



EUROPEAN CENTRAL BANK

EUROSYSTEM

“The Burst of High inflation in 2021-22: How and Why Did We Get Here”

Discussion

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The views expressed in this presentation are my own and do not necessarily reflect those of the ECB.

Main points of discussion

Ricardo's essay puts forward four hypothesis for the burst of high inflation in 2021-2022:

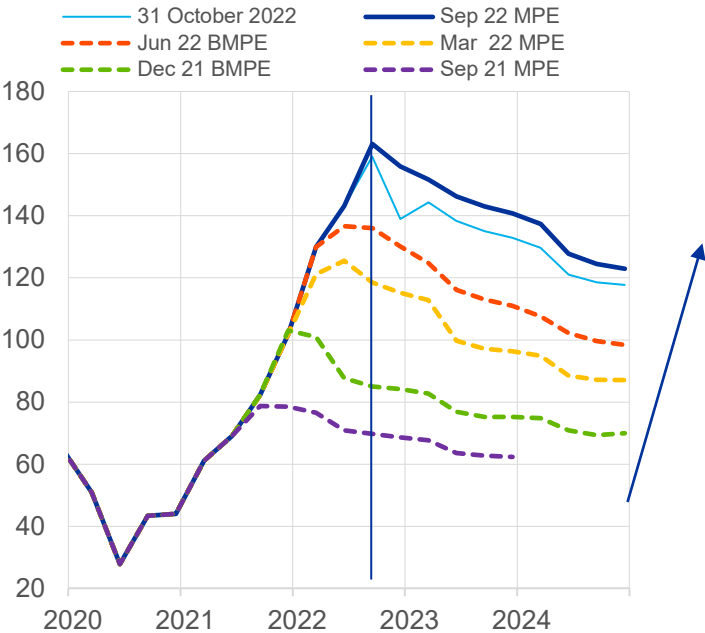
1. Misdiagnosis of the nature of shocks
2. Neglect of inflation expectations data driven by a strong belief that they were firmly anchored
3. Over-reliance on the credibility earned in the past
4. A revision of strategy that made central banks tolerant of higher inflation

My bottom line: the high inflation burst was mostly due to successive supply shocks and monetary policy is addressing risks to medium-term price stability

Misdiagnosis of the nature of shocks? Successive massive energy shocks

Synthetic energy price and futures

(USD per barrel)

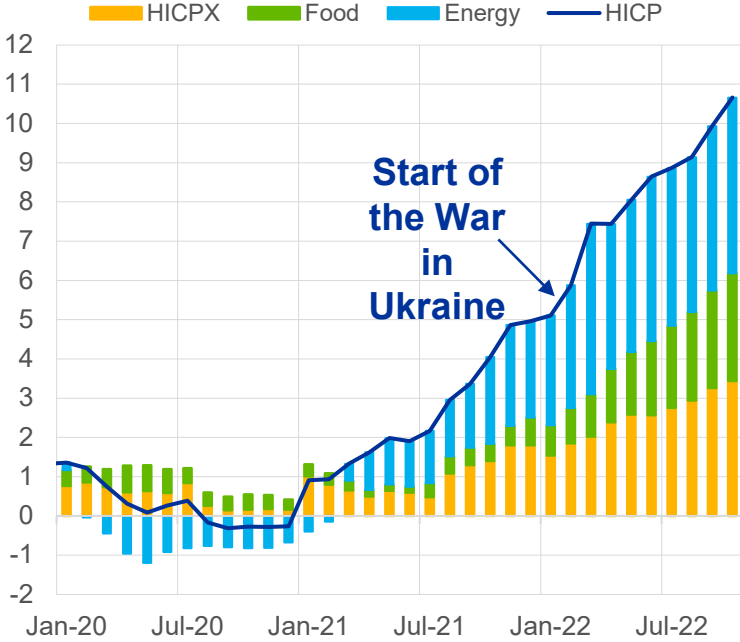


Sources: Refinitiv and ECB calculations.

Note: The synthetic index is a weighted average of oil and gas price developments based on futures and euro area import weights reported by HWWI (roughly 80% for oil and 20% for gas).

HICP inflation and components

(annual % changes and p.p. contributions)



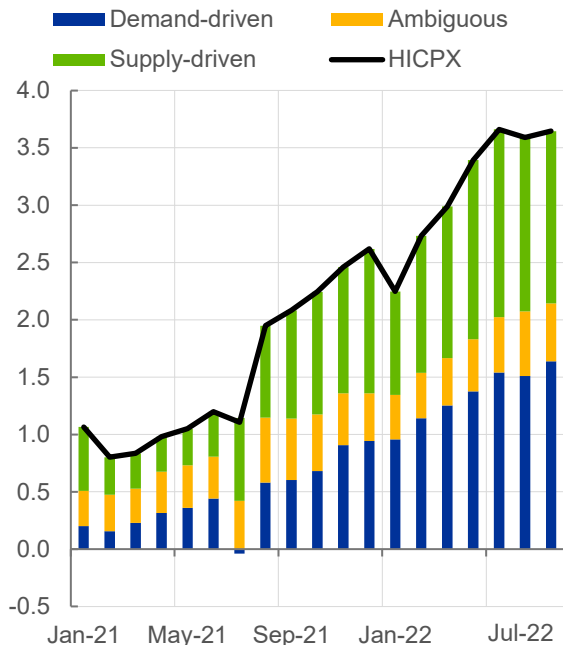
Sources: Eurostat, ECB calculations.

Latest observation: Oct. 2022 (flash) for HICP, HICPX and Food, Sept. 2022 for the rest.

Misdiagnosis? Core driven by supply and demand shocks

HICPX inflation – decomposition into supply and demand-driven factors

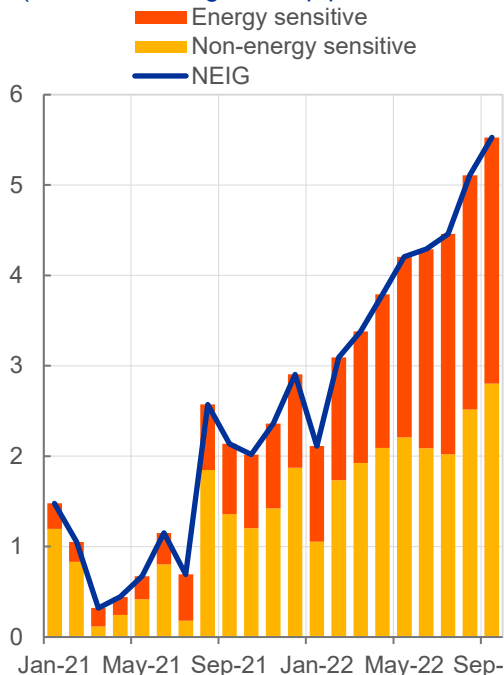
(annual % changes)



Sources: Eurostat and ECB calculations. Notes: Seasonally adjusted data. Based on Adam Shapiro (2022). HICPX inflation is the sum of demand-driven, supply-driven and ambiguous components, calculated as the trailing sum of the last 12 monthly contributions. While price data are available for September 2022, the latest observation is for July 2022 as the turnover series used as a proxy for activity are published with some delay. Latest observation: July 2022.

Non- Energy Industrial Goods inflation

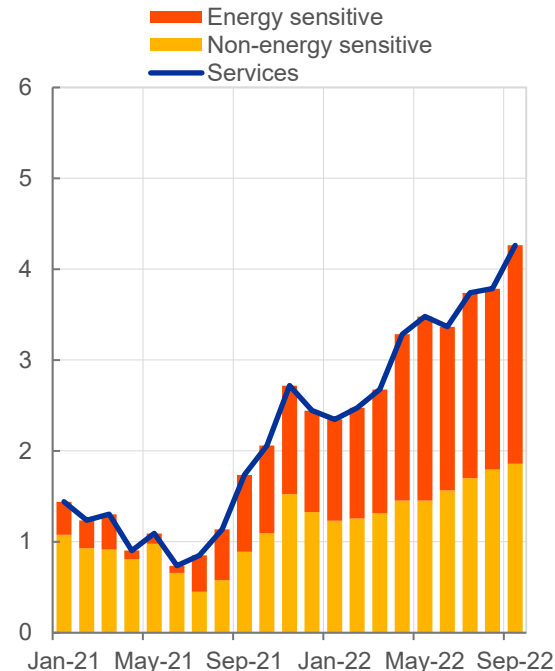
(annual % changes and p.p. contributions)



Sources: Eurostat and ECB staff calculations.
 Note: Energy sensitive component based on items with a share of energy in direct costs above the average energy share across all NEIG items.
 Latest observation: September 2022.

Services inflation

(annual % changes and p.p. contributions)

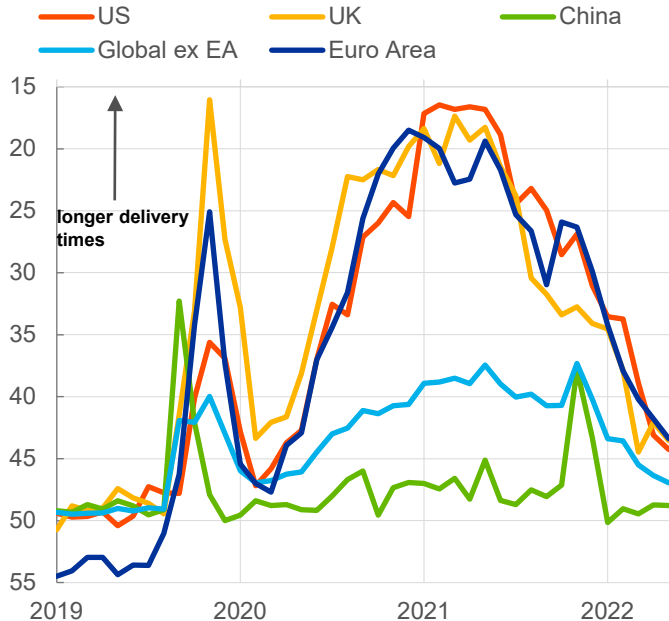


Sources: Eurostat and ECB staff calculations.
 Note: Energy sensitive component based on items with a share of energy in direct costs above the average energy share across all services items.
 Latest observation: September 2022.

Misdiagnosis? Bottlenecks do not seem to be permanent; terms of trade deterioration a drag on growth

Suppliers' delivery times

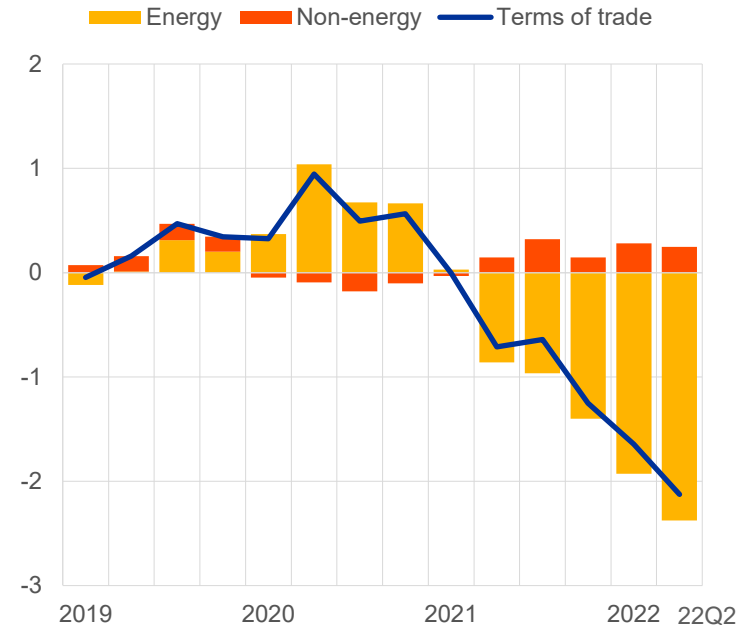
(diffusion indices, indices)



Sources: Haver, S&P Global and ECB calculations
Latest observation: Oct-22.

Income effect of euro area terms of trade

(pp. impact on in terms of changes with respect to previous year values)



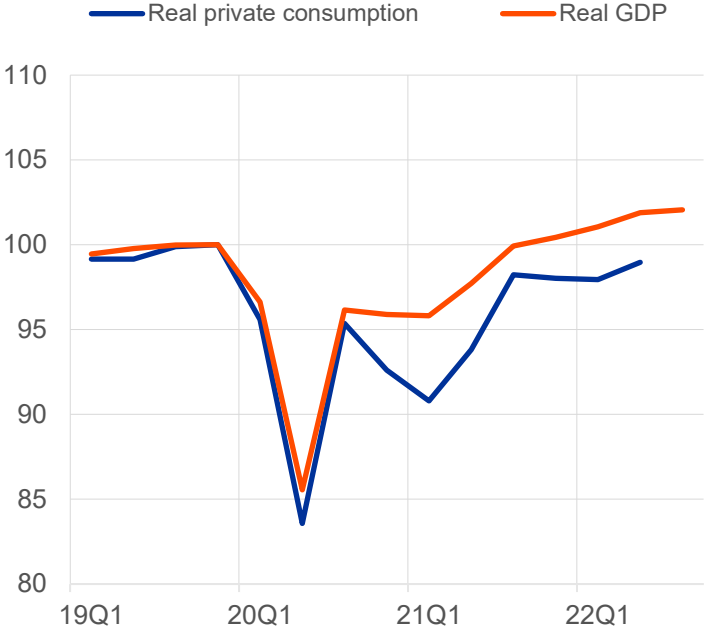
Sources: Eurostat and ECB calculations.

Note: The income effect of terms of trade is calculated by weighing export and import price changes by their respective previous year values and considered as a percentage share of previous year GDP. Last observation: 2022 Q2.

Despite the GDP recovery amid the reopening, consumption remained weak

Real private consumption and real GDP

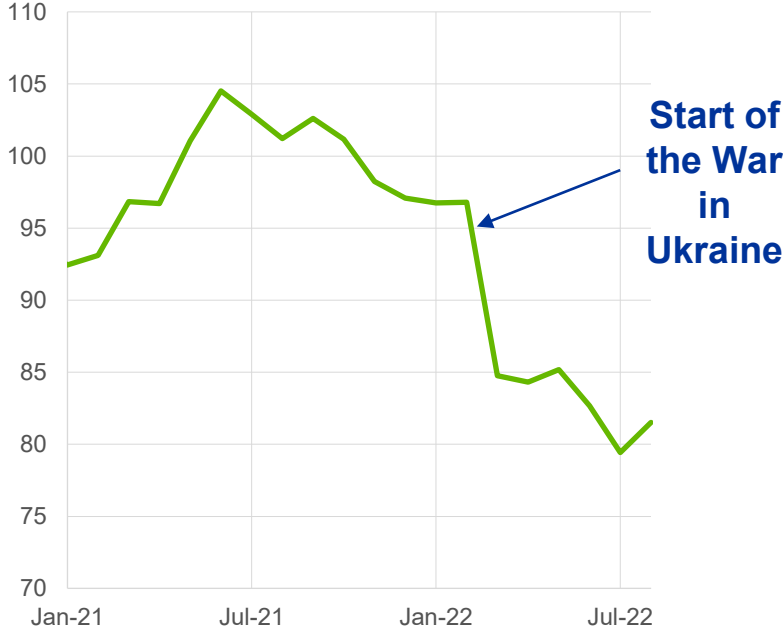
(index, 2019Q4 = 100)



Source: Eurostat.
Latest observation: 2022Q2 for private consumption, 2022Q3 for GDP.

Consumer confidence

(percentage balances, February 2020 = 100)



Source: European Commission.

Negotiated wages growth increased but remained at moderate levels

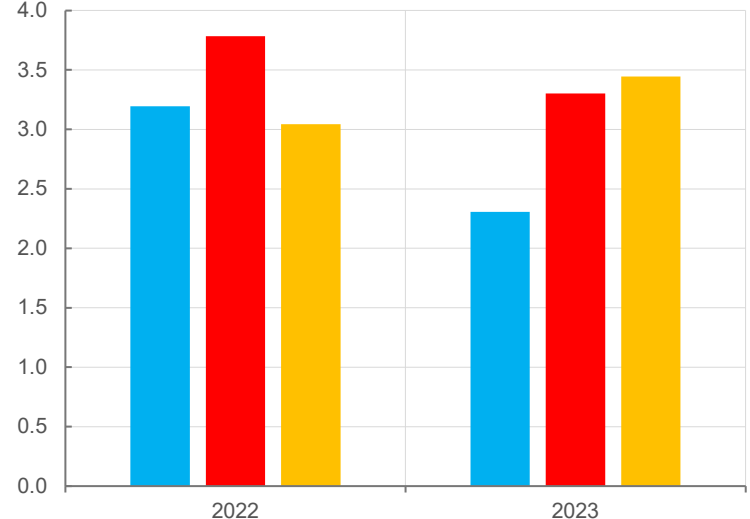
Euro area forward-looking wage tracker
(annual % changes)

— Weighted average of agreements signed in 2022
— Wage tracker



Euro area forward-looking wage tracker – weighted average of agreements
(annual % changes)

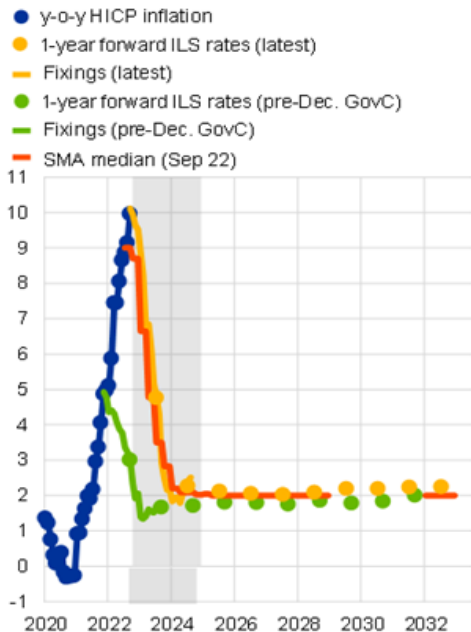
■ Signed in 22Q1 ■ Signed in 22Q2 ■ Signed in 22Q3



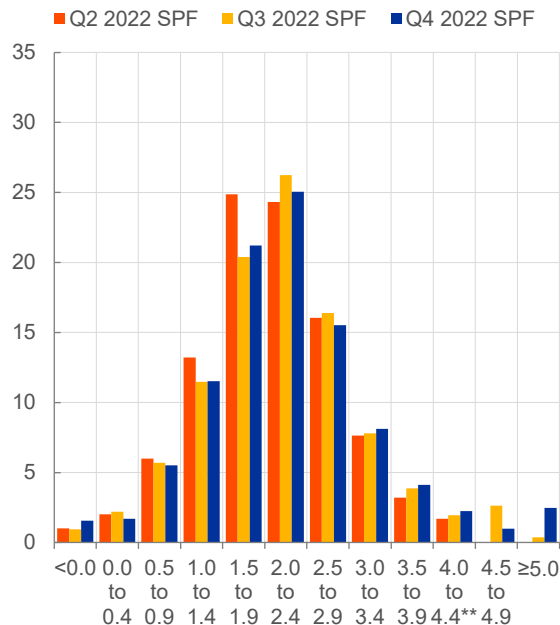
Sources: Calculated based on micro data on wage agreements provided by Bundesbank, Banco de España, Bank of Greece, The Oesterreichische Nationalbank, the Dutch employer association AWWN, Banca d'Italia and Banque de France. Data for FR based on an updated version of : Gautier, E. (2022): [Negotiated wage rises for 2022: the results so far](#). Latest data: September 2022.

Long-term inflation expectations remained anchored at 2%

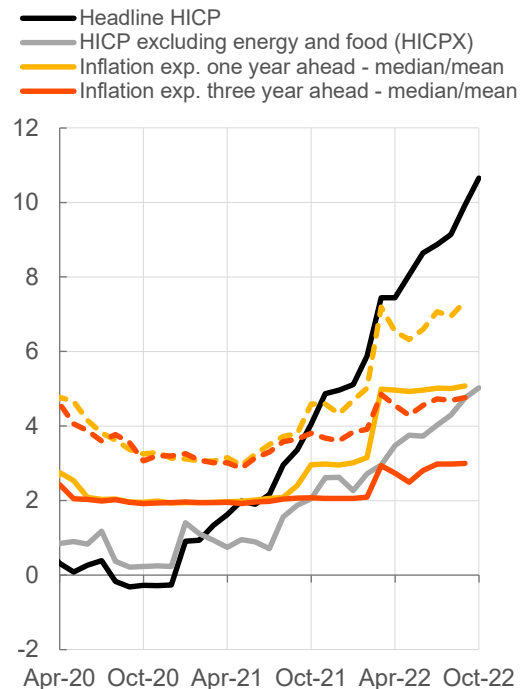
Market-based measures of inflation compensations and survey-based measures (percentage per annum)



Survey of professional forecasters expectation for HICP inflation in 2024 (annual percentage changes)



ECB Consumer Expectations Survey (CES) (annual percentage)



Sources: Bloomberg, Refinitiv, SMA and ECB calculations (left panel). ECB SPF (Middle panel). ECB Consumer Expectations Survey (CES) (right panel).

Notes: The grey area refers to the projection horizon ending in December 2024 (left panel). Number of respondents in September 2022 SMA is 28. Latest observation: 7 October 2022 (left panel). The SPF asks respondents for their point forecasts and separately, to assign probabilities to different ranges of outcomes. The left hand side chart shows the average probabilities which were assigned to inflation outcomes in those ranges across the different horizons.

**The highest bin used in the second quarter of 2022 rounds was ≥4.0%.

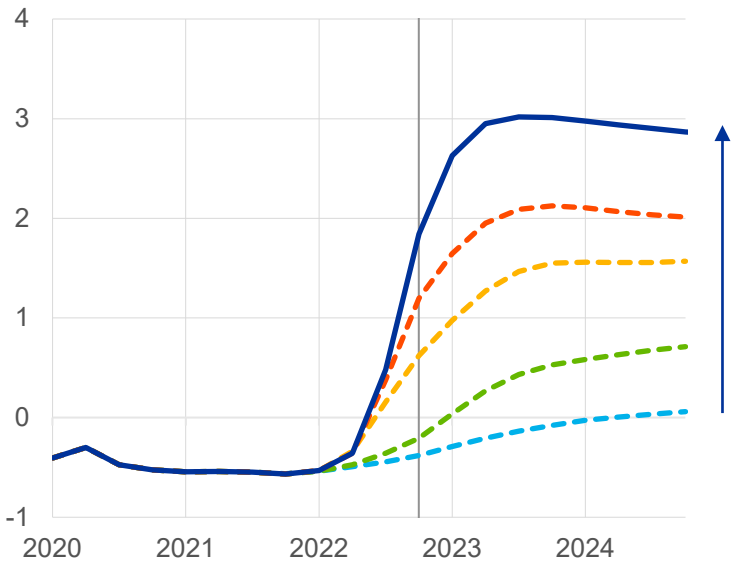
October 2022 (flash) for HICP. CES data from September 2022 round (right panel).

Monetary policy normalising, as reflected in actual and expected market rates

Short-term interest rates

(% per annum)

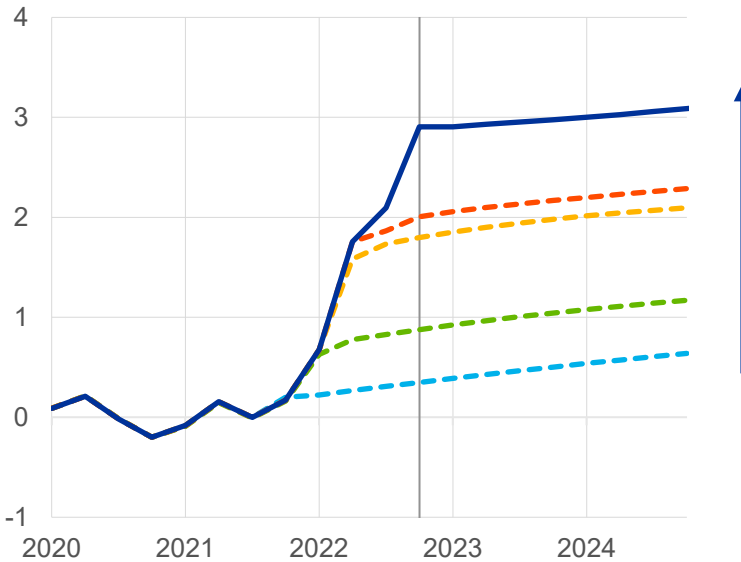
Dec 21 BMPE Mar 22 MPE Jun 22 BMPE
 Sep 22 MPE Latest



Long-term interest rates

(% per annum)

Dec 21 BMPE Mar 22 MPE Jun 22 BMPE
 Sep 22 MPE Latest



Notes: The assumptions for short-term interest rates are based on market expectations of the three-month EURIBOR, as implied in futures rates. The long-term interest rates for the euro area are based on the weighted average of countries' ten-year government bond yields, weighted by annual GDP figures. The weights are unchanged over the projection horizon. "Latest" refers to 31 October 2022.

The Governing Council has repeatedly signalled its intolerance of above target inflation

Governing Council Monetary Policy Statement (MPS) - December 2021

“**Inflation has risen sharply** owing to the surge in **energy prices**, and also because **demand is outpacing constrained supply** in some sectors.”

“The **future path of energy prices** and the pace at which **supply bottlenecks** are resolved are **risks** to the recovery and **to the outlook for inflation**. If price pressures feed through into higher than anticipated wage rises or the economy returns more quickly to full capacity, **inflation could turn out to be higher.**”

MPS October 2022:

“**Inflation remains far too high** and will stay above the target for an extended period.”

“The Governing Council **will base the future policy rate path on the evolving outlook for inflation and the economy**, following its meeting-by-meeting approach.”

“The Governing Council’s monetary policy is aimed at **reducing support for demand** and **guarding against the risk of a persistent upward shift in inflation expectations.**”

Thank you