



EUROPEAN CENTRAL BANK

EUROSYSTEM

No longer convenient? Safe asset abundance and r^*

25 February 2025

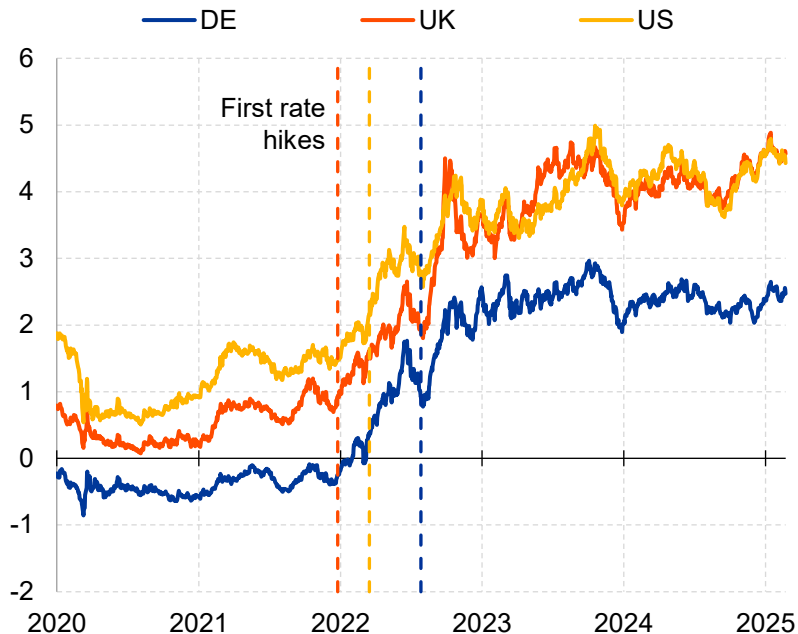
Isabel Schnabel, Member of the Executive Board of the ECB
Bank of England's 2025 BEAR Conference, London



Nominal long-term interest rates are higher because of a persistent rise in real rates

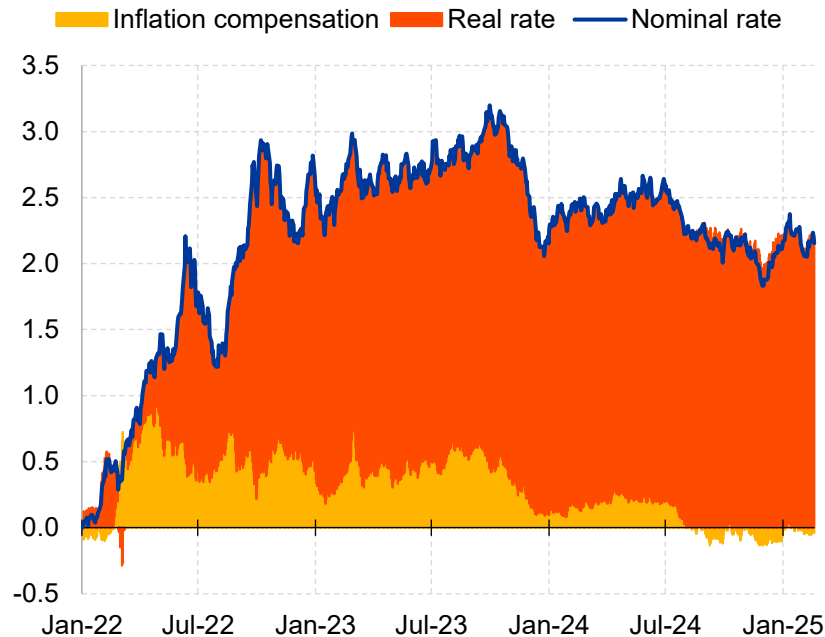
10-year sovereign bond yields

(percentages)



10-year euro area OIS rate decomposition

(cumulative changes since Jan-2022;
percentages and percentage points)



Source: Bloomberg.

Notes: The vertical dashed lines indicate the date of the first rate hike implemented by the ECB, FED and BoE, respectively. Latest observation: 21 February 2025.

Source: Bloomberg.

Latest observation: 21 February 2025.

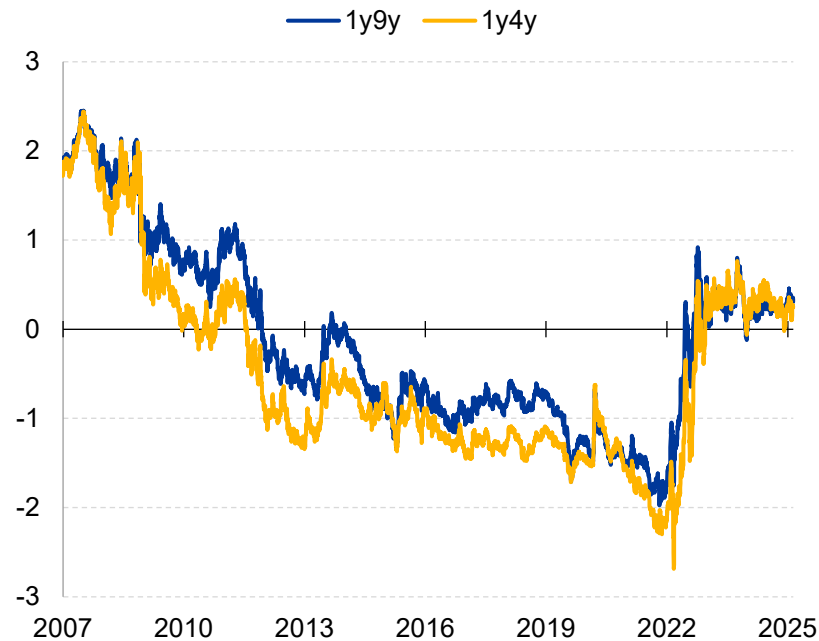
Real short-term interest rates are expected to remain higher over the medium to long term

10-year euro area real OIS rate (percentages)



Source: Bloomberg.
Latest observation: 21 February 2025.

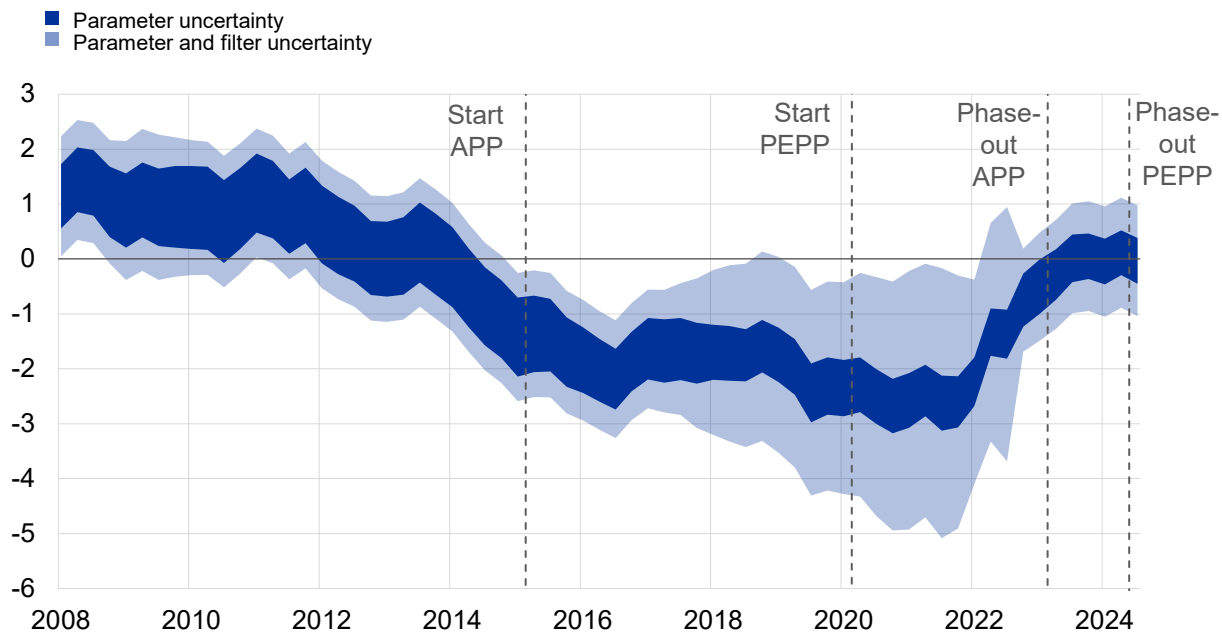
Euro area real forward OIS rates (percentages)



Sources: Bloomberg, ECB calculations.
Notes: Forward rates calculated from OIS/ILS spot rates; real rate as difference between nominal rate and inflation compensation.
Latest observation: 21 February 2025.

Model-based estimates also signal a marked upward shift in the natural rate of interest r^*

Euro area real natural rate of interest estimate (percentages per annum)



Source: ECB calculations.

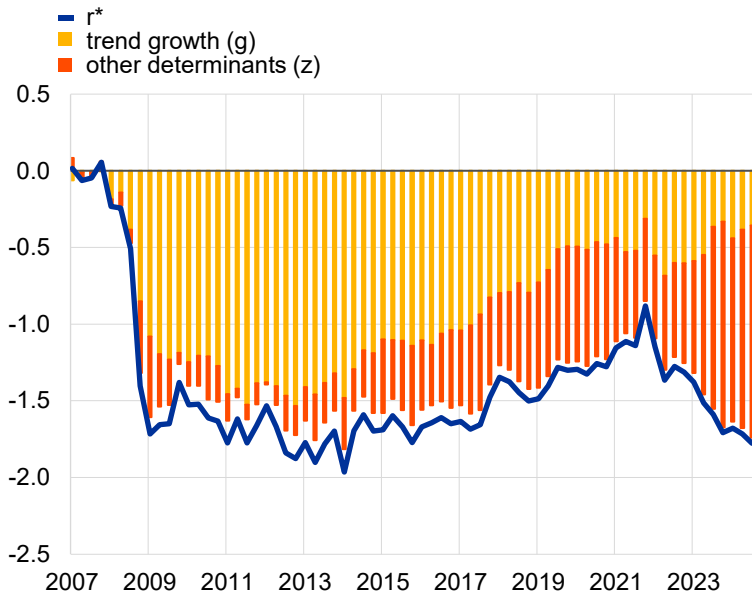
Notes: Estimates are based on Brand, C. and Mazelis, F., "Taylor-rule consistent estimates of the natural rate of interest", Working Paper Series, No 2257, ECB, Frankfurt am Main, March 2019 (extended to include stochastic volatility in the output gap, a long-term interest rate, asset purchase effects and the effective lower bound). The [RISE toolbox](#) for parameter estimation and regime-switching Kalman filtering enables the extraction of covariance matrices of unobserved states (see Maih, J. "Efficient perturbation methods for solving regime-switching DSGE models," Working Paper, 01/2015, Norges Bank, 16 January 2015). Parameter and filter uncertainties are displayed as 95% uncertainty bands, calculated following the methods for statistical inference with the Kalman filter described in Chapter 13.7 of Hamilton, J.D., "Time Series Analysis", Princeton University Press, 1994. Since computing the maximum likelihood estimate directly is impractical in this setting, the mode of the posterior distribution is used as an approximation. The filter uncertainty is based on the regime-specific covariance matrix of unobserved states from the predominant regime in the model, which features low volatility in the output gap and a policy rate that follows the Taylor rule. Considering regime-specific covariances or joint covariance matrices across different regimes would further enlarge the uncertainty ranges. The dashed lines indicate the start of APP and PEPP, respectively.⁴ The second lines mark the beginning of partial reinvestments for each programme.

Changes in the convenience yield can help explain shifts in r^* in the United States

Contributions to changes in r^* in the United States

(Holsten-Laubach-Williams, HLW)

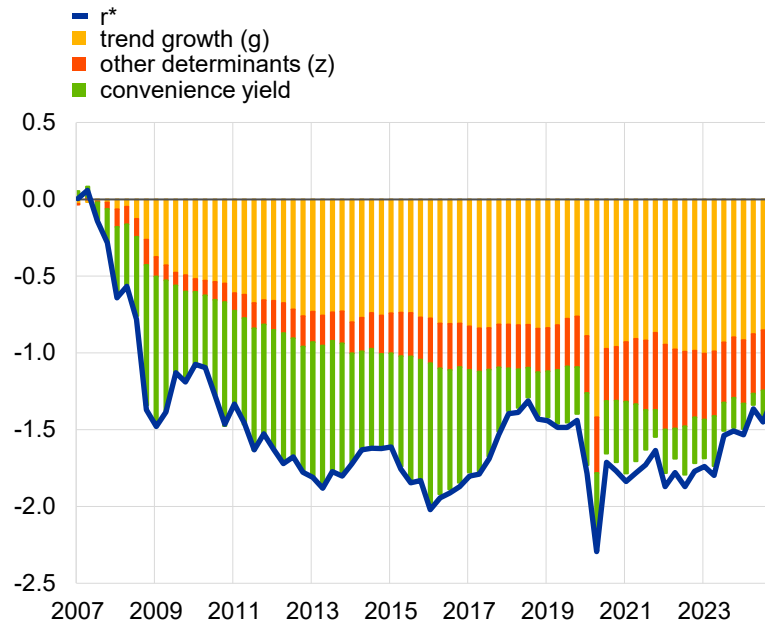
(cumulative changes; percent and percentage points)



Contributions to changes in r^* in the United States

(HLW with convenience yield)

(cumulative changes; percent and percentage points)

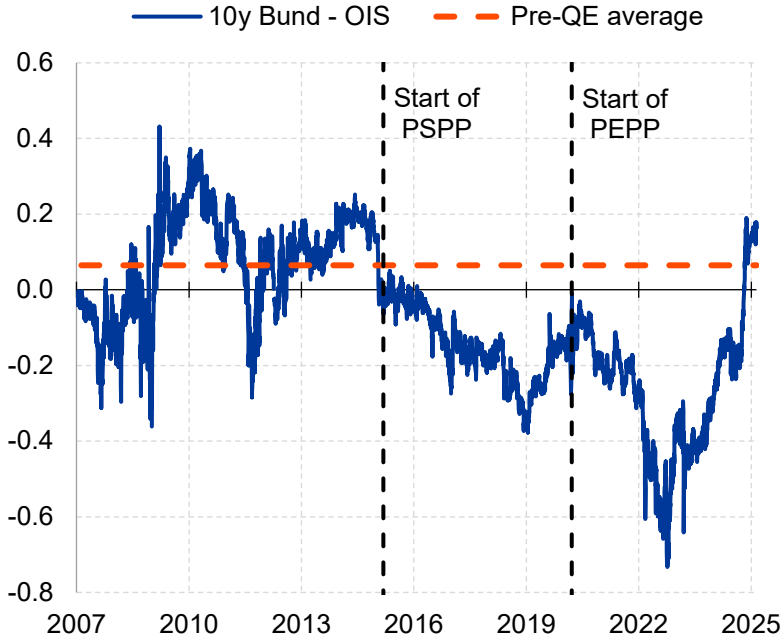


Sources: Szoke, B., Xavier, I. and Vazquez-Grande, F. (2024), "Convenience Yield as a Driver of r^* ", FEDS Notes, 3 September; and Holston, K., Laubach, T. and Williams, J. (2017), "Measuring the Natural Rate of Interest after COVID-19", Journal of International Economics 108, Supplemental 1 (May): S39–S75.
 Latest data: 2024 Q3 for HLW and 2024 Q4 for the model by Szoke et al.

Convenience yield has declined measurably over the past two years

10-year Bund – OIS spread

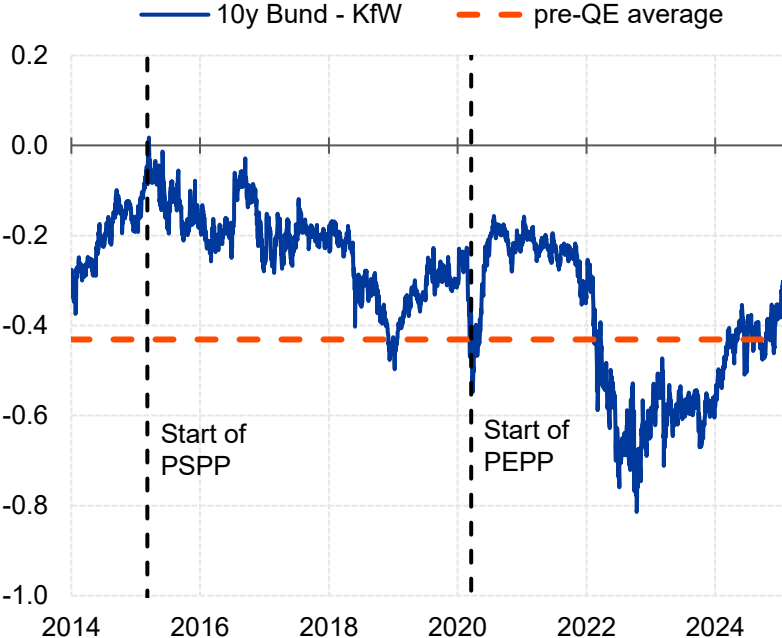
(percentages)



Source: Bloomberg. Notes: The pre-QE average covers the period from 2 January 2007 to 31 December 2013. Latest observation: 21 February 2025.

10-year Bund – KfW spread

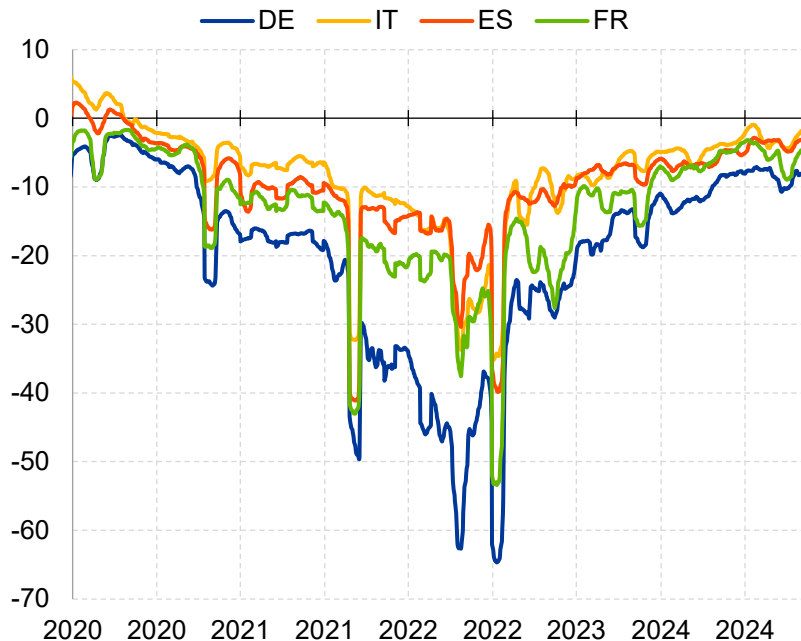
(percentages)



Source: Bloomberg. Notes: The pre-QE average covers the period from 2 January 2007 to 31 December 2013. Latest observation: 21 February 2025.

Spread of repo rates to deposit facility rate

(basis points)



Source: MMSR.

Notes: Repo 1-day against government collateral – DFR, smoothed by 20-days moving average.
Latest observation: 21 February 2025.

Spread of USD Corporates AAA 10-15y index vs equivalent US treasury

(basis points)



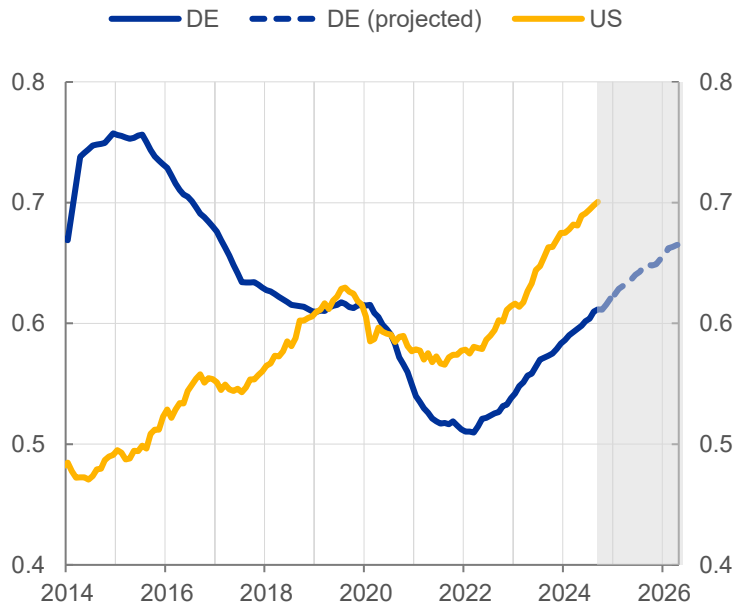
Source: Markit iBoxx.

Notes: The chart illustrates the premium for USD AAA-rated corporate bonds with maturities of 10 to 15 years over the corresponding US Treasury yield. The relevant US Treasury yield is determined through linear interpolation between two benchmark bonds, whose maturities are slightly above and below the bond's maturity date.
Latest observation: 21 February 2025.

Global bond free float is rising notably and is expected to increase further

Sovereign bond free float

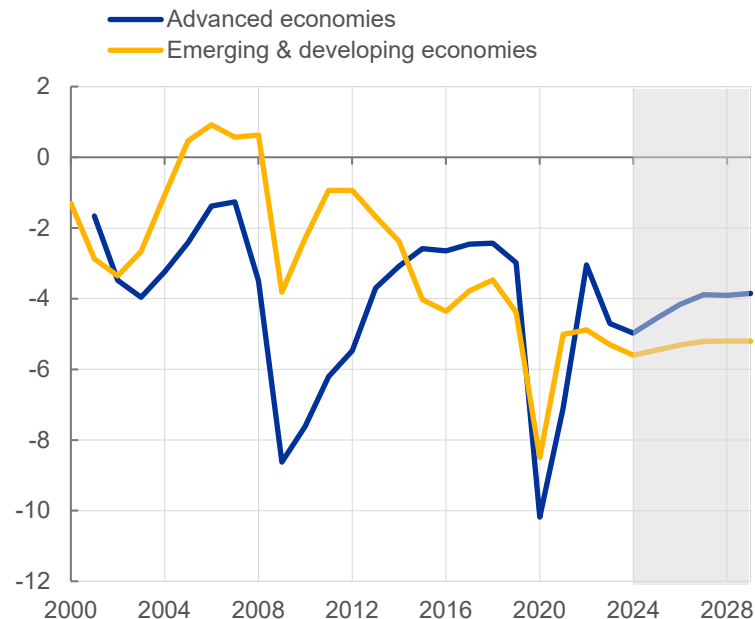
(% of outstanding)



Source: ECB. Notes: The DE free-float measure is defined as holdings of DE public sector bonds by price-sensitive investors defined as all sectors other than the foreign official sector, and the Eurosystem as a share of total outstanding DE public sector bond supply. The US free float is computed as share of outstanding marketable US Treasury debt not held in the Federal Reserve's SOMA portfolio, nor is reported as being held by foreign official investors. Foreign official holdings as reported in the US TIC data are transformed into nominal values based on the average price of outstanding US Treasury debt according to the Federal Reserve. Latest observation: 31 January 2025 for DE, 30 November 2024 for US.

Fiscal balance

(% of GDP)



Source: October 2024 IMF World Economic Outlook (WEO) via Haver Analytics. Notes: Fiscal balance refers to general government net lending / borrowing as a percentage of GDP. Latest observation: 2023.

Global fragmentation and the unwinding of QE are adding to the bond free float

Share of foreign official holdings of US Treasury securities

(percent)

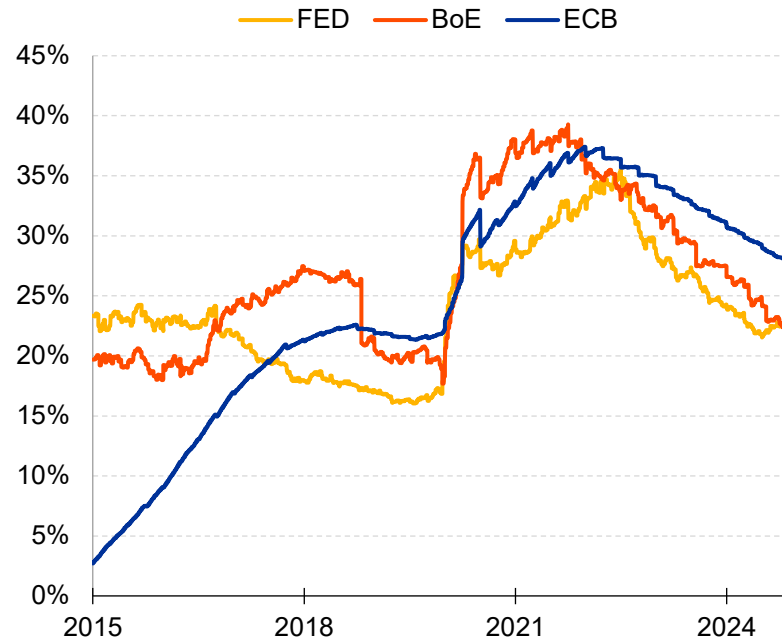


Sources: LSEG and ECB staff calculations.

Notes: Share calculated over the total marketable US Treasury securities outstanding.
Latest observation: November 2024.

Central bank monetary bond portfolio

(as percent of GDP)



Sources: Bloomberg, BoE Weekly Reports.

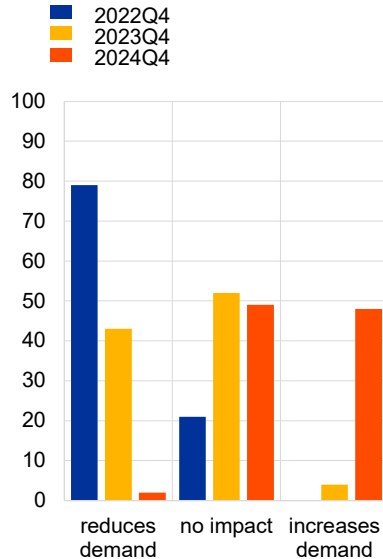
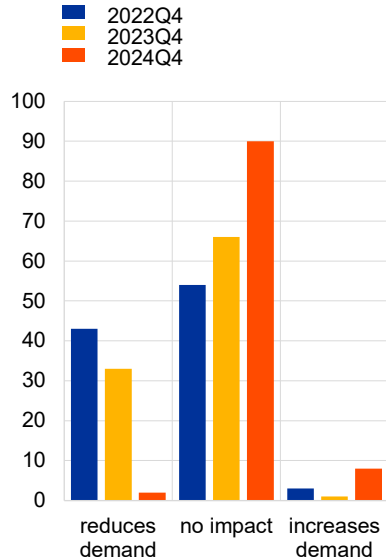
Notes: BoE data is estimated from BoE weekly reports.
Latest observation: 20 February 2025.

Impact of general level of interest rates on loan demand

(percent)

Corporate loans

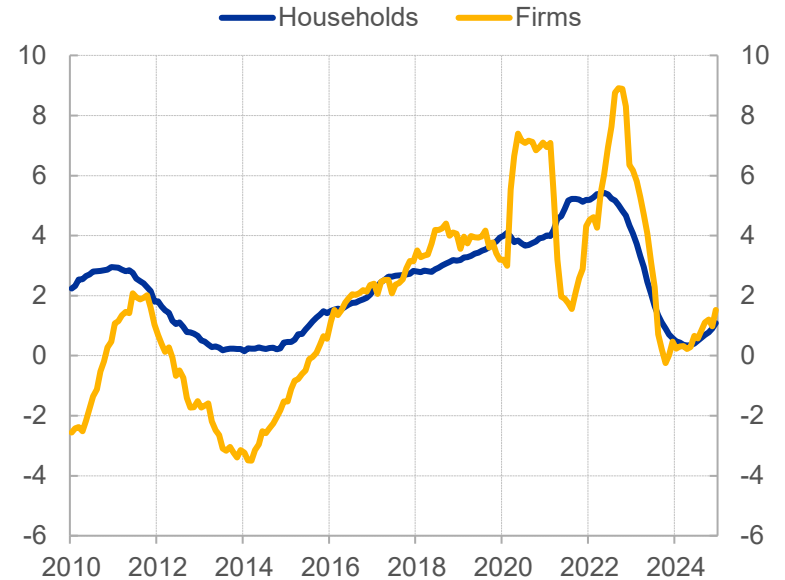
Mortgages



Source: ECB Bank Lending Survey.

Lending to firms and to households for house purchase

(annual percentage changes)



Sources: ECB (BSI) and ECB calculations.

Notes: Lending growth to households for house purchase prior to December 2015 is based on internal series.

Latest observation: December 2024.

Borrowing costs of households are relatively favourable compared with the 2010s

Spread between composite cost of borrowing for households and 10-year euro area government bond yield

(percentage points)



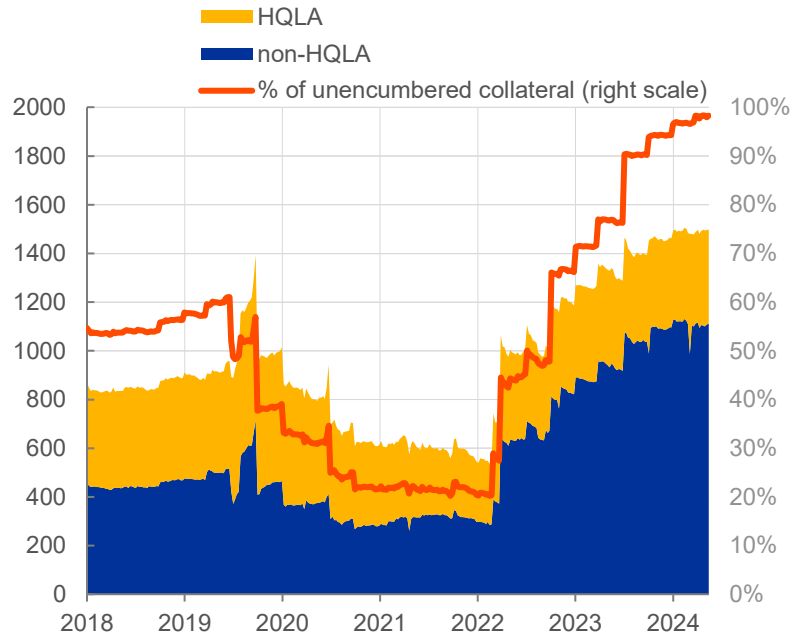
Sources: ECB (MIR, FM) and ECB calculations.

Notes: The 10-year euro area government bond yields are GDP-weighted. The historical average is calculated since January 2005.

Latest observation: December 2024.

Composition of collateral buffer mobilised with Eurosystem and unencumbered collateral

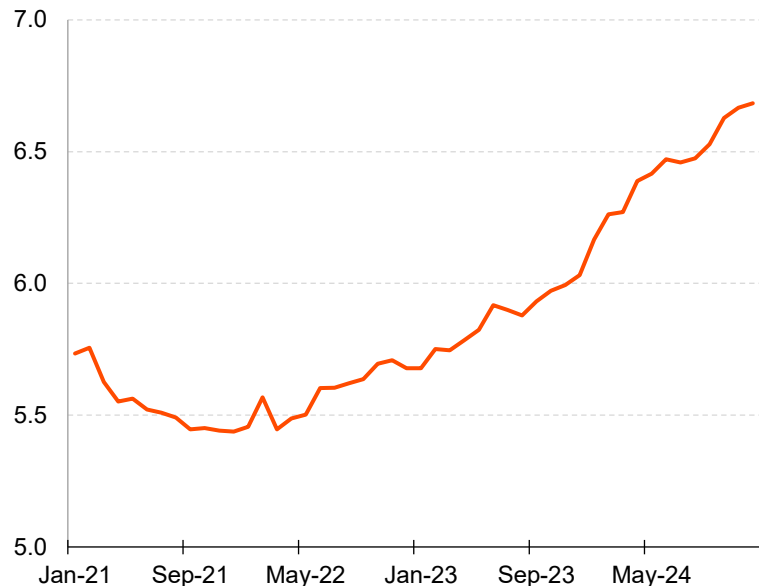
(in billion euro)



Source: ECB calculations

Notes: Chart shows composition of collateral mobilised by banks with the Eurosystem but not used for outstanding credit. Non-HQLA comprises predominantly non-marketable assets (credit claims), own-used covered bonds and retained ABS. Red line shows the share of unencumbered assets as a share of collateral mobilised with the Eurosystem but not used for actual borrowing. The increase in collateral buffers at the end of 2022 reflects that the sizable TLTRO-III repayments were not accompanied by a one-for-one reduction in mobilised collateral. The chart accounts for the 'waterfall' treatment of asset encumbrance under the LCR, i.e. that less liquid assets are counted as encumbered first.

Ratio of free float of euro area government bonds and capital of primary dealers



Sources: ESMA, CSEC, BSI, ECB calculations.

Notes: Dealer capital for primary dealers institutionally reporting as MFIs in the IBSI data collection. EGB free float based on central government issued bonds. Last observation: December 2024.

Thank you very much for your attention!