

Global Economic Outlook

January 2022



Foreword

Dear Readers,

The effects of the COVID-19 pandemic have shown us how difficult it is to find the best recipes to support the economy in extreme situations, just as even renowned epidemiologists don't always agree on the right way to combat the pandemic. The whole world had been expecting a demand recession, but instead we are facing an unprecedented global surge in inflation. The main causes may be temporary, but this temporary period has been going on far too long to be ignored by monetary authorities. At a time when there is great uncertainty around economic forecasting, I consider it crucial to get to the heart of the external economy and inflation as best we can. Our view of the situation abroad is described not only in our regular Monetary Policy Report, but also in the monthly Global Economic Outlook (GEO) published by our Monetary Department.

This year's first issue of GEO is of particular interest to me in terms of the focus of its analytical section, which responds to the renewed interest in the twin deficit phenomenon, i.e. a simultaneous current account deficit and budget deficit. In other circumstances, a twin deficit would put depreciation pressure on the exchange rate. However, the present current account deficit has been caused by supply chain disruptions – in particular a global chip shortage, which has temporarily complicated the export of domestic cars even though buyer interest remains high. The budget deficit has also been a natural phenomenon recently, as it has helped us to bridge the turbulent period of pandemic closures and avoid dramatic effects on the labour market and demand. The recent robust strengthening of the koruna suggests that our favourable assessment is shared by the market and the fear of twin deficits has been staved off on this occasion.

I hope you enjoy this winter issue of GEO and that it will make for an inspiring read.

Vojtěch Benda, CNB Bank Board member



I. Introduction	3
II. Economic outlook in selected territories	4
II.1 Euro area	4
II.2 Germany	5
II.3 United States	6
II.4 China	7
II.5 United Kingdom	8
II.6 Japan	8
II.7 Russia	9
II.8 Poland	9
II.9 Hungary	10
II.10 Countries in the spotlight – India	11
III. Leading indicators and outlook of exchange rates	12
IV. Commodity market developments	13
IV.1 Oil	13
IV.2 Other commodities	14
V. Focus	15
The risks associated with European export-oriented economies' twin deficits	15
A. Annexes	19
A1. Change in predictions for 2022	19
A2. Change in predictions for 2023	19
A3. GDP growth and inflation outlooks in the euro area countries	20
A4. GDP growth and inflation in the individual euro area countries	20
A5. GDP growth and inflation in other selected countries	27
A6. List of abbreviations	28

Cut-off date for data

14 January 2022

CF survey date

10 January 2022

GEO publication date

21 January 2022

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 EIU.

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.

Contact

gev@cnb.cz

Authors

Luboš Komárek	Editor-in-chief, I. Introduction, V. Focus
Petr Polák	Editor, II.3 United States, V. Focus
Soňa Benecká	II.1 Euro area, II.2 Germany
Alexis Derviz	II.4 China
Michaela Ryšavá	II.5 United Kingdom, II.10 India
Martin Kábrt	II.6 Japan
Oxana Babecká	II.7 Russia
Jaromír Tonner	II.8 Poland, II.9 Hungary
Jan Hošek	IV.1 Oil, IV.2 Other commodities

I. Introduction

Covid-19 is unfortunately still with us in 2022, with Omicron fast becoming the predominant variant. The Covid-19 epidemic is gaining momentum again at the start of the new year. The hope is that Omicron should, on average, cause less severe illness than previous variants. However, the health system could become overburdened again due to the high transmissibility and rapid spread of the variant.

Many countries, including those with the strongest economies, are entering the new year with very high inflation.

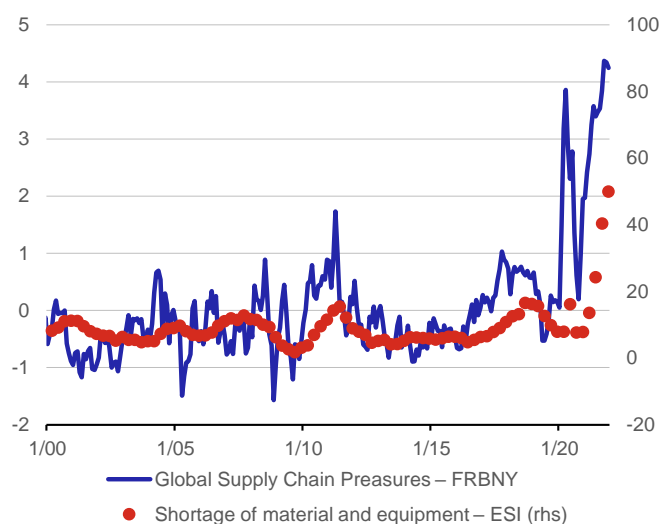
In the US, inflation is at its highest level in almost four decades, and the Fed is increasingly facing questions about its ability to fulfil its dual mandate. US interest rates are expected to begin rising at the start of spring, with four standard increases expected in 2022 as a whole. The situation in the euro area is quite different. ECB officials still view the current record high inflation as temporary and expect it to drop soon without the need to raise interest rates. Underlying this position are unspoken concerns about the potential consequences of an interest rate hike for overindebted euro area countries. The currently high inflation is also being fostered by growth in commodity prices, especially energy prices. The crude oil price reached USD 85/bbl again, and its outlook is only slightly falling.

Numerous central banks are continuing to raise interest rates, although real interest rates remain negative in the vast majority of countries.

The chart in the current issue shows supply chain patterns in the EU and the USA. Historically, the patterns have been broadly similar overall, and it turns out that the unavailability of production inputs and the supply problems have not only failed to subside, but are still seen as very serious. Supply bottlenecks are another cause of the inflation pressures. The current data also show that the problems are not easing yet. This could mean that the inflation pressures will be higher for longer.

The current issue also contains an analysis: [“The risks associated with European export-oriented economies’ twin deficits”](#). The article focuses on the twin deficit phenomenon, namely the link between the public budget balance and the current account balance. Both can have very negative impacts on the economy, so it is important to better understand the risks associated with current developments.

Supply chain pressures are not easing



Source: Federal Reserve Bank of New York, European Commission
 Note: Monthly data for Global Supply Chain Pressures; data from the Commission are quarterly.

Global Economic Outlook dashboard for selected countries

		EA	DE	US	UK	JP	CN	RU
GDP	2022	4.0	3.7	3.9	4.3	3.1	5.0	2.6
	2023	2.5	2.5	2.6	2.2	1.5	5.3	2.3
Inflation	2022	3.1	2.9	4.8	4.6	0.8	2.2	4.9
	2023	1.6	1.9	2.6	2.5	0.7	2.3	4.3
Unemployment	2022	7.3	5.2	3.7	4.4	2.6	5.1	4.8
	2023	7.0	5.0	3.5	4.4	2.5	5.0	4.7
Exchange rate	2022	1.14	1.14		1.35	114.1	6.45	72.6
	2023	1.16	1.16		1.37	111.8	6.33	72.4

Source: Consensus Forecasts (CF)

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

II.1 Euro area

Inflation in the euro area leapt to a new all-time high at the end of 2021. Annual consumer price inflation reached 5%. This was due mainly to growth in energy prices, but core inflation is also well above the ECB's target. European Commission and PMI surveys indicate that inflation pressures will remain strong in the coming months, although inflation expectations were adjusted slightly at the end of last year. Wage pressures remain subdued even though the euro area labour market is recovering. Unemployment fell to 7.6% in November, mainly due to developments in Spain. The German labour market is now tight – labour supply is at pre-crisis levels and job vacancies have risen further. However, the full onset of Omicron could cause further complications. Although the large-scale lockdowns experienced last year are unlikely, higher absences due to illness will mean additional costs for companies, again fostering higher inflation.

The rise of Omicron will throw more sand in the gears of global supply chains, which have been dragging for a long time due to shortages of materials and components and high energy prices. The overloading of chains eased at the end of 2021 as shipping prices fell and container availability rose. The November figures on industrial output, which rose by 2.3% month-on-month, confirmed the resilience of euro area industry in late 2021. Euro area consumer spending is also expected to show high resilience. In contrast to previous waves, mobility did not decline at the end of the year, and retail sales rose month on month in October and November. On the other hand, some government measures (such as the Covid pass requirement) and increasing energy bills are having a significant effect on consumer confidence.

The new CF outlook expects slightly lower economic growth and higher inflation this year. The euro area economy will slow in 2023, but the price pressures should ease. The return of inflation to the ECB's target is thus likely to be delayed again. This will put pressure on the central bank to end its asset purchases faster and raise interest rates sooner.



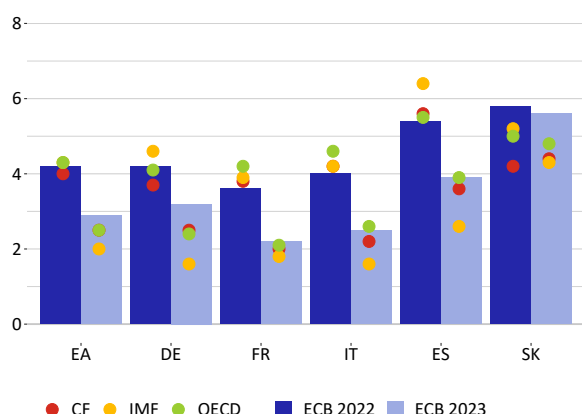
II.2 Germany

The German economy lagged well behind other euro area countries in 2021, growing by only 2.7% according to preliminary data from the statistics office. Output has thus still not returned to pre-crisis levels (the revised decline in German GDP in 2020 was 4.6%). The lag is evident in manufacturing and certain services sectors, while construction, IT and communications have now surpassed their pre-crisis output levels. According to preliminary data, the German economy recorded a modest decline at the end of 2021. This again postponed the expected recovery, and a question mark hangs over developments in the country at the start of 2022. The German economy may therefore slip into recession again.

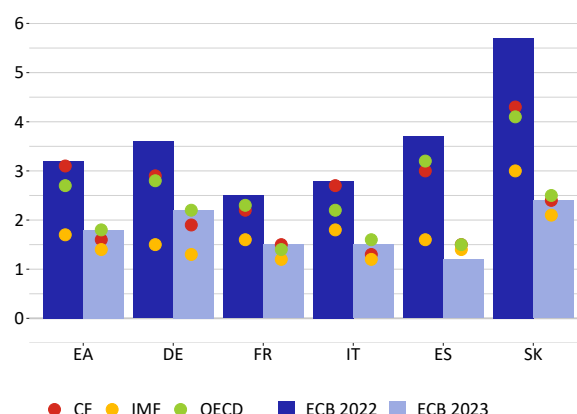
At the end of 2021, Germany's economic growth was slowed not only by anti-covid measures, but also by overloaded global chains and restricted production in many sectors. After an optimistic October, industrial output in Germany fell slightly in November. The automotive industry is recovering from the shortage of chips, but other sectors are still suffering from shortages of materials and components and rising energy prices. More than 85% of manufacturing firms reported equipment shortages in the European Commission's November survey. Household consumption is being adversely affected by the autumn wave of the pandemic, which has led to local closures and restrictions for the unvaccinated. This is likely to be reflected more strongly in some services, as retail sales rose month on month in October and November. According to OpenTable data, eating out did not fall as much as in previous waves.

According to the CF analysts, the German economy will make up for its Covid losses this year, while inflation will fall slightly. At the end of 2021, inflation rose above 5%, its highest level since June 1992. Last year, numerous one-off factors contributed to German inflation, the fading of which will foster a significant decrease in consumer price inflation. CF therefore expects average inflation to fall below the ECB's 2% target in 2023. GDP growth will slow from 3.7% this year to 2.5% in 2023.

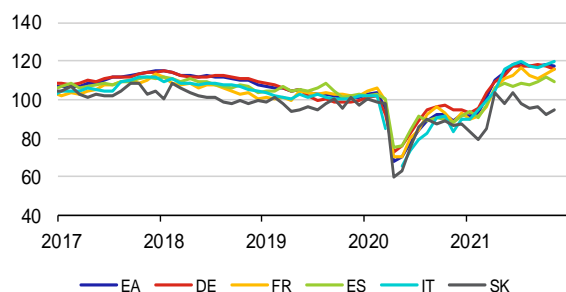
GDP growth in selected euro area countries in 2022 and 2023, %



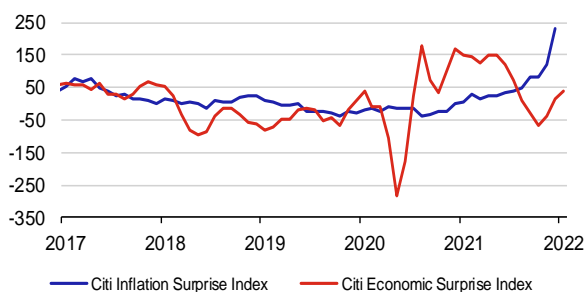
Inflation in selected euro area countries in 2022 and 2023, %



ESI leading indicators



Economic and inflation surprises in the euro area, %



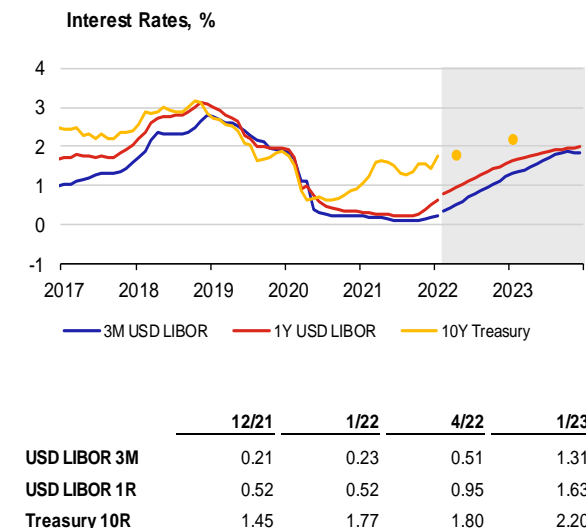
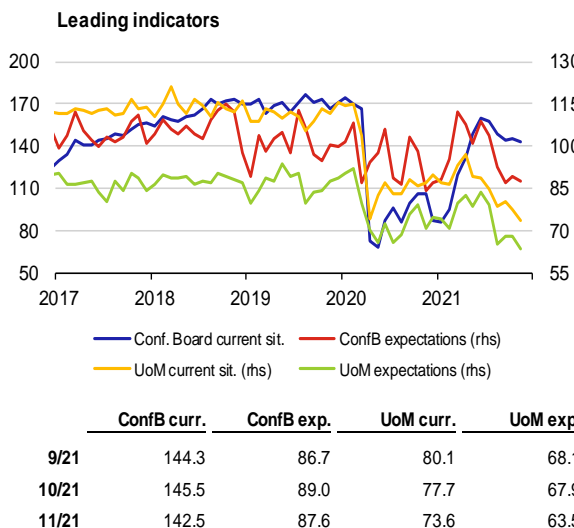
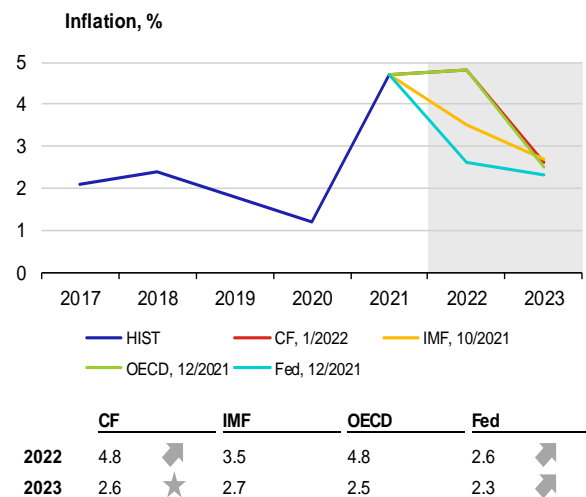
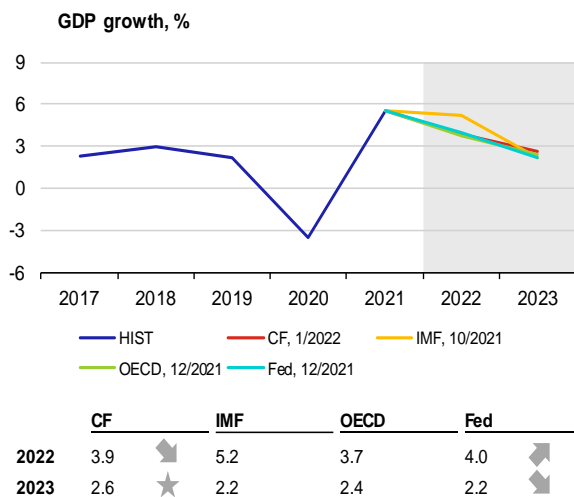
Note: Inflation expectations based on 5year inflation swap and SPF

	EA	DE	FR	ES	IT	SK	5y5y	SPF
9/21	117.8	118.0	111.2	109.4	116.8	96.2	1.91	1.90
10/21	118.6	117.5	113.1	111.9	118.6	92.0	1.90	1.90
11/21	117.5	115.8	116.1	109.3	119.5	94.8	1.91	

II.3 United States

The US economy, like the rest of the world, is experiencing another wave of the pandemic, this time due to the highly transmissible Omicron variant. The daily number of new cases exceeds 800,000 and is still growing. The high numbers of people who have to stay at home and cannot work due to infection, along with the tight labour market, are causing problems in the economy. The new CF outlook expects real GDP to grow by 3.9% this year and 2.6% in 2023. The unemployment rate fell to 3.9% in December, and almost 200,000 new jobs were created. The participation rate remains low. Wages rose by 9.8% year on year in October. As well as wage growth, employee resignations have been high since the spring. Foreign trade is thriving, reaching record levels in November (imports of USD 304 billion and exports of USD 224 billion).

Inflation in the USA is expected to peak in January, but inflation expectations remain high and the Fed is stepping on the brakes. Consumer prices grew by 7.1% year on year in December, while core inflation reached 5.5%. Food prices went up by 6.3%, services by 3.7%, and energy by 29.3%. The high energy prices and unwavering transport prices are affecting industrial producer prices, which rose at a rate of 9.8%, and prices of finished products, which increased by 12.4%. The CF outlook for inflation this year was revised up again to 4.8%, while the new outlook for 2023 expects a slowdown to 2.6%. In its December forecast, the Fed sees inflation at 2.6% in 2022 and 2.3% in 2023. Together with the new forecast, Chair Powell announced that the inflation pressures would last for longer and the Fed would thus speed up the reductions in its asset purchases. It is now expected to end its purchases in March and manage to raise rates several times this year.



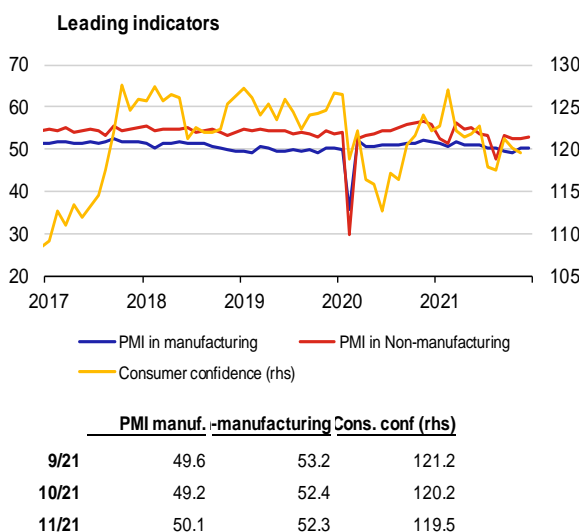
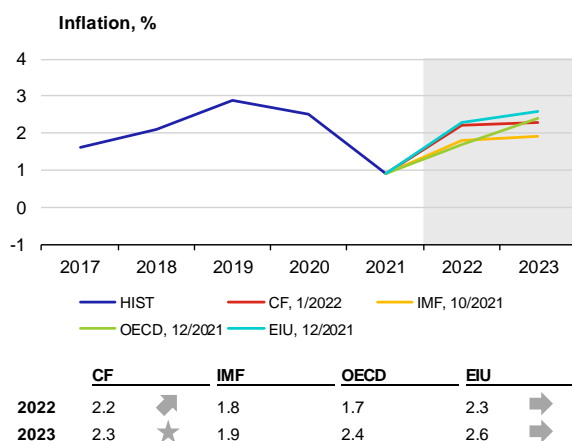
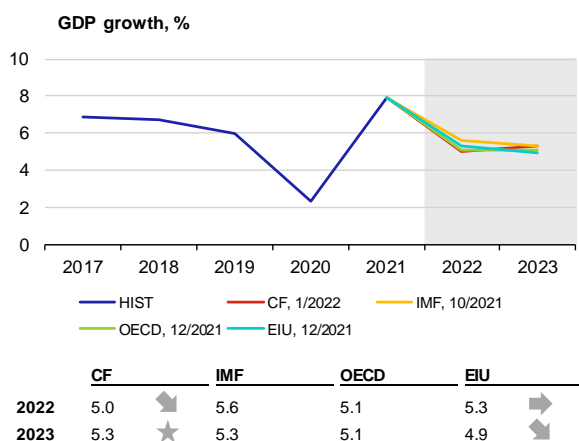
II.4 China

Economic growth in China rose by 4.9% in annualised terms in 2021 Q3, lagging behind the expectations of most analysts (median 5.2%) and the plans of the Chinese authorities (6%). Repeated lockdowns at the discovery of the smallest local outbreaks of Covid-19, continuing instability of export supply chains, and the need for financial consolidation in still risky real estate markets and related construction are having a negative effect on economic activity and private consumption. Analysts' outlooks expect growth of around 5% this year.

Economic confidence indicators remain just above the critical 50-point level. Sentiment in non-manufacturing sectors looks slightly better (with pre-Christmas sentiment up 0.4 on November to 52.7). This may reflect some hope associated with the February Winter Olympics. By contrast, overall trade sentiment diverged only slightly from the critical level signalling stagnation (rising from 50.1 in November to 50.3 in December). The orders received index, for example, has not yet exceeded 50 points (a shift of only 49.4 to 49.7 was recorded between November and December).

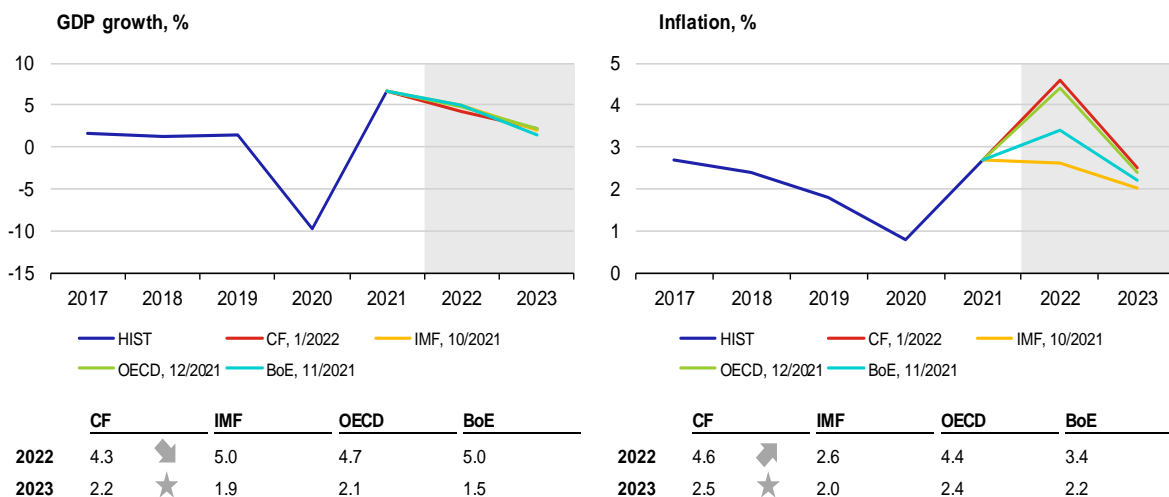
Consumer price inflation exceeded 2% for the first time in 15 months in November but returned below that level in December (1.5% at the year-end). The inflation outlooks of most analysts are above 2% for the whole of 2022. The PPI continued to record strong growth (10.3%) at the close of the year, with supply chain problems and rising coal prices considered the main drivers. No further significant increases in wholesale prices are expected in 2022.

China's foreign trade probably amounted to USD 6 trillion in 2021 as a whole, up USD 1.3 trillion on 2020. In contrast to 2020, imports were at pre-pandemic levels. After falling sharply in February, exports also performed well, recording stable growth for the rest of the year. However, continuing global supply chain disruptions, container shortages, rising commodity prices and growing competition from neighbouring economies during the post-pandemic recovery pose serious challenges to further growth this year.



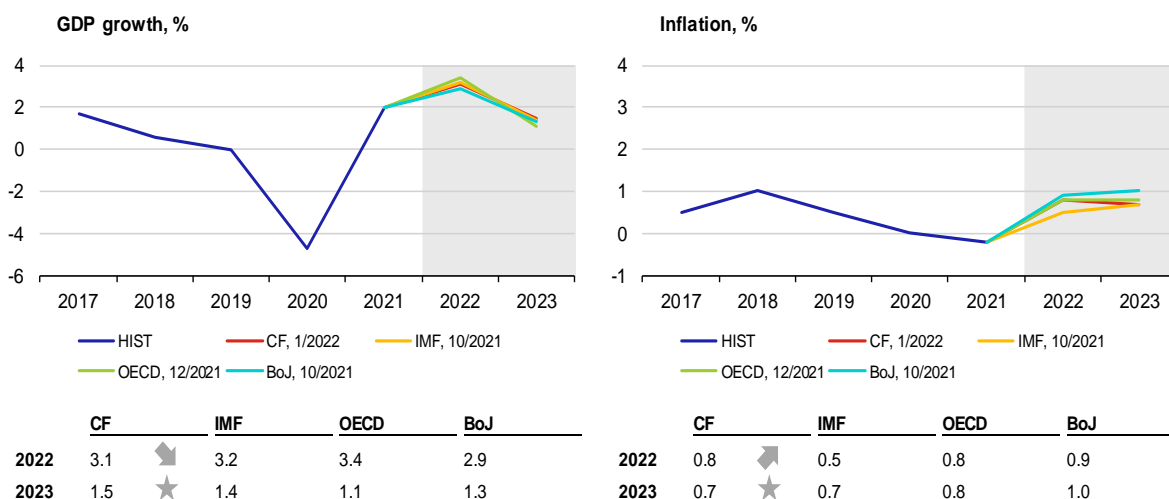
II.5 United Kingdom

The BoE raised its key interest rate by 0.15 pp to 0.25% in December. It maintained the total target stock of asset purchases at GBP 895 billion. According to the BoE, the new, more transmissible Omicron variant will probably limit economic activity in early 2022, although its effects on medium-term inflation pressures are still unclear. Inflation is predicted to peak at around 6% in April 2022. Due to the spread of Omicron, daily case numbers in the UK are at new record levels, and the restrictions to curb the spread of the virus are keeping consumers at home to some extent. The composite PMI fell to 53.6 in December. Private sector growth dropped to a ten-month low due to slowing growth in the services sector caused by stricter pandemic restrictions and renewed business uncertainty associated with the Omicron variant. Foreign Secretary Liz Truss became the new Brexit negotiator following the resignation of David Frost, at a time of intensive negotiations between the UK and the EU on the Northern Ireland Protocol. She is taking a more accommodating approach than her predecessor and wants to quickly negotiate a solution to the dispute.



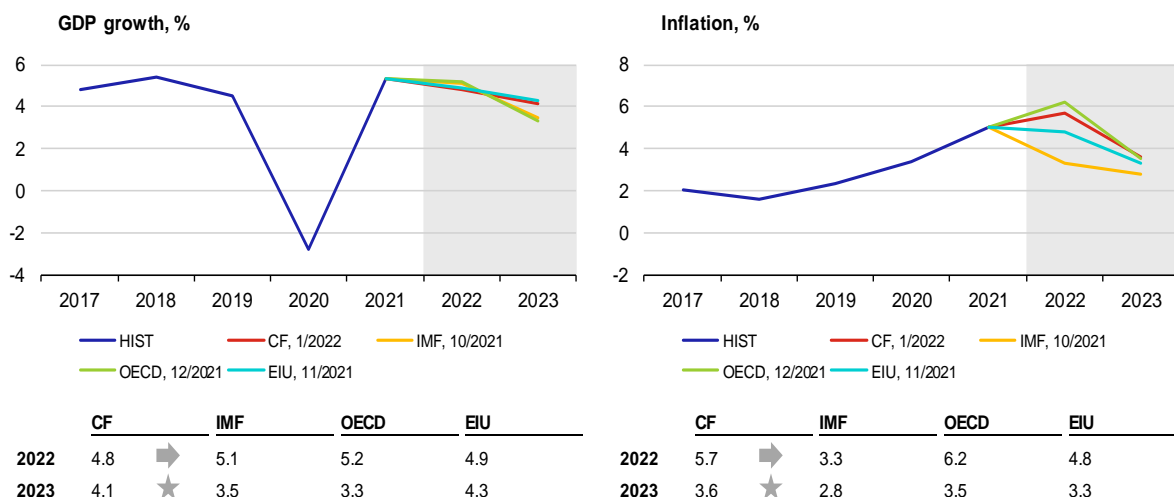
II.6 Japan

The Japanese yen weakened to its lowest level against the dollar in five years, and different stances of the BoJ and the Fed in 2022 are likely to cause further depreciation. According to estimates, decades of low inflation and easy monetary policy have brought the real exchange rate of the yen against a basket of other currencies to its weakest level since the 1970s. A more robust economic recovery in the USA and China, along with the expected rise in Fed interest rates, could lead to capital outflows from Japan and further depreciation of the yen. Indicators of real economic activity are favourable, however. Industrial output went up in November, due mostly to a recovery in the automotive industry as the chip crisis gradually subsided. The Tankan business sentiment index also improved in Q4. Only the December PMI, which captured the impact of the Omicron restrictions, indicates a slight wobble in the gradual recovery.



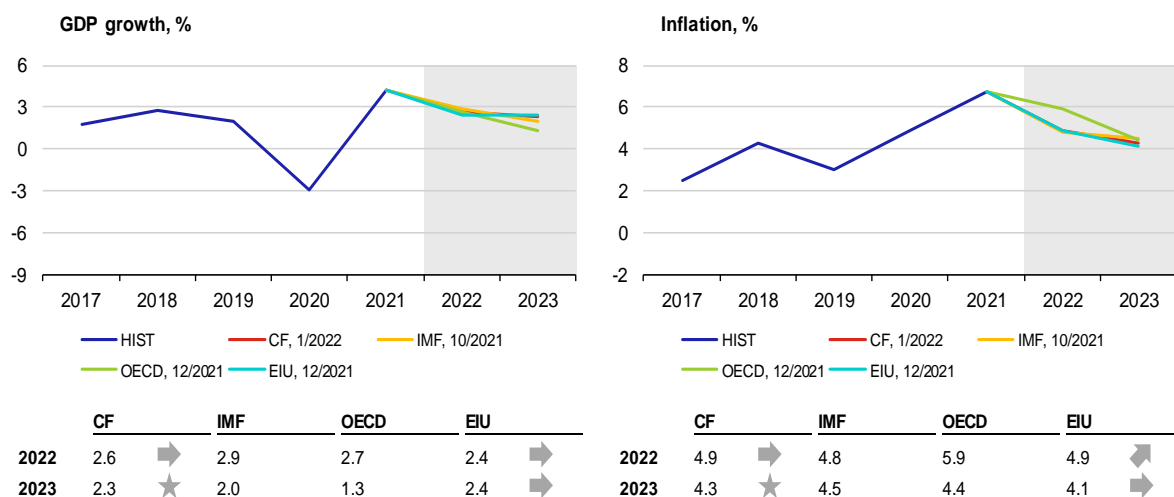
II.7 Russia

The Russian economy is benefiting from high energy commodity prices. According to preliminary data from the Russian Federal Customs Service, nominal natural gas exports doubled in the first 11 months of 2021 compared with the same period a year earlier. The volume of exports was little changed, with year-on-year growth only reaching 2.5%. At the same time, the value of crude oil exports increased by half (49.5%), again entirely due to prices. In real terms, crude oil exports fell by 4.5%. Commodity prices continued to rise in mid-December and January. For example, Russian Urals export oil has gone up in price by more than USD 10/bbl in the last month. However, the favourable developments did not stop the rouble weakening again in the first half of January above its level last April (RUB 76/USD). This was due to growth in geopolitical tensions, the not very encouraging outcome of talks with NATO and the extension of economic sanctions against Russia until July 2022 by the EU Council. Inflation remained at 8.4% at the close of the year. In line with expectations, the Russian central bank raised its key interest rate by 1 pp to 8.5% in the second half of December.



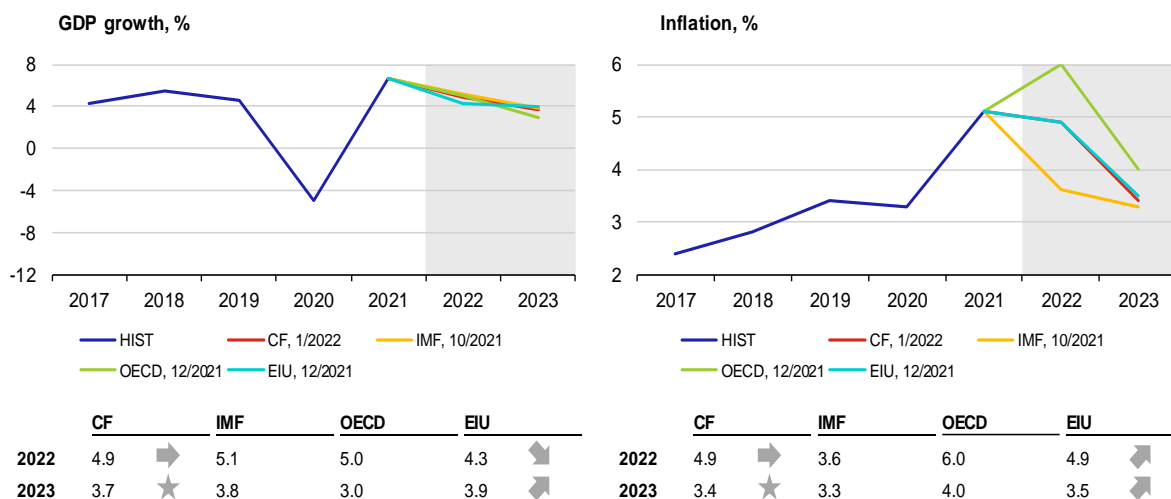
II.8 Poland

At its meeting on 4 January, the Monetary Policy Council of the Polish central bank decided to raise interest rates from 1.75% to 2.25%. Annual consumer price inflation again rose significantly, from 7.8% in November to a record 8.6% in December, the highest level since November 2000. In month-on-month terms, consumer prices grew by 0.9% in December (from 1.0% in November), reflecting the sharp rise in energy prices, the weak exchange rate of the zloty against the euro, and an economic recovery driven by growth in households' disposable income. Industrial output surged year on year from 7.8% in October to 15.2% in November across virtually all sectors, exceeding market expectations. The business confidence survey for the Polish economy, which has long been falling, is pessimistic. In December, it recorded its worst result since December 2020.



II.9 Hungary

At its meeting on 14 December, the Monetary Council of the Hungarian central bank (MNB) decided to raise the policy rate again (from 2.1% to 2.4%). The MNB also announced it was ready to continue tightening monetary policy until the inflation forecast is clearly on course for the 3% inflation target. Annual consumer price inflation remained at 7.4% in December (unchanged from November). Core inflation went up from 5.3% in November to 6.4%. According to GKI Economic Research, business confidence in the Hungarian economy has fallen for the first time since June 2021 (from 9.1 in November to 4.4 in December), reversing the upward trend. Retail sales grew by 3.8% year on year in November (as against 5.7% in October). Industrial output returned to year-on-year growth in November (2.6%), after having fallen by 3.4% in October. This was largely due to a recovery in manufacturing output and to faster growth in mining and quarrying.

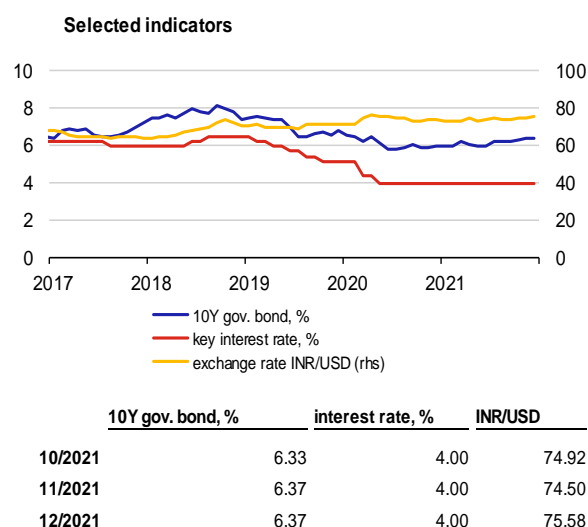
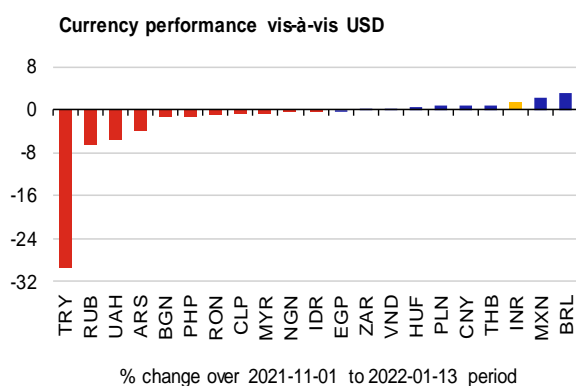
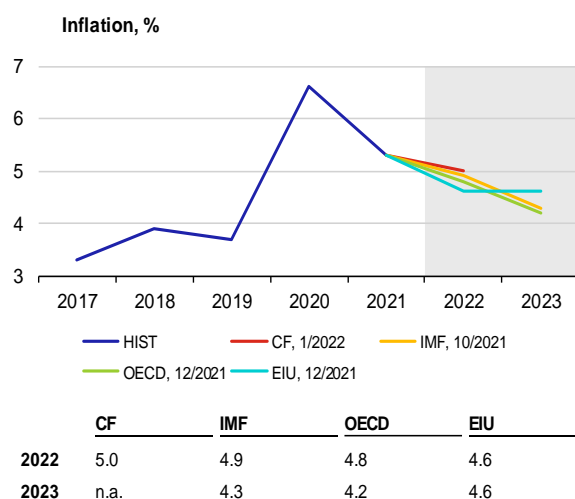
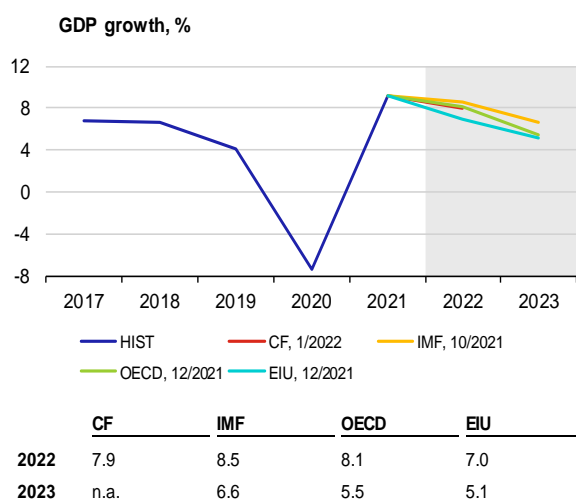


II.10 Countries in the spotlight – India

Given its sharp rise in case numbers, India needs to prepare sufficiently for a third wave of the pandemic driven by the Omicron variant. Above all, the government should formulate a clear vaccination policy and ensure that hospitals are on standby with sufficient supplies. Last spring, India was at the peak of a strong second wave of the pandemic, which led to significant restrictions on the economy and cost the country many lives. Although India has made progress in vaccinating its population and combating the virus, the high proportion of chronically ill and elderly in the population poses a threat. Almost 650 million people (about 45% of the population) are fully vaccinated. The total number of doses administered exceeding 1.5 billion. About 65% of the population have received at least one dose.

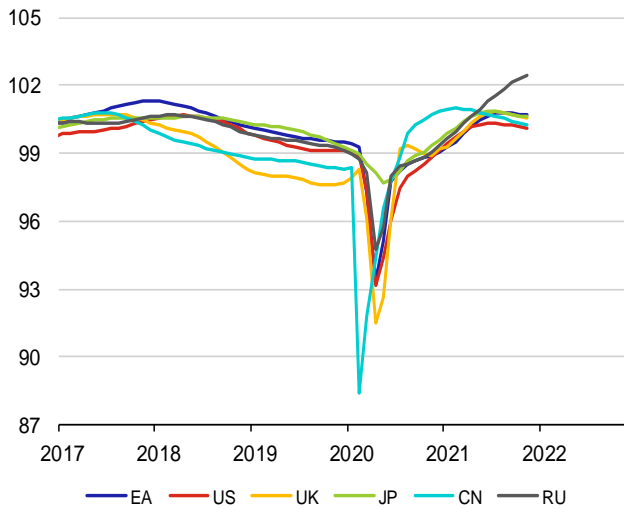
India's economic recovery was gaining pace relatively quickly before Omicron arrived and slowed it down. India intervened with a wide range of measures and economic reforms laying the groundwork for renewed growth. GDP increased by a record 20.1% in the first quarter of FY 2021–22. The growing activity was mainly due to the release of pent-up demand and a recovery in the services sector. The Reserve Bank of India (RBI) predicts GDP growth of 9.5% for FY 2021–22. GDP growth is expected to soar to 17.2% year on year in the first quarter of FY 2022–23. However, Omicron and persisting global supply disruptions represent a high risk. The country is also facing relatively high inflation, despite it already having fallen from its peak in June (6.3%), when it exceeded the tolerance band (the RBI's target is 4% with a tolerance band of ± 2 pp). The RBI expects inflation of 5.3% for FY 2021–22, while the IMF sees it slightly higher at 5.6%

The RBI left key rates unchanged at its latest meeting in December. The policy repo rate stayed at 4% and the reverse repo rate at 3.35% for the ninth meeting in a row. Support has also been promised in the form of accommodative monetary policy for as long as necessary to revive and sustain growth. In December, RBI Governor Shaktikanta Das was reappointed for a further three years. The RBI also launched a financial inclusion index aimed at providing a more comprehensive picture of Indians' access to financial services.

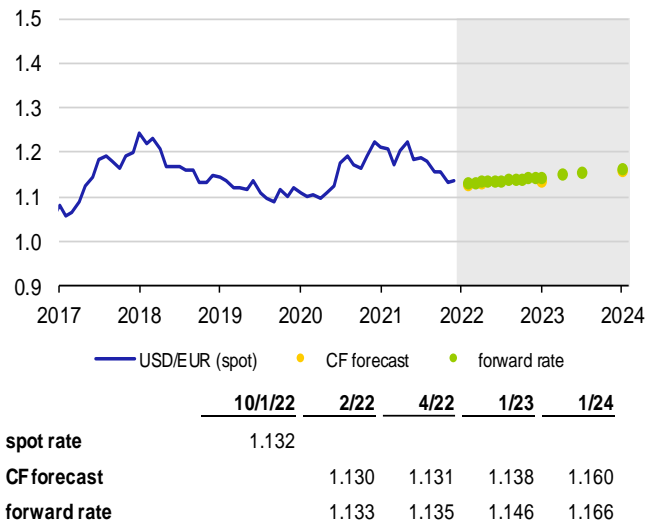


III. Leading indicators and outlook of exchange rates

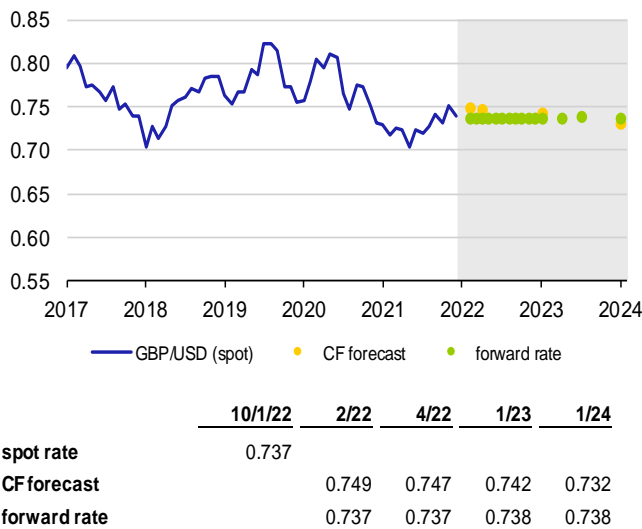
OECD Composite Leading Indicator



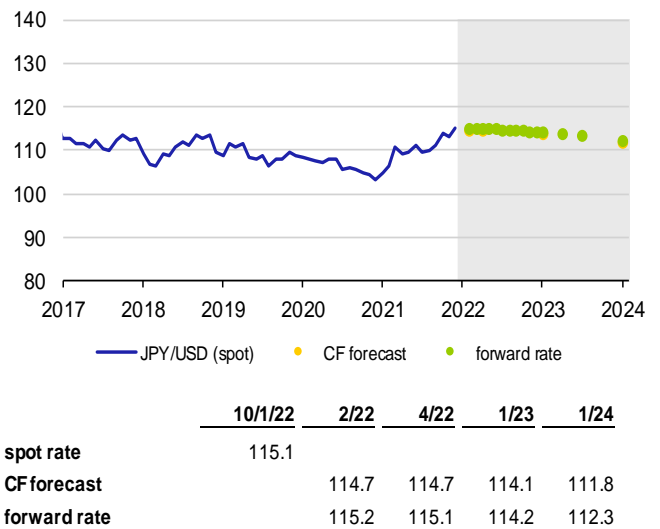
The US dollar (USD/EUR)



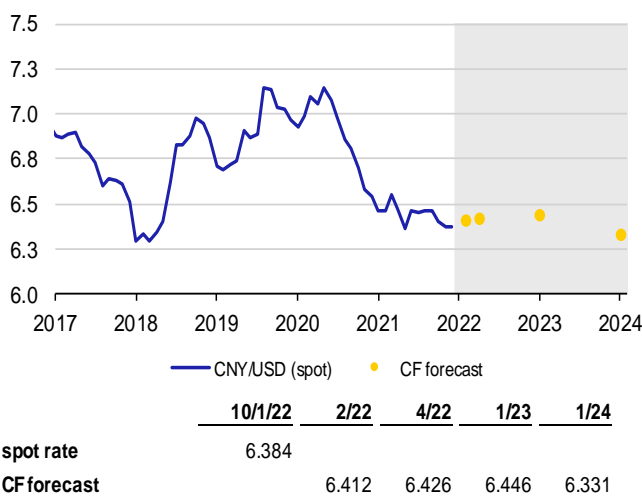
The British pound (GBP/USD)



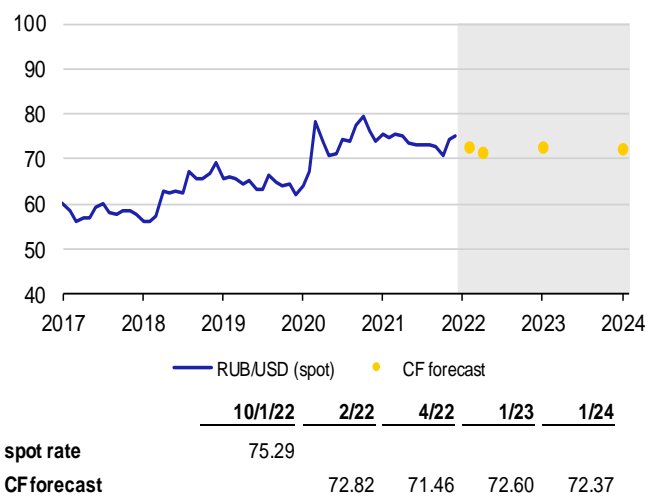
The Japanese yen (JPY/USD)



The Chinese renminbi (CNY/USD)



The Russian rouble (RUB/USD)

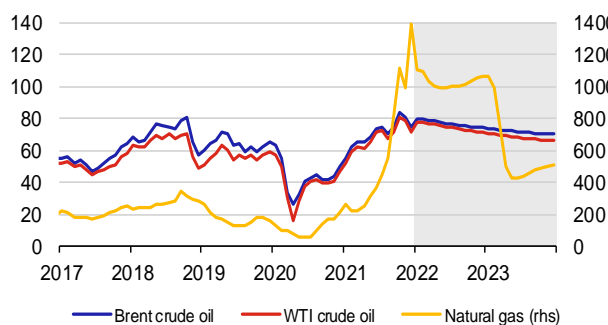


Note: Exchange rates as of last day of month. Forward rate does not represent outlook; it is based on covered interest parity, i.e. currency of country with higher interest rate is depreciating. Forward rate represents current (as of cut-off date) possibility of hedging future exchange rate.

IV.1 Oil

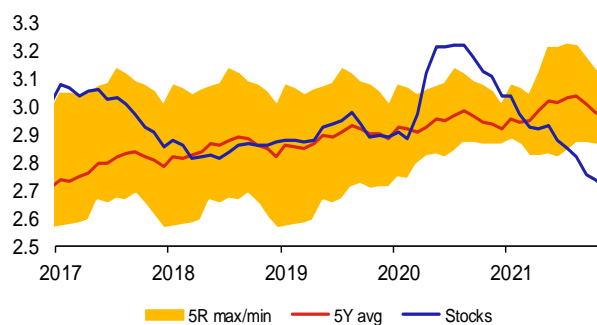
The Brent crude oil price began to rise in the second half of December and topped USD 85/bbl again in mid-January. The predictions (of the IEA and OPEC, for example) that the oil market will move into surplus in early 2022 on the back of rising output and seasonally weaker demand have yet to materialise. On the contrary, some OPEC+ countries are struggling to use their rising quotas due to under-investment in production, so OPEC+ output is growing more slowly than planned. Demand meanwhile remains strong despite the massive spread of Omicron, to which some countries are responding with tighter mobility restrictions (such as flight cancellations in China). The oil price has been bolstered by a sharp fall in US oil stocks in recent weeks, growing tensions at the Russian-Ukrainian border and a halt in talks between global powers and Iran. Production shortfalls in Libya have also reduced supplies, unrest in Kazakhstan has limited oil exports from the country, and severe frosts in Canada and the north of the USA have disrupted oil production and transport in the region. A weakening of the US dollar in January on reports that the Fed would not be rushing to tighten monetary policy also drove oil prices up. In January, the EIA upped its average Brent price forecast from USD 70/bbl to USD 75/bbl for this year. For 2023, it expects a fall to USD 67.5/bbl. According to the EIA, global oil inventories fell for a sixth consecutive quarter, and a modest decline is also expected for 2022 Q1. On average, however, inventories are expected to rise at a rate of 0.5 million b/d this year and 0.6 million b/d in 2023, which should gradually push oil prices down. The market curve in the first half of January is signalling a slower decline in the Brent crude oil price to an average of USD 77/bbl in 2022 and USD 72/bbl in 2023. The January CF is slightly below the market curve, predicting a Brent price of USD 72.3/bbl in January 2023. However, some large traders and bank analysts see oil prices slowly climbing as high as USD 100/bbl.

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

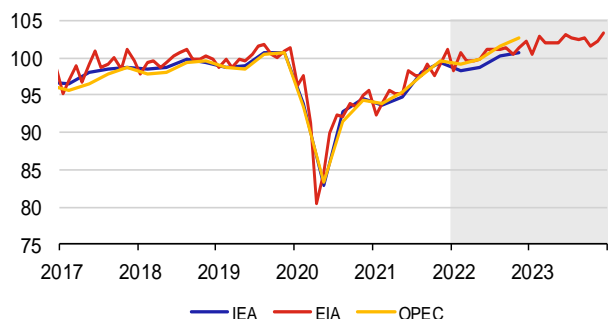


	Brent	WTI	Natural gas
2022	77.05 ↗	74.73 ↗	1033.47 ↗
2023	71.97 ★	68.25 ★	589.00 ★

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

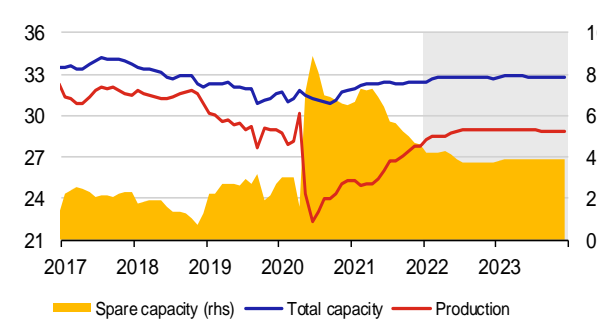


Global consumption of oil and oil products (mil. barrel / day)



	IEA	EIA	OPEC
2022	99.45 →	100.52 ↗	100.77 ↗
2023		102.28 ★	

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



	Production	Total capacity	Spare capacity
2022	28.76 ↗	32.71 ↗	3.95 ↗
2023	28.93 ★	32.81 ★	3.88 ★

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

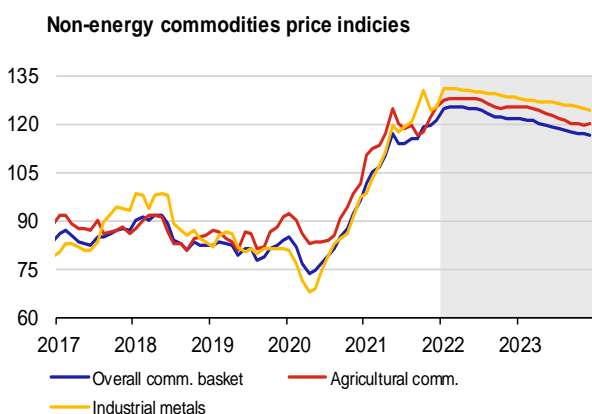
Note: Oil price at ICE, average gas price in Europe – World Bank data, smoothed by the HP filter. Future oil prices (grey area) are derived from futures and future gas prices are derived from oil prices using model. Total oil stocks (commercial and strategic) in OECD countries – IEA estimate. Production and extraction capacity of OPEC – EIA estimate.

IV.2 Other commodities

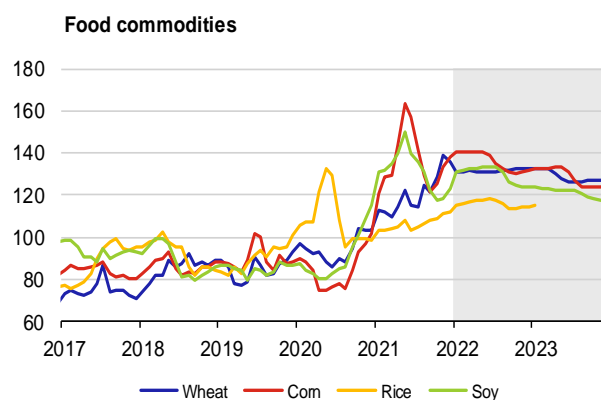
The price of natural gas in Europe started to surge again in December and peaked just before the Christmas holidays, when it also exceeded the high LNG prices in Asia. The situation then calmed quickly due to higher LNG supplies from the USA. However, the situation on the European market remains tense due to low stocks and weak and falling supplies from Russia. After more LNG tankers were diverted to Europe in late December in response to the record high European prices, spot prices returned to their October and November levels, which are still many times higher than the average for the past decade. The outlook remains at the current high level until 2023 Q1. Electricity prices are practically mirroring gas prices but will be more volatile going forward due to larger declines in the summer and rises in the winter. Emission allowance prices stopped rising in December and have since been highly volatile in a range of EUR 70–90/t. The situation is better on the coal market, where prices peaked in early October and then corrected downwards sharply.

The average monthly food commodity price index continued to rise in December and the first half of January, recording its highest level since September 2012. A slight decline in wheat and sugar prices was counteracted by rising corn, soy, rice and beef prices. The price of coffee stagnated after a sharp rise last year. The food index is expected to remain at its current high level until the middle of this year and then gradually decline.

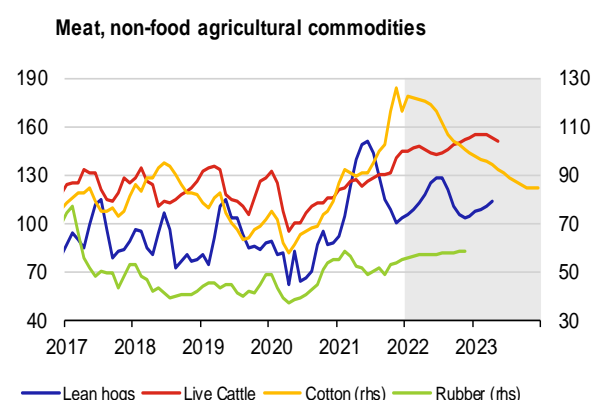
After falling in November and rising only slightly in December, the average monthly industrial metals price index was again close to a record high in the first half of January, but its outlook is falling. The same is true for aluminium prices. However, the flat price of copper is also close to an all-time high, and the tin price remains at a record level.



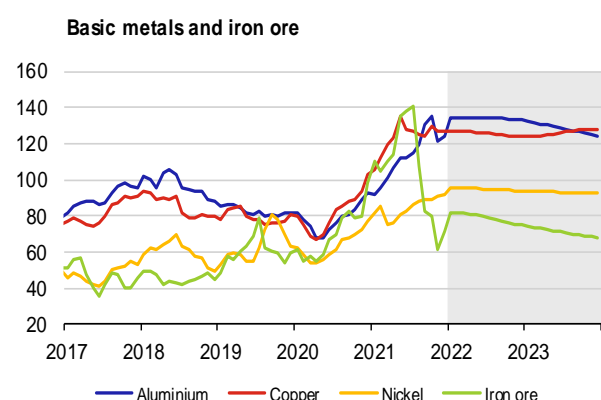
	Overall	Agricultural	Industrial
2022	123.7 ↗	126.7 ↗	129.7 ↗
2023	118.9 ★	122.3 ★	126.2 ★



	Wheat	Corn	Rice	Soy
2022	131.7 ↗	136.1 ↗	115.9 ↗	129.9 ↗
2023	128.7 ★	128.5 ★	115.1 ★	121.2 ★



	Lean hogs	Live Cattle	Cotton	Rubber
2022	114.1 ↗	147.0 ↗	112.1 ↗	57.2 ↗
2023	109.8 ★	153.5 ★	90.2 ★	



	Aluminium	Copper	Nickel	Iron ore
2022	134.1 ↗	125.6 ↗	94.8 ↗	78.9 ↗
2023	128.2 ★	126.0 ★	93.2 ★	70.9 ★

Source: Bloomberg, CNB calculations.

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

The risks associated with European export-oriented economies' twin deficits ¹

This article draws attention to the widening macroeconomic imbalances stemming from the unrelenting global Covid-19 pandemic, imbalances which take the form of “twin deficits”. The pandemic, which has now subsided and resurged in several waves, and the related shutdowns of economies, especially in the services sector, have not only been visibly reflected in a considerable worsening of countries' fiscal positions (public budget balances), but may also result in a deterioration in their external positions (current account balances). On the fiscal side, this is due to extremely accommodative fiscal policy, motivated by governments' efforts to soften the impacts of the pandemic on the income of households and firms. However, anti-Covid and subsequent fiscal measures have also led to the creation of forced savings and to a shift in demand from services to tradable goods, satisfied in part by imports. This has gone hand in hand with disruptions to global value chains (GVCs) due to logistical problems and shortages of production inputs, which have reduced the export performance of some sectors (the automotive industry, for example). Economic theory tells us that twin deficits generally reduce countries' resilience and make them more susceptible to macroeconomic and financial instability. A forward-looking macroeconomic approach requires economic policy makers to better get to know this risk in advance and to try to prevent it from forming.

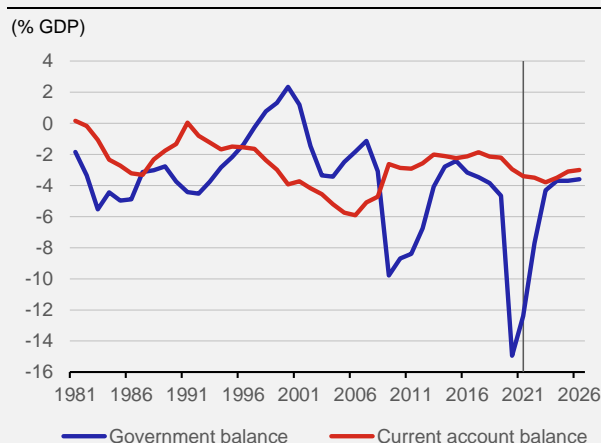
Introduction and history

Economists have been studying the relationship between the fiscal deficit and the current account deficit for several decades now. The twin deficit phenomenon was a hot topic for economists in the 1980s, mainly because of its emergence in the world's strongest economy – America. Tax cuts in the US caused the government deficit to widen, and the current account then also switched from surplus to deficit. In the following decade, however, the two deficits often moved in opposite directions in the world's most important economies (the G7). The twin deficit issue thus moved into the background for a time, only to re-emerge (not just in the USA) at the start of the new millennium (see [Chart 1](#)). As fiscal discipline was gradually eroded by the efforts to mitigate the effects of the Global Financial Crisis, fiscal deficits started to be accompanied by current account deficits in many countries, including in Europe, and twin deficits became a subject of economic debate again. Moreover, expansionary fiscal policy, in the form of supportive and compensatory measures, has also been applied by the vast majority of countries in response to the Covid-19 pandemic. This has led to a rapid and deep decline in public finances. If the hypothesis that the two deficits interact holds, current account deficits should also worsen in the near future. The current situation differs from past cases in that the entire world, not just one economy, has been exposed to a shock, albeit one with different impacts on different sectors of the economy.

The economic theory underlying twin deficits

Economic theory does not offer a clear explanation of the effects of twin deficits. The interconnectedness of the current account and public (government) budgets were studied by economists decades ago. As in many other fields of economic theory, there is no single explanation. The original twin deficit theory was based on the Keynesian approach, where growth in government expenditure causes the current account deficit to rise. The relationship between, and evolution of, the two deficits is derived from the basic macroeconomic identity stating that $(S - I) + (T - G) = NX$, where S is private savings, I is investment, T is tax income, G is government expenditure and NX are net exports, i.e. the difference between a country's exports Ex and imports Im of goods and services. The above formula implies that if public revenue T is lower than public expenditure G , a public (government) sector deficit arises. If this situation occurs and the economy is simultaneously close to its potential output level, private investment I or net exports NX must decline, assuming a constant saving rate. This shows in simplified terms the interlinkage of the government (public) finance balance – a zero balance being one of the forms of the notional internal balance of the economy – and the current account deficit, which is conversely an indicator of the notional external imbalance of the economy.

Chart 1 – Twin deficits in the USA



Source: EIU.

Note: The vertical line separates historical data and forecasted values.

¹ Authors: Luboš Komárek and Petr Polák. The views expressed in this article are those of the authors and do not necessarily reflect the official position of the Czech National Bank..

To assess the balance of an economy, we need to know the primary use of domestic savings. If domestic savings are invested in government debt, crowding-out of private investment by government (public) investment becomes more apparent in the economy. Conversely, if government (public) debt is funded from foreign sources (savings), the current account deficit in the home country increases. The relationships in the above equation can also be interpreted as meaning that the current account (or goods and services balance) worsens if government expenditure G exceeds government revenue T . It is therefore clear that we need to know the evolution of the structure of the above macroeconomic variables to determine the degree of imbalance of an economy.

The relationship $(S - I) + (T - G) = NX$ can be rewritten as $S + \text{goods and services deficit} = I + \text{budget deficit}$, where a goods and services deficit arises if $Ex < Im$ and a budget deficit arises if $T < G$. Simple rearrangement gives the relationship $\text{goods and services deficit} = \text{budget deficit} + I - S$, which shows the link between the two deficits more directly. An increase (decrease) in the government (budget) deficit will give rise either to an increase (decrease) in the goods and services deficit given constant investment and savings, or to other variants determined by combinations of movements of the variables on the right-hand side of the equation, i.e. the goods and services deficit, investment and savings.²

An alternative approach to the relationship between the government deficit and the current account deficit is referred to as Ricardian, i.e. based on Ricardian equivalence. Cutting taxes while keeping government expenditure constant will lead to growth in disposable income. However, this is more likely to result in growth in private savings than increased consumption. This growth will be driven mainly by expectations of future tax increases due to the need to consolidate public finances (and cover the budget deficit arising from the current tax cut). If this happens, aggregate savings remain unchanged (the reduction in public savings due to government expenditure is offset by growth in private savings) and there is no upward pressure on interest rates and no downward pressure on investment. The domestic currency does not appreciate either (because interest rates are unchanged and do not trigger a capital inflow). In the Ricardian world, the current account thus is unaffected, as the growth in private savings means there is no need to finance an increased budget deficit (using foreign loans, for example). In this world, it is assumed that the government bonds issued to finance the deficit will be subsequently bought by domestic entities from the excess funds obtained by cutting taxes. The budget deficit thus affects neither aggregate demand, nor other macroeconomic variables. James Buchanan termed this the *debt neutrality theorem*. However, it is fair to note that, owing to its assumptions, Ricardian equivalence is just a special case of the effects stemming from growth in public deficits and is often remote from the way governments actually behave.³

The relationship between the current account deficit and the fiscal deficit is crucial for the internal and external imbalances in the economy and also for economic policy makers. The twin deficit relationship, i.e. the relationship between the current account and the government budget balance, can differ across economies and over time. The context of their formation should not be ignored either. From the monetary policy perspective, the relationship between growth in government debt and the exchange rate is also important. Borrowing entails a need to attract foreign investors (lenders) and thus implies upward pressure on funding costs, an inflow of capital and hence a strengthening of the currency. The appreciation leads, via the price competitiveness channel, to a decrease in exports and an increase in imports, causing the current account deficit to worsen. However, if the growth in debt is very fast and is accompanied by other risk factors such as high inflation, the country's attractiveness to foreign investors decreases, which in turn causes an outflow of capital. This can lead to exchange rate depreciation, amid growth in both the current account deficit and the risk premium and hence also in government debt funding costs. A deficit may form as a result of inappropriate economic policy or in response to an exogenous shock to which the economy is exposed. The twin deficit problem can thus be seen as a vicious circle: a high budget deficit creates a significant current account deficit which, in turn, leads to growth in the budget deficit. A long-term export and import deficit may indicate a loss of competitiveness or an unsustainably low saving rate.

Twin deficits in Europe

Looking at the situation in Europe (specifically the 27 EU countries plus the UK), we can see that twin deficits are a common phenomenon. Most EU countries have been running government deficits over the last two decades. Things started to improve slightly at the start of the millennium, but the situation worsened visibly in 2008 and 2009 with the outbreak of the financial crisis. In the years leading up to the current Covid-19 pandemic, government finances gradually improved again. Looking at the situation in terms of the current account deficit, we do not observe any effect of the crises on the aggregate level. On the contrary, after the financial crisis peaked in 2008, the situation began to improve and the

² A current account deficit can be financed by foreign capital. This enables an external imbalance to be maintained under the assumption of high capital mobility. It was the investigation of the degree of capital mobility that laid the foundations for the formulation of the Feldstein-Horioka puzzle, which, in our opinion, is illusory. Feldstein and Horioka (1980) were the first to point to the high correlation between gross savings and investment in this context. This finding is inconsistent with the assumption of perfect capital mobility, which is the above-mentioned condition for financing current accounts (for an application to EU countries, see, for example, Aristovnik and Djuric, 2010).

³ Besides the Keynesian approach based on the Mundell-Fleming theory and the Keynesian absorption theory (budget deficit \Rightarrow CA deficit) and the Ricardian approach (no relation between deficits), economic theory offers other explanations of the interaction of these deficits, namely current account targeting (budget deficit \Leftarrow CA deficit; see, for example, Summers, 1988), and *feedback linkage* (budget deficit \Leftrightarrow CA deficit; see Feldstein and Horioka, 1980).

number of countries running twin deficits fell. From this point of view, we could conclude that the relationship between the government deficit and the current account deficit is not fixed but differs across countries and through time, as they show different tendencies.

The size as well as the existence of the deficit is important. Both the government deficit and the current account deficit should be viewed in terms of their size relative to GDP. A ratio of around 3% is generally regarded as sustainable for government debt, while 5% is viewed as the maximum financeable ratio for the current account deficit.⁴ However, the story of current account deficits differs somewhat from that of government deficits, as the number of countries running high current account deficits started rising gradually in 2000 and peaked at 15 in 2008, but then fell dramatically. Only the specific economy of Cyprus has had problems with current account deficits in recent years.

Besides affecting government finances, the pandemic has had a big impact on international trade, mainly in the form of supply bottlenecks. In recent years, modern logistics, corporate governance, globalisation and cost optimisation have led to relocation of production mainly to China and to a simultaneous shift to “just-in-time” planning with minimum storage requirements. Shutdowns of parts of economies (mainly services) and subsequent concerns of a recession like the one seen during the financial crisis have disrupted supplies of production components. A change in the behaviour of consumers towards consuming goods rather than services has also caused the balance of trade to shift. As a result, open, export-oriented advanced economies have started to suffer from an imbalance between consumer goods imports and exports, which have been reduced by component and commodity shortages. Even so, according to the EIU’s outlooks, European economies have generally managed to maintain current account surpluses.

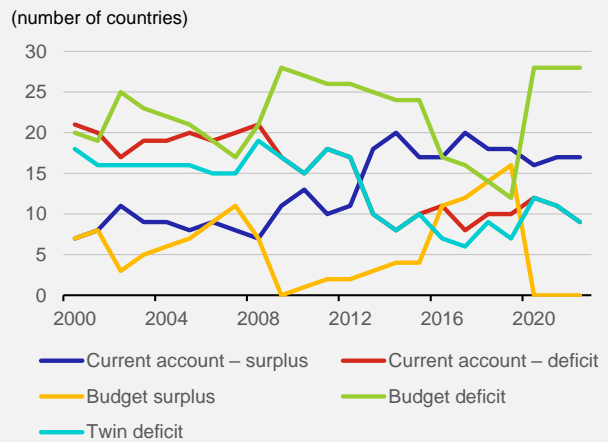
As a result, open, export-oriented advanced economies have started to suffer from an imbalance between consumer goods imports and exports, which have been reduced by component and commodity shortages. Even so, according to the EIU’s outlooks, European economies have generally managed to maintain current account surpluses.

The pandemic and deficits in the Visegrad Group countries

The existence of the twin deficit phenomenon in the Visegrad (V4) countries before and during the Covid-19 pandemic is apparent from Charts 3 and 4. The recent trends in our nearest neighbours have been very similar (see Chart 3). The exception is Hungary, which has recorded large current account surpluses over the last 10 years or so. According to the EIU outlook, it does not seem that the pandemic will have a major impact on the V4 countries’ current account balances. A similar conclusion can be drawn for the entire EU for the first year of the pandemic (see Chart 4). Current account balances worsened in only a few countries, while in most EU states they remained almost unchanged relative to GDP in 2019 and 2020.

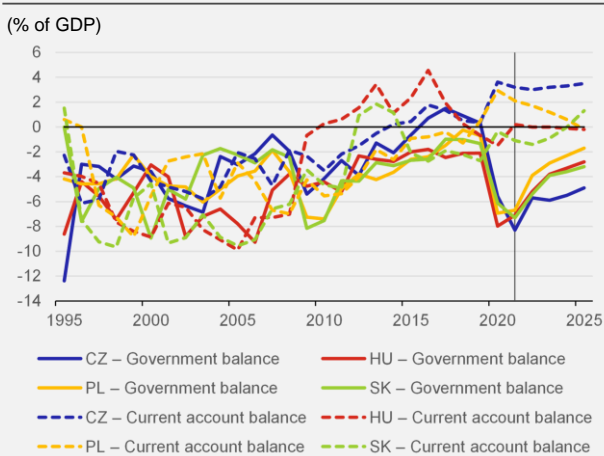
The fiscal outcomes and current (and financial) account deficits are reflected in exchange rates but may not be their main drivers. The twin deficit problem should mainly affect economies with their own currencies and external financing. In Europe, this can be demonstrated on the example of the V4 countries, three of which (the Czech Republic,

Chart 2 – Deficit-running countries in Europe



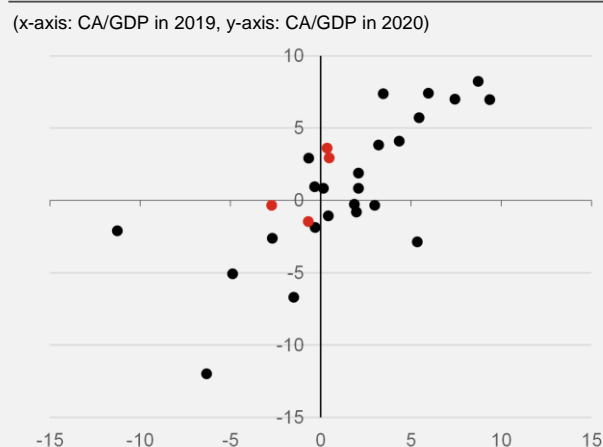
Source: EIU.

Chart 3 – Deficits in V4 countries



Source: EIU.
Note: The vertical line separates historical data and forecasted values.

Chart 4 – Current account balances in EU countries



Source: EIU.
Note: CA = current account. The red dots in the chart represent V4 countries.

Poland and Hungary) have independent monetary policies. Broadly speaking, the nominal CZK/EUR exchange rate has been *de facto* unchanged over the last decade despite its use as an additional monetary policy instrument, while the PLN/EUR rate has depreciated slightly and the HUF/EUR rate has weakened significantly (see Chart 5). Although Hungary has most often recorded the largest current account surplus-to-GDP ratio and a comparable government budget deficit-to-GDP ratio relative to the Czech Republic and Poland over the last decade, the forint has depreciated the most. It is thus evident that other factors (such as the monetary policy settings, the central bank's inflation target, political factors, the interest rate differential and the sovereign rating) have been significant for the behaviour of the exchange rate. Slovakia, the only V4 representative in the euro area, has a visible current account in the forecast.

Conclusion

The ongoing pandemic does not promise an early end to the large general government deficits of the vast majority of the countries under review, including those from the Visegrad Group. Continuing supply chain problems imply persisting uncertainty about the scale of the export recovery. This is particularly evident in the small open V4 countries, as reflected in their relatively modest economic growth outlooks. The V4 countries are also grappling with high inflation. However, its impact on their trade balances is unclear, as other economies and their main trading partners have been also been hit by inflation pressures. The current signals are that the strong inflation pressures, generated primarily by supply-side problems and exacerbated by fiscal deficits, may lead to growth in risk premia on financial markets. This usually goes hand in hand with sovereign rating downgrades. In the absence of visible fiscal consolidation efforts in the medium term, the external balance situation would be very likely to worsen in the form of larger current account deficits. Taking into account interest rate levels in the V4 economies, this would cause their currencies to weaken.

References

- Aristovnik, A.; Djuric, S. (2010). Twin deficits and the Feldstein-Horioka puzzle: A comparison of the EU member states and candidate countries. MPRA Paper No. 24149.
- Blanchard, O.; Gaivazzi, F. (2002). Current account deficits in the euro area. The end of the Feldstein Horioka puzzle? Massachusetts Institute of Technology, Department of Economics, Working paper 03-05, Cambridge.
- Clarida, R. H., et al. (2007). G7 current account imbalances: Sustainability and adjustment. University of Chicago Press, Business & Economics.
- Feldstein, M.; Horioka, C. (1980). Domestic saving and international flows. *Economic Journal*, 90(358): 314–329.
- Summers, L. H. (1988). Tax policy and international competitiveness. In "International aspects of fiscal policies", pp. 349–386, University of Chicago Press.

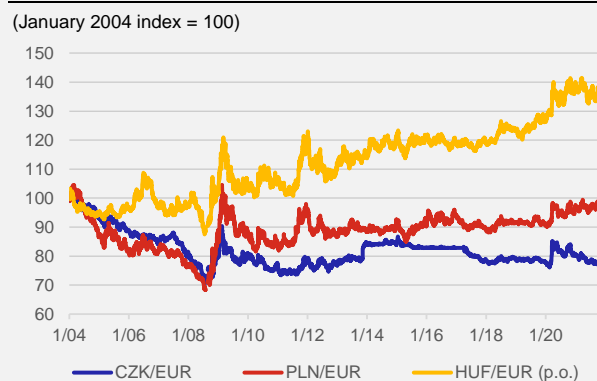
Keywords

Twin deficits, current account deficit, budget deficit, international trade, crisis

JEL Classificaton

F14, F41

Chart 5 – The V3 countries' exchange rates against the euro



Source: EIU.

A1. Change in predictions for 2022

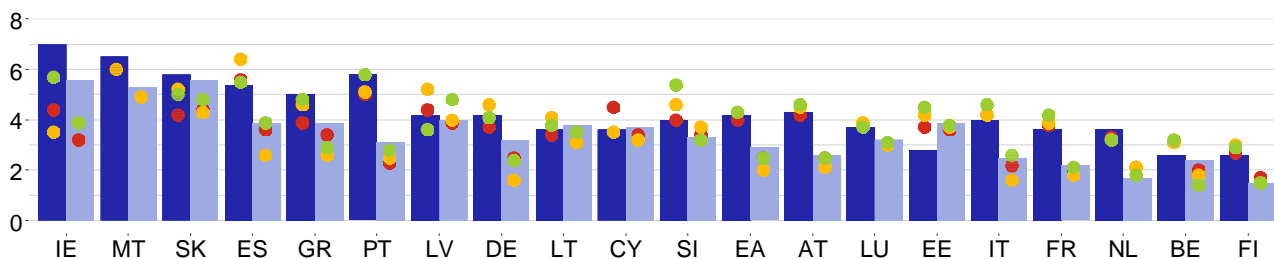
	GDP growth, %				Inflation, %			
	CF	IMF	OECD	CB / EIU	CF	IMF	OECD	CB / EIU
EA	+0.9	+0.7	+0.6	+0.5	-0.1	+1.0	+0.5	+0.9
US	+1.6	+1.1	+1.7	+1.7	+0.4	+1.9	+1.5	+3.1
UK	+2.3	+2.0	+1.7	+1.0	-1.6	+0.3	-0.7	+1.8
JP	-1.4	-0.6	-0.3	+0.7	-0.9	-0.9	-0.7	-0.9
CN	+2.9	+2.3	+2.3	+2.6	-1.2	-0.8	-1.4	-1.4
RU	+1.6	+1.6	+0.9	+1.8	+3.4	+2.5	+0.8	+2.2

A2. Change in predictions for 2023

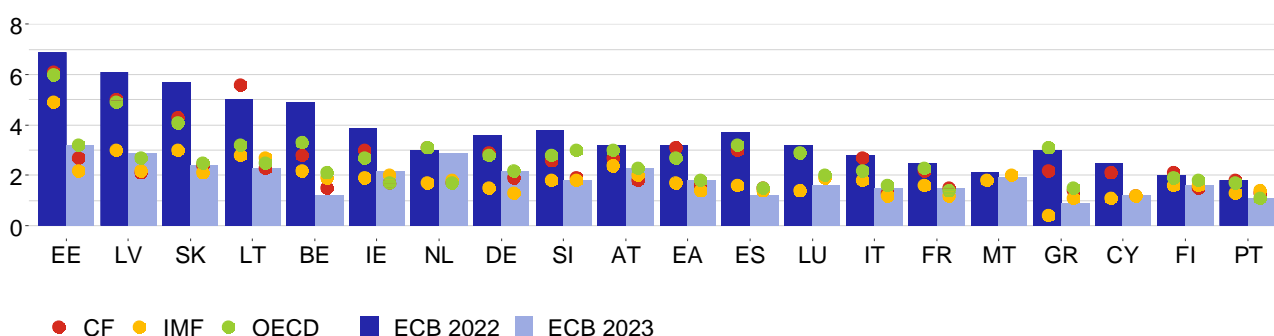
	GDP growth, %				Inflation, %			
	CF	IMF	OECD	CB / EIU	CF	IMF	OECD	CB / EIU
EA	--	+2.4	--	+2.1	--	+0.3	--	+1.7
US	--	+3.8	--	+1.5	--	+1.0	--	+0.4
UK	--	+3.0	--	+3.5	--	+0.6	--	+1.4
JP	--	+2.1	--	+1.6	--	-0.2	--	-0.1
CN	--	+0.2	--	+0.3	--	-0.1	--	-0.3
RU	--	+0.8	--	0	--	+1.0	--	+0.8

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

GDP growth in the euro area countries in 2022 and 2023, %



Inflation in the euro area countries in 2022 and 2023, %

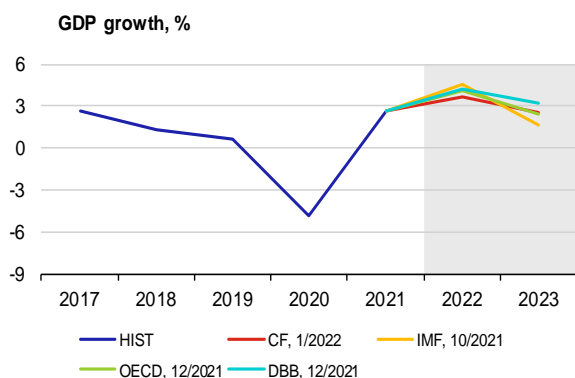


● CF ● IMF ● OECD ■ ECB 2022 ■ ECB 2023

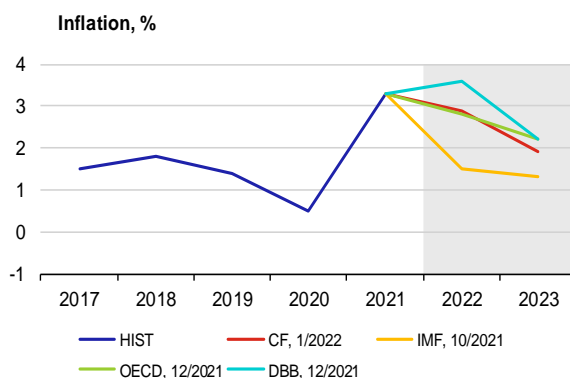
Note: Charts show institutions' latest available outlooks of for the given country.

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

Germany

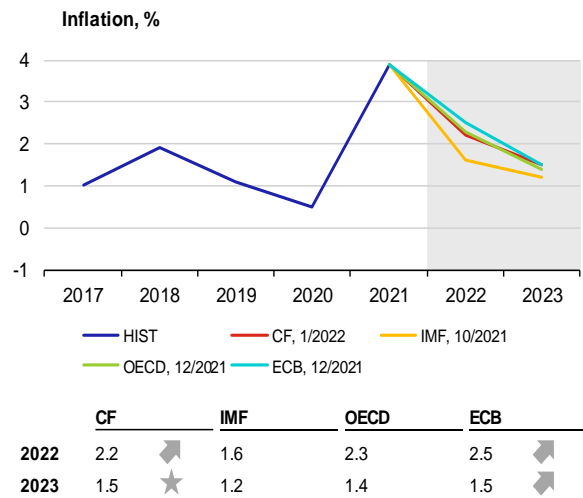
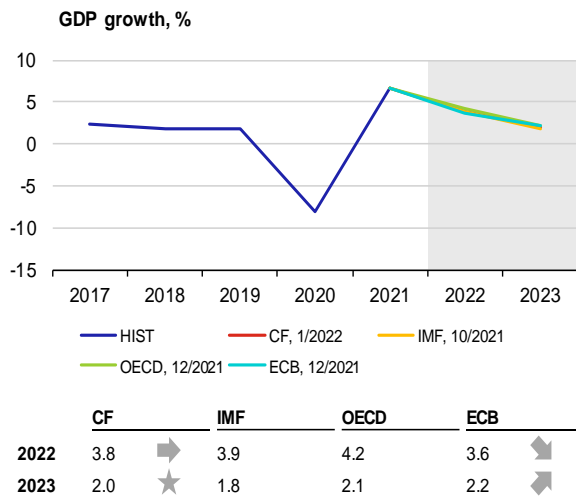


	CF	IMF	OECD	DBB
2022	3.7	4.6	4.1	4.2
2023	2.5	1.6	2.4	3.2

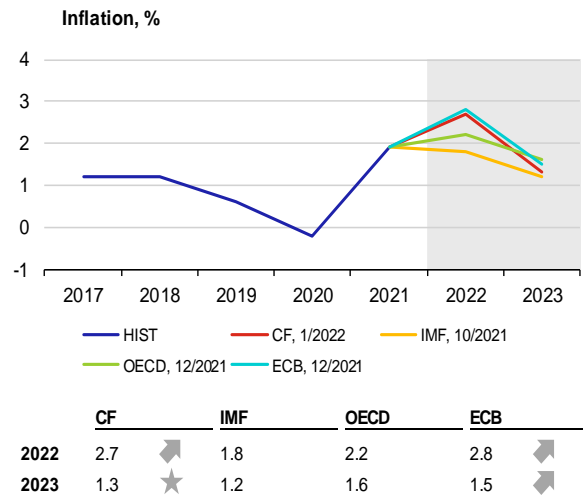
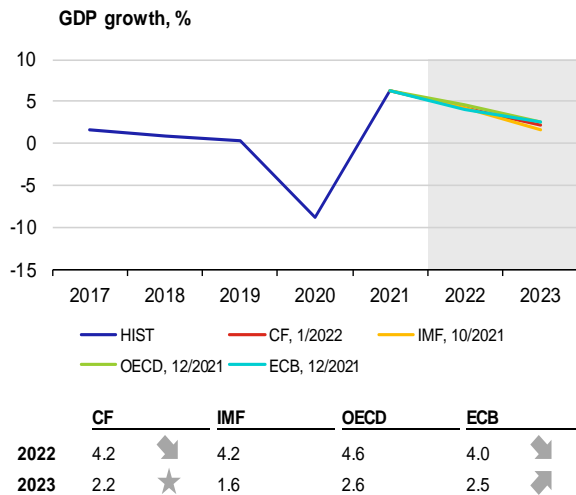


	CF	IMF	OECD	DBB
2022	2.9	1.5	2.8	3.6
2023	1.9	1.3	2.2	2.2

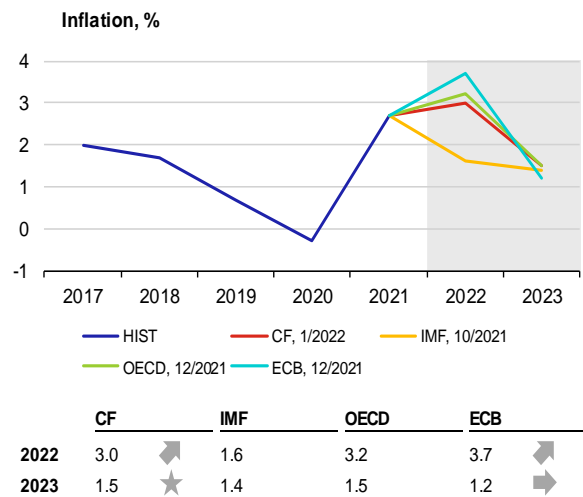
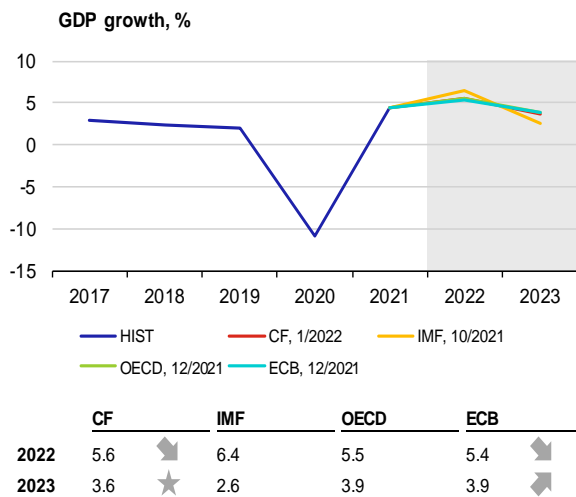
France



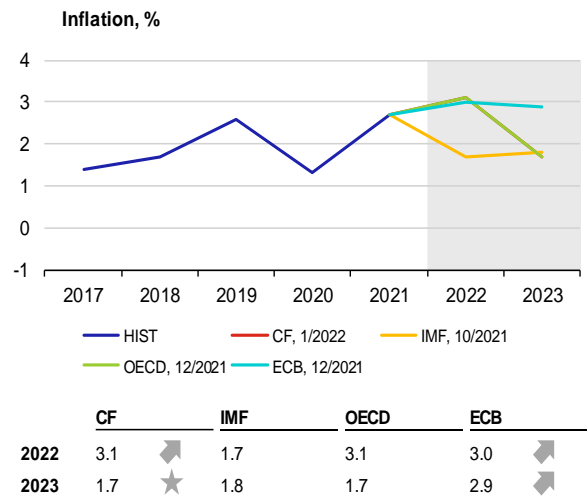
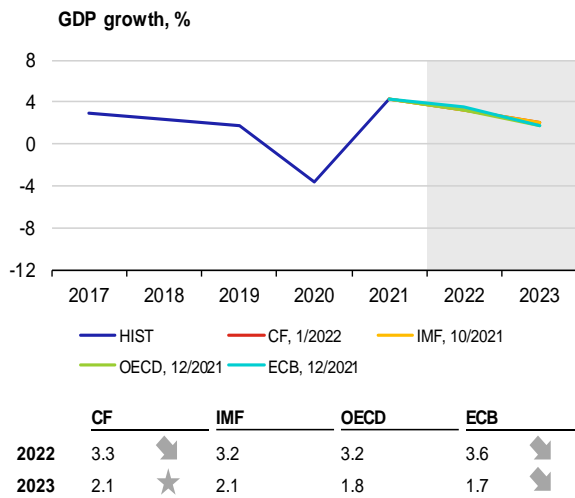
Italy



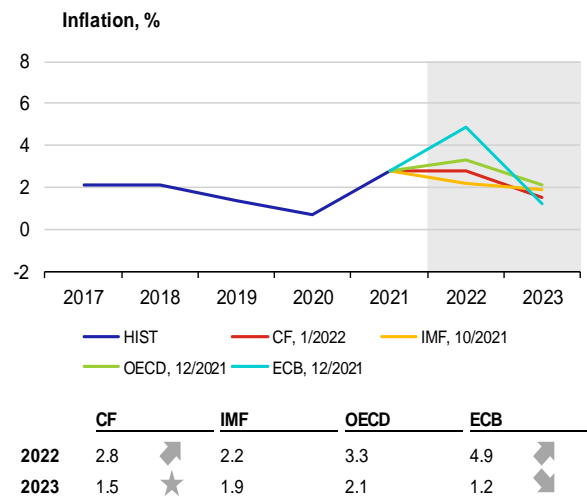
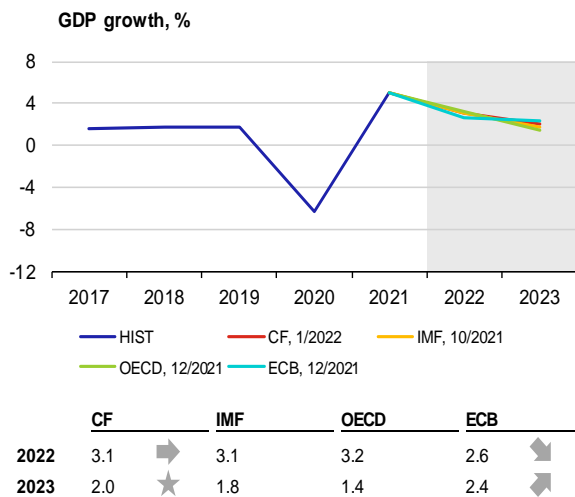
Spain



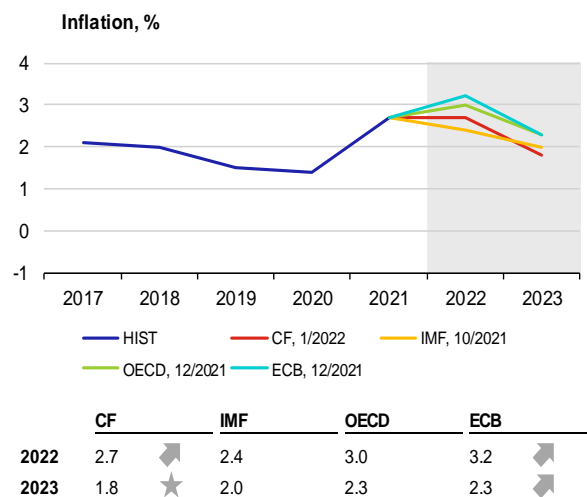
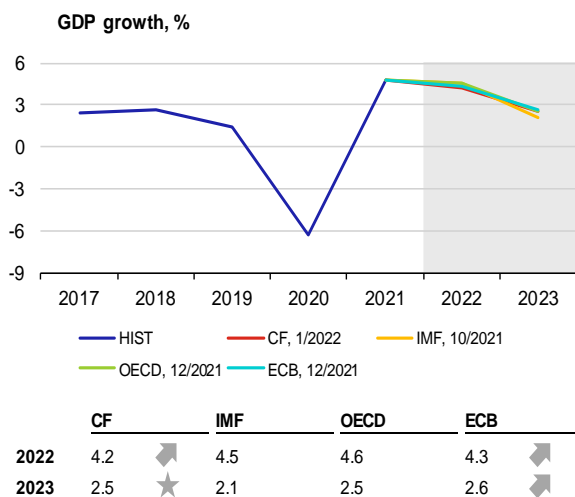
Netherlands



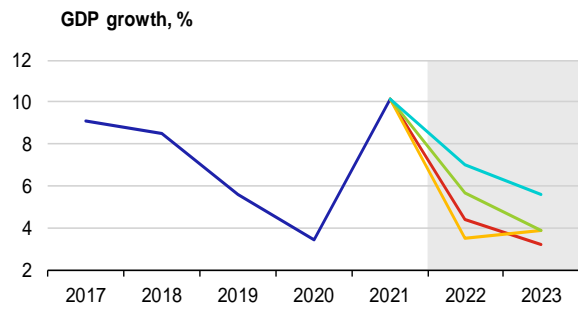
Belgium



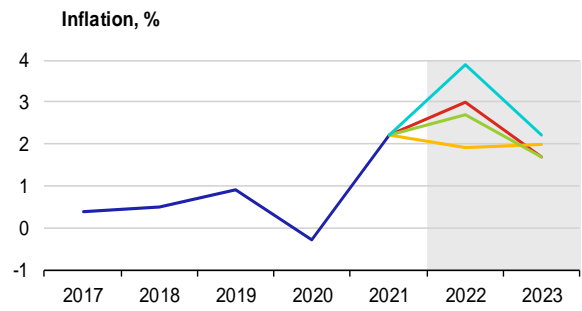
Austria



Ireland

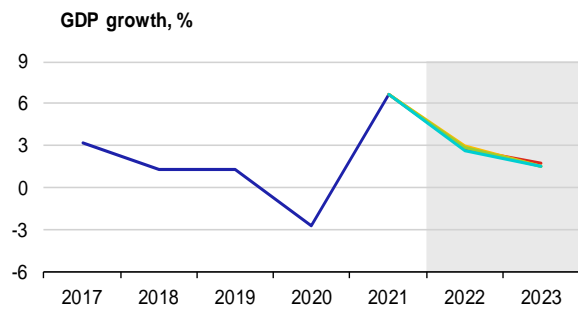


	CF	IMF	OECD	ECB
2022	4.4	3.5	5.7	7.0
2023	3.2	3.9	3.9	5.6

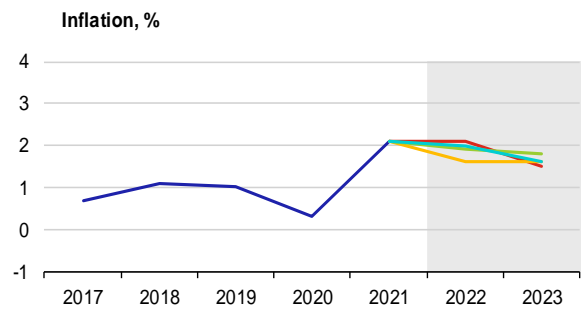


	CF	IMF	OECD	ECB
2022	3.0	1.9	2.7	3.9
2023	1.7	2.0	1.7	2.2

Finland

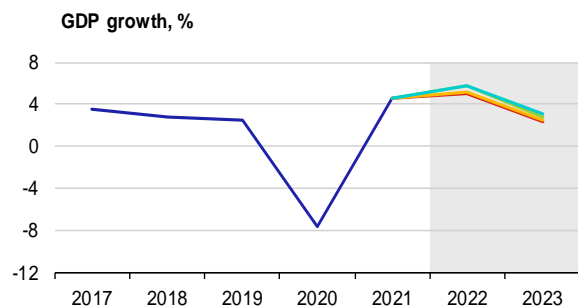


	CF	IMF	OECD	ECB
2022	2.7	3.0	2.9	2.6
2023	1.7	1.5	1.5	1.5

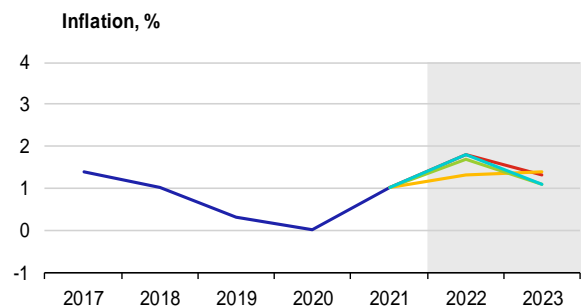


	CF	IMF	OECD	ECB
2022	2.1	1.6	1.9	2.0
2023	1.5	1.6	1.8	1.6

Portugal

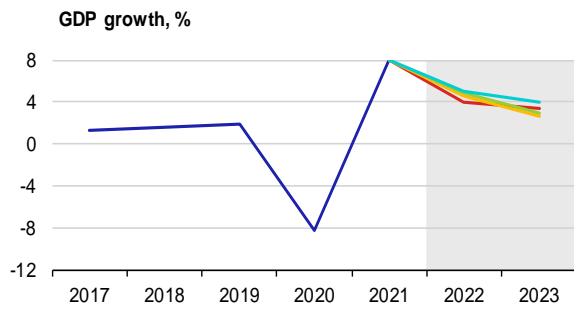


	CF	IMF	OECD	ECB
2022	5.0	5.1	5.8	5.8
2023	2.3	2.5	2.8	3.1

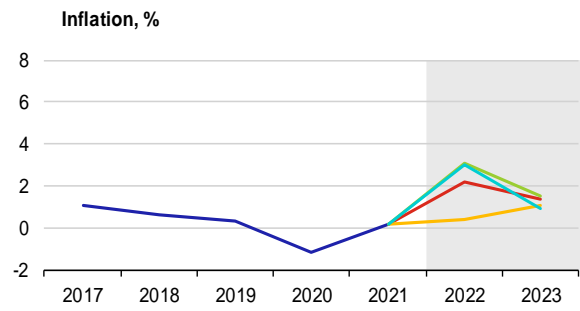


	CF	IMF	OECD	ECB
2022	1.8	1.3	1.7	1.8
2023	1.3	1.4	1.1	1.1

Greece

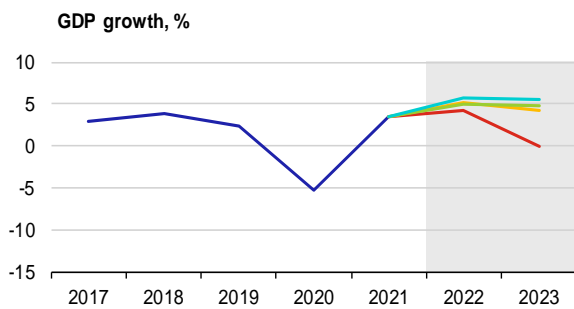


	CF	IMF	OECD	ECB
2022	3.9 →	4.6	4.8	5.0 →
2023	3.4 ★	2.6	2.9	3.9 →

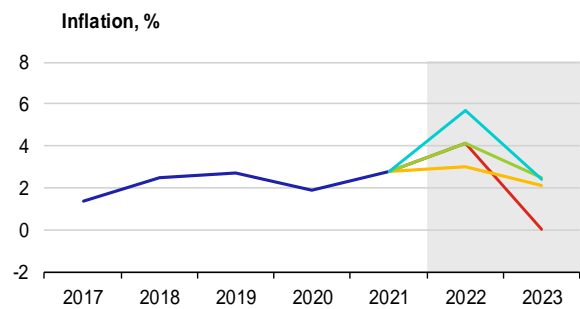


	CF	IMF	OECD	ECB
2022	2.2 →	0.4	3.1	3.0 →
2023	1.4 ★	1.1	1.5	0.9 →

Slovakia

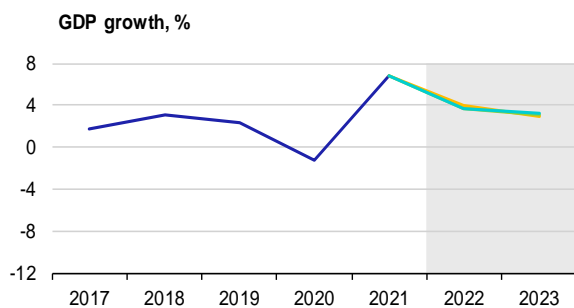


	CF	IMF	OECD	ECB
2022	4.2 →	5.2	5.0	5.8 →
2023	n.a.	4.3	4.8	5.6 →

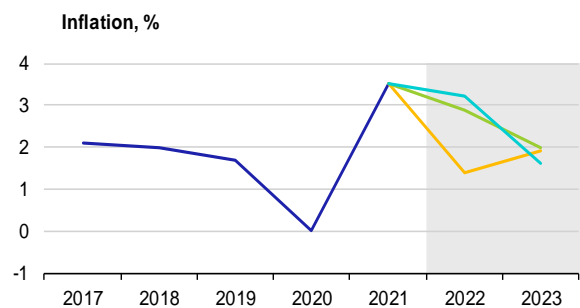


	CF	IMF	OECD	ECB
2022	4.1 →	3.0	4.1	5.7 →
2023	n.a.	2.1	2.5	2.4 →

Luxembourg

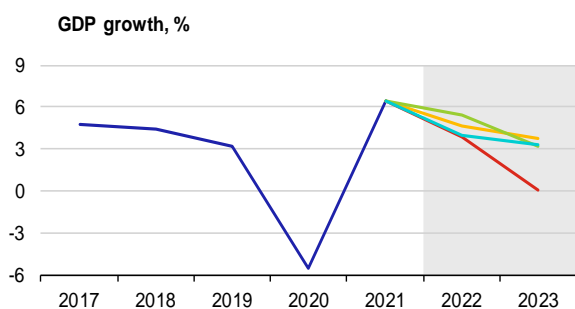


	CF	IMF	OECD	ECB
2022	n. a.	3.9	3.7	3.7 →
2023	n. a.	3.0	3.1	3.2 →

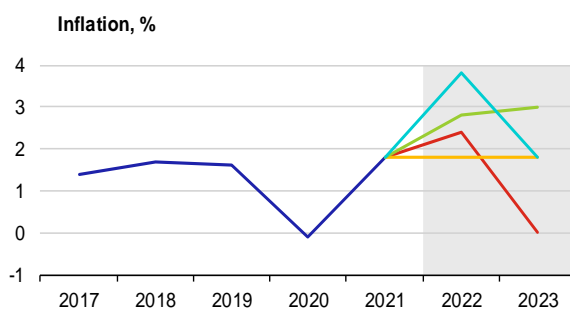


	CF	IMF	OECD	ECB
2022	n. a.	1.4	2.9	3.2 →
2023	n. a.	1.9	2.0	1.6 →

Slovenia

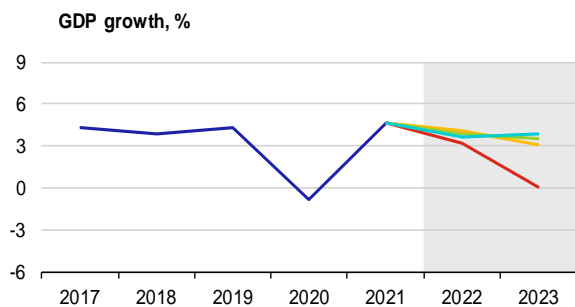


	CF	IMF	OECD	ECB
2022	3.8	4.6	5.4	4.0
2023	n.a.	3.7	3.2	3.3

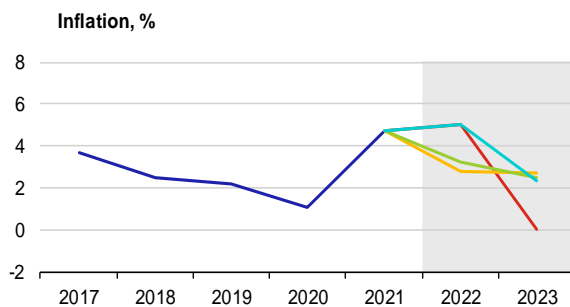


	CF	IMF	OECD	ECB
2022	2.4	1.8	2.8	3.8
2023	n.a.	1.8	3.0	1.8

Lithuania

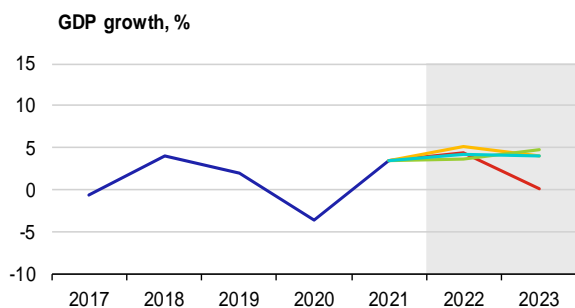


	CF	IMF	OECD	ECB
2022	3.2	4.1	3.8	3.6
2023	n.a.	3.1	3.5	3.8

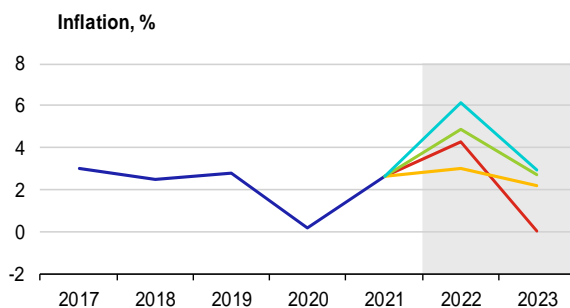


	CF	IMF	OECD	ECB
2022	5.0	2.8	3.2	5.0
2023	n.a.	2.7	2.5	2.3

Latvia

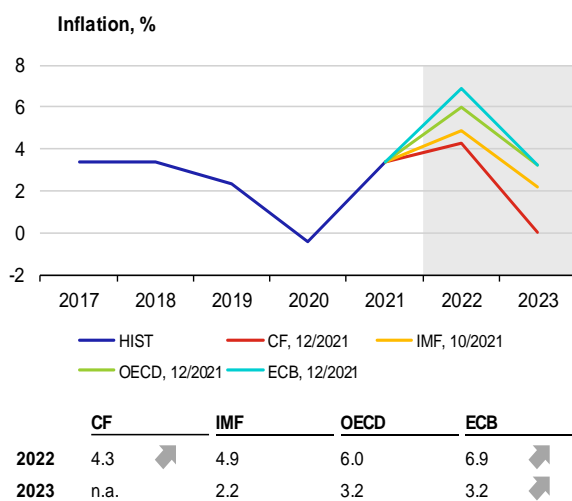
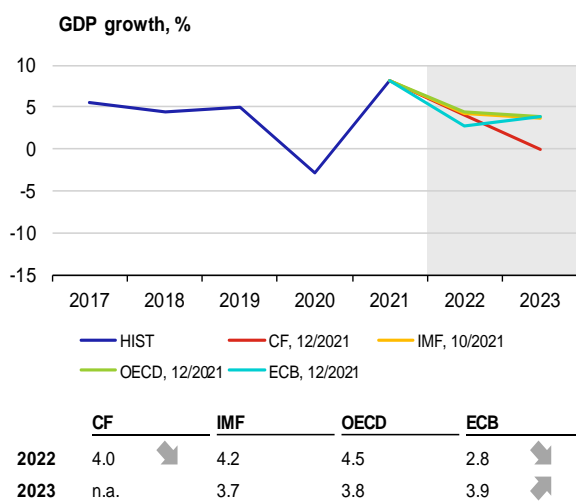


	CF	IMF	OECD	ECB
2022	4.4	5.2	3.6	4.2
2023	n.a.	4.0	4.8	4.0

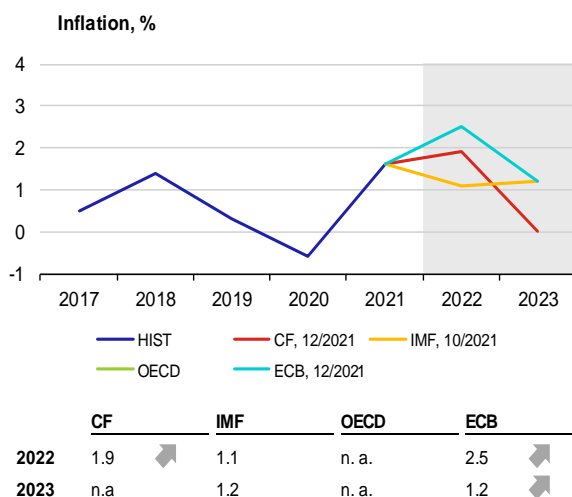
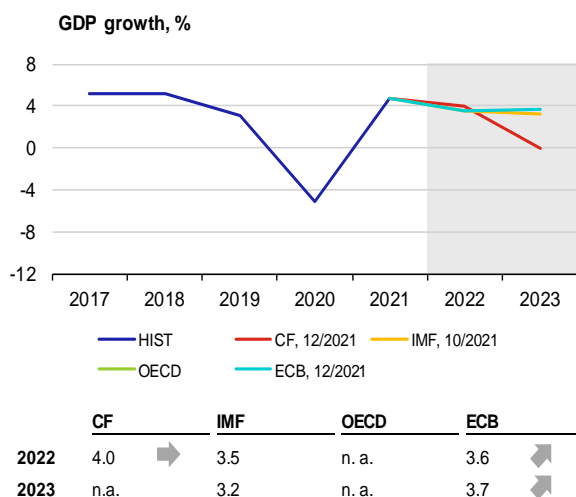


	CF	IMF	OECD	ECB
2022	4.3	3.0	4.9	6.1
2023	n.a.	2.2	2.7	2.9

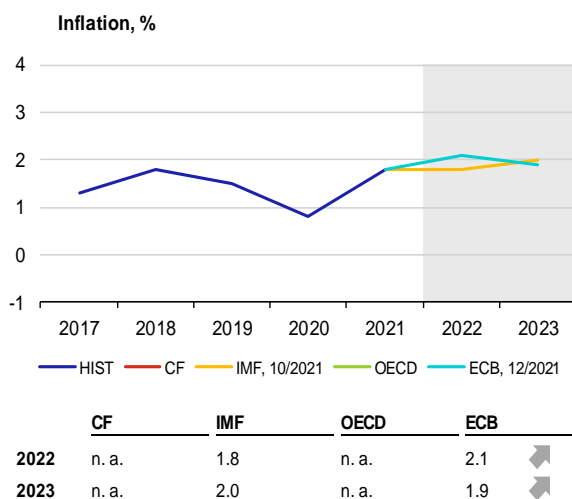
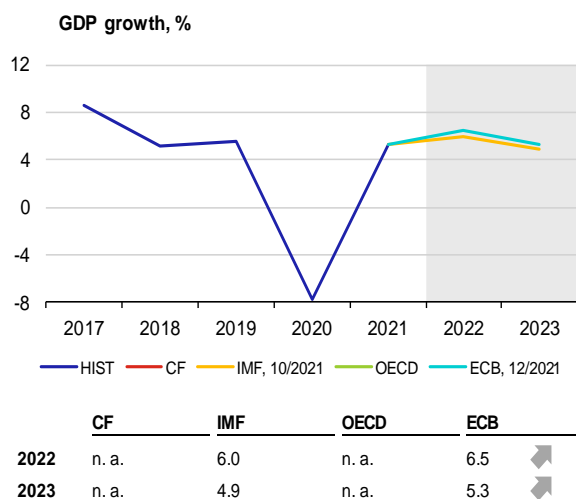
Estonia



Cyprus



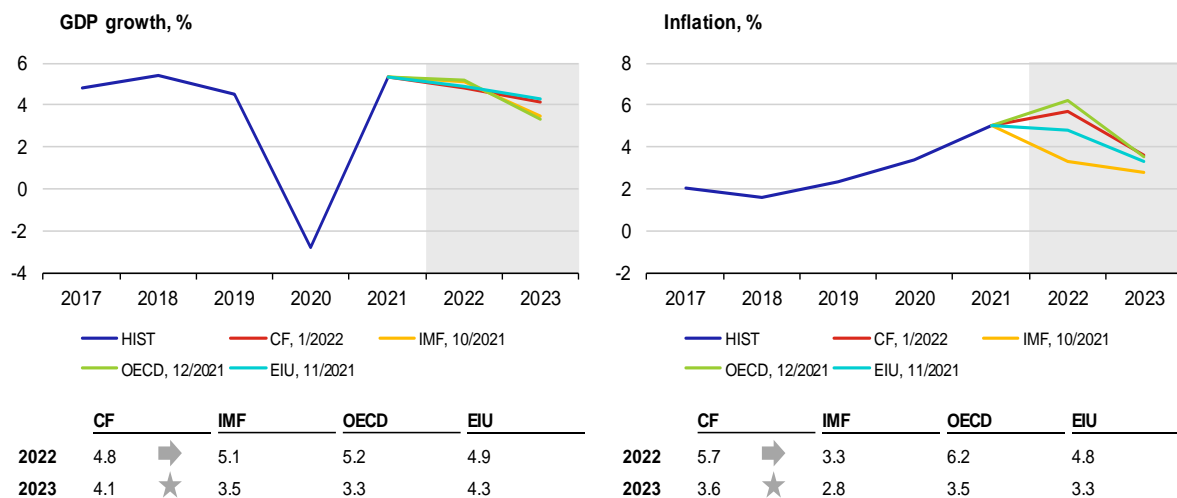
Malta



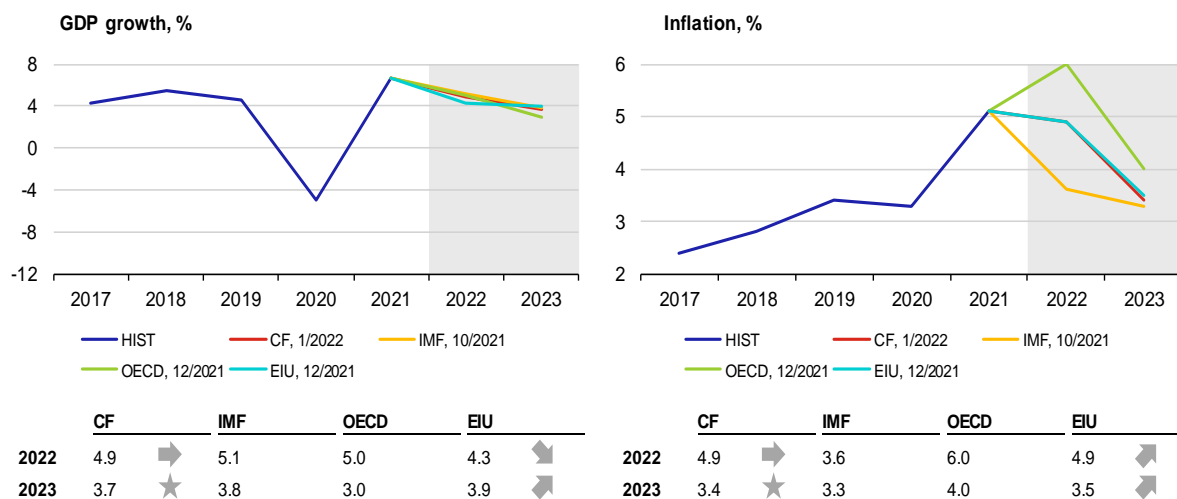
Ddd

A5. GDP growth and inflation in other selected countries

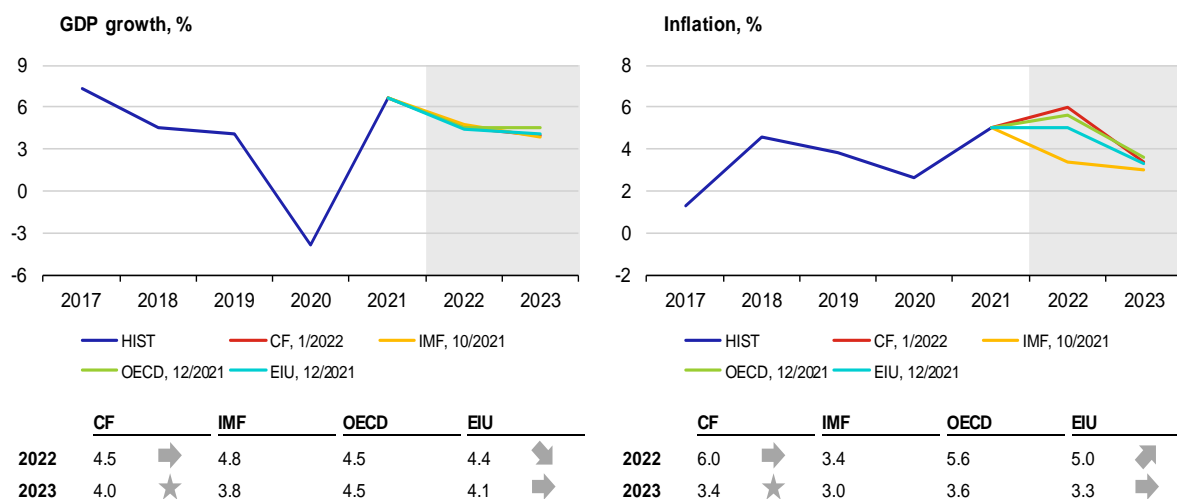
Poland



Hungary



Romania



A6. List of abbreviations

AT	Austria	IFO	Leibniz Institute for Economic Research at the University of Munich
bbl	barrel	IMF	International Monetary Fund
BE	Belgium	IRS	Interest Rate swap
BoE	Bank of England (the UK central bank)	ISM	Institute for Supply Management
BoJ	Bank of Japan (the central bank of Japan)	IT	Italy
bp	basis point (one hundredth of a percentage point)	JP	Japan
CB	central bank	JPY	Japanese yen
CBR	Central Bank of Russia	LIBOR	London Interbank Offered Rate
CF	Consensus Forecasts	LME	London Metal Exchange
CN	China	LT	Lithuania
CNB	Czech National Bank	LU	Luxembourg
CNY	Chinese renminbi	LV	Latvia
ConfB	Conference Board Consumer Confidence Index	MKT	Markit
CXN	Caixin	MT	Malta
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	OECD	Organisation for Economic Co-operation and Development
ECB	European Central Bank	OECD-CLI	OECD Composite Leading Indicator
EE	Estonia	OPEC+	member countries of OPEC oil cartel and 10 other oil-exporting countries (the most important of which are Russia, Mexico and Kazakhstan)
EIA	Energy Information Administration	PMI	Purchasing Managers' Index
EIU	Economist Intelligence Unit	pp	percentage point
ES	Spain	PT	Portugal
ESI	Economic Sentiment Indicator of the European Commission	QE	quantitative easing
EU	European Union	RU	Russia
EUR	euro	RUB	Russian rouble
EURIBOR	Euro Interbank Offered Rate	SI	Slovenia
Fed	Federal Reserve System (the US central bank)	SK	Slovakia
FI	Finland	UK	United Kingdom
FOMC	Federal Open Market Committee	UoM	University of Michigan Consumer Sentiment Index - present situation
FR	France	US	United States
FRA	forward rate agreement	USD	US dollar
FY	fiscal year	USDA	United States Department of Agriculture
GBP	pound sterling	WEO	World Economic Outlook
GDP	gross domestic product	WTI	West Texas Intermediate (crude oil used as a benchmark in oil pricing)
GR	Greece	ZEW	Centre for European Economic Research
ICE	Intercontinental Exchange		
IE	Ireland		
IEA	International Energy Agency		

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

Contact:
ODBOR KOMUNIKACE SEKCE KANCELÁŘ
Tel.: 224 413 112
Fax: 224 412 179
www.cnb.cz