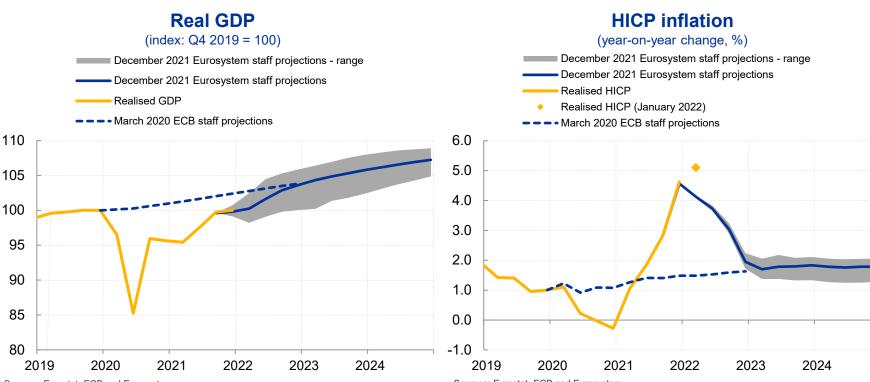


Euro area inflation: causes and outlook

Isabel Schnabel, Member of the Executive Board of the ECB SPD Working Group, 17 February 2022

Stabilisation during the pandemic

Sharp economic downturn as a result of the pandemic, but relatively fast recovery



Sources: Eurostat, ECB and Eurosystem.

Note: The area shaded in grey indicates the range of staff projections covering a milder and a more severe impact of the COVID-19 crisis.

Latest observation: Q4 2021

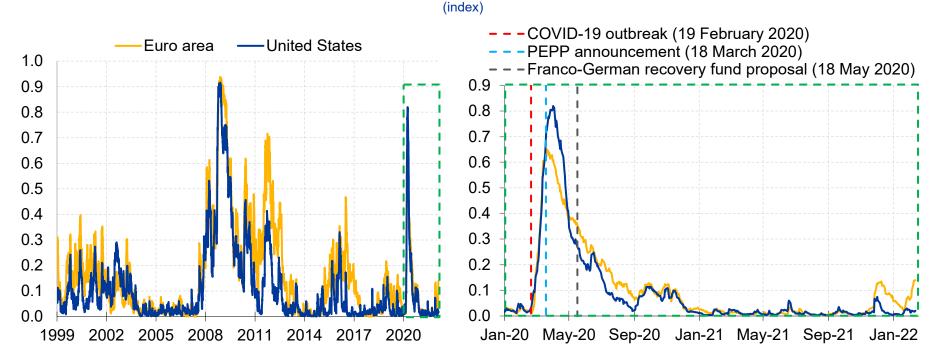
Sources: Eurostat, ECB and Eurosystem.

Note: The area shaded in grey indicates the range of staff projections covering a milder and a more severe impact of the COVID-19 crisis.

Latest observation: Q4 2021 for quarterly data. January 2022 for monthly data (diamond) on realised HICP.

Financial markets stabilised by monetary and fiscal policy

Indicator of systemic stress in financial markets (CISS)



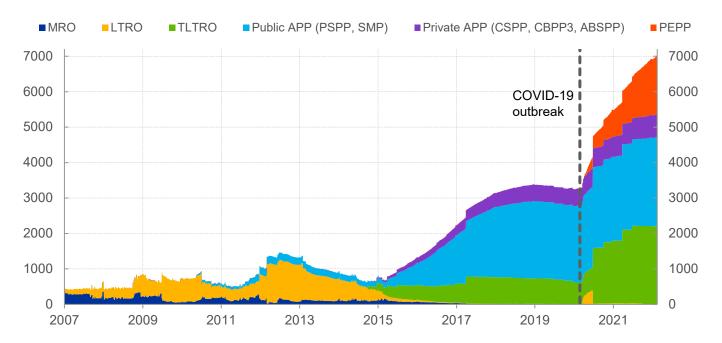
Source: ECB Working Paper No 1426.

Notes: CISS stands for Composite Indicator of Systemic Stress (0 = no stress,1 = high stress). The indicator aggregates stress signals from money, bond, equity and foreign exchange markets. Latest observation: 11 February 2022.

Sharp expansion of ECB balance sheet in response to the pandemic

ECB balance sheet, broken down by programme

(EUR billions)

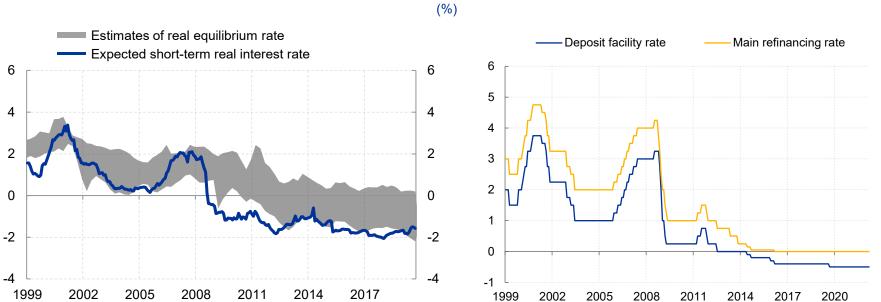


Source: ECB.

Latest observation: 12 February 2022.

"Unconventional" monetary policy due to proximity to the effective zero lower bound

Real interest rate, model-based estimates of the real equilibrium rate and policy rates in the euro area



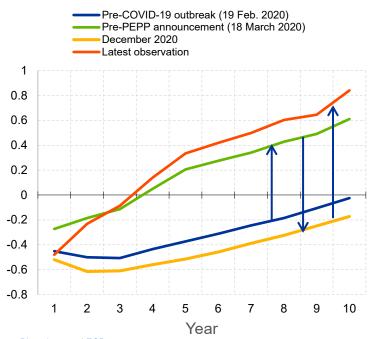
Source: The natural rate of interest: estimates, drivers, and challenges to monetary policy, Occasional Paper No 217, ECB. Updates: Ajevskis (2018), Brand, Goy, Lemke (2020), Brand, Mazelis (2019), Fiorentini, Galesi, Pérez-Quirós, Sentana (2018), Holston, Laubach, Williams (2017), Jarocinski (2017).

Notes: The range of estimates includes point estimates from several models and therefore reflects model uncertainty, but no other source of uncertainty. The real expected short-term rate is based on the difference between EONIA and consensus inflation expectations for the subsequent calendar year.

Latest observation: 14 February 2022.

Interest rates falling in the sovereign bond market and fragmentation risk declining

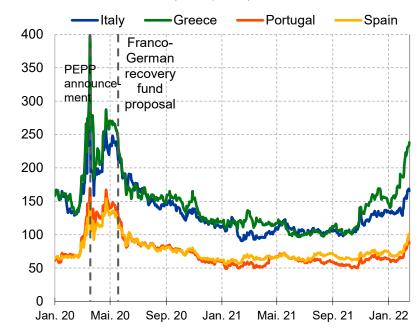
GDP-weighted yield curve in the euro area



Sources: Bloomberg and ECB. Latest observation: 13 February 2022.

10-year yield spreads of selected government bonds over German equivalents

(basis points)



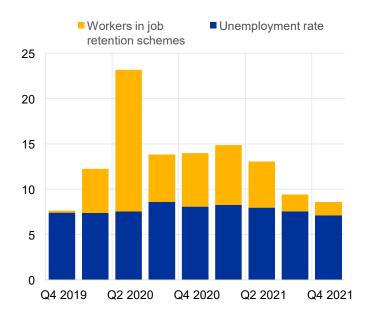
Source: Bloomberg.

Latest observation: 13 February 2022.

Labour market stabilisation amid rising sovereign debt

Unemployment rate and workers in job retention schemes

(% of labour force)

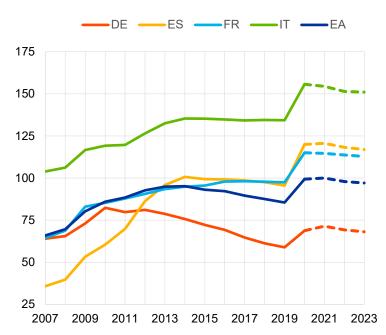


Sources: Eurostat, IAB, ifo Institute, Ministère du Travail, de L'Emploi et de L'Insertion, INPS, Ministerio de Inclusión, Seguridad Social y Migraciones.

Latest observation: Q4 2021.

Sovereign debt-to-GDP ratio

(% of GDP)

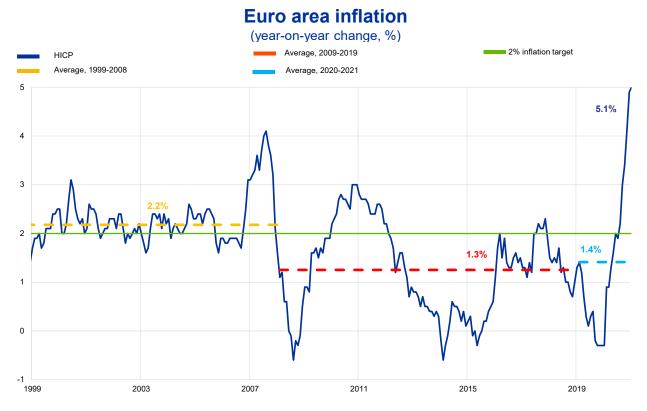


Source: European Commission.

Note: DE – Germany, ES – Spain, FR – France, IT – Italy, EA – euro area. Latest observation: Q2 2021.

Sharp rise in inflation during recovery phase

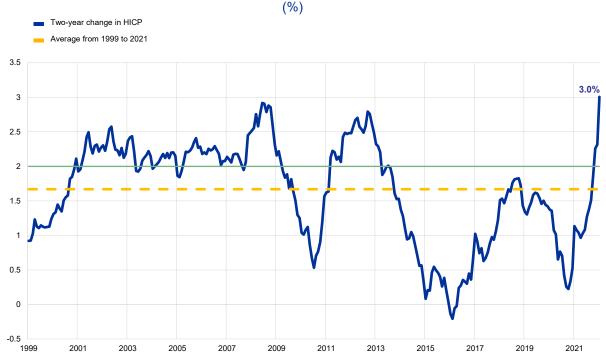
Sharp rise in inflation from mid-2021 after years of low inflation



Source: ECB. Latest observation: January 2022.

Inflation driven partly by statistical effects, ...

Two-year change in prices in the euro area



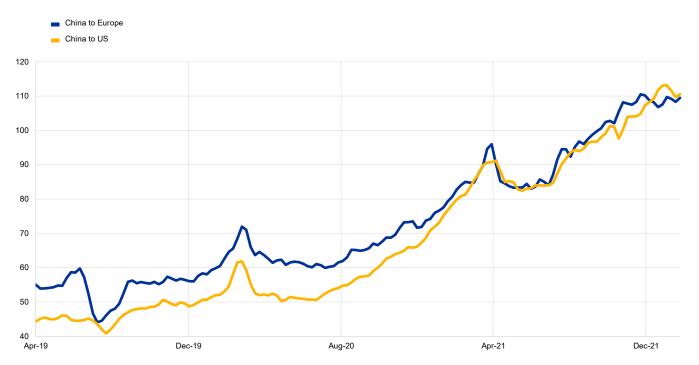
Source: ECB.

Latest observation: January 2022.

... but above all supply bottlenecks ...

Ocean Timeliness Indicator

(number of days, two-week moving average)



Source: Flexport.

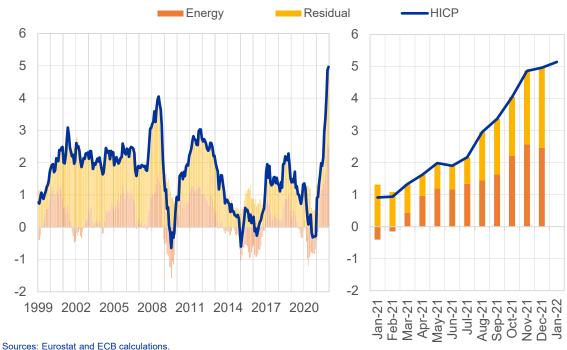
Notes: Number of days containers are on journey.

Latest observation: 6 February 2022.

... and higher energy prices

Energy contributions to HICP

(annual percentage changes; percentage point contribution)



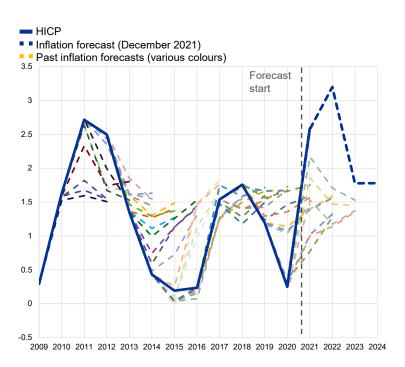
Latest observation: January 2022.

Assessment of inflation risks

Forecasts indicate a sharp decline in inflation, but with considerable estimation errors

Eurosystem staff projections for evolution of HICP

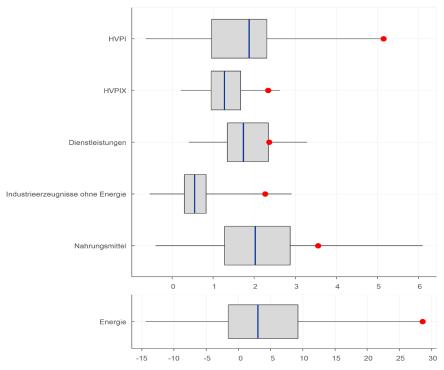
(year-on-year change, %)



Sources: ECB and Eurosystem. Latest observation: 2021 HICP.

Inflation for January 2022 and historical view since January 1999

(year-on-year change, %)



Sources: Eurostat and ECB calculations.

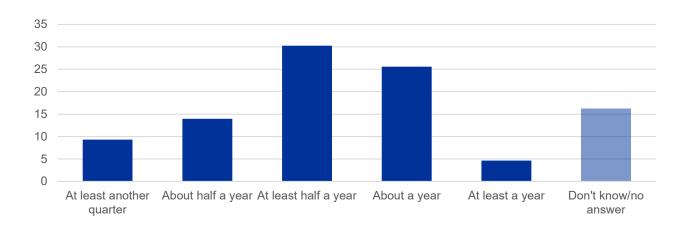
Notes: The horizontal line shows the minimum/maximum values. The box shows the interquartile range and the blue line the median.

Latest observation: January 2022 (flash estimate).

Supply chain disruptions lasting longer than expected

Expected persistence of supply bottlenecks: results of the corporate telephone survey

(percentage of respondents)



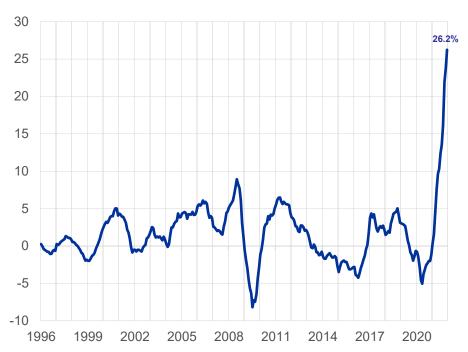
Source: Corporate telephone survey, January 2022.

Notes: Based on 43 respondents in the manufacturing, construction, retail and transport services sectors who indicated they experienced supply bottlenecks.

Very sharp rise in producer prices in the euro area

Euro area producer prices

(year-on-year change, %; all industry except construction; domestic market)

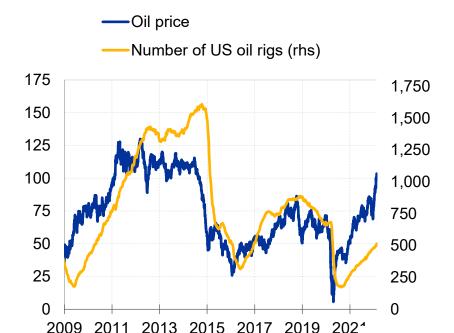


Sources: Eurostat and ECB calculations. Latest observation: December 2021.

Structural rise in energy prices due do green transition?

Oil price and shale production

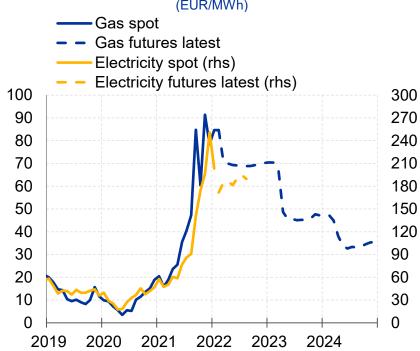
(left-hand scale: USD per barrel, right-hand scale: number of oil rigs)



Sources: Bloomberg and Baker Hughes. Latest observation: 14 February 2022 (oil price), 11 February 2022 (number of oil rigs).

Wholesale and future prices for electricity and natural gas in the euro area

(EUR/MWh)

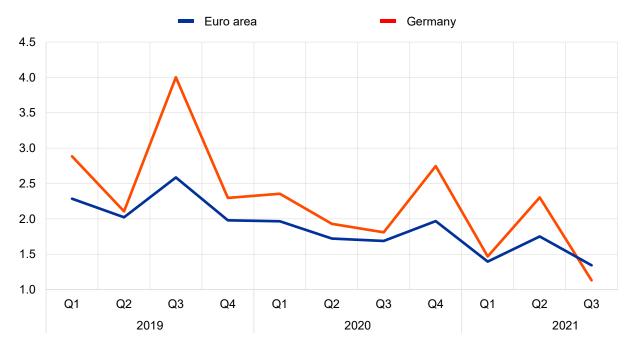


Sources: Bloomberg for electricity futures, OMIO, Gestore Mercati Energetici, Fraunhofer ISE and ENTSOE for wholesale electricity prices, Refinitiv for gas prices. Notes: Cut-off date for futures is 14/02/2022. Wholesale electricity prices is a weighted average of electricity prices in Germany, France, Spain, Italy and the Netherlands. Latest observation: February 2022 for wholesale electricity prices and spot gas prices.

No sign of a wage-price spiral despite an increasingly tight labour market

Negotiated wages in the euro area and Germany

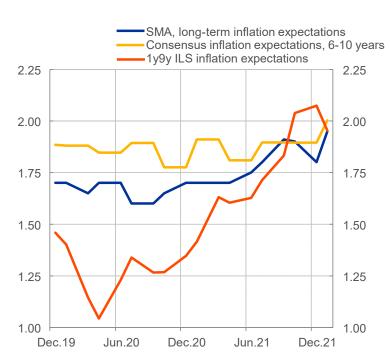
(annual percentage changes)



Source: ECB. Latest observation: Q3 2021.

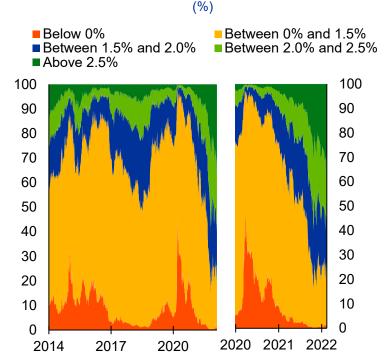
Firm anchoring of inflation expectations at 2%

SMA: long-term inflation expectations (%)



Source: All SMA surveys between January 2020 and February 2022. Note: Values were rounded to one decimal prior to aggregation.

Option-implied risk-neutral distribution of inflation expectations over the next five years



Sources: Bloomberg and ECB calculations.

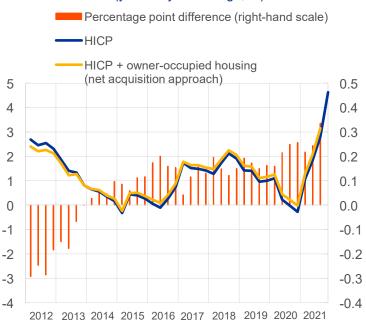
Notes: Risk-neutral probabilities implied by five-year zero-coupon inflation options, smoothed over five business days. The depicted probabilities are risk-neutral probabilities affected by risk premia and should therefore not be interpreted as "real world" (or physical) probabilities...

Latest observation: 14 February 2022.

Faster price rises when owner-occupied housing is included

HICP and HICP including owner-occupied housing

(year-on-year change, %)

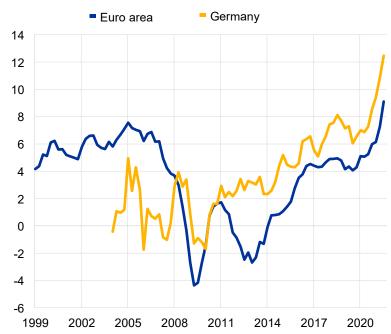


Sources: Eurostat and ECB calculations.

Latest observation: September 2021 for HICP including owner-occupied housing (Q3 2021). The HICP including owner-occupied housing is based on the net acquisition approach. December 2021 for HICP (Q4 2021).

Residential real estate prices

(year-on-year change, %)



Sources: Eurostat and ECB calculations.

Latest observation: September 2021 (Q3 2021).

Summary

- Successful stabilisation during the pandemic thanks to interaction of fiscal and monetary policy
- Tangible increase in inflation during the recovery after many years of low inflation
- No signs to date of a de-anchoring of inflation expectations from the ECB target or of a wage-price spiral
- Upside risks in inflations outlook due to pandemic and structural developments
- Close observation of upside risks by monetary policy and countering if this is necessary to ensure price stability

Thank you for your attention