



EUROPEAN CENTRAL BANK

EUROSYSTEM

Back to normal? Balance sheet size and interest rate control

27 March 2023

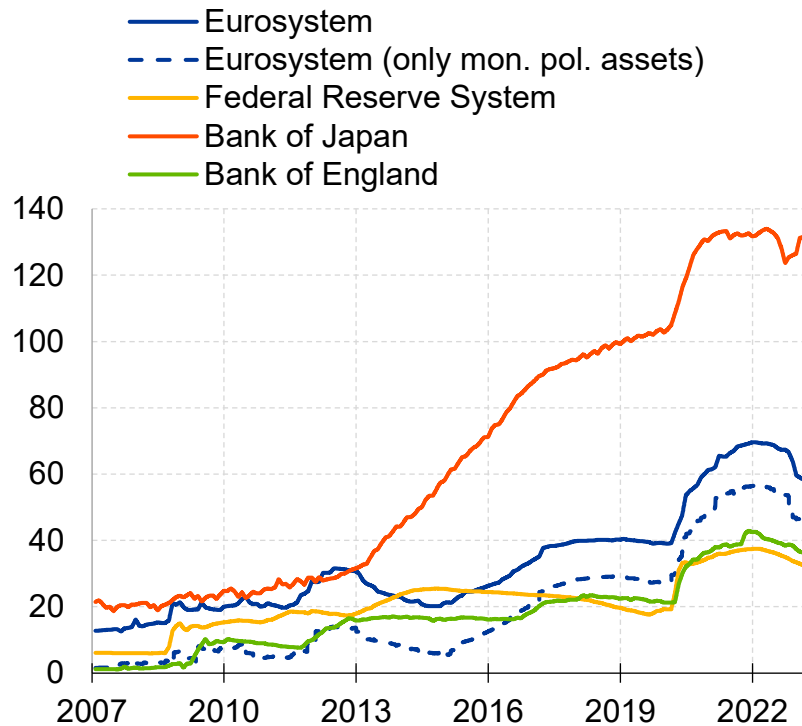
Isabel Schnabel, Member of the ECB's Executive Board
Columbia University, New York



Balance sheet expansion reflects the ECB's response to low inflation and the pandemic

Central bank total assets

(% of GDP)



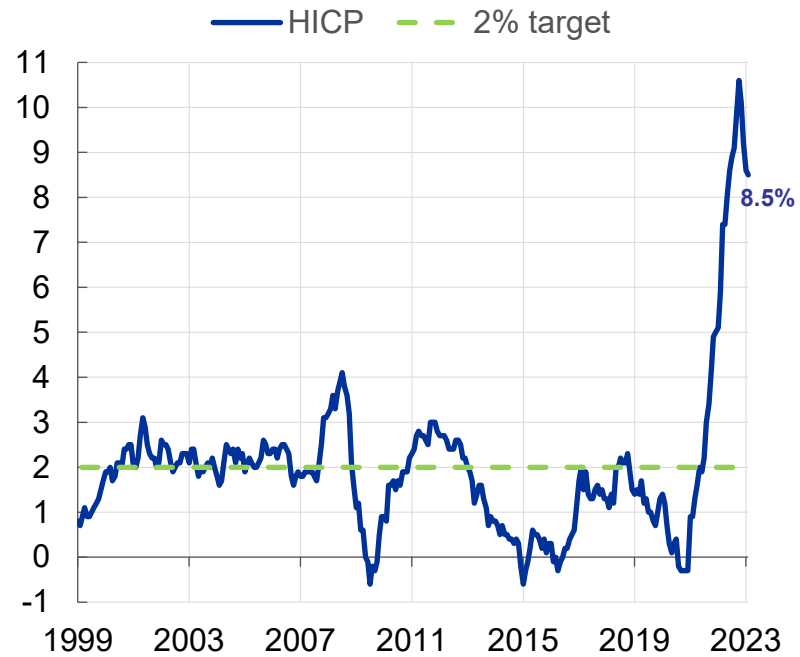
Source: Bloomberg.

Note: Series based on a 22-day moving average to smooth monthly data.

Last observation: 22 March 2023.

Euro area HICP inflation

(%)



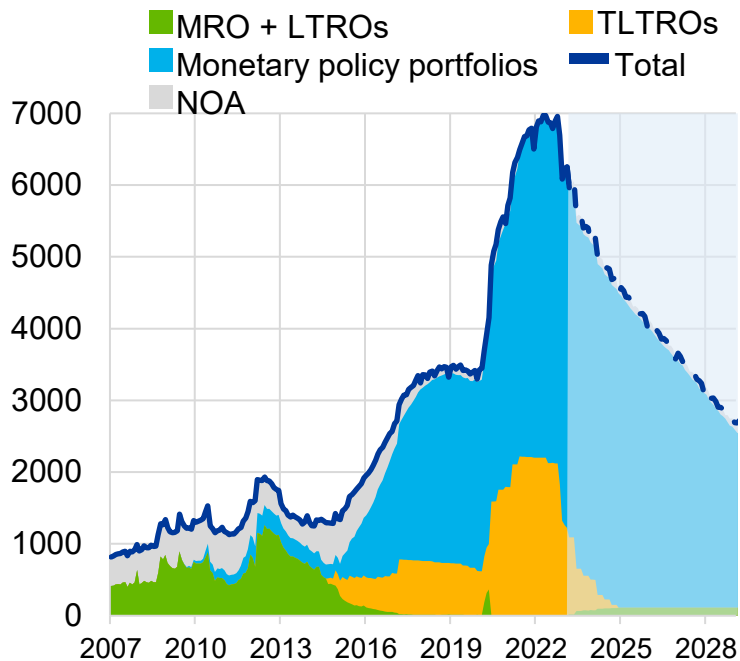
Source: Eurostat.

Sharp increase in monetary policy assets and corresponding rise in excess reserves

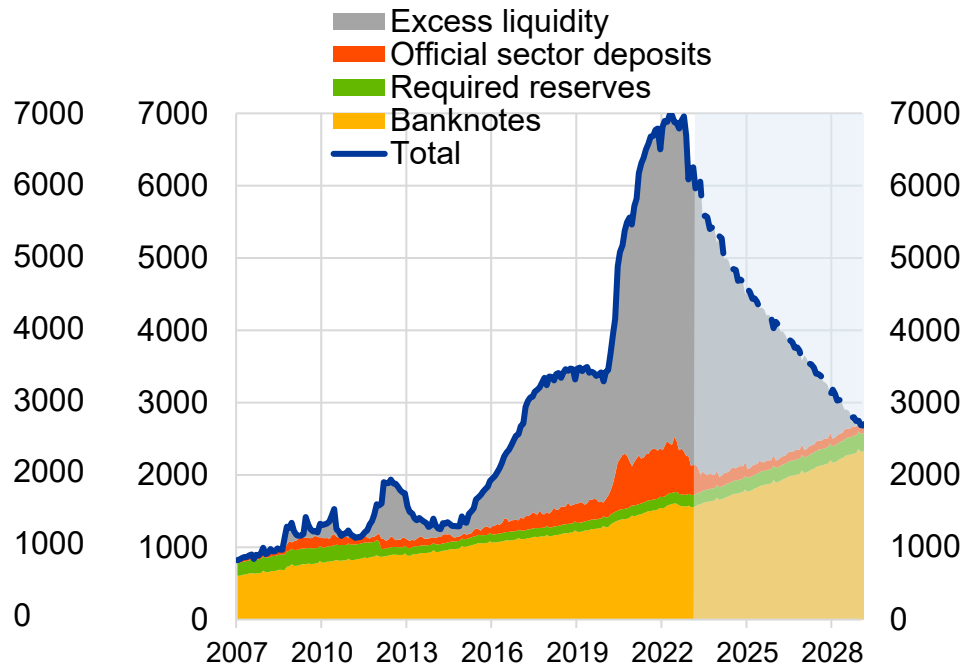
Eurosystem balance sheet: actual and projected

(EUR billion)

Asset side



Liability side

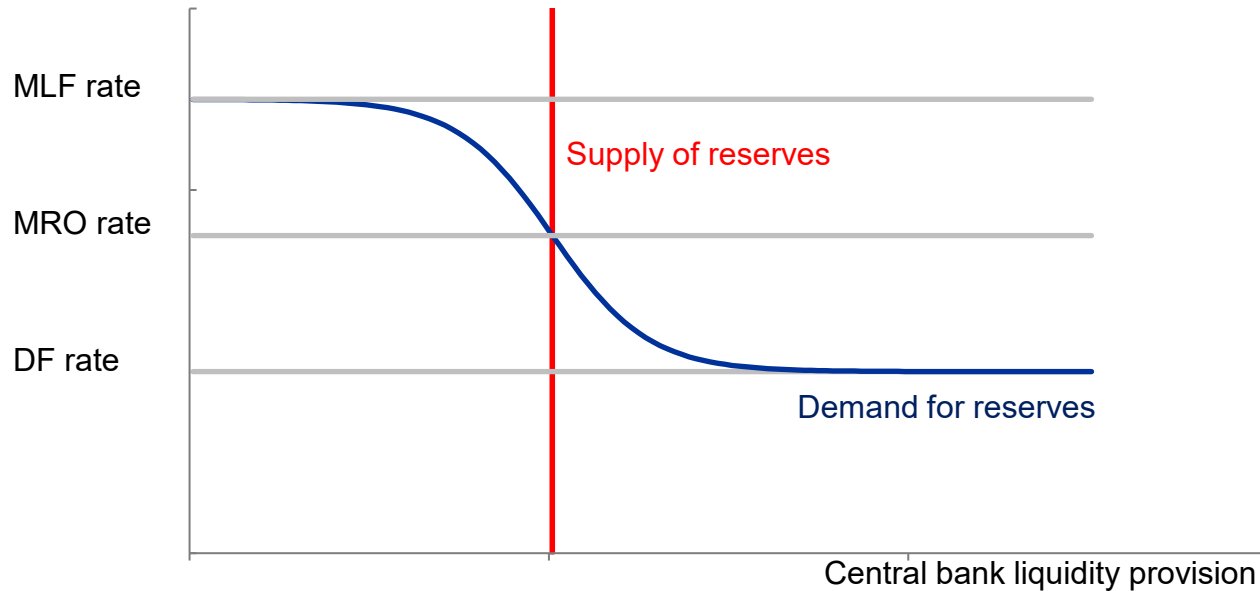


Source: ECB calculations.

Note: The future path of the monetary policy portfolio is based on the median expectations by analysts as reported in the March SMA survey. Government deposits are assumed to be remunerated at a ceiling of €STR-20bps as of May 2023. The projections of banknotes are based on an ECB internal model. NOA stands for net other assets.

Last observation: February 2023.

Supply of and demand for reserves in a corridor system



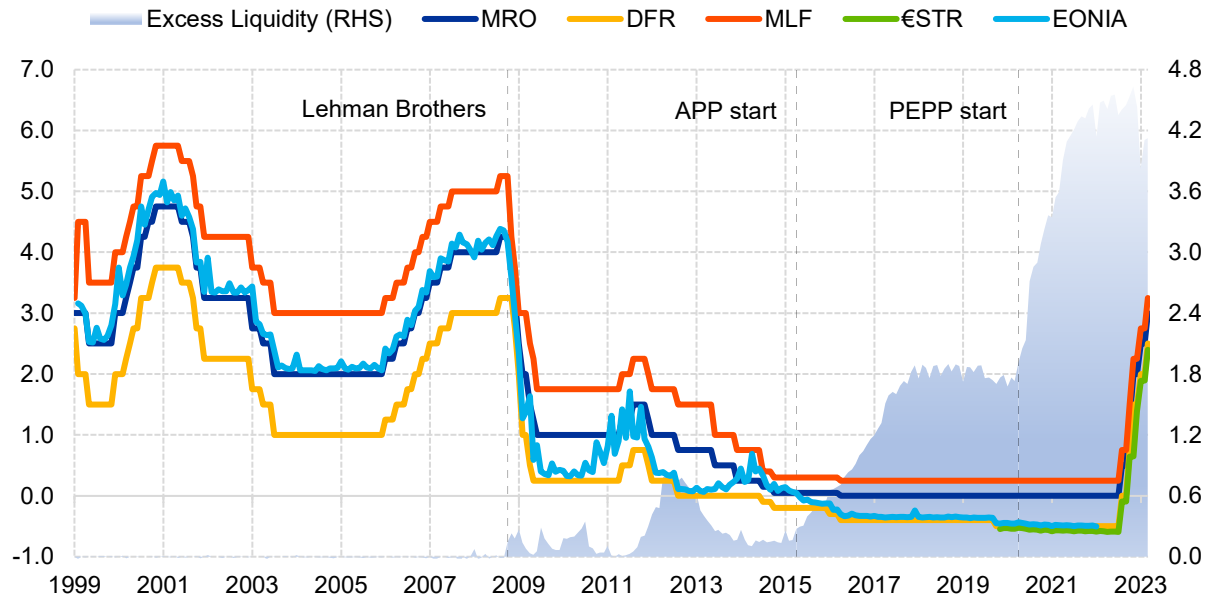
Source: ECB.

Notes: MLF refers to marginal lending facility, MRO to main refinancing operation, and DF to deposit facility.

EONIA traded in the middle of the corridor when supply of reserves matched demand

ECB key policy rates, overnight market rates and excess liquidity

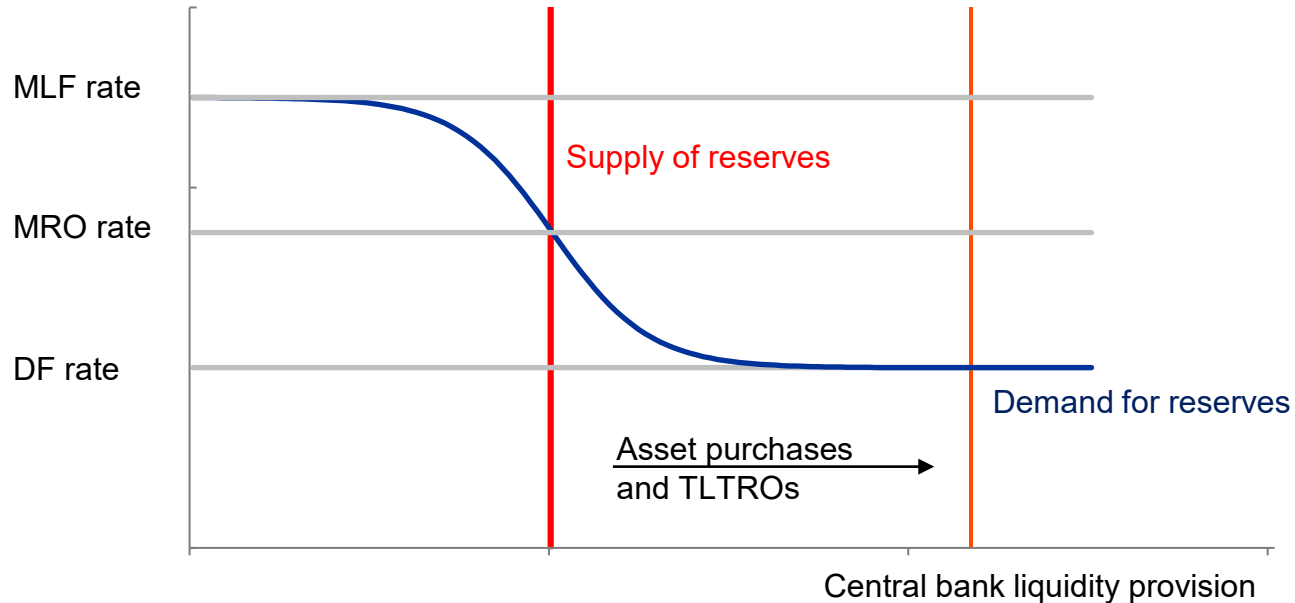
(LHS: percentage; RHS: EUR trillion)



Source: ECB.

Note: Three key ECB policy rates form the policy rate corridor: Main Refinancing Operation (MRO) rate, Marginal Lending Facility (MLF) rate and Deposit Facility Rate (DFR).

Supply of and demand for reserves in a floor system

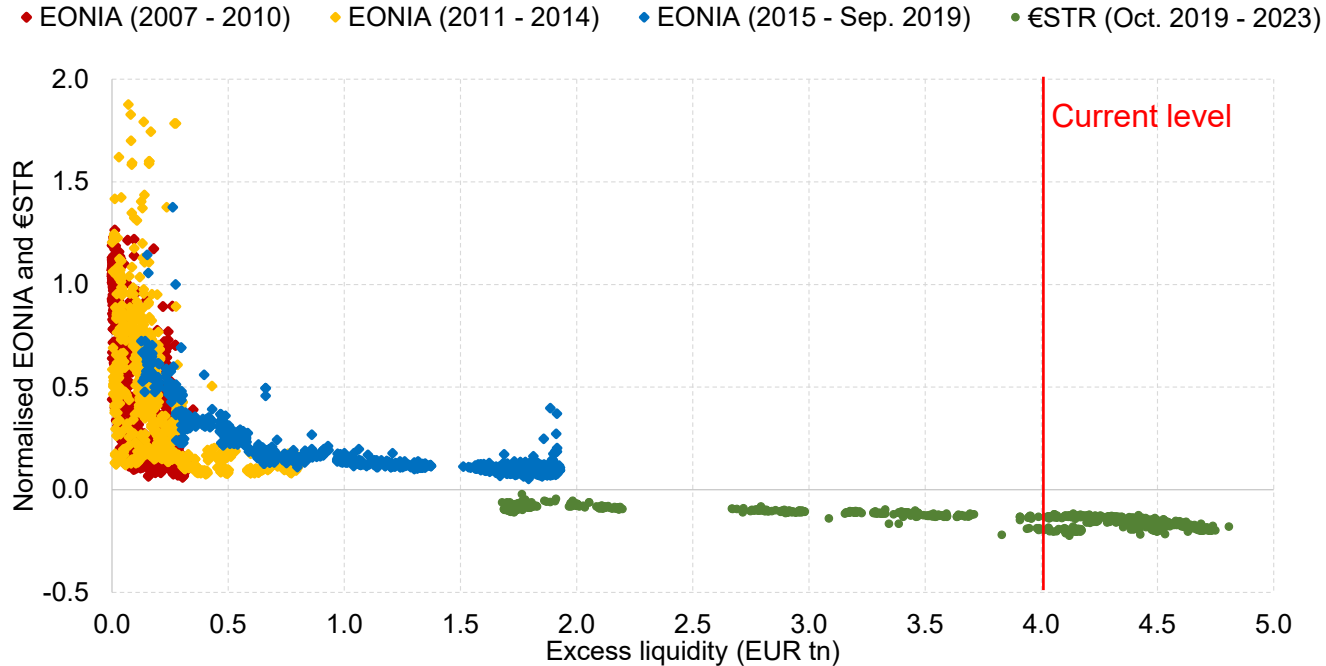


Source: ECB.

Notes: MLF refers to marginal lending facility, MRO to main refinancing operation, and DF to deposit facility.

EONIA and €STR as a function of excess liquidity

(Y-axis: ratio; X-axis: EUR trillion)



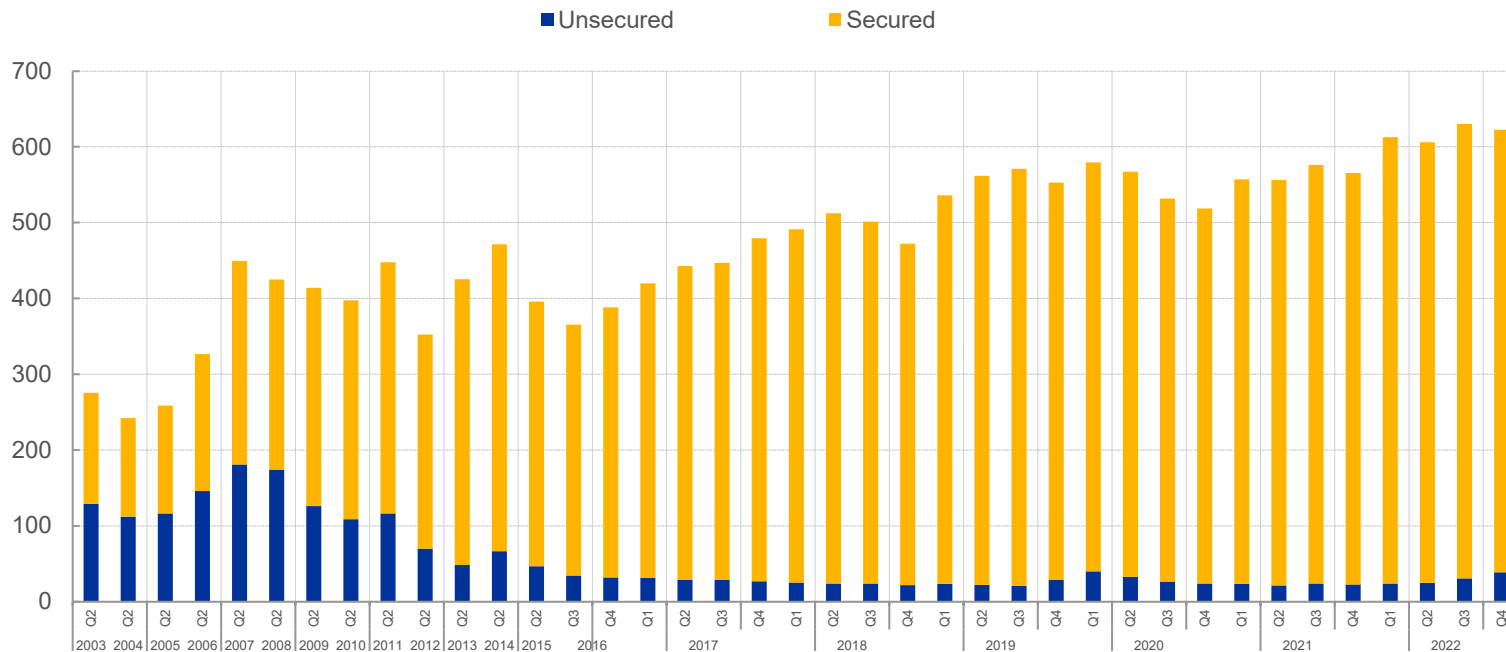
Source: EMMI, ECB.

Note: Spread of EONIA or €STR to the deposit facility rate over the spread of the rate on the main refinancing operation to the deposit facility rate.

Latest observation: 21 March 2023, indicated by vertical line.

Evolution of the size and composition of the interbank market

(EUR billion; average daily volumes)



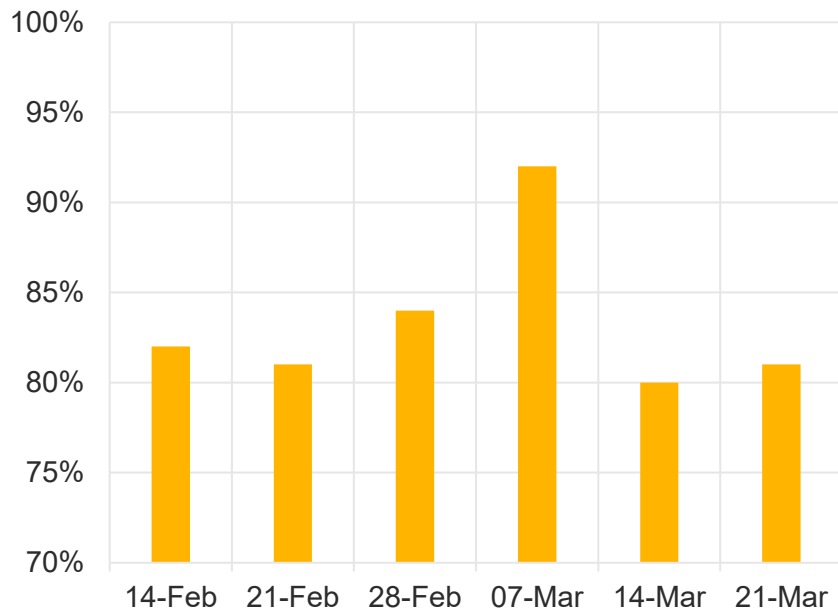
Source: Euro money market survey until 2015, MMSR from 2016 onwards.

Note: Until 2015, the chart is based on euro money market survey data for 38 overlapping reporting agents and retroplated data for the 14 MMSR reporting agents not covered in the survey. The performed retroplation applies the growth rates of the overlapping sample series to the missing data backwards in time, starting from the first available observation in 2016 Q3. Two confidential datapoints have been interpolated.

Swedish experience points to strong preferences by banks for holding reserves

Uptake of Riksbank certificates

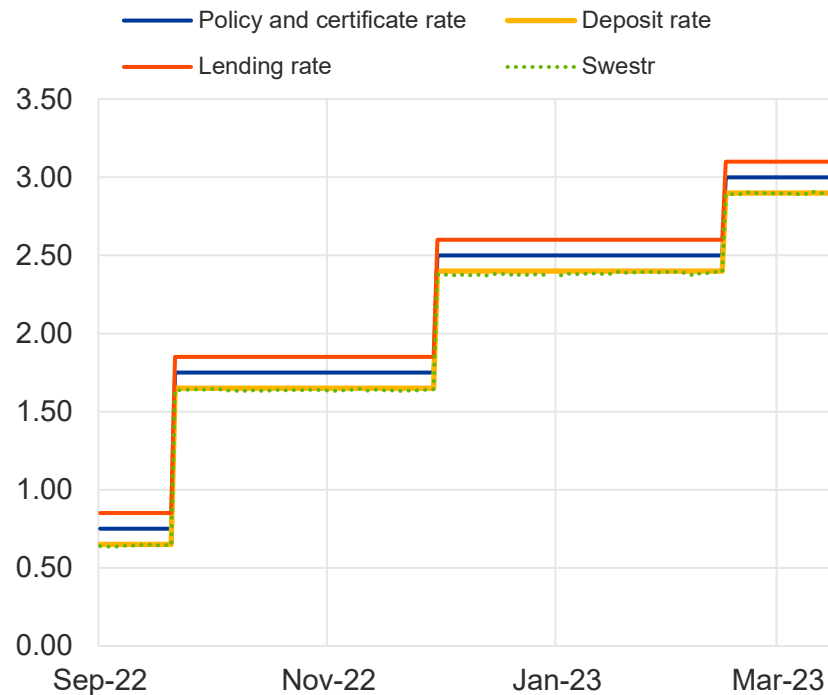
(% of amount offered)



Source: Sveriges Riksbank

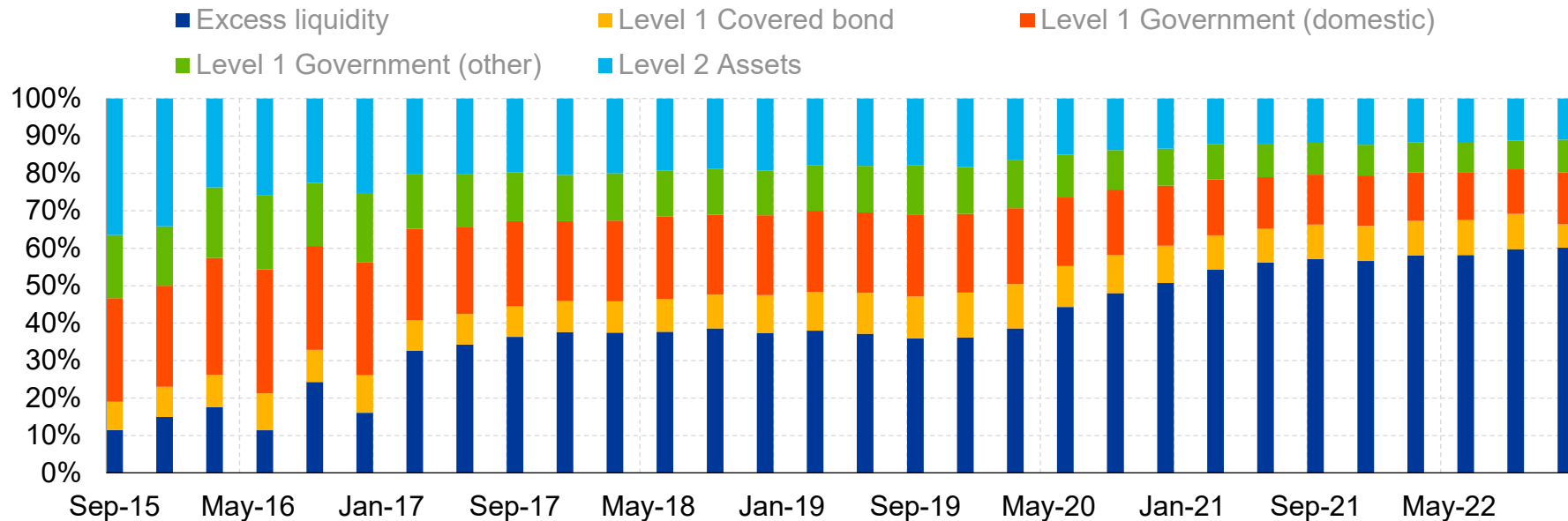
Key interest rates in Sweden

(%)



Euro area banks extensively use reserves to comply with regulatory requirements

High quality liquid assets (HQLA) held by euro area banks (% of total)



Source: Eurosystem and SHS

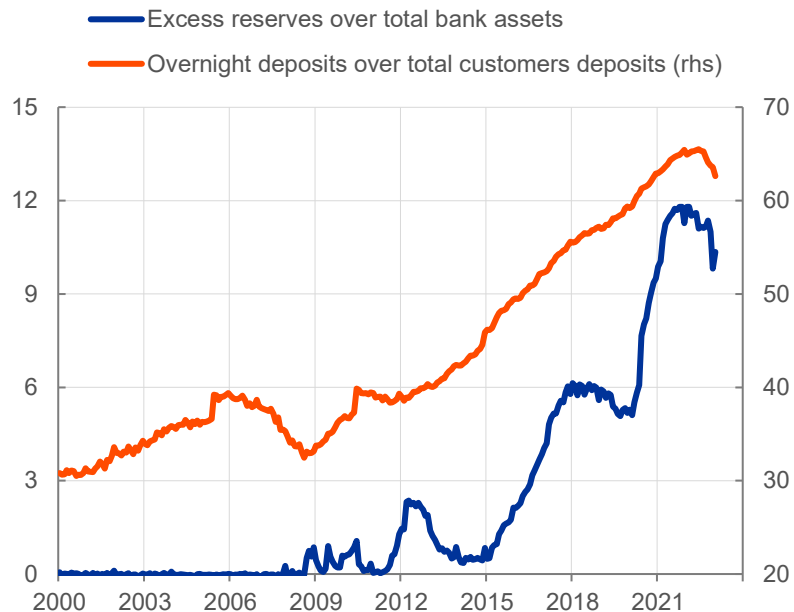
Note: Level 2 assets include other government, corporate and covered bonds as well as ABS.

Last observation: December 2022.

High share of overnight deposits may contribute to precautionary liquidity demand

Euro area overnight deposits and excess reserves

(lhs: percentages over total assets of MFIs excluding the Eurosystem,
rhs: percentages over total customer deposits)



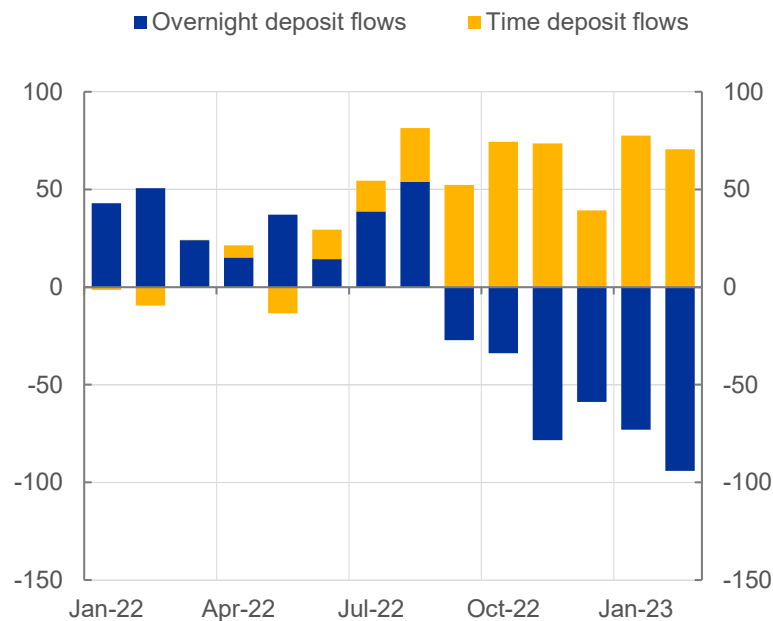
Source: ECB (BSI, ILM) and ECB calculations.

Note: Customer deposits include total deposits held by resident non-MFIs excluding central government and excluding long-term deposits held by financial vehicle corporations engaged in securitisation.

Latest observation: January 2023.

Overnight and time deposits by the non-financial private sector

(monthly flows in EUR billion)



Source: ECB. Notes: Time deposits are those with a maturity up to two years.

Latest observation: February 2023.

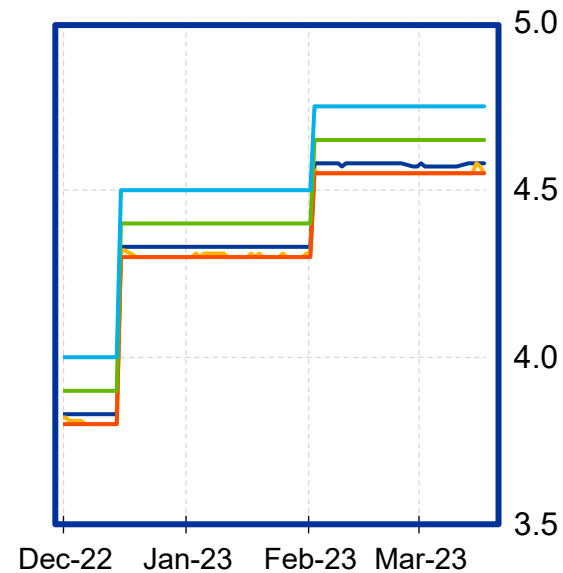
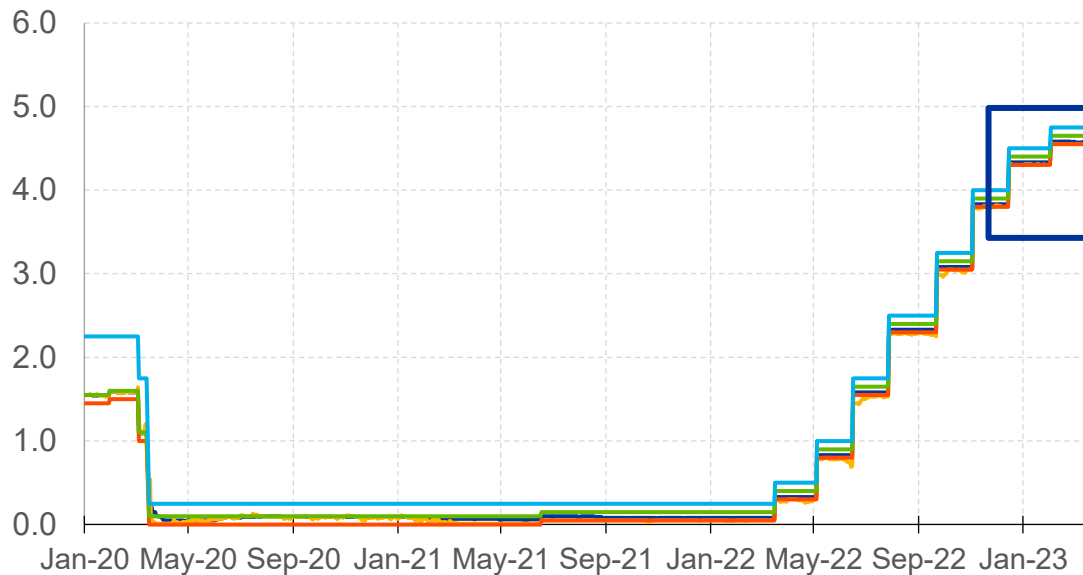
Federal Reserve operates in a floor system with ample reserves

US administrated and money market rates

(%)

- Federal Funds Effective Rate
- ON RRP Rate
- Discount Window (Primary Credit)
- SOFR
- IORB - Interest on Reserve Balances

Dec 22 – Mar 23



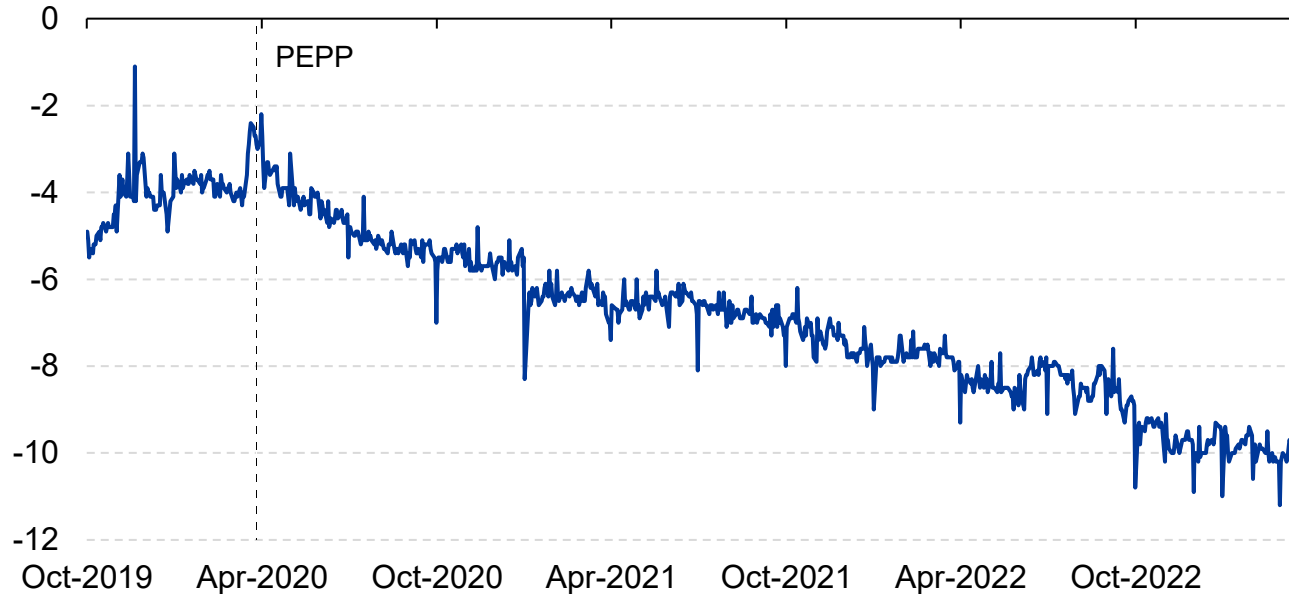
Source: Bloomberg.

Last observation: 20 March 2023

Notes: The Federal Reserve also operates a standing repo facility, which is not shown in the chart.

Rising excess liquidity has made the floor in the euro area increasingly “leaky”

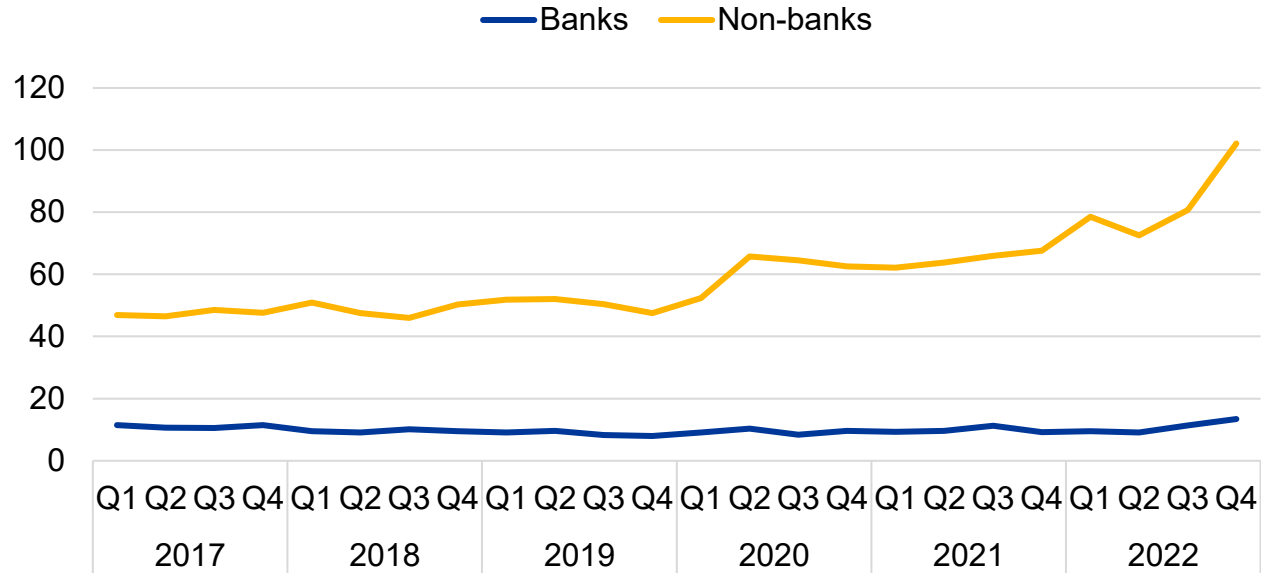
€STR – DFR spread (basis points)



Source: ECB.
Latest observation: 16 March 2023.

Rising share of non-bank transactions underlying the calculation of €STR

Daily average trades per counterparty group (EUR billion)

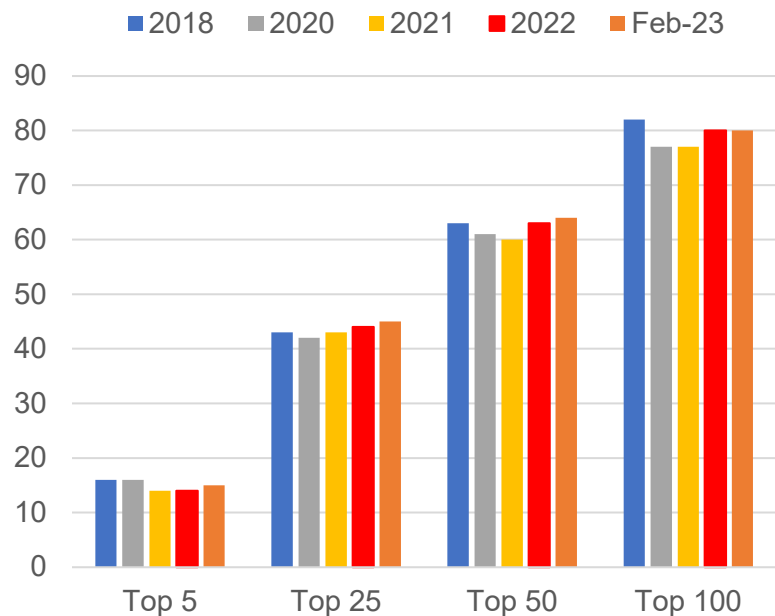


Source: MMSR.

Excess liquidity tends to be concentrated in financial centres in supply-driven system

Concentration of excess liquidity in euro area banks

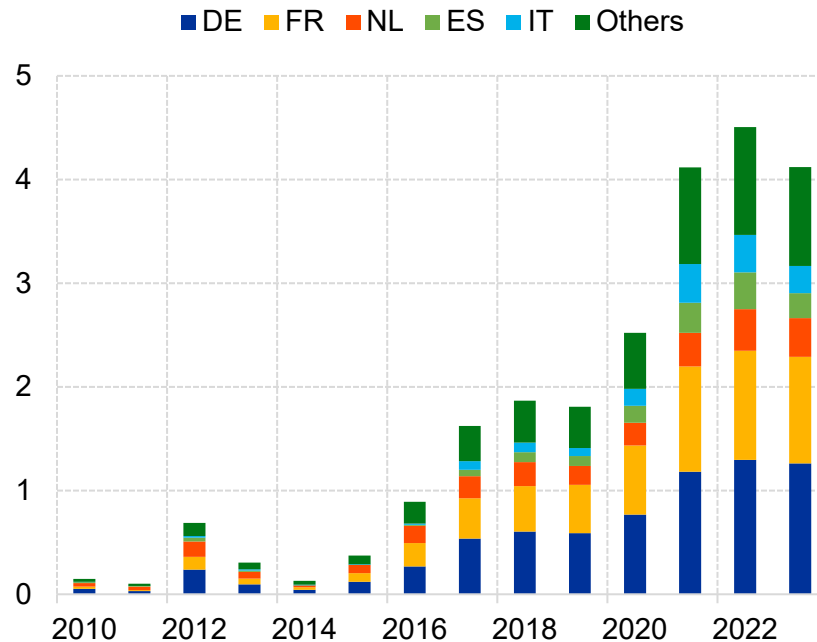
(percentages)



Source: ECB.

Excess liquidity across euro area countries

(EUR trillion)



Source: ECB.

QE has contributed to scarcity of safe and liquid assets in repo and bond markets

2-year Bund asset swap spread

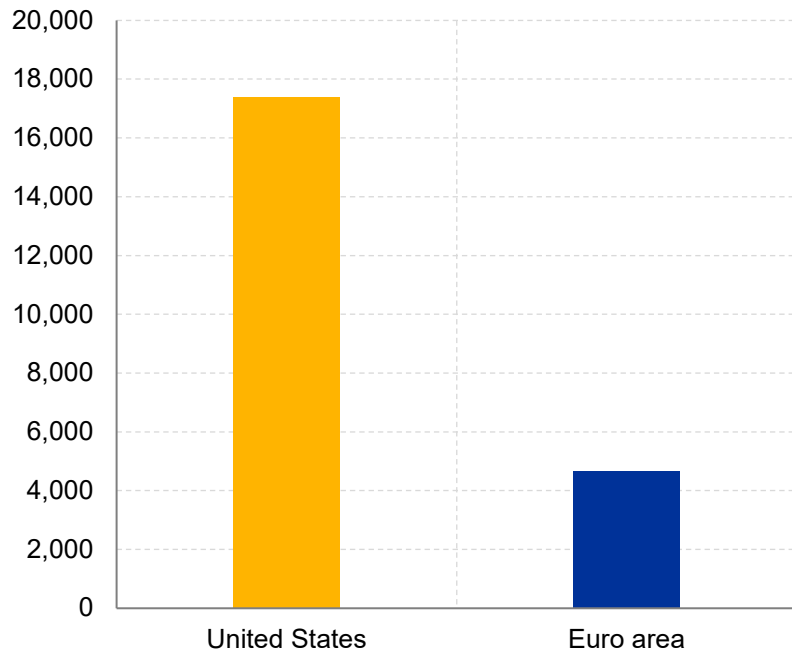
(basis points)



Source: Bloomberg.

Outstanding government bonds rated with very low credit risk

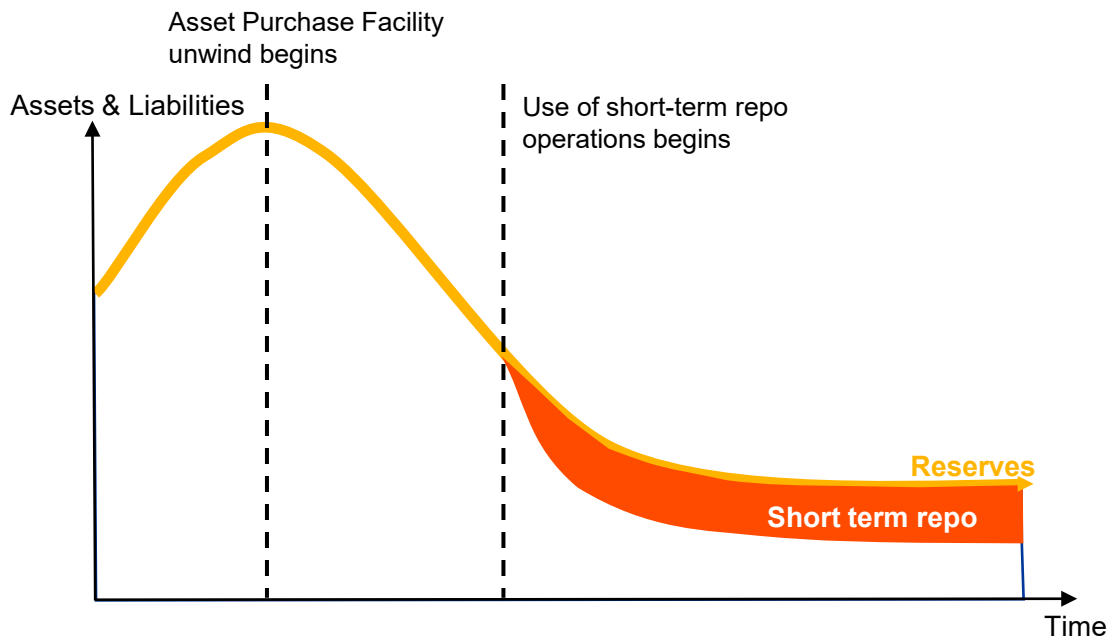
(USD and EUR trillions)



Source: ECB calculations, Bloomberg

Note: Only euro area government bonds rated up to and including Aa3 have been considered for calculation (Germany, Netherlands, Luxembourg, Austria, Belgium, France). Bills not included. Outstanding levels as of 31 December 2022.

Stylised evolution of reserves at Bank of England



Source: Bank of England.
Notes: The chart has been amended to simply visualization.

Two-year Bund vs. DFR spread (percentage points)



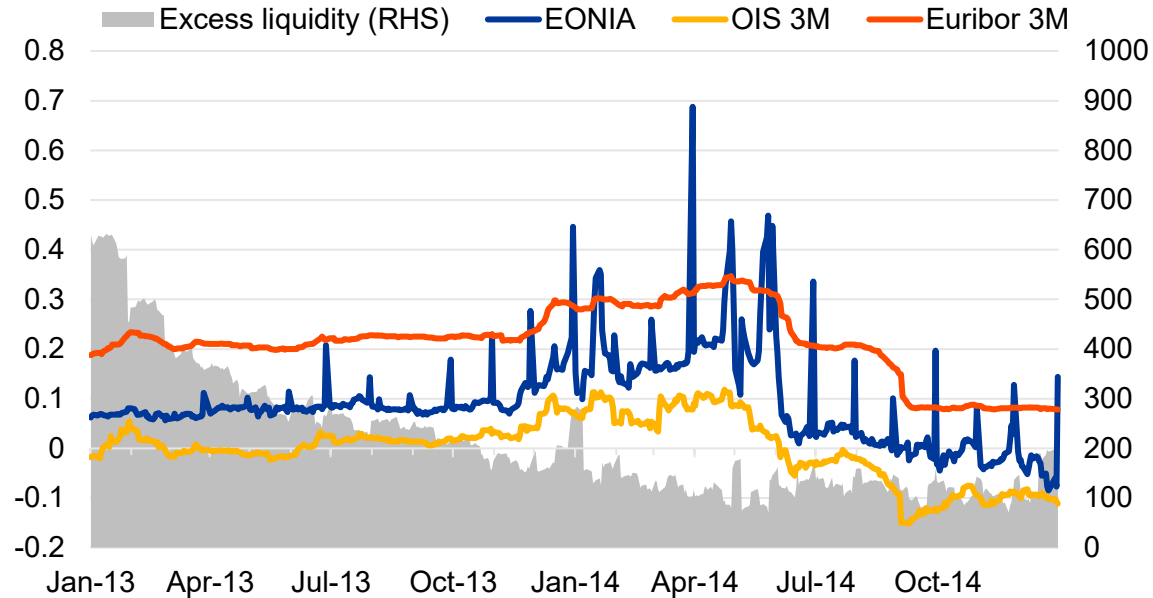
Source: Bloomberg, ECB.

Note: Difference between the yield to maturity of the German Bund with the deposit facility rate.

Volatility of overnight rates may not affect broader monetary policy transmission

Excess liquidity and selected interest rates

(LHS: percentage; RHS: EUR billion)



Source: ECB, Bloomberg.

Thank you very much for your attention!