

Mind the step: calibrating monetary policy in a volatile environment

Fabio Panetta, Member of the Executive Board of the ECB

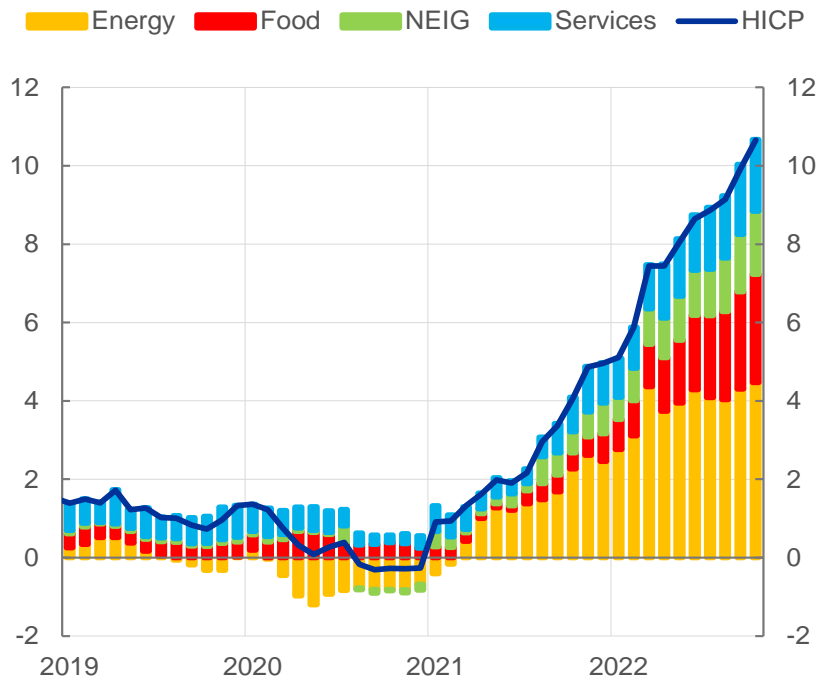
Keynote speech at the ECB Money Market Conference

3 November 2022

Chart 1

Contributions of components of euro area headline HICP inflation

(annual percentage changes and percentage points contributions)



Sources: Eurostat and ECB calculations.

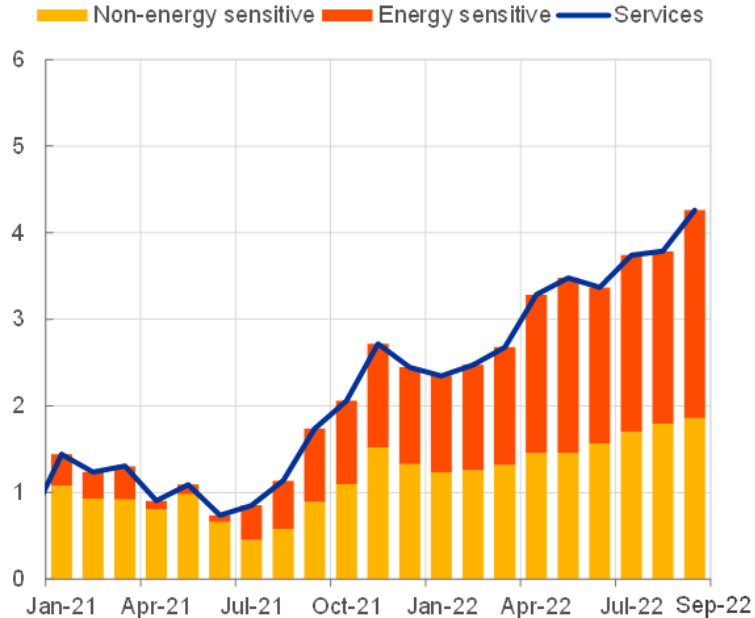
Notes: NEIG stands for "non-energy industrial goods". The latest observation is for October 2022.

Chart 2

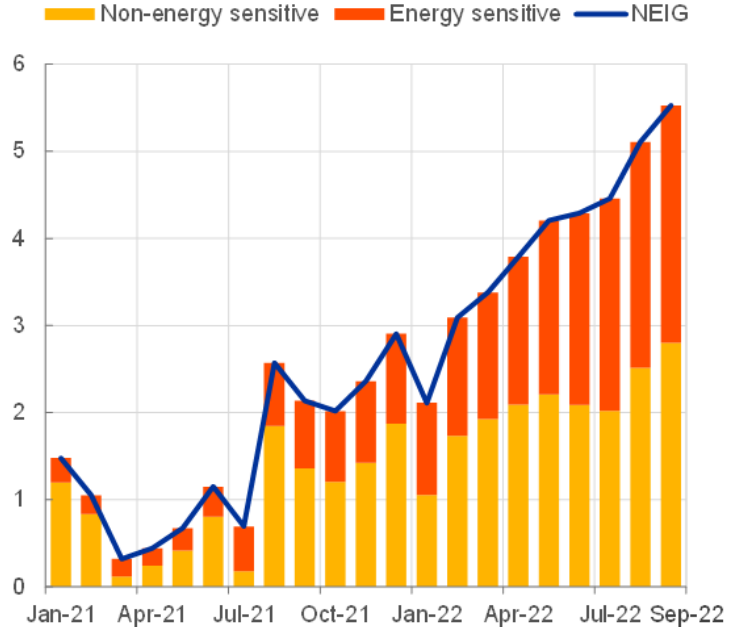
Contributions of energy-sensitive components to goods and services inflation in the euro area

(annual percentage changes and percentage point contributions)

Services inflation



Non-energy industrial goods inflation

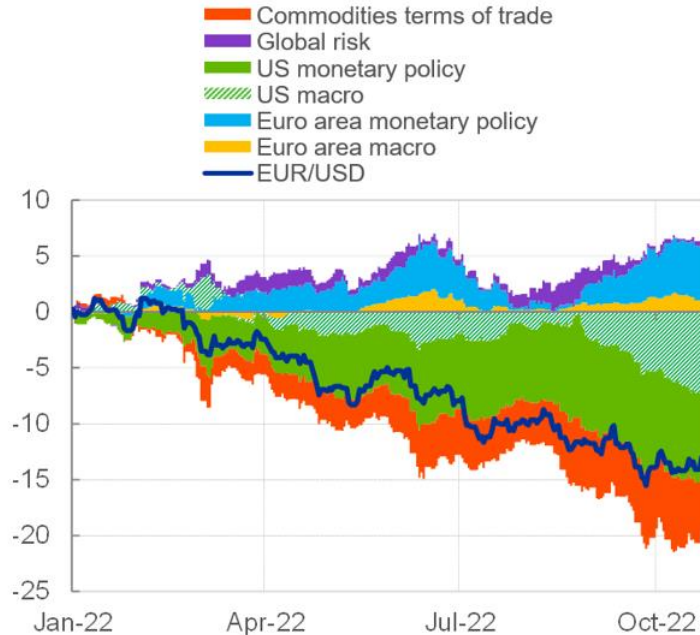


Sources: Eurostat and ECB staff calculations.

Notes: The term "energy-sensitive component" reflects items with a share of energy in direct costs above the average share of energy across services items (left-hand panel) and non-energy industrial goods (NEIG) items (right-hand panel). The latest observations are for September 2022.

Chart 3 Drivers of the euro-US dollar exchange rate

(cumulative changes since January 2022, percentage changes and percentage point contributions)

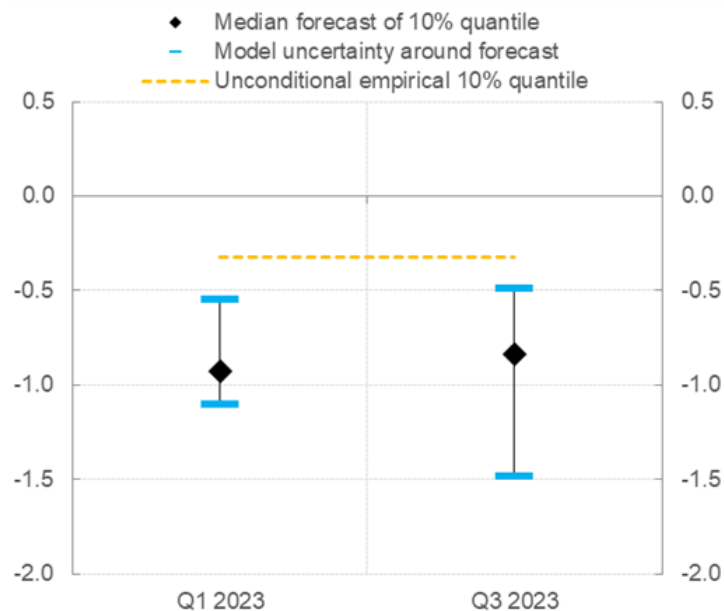


Sources: ECB and ECB calculations.

Notes: A decrease denotes a euro depreciation against the US dollar. The decomposition of exchange rate changes is based on an extended two-country Bayesian vector autoregression (BVAR) model including ten-year euro area overnight index swap rate, euro area stock price, EUR/USD, ten-year euro area overnight index swap-US Treasury spread, US stock prices and the relative Citi commodities terms-of-trade index in the euro area compared to the United States. An adverse euro area terms-of-trade shock is assumed to depreciate the euro against the dollar, reduce euro area equity prices, and increase euro area yields and yield spreads against the United States. Identification via sign and narrative restrictions, using daily data. The latest observation is for 24 October 2022.

Chart 4 Downside risks to euro area real GDP growth

Lower tail of the distribution of real GDP growth forecasts for Q1 and Q3 2023 based on “GDP-at-risk” models
(quarter-on-quarter change in percentage points)



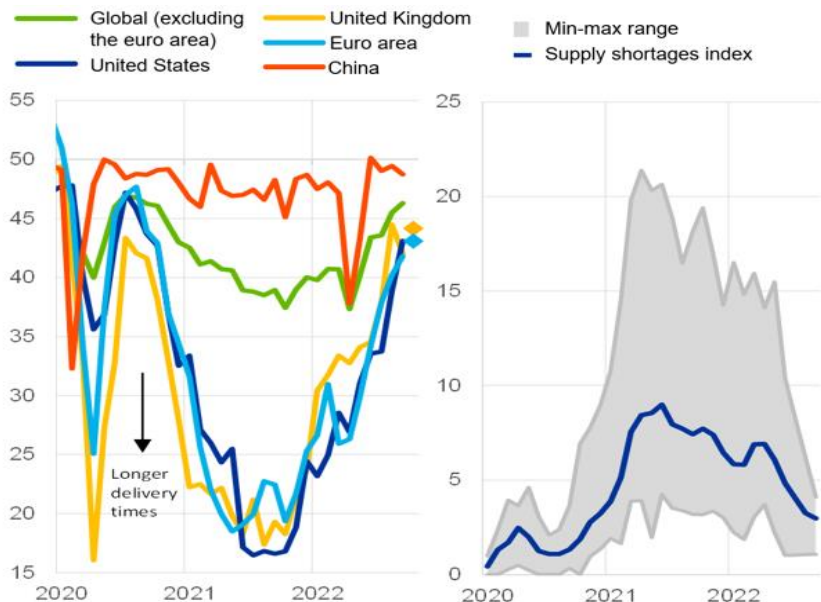
Source: ECB calculations.

Notes: For each horizon, the chart shows the median of estimates of the lower quantile (10th percentile) forecast across the suite of “GDP-at-risk” models maintained by ECB staff, as well as the interquartile range to account for model uncertainty. These estimates are predicated mainly on developments in financial conditions, credit, risk, and the macroeconomy. Forecasts are conditional on financial data up to mid-October 2022 and real economy indicators up to the end of September 2022.

Chart 5 Easing of supply chain bottlenecks

PMI suppliers' delivery times (left panel) and
Global Supply Shortages Index (right panel)

(diffusion indices)

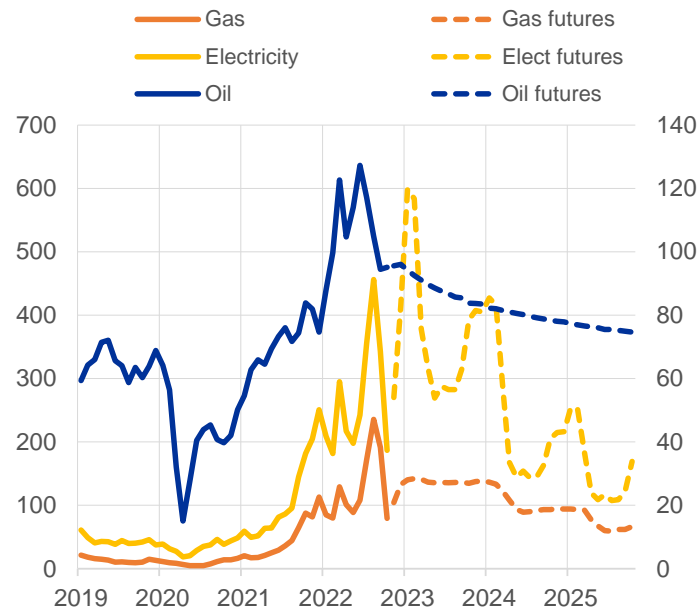


Sources: S&P Global, Markit and ECB staff calculations.

Notes: The Global Supply Shortages Index measures how many selected items have been in short supply against their long-run average for each month. The long-run average refers to value 1 of the index. The shaded minimum-maximum range refers to the 5th-95th percentile range across 20 items (e.g. chemicals, electrical items, packaging, steel and textiles). The latest observation are for September 2022 and October 2022 (Flash PMI estimates for the United Kingdom and the euro area).

Chart 6 Spot prices of oil, gas and electricity

(EUR/MWh for gas and electricity (left-hand scale),
USD/barrel for oil (right-hand scale))



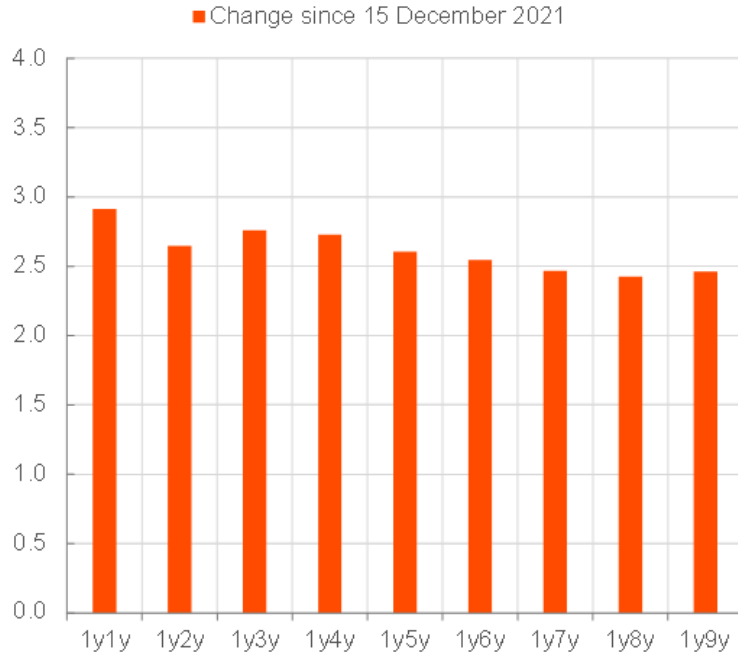
Sources: Refinitiv, HWWI, Energy Intelligence and ECB staff calculations.

Note: The latest observation is for October 2022.

Chart 7

Change in euro area forward real interest rates

(percentage points)



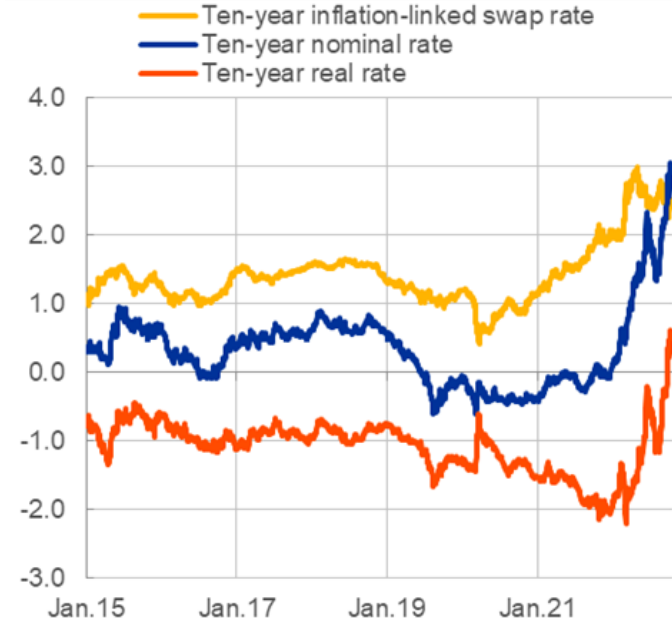
Sources: Bloomberg, Refinitiv and ECB calculations.

Notes: Real forward rates are calculated by subtracting the inflation-linked swap forward rates from the nominal overnight index swap forward rates for each maturity. The latest observation is for 20 October 2022.

Chart 8

Ten-year real, nominal and inflation-linked swap rates for the euro area

(percentages per annum)



Sources: Refinitiv and ECB calculations.

Note: The latest observation is for 20 October 2022.

Chart 9

Financial conditions indices in advanced economies and emerging market economies

(standardised indices)



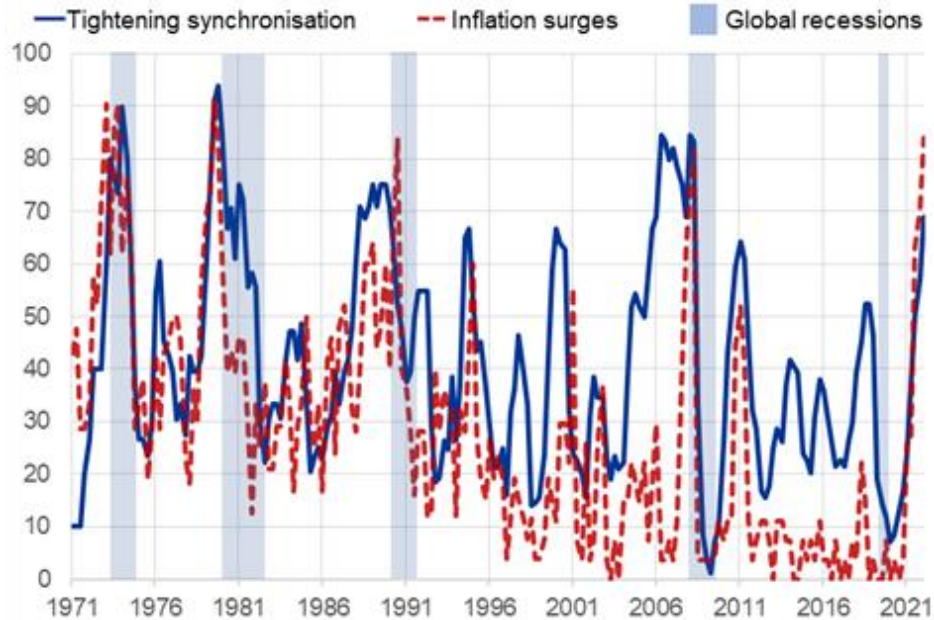
Sources: Refinitiv, Bloomberg and ECB staff calculations.

Notes: National financial conditions indices are aggregated using GDP purchasing power parity shares. The latest observations are for 6 October 2022.

Chart 10

Inflation surges, tightening synchronisation and global recessions

(percentages of countries)



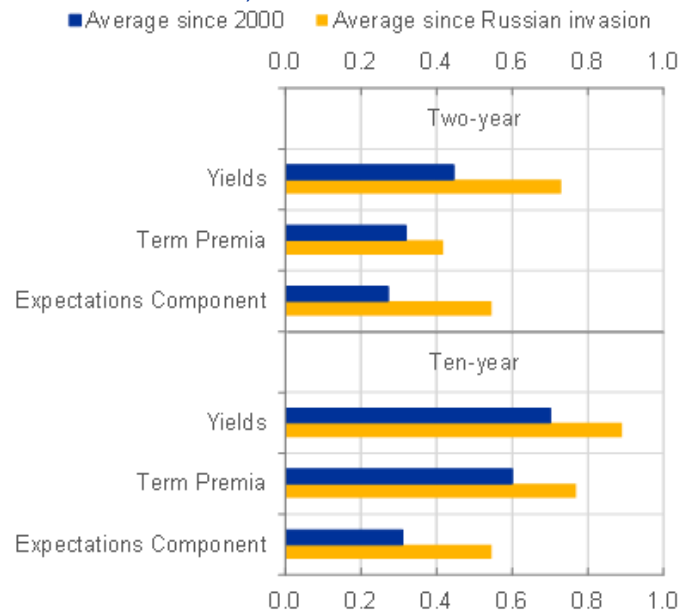
Sources: ECB calculations, BIS data and Haver Analytics.

Notes: The global "inflation surges" index (red dashed line) shows the share of countries which, at time t , are simultaneously experiencing: (1) year-on-year inflation that is higher than at time $t-1$; and (2) year-on-year inflation that is above a certain threshold. In this case, the threshold is given by the average of the year-on-year inflation in the post-Volcker period, from the first quarter of 1984 to the second quarter of 2022. The global "tightening synchronisation" index (blue solid line) is constructed using BIS data on the policy rates set by central banks and shows the share of countries which are tightening at time t . Global recessions are periods when: (1) annual growth of global GDP per capita is negative or close to zero; and (2) a high share of countries are in a technical recession. The latest observations are for the second quarter of 2022.

Chart 11 Global component in yields

Correlation of sovereign bond yields in advanced economies, expectations components and term premia

(correlation coefficient)



Sources: Datastream and Haver Analytics.

Notes: The sample consists of ten advanced economies (Australia, Canada, Denmark, euro area, Japan, New Zealand, Sweden, Switzerland, United Kingdom and United States). The bilateral correlation coefficients are averaged across these countries and time periods. The term premia and expectations components are the average of estimates from three models (dynamic Nelson-Siegel, rotated dynamic Nelson-Siegel and dynamic Svensson-Soderlind). The latest observations are for 21 October 2022 (daily data).

Thank you for your attention!