

GLOBAL ECONOMIC OUTLOOK JULY 2025



Foreword

Dear Readers,

You are holding the summer issue of Global Economic Outlook, a regular publication of the CNB's Monetary Department, now in its fifteenth year. This monthly publication provides a comprehensive overview of global economic developments and their outlook. The importance of developments abroad for a small open economy such as the Czech Republic's is generally well understood. In the current climate of heightened geopolitical tensions, rising protectionism and tariff wars, there is little need to further emphasise this relevance.

Recent developments globally, and in Europe in particular, are also characterised by "green" expenditure – whether in the form of investment in environmental protection or defence spending, traditionally symbolised by the "green" colour of the military. The current security situation is prompting



NATO member states to increase spending on defence and related infrastructure, driven by concerns over a possible expansion of the conflict beyond Ukraine's western border. A correlation can be observed between the geographical proximity of EU countries to Kyiv and their defence spending relative to GDP. The plans under discussion to raise this expenditure to as much as 5% of GDP are considered necessary for the defence of the countries concerned. From an economic perspective, however, they would require a significant reallocation of public expenditure and probably also an increase in the tax burden. Similarly, investment in energy efficiency, the development of environmentally friendly technologies and the reduction of dependence on fossil fuels serve not only to protect the planet but also to enhance the operational self-sufficiency of European countries.

The July issue of GEO takes a closer look at carbon taxes and tariffs as tools for mitigating the effects of climate change. Both the EU Emissions Trading System (EU ETS) and the Carbon Border Adjustment Mechanism (EU CBAM) aim to raise funding for investment in technology and the reduction of greenhouse gas emissions through market mechanisms. Green may well be the colour of the coming years...

I wish you an inspiring read and a pleasant summer. Jan Procházka, CNB Bank Board member

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Cut-off date for data

17 July 2025

CF survey date

14 July 2025

GEO publication date

25 July 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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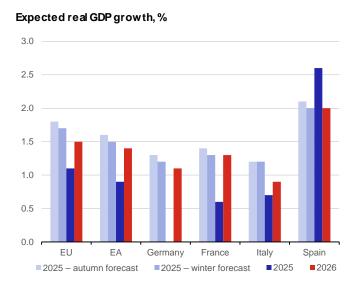
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I. Introduction

The war in Ukraine continues. Peace talks between Russia and Ukraine have not yet delivered any tangible outcome. In the diplomatic field, the EU has already approved the 18th package of sanctions, including a new price cap on oil of USD 47.6/barrel and a ban on the activities of an additional 105 vessels of the Russian 'shadow fleet'. The USA is considering further tariffs and steps against Moscow, prompted by President D. Trump's ultimatum of a formal 50-day deadline for a ceasefire, who is now increasingly leaning towards supporting the attacked Ukraine. In the Middle East, there has been a certain easing of tensions following the June attack on Iran's nuclear facilities, yet the situation remains affected by the ongoing humanitarian crisis.

At the macroeconomic level, central banks are still completing the process of stabilising inflation. In this context, advanced economies face a number of interconnected challenges. These are mainly persistent price pressures from services prices and the growth of nominal wages, the uncertainty related to the development of trade barriers and tariffs pushing the prices of imported goods upwards, as well as the disruption of global supply chains due to the decline in confidence and increased uncertainty. Inflation is thus only approaching the 2% target in some countries, and according to the CF analysts' outlook, it will be at the target this year only in the euro area. High levels of government debt and budget deficits limit room for fiscal easing and 'compromises' with the central bank, which may eventually need a more aggressive policy. The necessary gradual increase in defence spending by NATO member states to 3% or even up to 5% will be a severe test of budget stability, and would be less painful with robust economic growth.



Source: European Commission

The chart in the current issue presents the European Commission's forecast for GDP growth this year and the next compared to the forecasts from the second half of last year. Growth of around 1.5% was long anticipated for this year, however the current outlook expects significantly weaker figures. Yet GDP growth is expected to strengthen again next year. The European Commission even expects stagnation in Germany this year, while Spain is expected to perform better. Fiscal policy should also support economic growth in the coming years, when the aforementioned increase in defence spending is expected in particular.

The current issue also contains an analysis: Carbon tariffs and taxes: Economic tools for mitigating climate change. This article focuses on the principles of carbon tariffs and taxes, their impacts on international trade, the social sector and in flation. This is because carbon tariffs and taxes should, through mechanisms known as CBAM and ETS 2, affect European consumers next year and the year after that.

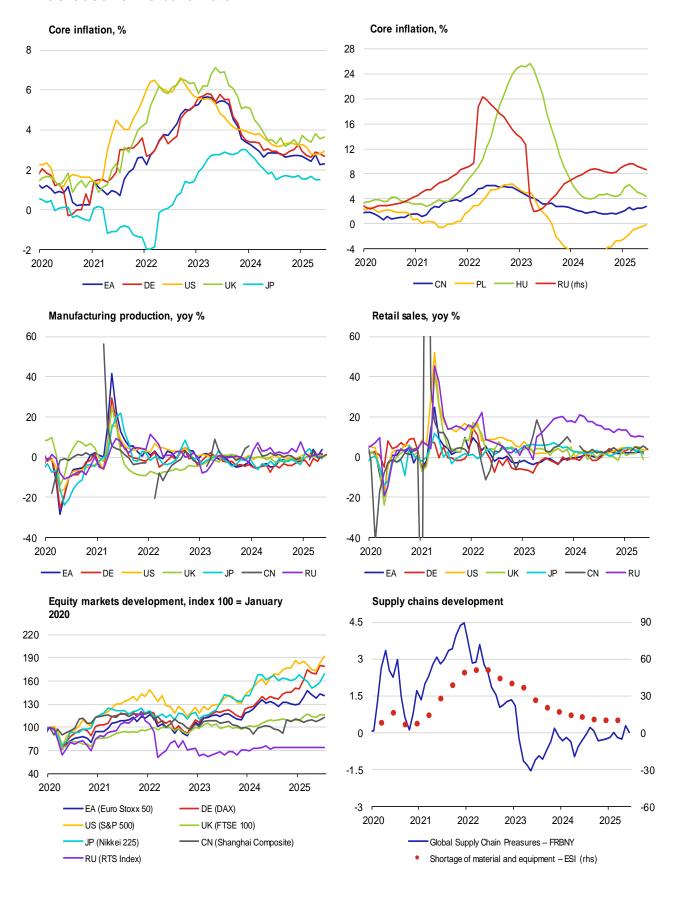
GEO barometer for selected countries

		EA	DE	US	UK	JP	CN	RU
GDP (%)	2025 2026	1.1	0.2	1.5	1.0	0.8	4.6	1.4 1.3
Inflation (%)	2025 2026	2.0	2.1	2.9	3.2 * 2.4 *	3.0	0.2	7.3 5.0
Unemployment (%)	2025 2026	6.3 1 6.4 1	6.3 * 6.2 *	4.3	4.7 + 4.7 +	2.5	3.9 3.8	2.6
Exchange rate (against USD)	2025 2026	1.18	1.18		1.37	137.9 134.7	7.17 7 .07 7 .07	89.5 9 7.9

Source: Consensus Forecasts (CF)

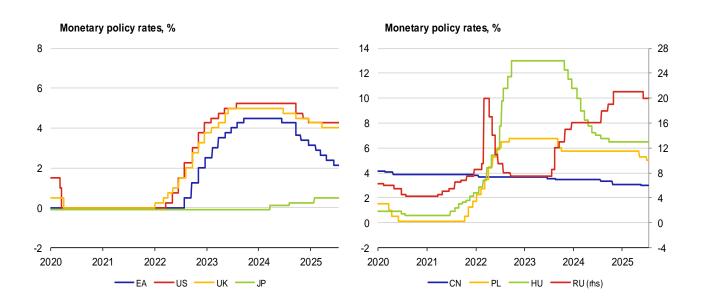
Note: The arrows indicate the direction of the revisions compared with the last GEO.

II. Macroeconomic barometer



Source: Refinitiv Datastream, European Commision.

II. Central Bank Monitoring



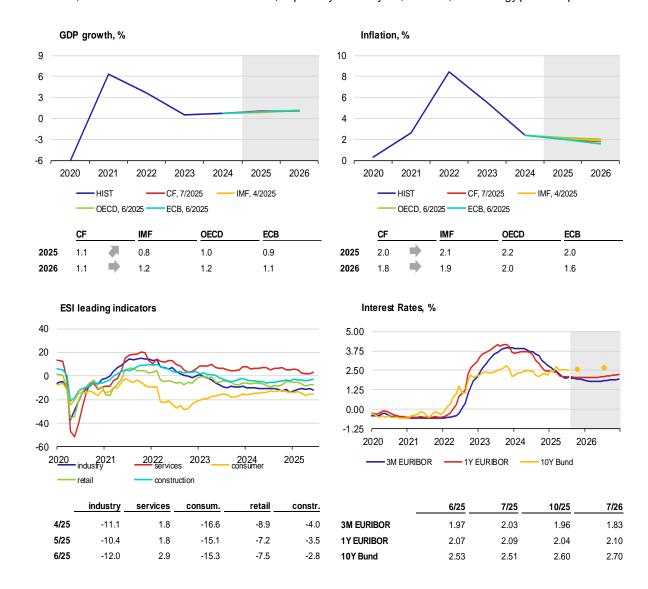
Latest monetary policy developments at selected central banks

	euro area (ECB)	USA (Fed)	United Kingdom (BoE)	Japan (BoJ)	
inflation target	2 % (HICP)	2 % (PCE)	2 % (CPI)	2 % (CPI)	
latest inflation	2 % (6/2025)	2,3 % (5/2025)	3,6 % (6/2025)	3,3 % (6/2025)	
current basic rate	2,00 %	4,25–4,50 %	4,25 %	0,5 %	
Publication of MP decision (rate changes)	5. June (-0,25)	18. June (0,0)	19. June (0,0)	17. June (0,0)	
expected MP decisions	24. July	30. July	7. August	31. July	
	I	I	I	I	
	China (PBoC)	Russia (CBR)	Poland (NBP)	Hungary (MNB)	
inflation target	-	4 % (CPI)	2,5 % (CPI)	3 % (CPI)	
latest inflation	0,1 % (6/2025)	9,4 % (6/2025)	4,1 % (6/2025)	4,6 % (6/2025)	
current basic rate	3,0 %	20,0 %	5,00 %	6,5 %	
Publication of MP decision (rate changes)	19. May (-0,1)	6. June (-1,0)	2. July (-0,25)	24. June (0,0)	
expected MP decisions	-	25. July	26. August	22. July	

III.1 Euro area

Economic growth in the euro area will probably exceed 1% this year thanks to a strong first quarter, while moderate growth is expected for the rest of the year. A stronger recovery will take place next year. At the beginning of the year, euro area GDP grew strongly (0.6% q-o-q), mainly thanks to Ireland, Malta and Cyprus. These 'tax havens' boosted investment and partly also net exports. There was also a contribution from American buyers stocking up before the increase in tariffs in March, from which Germany mainly benefited. Household consumption, on the other hand, slowed, while government spending stagnated. Industry became the driving force of growth thanks to this one-time export effect. A marked adjustment in the pace of GDP growth is therefore expected in the second quarter. Moreover, higher US tariffs and a strong euro had a negative effect. This hypothesis was confirmed by the April decline in industrial production (following the strong March), but it nevertheless increased again in May, and on average was above the level of the first quarter over both months. This enabled the sector to positively contribute to GDP growth again, albeit to a lesser extent than at the beginning of the year. Since January, the composite PMI has remained slightly above the 50-point mark that symbolises stagnation, thus diverging from GDP development. The ECB's June forecast expected GDP to grow by 0.9% this year, while the OECD expected 1.0%. However, neither institution had the final results for the first quarter available when making their forecasts, and these were surprisingly higher. The July CF currently expect 1.1%. GDP growth will recover next year thanks to growth in government expenditure on defence and infrastructure. Nevertheless, it will again be around 1.1% for the year as a whole due to statistical effects.

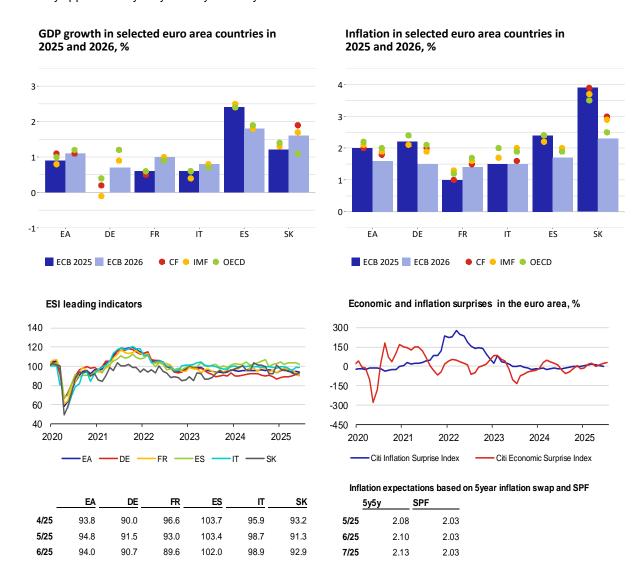
The ECB lowered its rates by 0.25 percentage points at its June meeting, in line with market expectations, bringing the deposit rate down to 2%. Analysts see this as a neutral rate, but some ECB representatives see room for further monetary policy easing. The markets expect one more rate cut this year but with the possibility that this will not happen. In its June forecast, the ECB lowered its inflation outlook, especially for next year, to 1.6%, with energy prices expected to decline.



III.2 Germany

The German economy noticeably revived in the first quarter despite year-on-year stagnation. Real GDP grew by 0.4% compared to the previous quarter, reflecting stronger industrial production performance and significant growth in exports, particularly of pharmaceutical products and cars. The increase in exports was partly due to stockpiling by foreign trading partners in response to the announced introduction of tariffs by the United States. According to the CF analysts' Julyforecast, the German economy will grow by just 0.2% this year following two years of economic contraction. Next year, the growth rate is expected to pick up to 1.2%, mainly as a result of the federal government's expansionaryfiscal policy – specifically a tax package of EUR 46 billion for 2025-2029 and an investment infrastructure fund of EUR 500 billion. However, this budgetary expansion will lead to an increase in the budget deficit, expected to exceed 4% of GDP by 2027. A possible escalation of trade disputes with the United States, the destination for around 10% of German exports (the highest outside the EU), is a risk. A deterioration in trade relations would adversely affect the industrial sector which, after a long period of weak performance, is starting to show signs of stabilisation. According to June data from the HCOB and S&P Global survey, business activity returned to growth, mainlythanks to a recovery in the manufacturing sector, where orders increased at the fastest rate in over three years. The composite Purchasing Managers' Index (PMI) rose from 48.5 points in May to 50.4 points, thus returning to the expansion zone.

Consumer price inflation in June confirmed the trend of easing price pressures, slowing year on year to 2.0%, its lowest value since October 2024. This development was mainly driven by further declines in energy prices and a more moderate increase in food prices. By contrast, services prices continued to rise at an above-average rate of 3.3% year on year. Core inflation, which excludes energy and food prices, reached 2.7%. Both these figures thus still exceed headline inflation, signalling persisting price pressures in other consumer basket segments. CF analysts expect consumer prices to increase by approximately 2% year on year this year and the next.

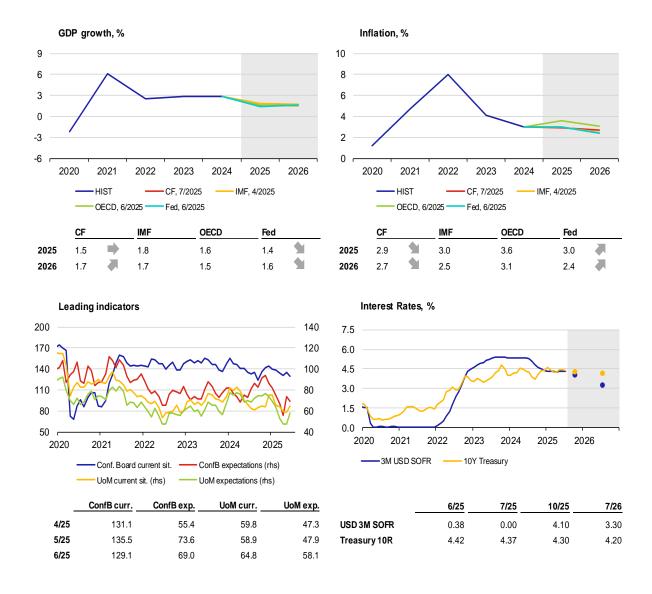


III.3 United States

US President Donald Trump returned to rhetoric about setting tariffs on international trade. However, the market reaction was very weak compared to the spring, as everyone hoped that an agreement would eventually be reached. At the same time, according to data from the real economy, imports of goods to the USA reached record levels in the first three months of this year, likely due to stockpiling in the economy in anticipation of new higher import tariffs. The price shock has thus been postponed so far. New forecasts for the performance of the American economy remain moderate, with the Fed being most pessimistic, expecting growth of only 1.4% this year. Yet analysts' estimates for GDP growth in the second quarter of this year have increased thanks to stable economic indicators, while the probability of a recession has decreased.

The unemployment rate remains just above 4%, while employment is falling, especially among foreigners who might be concerned about deportation. The actual labour market figures may thus be distorted by the US government's policies. 147,000 new jobs were created in non-agricultural sectors in June, which is the average pace for the past year. The number of federal government employees has decreased but, at the same time, local governments are recruiting, primarily in education, while new jobs are also being created in healthcare, for example.

The Fed's June meeting ended as expected with no changes to interest rates, while the markets do not expect rates to change at the July meeting either. The markets are expecting three subsequent rate cuts, with the first potentially coming at the September meeting. Chairman J. Powell is facing efforts by President D. Trump to remove him as the US central bank is keeping its rates high. American customs policy has prompted investors to move away from the dollar, and the exchange rate has significantly fallen not only against the euro but also against other currencies. A weaker exchange rate makes imports more expensive, and they are also burdened by customs duties. Inflation was 2.7% year on year in June, due mainly to prices of food, transport and second-hand vehicles. Fuel prices are falling. Core inflation also remains elevated (2.9% in June), especially for services (3.8% in June).



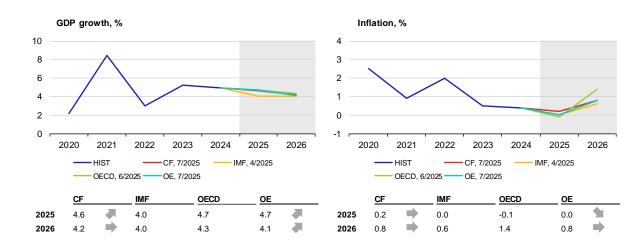
III.4 China

The growth rate of economic activity in China slowed somewhat in the second quarter after a strong start to the year. GDP growth of 5.2% was reported in the second quarter, however the threat of higher tariffs from the USA likely accelerated some manufacturing sector activities, so industrial production in June grew 6.8% year on year, much more than in the spring. Despite continued government stimuli, signs of a slowdown are being observed in a number of sectors, while electricity consumption also fell sharply in May. Retail sales growth (4.8% year on year) was also lower in June than in the spring.

After four months of decline, consumer price inflation edged up in June (by 0.1%). Government subsidies for private consumption played a role, as did a surge in imports of consumer goods under the impression of a temporary alleviation of trade disputes. Most of the increase was attributed to non-food goods and various services, reflected in a relatively high core inflation rate of 0.7% year on year in June, while prices for food and transport continued to decline. Further growth in headline inflation is unlikely in the near future, as the month-on-month consumer price index, by contrast, fell for the second consecutive month. Producer price inflation was also negative in June (-3.6%).

Business confidence indicates only very cautious optimism. Data from the National Bureau of Statistics put the composite PMI at 50.7 points in June after May's 50.4. Strong growth in confidence is visible in services, while the contraction among producers was smaller than in the spring: The PMI in industry improved slightly from 49.5 points in May to 49.7 in June. The non-manufacturing PMI rose from 50.3 in May to 50.5 in June. The official unemployment figure (5% in urban areas) was the lowest since February. Unemployment among younger age groups likely also decreased during the spring and early summer, although there are currently no data for June.

Chinese foreign trade is going through a very volatile period under pressure from trade disputes and the threats of higher tariffs. Exports increased by 5.8% year on year in June, the largest rise being in rare earths after the intensity of the trade conflict with the USA in this area was successfully mitigated. From a territorial point of view, imports increased mainly from ASEAN countries, while imports from the USA and the EU continued to decrease.





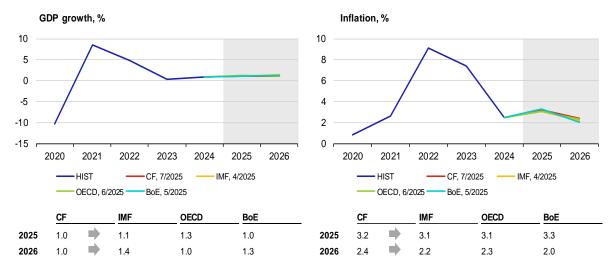
_	PMI manuf.	PMI in Non-manufacturing	PMI service
4/25	49.0	50.4	50.7
5/25	49.5	50.3	51.1
6/25	49.7	50.5	50.6



Source: Bloomberg

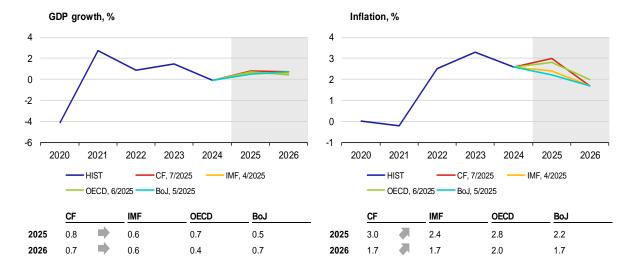
III.5 United Kingdom

The British economy is showing mixed prospects and inflation remains a problem. Although the economy grew at a solid pace (0.7%) in the first quarter of this year, mainly thanks to the services sector, April and May brought month-on-month declines, mainly due to the manufacturing sector. The year 2025 should be marked by moderate GDP growth of around 1%. The BoE expects a slight pick-up next year, OECD slowdown and CF even stagnation. According to the June composite PMI index, private-sector activity continues to grow (52.0 points), but the pace of expansion remains moderate. The uneven development of inflation was confirmed by its unexpected acceleration in June to an 18-month high (3.6%). Inflation is largely being driven by food prices, which have risen due to dry weather, among other reasons. Core inflation remains at nearly 4%, and services inflation is holding just below the 5% threshold. However, the BoE expects that after a temporary bout of acceleration, during which inflation will exceed 3% on average this year, it will return to the 2% target next year. This year, it has already twice decided to reduce the key interest rate by 25 basis points to the current 4.25%, most recently in May.



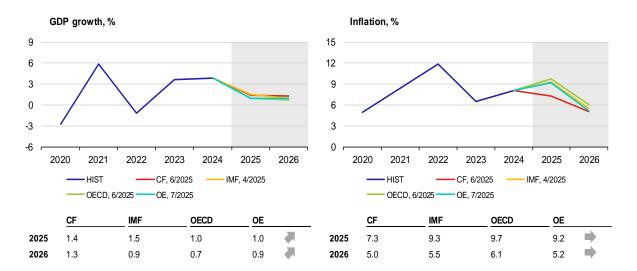
III.6 Japan

The Japanese economy is likely to show slightly weaker economic growth in the third quarter of 2025 compared to the previous quarter, at around 0.6%. This is due mainly to an expected decrease in exports in connection with the US customs policy. The unemployment rate is expected to remain at historical lows of around 2.5%. A slowdown in inflation is expected, which should, however, remain above the 2% target. Given the existence of a series of uncertainties, particularly concerning customs policies, and taking into account the mild disinflationary trends, the Bank of Japan (BoJ) cannot be expected to increase the key interest rate from the current 0.5% in the coming months. By contrast, the BoJ decided to slow the scaling back of its Japanese government bond purchases (JGB) from JPY 400 billion to JPY 200 billion per month due to the persistent exceptional steepness of the yield curve. The strengthening of the united opposition in the recently held elections to the upper house could additionally lead to both a reduction in taxes and an increase in government spending.



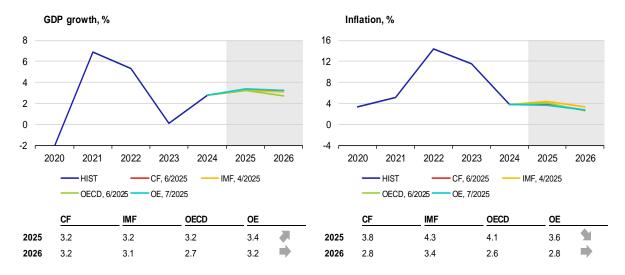
III.7 Russia

After a significant decline in economic activity at the beginning of the year, only a slight improvement is expected in the second quarter. GDP growth in the first quarter slowed year on year to 1.4% from the previous 4.3%. Declines were recorded in mining (-4.0%), electricity, gas, water and heat supplies (-3.8%) as well as in technical fields (-1.3%), while growth was mainly reported in the financial sector (17.5%). Public administration (6.8%) and the manufacturing industry (4.5%) also recorded solid expansion. According to the Russian central bank, economic activity rose again in April and May, but there was a slowdown in June, which was also confirmed by leading indicators. The manufacturing sector PMI fell to 47.5 points in June, while in services it also remained below the 50-point mark, indicating a slowdown in activity. The key interest rate was lowered to 20% in June, but monetary policy remains restrictive. Inflation slowed to 9.4% in the same month – the lowest rate since the start of the year – but remained well above the target of 4%.



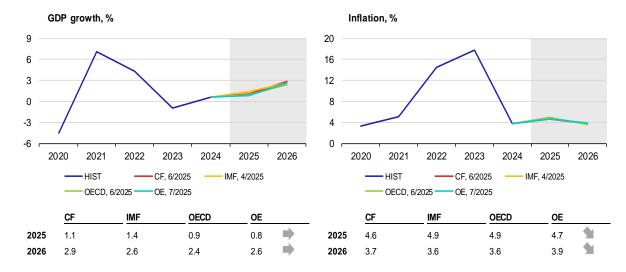
III.8 Poland

The NBP unexpectedly lowered the key interest rate by 25 basis points to 5% at its July meeting. The timing of the interest rate cut just before the presidential elections has sparked criticism from the markets. The analysts' consensus expects a gradual easing of monetary policy in the coming years, with a decrease in rates to 4.75% in the next quarter and to 4.5% by the end of this year, with a further drop to as low as 3.5% in 2026 and 2027. Inflation in June slightly increased year on year to 4.1% from May's 4.0%, and thus remains above the central bank's target range. Consumer prices were primarily driven up by rises in energy, gas and food prices, partially offset by a decline in fuel prices. In the second quarter of 2025, inflation expectations among companies significantly decreased across most sectors, with the largest decline recorded in the energy and construction sectors. By contrast, inflation expectations in the services sector remain elevated. The Polish economy slowed slightly at the start of 2025 to a year-on-year growth rate of 3.2%, which was mainly attributable to weaker household consumption and a negative contribution from net exports. However, the forecasts also expect continued solid GDP growth (3.2% in both 2025 and 2026).

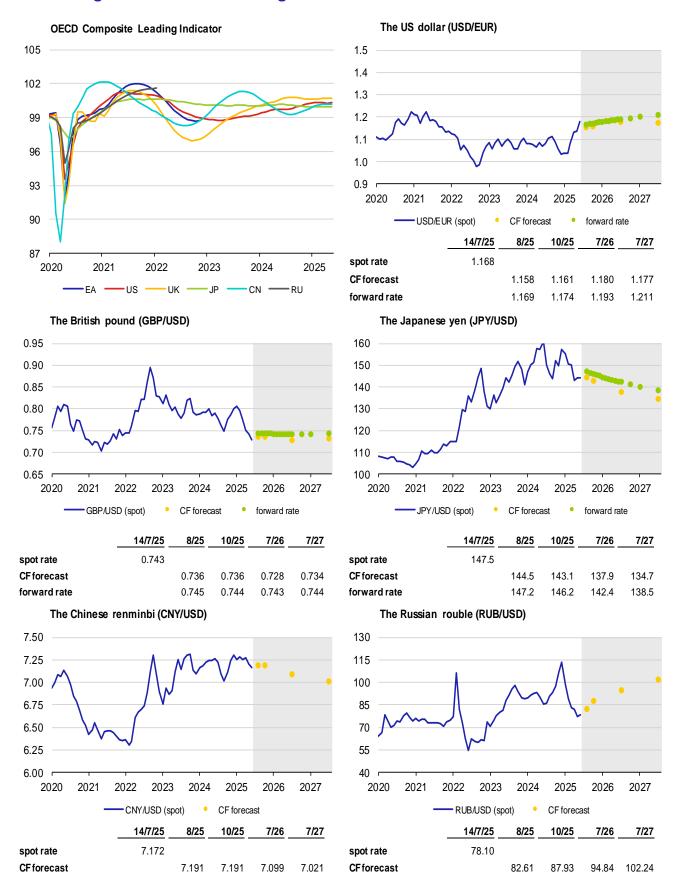


III.9 Hungary

Hungarian government responded by capping the margin on basic foods in mid-March. Year-on-year consumer price inflation slightly increased in June compared to May (by 0.1 percentage point), thus remaining at elevated levels (4.6%) outside the central bank's tolerance range (2-4%, target level 3%). The key interest rate has remained at 6.5% for nine months, and the MNB has so far ruled out any rapid reduction (a cautious approach being preferred). In addition to the potential impacts of trade wars, the weakening forint also remains a risk for domestic price growth. The CF analysts' June inflation outlook for this year is 4.6%, while OE analysts give 4.7%, with slightly higher estimates from the IMF and OECD (both 4.9%). In addition, in April, S&P lowered its credit rating outlook for Hungary in view of fiscal stability risks stemming from uncertain growth prospects, high interest expenditure, decreasing inflows of EU funds and expenditure pressures ahead of the eagerly awaited elections (April 2026). The GDP outlook for the coming years already shifted lower in the second quarter in response to the continuing decline in industrial production, a significant drop in new orders, and ongoing poor consumer sentiment.



IV. Leading indicators and exchange rate outlooks

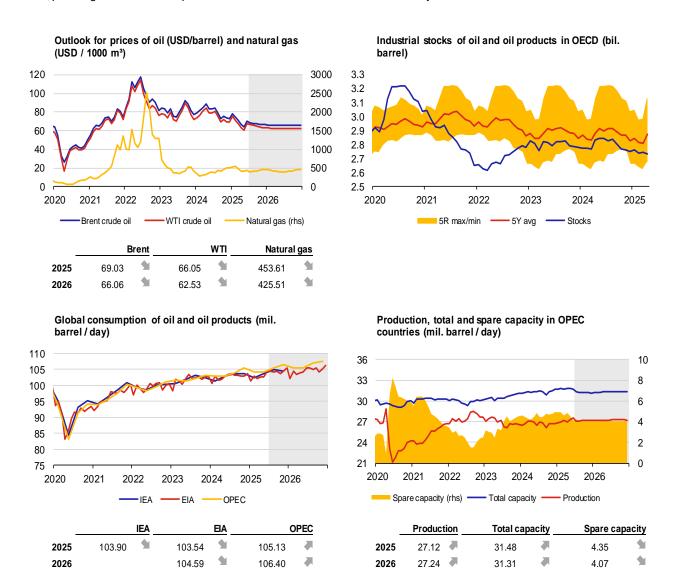


Note: Exchange rates as of last day of month. Forward rate does not represent outlook; it is based on covered interest parity, i.e. currency of country with higher interest rate is depreciating. Forward rate represents current (as of cut-off date) possibility of hedging future exchange rate.

V.1 Oil

The oil price fluctuated strongly in the 2nd quarter of this year due to geopolitical developments in the Middle East and the US foreign trade policy. The fluctuations were further amplified by significant speculative market activity by investors. In early April, the price plummeted after the announcement of reciprocal import tariffs by the USA and a surprisingly strong increase in extraction quotas by the OPEC+ alliance from May. Similar reasons led to a further decline in early May, when the Brent crude oil price reached this year's minimum of USD 60/barrel. In mid-June, however, it rose to nearly USD 80/barrel due to the escalation of the conflict between Israel and Iran and the subsequent US missile strikes on Iranian nuclear facilities. However, after the ceasefire, it quicklyfell back to below USD 70/barrel, where it remained around mid-July. Physical market demand remains relatively strong and rose in June, as refineries completed seasonal maintenance and ramped up production for the summer driving season. The relatively successful negotiations between the USA and China on mutual trade and the strong decline in oil inventories in the USA also improved market sentiment. Yet the rapid increase in OPEC+ alliance extraction quotas, taking advantage of the seasonally strong summer demand to increase market share, is working against higher price growth. By contrast, according to the EIA, US oil extraction growth is expected to cease due to low oil prices. The IEA expects very weak growth in global demand this year; however, the surplus oil is currently ending up in Chinese stocks.

The market outlook for the Brent crude oil price from the first half of July implies a decline until mid -2026 (to USD 66/barrel) and then only a slight increase to USD 66.7/barrel at the end of 2027. Similarly, the July CF expect a Brent crude oil price of USD 67.3/barrel at the one-year horizon. By contrast, the EIA (and the IEA) expects a relatively strong increase in global stocks, pushing the Brent crude price down to USD 63/barrel at the end of this year and USD 57/barrel at the end of the next.



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

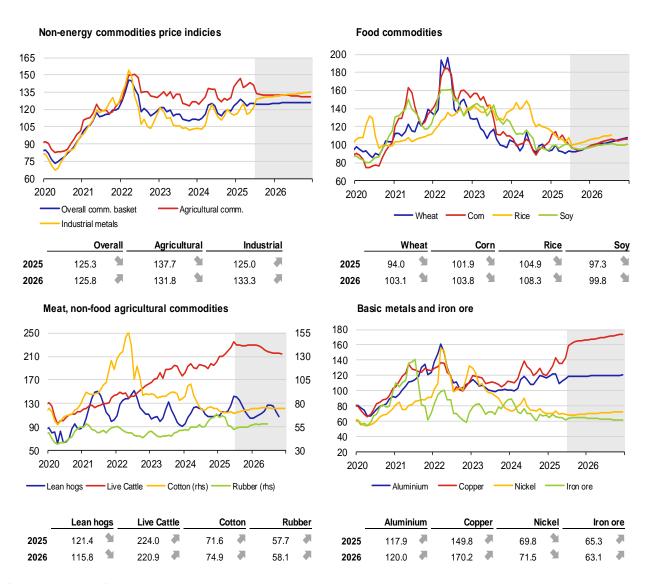
Note: Oil price at IČE, average natural gas price in Europe – World Bank data. Future oil and gas prices (grey area) are derived from futures. Industrial oil stocks in OECD countries – IEA estimate. Production and extraction capacity of OPEC – EIA estimate.

V.2 Other commodities

The natural gas price in Europe developed similarly to oil. This year's low of EUR 31.5/MWh was seen in early May, rising to EUR 41/MWh by mid-June after the armed conflict between Israel and Iran. After the Middle East situation calmed down, the gas price hovered around EUR 34/MWh in the first half of July. Norwegian gas and LNG supplies are stable, and the situation at European storage facilities (nearly 60% capacity full at the end of June) is satisfactory. LNG demand is strong, especially in Asia, due to the hot weather that also increased consumption in Europe in June. The coal price in Europe and Asia has been rising since May due to strong Asian demand and disruptions in Australian supplies. Chinese power plants have increased their coal stocks at the government's command, although fossil-fuel electricity generation is declining. In June, rising gas prices increased demand in Europe, with coal exports from the USA to the EU also rising due to the weaker dollar.

The industrial metals prices index rose sharply from June, reaching its highest value since May 2022 in mid-July, with further growth expected. In particular, copper and aluminium prices rose with companies stockpiling ahead of the imposition of US import tariffs, but also due to the weaker dollar. Prices were also supported by revived industrial activity in China and elsewhere, with JPMorgan's global manufacturing PMI reaching expansion territory in June (from 49.5 to 50.3). Stocks on the LME continued to decline sharply in June. Only the nickel price has slightly decreased in recent months. Iron ore and steel prices also declined as the Chinese steel industry PMI further decreased from 46.4 to 45.9 in June. However, they made up most of their previous losses in the first half of July.

The food commodity price index declined in June, further intensifying its drop in the first half of July. The outlook is now only slightly declining. Corn, rice, soy, sugar, coffee and cocoa prices fell in particular. By contrast, pork and beef prices continued rising. The wheat price has stagnated, but its outlook is strongly rising.



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.

Carbon tariffs and taxes: Economic tools for mitigating climate change¹

The EU Carb on Border Adjustment Mechanism (CBAM) is a climate policy tool designed to reduce greenhouse gas emissions and prevent carb on leakage. CBAMimposes a levy on imports of carbon-intensive goods in order to boost the competitiveness of domestic European producers and encourage foreign manufacturers to transition to low-carbon technologies. In 2027, the European ETS II (Emissions Trading System) is set to be launched. Media as well as academic publications discuss estimates of the impact this will have on consumer price developments, and on end customers. Once the second phase is implemented, the entire ETS system should cover up to 85% of greenhouse gas emissions in Europe. Preliminary calculations suggest that the increase in inflation will be noticeable, and an additional inflationary impulse could come in 2030, when the price cap on emission allowances is set to be removed. This article analyses the principles of carbon border tax and taxes, as well as their effects on international trade, the social sphere, and inflation.

Introduction

Global warming caused by greenhouse gas (GHG) emissions is one of the greatest challenges of the 21st century. Achieving the targets of the Paris Agreement will require a reduction in CO_2 and other GHG emissions. One tool that has the potential to contribute to this goal is the carbon border tax. This mechanism was proposed as part of the EU's broader strategy to achieve climate neutrality by 2050. It is a complex process with political, economic and technical dimensions.

The carbon border tax as a complement to the carbon tax

The carbon tax (introduced in the EU in 2005) applies to domestic energy-intensive production, whose carbon footprint – i.e. CO_2 and other GHG emissions generated in the production process in a country or region – is priced under the EU Emissions Trading System (EU ETS; see, for example, Fakta o klimatu, 2021). However, the carbon tax and the rising price of emission allowances have incentivised EU-based producers to relocate energy-intensive production to countries with less stringent climate policies and then import the goods back into the EU. As a result, GHG emissions have moved beyond the reach of European legislation – a phenomenon known as carbon leakage. Emission-intensive industries that are covered by the EU ETS and can easily relocate production to third countries where emissions are not regulated currently receive a portion of their emission allowances free of charge so that their competitiveness relative to foreign suppliers is not undermined. However, the number of free allowances will gradually be reduced, and newly introduced carbon border taxes – which will be compliant with WTO rules² – will serve as an alternative means of shielding EU firms from foreign competition.

The ETS I system has been in operation in the EU since 2005. It places a price on CO₂ (and other greenhouse gas) emissions from large emitters, such as major power plants, heating plants, heavy industry, and the aviation and maritime sectors. Currently, it covers approximately 38% of greenhouse gas emissions in the EU³.

The new ETS II system is expected to introduce carbon pricing at the EU level starting in 2027 for road transport, building heating (including domestic hot water and cooking), and emissions from small energy and industrial enterprises — see e.g. EU (2023). It is projected to cover an additional 47% of EU emissions. The remaining 15% of CO₂ emissions originate from agriculture and waste management. The objective is to encourage businesses and households to adopt low-emission transportation methods, improve building insulation, and make use of renewable energy sources (such as photovoltaics and heat pumps). This should lead to a 42% reduction in emissions in these sectors by 2030 compared to 2005 levels. ETS II will not apply to agriculture, the military, or rail and maritime transport. Additionally, the system allows for the exclusion of businesses and households in certain countries, provided they are already subject to a national carbon tax that exceeds the price of an emission allowance.

The ETS II system, including the setting of the allowance price, will operate separately from ETS I. While the price of allowances will be determined by the market, additional allowances will be released into circulation if the price exceeds the

¹ Author: Jan Hošek. The views expressed in this article are those of the author and do not necessarily reflect the official position of the Czech National Bank.

² Imports from all WTO member countries must be subject to the same rules, and domestic products must not be given preferential treatment over imported goods. This condition is met, as the price of imported carbon equals the price paid by European producers under the EU ETS. Moreover, the WTO allows trade restrictions in the interests of environmental protection. CBAM is thus justified as an environmental – rather than a protectionist – measure.

 $^{^3}$ One allow ance (European Emission Allowance) entitles the holder to emit one tonne of CO₂ or an equivalent amount of N₂O or perfluorocarbons (PFCs). Each year, the EU issues a fixed number of these allowances, with the total volume — known as the emissions cap — gradually decreasing over time. Companies participating in the system acquire allowances either through auctions (and can subsequently trade them on the market), from other companies, or they receive a certain portion of them for free. Free allocation applies in cases where companies might lose competitiveness due to increased costs from allowances, particularly compared to producers in third countries where emissions are taxed less — or not at all — or where there is a risk of production being relocated abroad (the so-called carbon leakage). However, from 2026 (with a gradual phase-in starting in 2023), the Carbon Border Adjustment Mechanism (CBAM) will come into effect. This mechanism will impose a levy on the import of carbon-intensive products into the EU, thereby creating a level playing field for domestic producers. As a result, the allocation of free allowances will be gradually reduced and will be completely phased out by 2034.

average over a given period or surpasses a ceiling⁴ of €45 per tonne of CO₂ (in constant 2020 prices) — see EU (2023) for details. These allowances will not be purchased directly by individual households or small businesses, but rather by large energy and fuel suppliers⁵, who will then pass the costs on through their pricing. The total number of allowances in circulation will decrease each year, similarly to the ETS I system. If, however, energy prices ⁶ are exceptionally high in the run-up to implementation (i.e. in the first half of 2026), the launch of the system maybe postponed from 2027 to 2028. This would occur if, for instance, the TTF gas price exceeds approximately€107 per MWh or the Brent crude oil price exceeds about \$160 per barrel.

The carbon border tax thus complements the carbon tax in the EU. It is based on the principle of internalising the external costs associated with GHG emissions. The aim is to ensure that imported goods are also taxed according to their carbon footprint. This helps prevent unfair competition from producers in countries with laxer climate standards. While the carbon tax does not directly affect emissions abroad and is intended primarily to incentivise domestic firms – through market mechanisms – to reduce fossil fuel consumption and invest in cleaner technologies and renewable energy sources, the carbon border tax has the potential to influence emissions generated abroad by encouraging foreign producers to cut their GHG emissions in order to avoid the tax. The carbon tax and the carbon border tax are therefore complementary tools for achieving optimal synergies in reducing global emissions.

How does the carbon border tax work?

Importers are required to declare the carbon footprint of their imports and, through CBAM certificates, pay a levy equal to what a domestic producer would pay in emission allowances for the same carbon footprint. If a carbon price has already been paid abroad, the corresponding amount is deducted from the levy. This ensures a level playing field for all market participants. EU firms are protected from competition from countries with lower emissions standards, while the incentive to relocate energy-intensive production to such countries is reduced. CBAM is compatible with WTO rules.

Timeline of the introduction of CBAM in the EU

- 2000–2010: Initial discussions on carbon border taxes emerge in response to observed carbon leakage as firms begin relocating energy-intensive production to countries with less stringent emissions regulations.
- 2019: The European Commission presents the European Green Deal, which sets the goal of achieving climate neutrality by 2050. The carbon border tax is proposed as one of the tools to help meet this objective.
- July 2021: The Commission publishes a proposal to introduce CBAM. The proposal focuses on five sectors iron and steel, aluminium, cement, fertilisers and electricity and contains the following key principles:
 - Importers must declare the carbon footprint of imported products.
 - $\circ \quad \text{The carbon footprint will be priced through certificates at the same level as production within the EU.} \\$
 - o Revenues generated by CBAM will be used to finance the EU's green transition.
- March 2022: Following extensive consultations with industry and NGO representatives and with international partners, the European Parliament and the Council of the EU reach a provisional agreement on the introduction of CBAM.
- May 2023: CBAM is formally adopted as part of the Fit for 55 package.⁸
- 2023–2025: A transitional period is established during which importers will be required to report emissions embedded in imported products, but no levy will be collected.
- January 2026: The carbon border tax will be fully implemented and begin to be levied.

Transitional period 2023-2025

CBAM entered its transitional phase on 1 October 2023. This period is intended to allow EU businesses, non-EU producers, importers and EU authorities to gradually familiarise themselves with CBAM and begin implementing it in practice. In the initial phase, reporting applies to goods whose production is carbon-intensive and at most significant risk of carbon leakage: cement, iron and steel, aluminium, fertilisers, electricity and hydrogen. With this scope, CBAM is expected to cover more than 50% of the emissions in EU ETS covered sectors (EC, 2025a). The CBAM methodology will be continuously refined. In future, the mechanism may be extended to include downstream products. During this period, the importers concerned have to report GHG emissions embedded in their imports (direct and indirect emissions). However, they will not pay any carbon border taxes.

⁴ This price ceiling is set in 2020 prices and is intended to be regularly indexed to EU HICP inflation. It is scheduled to be abolished since 2030.

⁵ According to the impact assessment of the European Commission (EC, 2021), ETS II is expected to cover approximately 7,000 tax warehouses for oil, 1,400 regional and local gas suppliers, and 3,000 coal suppliers.

⁶ The launch of the ETS II system will be postponed to the beginning of 2028 if the average TTF gas price in the first half of 2026 exceeds the average price recorded in February and March 2022 (approximately €107 per MWh), or if the average Brent crude oil price in the first half of 2026 is higher than twice its average price over the 2021–2025 period (approximately \$160 per barrel).

⁷ Importers are required to report the actual emissions embedded in their imports. The producer supplies data on the technology used and the unit emissions generated in the production process. Emissions are calculated according to standard EU methods, such as those applied under the EU ETS.

⁸ A package of legislative proposals tabled by the European Commission in July 2021. Its main objective is to reduce GHG emissions in the EU by 55% by 2030 compared to 1990 levels.

Full implementation from 2026

From January 2026, EU importers of goods covered by CBAM must register with national authorities, where they can also buy CBAM certificates. The price of the certificates will be calculated depending on the weekly average auction price of EU ETS allowances expressed in €/tonne of CO₂ emitted. Importers will declare the emissions embedded in their imports and surrender the corresponding number of certificates. They will therefore pay the same amount for the emissions embedded in imported goods as if the goods had been produced in the EU. If they can prove that a carbon price has already been paid during the production of the imported goods, the corresponding amount can be deducted.

Impacts of introducing carbon border taxes

The carbon border tax has the potential to significantly affect the global economy and international trade. However, its specific impacts will vary considerably across different groups of countries and may be both positive and negative (see also Box 1). While CBAM may benefit the EU and other advanced economies with similar climate goals – in terms of environmental impacts and competitiveness – it poses a challenge for developing and emerging economies. The key to success will lie in international cooperation, technological support and a fair approach to ensuring that the carbon border tax contributes to global sustainability without having adverse social and economic effects.

The positive impacts for EU countries include the protection of domestic industry, the preservation of jobs and the maintenance of the competitiveness of European manufacturing. CBAM also incentivises firms to invest in clean technologies and reduce their fossil fuel consumption and GHG emissions. CBAM revenues can be used to finance the green transition or to provide compensation for at-risk sectors.

On the other hand, European firms that import carbon-intensive raw materials or semi-finished goods will face higher costs, and the implementation and running of CBAM will impose a significant administrative burden on businesses and create complex bureaucracy for public authorities. However, CBAM is not expected to have a major negative impact on industrial and consumer prices in the EU, as imports of energy-intensive products from non-EU countries account for only 4.5% of total EU imports (and just 1.2% of total Czech imports), with iron, steel and aluminium making up the largest share. The Commission estimates annual revenues from the sale of import certificates at around EUR 2.1 billion by 2030. For the Czech Republic, the estimated cost of purchasing certificates is in the lower hundreds of millions of koruna per year.

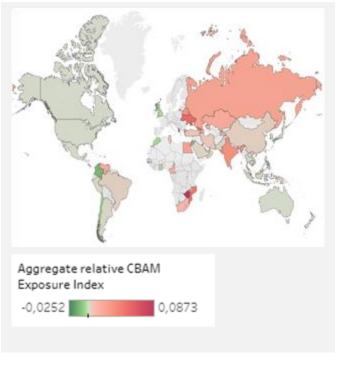
Advanced economies outside the EU – such as the US, Canada and Japan – with climate goals similar to those of the EU may be motivated to accelerate their green policies in order to avoid the tax. Countries with emissions standards comparable to those in the EU may benefit from preferential trade conditions, which could boost mutual trade with the EU. However, if these countries do not have sufficiently strict emissions regulations, their exports to the EU may be disadvantaged.

Box 1 – Impacts of the EU CBAM on other countries (WB, 2023)

The World Bank provides an <u>interactive map</u> on its website showing the estimated impacts of CBAM on various countries around the world. For each sector affected, the map displays:

- the carbon intensity of exports from individual countries (in kg CO₂/USD) relative to the EU average,
- the share of exports to the EU in total exports of a given commodity from the country,
- the relative impacts of CBAM on the country, taking into account carbon intensity and the share of exports to the EU, and finally
- the total impact of CBAM on the country when all the products concerned are considered together.

Countries whose competitiveness is expected to improve with the introduction of the EU CBAM are marked in dark green, while those whose export competitiveness is most at risk are shown in dark red.



 $^{^9}$ In its impact assessment (EC, 2021), the European Commission estimates that revenues from CBAM could reach approximately EUR 1.5 billion annually by 2028 and EUR 2.1 billion by 2030. Most other estimates fall within the range of EUR 1.5 billion to EUR 3.1 billion per year. OECD (2025) is alone in suggesting that CBAM could generate as much as EUR 14.7 billion yearly, assuming an emissions allowance price of EUR 80 per tonne of CO_2 equivalent and unchanged trade flows. Unlike revenues from the EU ETS — the majority of which accrue to individual EU Member States — 75% of CBAM revenues will go to the common EU budget and may be used, for example, to finance climate policies, the European Green Deal or the Just Transition Fund.

In emerging and developing economies such as China, India, and Brazil, negative effects are likely to prevail. The most affected will be countries dependent on exports of energy-intensive goods like steel, cement, or aluminum. The carbon border adjustment will raise export costs to the EU and reduce competitiveness. Some countries may lose market share, leading to revenue losses and economic strain. Many of them lack resources to invest in cleaner technologies, which hinders adaptation. The EU should provide technical and financial support to ease their transition to a low-carbon economy. Over time, the mechanism could encourage cleaner production and investment in renewables.

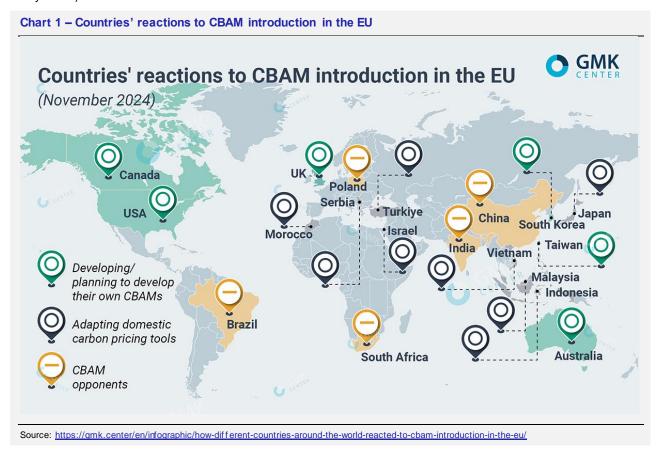
Countries dependent on fossil fuel exports – such as Russia and Saudi Arabia – will also face mostly negative impacts. A decline in demand for their products will reduce export revenues and may cause economic problems or even social unrest. In the long run, however, the pressure to reduce emissions may motivate these countries to diversify their economies and invest in sustainable industries.

From a global perspective, the carbon border tax could help reduce greenhouse gas emissions worldwide by encouraging countries to adopt stricter climate policies. The European CBAM may also serve as a model for other regions, contributing to the creation of global standards and harmonized climate policies. On the other hand, its introduction could trigger trade disputes within the World Trade Organization (WTO) and disadvantage developing countries, potentially widening economic inequalities between nations.

Reactions of other countries to the introduction of the EU CBAM

Other countries have reacted in broadly three ways to the launch of the first phase of CBAM by the EU in October 2023 (see Chart 1):

- By opposing the mechanism and arguing that it is discriminatory. The strongest opponents in this regard are Brazil, South Africa, India and China. Among European countries, Poland aligns with this group.
- By planning to develop their own CBAMs. This group includes Canada, the US, Australia, Taiwan, South Korea and the
 UK.¹⁰
- By adapting domestic carbon pricing to the EU CBAM. Countries such as Japan, Turkey, Indonesia, Israel, Serbia, Vietnam, Malaysia and Morocco are introducing their own carbon pricing tools (carbon taxes or emissions trading systems).



¹⁰ For example, a CBAM is already in operation in California, where it applies to a portion of imported electricity. Following the EU, the UK also intends to introduce a carbon border tax by 2027, with a scope similar to that of the EU. Australia's federal government has recently expressed support for the possible introduction of carbon border taxes. Canada and Japan are planning similar initiatives.

Mitigating the impacts on developing countries

The EU has committed to supporting developing countries in order to mitigate the impacts of CBAM on their industries. It also wants to promote the transition to green technologies and the adoption of GHG emissions pricing systems in these countries. The EU's carbon border taxes may also have a highly negative effect on iron and steel production in Ukraine (GMK, 2025). It may be difficult for Ukrainian firms to meet the decarbonisation requirements without additional funding. The European Commission is therefore working on the introduction of exemptions to help ease the burden on Ukrainian producers.

Box 2 – Estimated Impact of ETS II Introduction on Inflation in the Czech Republic

To estimate the impact of ETS II on Czech inflation, we begin with the maximum allowance price of € 45 in 2020 prices. This ceiling is gradually increased in line with the average HICP inflation in the EU27, which reached 22.6% in 2024 compared to 2020. For the following two years, we can estimate average inflation at 2% annually. Consequently, the adjusted ETS II allowance price cap at the beginning of 2027 could be 27.6% higher than in 2020, i.e., approximately €57. Assuming an exchange rate of CZK 25 per EUR, this translates into an initial allowance price of CZK 1,425. The increase in the CZK price of individual fuels then depends on the carbon emission factor — i.e. the amount of CO2 released per unit of fuel burned. The resulting increase in the CZK price per unit of each commodity, based on the above allowance price and exchange rate, is summarized in Table 1. The calculation is based on the Fakta o klimatu (2024) carbon price calculator. To the estimated price increase in CZK, VAT at the rate of 21% must be added.

The percentage increase in price depends on the market price of the given commodity at the time ETS II is launched, while the impact on inflation is given by the current weight of the item in the consumer price index (CPI) basket. Table 1 therefore presents a modelled impact on inflation assuming the system were to be launched in May 2025, but using the estimated allowance price for the beginning of 2027 and the current exchange rate. When ETS II is actually introduced in 2027, a new weighting scheme will already be in effect (as CPI weights are updated every two years), meaning that the weights of individual components will likely differ slightly. Nevertheless, the current calculation based on today's data can still offer informative insights into the expected inflationary impact. A more detailed calculation, extending beyond Table 1, also considered propane-butane, kerosene, and LPG. However, these fuels have a negligible effect on overall inflation. In contrast, a more substantial impact of ETS II could arise from the cost of heat supply for space heating and domestic hot water (DHW) preparation. While large heating plants are already covered by the ETS I system, the extension of ETS II will newly affect small heating plants and municipal energy providers. If we assume that these smaller heat sources account for approximately half of the relevant item in the consumer basket, the inflationary impact of ETS II could increase by an additional 0.1 p. p.. Under the above assumptions, the direct (maximum) impact of ETS II on inflation can thus be estimated at approximately 0.9 to 1.0 p. p.. ETS II is also expected to affect small-scale producers of fossil-fuel-based electricity.

It can be assumed that the aforementioned inflationary impact will be spread over several months following the introduction of ETS II, as energy and fuel suppliers are likely to stock up in advance. However, the actual timeline and intensity of the impact will depend on the final legislation, which is still under development. Energy companies — particularly major gas suppliers — currently do not yet know how they will be required to purchase allowances and how exactly these costs will be reflected in end-user prices.

In addition to the one-off impact of ETS II on consumer prices through directly affected items in the consumption basket, other indirect effects must also be taken into account. These are expected to materialize more gradually, as producers of goods and providers of services begin to pass on higher input costs resulting from ETS II into final consumer prices over time. Moreover, inflation will continuously be influenced by the evolution of the allowance price, which is currently virtually impossible to predict. If the price remains at the considered ceiling, it would increase in line with EU HICP inflation until 2029. The price cap is scheduled to be abolished since 2030, which means that allowance prices may begin to rise uncontrollably, potentially introducing additional inflationary pressure.

Table 1 - Maximum Estimated Impact of ETS II Implementation on Inflation in the Czech Republic

	Price in May 2025	Price increase (CZK)	Increase incl. VAT	Price increase (%)	Weight	Impact on inflation (p. p.)
Gasoline (CZK/I)	34.0	3.4	4.1	12.10	17.93	0.22
Diesel (CZK/I)	32.7	3.7	4.5	13.69	12.05	0.16
Natural gas (CZK/MWh)	2 382.6	285.0	344.9	14.47	16.69	0.24
Coal (CZK/100 kg)	887.4	413.3	500.1	58.35	4.18	0.24

Note: Prices of gasoline, diesel, and coal are based on data from the Czech Statistical Office (ČSÚ). The price of natural gas reflects the average total unit price charged by major suppliers. The inflation relevance of individual items (representatives) in the consumer basket changes over time. It starts from the fixed weight in the base period of the index, when all items are assigned an index value of 100. The weight then increases if the item's price index rises faster than the total index, and decreases if it grows more slowly. This is captured by the so-called current (running) weight, which, like the price data, refers to May 2025.

Source: CZSO, Fakta o klimatu, author'calculation

Criticism of CBAM

Besides criticism from abroad, the EU CBAM has faced strong opposition from within European industry. Representatives of the sectors affected point out that obtaining the necessary data from international suppliers is complicated and creates an excessive administrative burden. However, voices from the steel industry, which is struggling with

overcapacity, warn that without CBAM, steel prices could fall further, exacerbating the situation of European producers. CBAM has also been criticised in academic circles, particularly with regard to its limited effectiveness, ¹¹ fairness, ¹² compliance with international law, and its negative impact on developing countries.

Recent developments

In response to experience gained during the transitional period and criticism from various stakeholders, the European Commission proposed several simplifications to CBAM in February 2025 (EC, 2025b):

- Individuals and SMEs who import less than 50 tonnes of CBAM goods annually are exempted from the reporting requirements and payment obligations. As a result, the number of importers affected will fall by 90%, while CBAM will still cover 99% of imported emissions.
- For importers that remain in CBAM scope, the reporting requirements for the authorisation of declarants, the calculation of emissions and the management of financial flows will be simplified.
- These changes will make CBAM more effective, reduce rules circumvention and simplify the work of national authorities.
- The changes also lay the groundwork for extending CBAM to other sectors in 2026.

General impacts of pricing fuels and motor fuels

The pricing of fossil fuels and motor fuels will disproportionately affect low-income households and small businesses, as they typically spend a large share of their income on energy and fuel. ETS II will not apply to heating with biomass (e.g. firewood), whereas the greatest impact is expected on coal prices (see below).

The increase in the price of different energy sources will depend on the amount of CO₂ (and other greenhouse gases) released from burning a unit of each fuel, as well as on the price of emission allowances. Switching to lower-emission forms of transport and heating will help households and businesses mitigate the negative effects of ETS II implementation. Various subsidy and support schemes are available to assist both households and small enterprises in this transition.

Use of Revenues from Emission Allowance Auctions

One year before the launch of ETS II, the Social Climate Fund will be established at the EU level. Up to €65 billion will gradually be allocated to the fund, and Member States will be able to use these resources to compensate the negative effects of rising energy and fuel prices on low-income households and small businesses. To access the funding, countries must prepare a Social Climate Plan and contribute at least 25% from their own national resources. For the Czech Republic, this could mean access to more than CZK 50 billion to mitigate the impacts of ETS II.

The remaining revenues from ETS II auctions — as is already the case under ETS I — will be distributed among EU Member States. These funds should be used to support low-emission transport, and building renovations (e.g. insulation, heat pumps, biomass heating, photovoltaics, etc.). A portion of the proceeds may also be directed toward support for low-income households. According to estimates by the Czech Ministry of the Environment revenues between 2027 and 2030 could reach CZK 36–73 billion (MŽP, 2023).

Criticism of the functioning of the ETS II system

ETS II has been subject to criticism from both policymakers and experts. The allowance price cap mechanism is considered unnecessarily complex and may not deliver the intended outcome. It clearly prioritizes "market mechanism transparency" over "transparency of the final price". The one-off release of additional allowances to the market in response to adverse price developments may not bring the price back below the ceiling quickly or effectively. A simpler and potentially more effective approach would be for the EU to intervene in the market continuously —for example, adding allowances when the price reaches the cap, or withdrawing them in the event of a significant drop — in a way similar to how central banks intervene in foreign exchange markets to stabilize currency exchange rates. Due to the lack of final ized legislation and a functioning market for allowances, energy suppliers are currently unable to predict price levels, which complicates the conclusion of fixed-price contracts beyond 2026. There is also criticism of the decentralized purchasing model, under which each energy supplier is required to buy allowances individually, rather than through a centralized procurement system.

Current Developments in Europe

Since the beginning of May 2025, trading of futures contracts for ETS II allowances has been launched on the ICE exchange. However, these contracts apply only to allowances with first delivery from December 2028 onwards. The prices recorded have been significantly above the expected cap, ranging from approximately €80 to €100, depending on the maturity. Nonetheless, due to the limited trading volume, these prices offer little predictive value regarding the future market price of ETS II allowances. Starting from July 2025, ETS II allowances are also expected to be traded on the European Energy Exchange (EEX) in Leipzig. There, it should be possible to purchase futures for allowances valid from January 2027 onward.

¹¹ For example, the German EWI institute (EWI, 2021) points to the insufficient consideration of indirect emissions.

¹² CBAM only recognises direct carbon pricing tools such as carbon taxes and emissions trading systems (ETS). This means it does not take into account indirect measures such as fuel excise duties or regulatory interventions, which may have a comparable effect in reducing emissions. This approach may be perceived as discriminatory towards countries that employ different – but effective – climate policy tools.

Current situation from global perspective

The global state of greenhouse gas emissions pricing is clearly illustrated by the interactive map of the World Bank (see Chart 3). The map displays countries according to the policy instruments used, coverage of greenhouse gas emissions, the price per tonne of CO₂, government revenues from the sale of emission allowances or carbon taxes, and other relevant criteria.

Currently, emissions from road transport and buildings are subject to carbon pricing in 18 countries at the national level, and in 11 cases at the subnational level. Buildings alone are priced in an additional 8 jurisdictions, while transport alone is covered in 4. The majority of these pricing schemes take the form of a carbon tax (in 25 cases), while the remaining 16 cases are implemented through emissions trading systems (ETSs). ¹³



Conclusion

There are still many uncertainties surrounding the launch and operation of the ETS II system. Governments in some countries have refused to ratify the system into national legislation or are seeking to postpone or amendit ¹⁴. Their arguments refer both to the social impacts and to what they consider unrealistic assumptions on which the system is based. If the reduction in greenhouse gas emissions from transport and building heating proceeds more slowly than the pace at which allowances are withdrawn from the market, a sharp increase in allowance prices can be expected since 2030, along with further inflationary effects.

Both the EU Emissions Trading System (EU ETS) and the Carbon Border Adjustment Mechanism (EU CBAM) aim to use market mechanisms to motivate companies inside and outside the EU to invest more in green technologies and reduce their GHG emissions. Some EU manufacturers currently receive free emission allowances to maintain their competitiveness against foreign producers. However, this does not sufficiently incentivise them to cut emissions. Starting in 2026, the number of free allowances will gradually be reduced, and carbon border taxes – which importers of energy-intensive commodities will have to pay – will help protect European industry. Even so, only part of CO₂ emissions will be priced in the EU, as both the ETS and CBAM apply to only some industrial sectors at present. To make these mechanisms more effective, the EU is considering expanding the ETS in 2027 to road transport and heating of buildings (EU ETS II). It is also considering extending the scope of carbon border taxes, a move supported by some EU countries (such as France, Italy and Poland). This could be implemented in several ways:

- by extending the system to other sectors,
- by covering exports as well as imports,
- by including downstream products in imports from abroad.

The use of revenues from carbon pricing differs significantly between countries. For example, in Austria, the government introduced a discounted nationwide public transport ticket in 2021, and since 2023 has been returning part of the collected revenues to households through the so-called climate bonus (Klimabonus). In some Canadian provinces, a portion of the revenues raised through the carbon tax is also redistributed back to households. In Switzerland, two-thirds of the proceeds from the carbon tax are used to provide discounts on health insurance premiums, while the remaining one-third is allocated to reducing the energy intensity of buildings.

¹⁴ According to a briefing by the European Parliamentary Research Service (EPRS), 17 EU Member States have not yet implemented the inclusion of households in national emissions trading legislation, despite the deadline having passed in mid-2024. Poland, Slovakia, Estonia, and the Czech Republic have called for at least one-year postponement of the introduction of ETS II, citing concerns about the impact on consumers.

The increased revenues from these measures could be used to help repay pandemic-era public debt. However, critics wam that such steps could further escalate a potential trade war with the United States (Politico, 2025). To maximise the environmental impact, it is also necessary to further simplify the CBAM, minimise the opportunities for circumvention, promote its adoption outside the EU in cooperation with other countries, and compensate developing countries for its negative effects on their competitiveness. Additionally, financial and technological support should be provided to help these countries transition to green technologies.

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Keywords

carbon border tax, carbon tax, CBAM, ETS, ETS 2

JEL Classification

Q02, Q58, F18

A1. Change in predictions for 2025

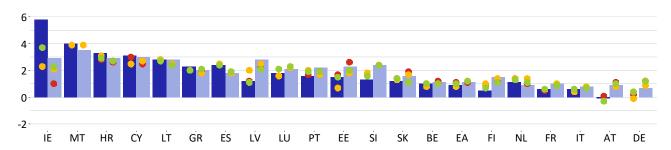
	GDP g	rowth, %							Inflat	ion, %						
	CF		CF IMF			OECD CB / OE				CF IMF			OECD		CB / OE	
EA	+0.1	2025/7	-0.2	2025/4	0	2025/6	0	2025/6	0	2025/7	+0.1	2025/4	0	2025/6	-0.3	2025/6
EA	+0.1	2025/6	-0.2	2025/1	U	2025/3	U	2025/3	U	2025/6	+0.1	2024/10	U	2025/3	-0.3	2025/3
DE	+0.1	2025/7	-0.4	2025/4	0	2025/6	-0.2	2025/6	0	2025/7	.01	+0.1 2025/4 2024/10	0	2025/6	-0.2	2025/6
	ŦU. I	2025/6	-0.4	2025/1		2025/3	-0.2	2024/12	U	2025/6	ŦU. I		U	2025/3		2024/12
US	0	2025/7	-0.9	2025/4	-0.6	2025/6	-0.3	2025/6	-0.1	2025/7	+1.1	2025/4	+0.8	2025/6	+0.3	2025/6
03	U	2025/6	-0.9	2025/1	-0.0	2025/3	-0.5	2025/3	-0.1	2025/6	Ŧ1.1	2024/10	₹0.0	2025/3	+0.3	2025/3
UK	0	2025/7	-0.5	2025/4	-0.1	2025/6	+0.2	2025/5	0	2025/7	+1.0	2025/4	+0.4	2025/6	-0.2	2025/5
UK	U	2025/6	-0.5	2025/1	-0.1	2025/3	ŦU.2	2025/2	U	2025/6	2024/10	TU.4	2025/3	-0.2	2025/2	
JP	0	2025/7	-0.5	2025/4	-0.4	2025/6	-0.6	2025/5	+0.2	2025/7	+0.4	2025/4	-0.4	2025/6	-0.2	2025/5
JF	U	2025/6	-0.5	2025/1	-0.4	2025/3	-0.0	2025/1	70.2	2025/6	TU.4	2024/10	-0.4	2025/3	-0.2	2025/1
CN	+0.1	2025/7	-0.6	2025/4	-0.1	2025/6	+0.4	2025/7	0	2025/7	-1.7	2025/4	-0.7	2025/6	-0.1	2025/7
CIV	ŦU. I	2025/6	-0.0	2025/1	-0.1	2025/3	TU.4	2025/6	U	2025/6	-1.7	2024/10	-0.7	2025/3	-0.1	2025/6
RU	-0.3	2025/6	+0.1	2025/4	-0.3	2025/6	+0.2	2025/7	-0.2	2025/6	+3.4	2025/4	-0.2	2025/6	0	2025/7
ΝŪ	-0.3	2025/5	+0.1	2025/1	-0.3	2025/3	∓ 0.2	2025/6	-0.2	2025/5	₹3.4	2024/10	-0.2	2025/3	U	2025/6

A2. Change in predictions for 2026

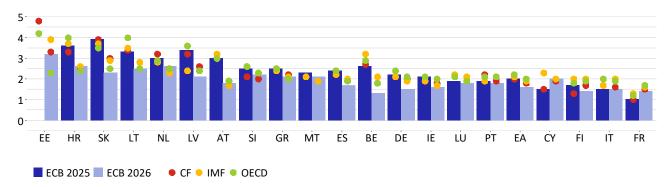
	GDP g	rowth, %							Inflat	ion, %						
	CF			IMF		OECD		CB / OE		CF		IMF		OECD		B / OE
EA	0	2025/7 2025/6	-0.2	2025/4 2025/1	0	2025/6 2025/3	-0.1	2025/6 2025/3	0	2025/7 2025/6	-0.1	2025/4 2024/10	0	2025/6 2025/3	-0.3	2025/6 2025/3
DE	0	2025/7 2025/6	-0.2	2025/4 2025/1	+0.1	2025/6 2025/3	-0.1	2025/6 2024/12	0	2025/7 2025/6	-0.1	2025/4 2024/10	+0.1	2025/6 2025/3	-0.6	2025/6 2024/12
US	+0.1	2025/7 2025/6	-0.4	2025/4 2025/1	-0.1	2025/6 2025/3	-0.2	2025/6 2025/3	-0.1	2025/7 2025/6	+0.4	2025/4 2024/10	+0.5	2025/6 2025/3	+0.2	2025/6 2025/3
UK	0	2025/7 2025/6	-0.1	2025/4 2025/1	-0.2	2025/6 2025/3	-0.2	2025/5 2025/2	0	2025/7 2025/6	+0.2	2025/4 2024/10	0	2025/6 2025/3	-0.5	2025/5 2025/2
JP	0	2025/7 2025/6	-0.2	2025/4 2025/1	+0.2	2025/3	-0.3	2025/5 2025/1	+0.1	2025/6	-0.3	2025/4 2024/10	-0.1	2025/6 2025/3	-0.3	2025/5 2025/1
CN	0	2025/7 2025/6	-0.5	2025/4 2025/1	-0.1	2025/6 2025/3	+0.1	2025/7	0	2025/7	-1.4	2025/4 2024/10	0	2025/6 2025/3	0	2025/7
RU	0	2025/6 2025/5	-0.3	2025/4 2025/1	-0.2	2025/6 2025/3	+0.4	2025/7 2025/6	-0.2	2025/6 2025/5	+1.5	2025/4 2024/10	-0.2	2025/6 2025/3	0	2025/7 2025/6

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

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



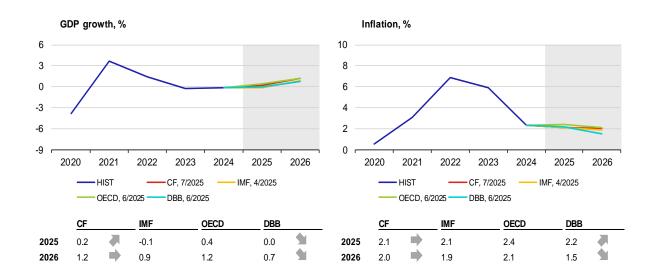
Inflation in the euro area countries in 2025 and 2026, %



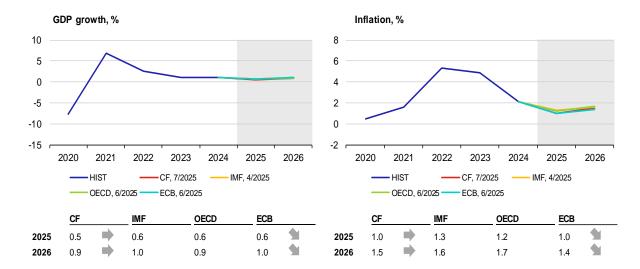
Note: Charts show institutions' latest available outlooks of for the given country.

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

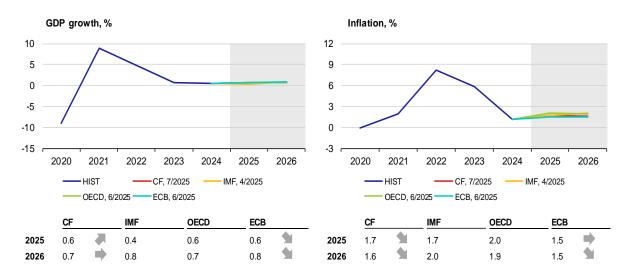
Germany



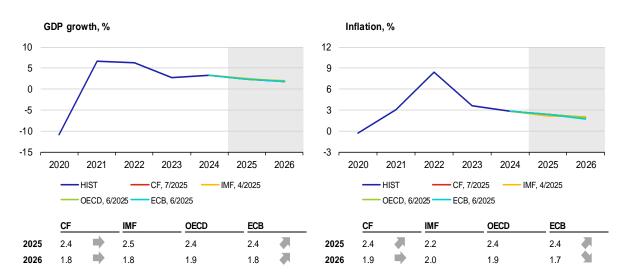
France



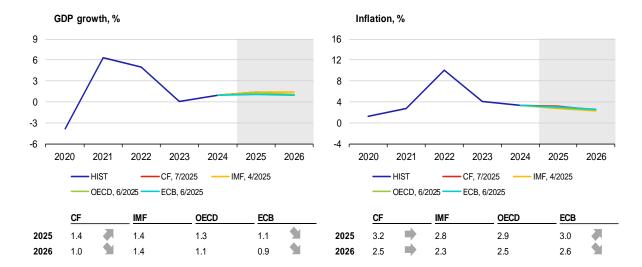
Italy



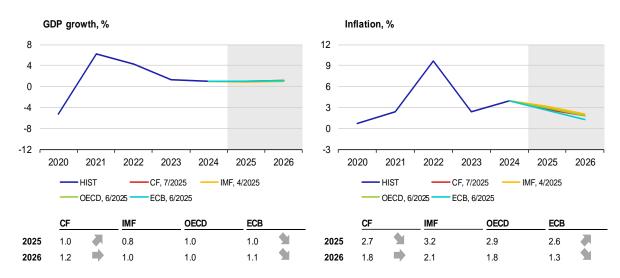
Spain



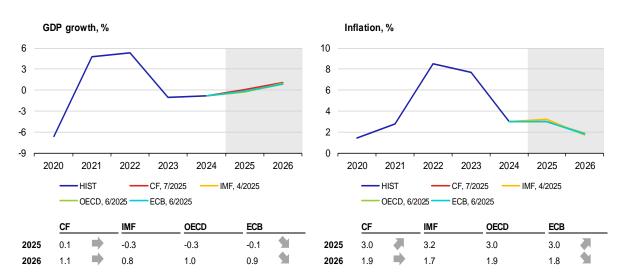
Netherlands



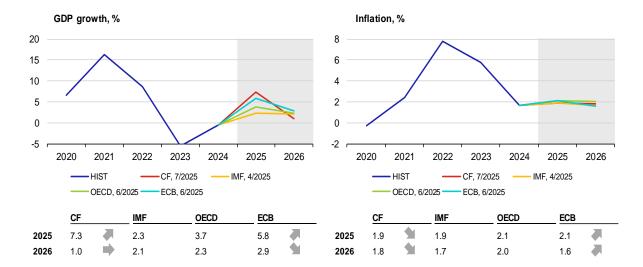
Belgium



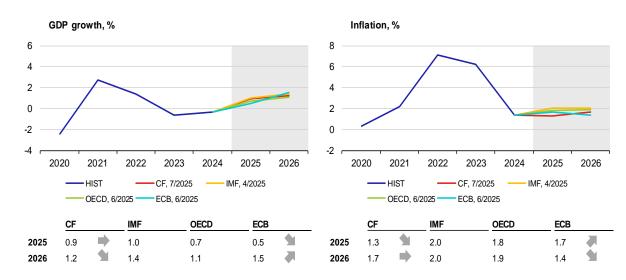
Austria



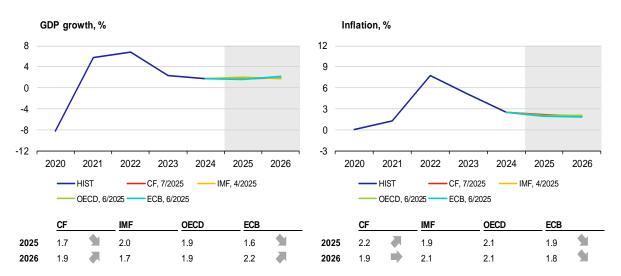
Ireland



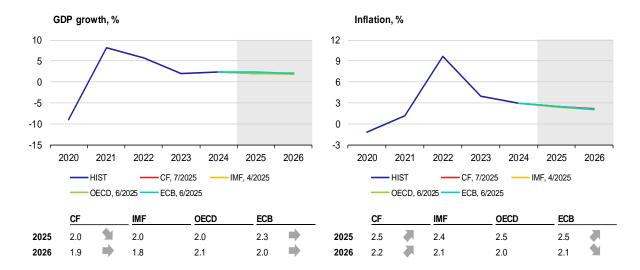
Finland



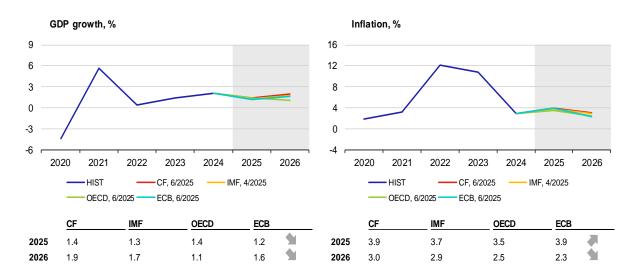
Portugal



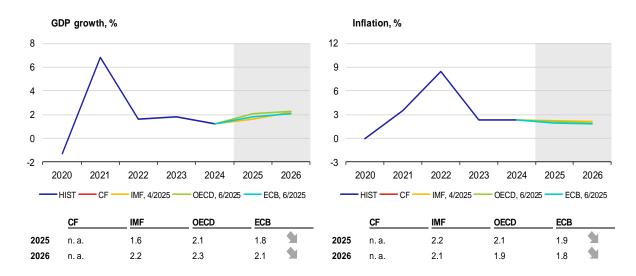
Greece



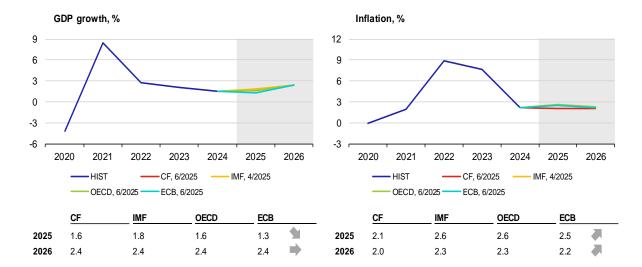
Slovakia



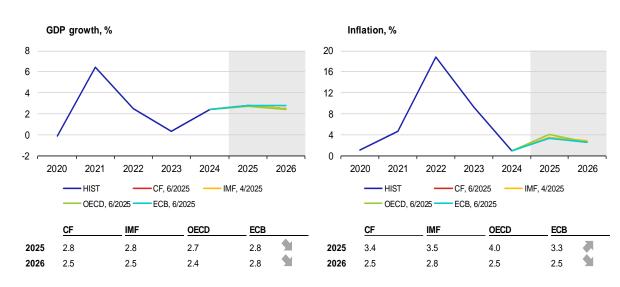
Luxembourg



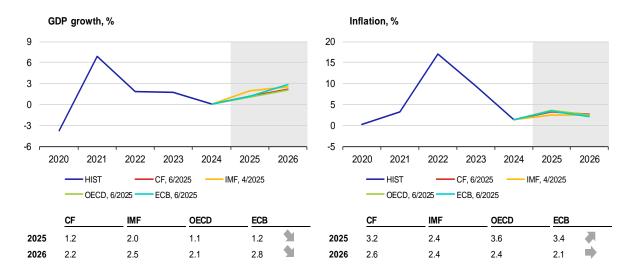
Slovenia



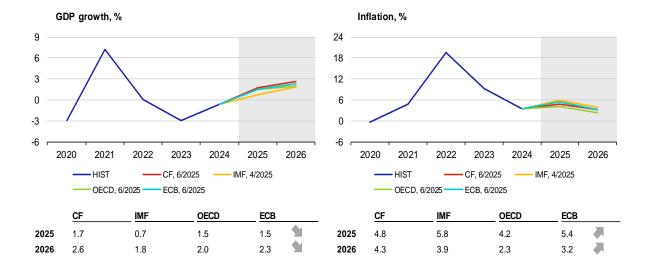
Lithuania



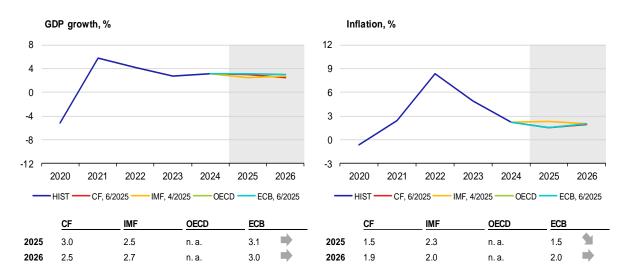
Latvia



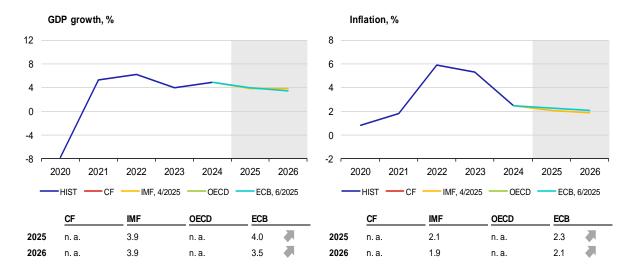
Estonia



Cyprus

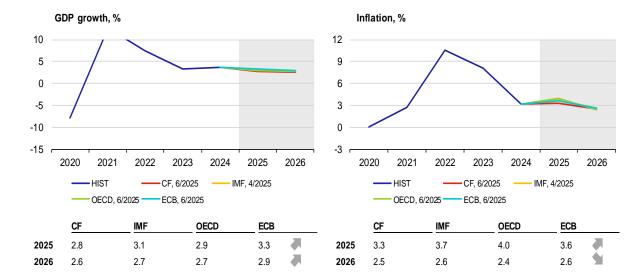


Malta



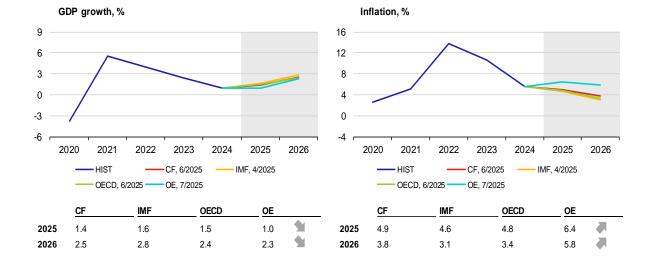
Ddd

Croatia



A5. GDP growth and inflation in other selected countries

Romania



A6. List of abbreviations

		100	1
AT	Austria	IRS	Interest Rate swap
bbl	barrel	ISM 	Institute for Supply Management
BE	Belgium	IT 	ltaly
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
СВ	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	Narodow y 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
EA	Energy Information Administration	OPEC+	member countries of OPEC oil cartel and 10 other oil-exporting countries (the most important of w hich 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		

University of Munich International Monetary Fund

Leibniz Institute for Economic Research at the

IFO

IMF

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