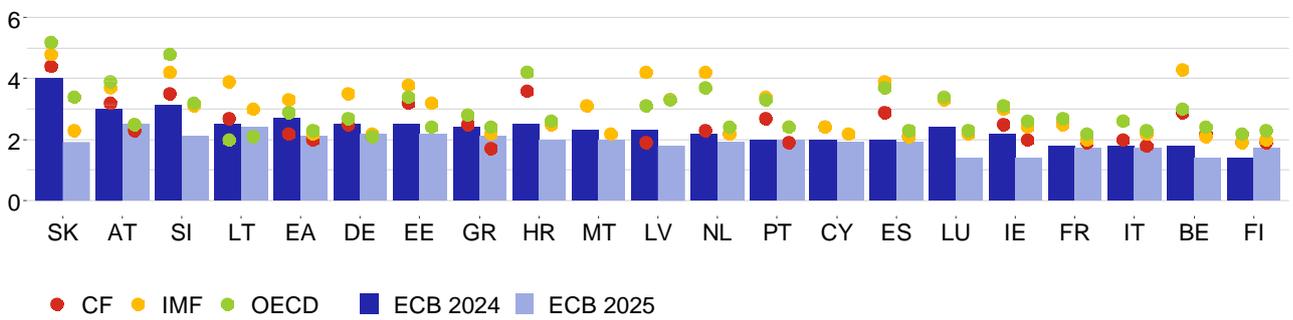
	GDP growth, %				Inflation, %			
	CF	IMF	OECD	CB / OE	CF	IMF	OECD	CB / OE
EA	0	-0.3	-0.2	-0.2	-0.2	+0.4	-0.1	-0.5
US	+0.2	+0.5	+0.2	-0.1	0	+0.5	+0.2	-0.1
UK	-0.1	-0.4	-0.1	-0.5	-0.4	+0.7	0	+1.0
JP	-0.1	0	0	-0.2	-0.1	+0.7	+0.5	+0.9
CN	0	-0.3	+0.1	0	-0.2	-0.5	-0.3	-0.7
RU	0	-0.2	+0.2	0	0	+1.7	+1.7	+0.2

### A3. GDP growth and inflation outlooks in the euro area countries

GDP growth in the euro area countries in 2024 and 2025, %



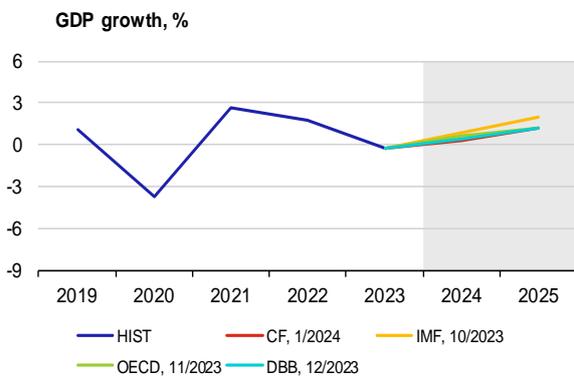
Inflation in the euro area countries in 2024 and 2025, %



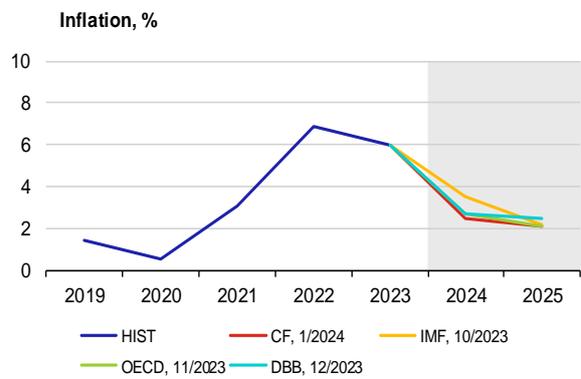
Note: Charts show institutions' latest available outlooks of for the given country.

### A4. GDP growth and inflation in the individual euro area countries

#### Germany

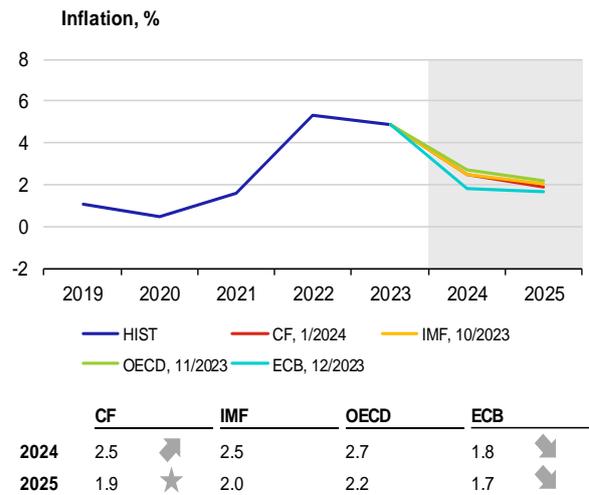
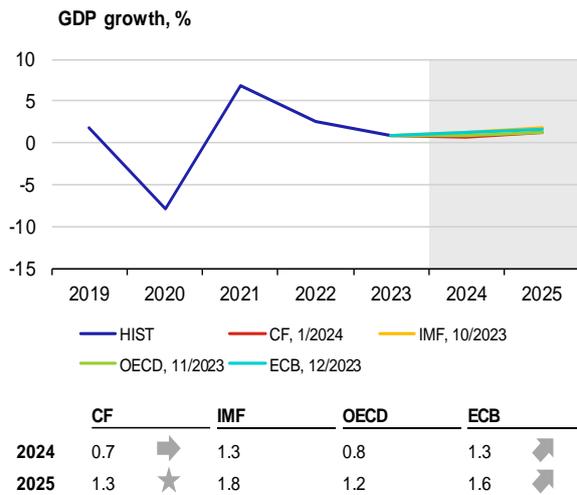


	CF	IMF	OECD	DBB
2024	0.3	0.9	0.6	0.4
2025	1.2	2.0	1.2	1.2

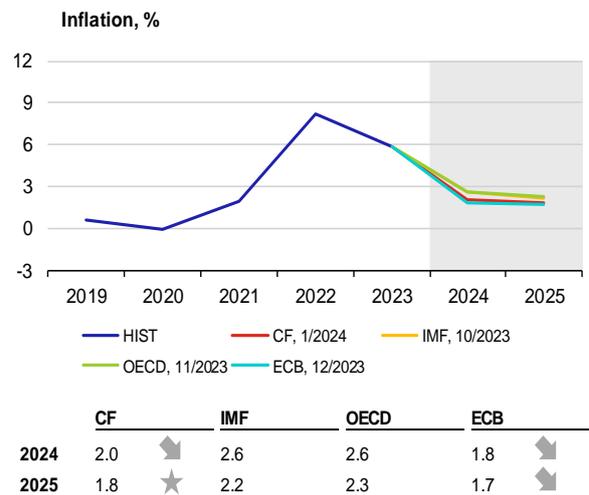
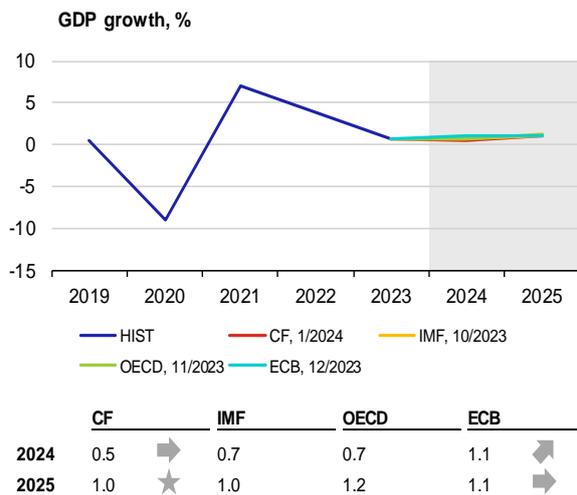


	CF	IMF	OECD	DBB
2024	2.5	3.5	2.7	2.7
2025	2.1	2.2	2.1	2.5

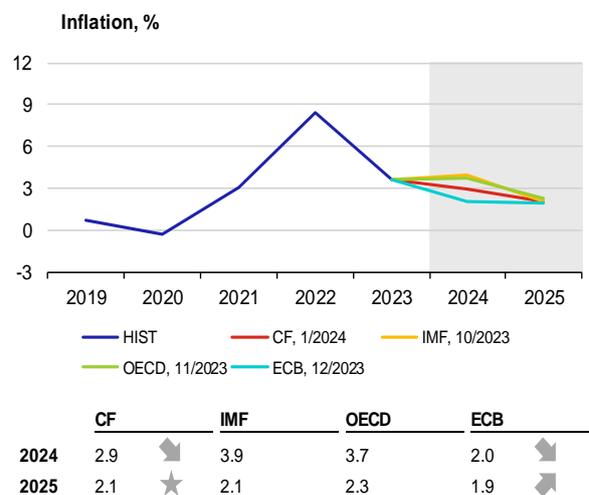
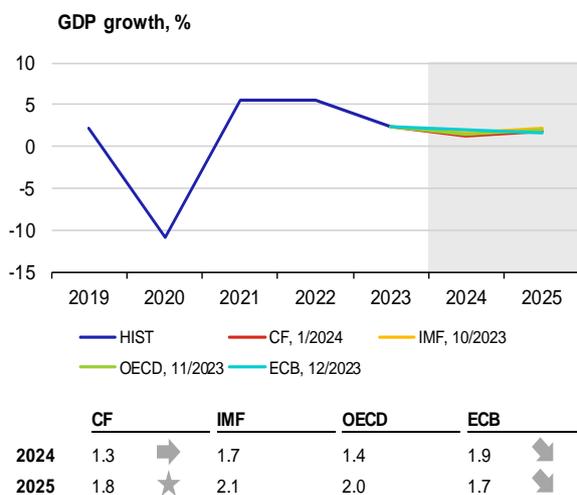
## France



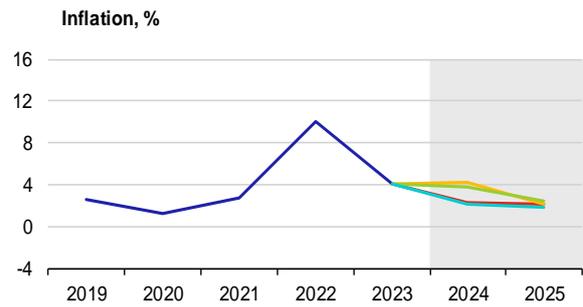
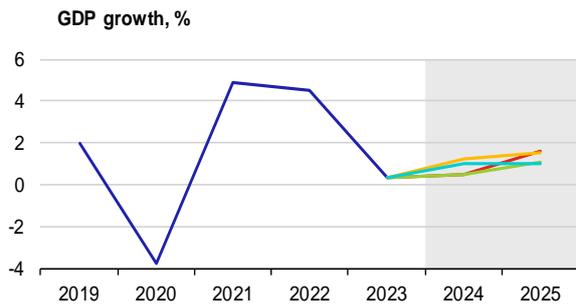
## Italy



## Spain



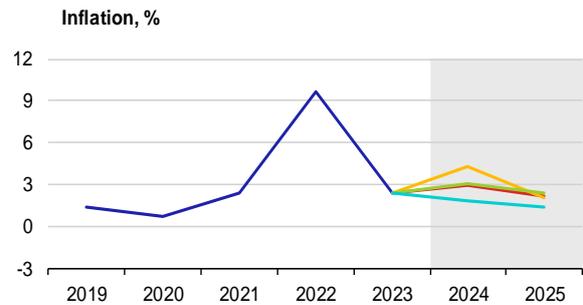
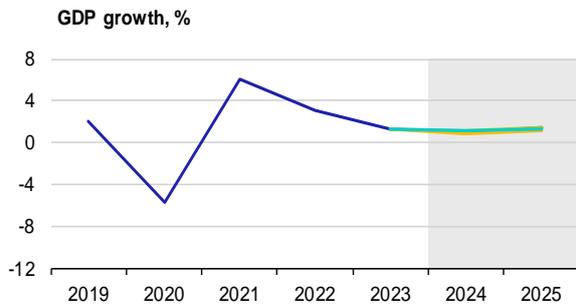
## Netherlands



	CF	IMF	OECD	ECB
2024	0.5	1.2	0.5	1.0
2025	1.6	1.5	1.1	1.0

	CF	IMF	OECD	ECB
2024	2.3	4.2	3.7	2.2
2025	2.2	2.2	2.4	1.9

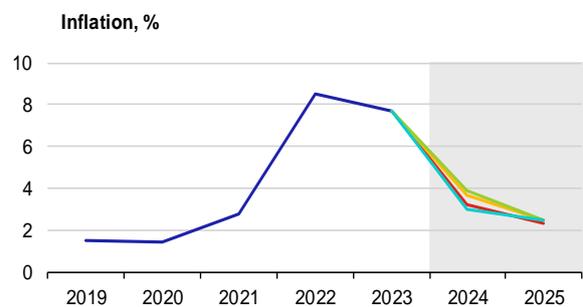
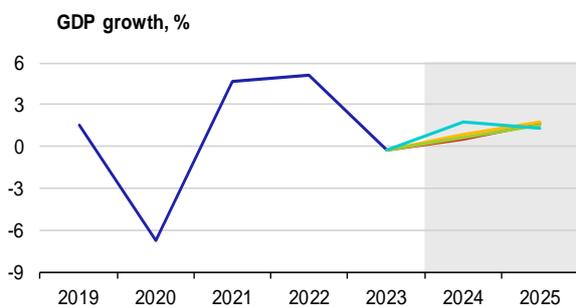
## Belgium



	CF	IMF	OECD	ECB
2024	1.0	0.9	1.1	1.2
2025	1.5	1.2	1.5	1.3

	CF	IMF	OECD	ECB
2024	2.9	4.3	3.0	1.8
2025	2.2	2.1	2.4	1.4

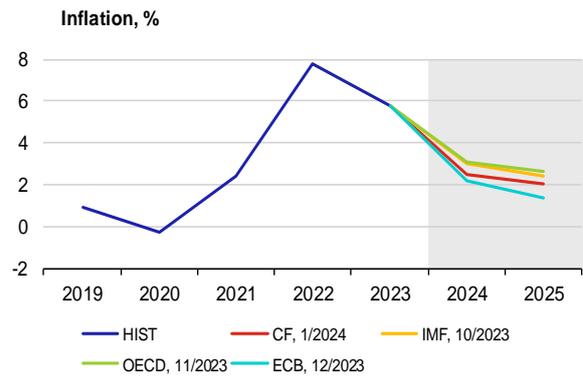
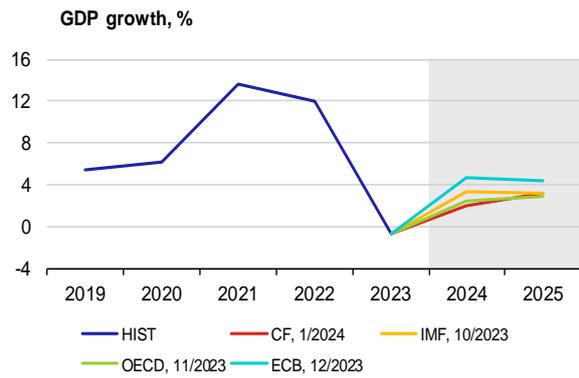
## Austria



	CF	IMF	OECD	ECB
2024	0.5	0.8	0.6	1.7
2025	1.6	1.7	1.5	1.3

	CF	IMF	OECD	ECB
2024	3.2	3.7	3.9	3.0
2025	2.3	2.5	2.5	2.5

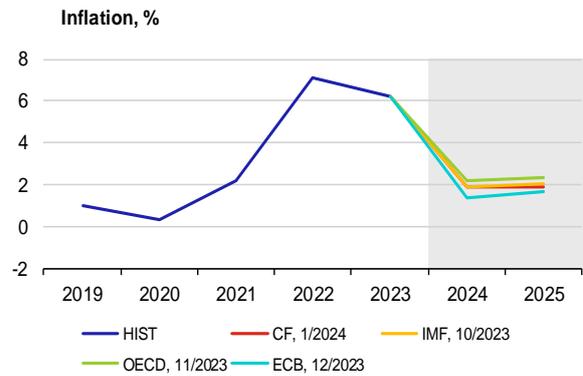
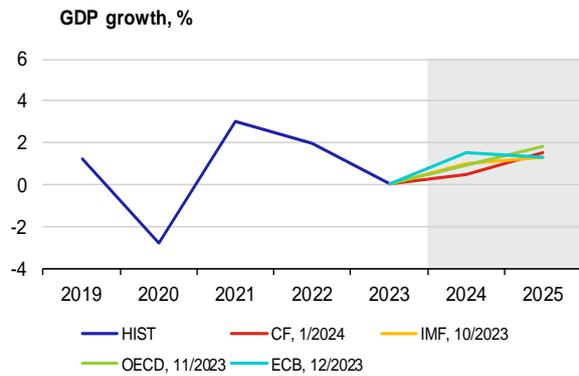
## Ireland



	CF	IMF	OECD	ECB
2024	2.0	3.3	2.4	4.6
2025	3.2	3.2	2.9	4.3

	CF	IMF	OECD	ECB
2024	2.5	3.0	3.1	2.2
2025	2.0	2.4	2.6	1.4

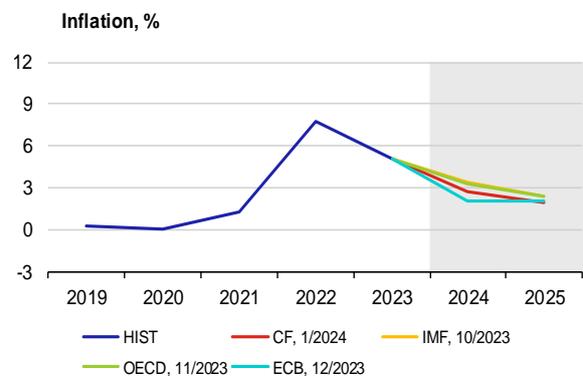
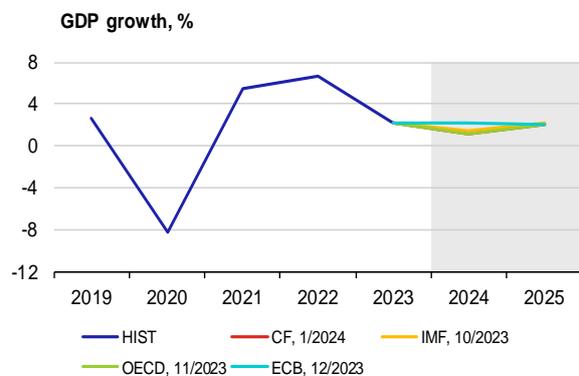
## Finland



	CF	IMF	OECD	ECB
2024	0.5	1.0	0.9	1.5
2025	1.5	1.3	1.8	1.3

	CF	IMF	OECD	ECB
2024	1.9	1.9	2.2	1.4
2025	1.9	2.0	2.3	1.7

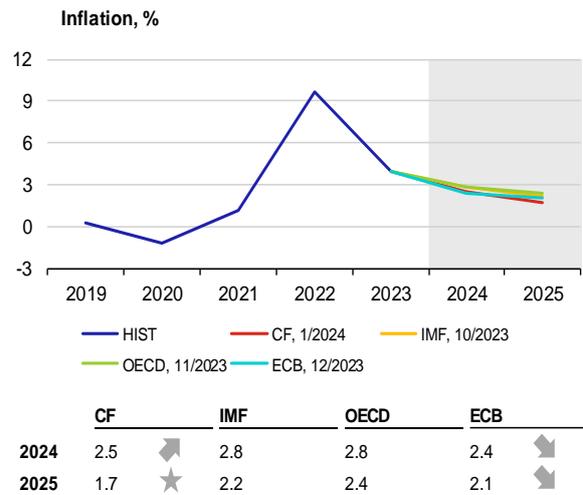
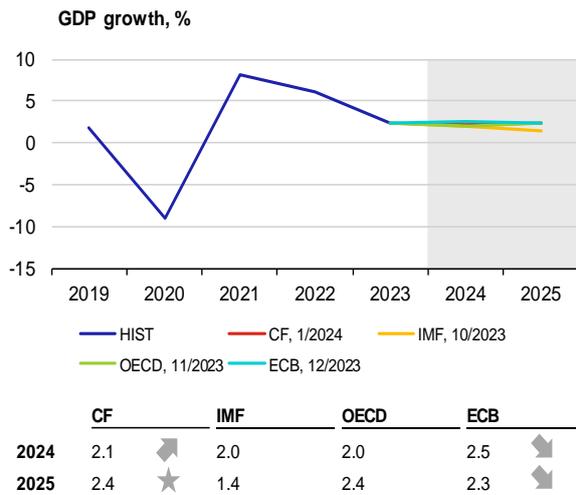
## Portugal



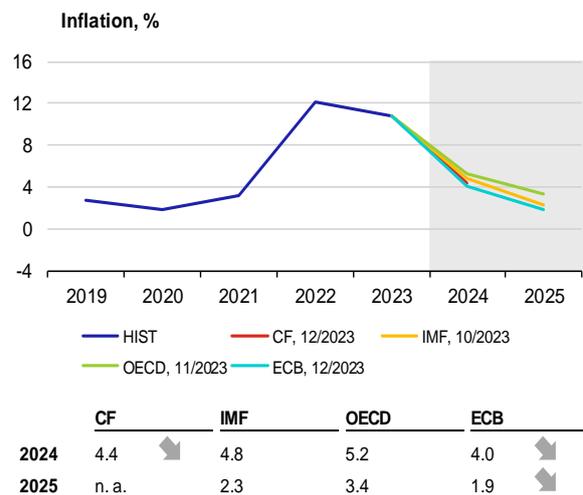
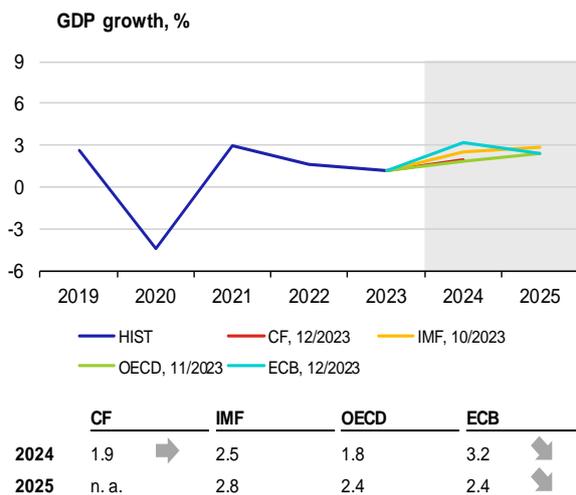
	CF	IMF	OECD	ECB
2024	1.2	1.5	1.2	2.2
2025	2.0	2.2	2.0	2.0

	CF	IMF	OECD	ECB
2024	2.7	3.4	3.3	2.0
2025	1.9	2.4	2.4	2.0

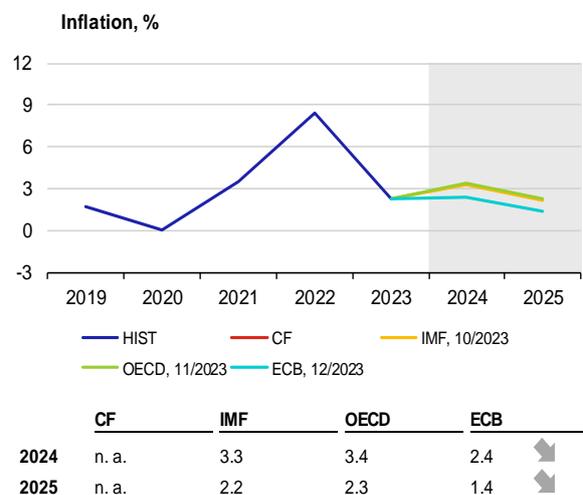
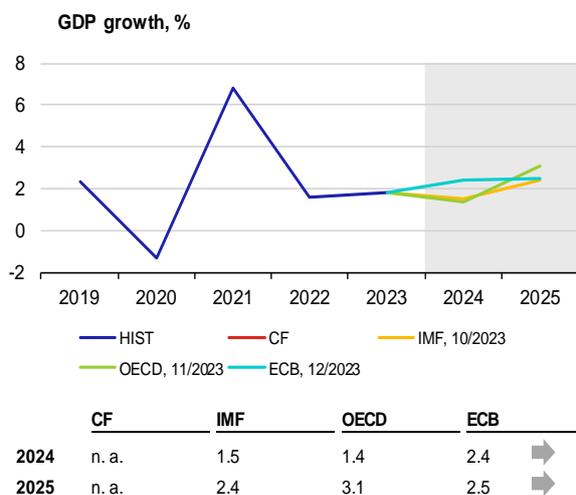
## Greece



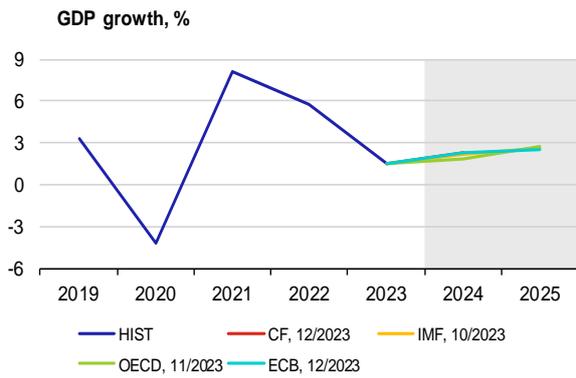
## Slovakia



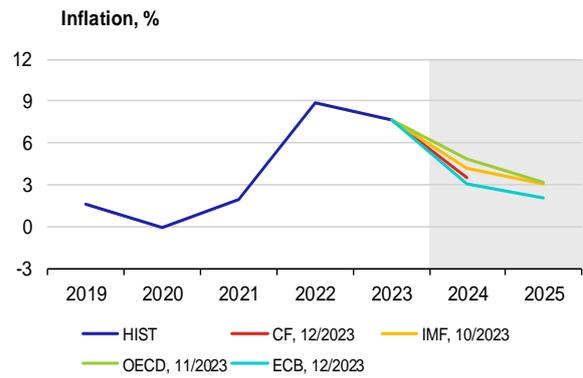
## Luxembourg



## Slovenia

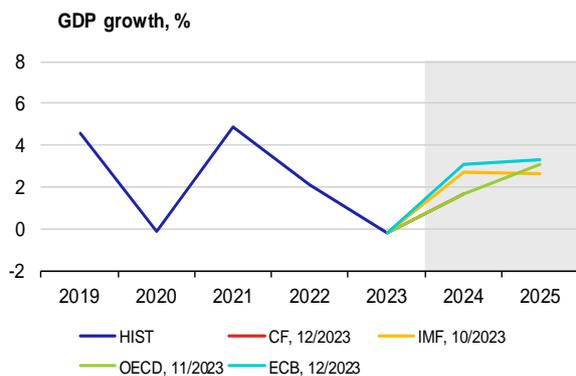


	CF	IMF	OECD	ECB
2024	2.3	2.2	1.8	2.3
2025	n.a.	2.6	2.7	2.5

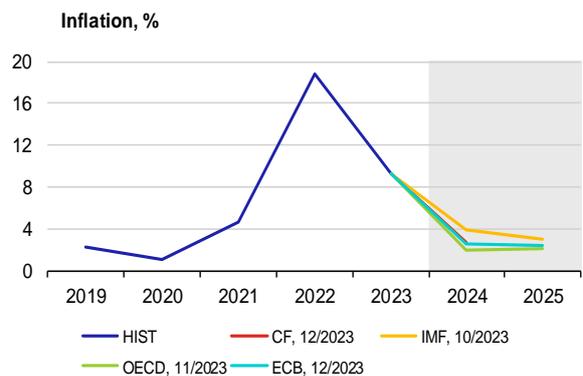


	CF	IMF	OECD	ECB
2024	3.5	4.2	4.8	3.1
2025	n.a.	3.1	3.2	2.1

## Lithuania

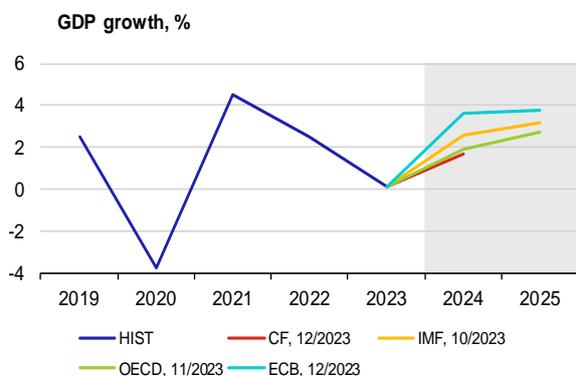


	CF	IMF	OECD	ECB
2024	1.7	2.7	1.7	3.1
2025	n.a.	2.6	3.1	3.3

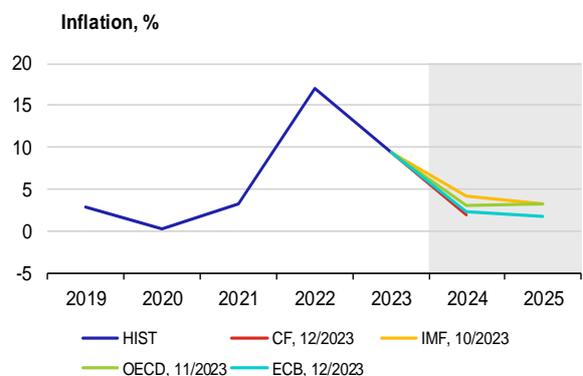


	CF	IMF	OECD	ECB
2024	2.7	3.9	2.0	2.5
2025	n.a.	3.0	2.1	2.4

## Latvia

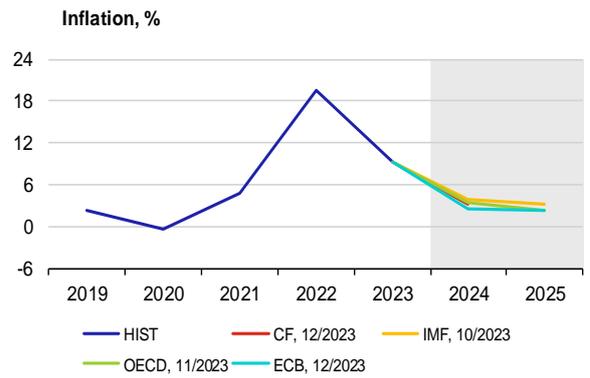
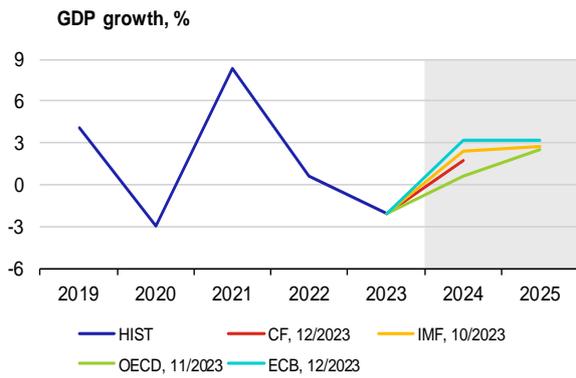


	CF	IMF	OECD	ECB
2024	1.7	2.6	1.9	3.6
2025	n.a.	3.2	2.7	3.8



	CF	IMF	OECD	ECB
2024	1.9	4.2	3.1	2.3
2025	n.a.	3.3	3.3	1.8

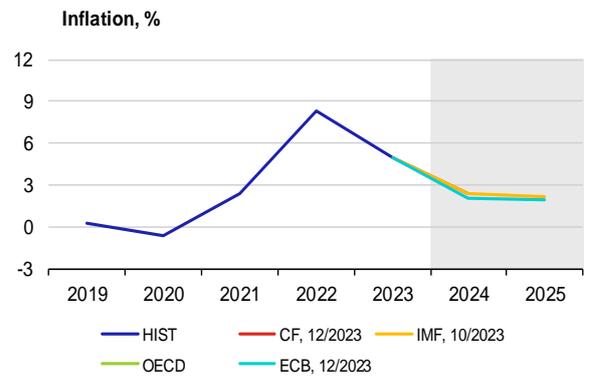
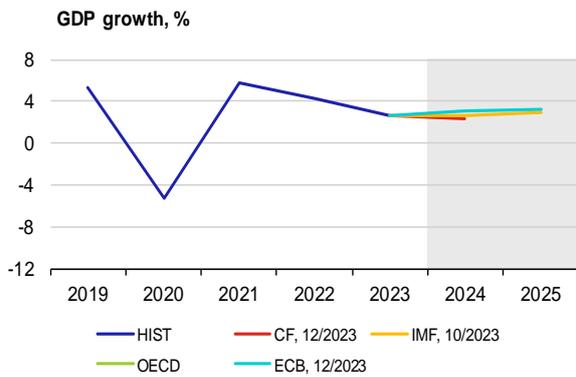
## Estonia



	CF	IMF	OECD	ECB
2024	1.7	2.4	0.6	3.2
2025	n. a.	2.7	2.5	3.2

	CF	IMF	OECD	ECB
2024	3.2	3.8	3.4	2.5
2025	n. a.	3.2	2.4	2.2

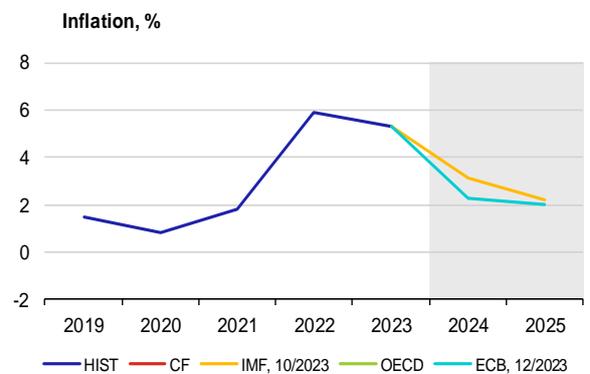
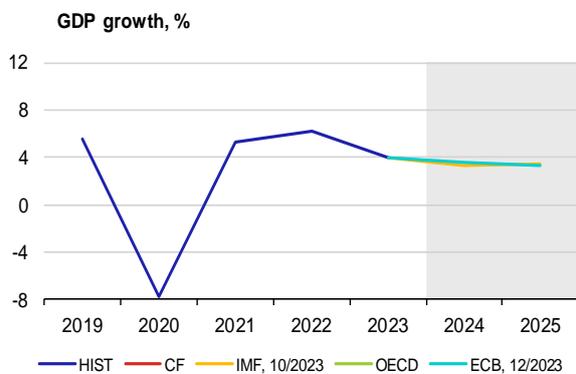
## Cyprus



	CF	IMF	OECD	ECB
2024	2.3	2.7	n. a.	3.1
2025	n. a.	3.0	n. a.	3.2

	CF	IMF	OECD	ECB
2024	2.4	2.4	n. a.	2.0
2025	n. a.	2.2	n. a.	1.9

## Malta

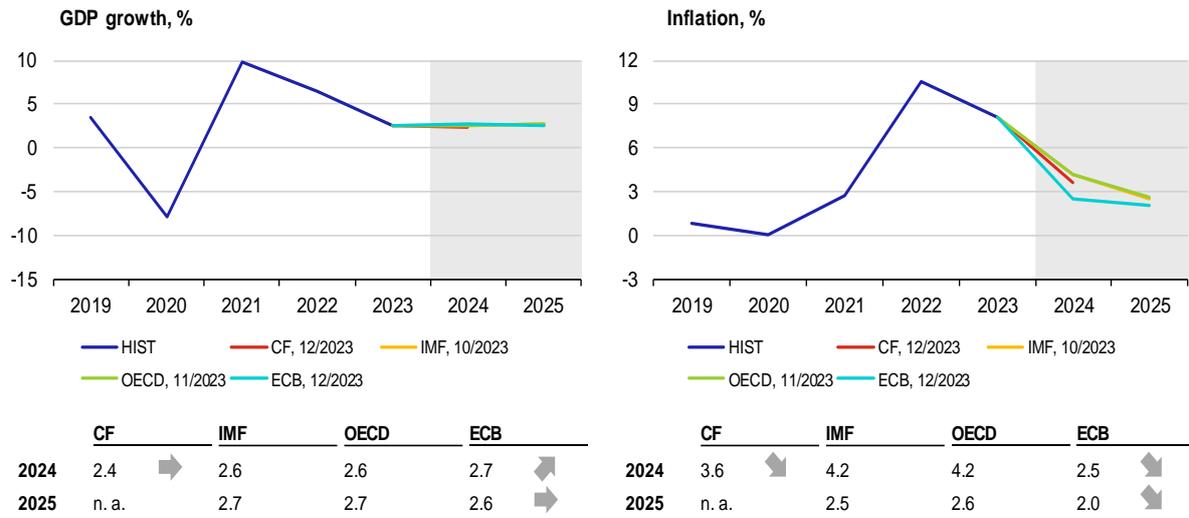


	CF	IMF	OECD	ECB
2024	n. a.	3.3	n. a.	3.6
2025	n. a.	3.5	n. a.	3.3

	CF	IMF	OECD	ECB
2024	n. a.	3.1	n. a.	2.3
2025	n. a.	2.2	n. a.	2.0

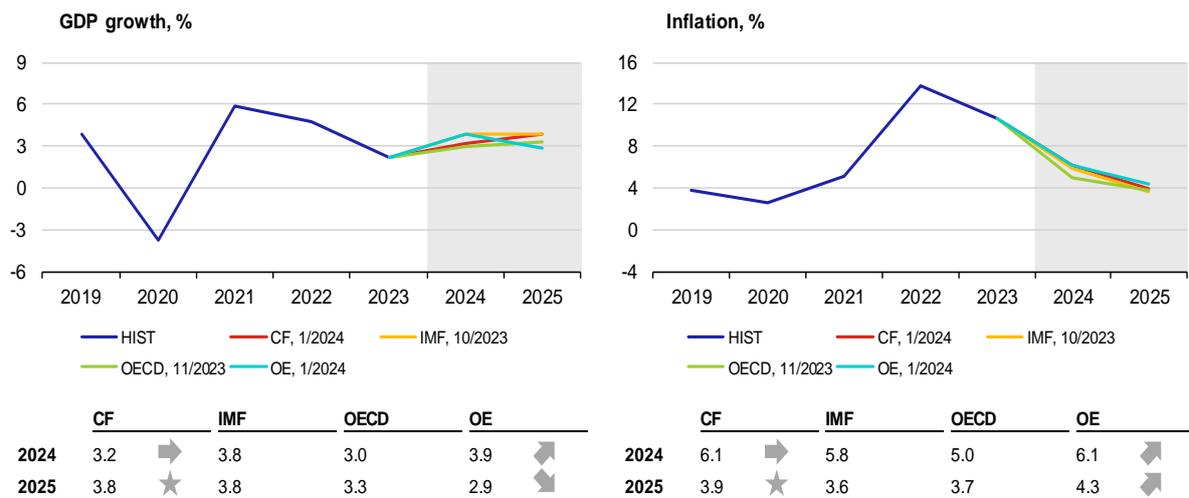
Ddd

## Croatia



## A5. GDP growth and inflation in other selected countries

### Romania



## A6. List of abbreviations

<b>AT</b>	Austria	<b>IRS</b>	Interest Rate swap
<b>bbi</b>	barrel	<b>ISM</b>	Institute for Supply Management
<b>BE</b>	Belgium	<b>IT</b>	Italy
<b>BoE</b>	Bank of England (the UK central bank)	<b>JP</b>	Japan
<b>BoJ</b>	Bank of Japan (the central bank of Japan)	<b>JPY</b>	Japanese yen
<b>bp</b>	basis point (one hundredth of a percentage point)	<b>LIBOR</b>	London Interbank Offered Rate
<b>CB</b>	central bank	<b>LME</b>	London Metal Exchange
<b>CBR</b>	Central Bank of Russia	<b>LT</b>	Lithuania
<b>CF</b>	Consensus Forecasts	<b>LU</b>	Luxembourg
<b>CN</b>	China	<b>LV</b>	Latvia
<b>CNB</b>	Czech National Bank	<b>MKT</b>	Markit
<b>CNY</b>	Chinese renminbi	<b>MNB</b>	Magyar Nemzeti Bank (the central bank of Hungary)
<b>ConfB</b>	Conference Board Consumer Confidence Index	<b>MT</b>	Malta
<b>CXN</b>	Caixin	<b>NBP</b>	Narodowy Bank Polski (the central bank of Poland)
<b>CY</b>	Cyprus	<b>NIESR</b>	National Institute of Economic and Social Research (UK)
<b>DBB</b>	Deutsche Bundesbank (the central bank of Germany)	<b>NKI</b>	Nikkei
<b>DE</b>	Germany	<b>NL</b>	Netherlands
<b>EA</b>	euro area	<b>OE</b>	Oxford Economics
<b>ECB</b>	European Central Bank	<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>EE</b>	Estonia	<b>OECD-CLI</b>	OECD Composite Leading Indicator
<b>EIA</b>	Energy Information Administration	<b>OPEC+</b>	member countries of OPEC oil cartel and 10 other oil-exporting countries (the most important of which are Russia, Mexico and Kazakhstan)
<b>ES</b>	Spain	<b>PMI</b>	Purchasing Managers' Index
<b>ESI</b>	Economic Sentiment Indicator of the European Commission	<b>pp</b>	percentage point
<b>EU</b>	European Union	<b>PT</b>	Portugal
<b>EUR</b>	euro	<b>RU</b>	Russia
<b>EURIBOR</b>	Euro Interbank Offered Rate	<b>RUB</b>	Russian rouble
<b>Fed</b>	Federal Reserve System (the US central bank)	<b>SI</b>	Slovenia
<b>FI</b>	Finland	<b>SK</b>	Slovakia
<b>FOMC</b>	Federal Open Market Committee	<b>SPF</b>	Survey of Professional Forecasters
<b>FR</b>	France	<b>TTF</b>	Title Transfer Facility (virtual trading point for natural gas in the Netherlands)
<b>FRA</b>	forward rate agreement	<b>UK</b>	United Kingdom
<b>FY</b>	fiscal year	<b>UoM</b>	University of Michigan Consumer Sentiment Index - present situation
<b>GBP</b>	pound sterling	<b>US</b>	United States
<b>GDP</b>	gross domestic product	<b>USD</b>	US dollar
<b>GR</b>	Greece	<b>WEO</b>	World Economic Outlook
<b>HICP</b>	Harmonised Index of Consumer Prices	<b>WTI</b>	West Texas Intermediate (crude oil used as a benchmark in oil pricing)
<b>HR</b>	Croatia	<b>ZEW</b>	Centre for European Economic Research
<b>ICE</b>	Intercontinental Exchange		
<b>IE</b>	Ireland		
<b>IEA</b>	International Energy Agency		
<b>IFO</b>	Leibniz Institute for Economic Research at the University of Munich		
<b>IMF</b>	International Monetary Fund		

Publisher:  
ČESKÁ NÁRODNÍ BANKA  
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