Global Economic Outlook ——— August 2023





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Cut-off date for data

10 August 2023

CF survey date

6 August 2023

GEO publication date

17 August 2023

Notes to charts

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

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

Leading indicators are taken from Bloomberg and Refinitiv Datastream.

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

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I. — Introduction

I. Introduction

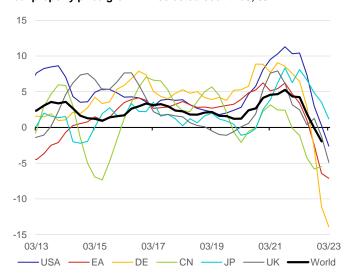
The global economy is on a path towards slightly more subdued economic growth and normalisation of inflation pressures. According to the IMF summer forecast, the global economy will grow by 3% this year and the next, with developed economies growing by roughly half that rate and developing economies by 4%. As regards advanced countries, especially the euro area is pushing economic growth towards lower levels, due mainly to a decline in economic performance in Germany this year. Global annual inflation is expected to decline to 6.8% and 5.2% this year and the next respectively. However, the upside risks to inflation in developed economies still include a tight labour market but also an increased saving rate in many developed, mainly European, economies (which is discussed in the thematic article of the

issue). The fiscal situation of many developed countries has not improved in the post-Covid period. Among other things, this has led to a rating downgrade of the USA by Fitch from the highest AAA grade to AA+. There are now only nine countries (only one of them, namely Germany, being a globally important economy) which have the highest rating by the three largest agencies.

The key central banks further tightened monetary policy in late July and early August, coming closer to a notional interest rate peak. The Fed, the ECB and the BoE raised their monetary policy rates by 0.25 pp as expected, so the tightest monetary policy settings remain in the USA (the 5.25–5.50 band). The ECB also decided unexpectedly not to remunerate the minimum reserves, which had been remunerated by the deposit rate. Monetary policy can be expected to start easing during 2024.

The chart in the current issue shows property price growth in real terms. In the past ten years, annual property price growth was 5.6% on average in nominal terms (4.5% in developed economies and 5.9% in

Real property price growth in selected countries; %



Source: BIS

Note: The latest data available for China and the world are as of 2022

Q4. The data for other mentioned regions are as of 2023 Q1

developing economies) and 2.4% in real terms. The surge in inflation last year caused property price growth to turn negative, with a few exceptions (e.g. Japan). The July <u>survey by the Ifo Institute</u> shows that the surveyed experts expect property price growth to increase even higher over the next ten years, due mainly to high demand, low construction, but also migration.

The current issue also contains an analysis: "The saving rate in the euro area and the Czech Republic – potential for growth in consumption". The article compares growth in household consumption, the saving rate and investment in the euro area (its strongest economies) with that in the Czech Republic. The analysis describes that, unlike in the pandemic period, the rise in the saving rate during the energy crisis was due mainly to precautionary motives. The article also expects the increased interest rates to put the brakes on the decline in households' propensity to save in the years ahead.

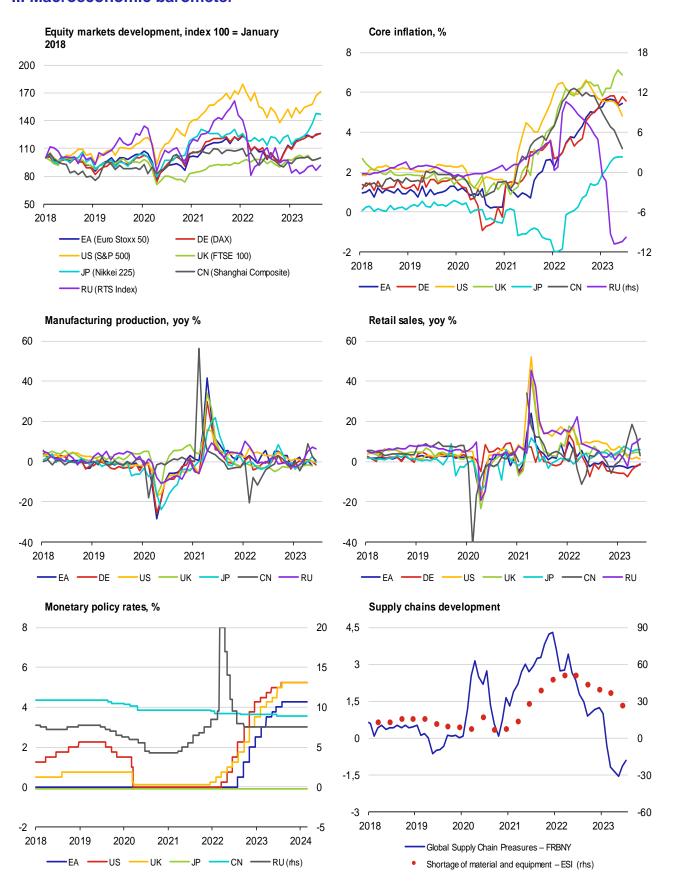
GEO barometer for selected countries

		EA	DE	US	UK	JP	CN	RU
GDP (%)	2023 2024	0.6	-0.3 • 0.9	1.9	0.2	1.4	5.3 1 4.7 1	0.7
Inflation (%)	2023 2024	5.5	6.0	4.1 ⇒ 2.6 ⇒	7.3 1 3.0 1	3.0	0.9	5.0 1 4.8
Unemployment (%)	2023 2024	6.6 ♦ 6.8 ♦	5.6 > 5.6 >	3.7 4 .4	4.1 → 4.1 →	2.6	3.5 3 .4 3 .4	3.3
Exchange rate (against USD)	2023 2024	1.12	1.12		1.29	130.2 122.4	7.03 1 6.80	89.8

Source: Consensus Forecasts (CF)

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

II. Macroeconomic barometer

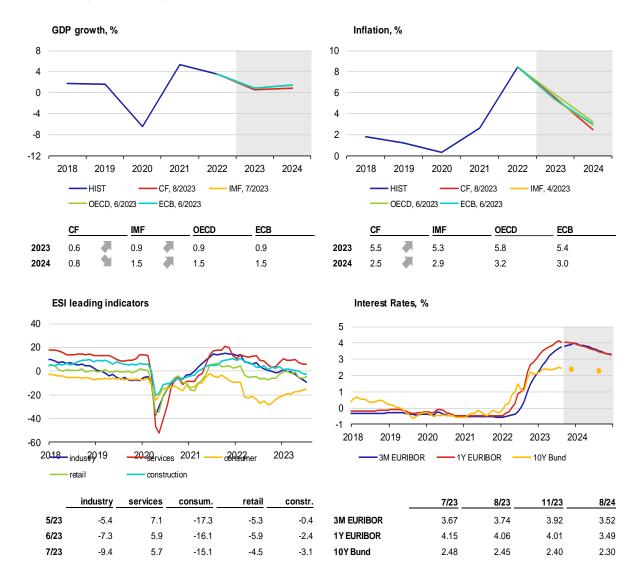


Source: Refinitiv Datastream, European Commision.

III.1 Euro area

Favourable economic results in the spring period have shifted the outlook slightly higher. According to a flash estimate, the euro area economy rose by 0.3% in Q2 (0.6% year on year). In annualised terms, this growth was broadly in line with the growth potential of the euro area, which gives a hope that the recent stagnation period has been overcome. The favourable result is due mainly to a recovery in domestic demand. Retail sales recorded growth mainly in May (after revision). They decreased again slightly in June but their annual fall has been gradually moderating. As regards large economies, France and Spain (which avoided the energy crisis and is in a very good shape) grew at solid rates. The German economy was flat in Q2 (thereby leaving technical recession), while the Italian economy recorded a decline. Information from various surveys is less favourable. The composite PMI keeps decreasing (48.9 in July) due to a falling number of new orders especially in manufacturing. Sentiment according to the ESI is worsening slightly further in both industry and services. Conversely, retail and consumer sentiment saw an improvement. According to the ECB President, the labour market is robust. Unemployment dropped to a new historical low (6.4%) and new jobs are being created mainly in the services sector. The updated IMF forecast expects euro area GDP to grow by 0.9% and 1.5% this year and the next respectively. CF analysts remain significantly more cautious, forecasting 0.6% and 0.8% respectively.

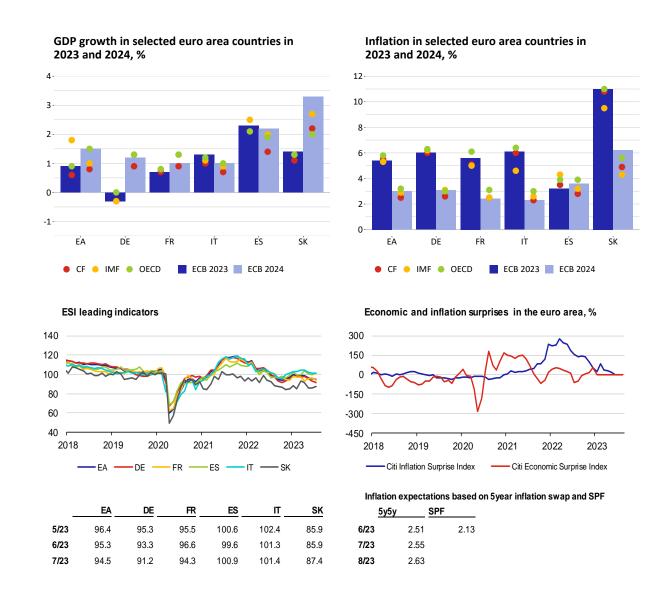
Inflation pressures in the euro area persist and are already of mainly domestic origin. As expected, the ECB raised key interest rates again at its July meeting (for the ninth time in a row). However, the biggest monetary policy tightening in its history is expected to slow in the months ahead. The central bank is entering a period when the tuning of rates is likely to be finer and there might thus be pauses in the tightening. Inflation remains high above the inflation target and is declining only gradually (according to a flash estimate, it slowed to 5.3% in July). It is persistent mainly in its core (5.5%), which is hence now above the headline figure. Food price inflation also remains high. According to estimates, inflation will not reach the ECB's 2% target even next year.



III.2 Germany

According to a flash estimate, the German economy stagnated in Q2, recovering only slightly after the recession. Zero quarterly GDP growth followed two quarters of an economic decline (down by a revised 0.1% in 2023 Q1 and by 0.4% in 2022 Q4). Household consumption stabilised after the weak six months in the winter but the German economy is being dampened by higher interest rates, high inflation and muted demand from abroad. Moreover, there are signs that the second half of the year will be weak, too. The composite PMI fell in July (48.5), returning to the contraction band after half a year. This is the first decline in private sector activity this year. Growth in activity in the services sector decreased (52.3 compared to 54.1 in June) amid an increasing decline in activity in manufacturing sector (38.8 compared to 40.6 in June). According to the Ifo and ZEW indicators, business sentiment has been worsening for several consecutive months as the recovery in the German economy is very uncertain and slow. The businesses surveyed worsened their assessment of both the current situation and the outlook. Following a previous slight decline, consumer confidence has so far stabilised. The new CF, IMF and Bundesbank forecasts identically agree on a decline in GDP of 0.3% this year, while introducing a more pessimistic outlook for 2024, implying growth of around 1%.

Following a previous pick-up, annual consumer price inflation slowed slightly in July but remains high. Harmonised inflation was 6.5%. It remains elevated due mainly to persistent above-average growth in food prices. However, even growth in energy prices was again somewhat higher that in the previous months due to base effects. Core inflation excluding food and energy prices also slowed slightly but remains above 5%. The new CF and Bundesbank forecasts are generally somewhat more positive, suggesting growth in consumer prices at 6% and around 3% this year and the next respectively. Growth in industrial producer prices slowed to almost zero (0.1%), recording the smallest annual increase since December 2020. Prices dropped again in month-on-month terms, by 0.3%.

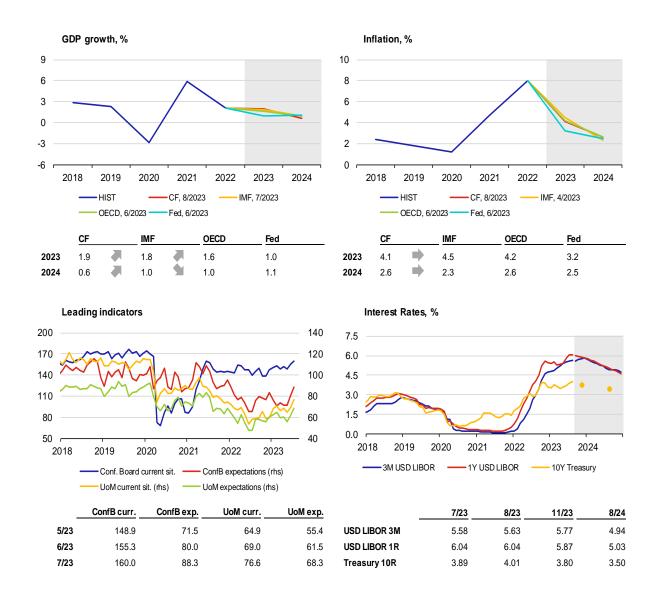


III.3 United States

Presiden Biden designated a "national monument" in the surroundins of the Grand Canyon, despite mining firms' objections. In 2012, the Obama administration banned new uranium mining claims near the Grand Canyon for the next 20 years. The current president has thus turned temporary protection into permanent. The national monument area is estimated to contain around 1.3% of national uranium reserves. Mining firms object that this reduces possible energy production and increases dependence on Russia. The USA currently produces 20% of electricity using nuclear resources.

As expected by market and analysts, the Fed increased the interest rate target range by 0.25 pp to 5.25–5.5% at its July meeting. According to Chairman Powell, it may be increased further at the meeting in September, given the newly available data. The central bank raised the rates due to concerns about inflation persistence. However, market outlooks do not expect a further rate increase, perceiving the current level as the peak. At the same time, the Fed Chairman's speech was assessed as rather "dovish". In July, inflation reached 3.2% and core inflation was 4.7% in year-on-year terms. The labour market showed some signs of a cooling as non-farm payrolls rose by 187,000, i.e. less than expected, yet the unemployment rate remains low at 3.5%.

Faster GDP growth in Q2 exceeded expectations, postponing the expected economic recession by a further six months. The growth stood at 2.4% in Q2 (in annualised quarterly terms) and was due largely to expansionary fiscal policy of the incumbent president, which is, however, hampering the central bank's efforts to reduce inflation. Retail sales grew by a mere 0.2% in June, which suggests a somewhat slower pace of growth in household consumption. On the other hand, prices of sea transport went up in early August and firms increased their capital expenditure in Q2, which might suggest expectations of steady demand. In July, the University of Michigan consumer confidence index also reached the highest level since October 2021.



III.4 China

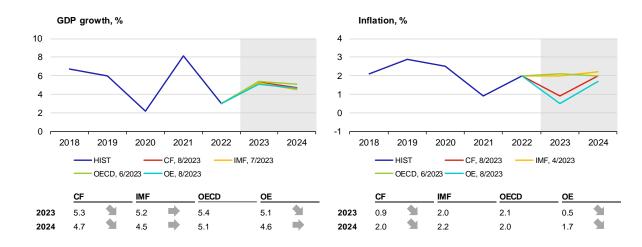
Economic growth reached 6.3% year on year in Q2, a significant increase from a quarter earlier (4.5%). However, the year-on-year growth rate was largely due to base effects, as China's best-performing regions (including Shanghai) were still subject to lockdowns in spring 2022. Unlike in the first few months of the year, growth was driven by manufacturing in Q2. By contrast, growth in retail sales slowed from the double-digit May outcome to slightly above 3% year on year in June.

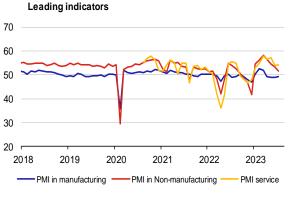
Business confidence as expressed by the Caixin set of indices is showing opposite dynamics than actual economic activity. While PMI in manufacturing fell below the 50-point threshold to 49.2 points in July and the non-manufacturing PMI approached it (from 53.2 in June to 51.5 in July), PMI in services strengthened to 54.1 points in July.

Unemployment in urban areas remains slightly above 5% of the working population according to official data, representing a clear improvement over the previous pandemic years. However, youth unemployment is developing unfavourably. It is now above 21% in the 16–24 age category, with a tendency to rise further.

Consumer price inflation was slightly negative (-0.3%) in year-on-year terms in July, due mainly to falling transport prices. Commercial property prices in China's largest 70 cities also followed a deflationary trend. Residential property prices were broadly flat in July. However, there are signs that the deflationary period is coming to an end: the July month-on-month figure was positive (0.2%) and core inflation also increased (0.8% year on year).

While the foreign trade balance remains positive, exports and imports have declined. The year-on-year decrease in exports to the USA and Europe (due to geopolitical factors and the economic slowdown there) as well as the ASEAN countries deepened. The opposite dynamics of exports to Russia failed to reverse the overall trend. Imports also declined, albeit at a somewhat slower pace, but with the same tendency. Only energy commodities, steel and some food items (e.g. soybeans from Brazil) recorded an increase in import volumes.





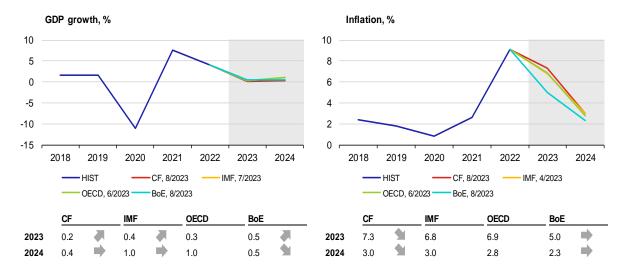
_	PMI manuf.	PMI in Non-manufacturing	PMI service
5/23	48.8	54.5	57.1
6/23	49.0	53.2	53.9
7/23	49.3	51.5	54.1

290 230 170 2018 2019 2020 2021 2022 2023

Source: Bloomberg

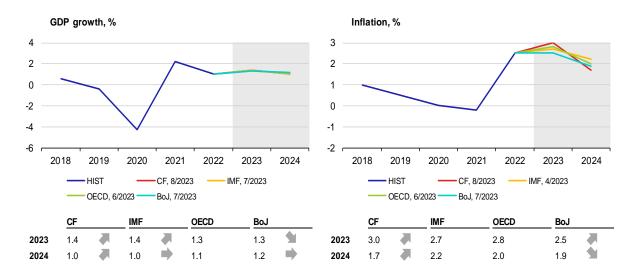
III.5 United Kingdom

The growth of the UK economy accelerated slightly in Q2, while inflation reached a 15-month low. GDP rose by 0.2% quarter on quarter, owing mainly to the resilience of consumption so far despite increasing interest rates, which picked up to 5.25% due to a further monetary policy tightening in August. Predictions point to fragile and relatively weak economic activity (a slowdown in expenditure and investment). The IMF and the BoE expect growth to reach around 0.5% this year and not exceed 1% in 2024. The CF forecasts are even more pessimistic. Consumer and business sentiment is showing signs of weakness, as it decreased in July. Moreover, the composite PMI also declined in July (50.8) and growth in the private sector was thus the weakest since January. Annual consumer price inflation slowed in June (7.9%) thanks to a drop in fuel prices and slowing food price inflation, while core inflation remaining high (6.9%). According to the BoE's new forecast, which is more positive than the rest, inflation will slow to levels close to 5% by the end of this year and reach the 2% target in early 2025. However, there are concerns of possible higher wage growth and labour market tightness.



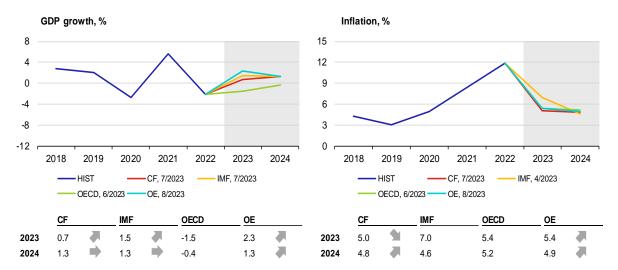
III.6 Japan

The Japanese central bank cautiously tightened monetary conditions after inflation in Japan exceeded that in the USA. Led by new governor Kazuo Ueda, the BoJ de facto widened the interest rate band for ten-year government bond yields in July, which it has controlled using interventions since 2016. In a cautious communication shift towards greater flexibility, the central bank now refers to the original ceiling of 0.5% as the "reference" yield but has shifted the "rigid limit" defended using unlimited interventions to 1%. Amid still negative short-term rates, this may in practice be the end of rigid yield curve control. Despite the psychological importance of this step, the market's reaction was somewhat indecisive. This was also aided by the BoJ, which refuses to interpret this as a major change and launched unplanned interventions several times after the ten-year benchmark yield exceeded a nine-year high above 0.6%.



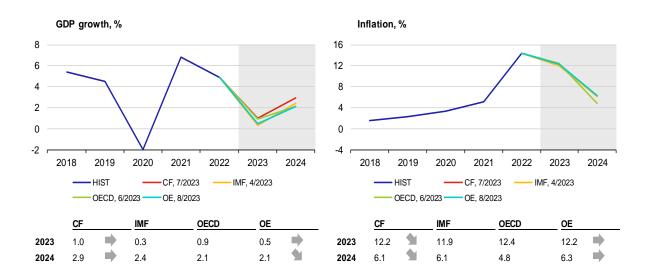
III.7 Russia

The Russian central bank is likely to raise interest rates at its September meeting. Consumer price inflation in Russia is accelerating (4.3% year on year in July compared with 3.3% in June) and is above the central bank's target. The reasons include a strengthening of domestic demand and rapid depreciation of the Russian rouble in the last month. Analysts expect inflation to peak at around 6% roughly in November. A flash estimate of GDP growth in Q2 showed that the economy grew by 4.9% year on year. However, this is due in part to a low comparison base, as the strongest sanctions were imposed by Western countries in 2022 Q2. The public finance deficit reached 1.8% of GDP in the first seven months of this year. Income from oil and gas (USD 43.1 billion) fell by more than 40% compared with last year. However, other income (USD 106.2 billion) picked up by almost 20%.



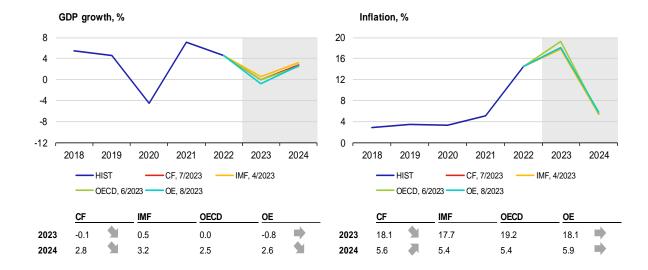
III.8 Poland

Inflation in Poland is falling gradually but is still far from the target. Annual consumer price inflation eased further from 11.5% in June to 10.8% in July and is thus the lowest since February 2022. The decrease was due mainly to falling food prices and fuel prices. In month-on-month terms, consumer prices even declined slightly by 0.2%. However, the return to the NBP's inflation target may be complicated by positive growth in real wages, supported above all by a tight labour market (unemployment is the lowest since 2019), a rising minimum wage pushing up wage expectations, and persistent labour shortages. A survey by the NBP has also shown that firms are willing to raise wages further and real wage growth can thus be expected until 2025. A property market recovery is another source of concerns that inflation may not return to the target quickly enough. It is reflected in an increase in housing prices (16.7% year on year in July compared with 14.6% in June). Poland is thus still facing a difficult road back to the inflation target.

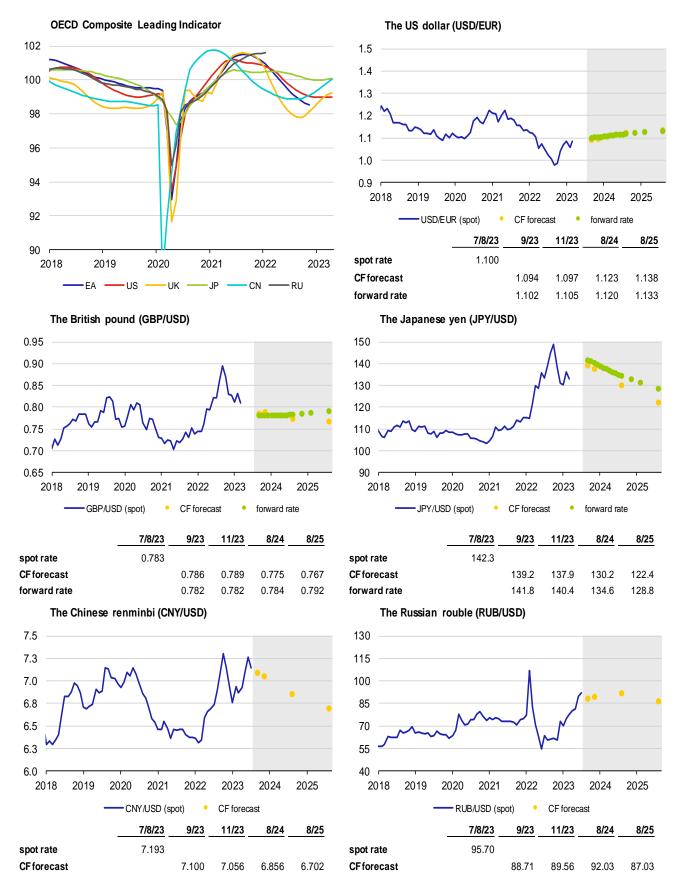


III.9 Hungary

The latest data from the Hungarian economy are in line with market expectations. Headline and core inflation (17.6% and 17.5% year on year respectively) fell below 20% in July. The two indicators had last been below that level in August 2022. Similarly, month-on-month growth in the price level has been falling for several months now. The decrease in consumer price inflation is supported mainly by declining commodity prices on global markets and falling domestic demand. This is in line with the MNB forecast. In the context of a favourable risk environment, the central bank continues to ease the tight monetary conditions gradually, reducing the upper boundary of the interest rate band and the overnight deposit rate by 100 basis points in July. The key interest rate was unchanged at 13% and remains the highest in the EU. The current developments are in line with market expectations. CF and OE analysts have therefore revised their outlooks for GDP growth and inflation by just 0.1 pp.



IV. Leading indicators and exchange rate outlooks

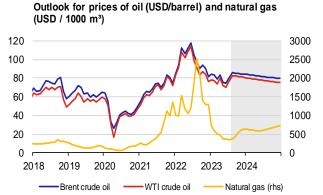


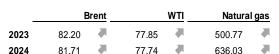
Note: Exchange rates as of last day of month. Forward rate does not represent outlook; it is based on covered interest parity, i.e. currency of country with higher interest rate is depreciating. Forward rate represents current (as of cut-off date) possibility of hedging future exchange rate.

V.1 Oil

The Brent crude oil price has been rising apace since late June and exceeded USD 85/bbl in early August. This is due to production cuts in Saudi Arabia and Russia, but also strong demand on the physical market. According to the EIA, the latter will reach new historical highs in the summer months owing to a strong motoring season, the use of oil in electricity production and rising activity in Chinese petrochemical industry. Stocks of petrol and diesel in the USA and Europe are below average and refinery production is lagging behind demand growth due to unplanned outages, a shortage of heavy sour oil (from Saudi Arabia) and hot weather (which reduces cooling power and thereby the production capacity of refineries). This is causing refinery margins to rise significantly across regions. Decreasing inflation and expectations that the interest rate tightening cycle of central banks may be nearing its end are fostering an improvement in macroeconomic sentiment and the global demand outlook for the second half of this year. Investor sentiment has therefore improved as well. Investors stopped betting on a decline in oil prices and started to increase their net long positions in July. Prices of oil (and other commodities) were supported by a sharp depreciation of the dollar in July (however, the dollar returned almost to the original level in the rest of the month) and expectations of further government support for the Chinese economy.

The market curve again shifted up markedly over the entire horizon in mid-August compared to the previous forecast, but remains downward-sloping, signalling a Brent price of USD 84.3 and 79.7/bbl at the end of 2023 and 2024 respectively. The EIA forecast has risen especially for the rest of 2023, when prices should stay high due to rapidly falling global stocks. Brent prices should rise to USD 88/bbl in November and stay there until March 2024. Growing global production should then lead to a gradual fall to USD 85/bbl at the end of 2024. The August CF raised its 1Y forecast by about USD 2 to USD 82.7/bbl.

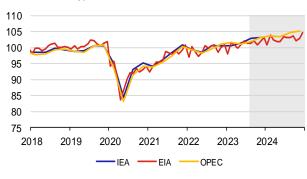




Industrial stocks of oil and oil products in OECD (bil. barrel)

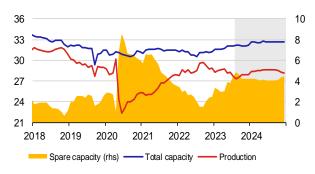


Global consumption of oil and oil products (mil. barrel / day)



_	IEA	EIA	OPEC
2023	102.00	101.20	102.00
2024		102.80	104.25

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



_	Production	Total capacity	Spare capacity
2023	28.06	31.95	3.89
2024	28.50	32.64	4.15

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

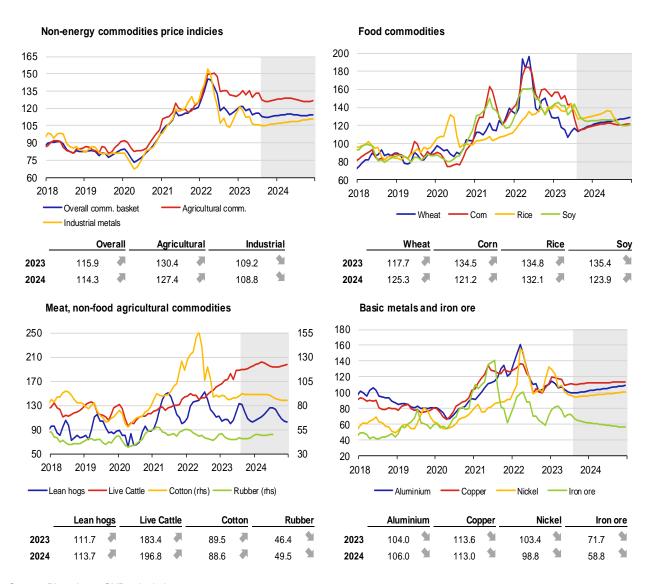
Note: Oil price at ICE, average natural gas price in Europe – World Bank data. Future oil and gas prices (grey area) are derived from futures. Industrial oil stocks in OECD countries – IEA estimate. Production and extraction capacity of OPEC – EIA estimate.

V.2 Other commodities

Gas storage filling rates in Europe are above average, but the price of natural gas at the TTF has been highly volatile. The gas price declined in the first half of July on account of weaker demand in industry and a moderation of hot weather. An expected renewal of supplies from Norway also had a favourable effect. A temporary price increase in the second half of July was due to higher demand from the energy industry owing to lower production of wind power. Prices rose sharply in early August due to concerns about disruptions to LNG supplies from Australia because of strikes in the energy industry there. This could foster higher interest of Asian customers in the spot market. Coal prices in Europe edged down further owing to weak demand in July. Excess stocks are being exported from Europe to Asia, where demand and prices are higher.

The food commodity price index was broadly flat in July; in mid-August, it fell to the lowest level since the end of 2021. Wheat prices are responding to the situation in Black Sea ports with short-term increases, but otherwise are showing an only slightly rising trend, even looking ahead. Prices of corn and rice, and partly also soy, recorded significant decreases in July. The price of sugar also fell slightly, whereas prices of cocoa and pork continued to grow. Beef prices were flat at an all-time high. The index outlook is broadly flat until the next harvest. After that, the index should return to a downward trend.

The industrial metal price index broadly stabilised following a sharp decline in May and its outlook is rising. Global industrial production is still not showing signs of a significant recovery (the J.P.Morgan Global Manufacturing PMI was flat at 48.7 in July and has been in the contraction band for 11 months now). Therefore, all the index components and the price of iron ore recorded only small movements in reaction to changes in stocks at the LME or the evolution of the dollar exchange rate.



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.

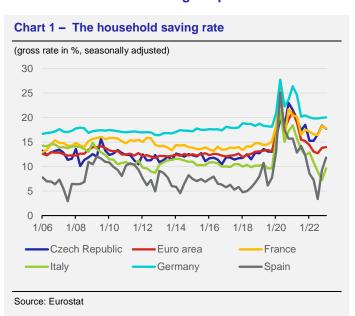
The saving rate in the euro area and the Czech Republic – potential for growth in consumption?¹

This article compares growth in household consumption, the saving rate and investment in the euro area and its largest economies with that in the Czech Republic. The comparison with euro area countries in a similar situation reveals that Czech households spent much less in response to the energy crisis amid a significantly higher saving rate relative to the long-term average. But Czech households did not channel their savings into housing, instead preferring to invest in liquid assets, probably for precautionary reasons. Their interest in financial products was boosted by rising interest rates. There are similar trends in a number of large euro area economies, where households' current high propensity to save can be expected to decline. However, the decline will be hindered by higher interest rates in the near future in the euro area, where the policy thightening cycle is peaking only now. By contrast, as interest rates in the Czech Republic probably reached their top already last year, Czech households' current high propensity to save is opening up room for a faster recovery in consumption growth than in the euro area.

The saving rate varies across euro area countries but rose in all of them during the pandemic

The saving rate differs historically across euro area countries (see Chart 1). Among the large euro area economies, it is traditionally highest in Germany (well above the euro area average) and lowest in Spain. In the Czech Republic2 it was near the euro area average of around 12% until the onset of the pandemic. Consumers' attitude to saving in different countries has also differed across the crises that have hit the world since the start of the new millennium – the Global Financial Crisis (GFC) after the collapse of Lehman Brothers (2009), the Covid-19 pandemic (2020-2021) and the energy crisis and the escalation of international tensions following Russia's invasion of Ukraine (2022). For example, as Chart 1 shows, the rise in the saving rate seen during the GFC was practically unobservable compared to recent crises. This can probably be attributed to the indirect link between uncertainty in the financial system and the approach of individual economic agents (households and firms) to creating reserves.

Numerous euro area countries saw sizeable growth in savings during the Covid-19 lockdowns, especially after the first wave of the pandemic (see Chart 1). This growth was far higher than during the 2009 GFC. The rise in the saving rate was driven by forced unwanted savings created by households because many types of goods and especially services were not available to buy. Examples included eating out and travel, as businesses were closed under antipandemic measures.3 Fiscal transfers stabilised household income, so the forced saving merely represented consumption deferred to the future. The saving rate in Germany surged above 27% in 2020 Q2 but started to decline towards the long-term average after the lockdowns as households made deferred purchases.



Glossary

The gross saving rate of households is defined by Eurostat as gross savings divided by gross disposable income adjusted for the change in the net equity of households in pension funds reserves. Gross savings are the part of gross disposable income that is not spent as final consumption expenditure. This rate is calculated on the basis of quarterly sectoral accounts data by institutional sector.

The gross investment rate of households is defined by Eurostat as gross fixed capital formation divided by gross disposable income adjusted for the change in the net equity of households in pension funds reserve. Household investment consists mainly in purchasing and renovating dwellings. This rate is calculated on the basis of quarterly sectoral accounts data by institutional sector.

¹ Written by Soňa Benecká and Luboš Komárek. The views expressed in this article are those of the authors and do not necessarily reflect the official position of the Czech National Bank.

² The Czech saving rate is discussed by Michálek and Šarboch in Reasons for households' current increased propensity to save.

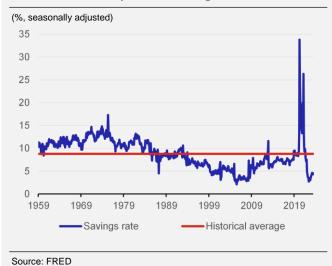
³ The dominant effect of forced savings during the first wave of the pandemic is confirmed by several studies, for example Dossche and Zlatanos (2020) and Dossche, Krustev and Zlatanos (2021).

VI. —— Focus 15

Box 1 – The post-pandemic release of savings in the USA

Like in Europe, private savings in the USA surged in response to the pandemic lockdowns, but unlike in Europe, the saving rate did not rise in winter 2022/2023. In contrast to previous recessions, the US government responded to the pandemic with an unprecedented package of support measures totalling USD 5 trillion in 2020–2021. As many of these were aimed directly at households (unemployment benefit, the child tax credit and others), households' personal savings grew rapidly, far exceeding the pre-Covid trend. As Chart 1 BOX shows, the personal saving rate jumped from near 9% before the pandemic to over 20% during the strictest lockdowns. After the pandemic ended, however, it began to fall appreciably below the prepandemic historical average (8.8%). Since early 2022, it has been fluctuating below 5%.

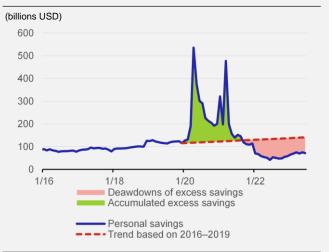
Chart 1 BOX - The personal saving rate in the USA



US households have therefore been gradually releasing their accumulated savings since 2021 Q3 and this trend is set to persist until the end of 2023. According to estimates made by the San Francisco Fed

(2023), accumulated excess savings in nominal terms totalled about USD 2.1 trillion in August 2021 (see Chart 2 BOX; green area). Initially, the drawdowns of savings were slow (USD 34 billion a month on average between September and December 2021). Later on, they accelerated to around USD 100 billion a month on average for 2022 as a whole. In 2021 Q1, they slackened again to USD 85 billion a month. Cumulative drawdowns amounted to USD 1.6 trillion in March (red area). This means that excess savings of around USD 500 billion are left in the economy. If the current pace of drawdown were to persist, excessive savings would probably continue to support household spending at least until 2023 Q4.

Chart 2 BOX – Personal savings versus the prepandemic trend



Source: Authors' calculation, St. Louis Fed

Note: Based on Abdelrahman and Oliveira (2023), seasonally adjusted.

As the USA was not affected by the energy crisis, the release of savings was able to boost household consumption in America while Europe was saving. The post-pandemic recovery of the US economy was surprisingly strong, boosted considerably by the release of savings. By contrast, Europe experienced further shocks, which made households cautious.

After the pandemic ended, however, the saving rate in euro area countries did not return to the pre-2020 level. Take Germany, for example, where the average saving rate was 17.4% in 2011–2018 but has been just below 20% since mid-2021. Similar effects can be found in other euro area countries, although the differences from the long-term average were not large in all of them. Euro area households thus responded differently to the re-opening of economies after the pandemic and have yet to return fully to their usual pre-Covid consumer behaviour. According to the theory, households were expected to release their forced savings in consumption over the course of several quarters, as was the case in the USA (see Box 1).

There are several motives for the higher rate of saving after the pandemic. High-income households are responsible for a large part of the savings created during the pandemic (the saving rate increases as we move to higher income quintiles). They are characterised by a lower marginal propensity to spend out of income or wealth than low-income households. Moreover, the rising interest rates of central banks battling unprecedentedly high inflation is providing wealthier households with a solid additional return, which *ceteris paribus* reduces their propensity to consume. Households can use higher savings to pay off their debt more quickly (cf. the ongoing refixing of mortgages in an environment of significantly higher interest rates) or to make new investments. Investments can be directed at mitigating the impacts of the growth in energy prices (insulating homes to make them more energy efficient) or at procuring personal or more cost-effective sources of energy (small solar power plants and heat pumps). Last but not least, according to Ricardian equivalence, households may save more in anticipation of future tax increases, as much of the macroeconomic stabilisation during the pandemic was done through fiscal transfers, at the cost of growth in sovereign debt.

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⁴ See Attinasi, Bobasu and Manu (2021).

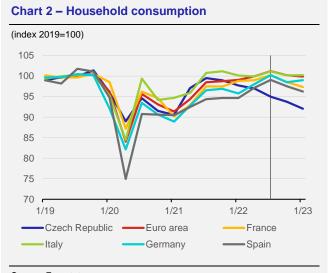
VI. --- Focus 16

Concerns about the energy crisis boosted saving rates again in many euro area countries

Euro area economies suffered another shock when Russia invaded Ukraine in February 2022. The invasion exacerbated the inflationary pressures by causing a sharp rise in prices of energy, especially electricity and gas. The real income of euro area households dropped markedly and there were growing concerns about energy expenditure as the 2022/2023 heating season - the first without gas supplies from Russia - drew near. Although countries found replacement supplies mainly from Norway and the USA, they did so at the cost of a surge in prices for both firms and consumers.

Households' demand for energy is inelastic in the short run. So, households can respond to sharp growth in energy prices by: (i) reducing their consumption of non-energy goods and services, (ii) reducing their propensity to save, or (iii) increasing their income. Most euro area households did not reduce their propensity to save. As Chart 1 shows, the saving rate of euro area households actually increased at the turn of 2023. Households in Germany saved only slightly more, while the saving rate in Spain soared again. Unlike in the pandemic period, the rise in the saving rate during the energy crisis was due mainly to precautionary motives. Households also made energy savings, consuming less gas not only because of the mild winter, but also at the cost of lower thermal comfort.

European households thus did not reduce their propensity to save in order to offset falling real income. Gradually rising interest rates in the euro area also fostered a higher saving rate. At the same time, most euro area countries introduced measures to protect households against energy poverty (such as caps on energy prices in Germany, France and the Netherlands). This reduced the magnitude of the price shock for households. By contrast, households seem to have



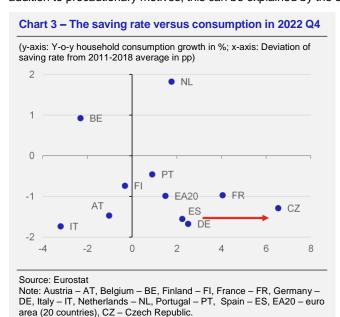
Source: Eurostat

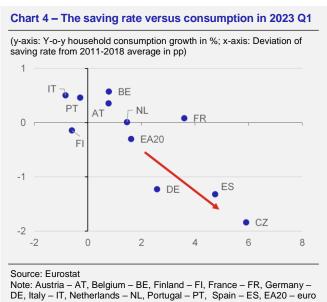
Note: Black line represents the beginning of energy crisis period. Constant prices, seasonally adjusted.

responded to the energy crisis primarily by reducing their real consumption amid surging consumer inflation. Chart 2 shows the decline in household consumption in the large euro area economies over the last two quarters (the grey area). However, the decline was smaller than that in the Czech Republic, where household consumption dropped to the 2021 Q1 level in real terms.

Czech households spent less and saved more by European comparison

The international comparison thus shows considerable similarity in households' responses to the energy crisis -real consumption is falling in most countries due to rising inflation amid higher-than-usual saving rates. However, this effect is very strong for the Czech Republic. At the end of 2022, the Czech saving rate neared levels typical of the traditionally very thrifty Germany, exceeding 18%, and in 2023 Q1 it fell only slightly. It is thus around 6 pp above the 2011–2018 average. Household consumption conversely dropped very dramatically in real terms. Not only did Czech households save more on average amid declining real income, but the purchasing power of their income also dropped rapidly. The shifts in Czech households' consumption and saving are larger than those in the euro area economies, especially in 2023 Q1 (see Chart 3). In addition to precautionary motives, this can be explained by the substantially higher Czech interest rates.





area (20 countries), CZ - Czech Republic.

Where have euro area households channelled their savings over the last three years?

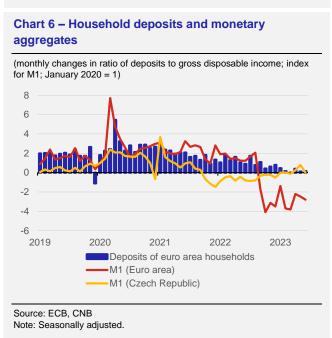
If European households saved more and consumed less during both the pandemic and the energy crisis, the question is where did they channel their savings? The precautionary motives speak mainly in favour of purchases of various financial assets, especially liquid ones. However, households may have used used part of the money to invest in housing — to purchase or renovate property. Mortgage rates were low in the euro area during the pandemic, but the ability to trade in property was limited during the lockdowns.

The gross household investment rate in the large euro area economies rose only modestly during the pandemic (see Chart 5) and fell slightly at the turn of 2023. The investment rate in the Czech Republic started to fall noticeably in late 2021, hence Czech households did not use their higher propensity to save to such an extent as to increase their tangible (fixed) investments.⁵ This again supports the hypothesis of a preference for higher-yielding financial assets in an environment of rising interest rates.

By contrast, the deposits and loans of euro area households rose sharply during the first wave of the pandemic (see Chart 6). Growth in deposits would imply greater interest of households in more liquid assets than fixed assets. This trend reversed in the second half of 2022 after the European Central Bank raised interest rates for the first time since the financial crisis and started its relatively drastic tightening cycle.6 Gradual transmission from policy rates to financial market yields then stimulated an outflow of funds into higher-yielding assets. A relative decline in the most liquid assets (M1) was also fostered by other central bank operations (a halt to reinvestment under the asset purchase programme and repayment of longer-term refinancing operations programmes). The Czech monetary aggregates data suggest a similar trend,7 although the rateraising cycle started to have an impact earlier.

Households' current high propensity to save has thus not been redirected into an increase in the fixed investment rate to any significant extent, so households may in time return to their pre-crisis shopping and current expenditure behaviour. The reasons to panic vanished and the precautionary motive to save more is disappearing, but the increased interest rate level will hinder the return to usual consumer behaviour in the quarters ahead.

Chart 5 - The household gross investment rate (in %) 18 16 14 12 10 8 6 4 2 1/06 1/08 1/16 1/20 1/22 Czech Republic Euro area Germany France Italy Spain Source: Eurostat Note: Seasonally adjusted.



Interest rates in the euro area were last at the current level at the height of the GFC. Financial markets do not expect euro area rates to start decreasing before mid-2024, while analysts are predicting that monetary policy in the Czech Republic will begin to be eased as early as this year. The current propensity to save is exceptionally high in the Czech Republic. A decline to its long-term average could lead to stronger and earlier stimulation of consumption than in most euro area countries.

For the time being, though, there are no signs of a turnaround in household sentiment. Some evidence is offered by data from a survey of German households⁸ available in the data for the Economic Sentiment Indicator (ESI). After the pandemic lockdowns, German households preferred to make major purchases and draw on their savings (see Charts 7 and 8), but in 2022 Q1 their sentiment changed and consumers started to postpone their plans to make major purchases. Their preference to save increased as well.

⁵ However, caution is warranted when interpreting saving rate data, as the time series are subject to major revisions. Previous estimates tended to indicate a flat investment rate in the Czech Republic.

⁶ See Benecká, Kábrt, Komárek and Polák (2023).

⁷ The Czech M1 time series is slightly distorted at the end of 2021 because the seasonal adjustment method has difficulty identifying effects relating to banks' contributions to the guarantee system, which vary in strength from year to year.

⁸ Indicators are available for more countries, but for methodological reasons their information value is not high and they are more difficult to compare across countries.

VI. --- Focus 18





Source: Eurostat, European Commission (ESI), data not available for euro

Note: Difference between the ESI indicators "Savings over the next 12 months" and "Now is a good moment to save", so a positive value indicates a preference for future savings and negative value a preference for current savings.

Conclusion

The household saving rate varies historically across countries, and the Covid-19 pandemic increased it significantly. The saving rate rose most of all during the Covid-19 pandemic, not only in Europe, but also in the USA and Japan.9 During the lockdowns, the elevated saving rate was mostly forced, since households could not spend on goods and services. A strong fiscal stimulus was implemented at the same time.

After the pandemic ended, Europe was hit by another crisis, this time an energy crisis. This crisis also affected the household saving rate, but the response varied from country to country. Unlike in the pandemic period, the rise in the saving rate during the energy crisis was due mainly to precautionary motives. This effect was particularly strong in the Czech Republic, where the saving rate in late 2022 neared the levels typical of the traditionally very thrifty Germany.

Interest rates in the euro area have been raised significantly over the last year, and this is starting to be reflected in households' behaviour and a higher preference to save. In the years ahead, the increased interest rates will hinder the decline in households' propensity to save. In the near future, higher interest rates may support the willingnes to save in the near future in the euro area, where the policy thightening cycle is peaking only now.

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Keywords

Saving rate, investment rate, pandemic, energy crisis

JEL Classification

D14, E21, E43

⁹ See the chart in the April 2023 issue of Global Economic Outlook.

A1. Change in predictions for 2023

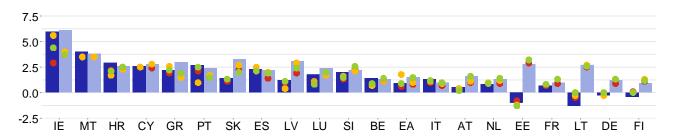
	GDP g	rowth, %							Inflation	on, %						
		CF		IMF		DECD	C	B / OE		CF		IMF		DECD	C	B / OE
EA	+0.1	2023/8 2023/7	+0.1	2023/7 2023/4	+0.1	2023/6 2023/3	-0.1	2023/6 2023/3	+0.1	2023/8 2023/7	-0.4	2023/4 2022/10	-0.4	2023/6 2023/3	+0.1	2023/6 2023/3
US	+0.3	2023/8 2023/7	+0.2	2023/7 2023/4	+0.1	2023/6 2023/3	+0.6	2023/6 2023/3	0	2023/8 2023/7	+1.0	2023/4 2022/10	+0.5	2023/6 2023/3	-0.1	2023/6 2023/3
UK	+0.1	2023/8 2023/7	+0.7	2023/7 2023/4	+0.5	2023/6 2023/3	+0.2	2023/8 2023/5	-0.1	2023/8 2023/7	-2.2	2023/4 2022/10	+0.2	2023/6 2023/3	0	2023/8 2023/5
JP	+0.2	2023/8 2023/7	+0.1	2023/7 2023/4	-0.1	2023/6 2023/3	-0.1	2023/7 2023/4	+0.1	2023/8 2023/7	+1.3	2023/4 2022/10	+0.3	2023/6 2023/3	+0.7	2023/7 2023/4
CN	-0.2	2023/8 2023/7	0	2023/7 2023/4	+0.1	2023/6 2023/3	-0.4	2023/8 2023/7	-0.1	2023/8 2023/7	-0.2	2023/4 2022/10	-0.1	2023/6 2023/3	-0.4	2023/8 2023/7
RU	+0.3	2023/7 2023/6	+0.8	2023/7 2023/4	+1.0	2023/6 2023/3	+0.8	2023/8 2023/7	-0.1	2023/7 2023/6	+2.0	2023/4 2022/10	-1.0	2023/6 2023/3	+0.4	2023/8 2023/7

A2. Change in predictions for 2024

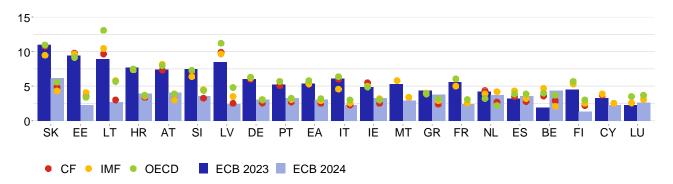
	GDP (growth, %							Inflati	on, %						
		CF		IMF OECD		CB / OE			CF		IMF		OECD		B / OE	
EA	-0.1	2023/8 2023/7	+0.1	2023/7 2023/4	0	2023/6 2023/3	-0.1	2023/6 2023/3	+0.1	2023/8 2023/7	+0.2	2023/4 2022/10	+0.2	2023/6 2023/3	+0.1	2023/6 2023/3
US	+0.1	2023/8 2023/7	-0.1	2023/7 2023/4	+0.1	2023/6 2023/3	-0.1	2023/6 2023/3	0	2023/8 2023/7	+0.1	2023/4 2022/10	+0.1	2023/6 2023/3	0	2023/6 2023/3
UK	0	2023/8 2023/7	0	2023/7 2023/4	+0.1	2023/6 2023/3	-0.3	2023/8 2023/5	-0.2	2023/8 2023/7	-0.7	2023/4 2022/10	0	2023/6 2023/3	0	2023/8 2023/5
JP	+0.2	2023/8 2023/7	0	2023/7 2023/4	0	2023/6 2023/3	0	2023/7 2023/4	+0.2	2023/8 2023/7	+1.2	2023/4 2022/10	+0.2	2023/6 2023/3	-0.1	2023/7 2023/4
CN	-0.1	2023/8 2023/7	0	2023/7 2023/4	+0.2	2023/6 2023/3	0	2023/8 2023/7	-0.1	2023/8 2023/7	+0.3	2023/4 2022/10	0	2023/6 2023/3	-0.2	2023/8 2023/7
RU	0	2023/7	0	2023/7	+0.1	2023/6	+0.3	2023/8	+0.2	2023/7	+0.6	2023/4	-0.1	2023/6	+0.6	2023/8

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

GDP growth in the euro area countries in 2023 and 2024, %



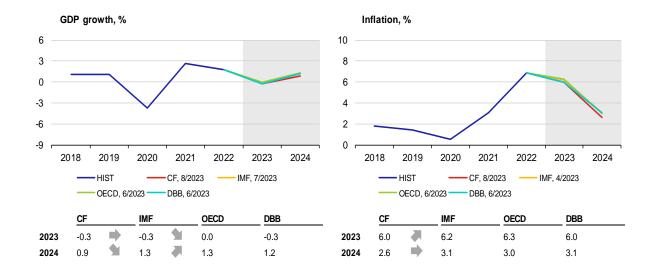
Inflation in the euro area countries in 2023 and 2024, %



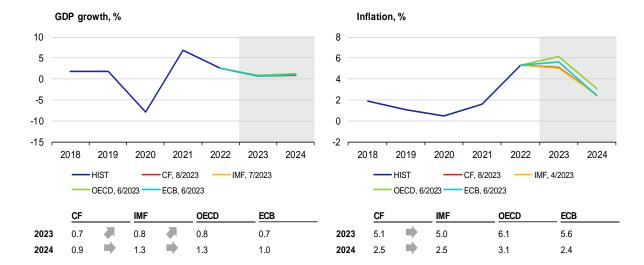
Note: Charts show institutions' latest available outlooks of for the given country.

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

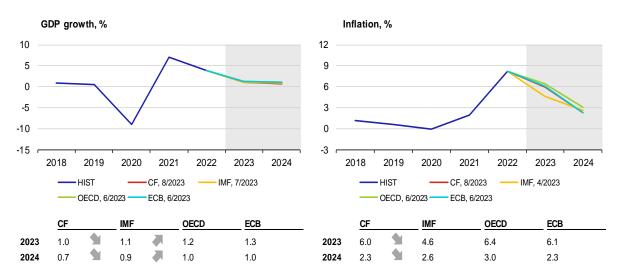
Germany



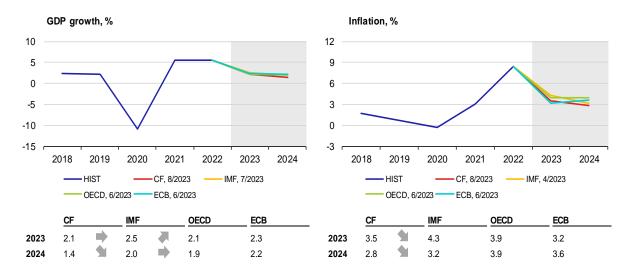
France



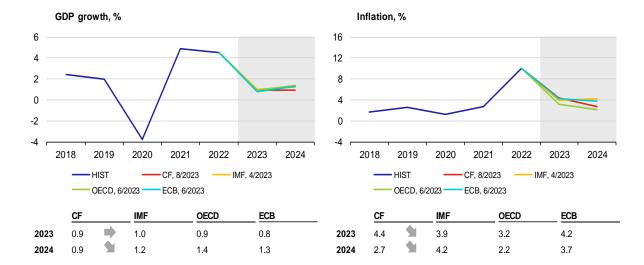
Italy



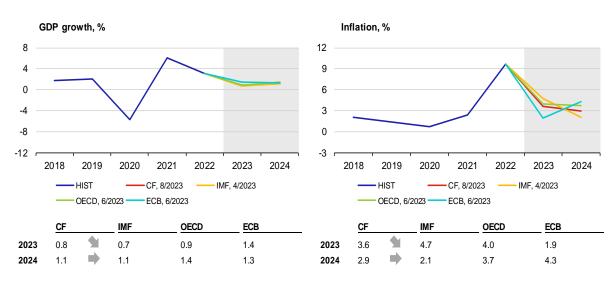
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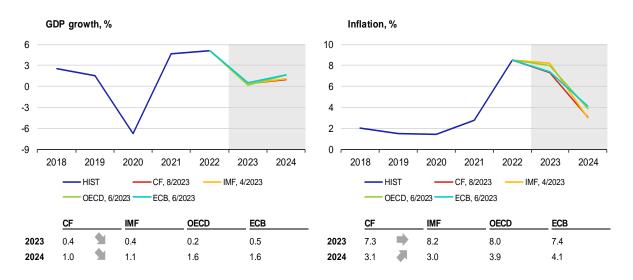
Netherlands



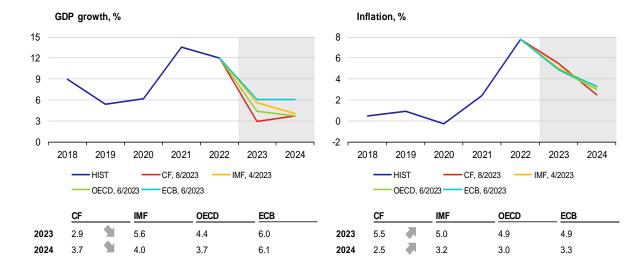
Belgium



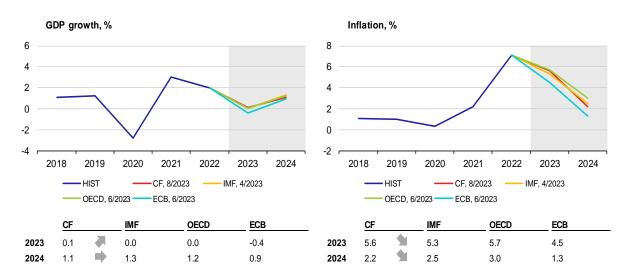
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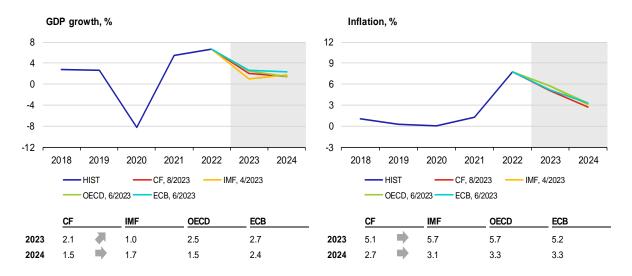
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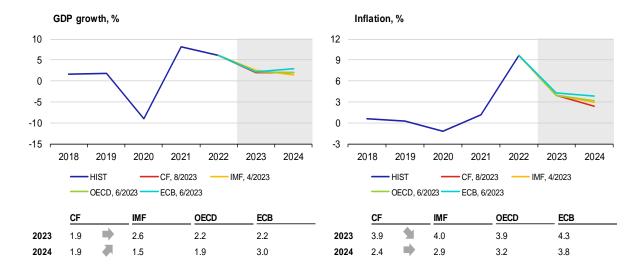
Finland



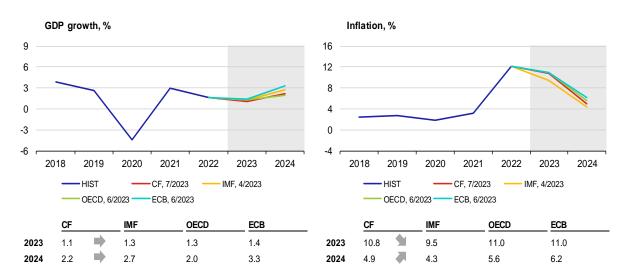
Portugal



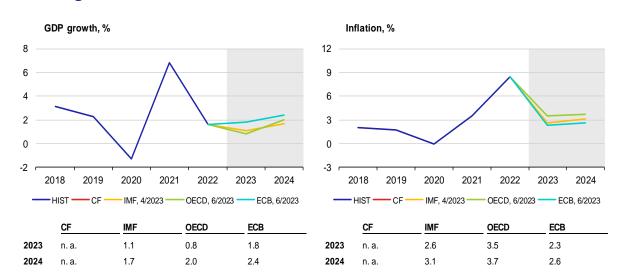
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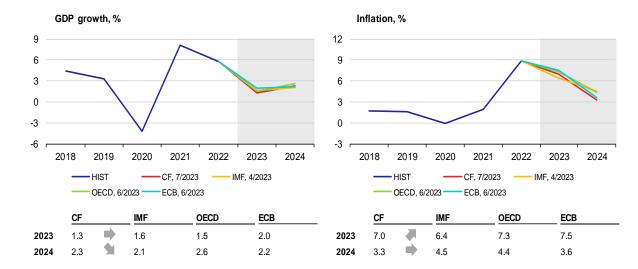
Slovakia



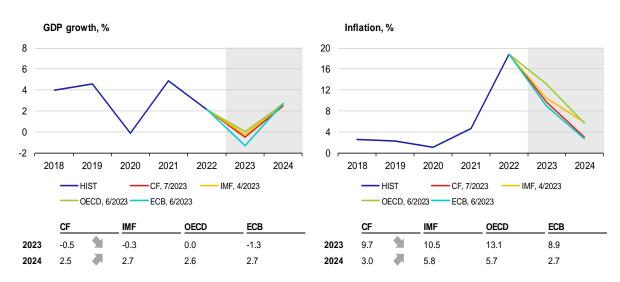
Luxembourg



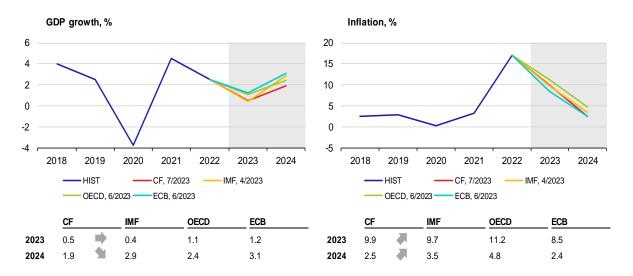
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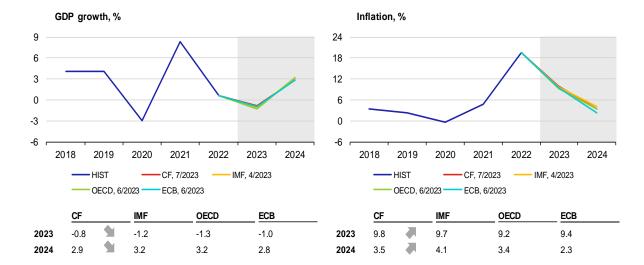
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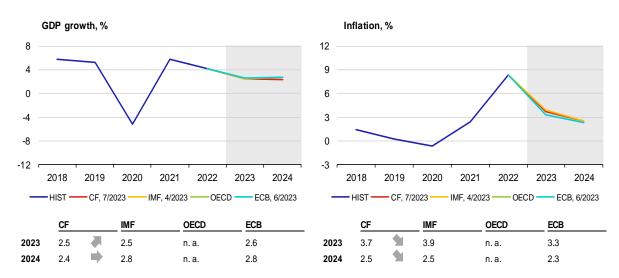
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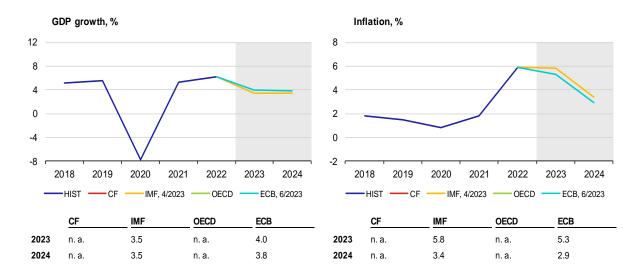
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Cyprus

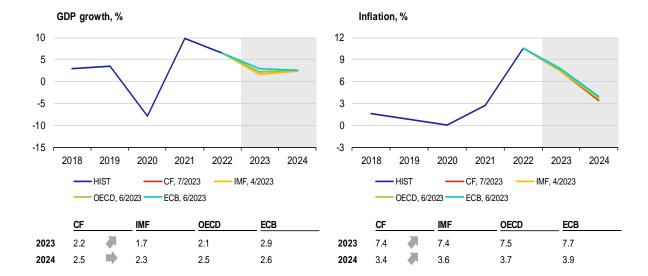


Malta



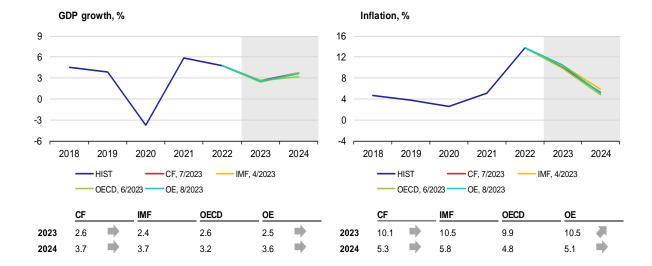
Ddd

Croatia



A5. GDP growth and inflation in other selected countries

Romania



A6. List of abbreviations

AT Austria IRS Interest Rate sw bbl barrel ISM Institute for Supp	
bbl barrel ISM Institute for Supp	•
	ply Management
BE Belgium IT Italy	
BoE Bank of England (the UK central bank) JP Japan	
BoJ Bank of Japan (the central bank of Japan) JPY Japanese yen	
bp basis point (one hundredth of a percentage point) LIBOR London Interban	nk Offered Rate
CB central bank LME London Metal Ex	xchange
CBR Central Bank of Russia LT Lithuania	
CF Consensus Forecasts LU Luxembourg	
CN China LV Latvia	
CNB Czech National Bank MKT Markit	
•••	ii Bank (the central bank of
ConfB Conference Board Consumer Confidence Index Hungary)	
CXN Caixin MT Malta	
Poland	Polski (the central bank of
Research (UK)	e of Economic and Social
DE Germany NKI Nikkei	
EA euro area NL Netherlands	
ECB European Central Bank OE Oxford Economi	ics
	Economic Co-operation and
EIA Energy Information Administration Development	
·	ite Leading Indicator
Commission oil-exporting cou	es of OPEC oil cartel and 10 other untries (the most important of
	ia, Mexico and Kazakhstan)
Lon Guid	_
EURIBOR Euro Interbank Offered Rate pp percentage poin	ıı
Fed Federal Reserve System (the US central bank) PT Portugal Russia	
FI Finland RU Russia	
FOMC Federal Open Market Committee RUB Russian rouble	
Claveria	
FR France SI Slovenia	
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FRA forward rate agreement FY fiscal year GBP pound sterling GDP gross domestic product GR Greece HICP Harmonised Index of Consumer Prices HR Croatia ICE Intercontinental Exchange IE Ireland International Energy Agency IFO Leibniz Institute for Economic Research at the Issue SPF Survey of Profest Survey of	acility (virtual trading point for the Netherlands) chigan Consumer Sentiment Index on c Outlook ermediate (crude oil used as

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