Global Economic Outlook

December 2024

Czech National Bank —— Global Economic Outlook —— December 2024

CNB CZECH NATIONAL BANK

Cut-off date for data
13 December 2024

CF survey date
9 December 2024

GEO publication date
20 December 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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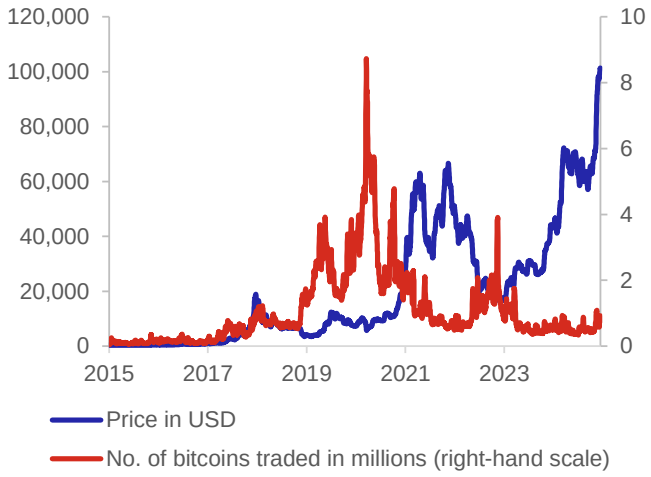
I. Introduction

The slow search for a way to end the war in Ukraine continues, but still behind "closed doors". Experts say that the authorisation to use American weapons deep inside Russian territory and increased US assistance to Ukraine from the outgoing administration of President Joe Biden gives the incoming President Donald Trump several trump cards that may be significant in ceasefire negotiations. At the beginning of December, the US government announced that it had prepared a new military aid package for Ukraine worth USD 725 million (the total has reached an astronomical USD 60 billion since the beginning of the conflict) so that the Russian advance on the front can be slowed as effectively as possible.

Bitcoin (BTC) price and trades over the past nine years



Source: Yahoo Finance
Note: The chart shows 7-day averages. The number of bitcoins traded is calculated as the daily volume divided by the price.

According to the updated OECD outlook, the global economy will grow by 3.2% this year. The OECD also projects that global GDP growth will strengthen slightly to 3.3% next year and remain stable at this level until 2026. In OECD economies, GDP is projected to grow moderately compared to the pre-pandemic period, at 1.9% in both 2025 and 2026. Growing protectionism in international trade is a risk to global growth. Headline inflation continued to decline in most states until 2024, thanks to a further drop in food, energy and goods price inflation. However, inflation in services prices is still persistent and is fluctuating around 4% in OECD states.

The ECB's monetary policy continues its dovish tilt. The December ECB meeting brought the third consecutive rate cut of 25 bps, as well as confirmation that the ECB will also discontinue reinvestments of principal payments from maturing securities under the PEPP programme at the end of this year. In the case of the US Fed, the situation is similar, with a rate cut of 25 bps in December~~, as expected~~. The Canadian (BoC) and Swiss (SNB) central banks implemented rate cuts of 50 bps in December, surprising the markets with their vigour.

The chart in the current issue shows how the bitcoin price surged this year, exceeding USD 100,000 in December. Demand for bitcoins is growing in tandem with the outcome of the US election, but also thanks to interest in bitcoins from institutional investors, who are increasingly legitimising the asset. Interestingly, the daily number of traded bitcoins rose slightly after Donald Trump's victory in the presidential election. Fed Chairman Jerome Powell also mentioned bitcoin as a speculative asset and "virtual gold" in early December.

The current issue also contains an analysis: Crises and their reflection on financial market integration. The article analyses how events like the global financial crisis, the Covid-19 pandemic, the security crisis and the subsequent energy crisis have manifested themselves in the degree of (mis)alignment of individual parts of the financial market (money, foreign exchange, equity and government bond markets) of selected euro candidates compared to the euro area.

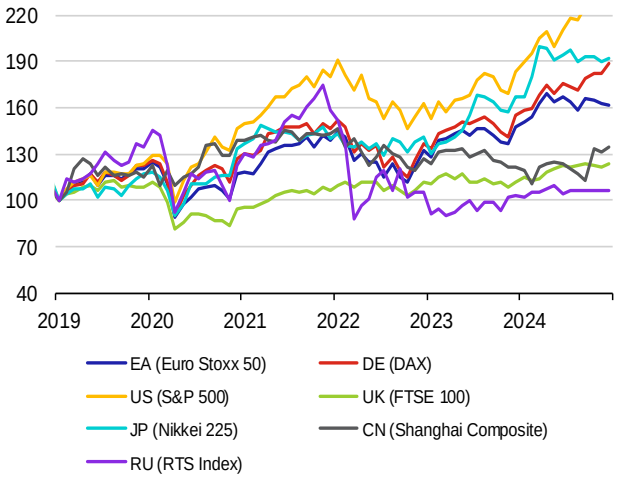
GEO barometer for selected countries

		EA	DE	US	UK	JP	CN	RU
GDP	**2024**	0.8 →	-0.1 →	2.7 →	0.9 →	-0.2 ↘	4.9 ↗	3.6 ↗
(%)	**2025**	1.0 ↘	0.4 ↘	2.0 ↗	1.3 →	1.2 →	4.5 →	1.6 →
Inflation	**2024**	2.4 →	2.3 →	2.9 →	2.5 ↘	2.6 →	0.4 →	8.1 ↗
(%)	**2025**	1.9 →	2.0 →	2.4 ↗	2.6 ↗	2.3 ↗	0.9 ↘	5.5 ↗
Unemployment	**2024**	6.4 ↘	6.0 →	4.1 →	4.3 →	2.5 →	3.4 →	2.5 ↘
(%)	**2025**	6.5 →	6.2 ↗	4.3 ↘	4.3 →	2.4 →	3.3 →	2.4 ↘
Exchange rate	**2024**	1.06 ↘	1.06 ↘		1.28 ↘	147.7 ↗	7.34 ↗	103.7 ↗
(against USD)	**2025**	1.07 ↘	1.07 ↘		1.28 ↘	141.7 ↗	7.24 ↗	102.6 ↗

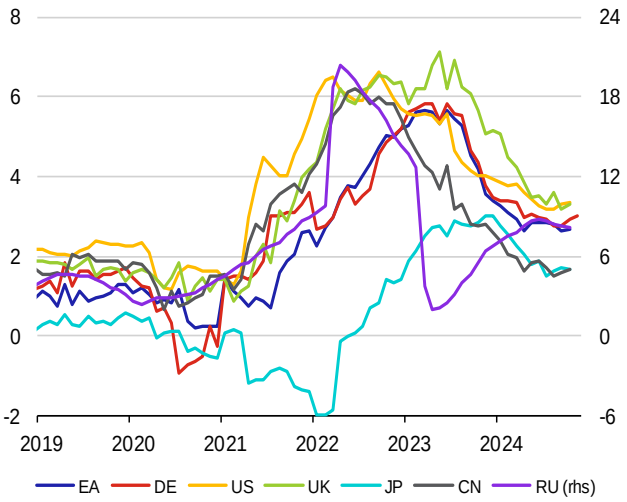
Source: Consensus Forecasts (CF)
Note: The arrows indicate the direction of the revisions compared with the last GEO.

II. Macroeconomic barometer

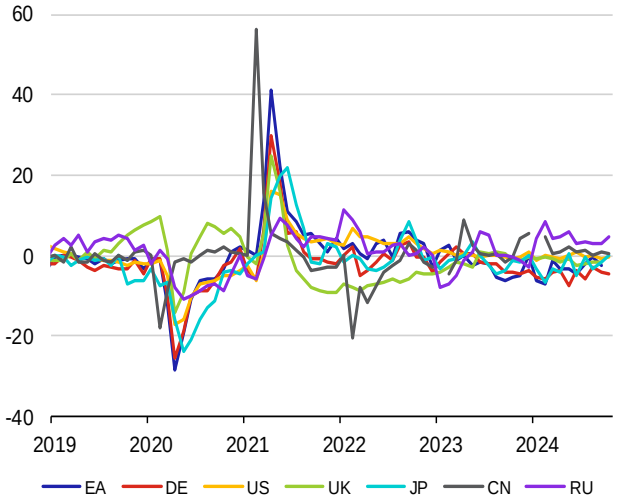
Equity markets development, index 100 = January 2019



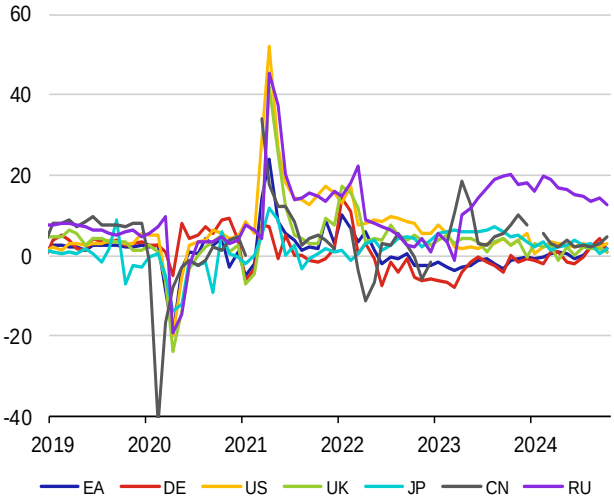
Core inflation, %



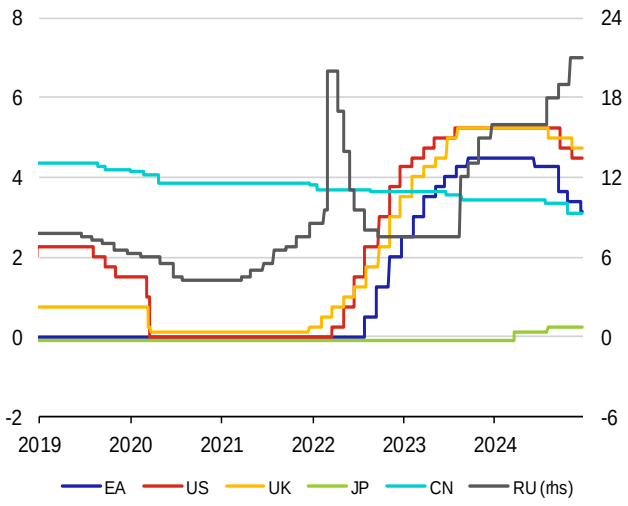
Manufacturing production, yoy %



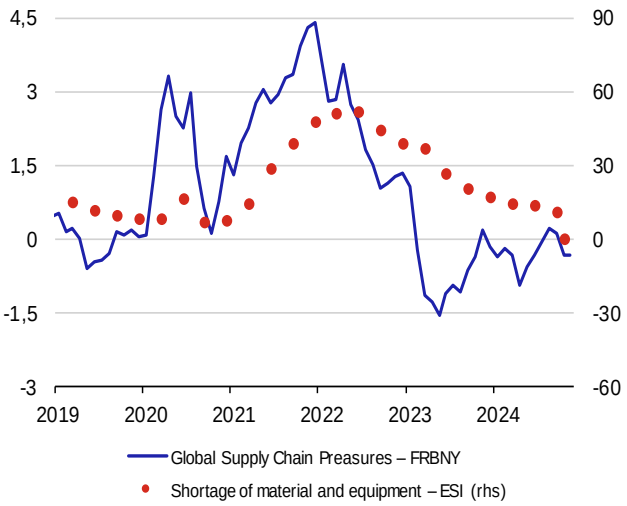
Retail sales, yoy %



Monetary policy rates, %



Supply chains development



Source: Refinitiv Datastream, European Commision.

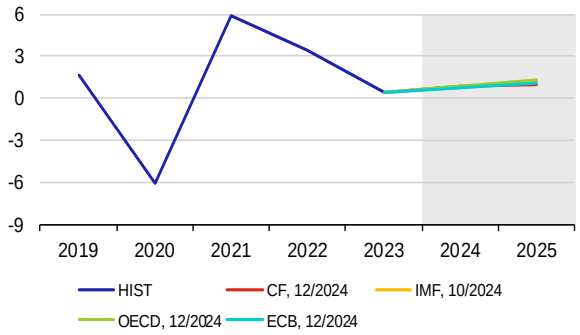
III.1 Euro area

The euro area economy has faced significant challenges in recent months. Industrial production fell by almost 5% year on year in October, reflecting long-standing structural problems, including high energy costs and weak global demand. Moreover, political instability in France and Germany is increasing uncertainty, which is negatively affecting investment and consumer confidence. CF analytics expect euro-area economic growth to reach only 0.8% in 2024, with the strongest slowdown in growth projected in France, where political problems are complicating budget approval and worsening fiscal stability. The euro-area labour market remains relatively tight, despite weak economic activity. Companies are still holding on to workers, reflecting concerns about the difficulty of hiring in the future. However, with declining profits and rising labour costs, hiring is being reduced and unemployment is expected to rise slightly in 2025. These developments could bring short-term productivity improvements, but at the same time increase risks to overall economic performance.

Inflation remained above the ECB's target level in November, with core inflation standing at 2.7%. A slowdown in price growth is expected due to weak demand, but higher energy prices and service costs could keep pressure on the price level in the year ahead. This is creating a difficult situation for monetary policy, which seeks to support the economy without impacting inflation expectations. The ECB plans to continue cutting interest rates, with the deposit rate expected to be cut by 25 bps as early as in December. Yet the scope for further policy easing is limited, underscoring the need for increased fiscal stimulus, especially in states like Germany, where an investment deficit is holding back long-term growth.

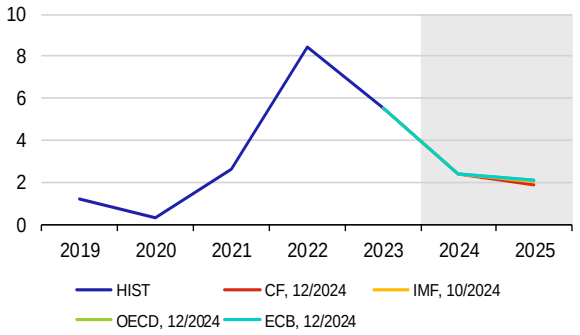
The 2025 outlook is mixed. Southern states like Spain and Portugal benefit from significant NextGen fund investments, but still show above-average growth. Northern states, however, especially Germany and France, face structural problems and political obstacles weakening their economic performance. Only a modest recovery for the euro area as a whole can be expected. According to the CF analysts, GDP growth will reach 1.0%. Inflation will only slowly return to 2%.

GDP growth, %



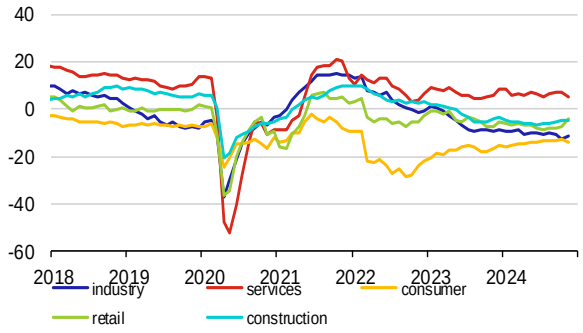
	CF	IMF	OECD	ECB
2024	0.8	0.8	0.8	0.7
2025	1.0	1.2	1.3	1.1

Inflation, %



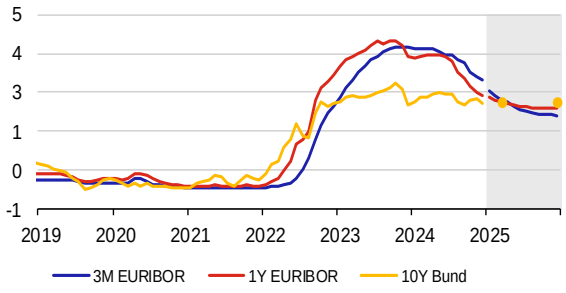
	CF	IMF	OECD	ECB
2024	2.4	2.4	2.4	2.4
2025	1.9	2.0	2.1	2.1

ESI leading indicators



	industry	services	consum.	retail	constr.
9/24	-10.8	6.8	-13.0	-8.2	-5.5
10/24	-12.6	6.8	-12.5	-7.2	-4.8
11/24	-11.1	5.3	-13.7	-4.4	-4.8

Interest Rates, %



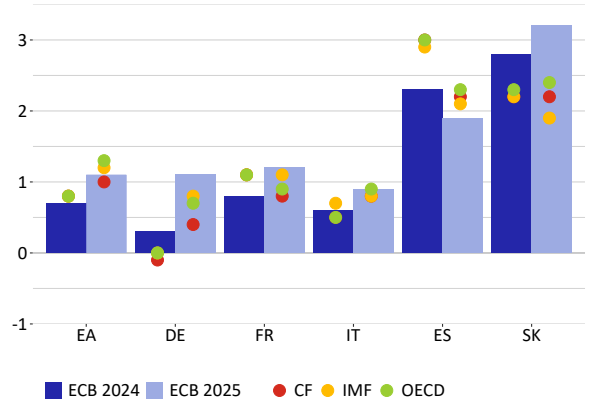
	11/24	12/24	3/25	12/25
3M EURIBOR	3.01	2.88	2.25	1.77
1Y EURIBOR	2.51	2.41	2.17	2.00
10Y Bund	2.31	2.12	2.20	2.20

III.2 Germany

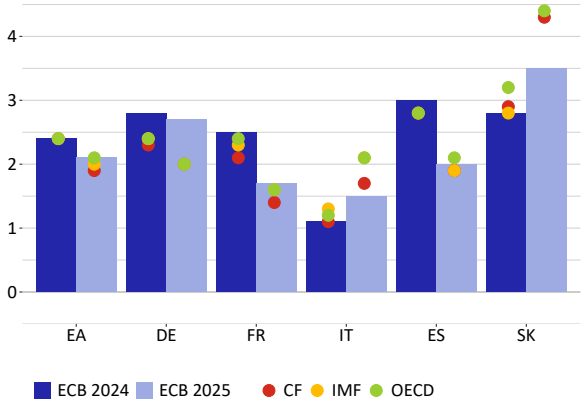
The detailed results have confirmed that the German economy started the second half of the year with moderate growth. However, q-o-q GDP growth was revised down to 0.1% in Q3 (from the original 0.2%). The more detailed data showed that the weak economic result was due to a negative contribution from net exports, which was only slightly outweighed by the positive effect from the final consumption expenditure. The German economy has generally stagnated since the pandemic and the head of the Bundesbank, Joachim Nagel, is calling for a reform of the constitutional debt brake. With the dominant manufacturing sector under pressure from high costs and declining competitiveness, Germany faces a complicated and weak outlook. According to the new OECD forecast, GDP should show zero growth this year and accelerate to 0.7% next year, but the CF and especially the Bundesbank are more pessimistic, expecting a slight decline in GDP this year and then slight growth in 2025. The composite PMI indicator fell to 47.2 points in November and remains in the contraction zone. Private sector activity fell the most since February, as the services sector slipped into contraction (49.3) and manufacturing continued to decline sharply (43.0). According to the November Ifo index, business sentiment has become increasingly gloomy since October's positive tremor. This was mainly due to a worse assessment of the current situation, but expectations also fell slightly. Consumer sentiment also declined significantly in November after slight improvements in previous months.

Harmonised consumer price inflation was flat at 2.4% in November. In year-on-year terms, prices thus accelerated, as they did in October. In particular, above-average growth in services prices contributed positively to headline inflation, while energy price developments again had a dampening effect in November, albeit less pronounced than in previous months. Core inflation continued to accelerate slightly to 3.0%. Recent forecasts by the CF, OECD and the Bundesbank all assume that price growth will not exceed 2.5% this year and will slow to the ECB's 2% inflation target next year (only in 2026 according to the Bundesbank). The decline in industrial producer prices slowed slightly to 1.1% year on year in October (compared to 1.4% in September), the main reason continuing to be lower energy prices.

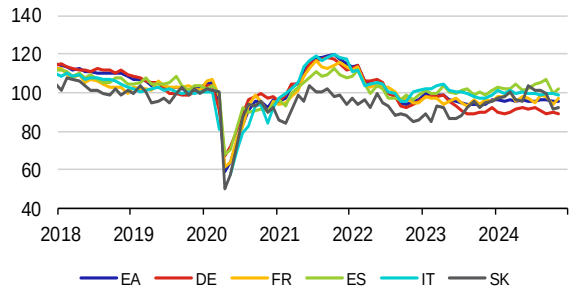
GDP growth in selected euro area countries in 2024 and 2025, %



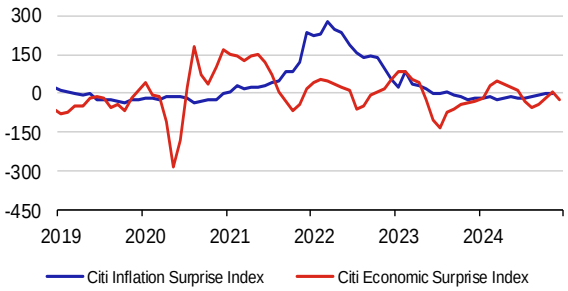
Inflation in selected euro area countries in 2024 and 2025, %



ESI leading indicators



Economic and inflation surprises in the euro area, %



	EA	DE	FR	ES	IT	SK
9/24	96.3	89.3	98.1	107.3	99.9	99.3
10/24	95.7	90.1	93.9	100.0	99.5	91.9
11/24	95.8	88.8	96.9	102.1	99.2	92.0

Inflation expectations based on 5year inflation swap and SPF

	5y5y	SPF
10/24	2.15	2.01
11/24	2.09	2.01
12/24	1.98	2.01

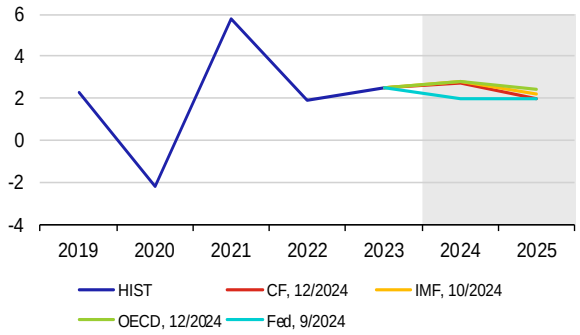
III.3 United States

The OECD's new GDP growth outlook expects 2.8% this year and 2.4% next year. Economic growth in the third quarter depended on a narrow set of factors such as consumer demand, business investment in equipment and elevated inventory levels, with companies accelerating investment due to tariff concerns. In November, growth in services activity slowed as firms faced significant uncertainty about the policies of future President Donald Trump. Although the election was expected to boost economic activity, comments in November suggested that businesses remain cautious about the potential impact of the new administration's policies on the broader economy. Annual Inflation bottomed out in September at 2.4%, after which the consumer price index rose slightly to 2.7% year on year in November, while core inflation has remained at 3.3% for three months with the same month-on-month increase of 0.3%. The OECD's new inflation outlook expects 2.9% this year and, along with the CF analysts, has raised expectations for next year to 2.4%.

The labour market showed strong employment growth in November, representing a recovery from the weakness in October caused by the hurricanes and strikes. However, this recovery fell short of expectations, suggesting that the slowdown in October was not due to temporary factors. For example, employment growth in manufacturing would have remained negative if it had not been for the one-off increase after the end of the strike at Boeing. Moreover, the slight increase in the unemployment rate points to persistent weaknesses in cyclical sectors of the economy. Unemployment reached 4.3% in November.

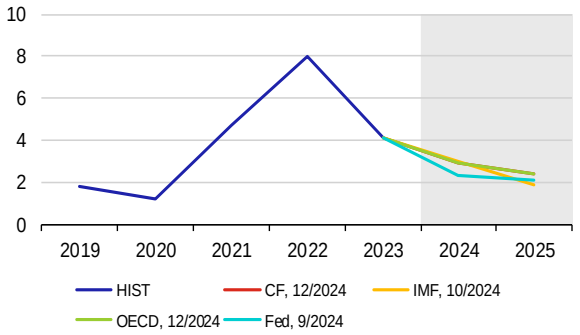
The Fed's December meeting is expected to cut rates to the 4.25% to 4.5% band. After that, according to the markets, the US central bank should take a pause in easing monetary policy, with the next cut not expected until the spring. Fed Chairman Jerome Powell drew attention to himself after he said, during an interview in early December, that bitcoin "is like gold, it's just virtual and digital". In a broader context, he said that people use it as a speculative asset and that it is not a rival to traditional currencies, but rather to gold.

GDP growth, %



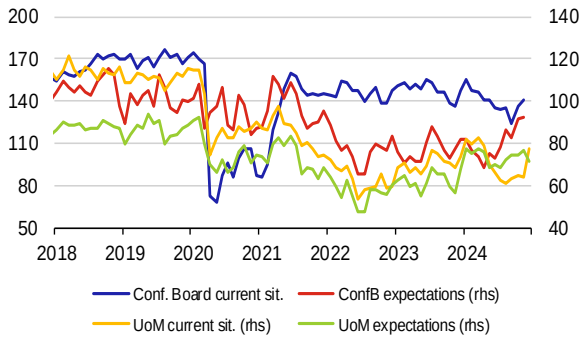
	CF	IMF	OECD	Fed
2024	2.7	2.8	2.8	2.0
2025	2.0	2.2	2.4	2.0

Inflation, %



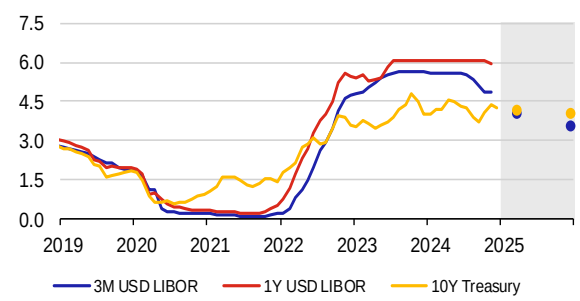
	CF	IMF	OECD	Fed
2024	2.9	3.0	2.9	2.3
2025	2.4	1.9	2.4	2.1

Leading indicators



	ConfB curr.	ConfB exp.	UoM curr.	UoM exp.
10/24	136.1	91.9	64.9	74.1
11/24	140.9	92.3	63.9	76.9
12/24			77.7	71.6

Interest Rates, %



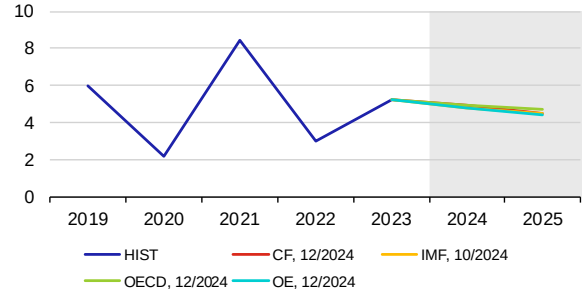
	11/24	12/24	3/25	12/25
USD LIBOR 3M	0.00	0.58	4.10	3.60
USD LIBOR 1R	0.00	0.00		
Treasury 10R	4.36	4.25	4.20	4.10

III.4 China

At the close of this year, the Chinese economy is showing signs of stabilisation, accompanied by modest signs of recovery owing to stimulus measures by the government and the central bank. After the preceding months of relative uncertainty and subdued real economic activity, November and preliminary December data suggest cautious improvements in some key areas. The industrial activity indicator, the Purchasing Managers' Index (PMI), rose slightly to 50.3 points in November, hovering just above the neutral 50-point mark, the same as in the previous month. The Caixin index, which focuses more on smaller and private businesses, also showed a relatively significant expansion to 51.5 points in November compared to 50.3 the previous month. This suggests a recovery in business confidence and a partial unwinding of the tensions that previously held back investment and manufacturing activity. In addition, industrial production increased by a further 5.4% year on year in November. The sector was supported by targeted policy measures to ease credit conditions to in turn stimulate domestic demand, which however is still not robust enough, as retail sales unexpectedly slowed in November and rose only 3% year on year after a 4.8% rise in October, which was the highest in eight months. According to the December outlook from the CF analysts, the annual growth rate of the Chinese economy will reach 4.9% this year, close to the Chinese government's target of 5%, while GDP growth should slow to 4.5% next year.

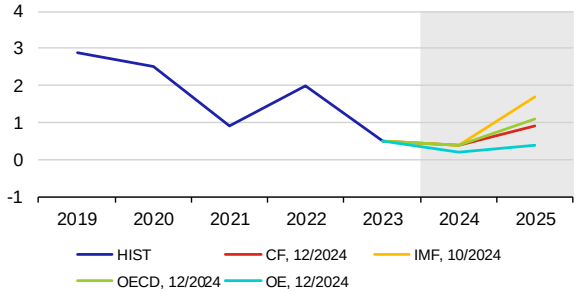
Consumer prices are almost flat, while producer prices remain in deep deflation. Consumer price inflation slowed slightly further in November, with prices rising by only 0.2% year on year, thus falling short of expectations, meaning inflation remains subdued despite the government's stimulus measures, adding to pressure for further support through fiscal and monetary policy. At the same time, the decline in producer prices moderated from -2.9% in October to -2.5% in November. According to the CF analysts' outlook, consumer prices have risen by 0.4% this year and were thus well below the Chinese government's target of around 3%, with only a slight acceleration to 0.9% expected next year.

GDP growth, %



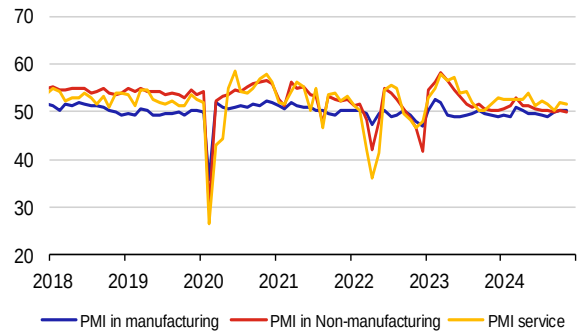
	CF	IMF	OECD	OE
2024	4.9	4.8	4.9	4.8
2025	4.5	4.5	4.7	4.4

Inflation, %



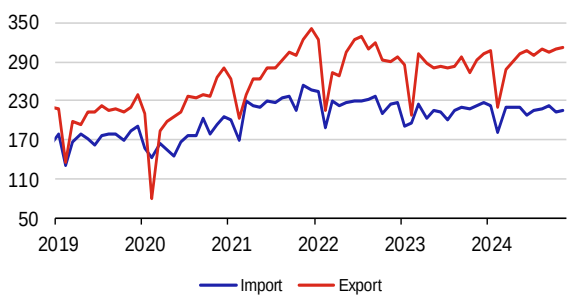
	CF	IMF	OECD	OE
2024	0.4	0.4	0.4	0.2
2025	0.9	1.7	1.1	0.4

Leading indicators



	PMI manuf.	PMI in Non-manufacturing	PMI service
9/24	49.8	50.0	50.3
10/24	50.1	50.2	52.0
11/24	50.3	50.0	51.5

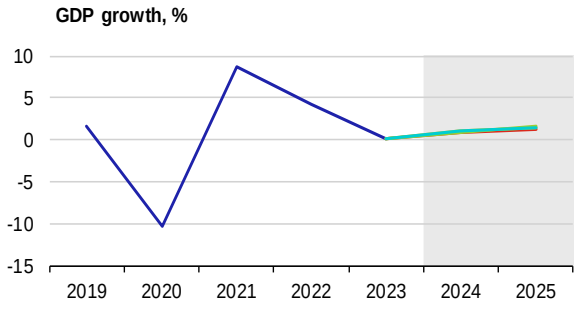
Development of China foreign trade, bil. USD



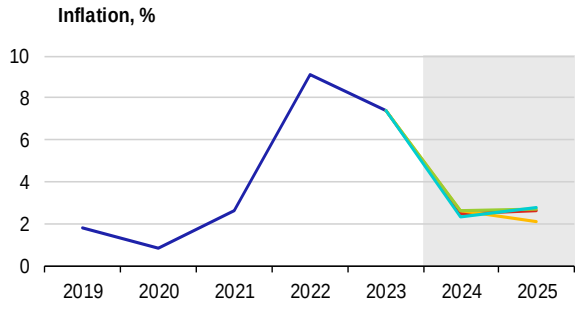
Source: Bloomberg

III.5 United Kingdom

Inflation accelerated sharply, back above the central bank's 2% inflation target. Annual consumer price inflation accelerated to 2.3% in October (from 1.7% in September), mainly due to an increase in the energy price cap by the gas and electricity markets regulator Ofgem. Core inflation (3.3%) and services inflation (5.0%) also rose slightly. Despite these worse-than-expected figures, however, consumer price growth has fallen faster this year than the BoE had predicted, and Governor Andrew Bailey therefore expects up to four possible rate cuts next year if disinflation continues. According to the new CF and OECD forecasts, inflation will be around 2.5% this year and in 2025. According to the composite PMI indicator (50.5 points), private-sector activity continues to lose momentum as business confidence in the Labour government fell after the budget announcement. Chancellor Rachel Reeves then committed to an ambitious economic partnership with the EU, as she believes that improving mutual trade is key to promoting growth. According to the new forecasts, this will barely reach 1% this year and accelerate slightly to 1.5% next year.



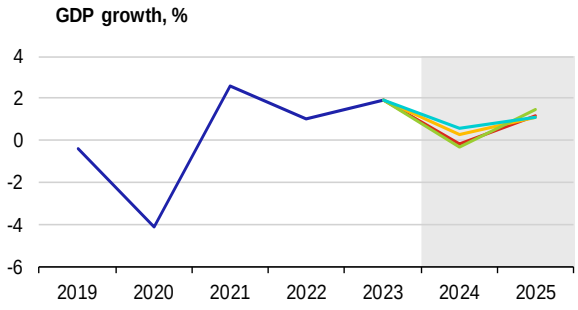
	CF	IMF	OECD	BoE
2024	0.9	1.1	0.9	1.0
2025	1.3	1.5	1.7	1.5



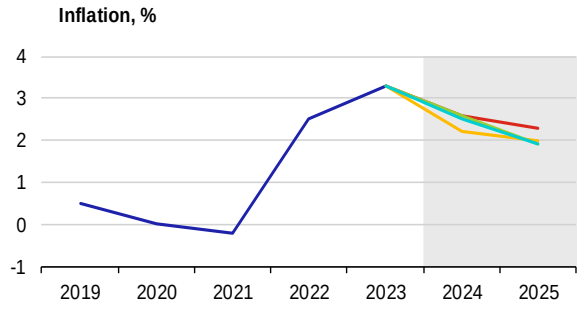
	CF	IMF	OECD	BoE
2024	2.5	2.6	2.6	2.3
2025	2.6	2.1	2.7	2.8

III.6 Japan

Economic indicators point to a continued recovery, with GDP growth revised up to an annualised 1.2% in the third quarter, driven by net exports and capital expenditures. October industrial production showed a solid pace, but is expected to decline slightly in November and December. Consumer spending remains stable but cautious due to persistent inflation. Producer inflation also increased, with input prices for firms rising by 3.7% year on year, reflecting broader inflationary pressures. Three interest rate hikes are expected by the end of next year, bringing rates to 1%. Economic growth should maintain its current momentum next year, with inflation gradually receding to 2%. The yen showed volatility, weakening to 152.82 per dollar as rate-hike expectations eased, although recent inflation data strengthened it for a short time. The outcome of the US election and the threat of tariffs, which also pose a risk to economic growth next year, have also contributed to its volatility.



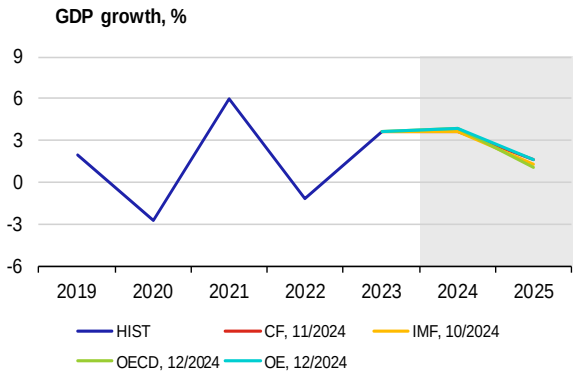
	CF	IMF	OECD	BoJ
2024	-0.2	0.3	-0.3	0.6
2025	1.2	1.1	1.5	1.1



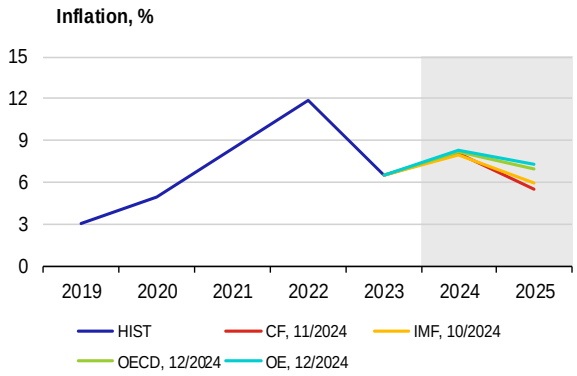
	CF	IMF	OECD	BoJ
2024	2.6	2.2	2.6	2.5
2025	2.3	2.0	1.9	1.9

III.7 Russia

After the November inflation results, which exceeded the central bank's projections (8.9% year on year), analysts expect an interest rate hike of 2 to 3 percentage points from the current 21% at the CBR's December meeting. Inflationary pressures continue to stem from persistent excess demand, subsidised credit programmes and expansionary fiscal stimulus, while the unemployment rate declined to a historic low of 2.3% in October. Refinery activity increased after the ban on petrol exports was lifted. At the end of November, the Russian rouble had fallen to its lowest level against the US dollar since March 2022, due to an expansion of sanctions by the United States. The sanctions mainly target Russian banks, which have been key channels for international payments and maintaining foreign trade despite the previous restrictions.



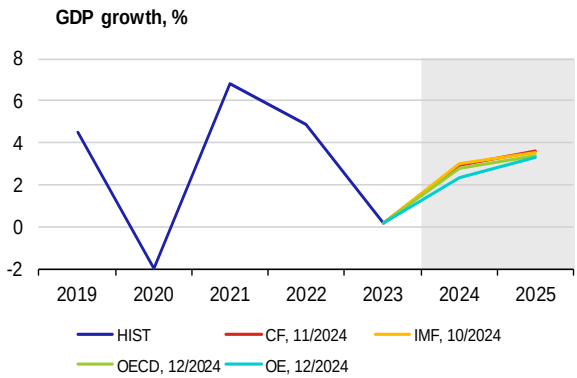
	CF	IMF	OECD	OE
2024	3.6	3.6	3.9	3.8
2025	1.6	1.3	1.1	1.6



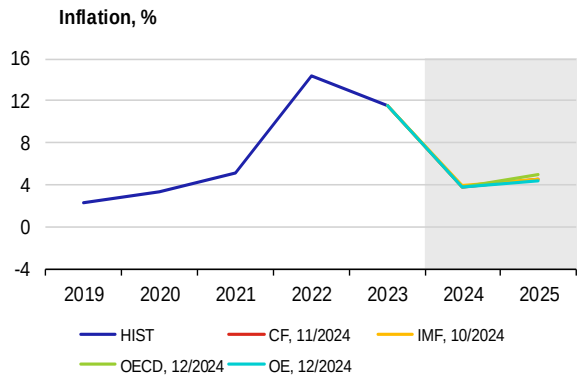
	CF	IMF	OECD	OE
2024	8.1	7.9	8.2	8.3
2025	5.5	5.9	7.0	7.3

III.8 Poland

At its December meeting, the NBP left the key reference rate unchanged at 5.75%, but political uncertainty and divergent views within the Monetary Policy Council have prevented a clear consensus on the further path of rates. In response to the expected rise in inflation in November (4.7% year on year), Governor Adam Glapiński has postponed the prospect for interest rate cuts until 2026. In his statement, he suggested that inflation will stay above the NBP's target band, at around 5%, in the first half of 2025, and should accelerate towards the end of the year. Market reactions after the release of the governor's communication led to a strengthening of the zloty and a decline in government bond prices. Some members of the Monetary Policy Council have distanced themselves from the statement and have indicated that appropriate conditions for lowering rates could occur as early as the first half of 2025 or after the presidential election in July, when the political risks subside. Inflation in Poland continues to be dampened by falling demand pressures and weakening consumer confidence, while the lifting of the energy price cap, together with an increase in excise duty on tobacco products, ~~is~~ are having an inflationary effect.



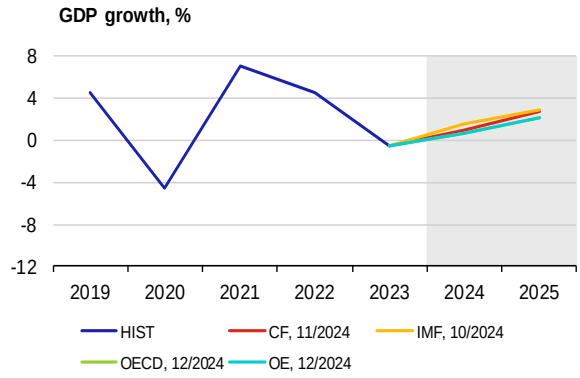
	CF	IMF	OECD	OE
2024	2.9	3.0	2.8	2.3
2025	3.6	3.5	3.4	3.3



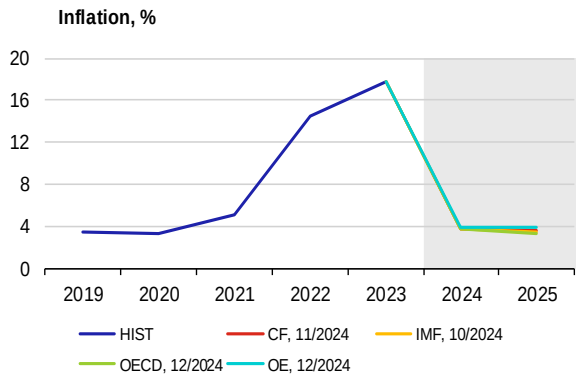
	CF	IMF	OECD	OE
2024	3.7	3.9	3.8	3.7
2025	4.5	4.5	5.0	4.4

III.9 Hungary

The analysts have revised GDP for this year and next year towards significantly lower year-on-year growth. Annual consumer price inflation in Hungary accelerated slightly again, reaching 3.7% in November (3.2% in October), thus reaching its highest level since July this year. November's increase was driven by rising food prices (especially flour, alcoholic beverages and tobacco), while the decline in energy commodity prices is slowly winding down. On the other hand, core inflation recorded its lowest levels for the last five months (4.4%). The final figure for the third quarter confirmed a year-on-year decline in GDP of 0.8%, while the markets had expected year-on-year growth of 1.3%. The new estimates for GDP growth from the CF, OECD and OE have been revised significantly lower for this year and the next. However, leading indicators point to more optimistic outlooks for the rest of this year. The manufacturing PMI has entered the expansion zone for the first time in five months, and the index of new orders has been gradually rising since August. Retail trade is also doing well, with sales growing by 3.6% in October.



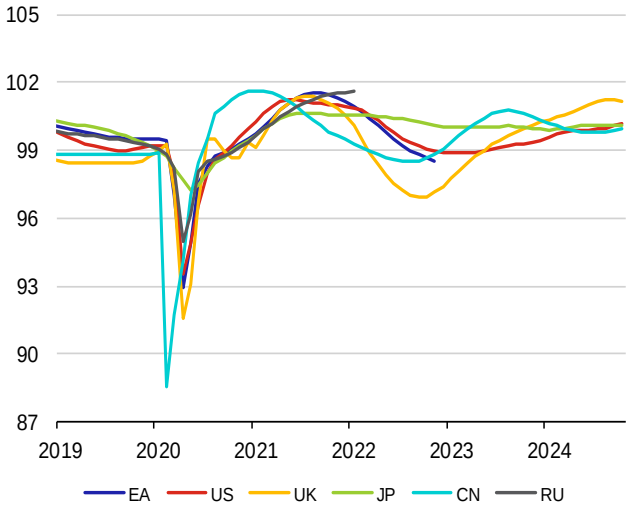
	CF	IMF	OECD	OE
2024	1.0	1.5	0.6	0.6
2025	2.7	2.9	2.1	2.2



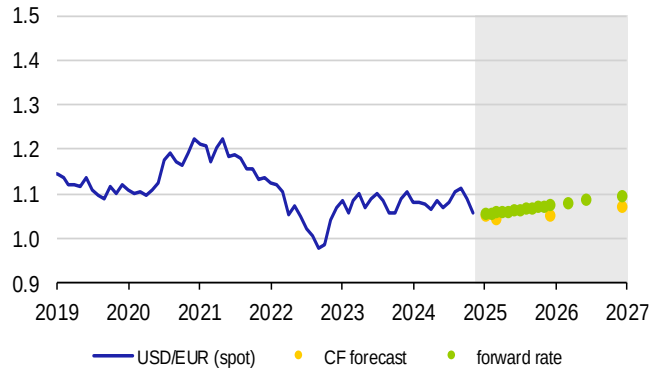
	CF	IMF	OECD	OE
2024	3.8	3.8	3.8	3.9
2025	3.6	3.5	3.3	3.9

IV. Leading indicators and exchange rate outlooks

OECD Composite Leading Indicator

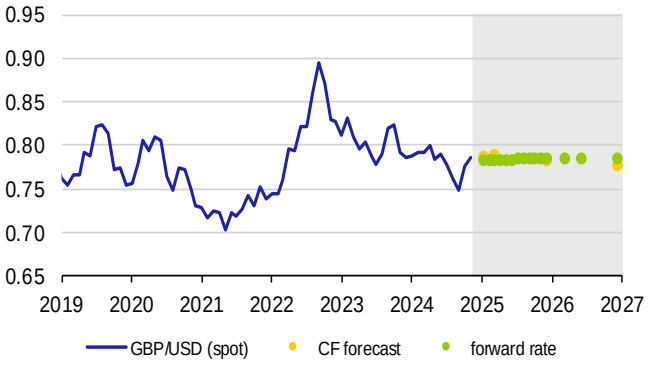


The US dollar (USD/EUR)



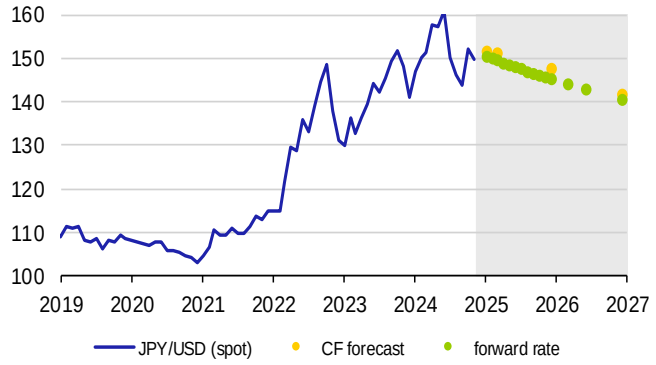
	9/12/24	1/25	3/25	12/25	12/26
spot rate	1.059				
CF forecast		1.052	1.046	1.055	1.073
forward rate		1.057	1.060	1.077	1.099

The British pound (GBP/USD)



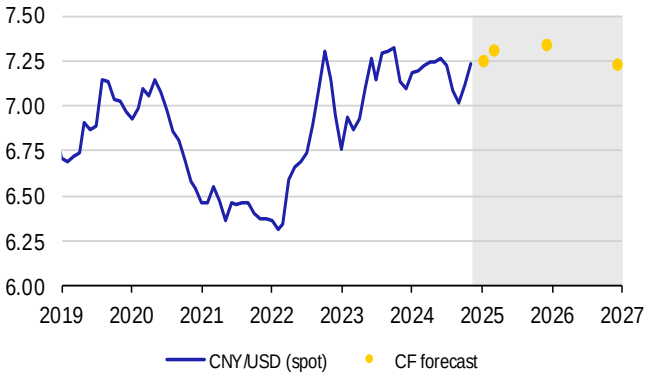
	9/12/24	1/25	3/25	12/25	12/26
spot rate	0.781				
CF forecast		0.787	0.789	0.784	0.779
forward rate		0.784	0.785	0.786	0.786

The Japanese yen (JPY/USD)



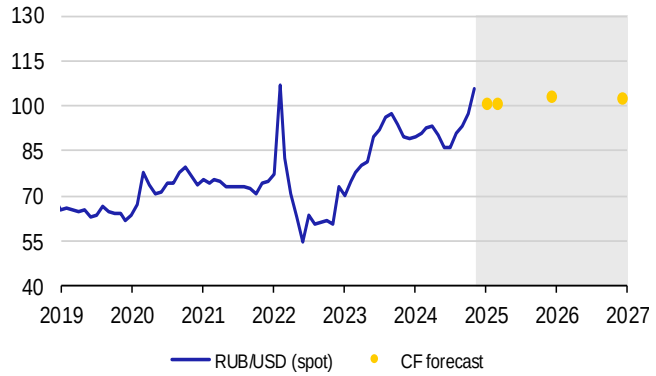
	9/12/24	1/25	3/25	12/25	12/26
spot rate	151.0				
CF forecast		151.6	151.2	147.7	141.7
forward rate		150.5	149.5	145.3	140.5

The Chinese renminbi (CNY/USD)



	9/12/24	1/25	3/25	12/25	12/26
spot rate	7.276				
CF forecast		7.253	7.317	7.340	7.237

The Russian rouble (RUB/USD)



	9/12/24	1/25	3/25	12/25	12/26
spot rate	100.50				
CF forecast		100.70	101.20	103.60	102.50

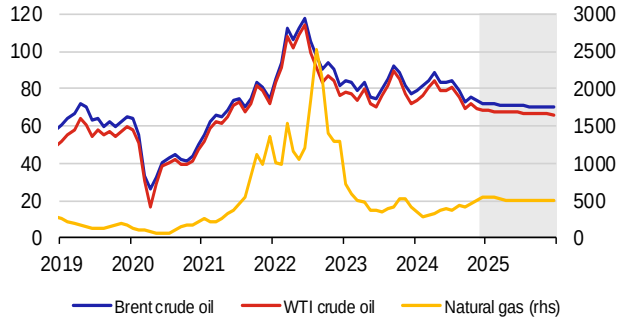
Note: Exchange rates as of last day of month. Forward rate does not represent outlook; it is based on covered interest parity, i.e. currency of country with higher interest rate is depreciating. Forward rate represents current (as of cut-off date) possibility of hedging future exchange rate.

V.1 Oil

Oil price volatility is decreasing, and the Brent crude oil price has been fluctuating without any significant trend in the range of about USD 70 to USD 75 per barrel since mid-October. Stronger price growth is being prevented by persisting negative investor sentiment from expectations of weak demand in China and a surplus of oil on the market next year. The price is also being pushed down by a strong dollar and easing tensions in the Middle East. Meanwhile, the continued production cuts of the OPEC+ alliance are working against a greater decline. Its representatives decided to further postpone the start of production increases (this time by three months to April 2025), and the subsequent easing of extraction restrictions should then be spread over 18 months instead of the originally planned one year. The oil price is also supported by the tightening of sanctions on oil exports from Iran and Russia by the USA. The Chinese government's plan to ease monetary policy further next year has also contributed to the improvement in market sentiment. However, the outlook for oil demand remains highly uncertain (also due to the possible introduction of import tariffs by the USA). Although, according to the IEA, growth in global demand is expected to accelerate from 840,000 barrels to 1.1 million barrels per day next year (mainly due to the petrochemical industry), rapid extraction growth outside the OPEC+ alliance (1.5 million barrels per day) will lead to a strong oil surplus on the market even if the alliance does not increase its production. By contrast, according to EIA and OPEC reports, the market situation could allow for a gradual increase in the alliance's extraction next year while maintaining a rough balance between demand and supply. Refinery margins grew in November for the second month in a row.

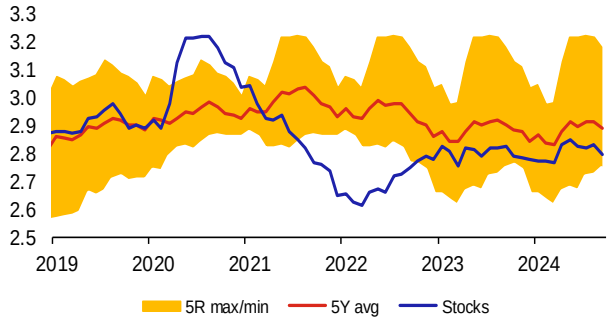
The market outlook for the Brent crude oil price from the first half of December has shifted slightly downwards again, signalling prices of USD 70.0 and USD 68.8 per barrel at the end of 2025 and 2026, respectively. The EIA has also shifted its forecast lower again, especially for the coming months. At the same time, it continues to expect the price to rise (to USD 75 per barrel) until March 2025 and then fall to USD 72 per barrel at the end of the year as OPEC+ extraction increases. The December CF also lowered the expected price over the one-year horizon to USD 74.6 per barrel.

Outlook for prices of oil (USD/barrel) and natural gas (USD / 1000 m³)

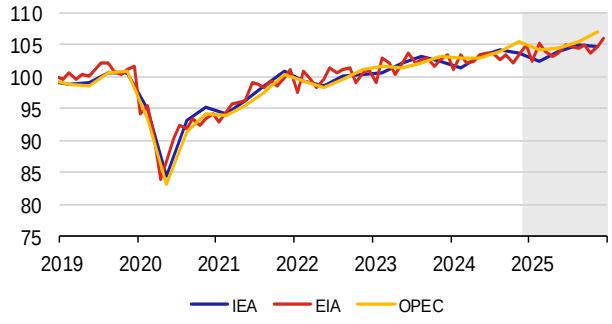


	Brent	WTI	Natural gas
2024	79.77	75.61	398.19
2025	70.90	67.11	512.83

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

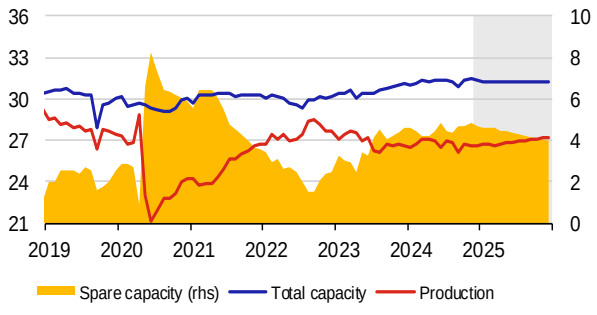


Global consumption of oil and oil products (mil. barrel / day)



	IEA	EIA	OPEC
2024	103.06	103.03	103.83
2025	104.00	104.33	105.28

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



	Production	Total capacity	Spare capacity
2024	26.72	31.25	4.53
2025	26.90	31.20	4.30

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.

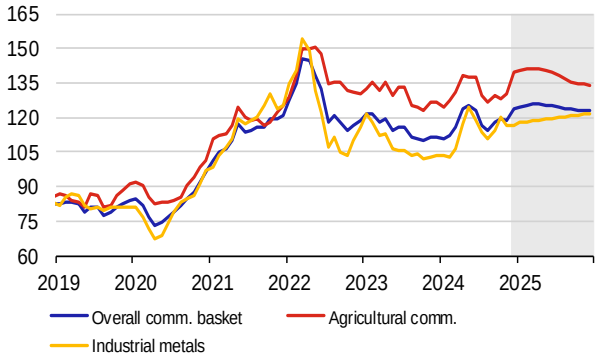
V.2 Other commodities

The price of natural gas in Europe remained high in the second half of November (between EUR 45/MWh and EUR 49/MWh), but fell rapidly in the first half of December. The reasons for the high price in November were cold weather in Europe, supply outages from Norway and low wind-farm generation in northern Europe. By mid-December, the price had fallen to EUR 40/MWh due to renewed wind-power generation and high LNG supplies. Inventories in Europe were slightly below the five-year average (around 80% of storage capacity) in mid-December. The Power of Siberia pipeline from Russia to China has reached full operating capacity, allowing China to return part of the contracted LNG supplies to the spot market. However, uncertainty about the supply of Russian pipeline gas remains due to the end of transit through Ukraine from the new year and tightened US sanctions on Gazprombank. Russia has responded to these by easing the payment conditions for European importers of Russian gas. The price of coal in Europe has more or less copied the price development of natural gas.

The industrial metals price index fell in November as the favourable effects of the US interest rate cut and the announcement of the Chinese government's stimulus measures on market sentiment evaporated. This decline was also fostered by a strong dollar. The prices of copper, tin and zinc fell in particular, and that of iron ore fell slightly. The decline halted in the first half of December, with the prices of some metals starting to rise again thanks to signs of a global industrial recovery (the JPMorgan Global Manufacturing PMI just made it into the expansion band). A slight increase in the index is expected over the course of next year, after which the index should stagnate.

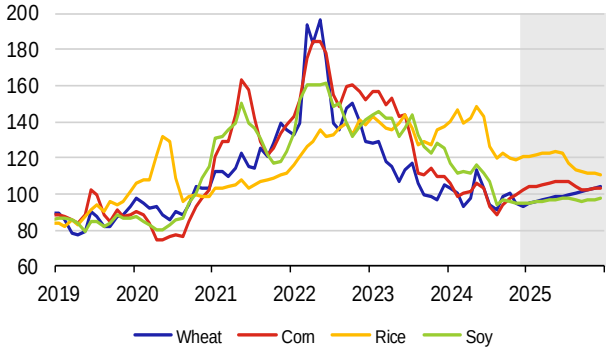
The food commodity price index increased strongly in the first half of December after a modest rise in November, recording its highest level since mid-2022. Coffee prices (due to a drought in Brazil) and cocoa prices (due to a drought in West Africa) in particular contributed to this by rising again to all-time highs. The price of corn has also risen, while beef has also remained close to its all-time high. By contrast, the prices of wheat and sugar moved in the opposite direction. The index should remain at a high level in the first half of next year, after which a gradual decline is expected with the new harvest.

Non-energy commodities price indicies



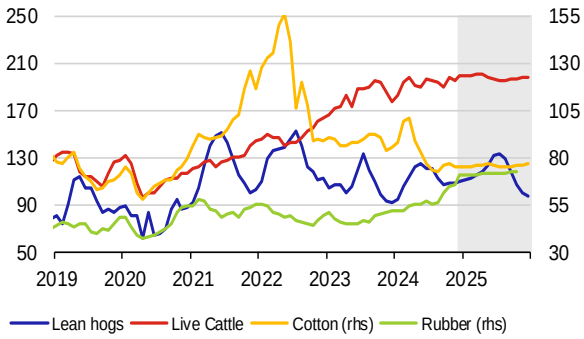
	Overall	Agricultural	Industrial
2024	118.5	131.6	113.9
2025	124.5	138.1	119.8

Food commodities



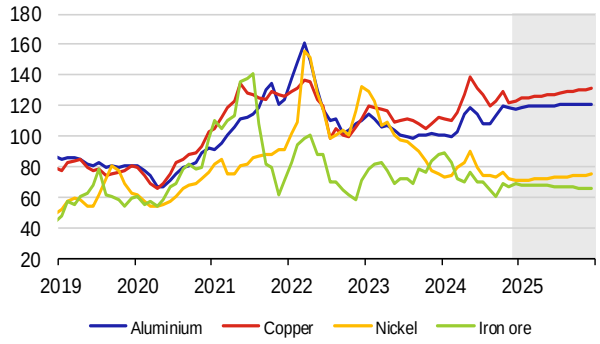
	Wheat	Corn	Rice	Soy
2024	98.6	99.2	132.2	105.3
2025	99.6	104.6	117.5	96.5

Meat, non-food agricultural commodities



	Lean hogs	Live Cattle	Cotton	Rubber
2024	112.3	193.3	82.0	58.2
2025	116.3	197.6	75.6	71.6

Basic metals and iron ore



	Aluminium	Copper	Nickel	Iron ore
2024	111.6	123.4	77.3	72.0
2025	120.4	128.2	73.4	67.6

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.

Crises and their reflection on financial market integration[1]

This article focuses on financial markets, and through it we will seek to briefly introduce the reader to the essence of the idea of financially integrated markets, and outline the possibilities for a general measurement of alignment. We will then try to assess the progress of financial alignment across markets over the quarter of a century of euro-area existence that we are commemorating this year. In this spirit, we will look at how similar the movements in the foreign exchange, money and equity markets of selected euro candidates have been to those in the euro area and, in the case of the government bond market, to those in Germany, in response to the ongoing turbulent events. Our goal is to show how events like the global crisis, the Covid-19 pandemic, the security crisis and the subsequent energy crisis have manifested themselves in the degree of (mis)alignment of individual parts of the financial market.

EU membership and accession to the four freedoms of the internal market have further increased the already visible interconnectedness of European states and their populations. EU states have guaranteed the free movement of goods, services, people and capital throughout the EU. Furthermore, participation in this European integration project enables EU citizens to live and work anywhere in the EU, providing them with better opportunities for employment and personal fulfilment. We can especially see the indisputable benefit of EU membership in the post-socialist states, which have undergone rapid transformation into market economies[2]. Although these processes have proceeded differently in the various states, they have also contributed to the visible integration of the financial markets of EU states. This should be even more visible for states using the single currency, the euro.

So what are the advantages and disadvantages of greater financial market integration? Financial integration brings both benefits and costs to individual entities, whether directly or indirectly[3]. The experience of the global financial crisis after the collapse of the Lehman Brothers investment bank in 2008, and then the turbulent period after 2020, have amplified the importance of this debate. The most frequently cited benefits of financial market integration include: (i) a smoothing of consumption through international risk diversification, (ii) the positive impact of capital flows on domestic investment and economic growth[4], (iii) improved financial system efficiency, and (iv) more prudential behaviour by financial market operators and a higher degree of financial stability. Although it is generally accepted that a higher degree of market integration benefits a state, under certain conditions it can also have less positive effects. In states insufficiently prepared for financial integration (where the financial sector is less developed, or has a very different structure and/or legal framework), the costs associated with market integration may outweigh the benefits. However, this should not apply to the euro candidates, which should already be largely aligned with the other EU states by virtue of their membership in the EU. Substantial financial integration costs include: (i) a lack of access to financial resources in periods of financial instability, including the concentration and procyclicality of capital, (ii) the inadequate allocation of capital flows, (iii) a loss of macroeconomic stability, (iv) herd behaviour among investors, contagion propagating through interconnected financial markets, and the high volatility of cross-border capital flows[5].

Global megatrends[6] and the increasing degree of interconnectedness of economies have further effects on all actors, meaning households, companies, governments and financial institutions. A higher degree of financial market integration can improve their investment opportunities, thus enabling them to get higher returns at the same risk levels. On the other hand, if they are all exposed to similar risks, their balance sheets may not be sufficiently diversified and the original positive effect of integration may be reduced. In addition, where there is a high degree of geographical and sectoral interdependence of financial institutions (banks) and individual parts of the financial market, the financial sector as a whole may be more susceptible to the aforementioned risk of contagion, which could reach a systemic dimension. Whether the benefits of deepening financial integration outweigh its risks, and whether this process will lead to improved financial stability, depends to a large extent on the resilience and flexibility of the financial system itself and the fulfilment of the prudential role of national and international institutions.

One key prerequisite for measuring integration is the validity of the law of one price. Most definitions of financial integration are closely related to, or even directly defined by, the law of one price. This tells us that *"assets (exchange rates, bonds, stocks, ...) with identical risk and return should be priced identically regardless of where they are traded."* We can imagine it, for example, as the sea level, which is the same everywhere on earth due to the laws of physics. This is because

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[1] Written by Jan Babecký, Luboš Komárek and Zlatuše Komárková. The views expressed in this article are those of the authors and do not necessarily reflect the official position of the Czech National Bank.

[2] See e.g. Kábrt et al. (2024).

[3] See e.g. ECB (2024), Coeurdacier et al. (2020) or earlier works, e.g. Agénor (2003), Baele et al. (2004) and Babecký, Komárek and Komárková (2012).

[4] It leads to higher economic growth by creating additional opportunities for risk diversification and efficient capital allocation.

[5] See Agénor (2003).

[6] Population ageing, electromobility, new technologies and artificial intelligence, environmental awareness, the interconnectedness of global production chains, etc.

there are no artificial barriers around the planet that locally increase or decrease the sea level. The following formulation is considered a generally applicable definition of a financially integrated market in the relevant literature (Baele et al., 2004; Weber, 2006): *"The market for a given set of financial instruments and/or services is fully integrated if all potential market participants (i) face a single set of rules when they decide to make transactions, (ii) have equal access to the above-mentioned set of financial instruments and/or services, and (iii) are treated equally when they are active in the market."*

To measure the integration or alignment of financial markets, the concepts of beta- and sigma-convergence can be used.[7] Beta-convergence makes it possible to determine the speed at which differences in yields are reduced on individual financial markets. If the beta coefficient is negative, it means that convergence is in progress. The closer its value is to -1, the higher the convergence speed. Beta-convergence can be assessed using a derived *convergence half-life* indicator, which allows an intuitive interpretation of the speed at which the gap between yields across markets is shrinking. Convergence half-life refers to the time it takes for differences between asset yields to fall to half their original value. The other side of the same convergence coin is the concept of sigma-convergence, which focuses on the dispersion of the differences between the yields on the same assets in different states at a given point in time. This concept determines the level of alignment achieved by the individual financial market segments. Sigma-convergence is when the dispersion falls to zero. It is important to note that beta-convergence may or may not be accompanied by sigma-convergence. There may even be sigma-divergence. For this reason, both concepts need to be monitored simultaneously when assessing financial integration.

The following text presents the beta- and sigma-convergence results for the financial markets of selected euro candidates (the Czech Republic, Hungary and Poland) and selected euro area member states (Austria, Portugal, Italy and Slovakia) with the euro area, respectively with Germany, for the period from January 1995 to June 2024. The calculations were made on weekly data (averages from daily data) from Bloomberg and Refinitiv from January 1995 for the foreign exchange and equity markets, from January 1999 for the money market and from January 2000 for the bond market. The dataset ends in June 2024 for all the markets. Three-month interbank market rates were used for the money market, quotes of national currencies against the USD for the foreign exchange market, five-year government bonds for the bond market, and national stock indices for the equity market. Beta coefficients were estimated using regression analysis as in the work by Babecký, Komárek and Komárková (2017).

Table 1 – Beta-convergence of the foreign exchange and money markets vis-à-vis the euro area

(convergence half-life values; in days)

	Foreign exchange market			Money market		
	7/07	12/19	6/24	7/07	12/19	6/24
Czech Republic	1.8	2.0	2.2	5.8	6.8	1.2
Hungary	1.4	1.8	2.1	3.1	2.8	1.7
Poland	2.4	2.0	2.1	2.5	2.8	3.3
Euro area	B	B	B	B	B	B

Source: Bloomberg, Refinitiv, authors' calculations
Note: The half-life is the time it takes for the difference in yields to be halved. The lower the half-life value, the faster the convergence. The first milestone indicates the period before the onset of the financial crisis (to July 2007), the second the period before the pandemic (to December 2019) and the third the current period (to June 2024). Other symbols: B – benchmark.

Beta-convergence in the foreign exchange and money markets is proceeding relatively rapidly, but there are significant differences between states. Table 1 shows beta-convergence in the foreign exchange and money markets vis-à-vis the euro area for the selected euro candidates. In all three states, the convergence half-life is less than a week, indicating a relatively high pace of alignment with the euro area. In the foreign exchange market in particular, the convergence half-life is within a narrow range of two days in all reference periods, thus confirming the stable and rapid alignment of this segment across states. In the money market, we see a decline in the convergence half-life in the Czech Republic and Hungary to values below two days, suggesting an acceleration in alignment towards the end of the period under review. By contrast, in Poland there was a slight increase in the convergence half-life from 2.5 to 3.3 days, indicating a slowdown in alignment in this segment of the financial market.

[7] See e.g. Baltzer et al. (2008), Baele et al. (2004). The terms beta-convergence and sigma-convergence originate from the literature on economic growth and its dynamics; see, for example, Barro and Sala-i-Martin (1992). Their first application to financial markets was performed by Adam et al. (2002).

Table 2 – Beta-convergence in the bond and equity markets

(convergence half-life values; in days)

	Bond market			Equity market		
	7/07	12/19	6/24	7/07	12/19	6/24
Czech Republic	3.8	3.8	3.8	3.1	3.0	3.0
Hungary	3.7	3.8	4.0	2.9	2.7	2.7
Poland	2.9	2.9	3.1	2.9	2.8	2.8
Germany	B	B	B	3.2	3.1	3.2
Austria	1.3	3.4	3.4	2.3	2.5	2.5
Portugal	2.6	2.3	2.3	1.9	2.0	2.1
Italy	2.0	2.1	2.1	3.0	3.1	3.0
Slovakia	3.4	3.1	3.0	3.8	3.0	3.0
Euro area	-	-	-	B	B	B

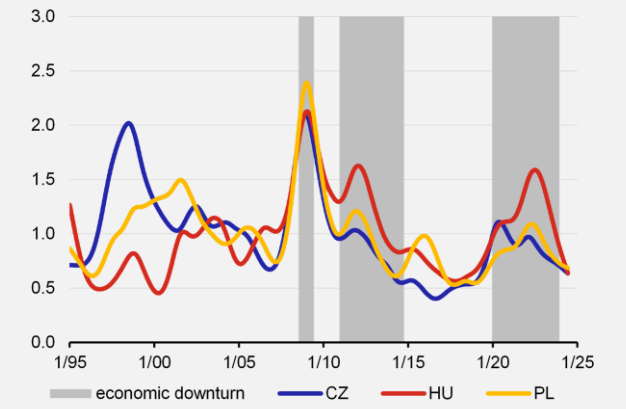
Source: Bloomberg, Refinitiv, authors' calculations
Note: The half-life is the time it takes for the difference in yields to be halved. The lower the half-life value, the faster the convergence. The first milestone indicates the period before the onset of the financial crisis (to July 2007), the second the period before the pandemic (to December 2019) and the third the current period (to June 2024). Other symbols: B – benchmark, "-" – data not available.

Beta-convergence in the bond and equity markets shows differing alignment speeds, with euro-area states generally more strongly integrated than the euro candidates. As shown in Table 2, convergence half-lives in the bond market are below four days in all states under review, while in the Czech Republic and Hungary they remain stable or are rising slightly, suggesting slower alignment. Poland shows a slight increase in the convergence half-life to 3.1 days, while euro area states like Portugal and Italy have lower values (1.3 to 2.3 days), suggesting stronger integration. On the equity market, the convergence half-life is stable at less than three days in most of the states under review, including the Czech Republic, Hungary and Poland, indicating the sustained and relatively rapid integration of this financial market segment.

The dynamics of sigma-convergence in the foreign exchange and money markets reflect different responses to the global financial crisis and the recent inflationary episode. As shown in Chart 1, sigma-convergence in the foreign exchange market was most affected by the global financial crisis (2008–2009) and subsequently by the recent wave of inflation. During these periods, there was a significant increase in the dispersion of yield differences, signalling a temporary disruption in the market alignment. With the fading of the crisis, this dispersion has gradually narrowed, suggesting a renewed integration of foreign exchange markets within the euro area.

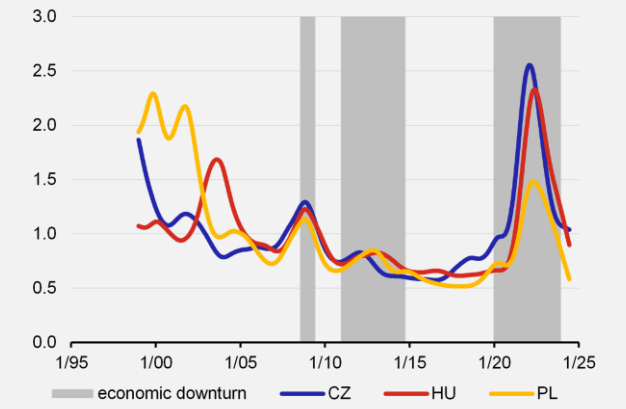
By contrast, the effect of the global financial crisis was less pronounced in the money market than on the foreign exchange market (see Chart 2), indicating greater stability in this segment during the crisis. However, the recent inflationary wave (2021–2024) had the greatest impact on money market sigma-convergence. The increased interest rate volatility in response to inflation led to an increase in the dispersion of yield differentials, signalling a deterioration in market alignment.

Chart 1 – Sigma-convergence of the foreign exchange market vis-à-vis the euro area



Source: Bloomberg, Refinitiv, authors' calculations

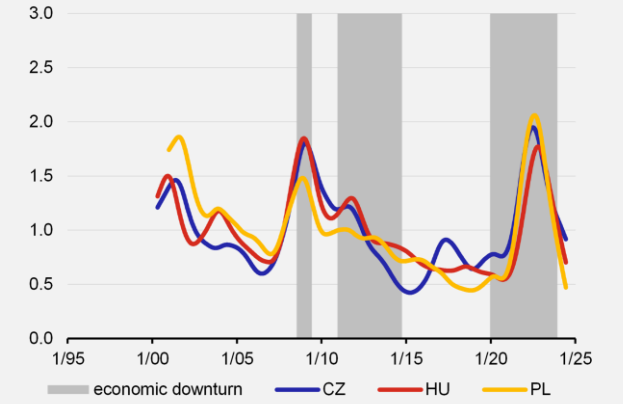
Chart 2 – Sigma-convergence of the money market vis-à-vis the euro area



Source: Bloomberg, Refinitiv, authors' calculations

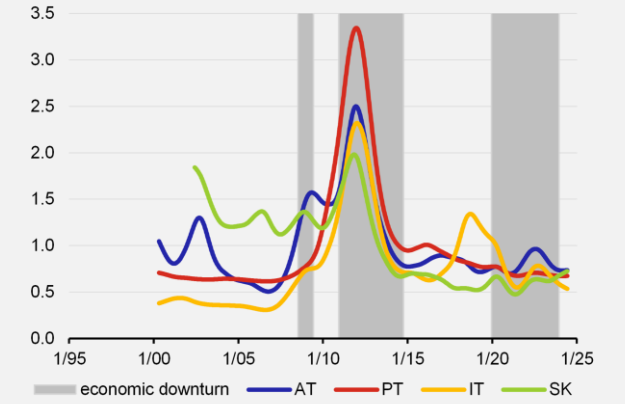
In the government bond market of the euro candidates, the sigma-convergence dynamics were most influenced by two key periods – the global financial crisis and the recent inflationary wave. As shown in Chart 3a, the global financial crisis led to an increase in the dispersion of differentials between government bond yields vis-à-vis Germany, signalling a temporary disruption in alignment. The security and energy crises further disrupted sigma-convergence due to the differing reactions by the national economies to high inflation, including the related interest rate policies of central banks.

Chart 3a – Sigma-convergence of the government bond market vis-à-vis Germany (euro candidates)



Source: Bloomberg, Refinitiv, authors' calculations

Chart 3b – Sigma-convergence of the government bond market vis-à-vis Germany (euro area states)

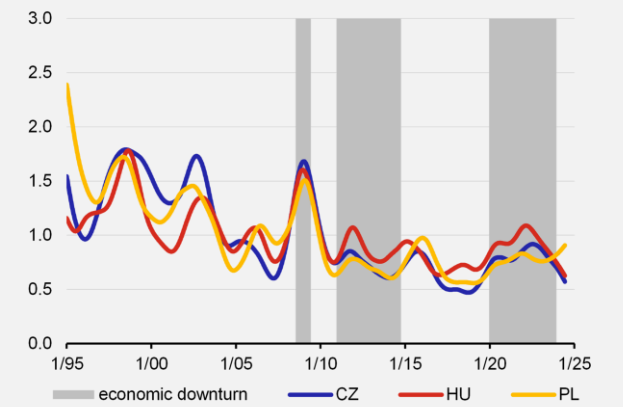


Source: Bloomberg, Refinitiv, authors' calculations

The most important factor influencing sigma-convergence in the government bond market of selected euro area states was the debt crisis (2010–2012). As Chart 3b shows, this crisis led to a sharp increase in the dispersion of these states' government bond yields vis-à-vis Germany, which temporarily disrupted alignment. After the debt crisis ended, the market saw a renewal of sigma-convergence, which has remained mostly stable over the last few years. The exception is Italy, with temporary sigma-divergence probably reflecting the bleak state of its public finances

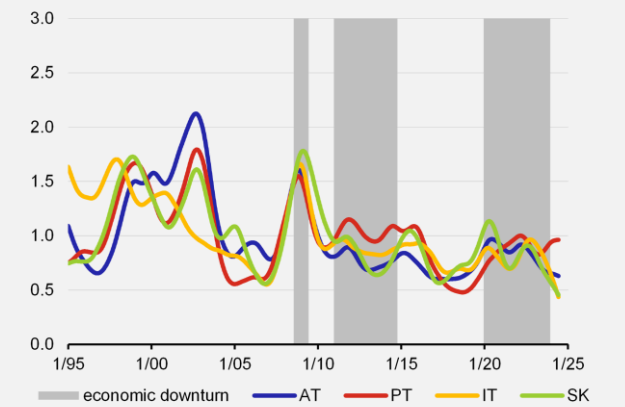
In equity markets, historical volatility and the global financial crisis period have had the greatest influence on sigma-convergence. Both the euro candidates (the Czech Republic, Hungary and Poland) and the euro area states were significantly impacted by the global financial crisis of 2008–2009, which saw a sharp and synchronised increase in volatility in all the states under review (Chart 4). By contrast, the Covid-19 pandemic and inflation episode had a much smaller impact on sigma-convergence, suggesting that the equity markets have been relatively resilient to the recent economic shocks.

Chart 4a – Sigma-convergence of the equity market vis-à-vis the euro area (euro candidates)



Source: Bloomberg, Refinitiv, authors' calculations

Chart 4b – Sigma-convergence of the equity market vis-à-vis the euro area (euro area states)



Source: Bloomberg, Refinitiv, authors' calculations

Conclusions

The analysis of beta- and sigma-convergence indicates that European financial markets show different degrees of alignment. While beta-convergence indicates a relatively rapid process of closing yield differentials, sigma-convergence reveals that alignment can be temporarily disrupted by crises and economic shocks.

The dynamics of sigma-convergence differ depending on financial market type. While the foreign exchange market was most affected by the global financial crisis, the euro candidates' money and bond markets were most affected by a deterioration in alignment during the recent inflation episode. However, all the markets are showing a gradual return to lower dispersion values after the crises, demonstrating their ability to regain higher alignment levels.

The relatively high alignment of European equity markets. The equity markets across all the monitored states are showing stable and relatively rapid beta-convergence. Equity market sigma-convergence has been most affected by historical volatility and the global financial crisis, while the pandemic and the inflation episode have had a lesser impact, suggesting higher stability for this segment.

Differences between the euro candidates and euro area states. The Czech Republic, Hungary and Poland generally exhibit slower beta-convergence and higher sigma-convergence (dispersion), suggesting a longer process for the alignment of their financial markets with the euro area. By contrast, the euro area states are achieving lower dispersion and faster beta-convergence, especially in the bond and money markets.

Conclusion on overall alignment. The combination of beta- and sigma-convergence reveals an important dynamic: although yield differences (measured by beta-convergence) can be eliminated quickly, their dispersion (sigma-convergence) can be disrupted by external shocks in the short term. This phenomenon highlights the need to monitor both types of convergence simultaneously to gain a comprehensive understanding of financial market alignment. However, this approach does not make it possible to directly identify the reasons behind a change in the financial market alignment. These can thus be deduced indirectly with knowledge of developments in individual states.

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Keywords

Equity markets, financial markets, sigma convergence, bonds

JEL Classification

E58, F31, F41

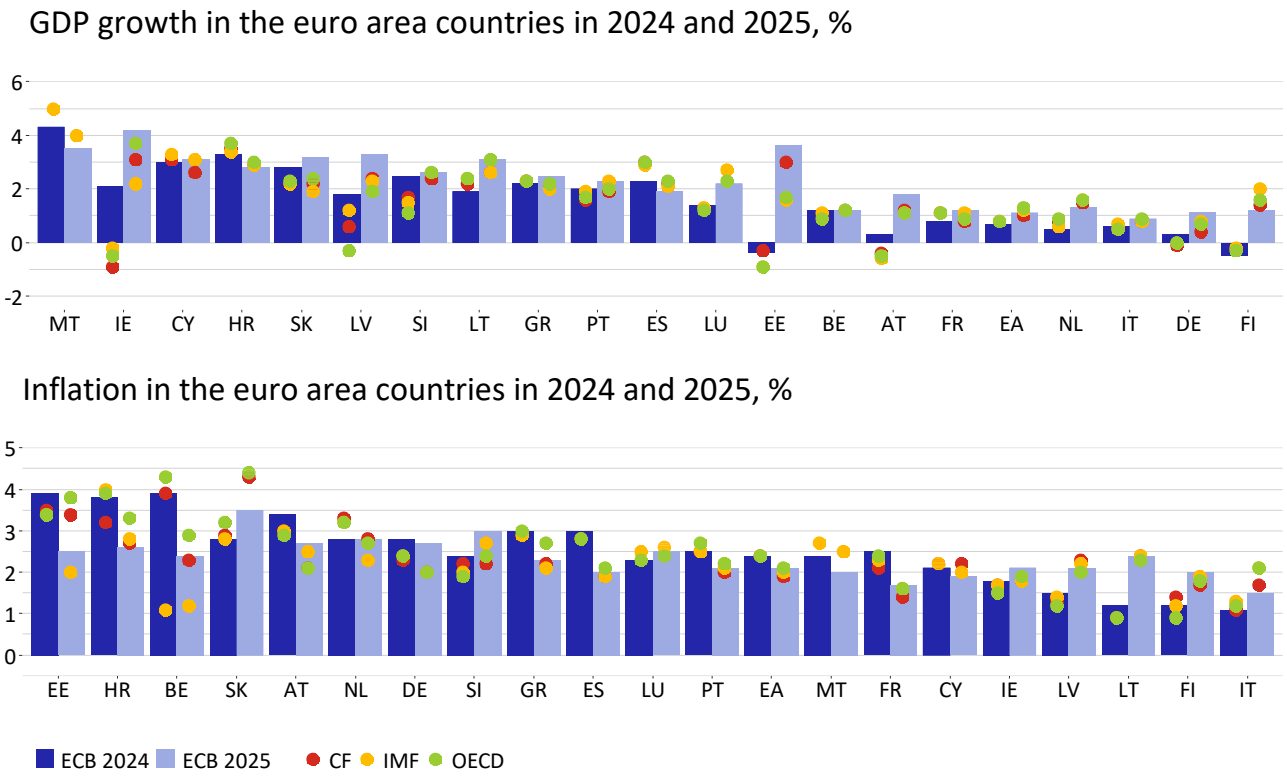
A1. Change in predictions for 2024

	GDP growth, %								Inflation, %							
	CF		IMF		OECD		CB / OE		CF		IMF		OECD		CB / OE	
EA	0	2024/12 2024/11	-0.1	2024/10 2024/7	+0.1	2024/12 2024/9	-0.1	2024/12 2024/9	0	2024/12 2024/11	0	2024/10 2024/4	0	2024/12 2024/9	-0.1	2024/12 2024/9
US	0	2024/12 2024/11	+0.2	2024/10 2024/7	+0.2	2024/12 2024/9	-0.1	2024/9 2024/6	0	2024/12 2024/11	+0.1	2024/10 2024/4	+0.5	2024/12 2024/9	-0.3	2024/9 2024/6
UK	0	2024/12 2024/11	+0.4	2024/10 2024/7	-0.2	2024/12 2024/9	-0.3	2024/11 2024/8	-0.1	2024/12 2024/11	+0.1	2024/10 2024/4	-0.1	2024/12 2024/9	-0.5	2024/11 2024/8
JP	-0.1	2024/12 2024/11	-0.4	2024/10 2024/7	-0.2	2024/12 2024/9	0	2024/10 2024/7	0	2024/12 2024/11	0	2024/10 2024/4	+0.1	2024/12 2024/9	0	2024/10 2024/7
CN	+0.1	2024/12 2024/11	-0.2	2024/10 2024/7	0	2024/12 2024/9	0	2024/12 2024/11	0	2024/12 2024/11	-0.6	2024/10 2024/4	+0.1	2024/12 2024/9	0	2024/12 2024/11
RU	+0.1	2024/11 2024/10	+0.4	2024/10 2024/7	+0.2	2024/12 2024/9	+0.3	2024/12 2024/11	+0.6	2024/11 2024/10	+1.0	2024/10 2024/4	+0.4	2024/12 2024/9	0	2024/12 2024/11

A2. Change in predictions for 2025

	GDP growth, %								Inflation, %							
	CF		IMF		OECD		CB / OE		CF		IMF		OECD		CB / OE	
EA	-0.1	2024/12 2024/11	-0.3	2024/10 2024/7	0	2024/12 2024/9	-0.2	2024/12 2024/9	0	2024/12 2024/11	0	2024/10 2024/4	0	2024/12 2024/9	-0.1	2024/12 2024/9
US	+0.1	2024/12 2024/11	+0.3	2024/10 2024/7	+0.8	2024/12 2024/9	0	2024/9 2024/6	+0.1	2024/12 2024/11	-0.1	2024/10 2024/4	+0.6	2024/12 2024/9	-0.2	2024/9 2024/6
UK	0	2024/12 2024/11	0	2024/10 2024/7	+0.5	2024/12 2024/9	+0.5	2024/11 2024/8	+0.2	2024/12 2024/11	+0.1	2024/10 2024/4	+0.3	2024/12 2024/9	+0.5	2024/11 2024/8
JP	0	2024/12 2024/11	+0.1	2024/10 2024/7	+0.1	2024/12 2024/9	+0.1	2024/10 2024/7	+0.2	2024/12 2024/11	-0.1	2024/10 2024/4	-0.2	2024/12 2024/9	-0.2	2024/10 2024/7
CN	0	2024/12 2024/11	0	2024/10 2024/7	+0.2	2024/12 2024/9	0	2024/12 2024/11	-0.2	2024/12 2024/11	-0.3	2024/10 2024/4	+0.1	2024/12 2024/9	-0.9	2024/12 2024/11
RU	0	2024/11 2024/10	-0.2	2024/10 2024/7	0	2024/12 2024/9	-0.1	2024/12 2024/11	+0.3	2024/11 2024/10	+1.4	2024/10 2024/4	+1.5	2024/12 2024/9	0	2024/12 2024/11

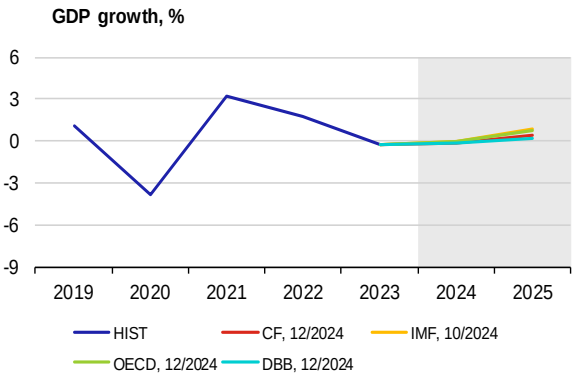
A3. GDP growth and inflation outlooks in the euro area countries



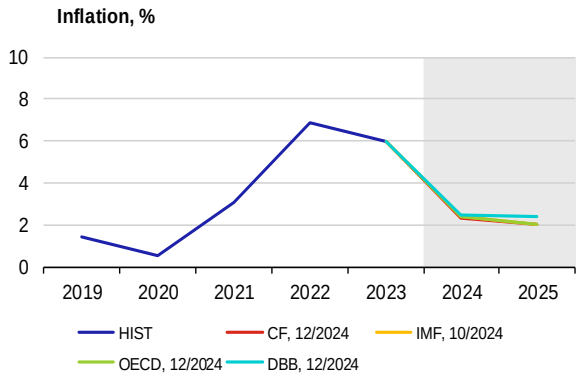
Note: Charts show institutions' latest available outlooks of for the given country.

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

Germany

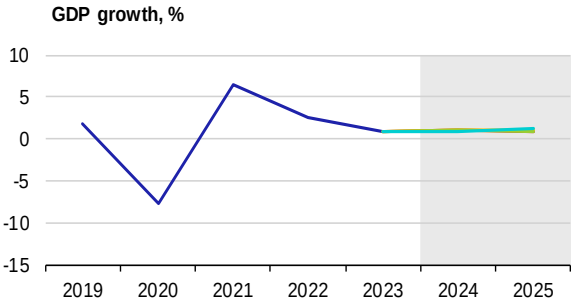


	CF	IMF	OECD	DBB
2024	-0.1	0.0	0.0	-0.2
2025	0.4	0.8	0.7	0.2

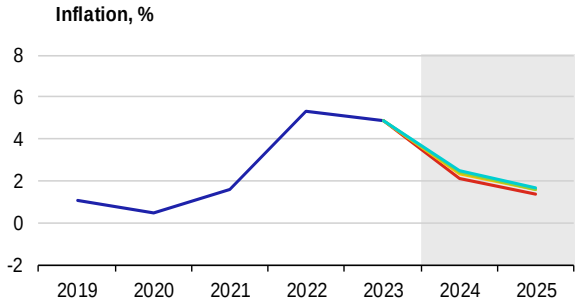


	CF	IMF	OECD	DBB
2024	2.3	2.4	2.4	2.5
2025	2.0	2.0	2.0	2.4

France

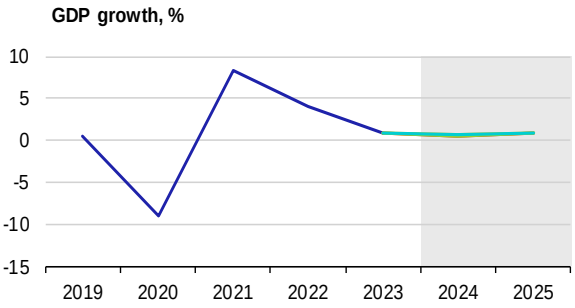


	CF	IMF	OECD	ECB
2024	1.1	1.1	1.1	0.8
2025	0.8	1.1	0.9	1.2

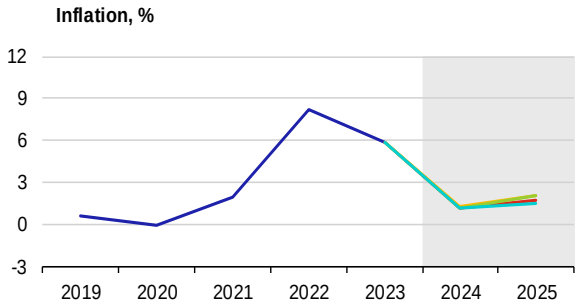


	CF	IMF	OECD	ECB
2024	2.1	2.3	2.4	2.5
2025	1.4	1.6	1.6	1.7

Italy

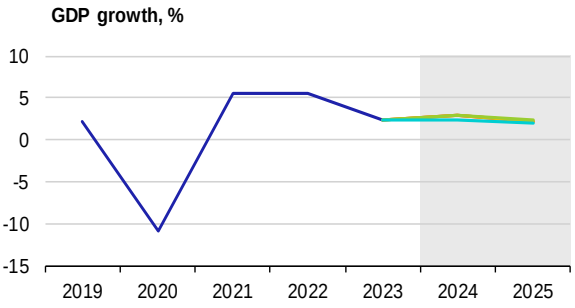


	CF	IMF	OECD	ECB
2024	0.5	0.7	0.5	0.6
2025	0.8	0.8	0.9	0.9

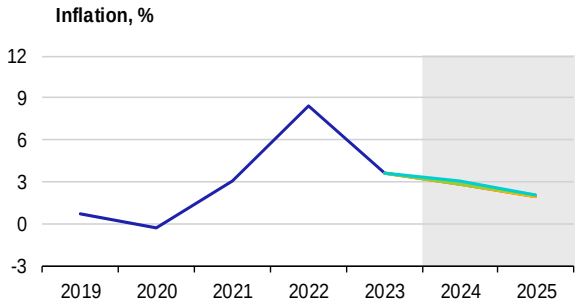


	CF	IMF	OECD	ECB
2024	1.1	1.3	1.2	1.1
2025	1.7	2.1	2.1	1.5

Spain



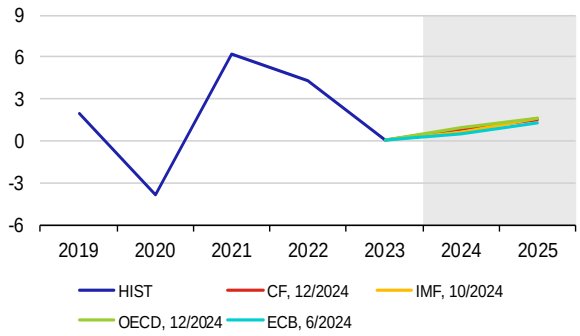
	CF	IMF	OECD	ECB
2024	3.0	2.9	3.0	2.3
2025	2.2	2.1	2.3	1.9



	CF	IMF	OECD	ECB
2024	2.8	2.8	2.8	3.0
2025	1.9	1.9	2.1	2.0

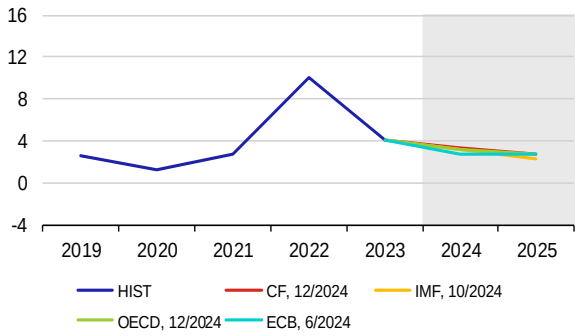
Netherlands

GDP growth, %



	CF	IMF	OECD	ECB
2024	0.8	0.6	0.9	0.5
2025	1.5	1.6	1.6	1.3

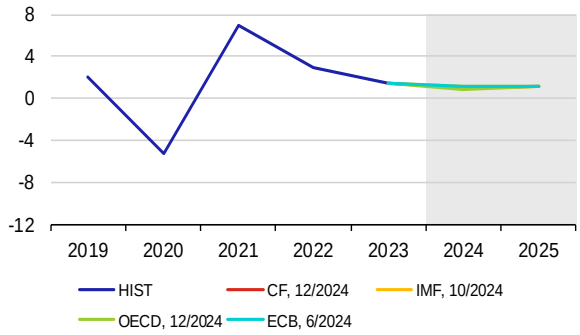
Inflation, %



	CF	IMF	OECD	ECB
2024	3.3	3.2	3.2	2.8
2025	2.8	2.3	2.7	2.8

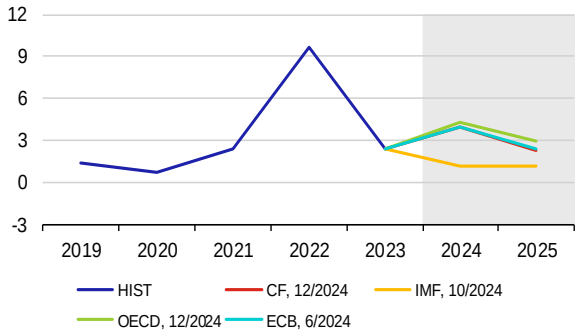
Belgium

GDP growth, %



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

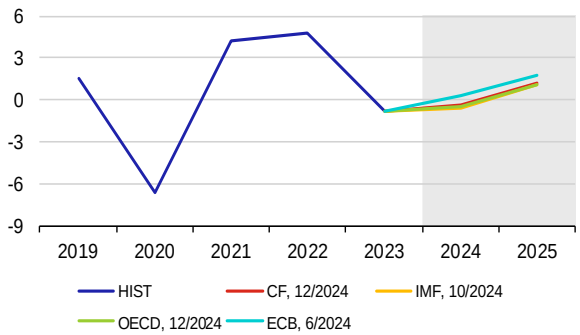
Inflation, %



	CF	IMF	OECD	ECB
2024	3.9	1.1	4.3	3.9
2025	2.3	1.2	2.9	2.4

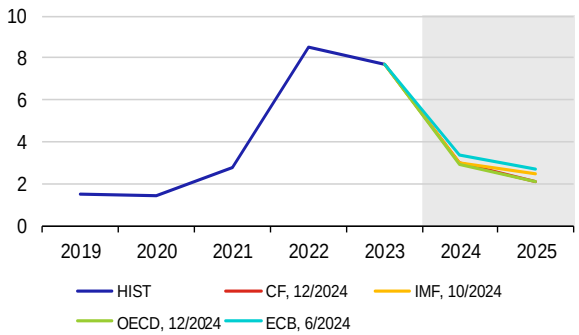
Austria

GDP growth, %



	CF	IMF	OECD	ECB
2024	-0.4	-0.6	-0.5	0.3
2025	1.2	1.1	1.1	1.8

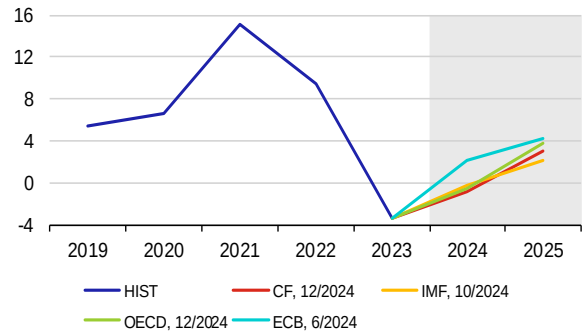
Inflation, %



	CF	IMF	OECD	ECB
2024	3.0	3.0	2.9	3.4
2025	2.1	2.5	2.1	2.7

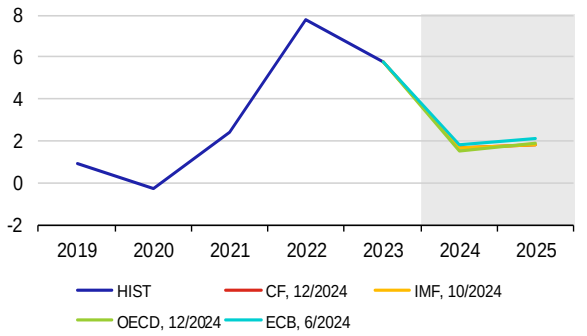
Ireland

GDP growth, %



	CF	IMF	OECD	ECB
2024	-0.9	-0.2	-0.5	2.1
2025	3.1	2.2	3.7	4.2

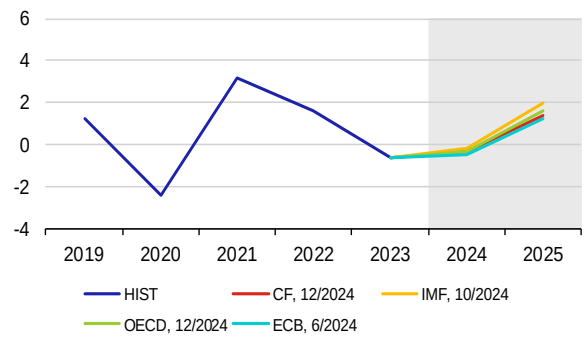
Inflation, %



	CF	IMF	OECD	ECB
2024	1.7	1.7	1.5	1.8
2025	1.8	1.8	1.9	2.1

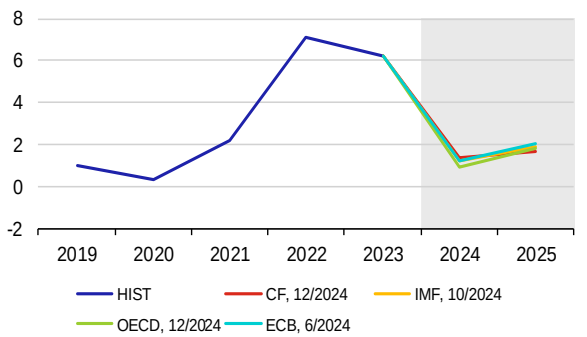
Finland

GDP growth, %



	CF	IMF	OECD	ECB
2024	-0.3	-0.2	-0.3	-0.5
2025	1.4	2.0	1.6	1.2

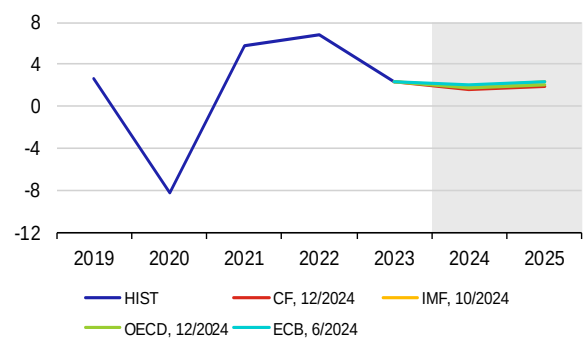
Inflation, %



	CF	IMF	OECD	ECB
2024	1.4	1.2	0.9	1.2
2025	1.7	1.9	1.8	2.0

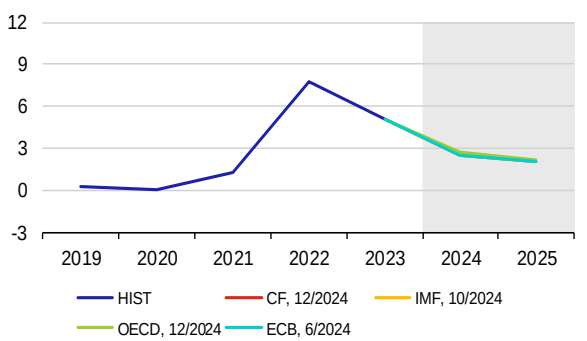
Portugal

GDP growth, %



	CF	IMF	OECD	ECB
2024	1.6	1.9	1.7	2.0
2025	1.9	2.3	2.0	2.3

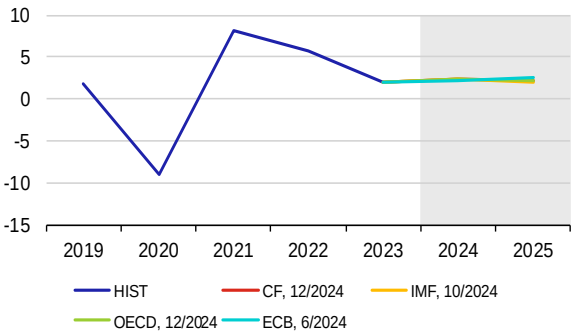
Inflation, %



	CF	IMF	OECD	ECB
2024	2.5	2.5	2.7	2.5
2025	2.0	2.1	2.2	2.1

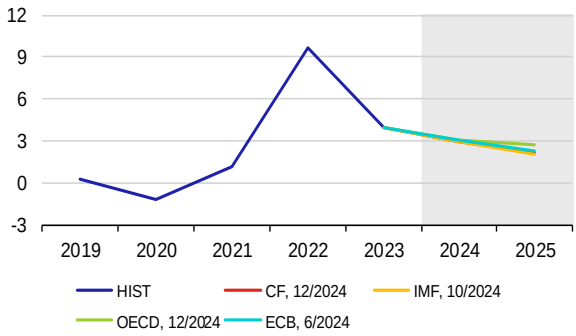
Greece

GDP growth, %



	CF	IMF	OECD	ECB
2024	2.3	2.3	2.3	2.2
2025	2.1	2.0	2.2	2.5

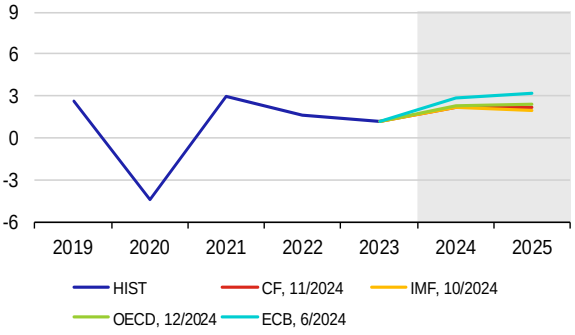
Inflation, %



	CF	IMF	OECD	ECB
2024	2.9	2.9	3.0	3.0
2025	2.2	2.1	2.7	2.3

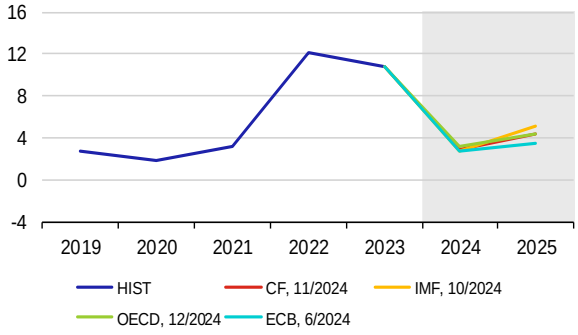
Slovakia

GDP growth, %



	CF	IMF	OECD	ECB
2024	2.2	2.2	2.3	2.8
2025	2.2	1.9	2.4	3.2

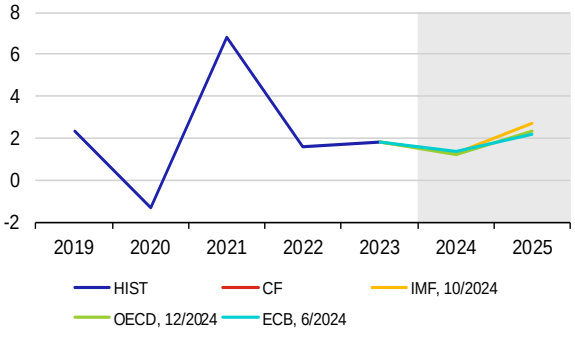
Inflation, %



	CF	IMF	OECD	ECB
2024	2.9	2.8	3.2	2.8
2025	4.3	5.1	4.4	3.5

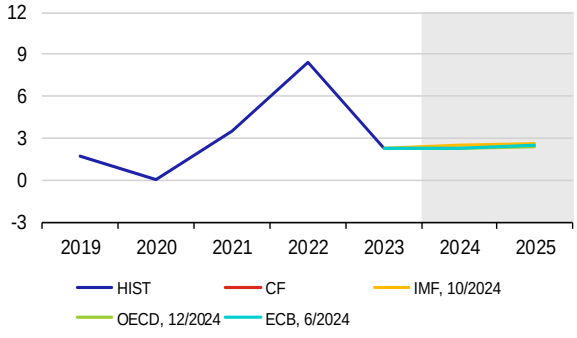
Luxembourg

GDP growth, %



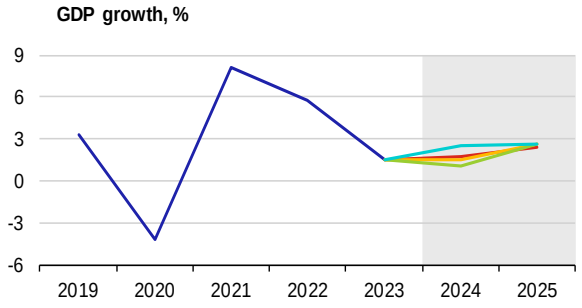
	CF	IMF	OECD	ECB
2024	n. a.	1.3	1.2	1.4
2025	n. a.	2.7	2.3	2.2

Inflation, %

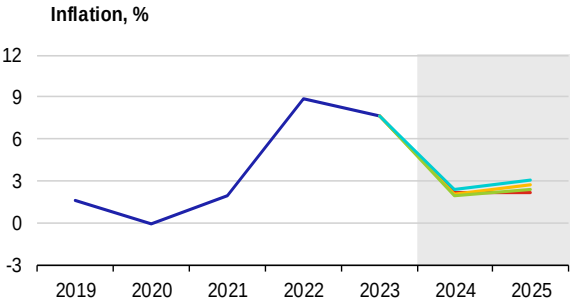


	CF	IMF	OECD	ECB
2024	n. a.	2.5	2.3	2.3
2025	n. a.	2.6	2.4	2.5

Slovenia

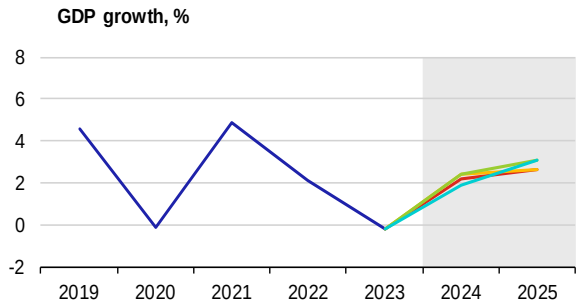


	CF	IMF	OECD	ECB
2024	1.7	1.5	1.1	2.5
2025	2.4	2.6	2.6	2.6

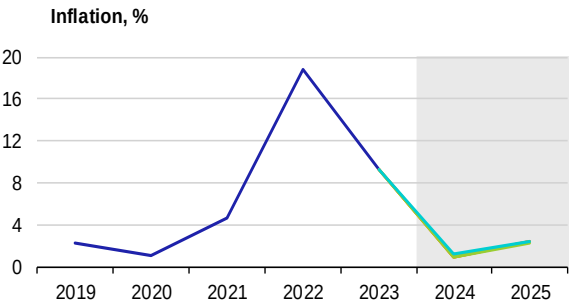


	CF	IMF	OECD	ECB
2024	2.2	2.0	1.9	2.4
2025	2.2	2.7	2.4	3.0

Lithuania

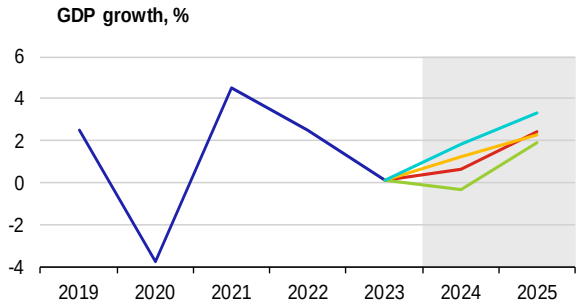


	CF	IMF	OECD	ECB
2024	2.2	2.4	2.4	1.9
2025	2.6	2.6	3.1	3.1

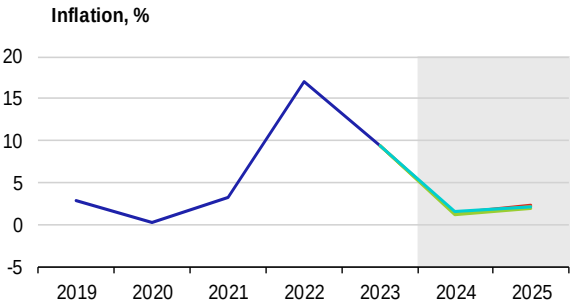


	CF	IMF	OECD	ECB
2024	0.9	0.9	0.9	1.2
2025	2.4	2.4	2.3	2.4

Latvia



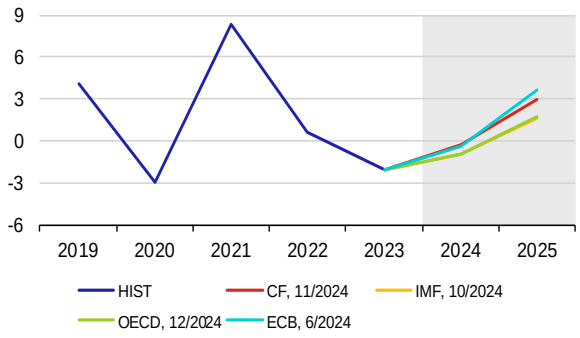
	CF	IMF	OECD	ECB
2024	0.6	1.2	-0.3	1.8
2025	2.4	2.3	1.9	3.3



	CF	IMF	OECD	ECB
2024	1.3	1.4	1.2	1.5
2025	2.3	2.2	2.0	2.1

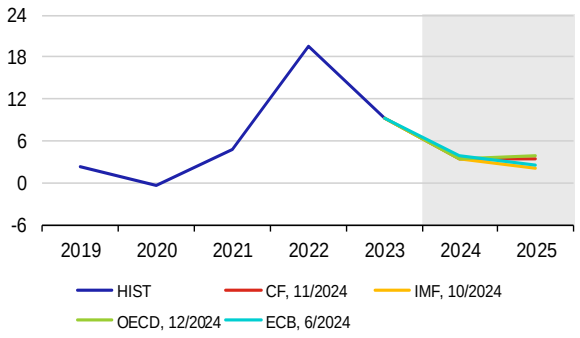
Estonia

GDP growth, %



	CF	IMF	OECD	ECB
2024	-0.3	-0.9	-0.9	-0.4
2025	3.0	1.6	1.7	3.6

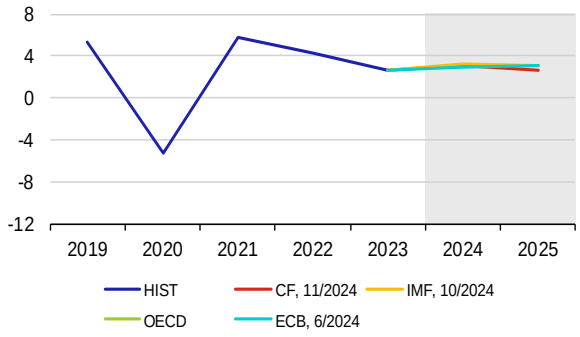
Inflation, %



	CF	IMF	OECD	ECB
2024	3.5	3.4	3.4	3.9
2025	3.4	2.0	3.8	2.5

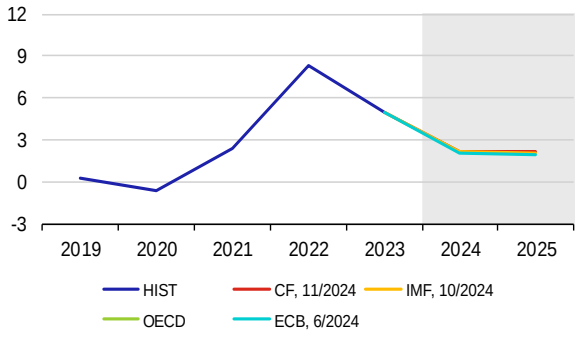
Cyprus

GDP growth, %



	CF	IMF	OECD	ECB
2024	3.1	3.3	n. a.	3.0
2025	2.6	3.1	n. a.	3.1

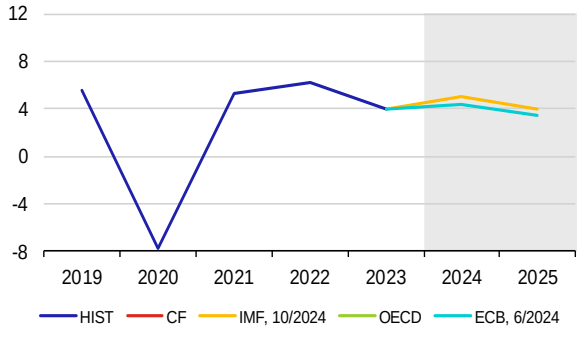
Inflation, %



	CF	IMF	OECD	ECB
2024	2.2	2.2	n. a.	2.1
2025	2.2	2.0	n. a.	1.9

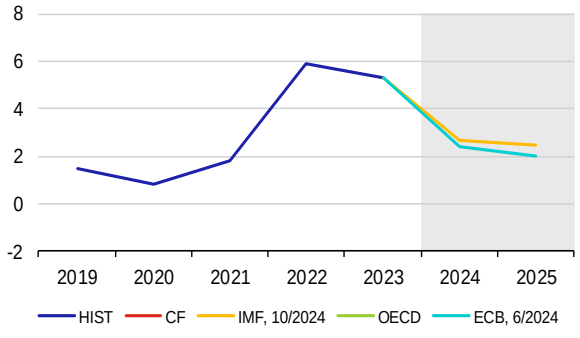
Malta

GDP growth, %



	CF	IMF	OECD	ECB
2024	n. a.	5.0	n. a.	4.3
2025	n. a.	4.0	n. a.	3.5

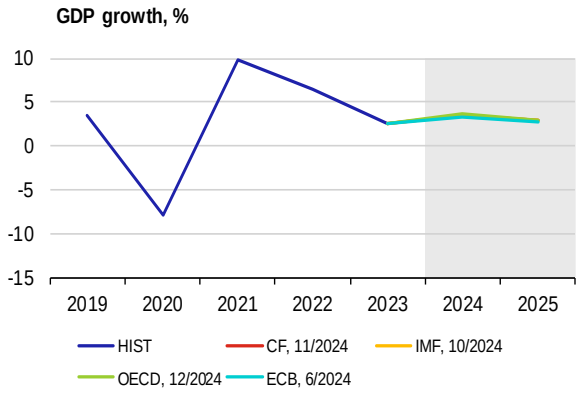
Inflation, %



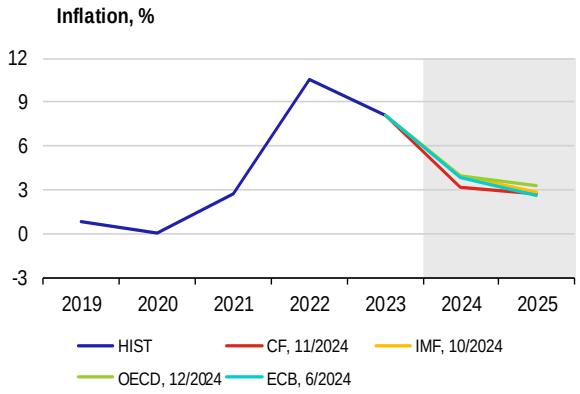
	CF	IMF	OECD	ECB
2024	n. a.	2.7	n. a.	2.4
2025	n. a.	2.5	n. a.	2.0

Ddd

Croatia



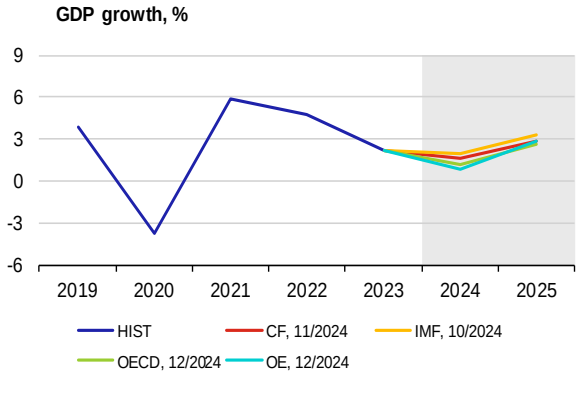
	CF	IMF	OECD	ECB
2024	3.5	3.4	3.7	3.3
2025	2.9	2.9	3.0	2.8



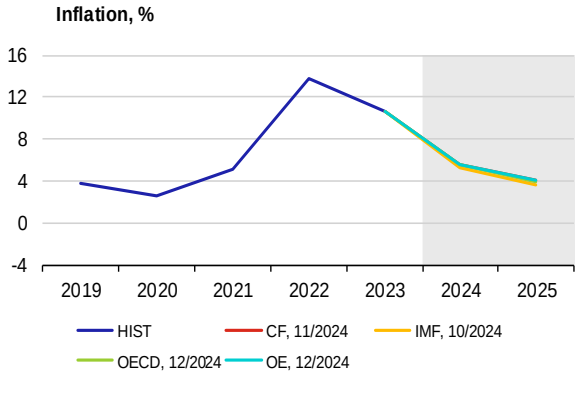
	CF	IMF	OECD	ECB
2024	3.2	4.0	3.9	3.8
2025	2.7	2.8	3.3	2.6

A5. GDP growth and inflation in other selected countries

Romania



	CF	IMF	OECD	OE
2024	1.6	1.9	1.2	0.8
2025	2.8	3.3	2.6	2.8



	CF	IMF	OECD	OE
2024	5.5	5.3	5.5	5.5
2025	4.1	3.6	3.9	4.0

A6. List of abbreviations

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

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