

Global Economic Outlook

January 2025



Foreword

Dear GEO readers,

It is my honour to introduce this year's first issue of Global Economic Outlook, the CNB Monetary Department's regular publication. The year 2025 brings numerous uncertainties and rapidly evolving issues that will shape the global economic landscape.

The United States is entering a new chapter with Donald Trump's return to the presidency. One of the key themes of his administration will be protectionist measures, the full impact of which on international trade remains difficult to predict at this stage. Particular attention will focus on the interaction between the US and China, which is facing significant economic challenges. These include slowing growth, a real estate crisis, demographic pressures, and adapting to changes in the global market. On the other hand, China has managed to maintain relatively low inflation levels compared to the EU and the US

In the European context, 2025 also brings important events. The upcoming parliamentary elections in Germany may redefine approaches to addressing structural issues, including discussions on fiscal policy, the debt brake and the energy mix. Uncertainty is further elevated by possible elections in France, where the political situation and fiscal imbalances create a backdrop for critical debates on future priorities.

For the Czech Republic, the energy sector remains a key topic. Energy price increases are influenced by strategic decisions at the national level as well as emission costs tied to the EU ETS system. A future inflationary factor is the Carbon Border Adjustment Mechanism (CBAM), which is set for full implementation in 2026. The expected impact of this measure on household and corporate costs will need to be analysed continuously.

The January issue of Global Economic Outlook also delves into another socio-economic issue: the property market. The authors examine long-term trends in property markets across selected European countries. This allows them to explore developments in the shares of owner-occupied and rental housing, including an analysis of the factors driving the different shares in different countries.

I wish you inspiring reading and a successful year in 2025,
Jan Kubíček, CNB Bank Board member



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Cut-off date for data

17 January 2025

CF survey date

13 January 2025

GEO publication date

24 January 2025

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

Donald John Trump became the 47th president of the United States. In his words, resolving the conflict in Ukraine is his top priority on the international scene, as is apparent from an interview for the French magazine [Paris-Match](#). Trump explicitly mentioned the need to end the rise in incredible human losses in this war as soon as possible. The no less closely-observed economic programme of the new Trump administration could contain potential pro-growth measures of the new US administration, i.e. deregulation of the business environment and a reduction in the tax burden on people and firms, as well as anti-growth barriers. This includes the possible introduction of significant tariffs on goods imported from China and a 10% universal basic customs duty on imports of goods from other countries. A tightening of the US migration policy would also have an anti-growth effect. There is a question as to which effects will prevail and shift the US and then the global economy towards higher growth.

According to the new IMF forecast, the world economy will grow by 3.3% this year and next, which is below the historical average (2000–19) of 3.7%. The forecast for this year is broadly unchanged from the October 2024 forecast in the Global Economic Outlook (GEO), thanks mainly to improved economic prospects for the USA, which are, however, offset by a decrease in expected growth in the other major economies. Economic growth in advanced countries will converge within sight of 2% growth, and emerging and developing economies will grow at more than double that rate. The IMF expects total global inflation to fall to 4.2% in 2025 and 3.5% in 2026, with advanced economies returning to the target earlier than emerging and developing economies.

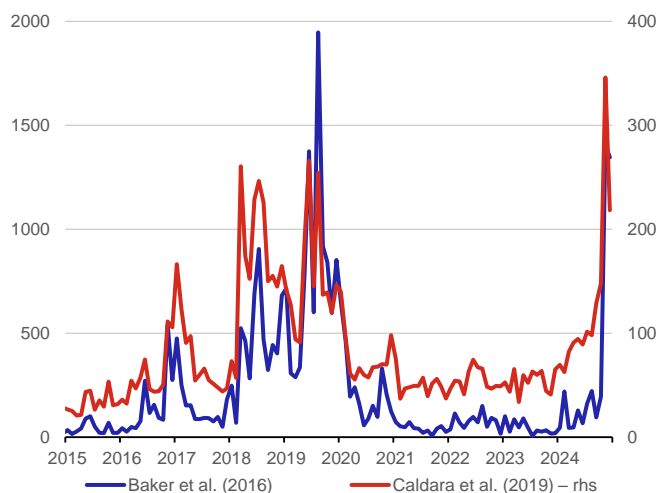
ECB and Fed interest rates will be set at the end of January.

The ECB will very probably cut interest rates by 25 bp, whereas the US Fed will probably not do so until this summer. These declines will bring interest rates within sight of the levels discussed as the natural equilibrium interest rate.

A chart in the current issue shows trends in the uncertainty surrounding international trade policies stemming mainly from the new US president, Donald Trump. Indices measuring this uncertainty are at historical highs, which is due to concerns about future trade relations with the USA, which are a big topic and threat to the positive growth of the global economy.

The current issue also contains an analysis: [Trends on Europe's property market](#). The article covers property market trends in selected European countries from the start of the new millennium. This article also contains a simple view of property price misalignment, which shows that prices in selected countries are highest above the long-term average in Poland and lowest below it in Germany.

Trade policy uncertainty from the perspective of academic indices



Source: www.policyuncertainty.com a www.matteoiacoviello.com/tpu.htm
Note: Monthly data, latest observations for December 2024

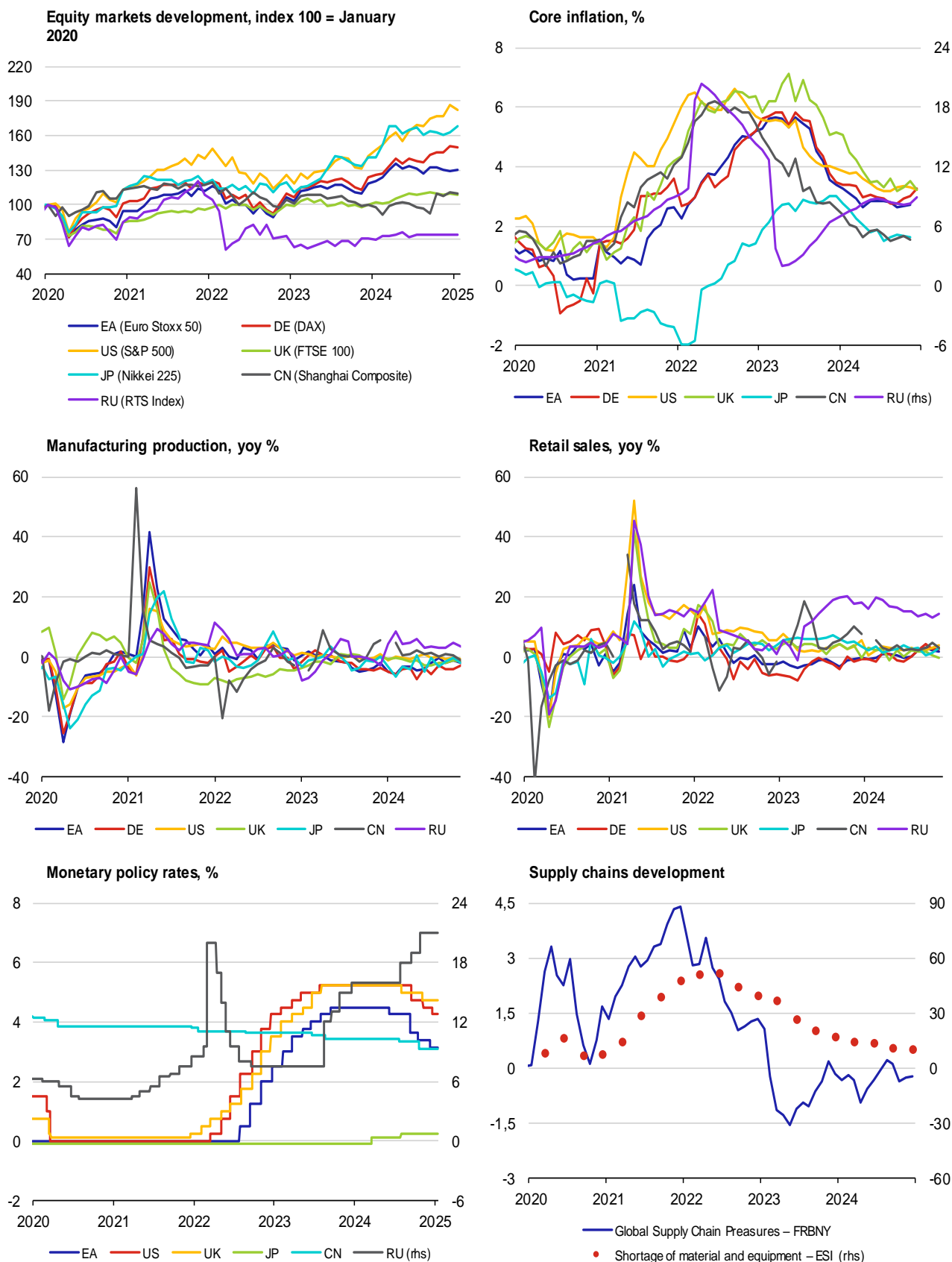
GEO barometer for selected countries

		EA	DE	US	UK	JP	CN	RU
GDP (%)	2025	1,0 ➡	0,4 ➡	2,2 ➡	1,2 ➡	1,2 ➡	4,5 ➡	1,7 ➡
	2026	1,2 ★	1,0 ★	2,0 ★	1,4 ★	0,9 ★	4,1 ★	1,4 ★
Inflation (%)	2025	1,9 ➡	2,0 ➡	2,6 ➡	2,6 ➡	2,3 ➡	0,7 ➡	6,1 ➡
	2026	1,9 ★	1,9 ★	2,6 ★	2,3 ★	1,8 ★	1,1 ★	4,8 ★
Unemployment (%)	2025	6,5 ➡	6,2 ➡	4,3 ➡	4,5 ➡	2,4 ➡	3,2 ➡	2,4 ➡
	2026	6,5 ★	6,1 ★	4,3 ★	4,5 ★	2,4 ★	3,4 ★	3,6 ★
Exchange rate (against USD)	2025	1,04 ➡	1,04 ➡		1,26 ➡	149,8 ➡	7,36 ➡	105,1 ➡
	2026	1,07 ★	1,07 ★		1,28 ★	142,8 ★	7,21 ★	106,0 ★

Source: Consensus Forecasts (CF)

Note: The arrows indicate the direction of the revisions compared with the last GEO.

II. Macroeconomic barometer

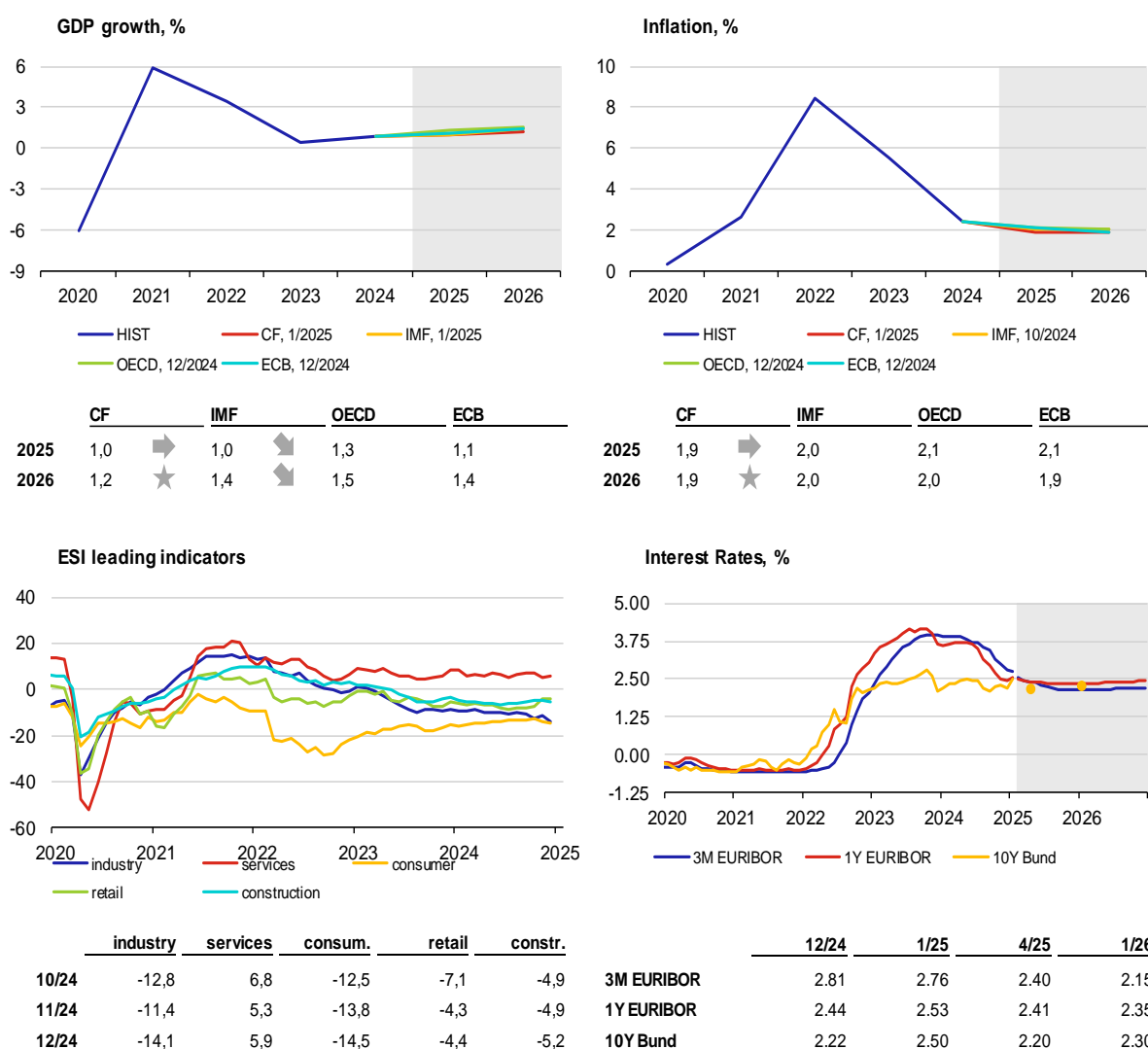


Source: Refinitiv Datastream, European Commission.

III.1 Euro area

Economic activity in the euro area stagnated in 2024, reflecting persistent structural problems that hindered a faster recovery together with elevated energy prices. The main factors behind this trend were subdued industrial production and low investment rates. Industrial production increased by 0.2% month on month in November 2024, signalling a mild rebound after previous declines. However, industrial production was 1.9% lower than a year earlier. This decline reflects the ongoing weakness in the industrial sector, especially in Germany, where industrial production has fallen by 15% from its peak in 2017. Household consumption improved slightly, despite a weakening industrial sector, thanks to rising real incomes and stable employment. The low unemployment rate in the euro area is positively contributing to sustaining consumer spending. According to the January CF outlook, the annual growth rate of the euro area economy will reach 1% this year and accelerate to 1.2% next year. The main driver of growth should be an improvement in domestic demand supported by rising real incomes and moderating financial conditions. The contribution of net exports, which are unlikely to boost economic growth, will be uncertain, given persistent problems with the competitiveness of European industry.

Euro area consumer prices increased by 2.4% year on year in 2024, with inflation reaching the same rate in December. This represents an increase compared to inflation of 2.2% in November. The main factor in this rise was energy prices, which again recorded positive values following several months of decline, and services prices, which rose by 4% year on year. Core inflation remained stable at 2.7%. CF analysts expect annual consumer price inflation of 1.9% this year and the next. The ECB responded to the slowing economy and declining inflation by gradually cutting interest rates and, as expected, it lowered the deposit rate to 3% in December. The market consensus assumes that the ECB will cut its deposit rate by a further 100 basis points by the end of 2025.

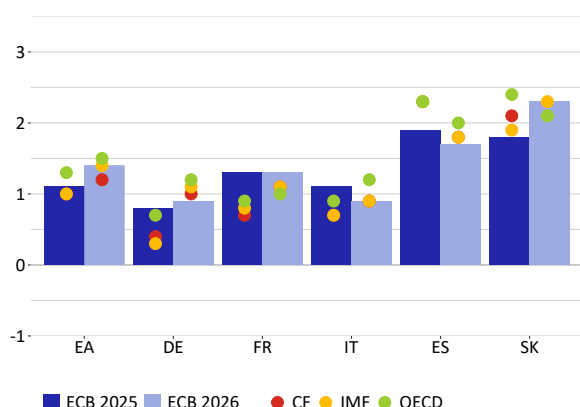


III.2 Germany

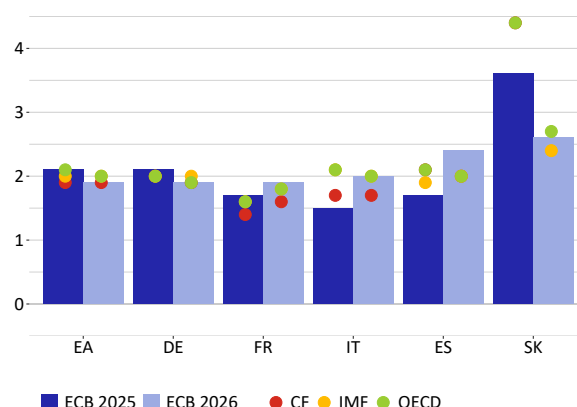
The German economy contracted for the second consecutive year. After a 0.3% contraction in 2023, GDP contracted last year by 0.2%. This underlines the seriousness of the situation facing Europe's manufacturing powerhouse. One of the most protracted economic crises in Germany over the last decade comes six weeks ahead of decisive early elections. Germany is facing a crisis in the automotive industry caused by Chinese competition and the costly transition to electromobility, coupled with high energy costs and weak consumer demand. The Bundesbank stated that the stagnation would continue this year, predicting growth of just 0.1%, followed by a slight acceleration to 1.1% next year. CF and the IMF see a similar situation. As a consequence of the longer weakness of the German economy, business sentiment, which was the worst since 2020, fell in December. The decline was mainly driven by more pessimistic expectations. On the contrary, businesses assessed the current situation as being better. By contrast, consumer sentiment recovered slightly at the end of the year, but its outlook is modest. Income expectations and willingness to buy increased in December, while the willingness to save decreased. The German composite PMI edged up to 47.8 points in December, pointing to a further, albeit slower, decline in private sector activity. The modest growth in services activity was overshadowed by a faster decline in activity in the manufacturing sector.

After stagnating, harmonised consumer price inflation rose to 2.8% in December. Year-on-year price increases rose from 2.4% in November and core inflation (excluding food and energy prices) also went up slightly to 3.1% in December. The average annual inflation rate last year was 2.5% compared to 2023. Inflation was fostered mainly by a sharp rise in service prices last year, reaching almost 4% on average. Energy prices made a negative contribution to total inflation. Core inflation fluctuated around 3% on average. According to the new CF forecast, inflation will fluctuate around 2% this year and next. Industrial producer prices recorded year-on-year growth last November for the first time since June 2023, albeit by just 0.1% (compared to a 1.1% decline in October).

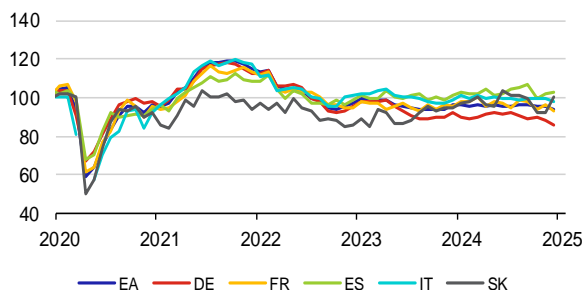
GDP growth in selected euro area countries in 2025 and 2026, %



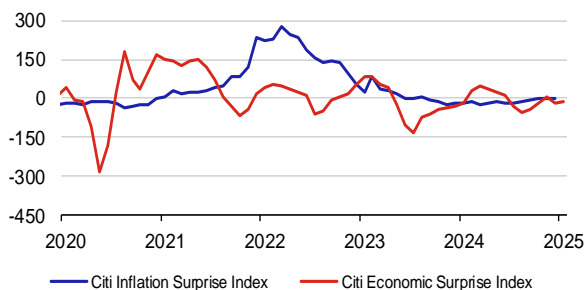
Inflation in selected euro area countries in 2025 and 2026, %



ESI leading indicators



Economic and inflation surprises in the euro area, %



	EA	DE	FR	ES	IT	SK
10/24	95,6	89,9	93,8	100,0	99,6	92,2
11/24	95,6	88,6	96,5	102,0	99,3	92,3
12/24	93,7	86,1	93,5	102,9	98,2	100,7

Inflation expectations based on 5year inflation swap and SPF

	5y5y	SPF
11/24	2,09	2,01
12/24	2,01	2,01
1/25	2,10	

III.3 United States

The US economy is entering this year with strong growth (an estimate of 2.8% according to the IMF) and promising growth prospects for the coming years. Real GDP growth expectations for 2025 have been rising gradually since the middle of last year and the CF analyst survey now points to growth of 2.2%. This is very similar in the Fed's December forecast. The January IMF outlook expects growth of up to 2.7% this year. Next year, the growth rate should stay at around 2% according to all the institutions monitored. The strength of this advanced economy lies not only in technology, but also less regulation and cheaper energy than the advanced economies in Europe. In advance of his inauguration, incoming President Trump started to show his strength and the details of his plans to intervene in international trade through targeted tariffs are gradually emerging. He is starting to protect US know-how and its technological lead more and now plans to restrict exports of the most advanced technologies.

Consumer price inflation in the USA is still elevated. At its December meeting, the Fed cut its rates by 0.25% to target range 4.25%-4.50%, but the markets do not expect them to go down further for another approximately six months. Annual inflation rose again in December, reaching 2.9%, whereas core inflation remains elevated, although it fell slightly to 3.2%, reducing its month-on-month growth to 0.2%. The new CF inflation outlook expects 2.6% this year and the next as well. The Fed's December outlook expects it to be 2.5% this year and 2.1% next year.

The labour market is stabilising, with more than 250,000 new non-farm jobs being created in December. Continuing positive economic trends and smaller concerns about the new president's next steps are leading to positive expectations of future trends on the labour market. Migration policy, which could have a negative impact on growth, remains an uncertainty. Unemployment fell to 4.1% in December.



III.4 China

The Chinese economy was undergoing a gradual recovery in the last quarter of last year due to massive government stimulus measures. Official data on annual GDP growth of 5.4% in Q4 and 5% in 2024 as a whole meet the Chinese leadership's targets set at the start of last year. The effect of government policies is visible mainly on the supply side. Annual industrial production growth exceeded 5% throughout the autumn and the new orders index was in the expansion zone (around 51 points) in both November and December. By contrast, private consumption increased in the autumn, albeit at a slowing pace in both month-on-month and year-on-year terms. Residential property sales increased somewhat in the fourth quarter, but mainly as a result of a continued decline in residential property prices reflecting the persisting crisis in the development sector.

Price pressures in the Chinese economy were very weak in the fourth quarter. Consumer price inflation fell to 0.1% year on year in December (from 0.2% in November) and remained at zero month on month. Compared to the autumn months, food prices started to decline at the end of the year. Year-on-year core inflation remains positive so far, but the month-on-month data for December are deflationary. Month-on-month growth in the PPI turned negative in December following a one-off positive result in November (-2.3%). In addition to cheap raw materials, according to analysts this result may reflect the fact that some of the government support measures in industry are leading to lower input prices. Most observers believe that consumer price inflation will not exceed 1% this year.

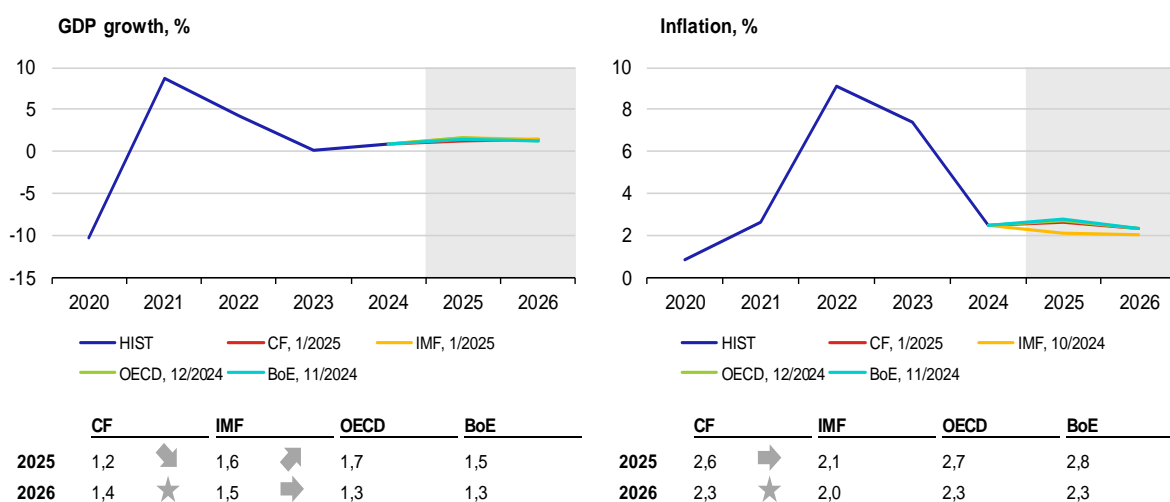
The Chinese foreign trade surplus continued to rise at the end of the year and was the highest in ten months in December. Exports grew to virtually all the main territories, beside the traditional ASEAN partners also to the US, among others. This is linked with front-loading before the trade restrictions expected from the new Trump administration. By contrast, imports were flat overall, mainly from advanced countries (the USA, the EU and Japan) and imports from India even fell. By contrast, the import shares of ASEAN countries increased.



Source: Bloomberg

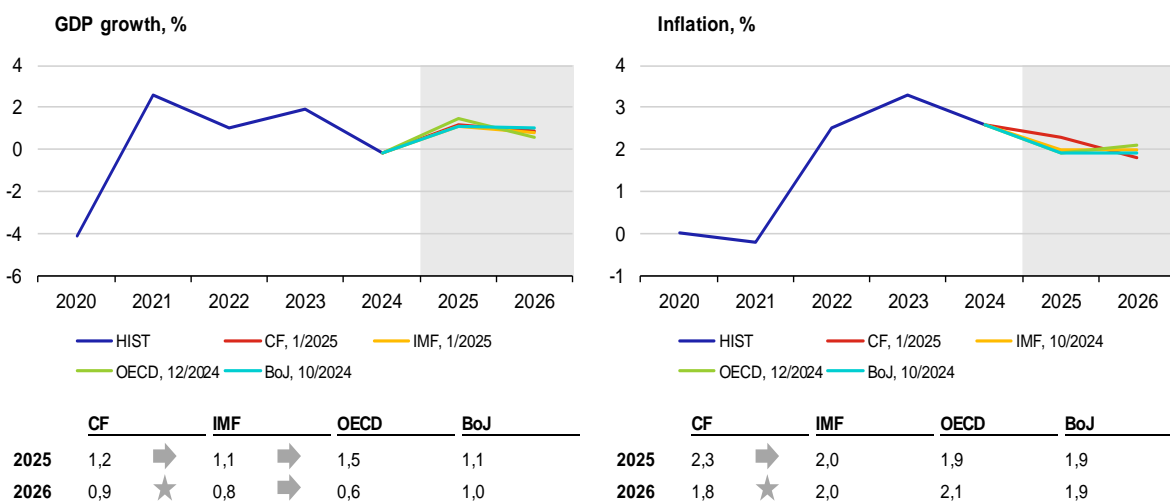
III.5 United Kingdom

The growth of the UK economy unexpectedly halted in the third quarter according to revised data. Moreover, the BoE predicts zero expansion in Q4/2025. Although in November the UK economy grew for the first time since August (by 0.1%) thanks to a dominant contribution from the services sector, pressure on the government, which is facing criticism from businesses, whose confidence is falling, is increasing. According to the new CF forecast, GDP growth will not exceed 1.5% in 2025 or 2026, while the IMF is more optimistic. Inflation had unexpectedly slowed year on year to 2.5% in December, but is soon expected to accelerate slightly again. Core inflation also slowed (3.2%) and even inflation in services fell sharply (4.4%). According to the CF, inflation will stay above 2.5% this year and slow slightly next year. Despite the worse prospects, the BoE left its key interest rate at 4.75% after its December meeting, but the stagnating economy is increasing the risk that the BoE will have to accelerate its rate cuts this year. In general, 2025 will not be easy for the economy, based on data and forward-looking indicators.



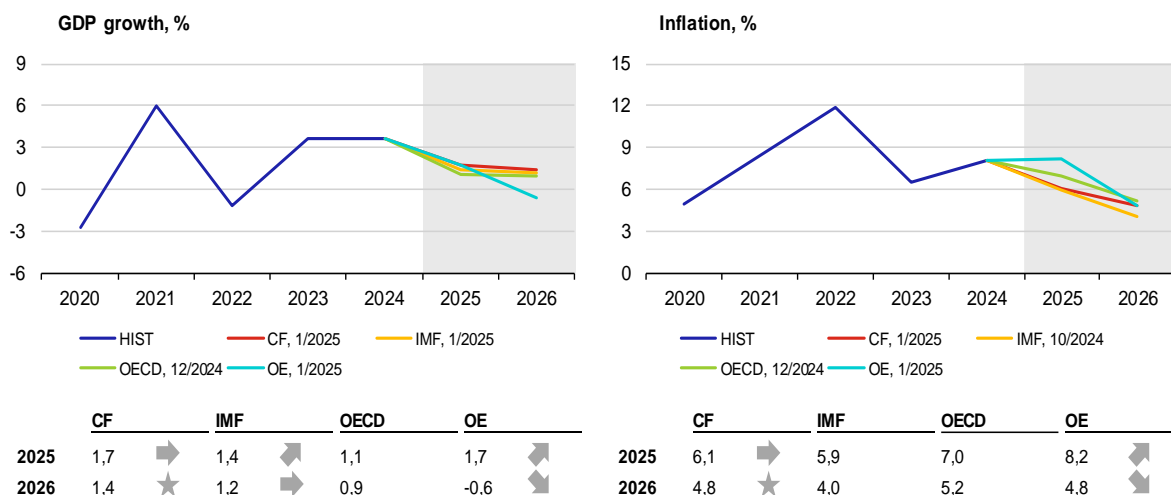
III.6 Japan

Japan's economic growth ended last year with a slight decline, but GDP should grow by more than 1.0% in 2025 according to the outlooks of the institutions monitored. Labour market conditions remain stable, unemployment is at a record low and the spring wage bargaining is expected to end with solid growth, the same as last year. Higher wages are also reflected in inflation, as firms are passing on increased costs to their final prices, especially to prices in services. All this, together with the weak yen, is leading the BoJ to take a hawkish position. Analysts agree that if the central bank does not increase rates at its January meeting, it will do so in March. This is also illustrated by rising government bond yields, which are at several-year highs. A further tightening of monetary policy will have global impacts via carry trades associated with loans in yen.



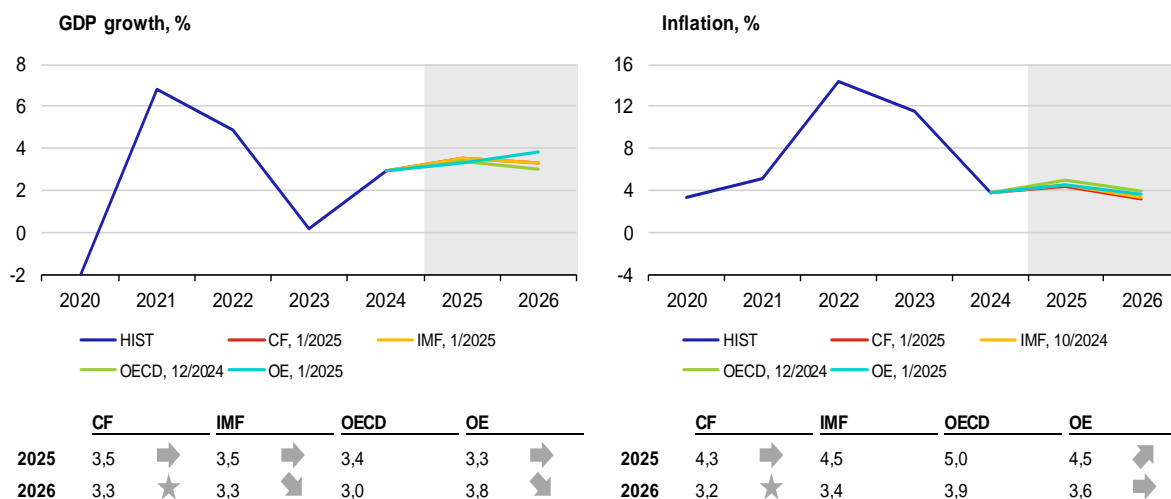
III.7 Russia

GDP growth reached 3.1% in the third quarter of last year. The GDP growth outlooks for this year expect a slowdown, while the CBR estimates growth at 1.5%. Inflation increased to 9.5% year on year in December. Price growth is being fostered by an overheated labour market. Unemployment remains at a historical low (2.3% in October). Real wage growth slowed but remains high (7.4% year on year in October). In contrast to the visible decline in GDP growth, inflation is unlikely to fall in the near future. According to the CBR's estimate based on a survey, full-year growth will remain similar to last year (8.2% versus 8.4%, the December assumption for 2024). In December, inflation expectations reached 13.9% at the one-year horizon, while the consumer sentiment index was at its lowest level in two years. Russia therefore entered the new year with a record-high key rate of 21% (from October 2024). In the first half of January, the rouble remains above the psychological threshold of RUB 100 to the dollar and should remain above it throughout the year.



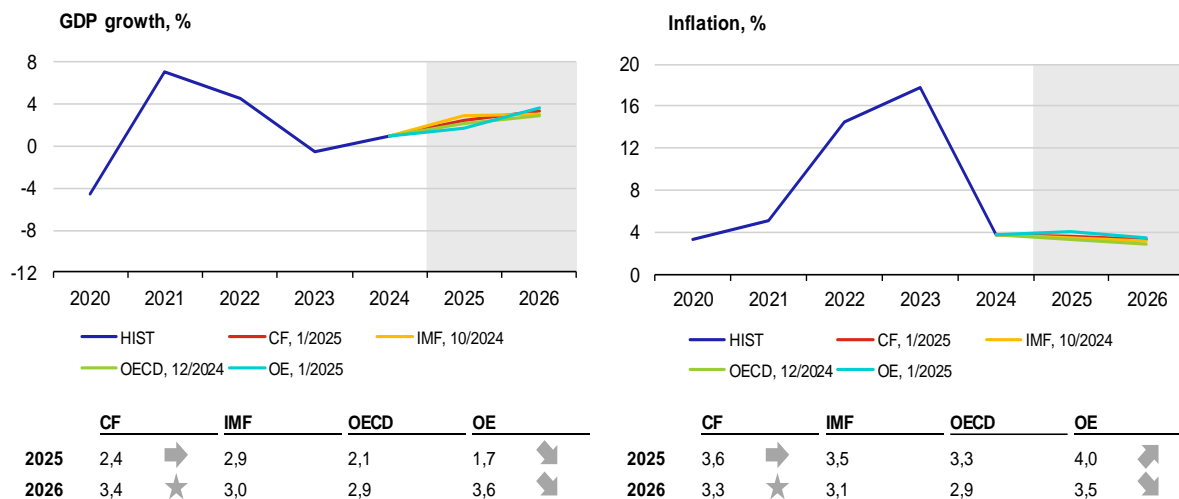
III.8 Poland

The inflation rate in Poland remained at 4.7% year on year in December, a slight deviation of 0.1% above the preliminary estimate published earlier in January. Food and non-alcoholic beverages had an inflationary effect (4.8%), while prices in the housing and energy sectors went up (10.1%). Inflation is still well above the NBP's inflation target range (1.5%–3.5%), with an expected peak of 5% in February this year. At its January meeting, the NBP responded by leaving its key interest rate unchanged at 5.75%, in line with market expectations. A more pronounced decrease in inflation pressures is predicted from July, which could create room for debate about a potential lowering of interest rates. Meanwhile, Poles are seeking protection against inflation and low bank rates in record-high government bond purchases, while average interest rates on households' bank deposits fell to 3.96% in November, below both inflation and central bank reference rates.



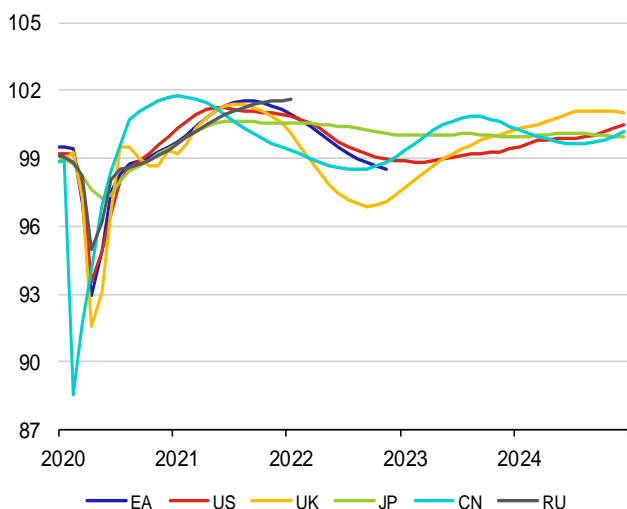
III.9 Hungary

Annual consumer price inflation in Hungary rose to 4.6% in December. It was thus well above the November level (3.7%) and slightly above market expectations (4.4%). The higher inflation was due mainly to higher fuel and processed food prices. In addition, Hungarian households' inflation expectations increased further in December. OE analysts therefore revised their inflation outlook for 2025 upwards. Next year, annual GDP growth will be around 2.5%. Businesses have increased expectations regarding retail sales and sales in services. The manufacturing PMI was in the expansion band (50.6) for the second consecutive month in December and new orders were at stably high levels. Hungary's external balance shows favourable trends. After the energy crisis, the current account returned sharply to the usual surplus. As a percentage of GDP, the Hungarian economy's external position is the best performer in the region. This was due mainly to a year-on-year rise in the services balance together with a smaller income deficit.

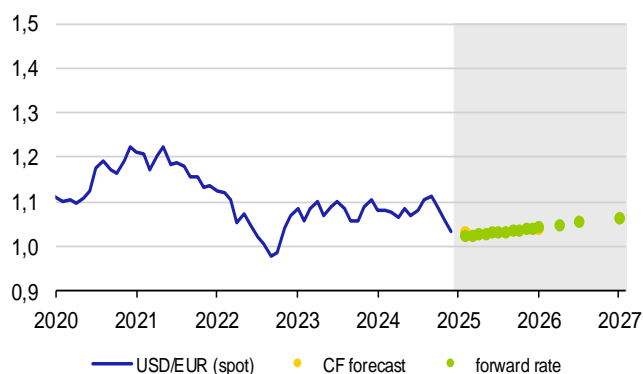


IV. Leading indicators and exchange rate outlooks

OECD Composite Leading Indicator

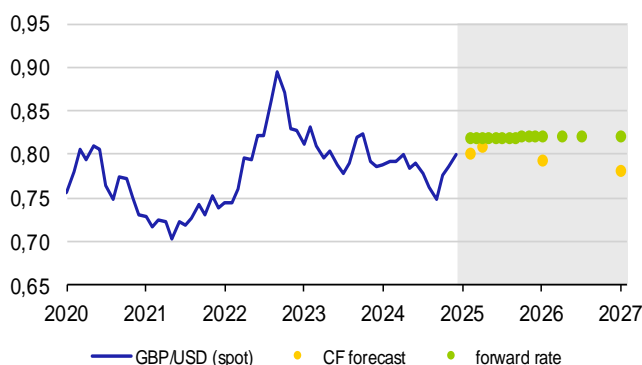


The US dollar (USD/EUR)



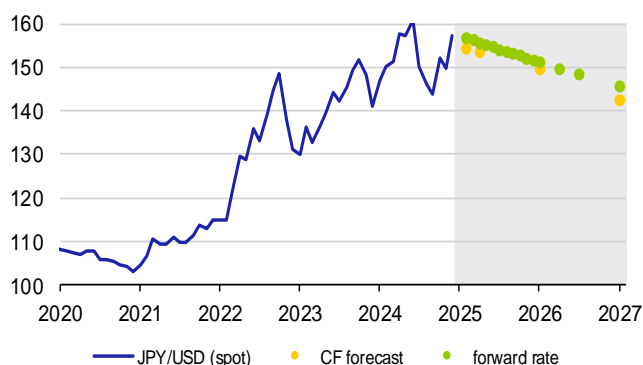
	13/1/25	2/25	4/25	1/26	1/27
spot rate	1,020				
CF forecast		1,033	1,029	1,042	1,065
forward rate		1,026	1,029	1,045	1,067

The British pound (GBP/USD)



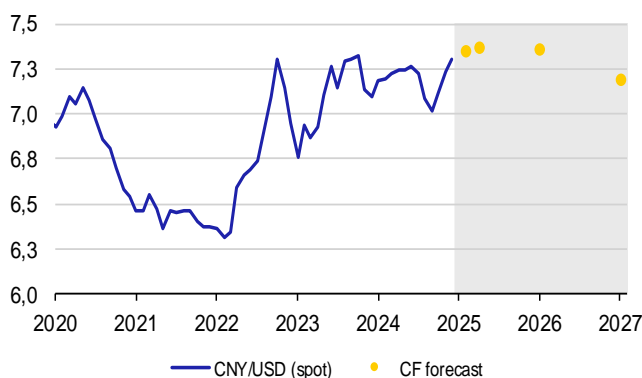
	13/1/25	2/25	4/25	1/26	1/27
spot rate	0,823				
CF forecast		0,803	0,810	0,795	0,782
forward rate		0,820	0,820	0,821	0,821

The Japanese yen (JPY/USD)



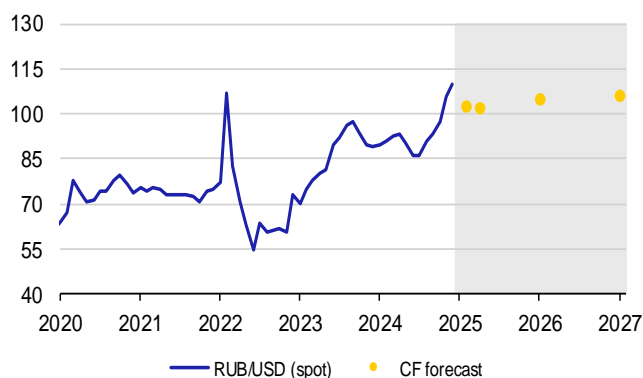
	13/1/25	2/25	4/25	1/26	1/27
spot rate	157,5				
CF forecast		154,4	153,5	149,8	142,8
forward rate		156,9	155,8	151,3	145,7

The Chinese renminbi (CNY/USD)



	13/1/25	2/25	4/25	1/26	1/27
spot rate	7,353				
CF forecast		7,347	7,375	7,361	7,194

The Russian rouble (RUB/USD)



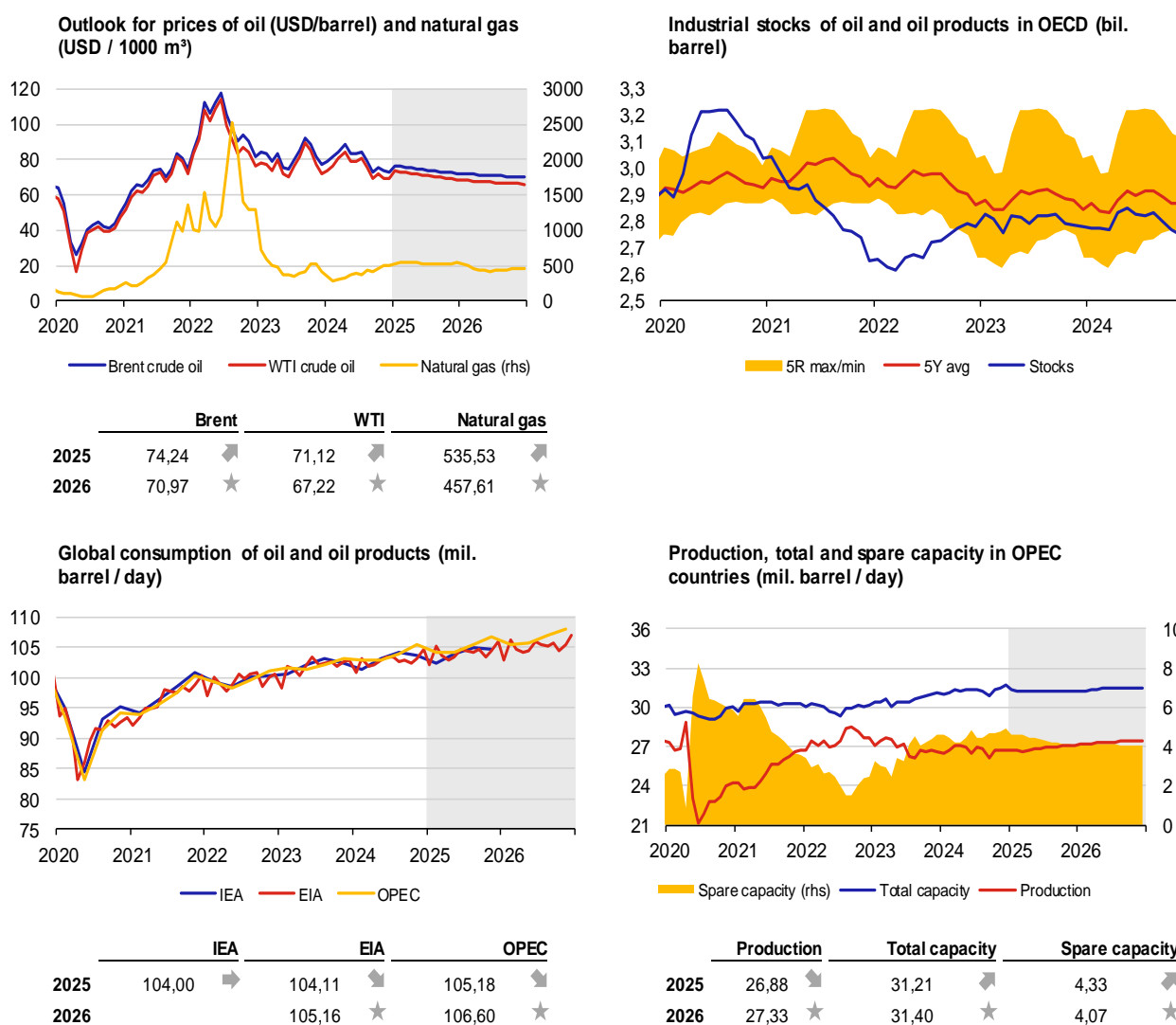
	13/1/25	2/25	4/25	1/26	1/27
spot rate	103,10				
CF forecast		102,50	102,40	105,40	106,10

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 began to rise unexpectedly sharply at the start of 2025 and was above USD 80 a barrel in mid-January. Money market sentiment started to improve at the end of last year, due to moderately optimistic news from the Chinese economy and strong demand from refineries on the physical market due to cold weather in the northern hemisphere. Money managers started to close out their massive short positions in December. These factors started to be reflected in oil prices when trading activity increased at the start of 2025. The upswing in price was fostered on 10 January by another package of US sanctions against the Russian oil sector and the large number of tankers carrying Russian oil. As a result, tankers' transport margins increased strongly and Chinese and Indian refineries increased the demand for oil from the Middle East. Oil prices stopped rising in mid-January, after news that both Israel and Hamas had agreed to a temporary ceasefire. The markets are also waiting for steps by the incoming US administration after Donald Trump assumed the presidency.

The market outlook for the Brent crude oil price in the first half of January shifted upwards compared to the previous month and continues to expect prices to fall gradually to around USD 72 and USD 70 a barrel at the end of 2025 and 2026 respectively. However, the outlook is based on the ten-day average, so these levels do not fully reflect the current oil prices above USD 80 a barrel. The January EIA forecast continues to expect global oil inventories to continue falling in the first quarter of this year, thanks to continued limited output in OPEC+ countries, which will keep the oil price higher. However, an excess supply of oil is then expected to affect the market and the Brent crude oil price should gradually drop towards USD 72 a barrel at the end of this year. In contrast to the market curve, however, the EIA also expects a sharp decline next year, with the Brent crude oil price expected to be around USD 63 a barrel at the year-end. The January CF forecast is the highest, with USD 74.6 a barrel at the one-year horizon.



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.

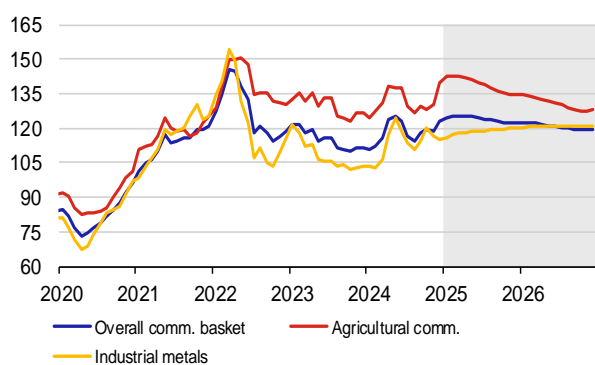
V.2 Other commodities

The price of natural gas in Europe rose sharply again in the second half of December, reaching more than the yearly maximum of EUR 50/MWh at the year-end. Besides the cold weather and a rapid drop in inventories (63% in the EU and 59% in the Czech Republic in mid-January), the price growth was due to concerns about how Europe will deal with the expected end of Russian gas transit through Ukraine, which accounted for around 5% of consumption. The gas price corrected downwards in the first half of January, but stayed above EUR 45/MWh. Central Europe has redirected gas flows. The Czech Republic and Austria take gas from Germany and Hungary receives Russian gas from the Turkstream pipeline. Slovakia is currently drawing on its reasonably well-filled reservoirs. Unlike gas, the price of coal in Europe fell in December and the first half of January on the back of weaker demand from Asia and Europe and sufficient inventories in China.

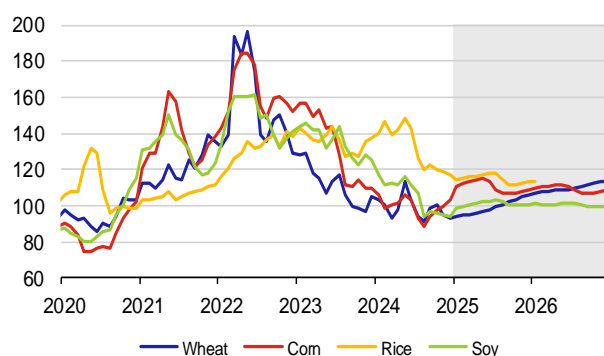
The industrial metals price index fell for the second consecutive month in December, but rose in the first half of January. Metal prices continued to be pushed down by the strong dollar and the global manufacturing PMI, which fell back into the contraction band. The revival of the index in the first half of January was driven mainly by copper prices, which rose sharply in response to more favourable news from the Chinese economy. In addition, expected extraction in Chile was revised downwards. The price of aluminium also surged, as the EU is also considering a ban on imports of this metal in another package of sanctions on Russia. The price of nickel increased following news that Indonesia will strongly limit extraction quotas for this year. Prices of other metals (except zinc) also rose to a lesser extent.

The food commodity price index rose sharply in December and this trend continued into early January. In December and January, the growth was driven mainly by corn prices (thanks to strong demand from distilleries) and beef, while sugar prices moved in the opposite direction. Cocoa prices also went up in December, while rice prices fell. The price of soy rose in the first half of January, while cocoa prices edged down from a historical high. The index outlook is falling.

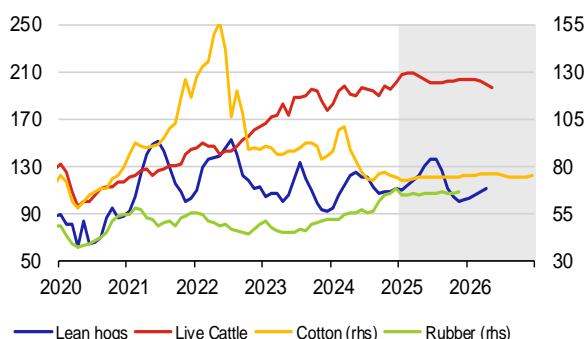
Non-energy commodities price indices



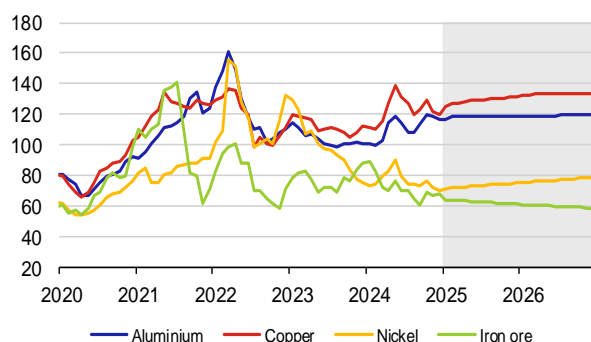
Food commodities



Meat, non-food agricultural commodities



Basic metals and iron ore



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.

Trends on Europe's property market¹

The article covers property market trends in selected European countries from the start of the new millennium. We look at the property market from the perspective of property prices in both nominal and real terms. We supplement this view by analysing property price ratios relative to trends in rents and income. Overall, these enable us to make a deeper comparison and assessment of property market trends across time and countries. The article also compares the shares of owner-occupied and rental housing in European countries, which vary significantly depending on historical, economic and cultural factors.

Property prices and crises

Europe experienced several crises in the 21st century and trends in property prices varied during them. After the collapse of Lehman Brothers in September 2008, house prices experienced a marked correction worldwide, but there were large differences across countries. Significant corrections occurred mainly in Ireland and Spain, whereas the decline in Germany, for example, was not as pronounced (see Chart 1). However, many countries then saw a decade during which property prices rose steadily.

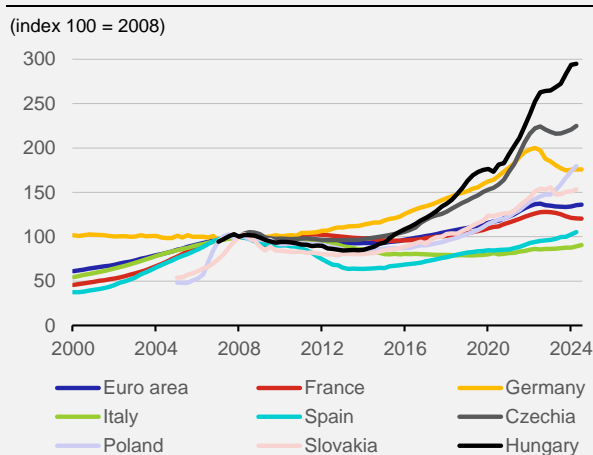
The Covid crisis had no tangible effect on property price growth in most countries. From the perspective of the data, 2019 and 2020 were just years when property prices rose gradually. At the same time, however, central banks eased monetary policy, further supporting property price growth via more available financing. Property prices thus surged, especially in the Czech Republic. 2022 was the year of Russia's attack on Ukraine and the start of the energy and security crisis in Europe. At the same time, high inflation tightened monetary policy, reduced available financing, caused falling demand and thus falling property prices in several countries.

Looking at real estate prices from the perspective of real prices, i.e. prices adjusted for inflation, we can then see that in Italy, for example, property prices have been falling steadily since the financial crisis. On the other hand, in Poland, where property prices have been rising steadily in nominal terms since 2013, they declined in real terms due to high inflation, the same as in other countries (see Chart 2). Real property prices peaked in most countries at the end of 2021, as real property prices declined in 2022 – mainly on account of high inflation. Growth started to recover again last year.

Main property market factors and indicators

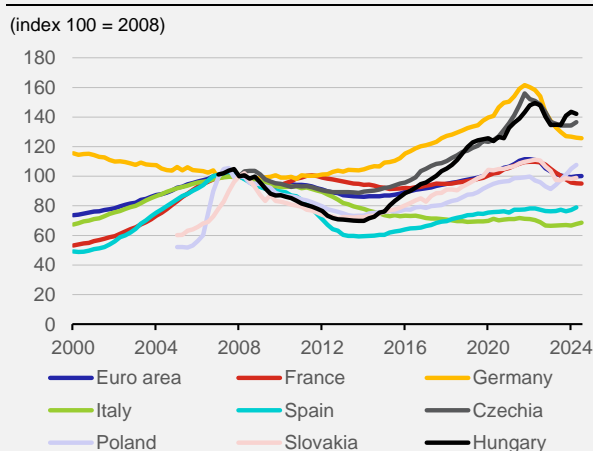
Property prices are affected by a wide range of general economic and non-economic factors, as well as events such as the COVID-19 epidemic, which temporarily increased demand for recreational property and conversely reduced demand for short-term rental investment apartments due to travel restrictions. The main demand factors explaining property price trends include wage growth or more precisely disposable income, growth in loans related to housing financing (in particular mortgages), higher job offerings respectively lower unemployment, growth of construction, interest rate trends (a decline in interest rates leads to a rise in property prices), demographic factors (population growth, higher marriage rate and divorce rate lead to property price growth), the size of the property market (higher supply reduces property prices) and level of rents (higher rents cause growth of real estate prices). On the supply side

Chart 1 – Nominal property price growth in selected European countries



Source: OECD

Chart 2 – Real trends in property prices in selected European countries



Source: OECD.

¹ 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.

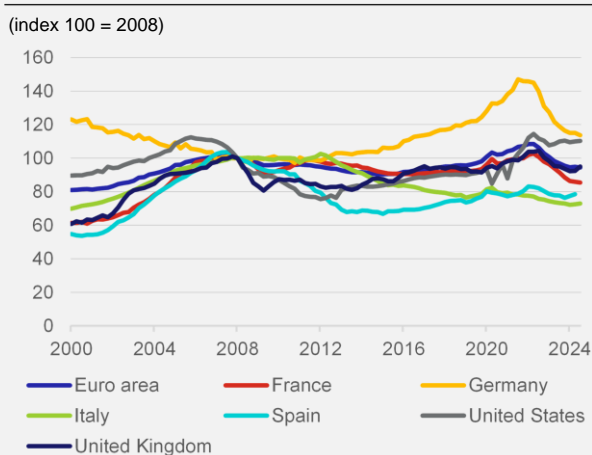
factors explaining property price trends include limited property supply in a specific location, prices of construction materials and volume of construction itself. Supply in the property market is driven also by the profitability of construction and regulatory and administrative factors (length of the process and other requirements) and is regarded as sticky in the short run.

To make the property market easier to understand and to compare trends in property markets, ratios for individual countries, regions and cities are constructed. They include the price-to-income (P/I) and price-to-rent (P/R) ratios.

The P/I ratio provides basic information about the affordability of property in relation to income (Charts 3a and 3b).

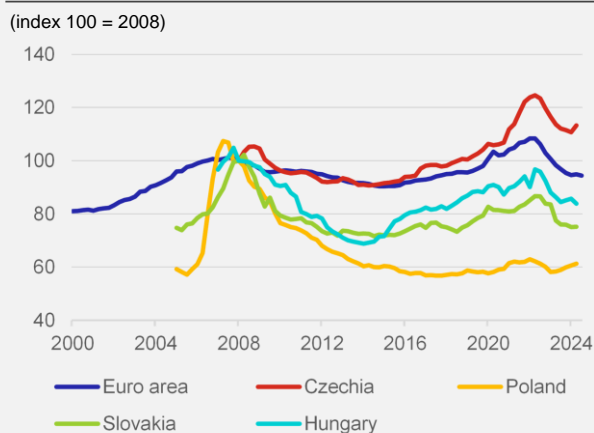
A high P/I ratio indicates that property purchasing costs are high relative to the ability to finance them from income, while at the same time the interest rate and loan-to-value (LTV) ratio² make it more difficult to repay any debt financing for real estate purchases. For the trends in the indicators, we divided the countries under review into two groups, large advanced economies and eastern European countries. The affordability of property increased in all the compared countries in 2023, thanks mainly to subdued property price growth and rapid overall wage growth. The situation in Germany, where housing affordability was constantly declining, deviated significantly, but in recent years the price-to-income ratio has returned to the

Chart 3a – Price-to-income ratio (P/I): countries in the euro area and the global economy



Source: OECD

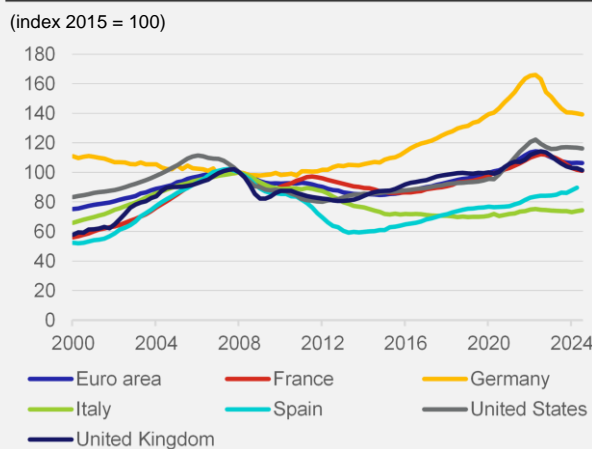
Chart 3b – Price-to-income ratio (P/I): V4 countries



Source: OECD.

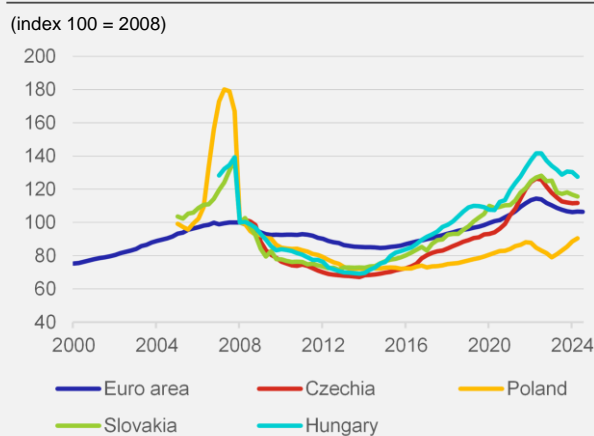
level it was at around ten years ago. Of the V4 countries, housing affordability increased most of all in Poland after the financial crisis, despite continued growth in property prices. Income growth is therefore keeping pace with properties. By contrast, the situation in the Czech Republic, where housing unaffordability relative to income peaked in 2022, is the worst and is getting even worse.

Chart 4a – Price-to-rent ratio (P/R): large global economies



Source: OECD.

Chart 4b – Price-to-rent ratio (P/R): V4 countries



Source: OECD.

² This is discussed in more detail in the Financial Stability Report, for example

The P/R ratio provides basic information about trends in the property prices relative to rental prices (see Charts 4a and 4b). An increase in the ratio may indicate an overvaluation of property prices driven by expectations about future property-related profits, but may likewise indicate that owner-occupied housing is less advantageous than rental housing. If there is optimisation (arbitrage) going on, interest in owner-occupied housing should decline as the ratio rises. The P/R ratio does not seem entirely suitable for the exact determination of property price misalignment, as it takes into account neither opportunity costs (property investment income cannot be compared, for example, with government bond yields) nor the interest rate, which is related to the affordability of loan financing. The inverse of the P/R ratio, i.e. the rent return, is of some help, as it can be directly compared with the long-term interest rate, enabling the opportunity costs to be approximated. A high rent return (i.e. a low P/R ratio) relative to home loan rates can open up space for potentially risky speculative property purchases. At first glance, trends in the ratio in our sample of countries are similar to those in the case of relations to income. In the large advanced economies, the return on rents in Germany decreased the most, i.e. rents are not growing that fast there. Poland is the most interesting of the V4 countries for investors.

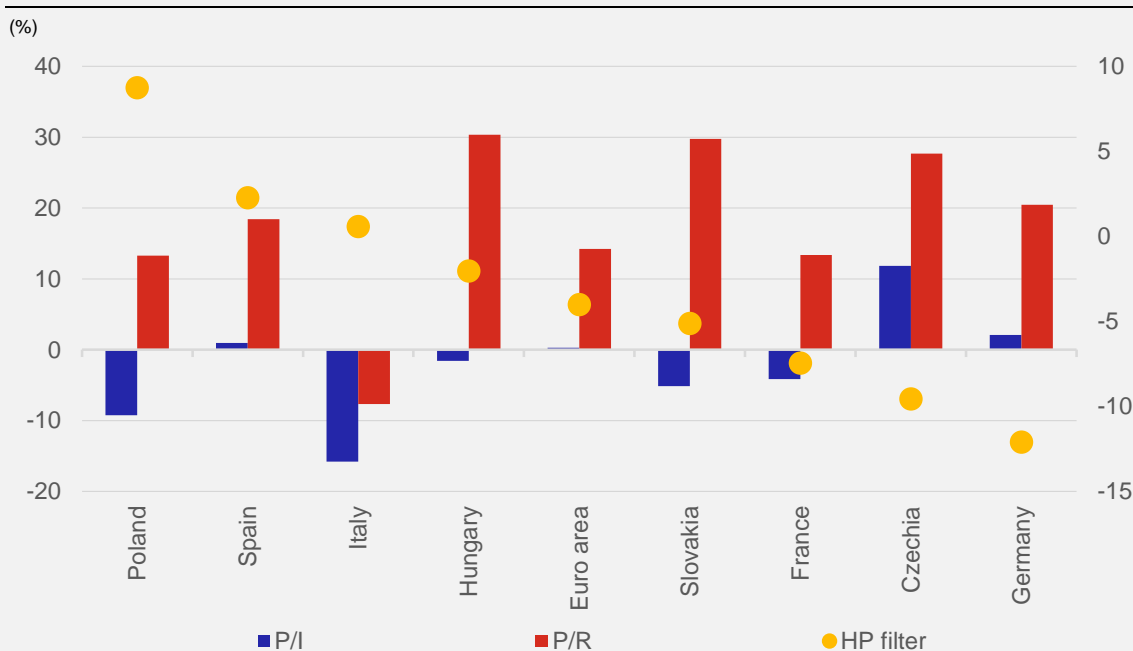
Assessment of property price misalignment

Development of real estate prices and basic ration indicators already provide general information about the mismatch of real estate prices. As shown, the property market experienced a visible correction after 2008. Like trend curves and statistical filters, the P/I and P/R ratios are used to get a quick idea about a particular property market and are especially popular with financial market practitioners. The unanswered question is whether the indicators presented are move in the same way and what conclusion about the property prices misalignment can we make using the knowledge of long-term trends. If price development is well above the long-term average, the P/I and P/R ratios would also likely be higher, as both are directly proportional to property prices.

Further information on the mismatch in real estate prices can be obtained by looking at statistical filters for trends. These are among the simplest approaches, however, these results may not necessarily be less successful *ex ante* than those obtained based on much more sophisticated methods, which, however, usually also provide an answer about what factors most strongly affect property prices. The Hodrick-Prescott filter (HP filter) with a recommended smoothing coefficient for the given time series periodicity, the Band-Pass filter (BP filter) and other univariate filters can be used to calculate trends.

Chart 5 summarises the current P/I and P/R ratios together with the misalignment results obtained using the Hodrick-Prescott filter. The disadvantage of the static HP filter is the well-known problem of endpoint bias, which is more pronounced at times of rapid property price changes. Chart 5 shows that in general property prices oscilate around the long-term average relative to household income in the selected sample. The exception is the Czech Republic, where property prices relative to income are well above the average, while at the opposite end it is Italy, where prices are below

Chart 5 – Property price misalignment in selected countries



Source: authors' calculation based on OECD data

Note: HP filter for mid-2024, P/I and P/R indicators expressed in mid-2024 compared to their long-term average in the relevant country.

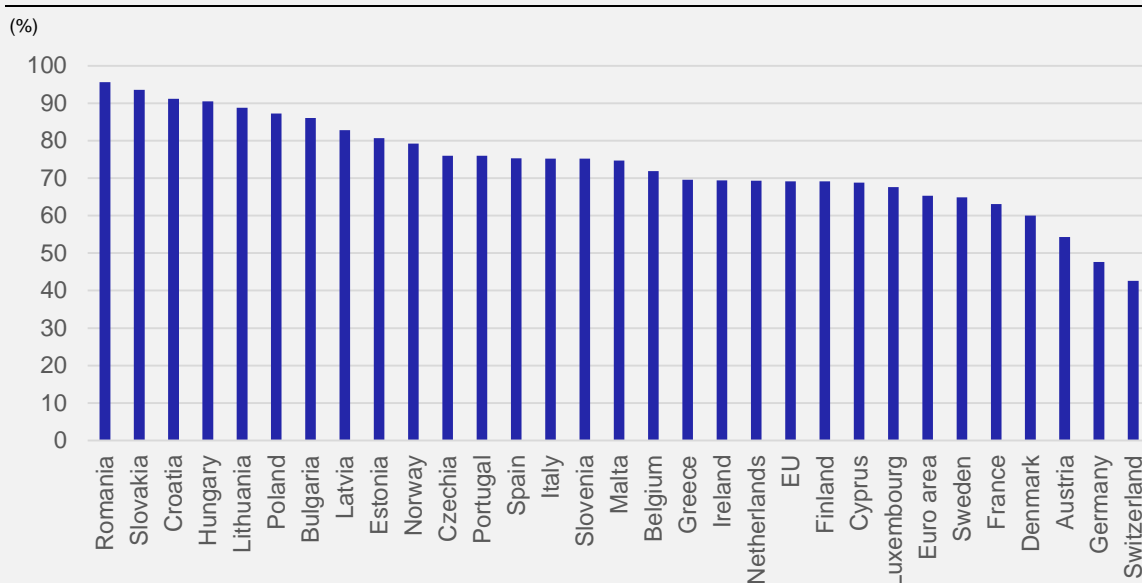
Countries ranked according to the HP filter

the long-term average relative to income. All the countries except Italy are below the long-term average of rental yields, as the price-to-rent ratio is well above the long-term average. From the perspective of the statistical filter, the price of property in Poland is around 9% above the long-term average, while at the opposite end lies Germany, where prices fell sharply and reached values under the long-term trend. More complex structural models would have to be used to obtain a more robust idea of the degree of property price misalignment with fundamentals.

Would Europeans rather be in their own home or rental accommodation?

Property prices and indicators relative to income and rents affect households' preferences as to whether to buy or rent the place where they live. The share of owner-occupied and rental housing varies significantly across European countries, depending on historical, economic and cultural factors. On average, around 70% of the European Union's population owns a property. In Eastern European countries, the share of owner-occupied housing is generally higher, while rental housing is more common in Western European countries. Romania has the highest share of owner-occupied housing (over 96%) and Switzerland the lowest (Chart 6).

Chart 6 – Share of owner-occupied housing in Europe



Source: Eurostat
Note: Data for 2023

The economic factors supporting the preference for owner-occupied housing include mainly the availability of financing (low interest rates and the maturity of the mortgage market support owner-occupied housing), (property prices (the lower property prices, the more households can get a mortgage in an average amount to finance an average size of property), and the stability of household income (the lower the unemployment rate, the more stable household income is, which supports financial confidence for taking on a mortgage liability).

Purchasing your own home is often not a result of a purely economic perspective, but cultural and social factors are also an important factor in the purchase. These include e.g. long-term traditions, mentality and historical trends reflecting, for example, the privatisation of the housing stock after the fall of Communism in Eastern Europe, the traditional propensity to inherit property in southern and eastern EU countries, and also the traditional preference for rental housing in Western Europe (a standard and long-term stable alternative to owner-occupied housing) and family backgrounds and links (people planning a family or living in an intergenerational property usually prefer owner-occupied housing).

Demographic factors also influence housing demand, which mainly include age (younger people mostly prefer rental housing, older people owner-occupied housing, which reflects their view of property as an investment or a way they can provide for themselves in old age. This is undoubtedly related to the expected size of income in old age; if it is lower, then owner-occupied housing is preferred). Next factor is the degree of urbanisation (in cities there is a higher propensity to rent housing, as its supply is also higher; in villages owner-occupied housing is clearly ahead as these mainly include family houses). At the same time, given the high owner-occupier share, the supply of rental properties may not be sufficient, which may further limit the development of some localities.

The fourth group of factors can be placed under the legal and institutional area, and includes the degree of regulation of the rental market (in countries with strict protection of tenants' rights, such as Germany, rental housing is more attractive),

as well as the field of taxes and subsidies (tax breaks on mortgages or direct subsidies for property purchases motivate ownership of housing; in some countries rental housing may be favoured by lower taxation of rental income).

The last group consists of psychological motives associated with property holdings. This concerns feelings of certainty and social prestige. Both these factors argue in favour of owner-occupied housing. If people buy property for long-term use, a high degree of owner-occupied housing will be associated with stable property prices amid the sufficient construction of new property in popular locations. A high degree of owner-occupied housing has a negative effect on population mobility and hence on labour market flexibility. Ownership of real estate entails higher transaction costs, which it is advantageous to pay only in the event of longer use.

Conclusion

The European property market has undergone major changes over the last quarter of century, reflecting the impact of economic crises, demographic trends and monetary policy. The 2008 crisis brought a sharp correction to house prices in some countries, such as Ireland and Spain, while countries such as Germany exhibited more stable trends before as well as after this event. Recent years have shown the growing impact of inflation, which has led to a fall in real property prices, although nominal property prices have often increased further.

Ratios such as price-to-income (P/I) and price-to-rent (P/R) provide valuable insights into the current situation and long-term sustainability of the market. Although most European countries report values close to their long-term averages, the Czech Republic and Poland remain extremes – the first with significant housing unavailability and the second as an attractive location for investors due to the relatively low prices in relation to rents. Future market trends are likely to be determined by a combination of macroeconomic factors, central bank policies, and property supply and demand dynamics.

The availability of owner-occupied and rental housing varies across Europe. The reasons could be found among economic, historical and cultural factors. In Eastern Europe, owner-occupied housing, often associated with the post-communist privatisation of the housing stock, is dominant, while in Western Europe rental housing is more common thanks to better regulation of the rental market. Factors such as the availability of financing, degree of urbanisation and tax policy significantly influence households' decisions on buying or renting. Although a high share of owner-occupied housing increases market stability, it may also reduce labour mobility and labour market flexibility. However, housing unaffordability in relation to household income remains high, especially in countries such as the Czech Republic.

Keywords

Property prices, financial crisis, COVID-19

JEL classification

E32, R31, R33

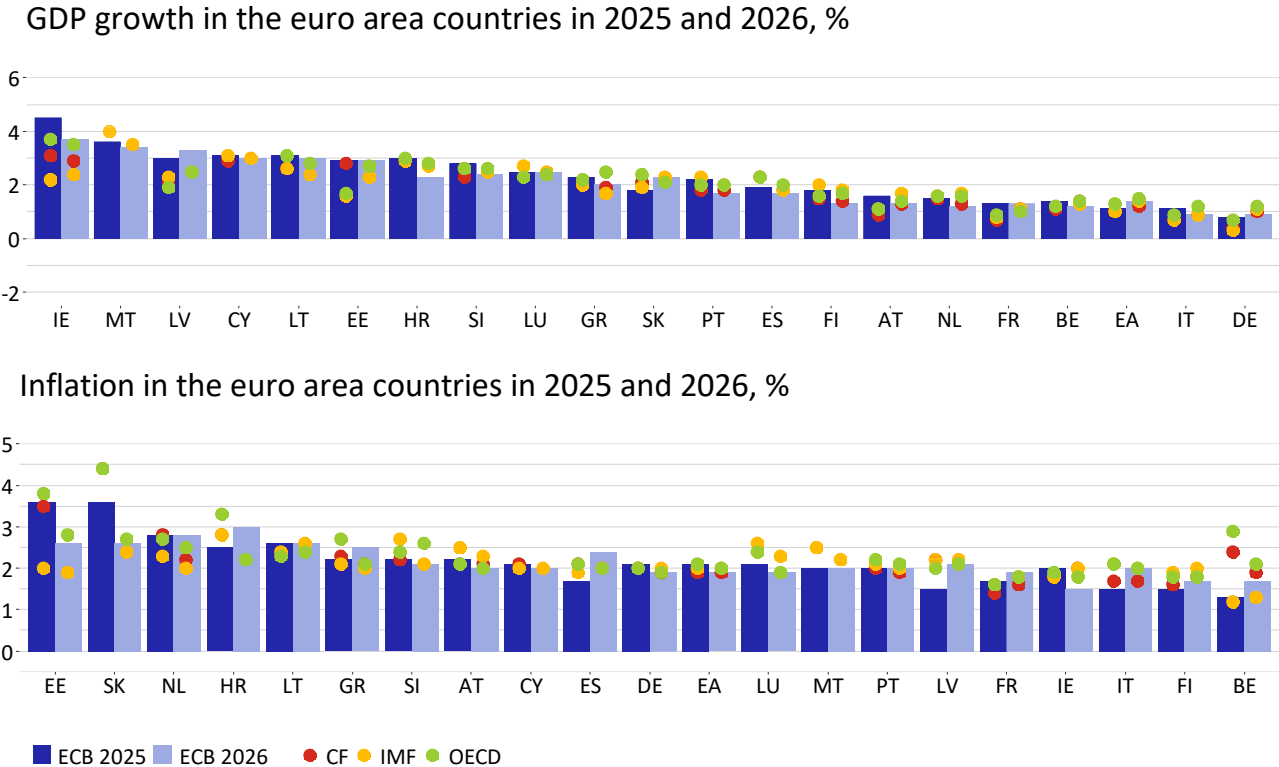
A1. Change in predictions for 2025

GDP growth, %								Inflation, %								
		CF	IMF		OECD		CB / OE			CF	IMF		OECD		CB / OE	
EA	0	2025/1	-0,2	2025/1	0	2024/12	-0,2	2024/12	0	2025/1	0	2024/10	0	2024/12	-0,1	2024/12
		2024/12		2024/10		2024/9		2024/9		2024/12		2024/9		2024/9		
US	+0,2	2025/1	+0,5	2025/1	+0,8	2024/12	+0,1	2024/12	+0,2	2025/1	-0,1	2024/10	+0,6	2024/12	+0,4	2024/12
		2024/12		2024/10		2024/9		2024/9		2024/12		2024/9		2024/9		
UK	-0,1	2025/1	+0,1	2025/1	+0,5	2024/12	+0,5	2024/11	0	2025/1	+0,1	2024/10	+0,3	2024/12	+0,5	2024/11
		2024/12		2024/10		2024/9		2024/8		2024/12		2024/4		2024/9		2024/8
JP	0	2025/1	0	2025/1	+0,1	2024/12	+0,1	2024/10	0	2025/1	-0,1	2024/10	-0,2	2024/12	-0,2	2024/10
		2024/12		2024/10		2024/9		2024/7		2024/12		2024/4		2024/9		2024/7
CN	0	2025/1	+0,1	2025/1	+0,2	2024/12	0	2025/1	-0,2	2025/1	-0,3	2024/10	+0,1	2024/12	0	2025/1
		2024/12		2024/10		2024/9		2024/12		2024/12		2024/4		2024/9		2024/12
RU	0	2025/1	+0,1	2025/1	0	2024/12	+0,1	2025/1	0	2025/1	+1,4	2024/10	+1,5	2024/12	+0,9	2025/1
		2024/12		2024/10		2024/9		2024/12		2024/12		2024/4		2024/9		2024/12

A2. Change in predictions for 2026

GDP growth, %								Inflation, %									
	CF		IMF		OECD		CB / OE			CF		IMF		OECD		CB / OE	
EA	---	2025/1	-0,1	2025/1	---	2024/12	-0,1	2024/12	---	2025/1	0	2024/10	---	2024/12	0	2024/12	
	---	2024/10		---		2024/9		---		2024/9							
US	---	2025/1	+0,1	2025/1	---	2024/12	0	2024/12	---	2025/1	0	2024/10	---	2024/12	+0,1	2024/12	
	---	2024/10		---		2024/9		---		2024/9							
UK	---	2025/1	0	2025/1	---	2024/12	0	2024/11	---	2025/1	0	2024/10	---	2024/12	+0,8	2024/11	
	---	2024/10		---		2024/8		---		2024/8							
JP	---	2025/1	0	2025/1	---	2024/12	0	2024/10	---	2025/1	0	2024/10	---	2024/12	0	2024/10	
	---	2024/10		---		2024/7		---		2024/7							
CN	---	2025/1	+0,4	2025/1	---	2024/12	0	2025/1	---	2025/1	0	2024/10	---	2024/12	0	2025/1	
	---	2024/10		---		2024/12		---		2024/12							
RU	---	2025/1	0	2025/1	---	2024/12	-0,1	2025/1	---	2025/1	0	2024/10	---	2024/12	-0,1	2025/1	
	---	2024/10		---		2024/12		---		2024/4		---		2024/12			

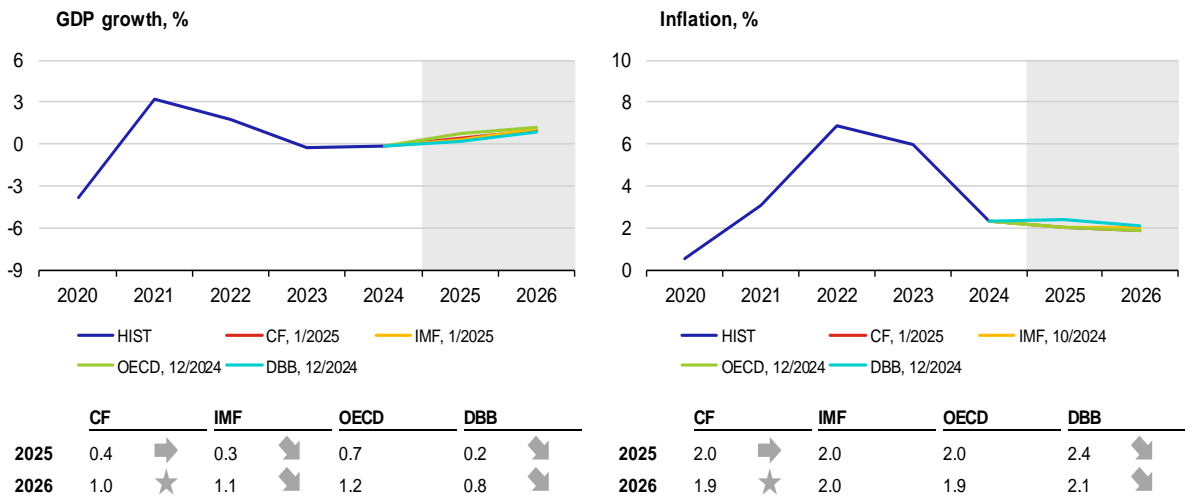
A3. GDP growth and inflation outlooks in the euro area countries



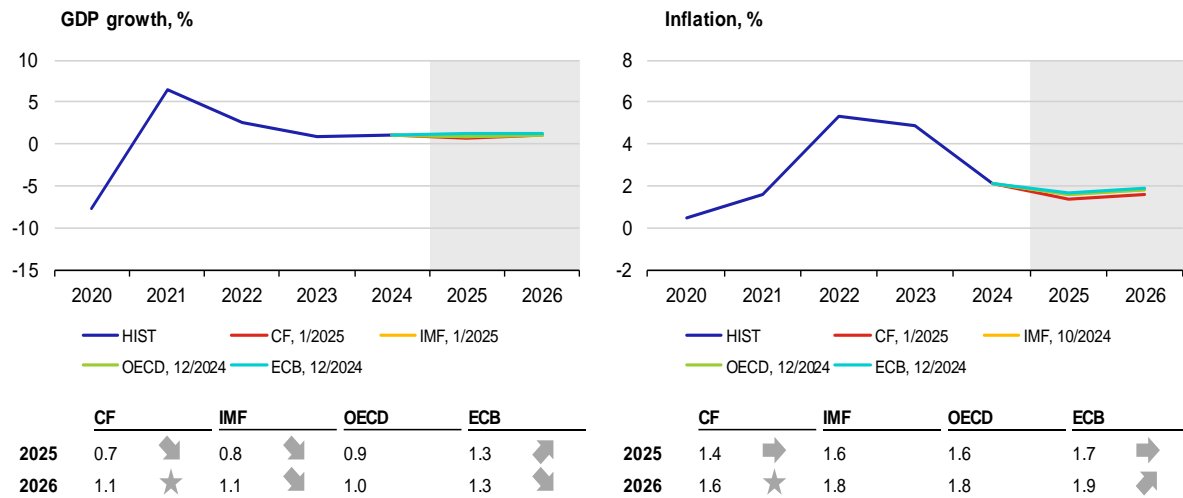
Note: Charts show institutions' latest available outlooks of for the given country.

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

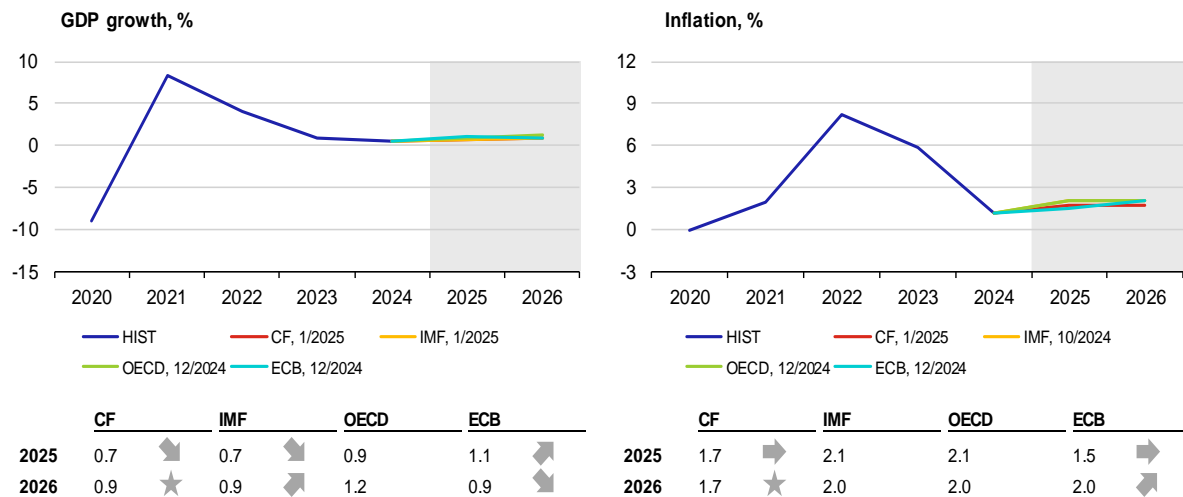
Germany



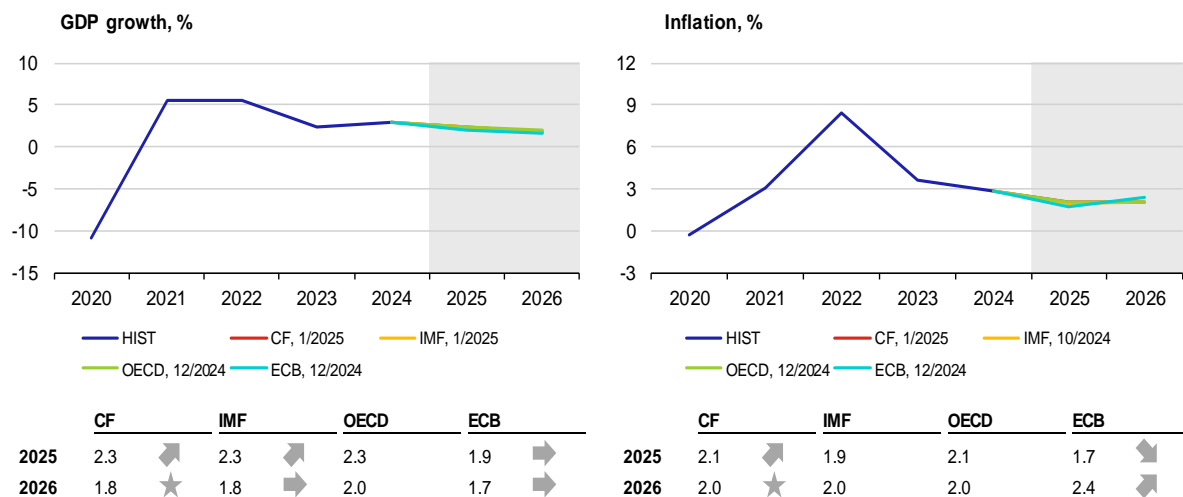
France



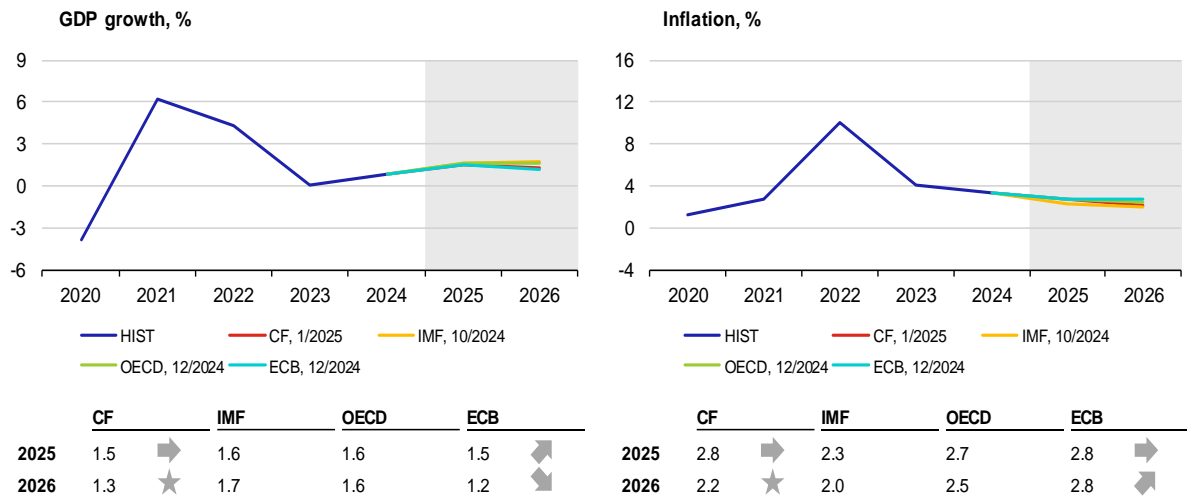
Italy



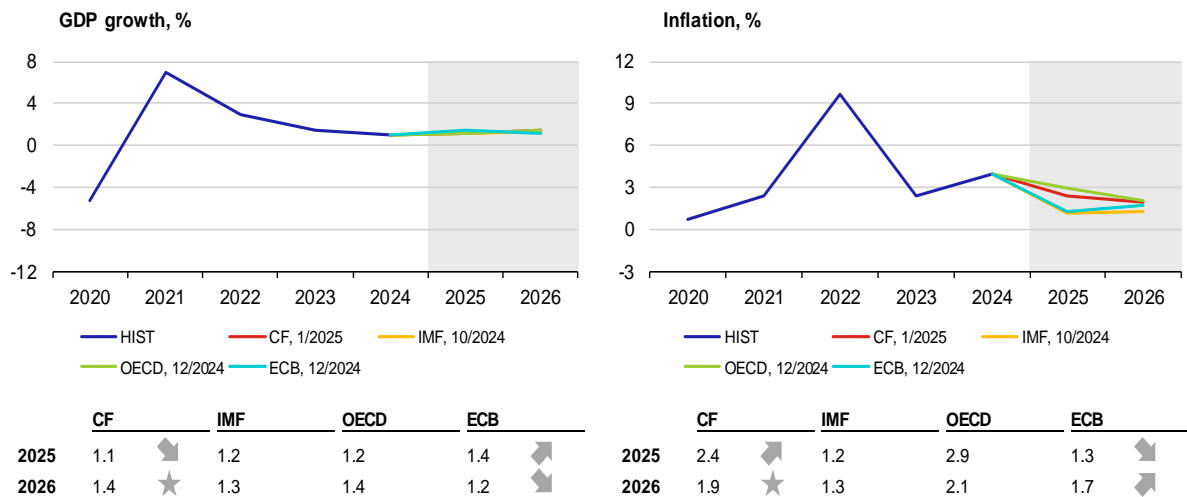
Spain



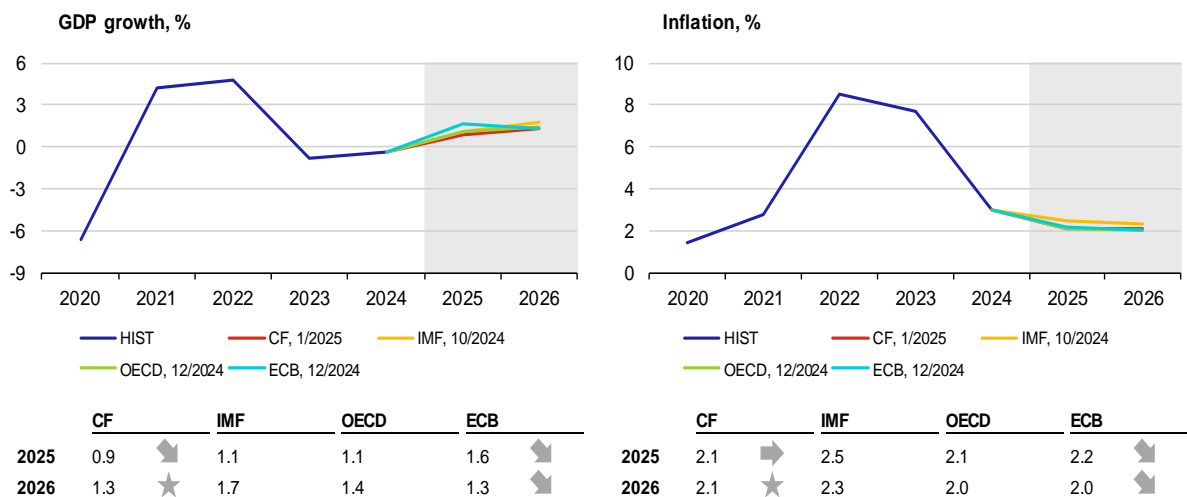
Netherlands



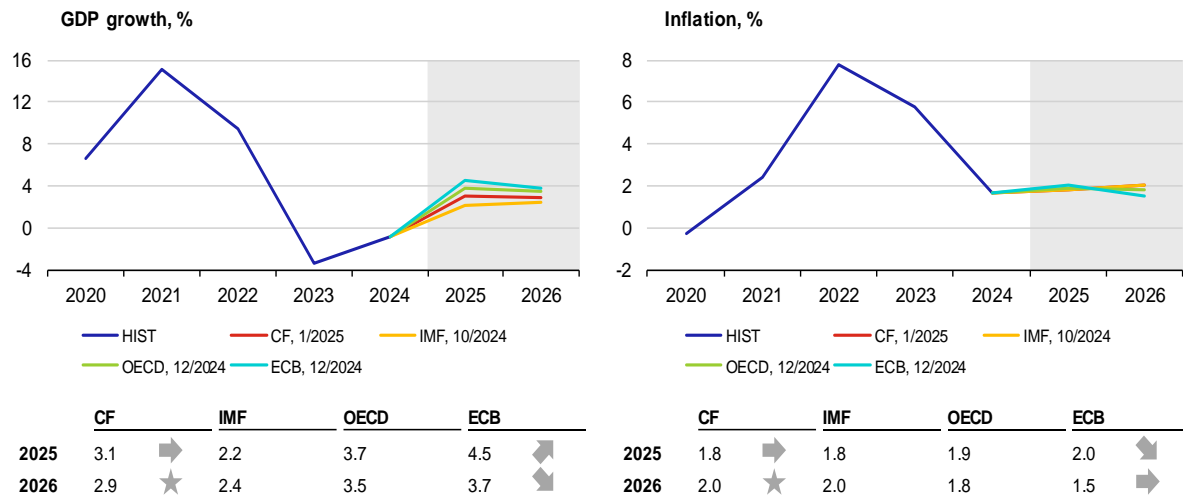
Belgium



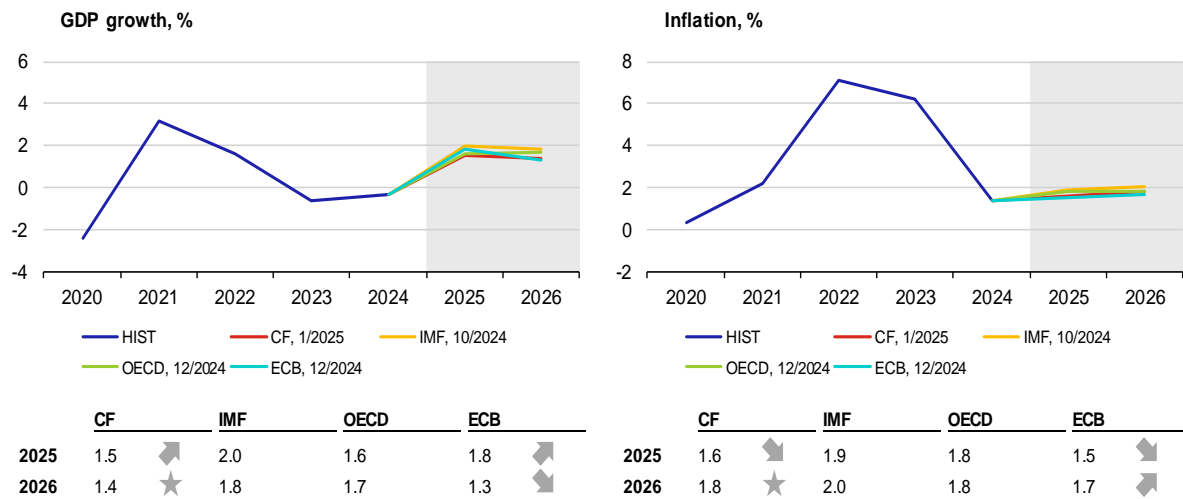
Austria



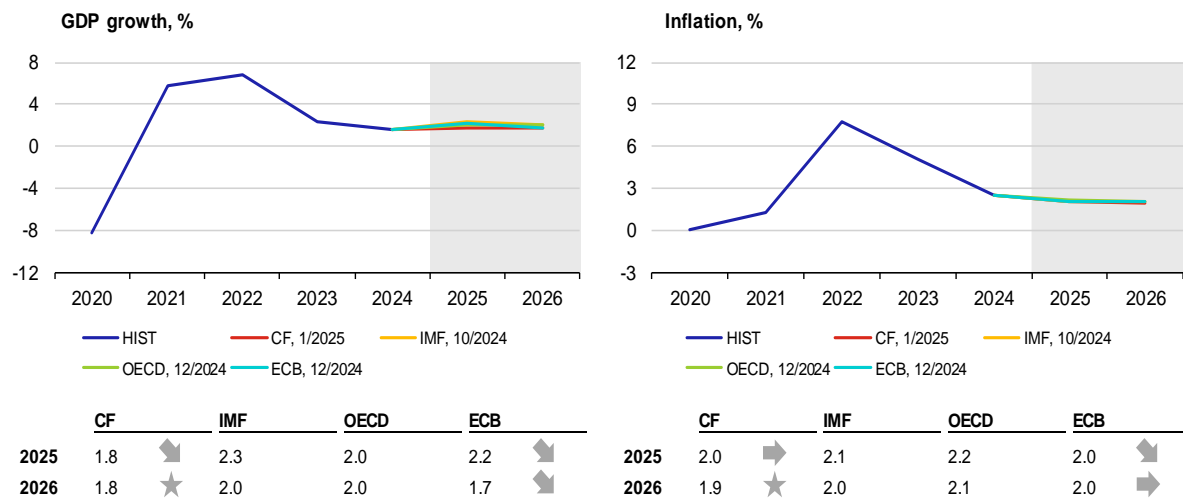
Ireland



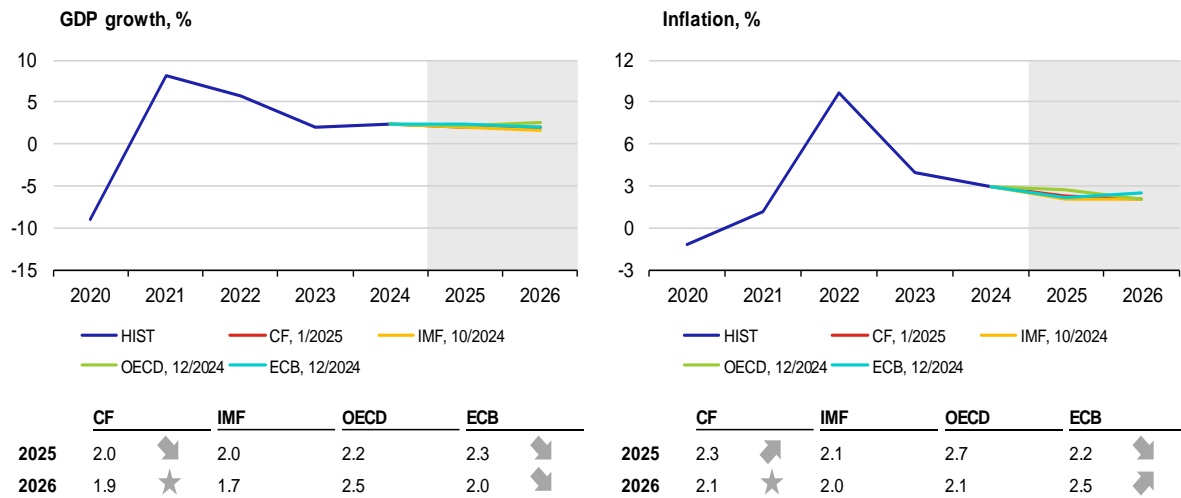
Finland



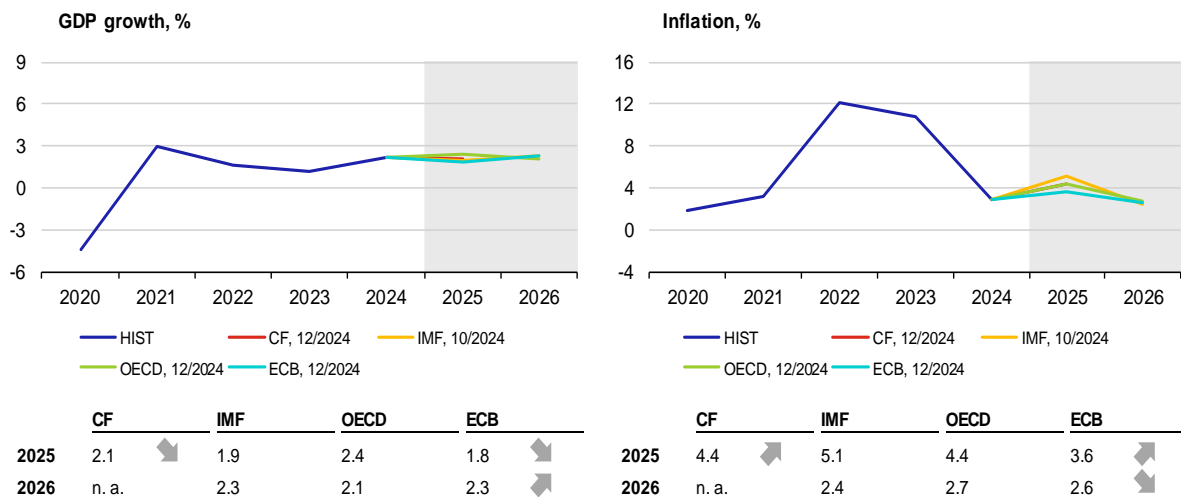
Portugal



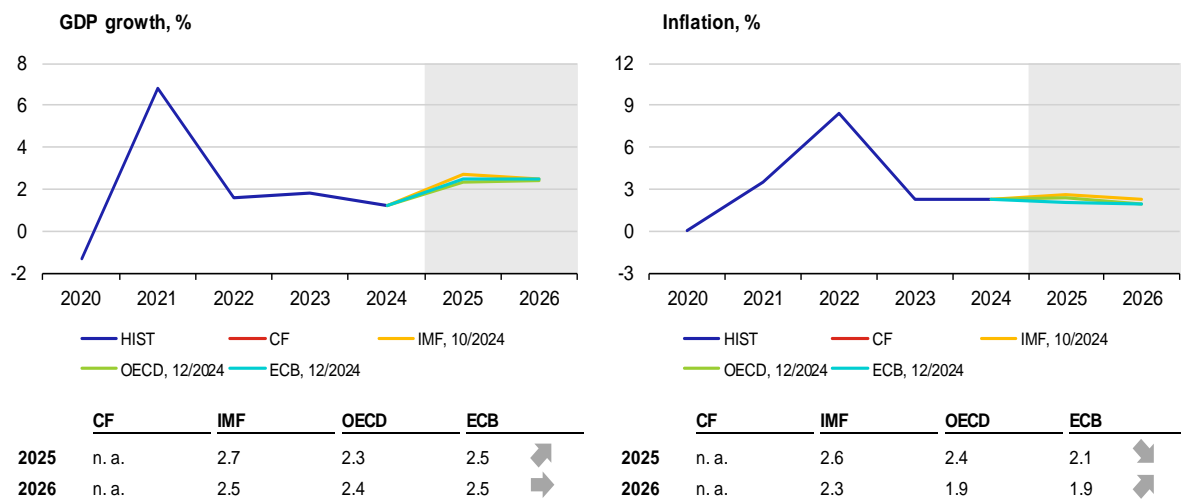
Greece



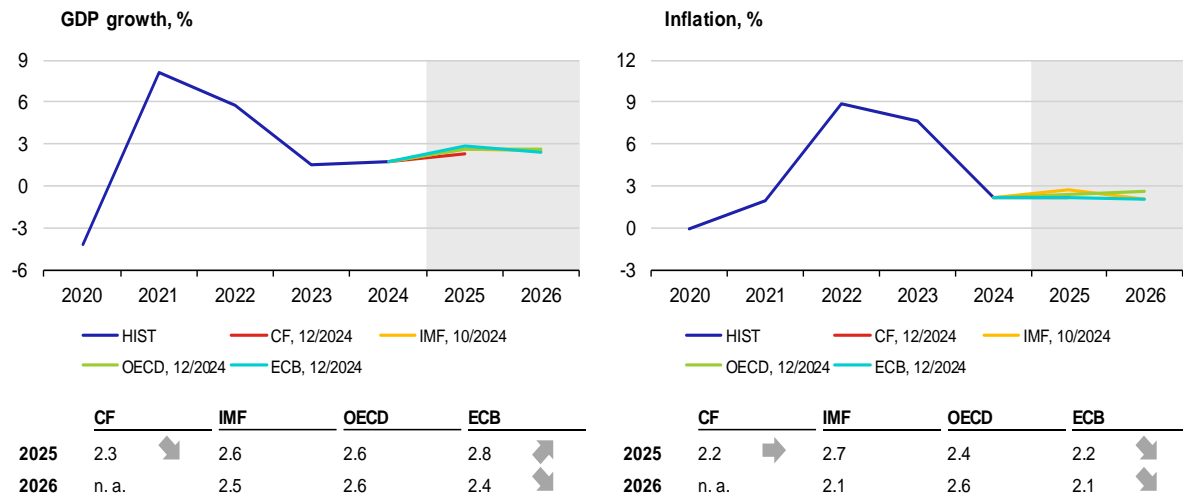
Slovakia



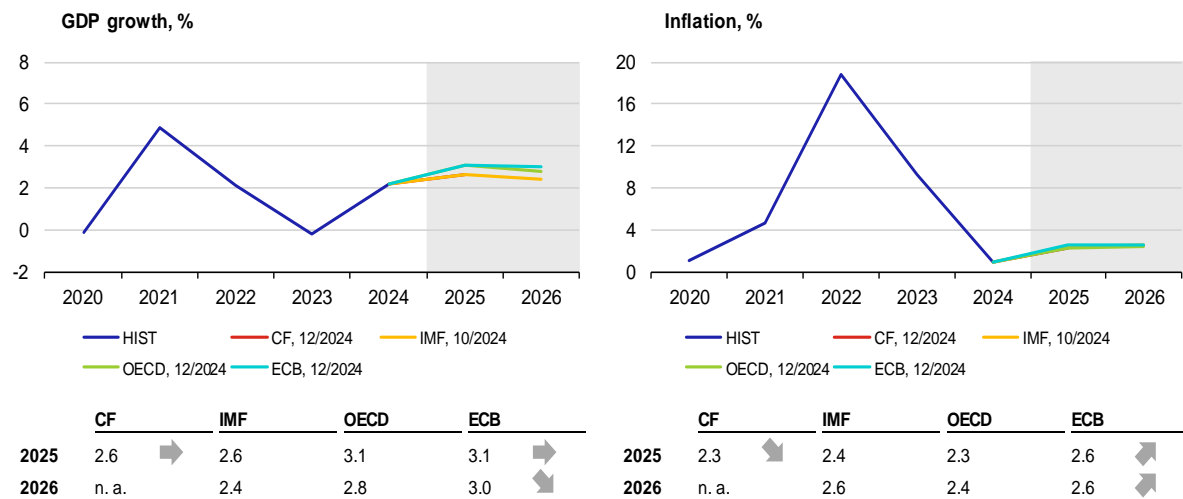
Luxembourg



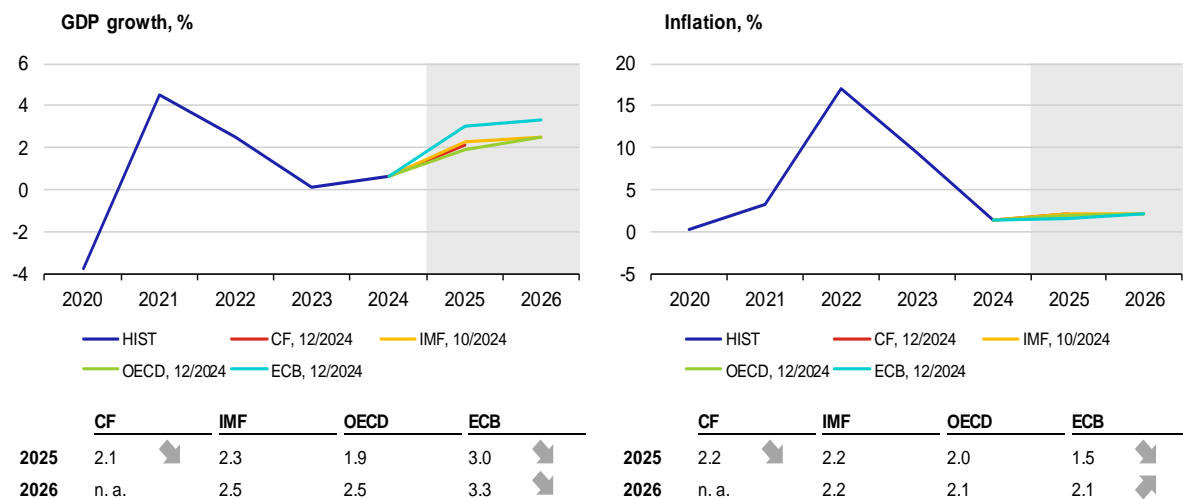
Slovenia



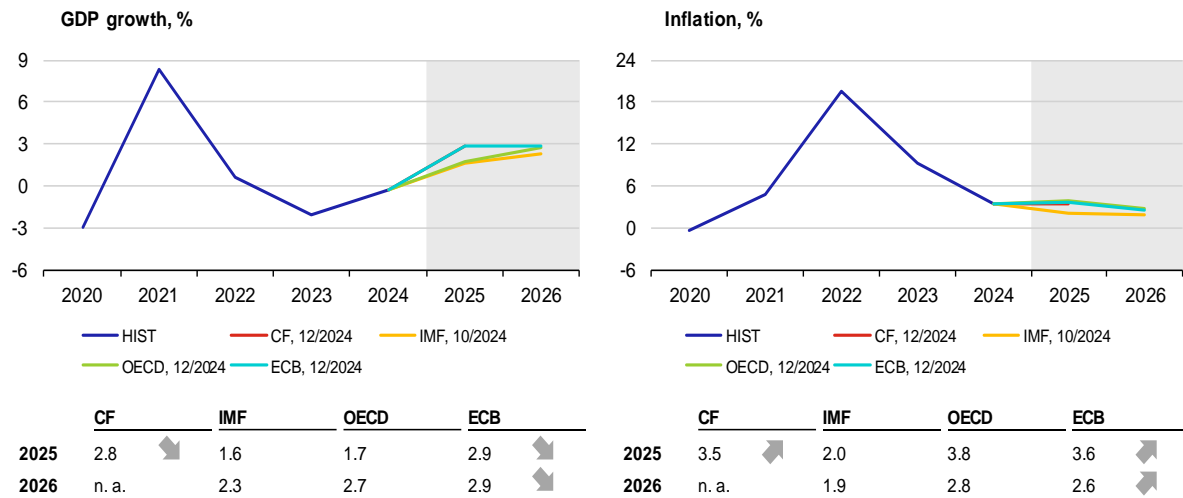
Lithuania



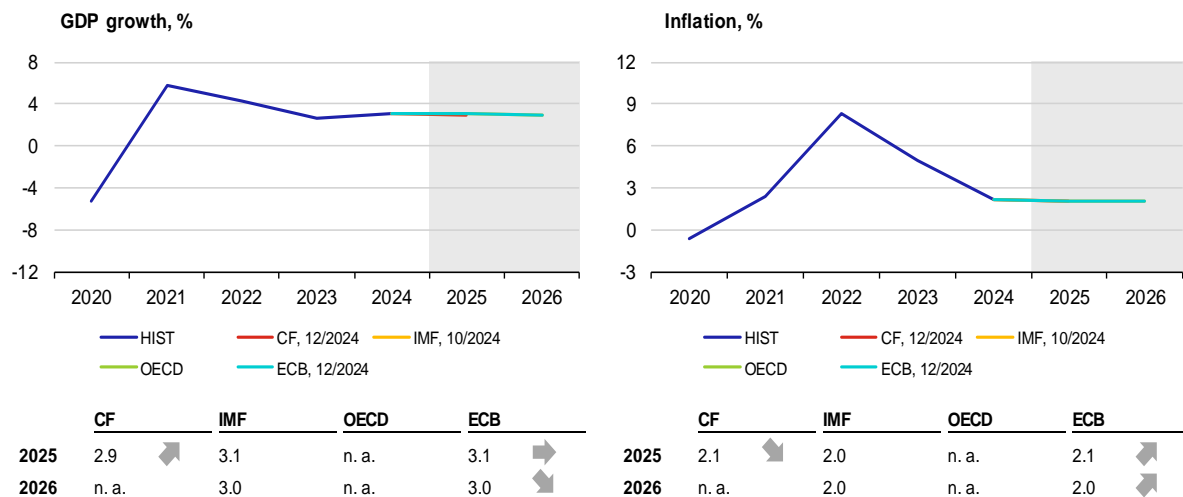
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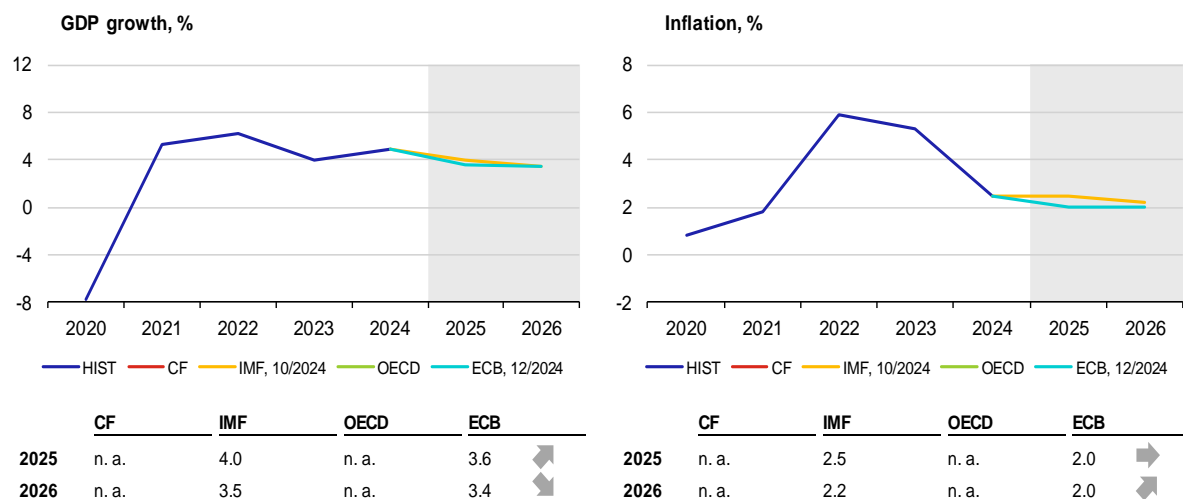
Estonia



Cyprus

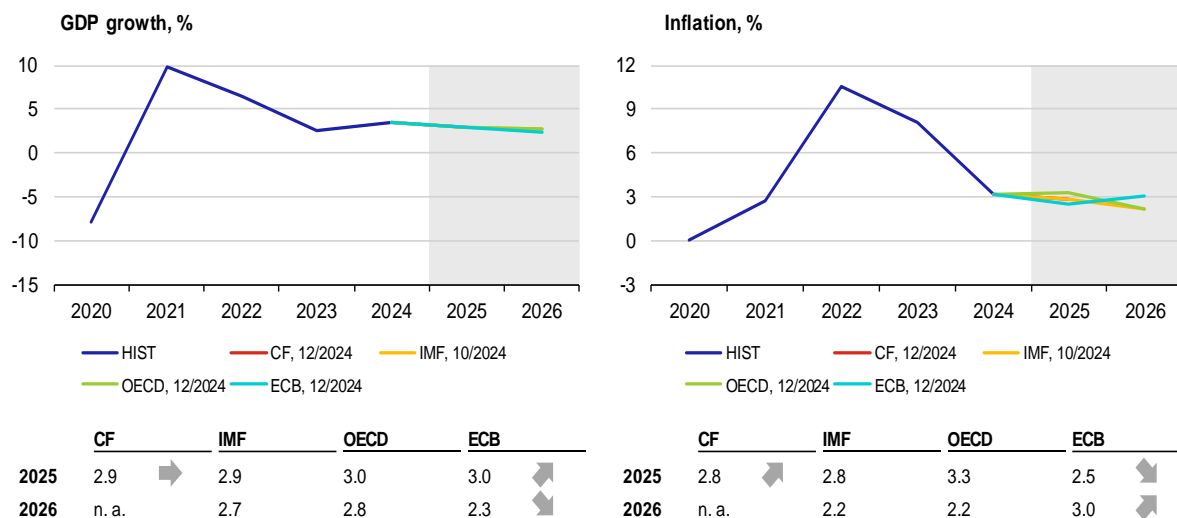


Malta



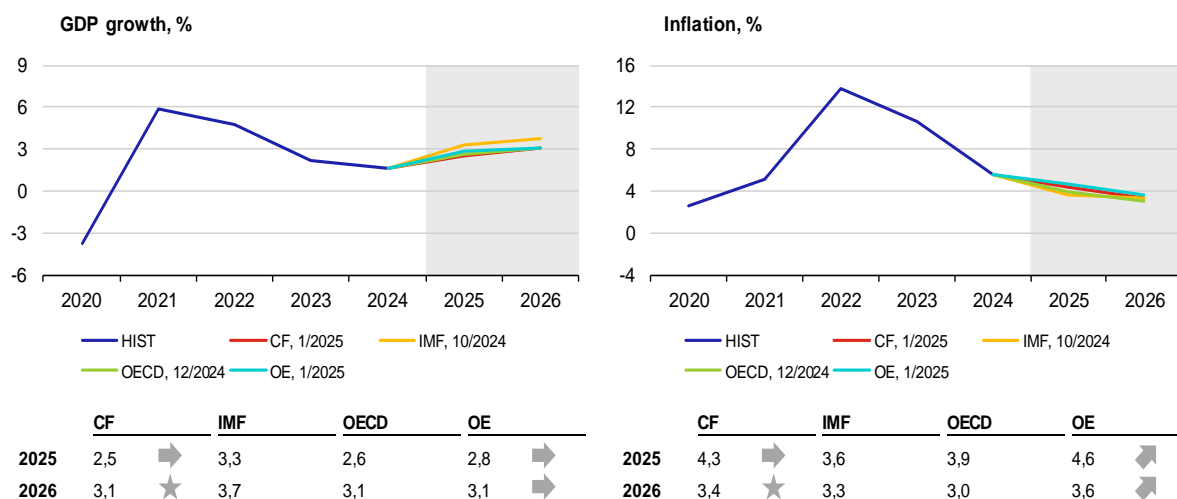
Ddd

Croatia



A5. GDP growth and inflation in other selected countries

Romania



A6. List of abbreviations

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

Publisher:
ČESKÁ NÁRODNÍ BANKA
Na Příkopě 28
115 03 Praha 1
Česká republika

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