Euro area inflation: causes and outlook

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

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**Real GDP**
(index: Q4 2019 = 100)

- December 2021 Eurosystem staff projections - range
- December 2021 Eurosystem staff projections
- Realised GDP
- March 2020 ECB staff projections

**HICP inflation**
(year-on-year change, %)

- December 2021 Eurosystem staff projections - range
- December 2021 Eurosystem staff projections
- Realised HICP
- Realised HICP (January 2022)
- March 2020 ECB staff projections

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.
Financial markets stabilised by monetary and fiscal policy

Indicator of systemic stress in financial markets (CISS)

(index)


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


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.

**10-year yield spreads of selected government bonds over German equivalents (basis points)**

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

Source: European Commission.
Sharp rise in inflation during recovery phase
Sharp rise in inflation from mid-2021 after years of low inflation

**Euro area inflation**
(year-on-year change, %)

Source: ECB. Latest observation: January 2022.
Two-year change in prices in the euro area

Inflation driven partly by statistical effects, ...

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.
Energy contributions to HICP
(annual percentage changes; percentage point contribution)

Sources: Eurostat and ECB calculations.
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, %)

- **Forecast start**
- **HICP**
- Inflation forecast (December 2021)
- Past inflation forecasts (various colours)

**Inflation for January 2022 and historical view since January 1999**
(year-on-year change, %)

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

**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).

**Sources:**
- Eurostat and ECB calculations.
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 to 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.
Firm anchoring of inflation expectations at 2%

**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.


**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.
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).
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 inflation 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