



EUROPEAN CENTRAL BANK

EUROSYSTEM

Euro Money Market Study 2022

2021-2022 trends observed
through ECB Money Market
Statistical Reporting data

EMMEC meeting – Brussels
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Comprehensive analysis of euro money market over the two year period:

(1) Secured; (2) Unsecured; (3) ST securities issuance; (4) FX swaps and (5) O/N interest swaps



Volumes

- Flows
- Stock
- Drivers



Counterparties

- The role of non-banks
- Flows across sectors
- Flows across jurisdictions
- International trade evolution



Rates

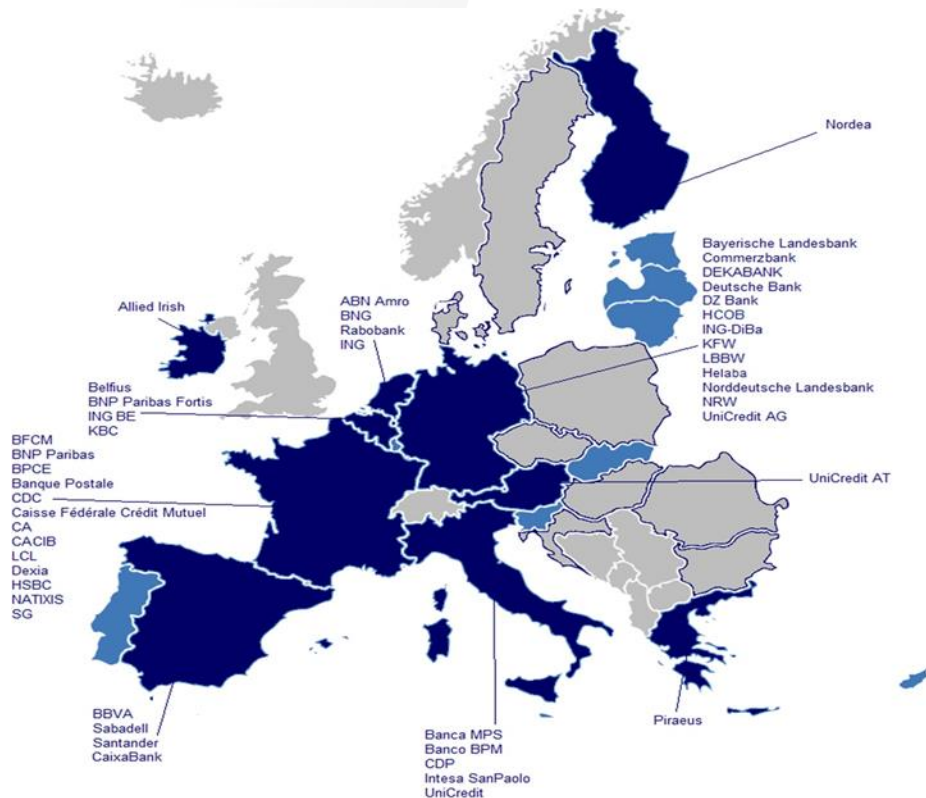
- Pass through
- DFR spread
- Drivers



Maturities

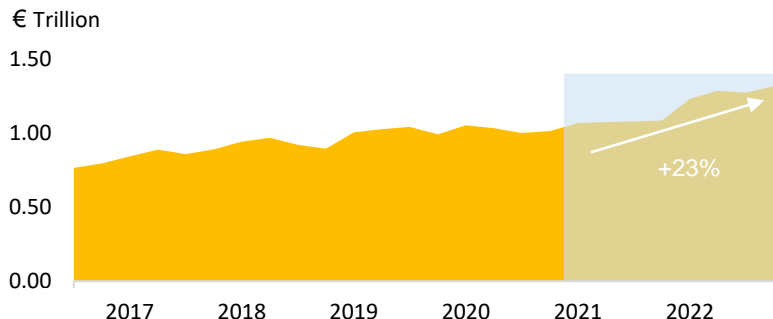
- Maturity buckets
- Calendar effects
- Seasonal patterns

Transactions-based dataset provided by reporting agents contributing to MMSR

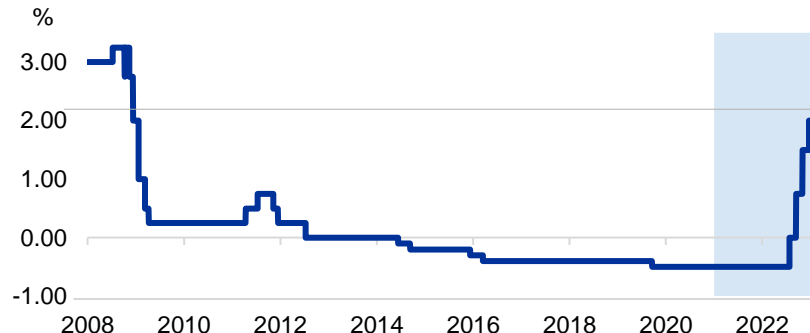


Activity increased in a context of rate hikes, collateral scarcity, ample reserves

Euro Money Market Daily transaction volumes

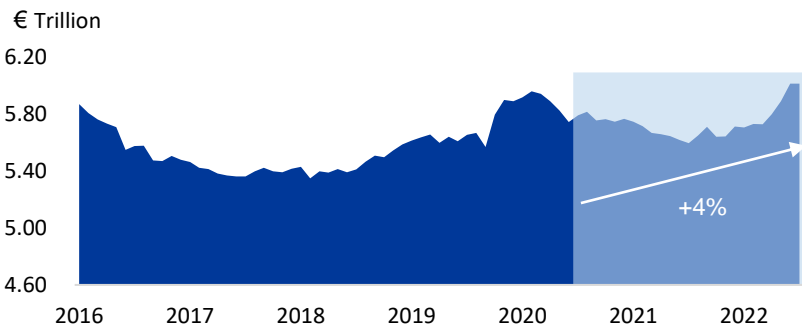


ECB Deposit Facility Rate



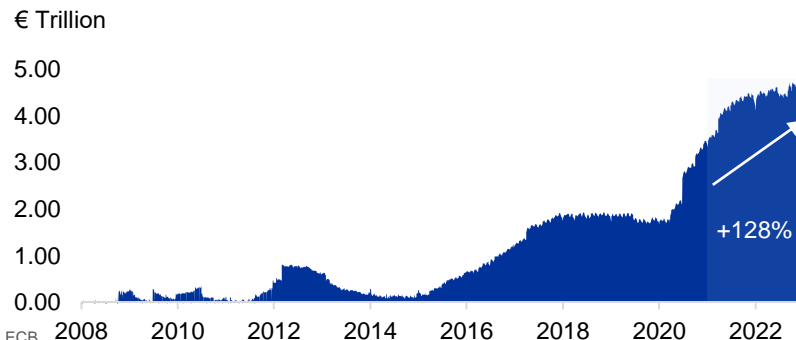
Sources: MMSR

European Government Bond (EGB) availability



Sources: ECB

Excess Liquidity (EL)



Sources: ECB

Sources: ECB own calculations

Notes: Calculated as the total issuance of euro area government bonds minus the Eurosystem footprint (monetary policy portfolios + government bonds pledged as TLTRO collateral – bonds lent through the securities lending program)

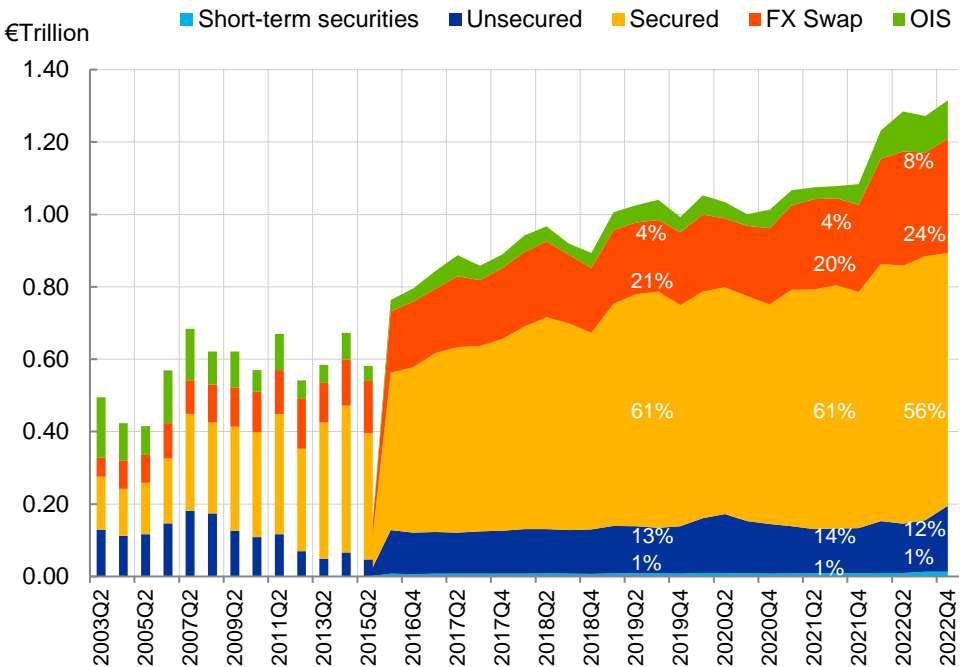


Main findings

Activity dominated by money market secured trades and FX swaps

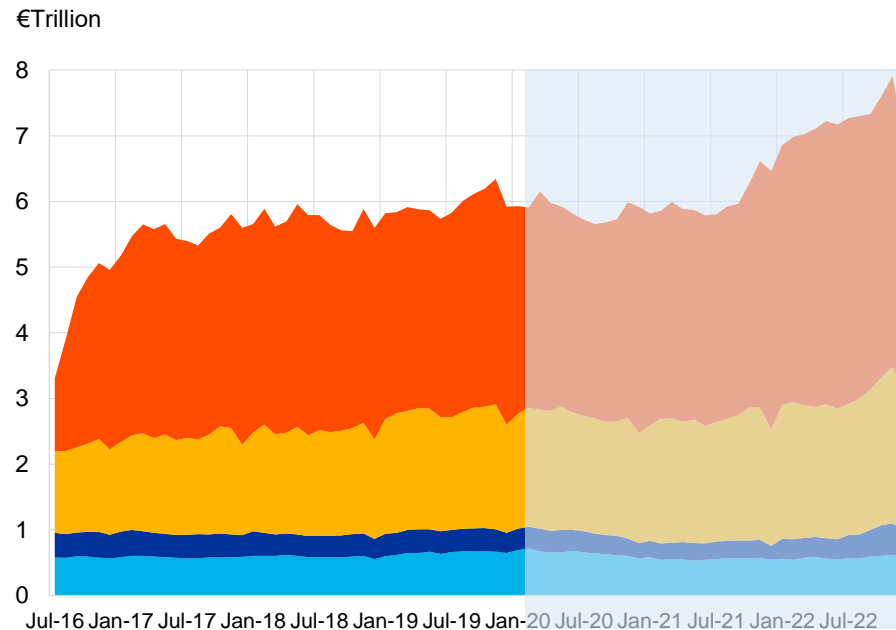


Daily transaction volumes (flows)



Sources: CSDB for the STS segment and MMSR for the other four segments.
 Note: From 2016 on, series includes MMSR transactions. Previous to that, the series includes euro money market survey for 38 overlapping reporting agents.

Outstanding amount (stock)

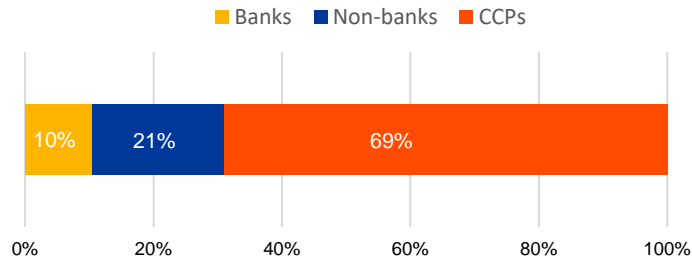


Sources: CSDB for the STS segment and MMSR for the other three segments.
 Note: OIS is not represented because these derivative only involve the exchange of interest payments between the parties, without exchanging the notional amounts

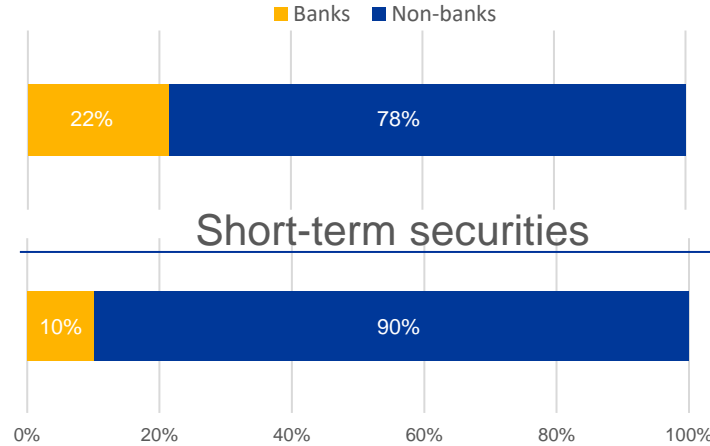


Significant share of non-banks and CCPs in several money market segments

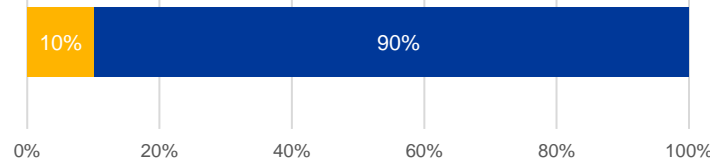
Secured



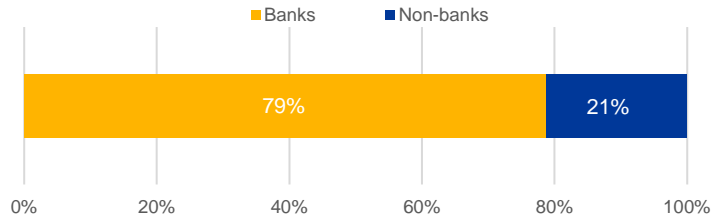
Unsecured



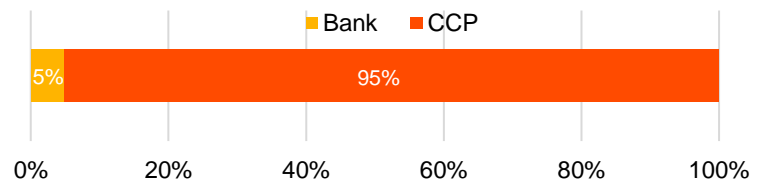
Short-term securities



Foreign Exchange Swaps



Overnight Index Swaps

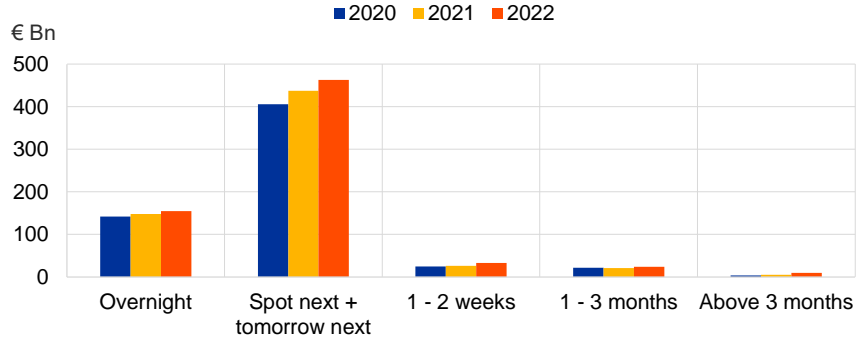


Source: CSDB for the STS segment and MMSR for the other segments.

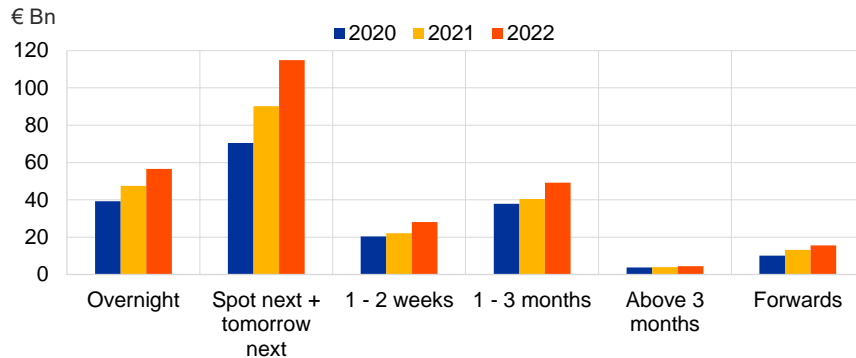
Activity is concentrated in very short tenors in all market segments



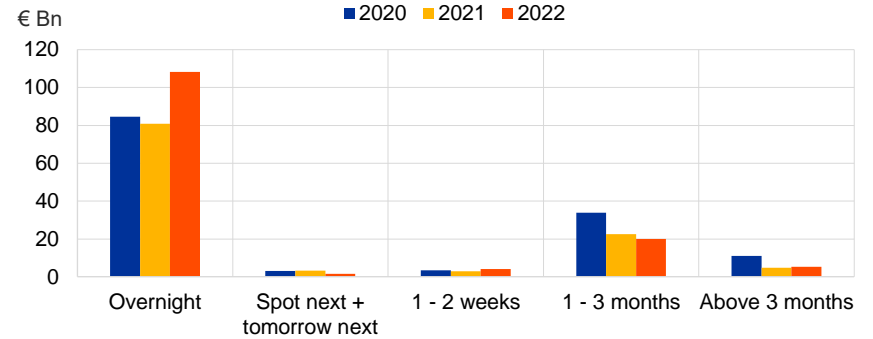
Secured



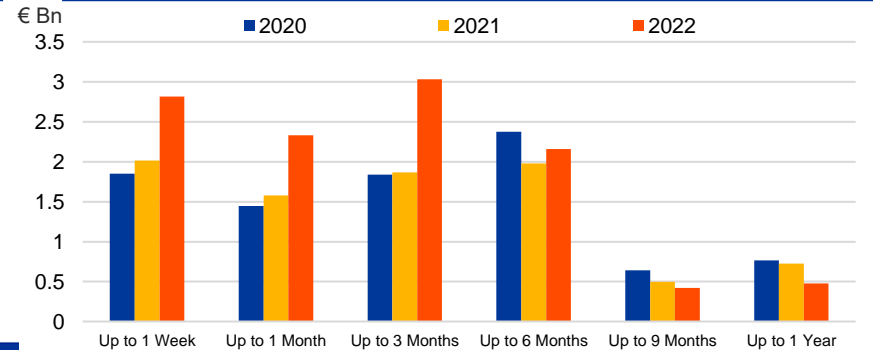
Foreign Exchange Swaps



Unsecured



Short-term securities

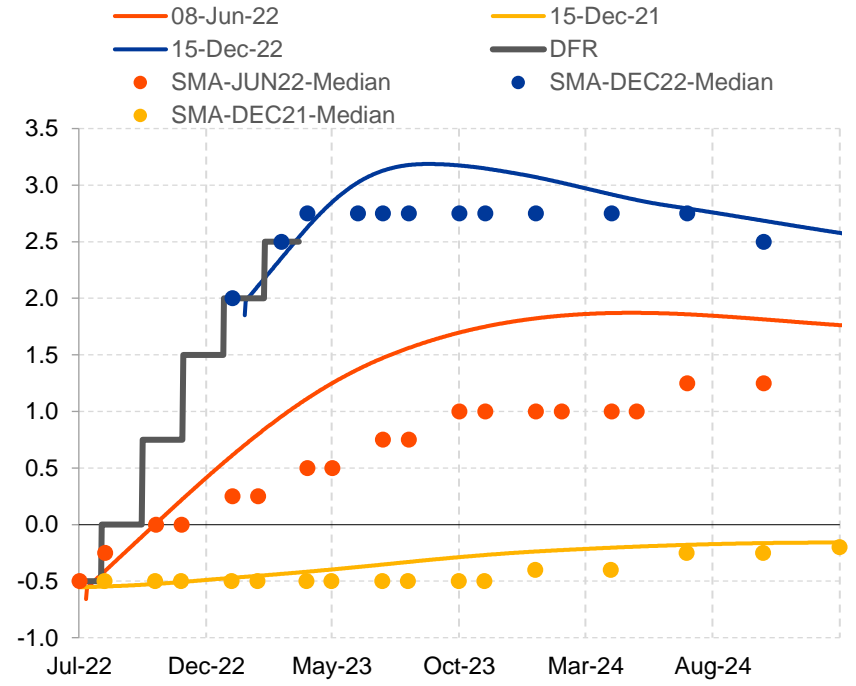


Source: CSDB for the STS segment and MMSR for the other three segments.



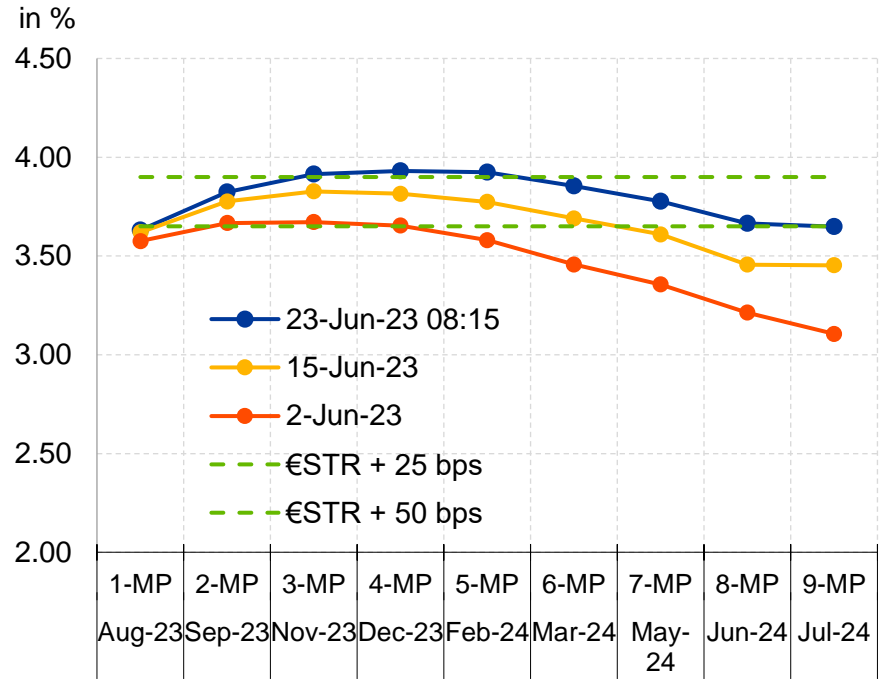
OIS anticipated well policy rate hikes

Forward OIS curves evolution within 2022



Source: Bloomberg, ECB.
 Notes: The OIS forward curves show nominal rates. SMA stands for the ECB Survey of Monetary Analysts.

Latest (23th June 2023) Forward OIS curve

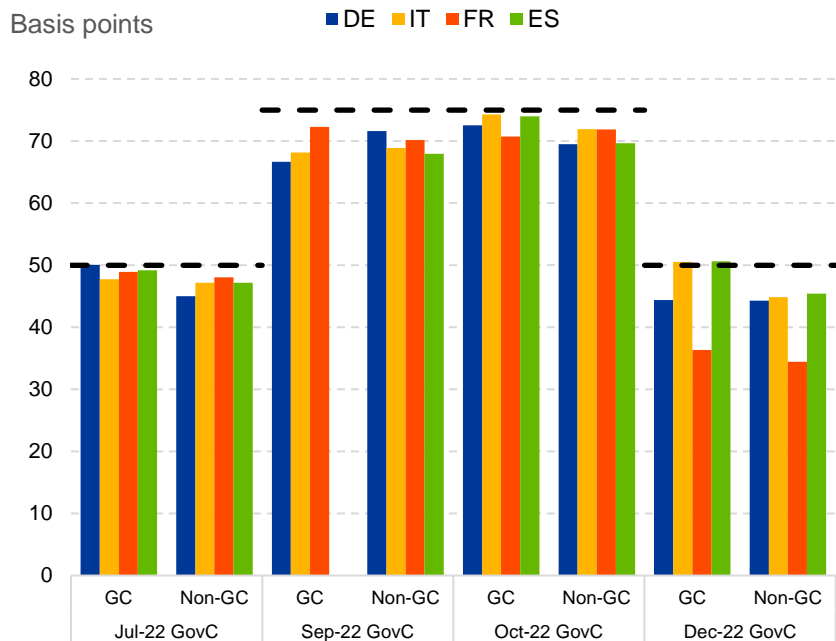


Source: Bloomberg



Effect of interest rate hikes

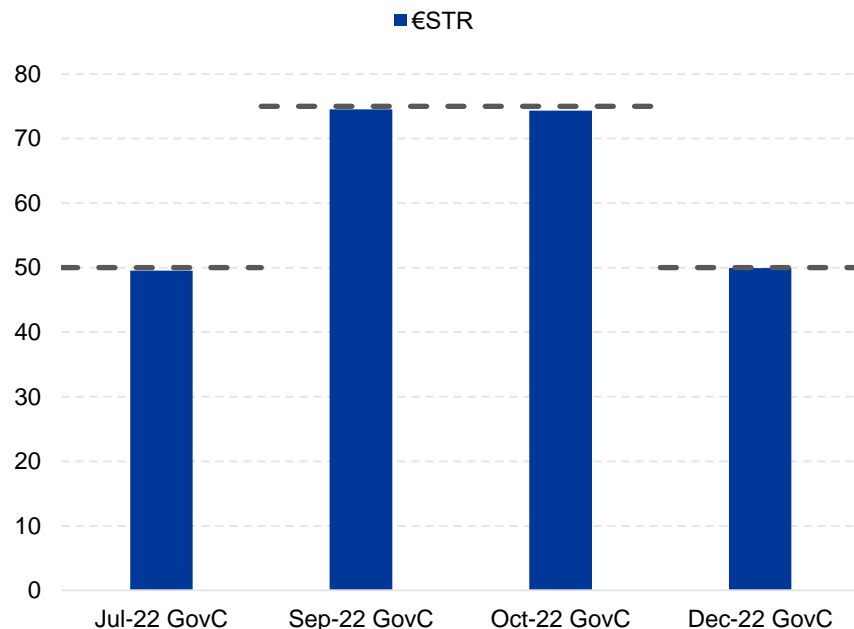
Uneven and partially lagged transmission to secured



Source: BrokerTec, MTS.

Note: Basis points difference of the volume-weighted average rates of the overnight (O/N), spot/next (S/N) and tomorrow/next (T/N) trades from the day of the Governing Council decision until the last day of the maintenance period (MP) and that settle either on the first or second day of the new MP, and the trades from the day of the Governing Council decision until the last day of the MP and that settle before the new MP. For Spain, there were no transactions with GC that met these date requirements for the September hike.

Good and complete transmission to unsecured

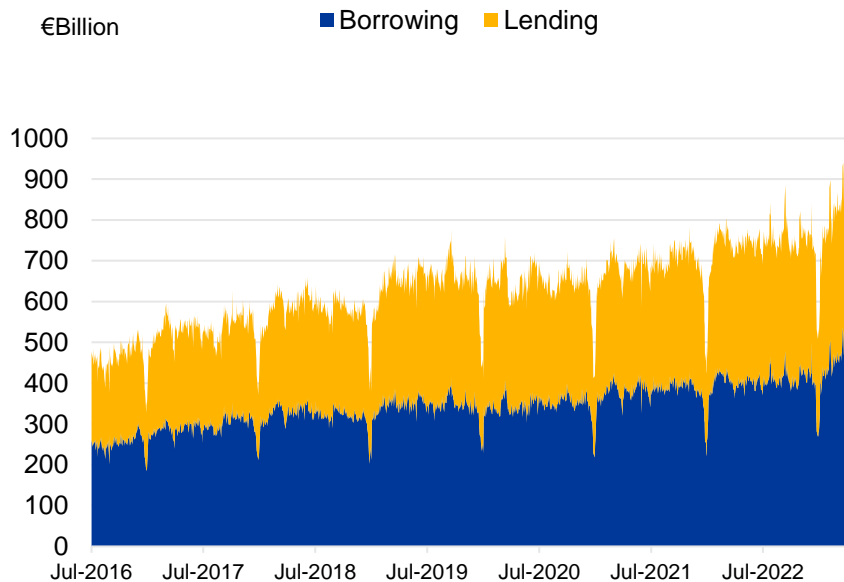


Sources: ECB and Bloomberg.

Note: The €STR shows the one-day change for unsecured overnight trades that settled on the last day of the MP and the first day of the MP.

Effect of collateral scarcity

Transaction secured volume

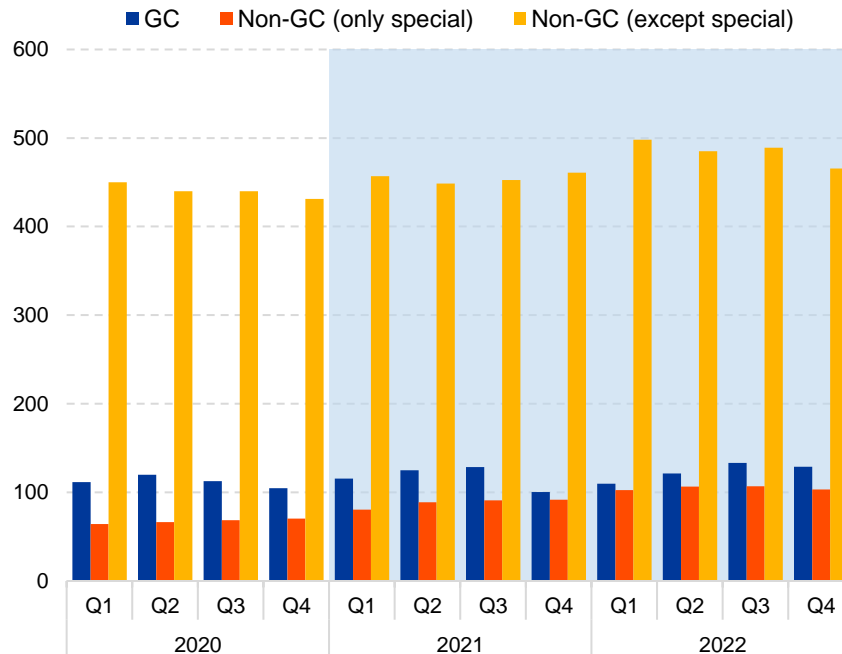


Source: MMSR.

Note: Non-general collateral repo refers to secured transactions collateralised using specific securities (international securities identification number (ISIN) codes) and trades with undefined collateral. Given that reporting special collateral is voluntary in the MMSR, the volumes may be under-represented.

Both graphs refer to daily transaction volumes

Secured transactions by collateral type

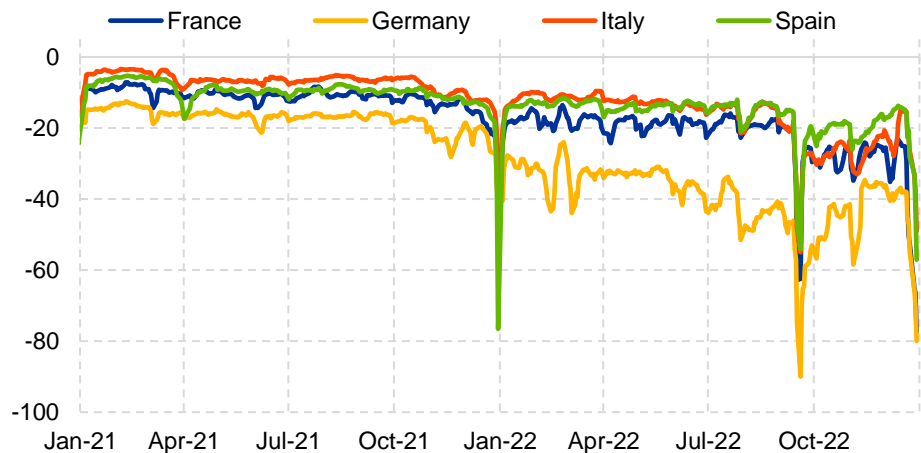




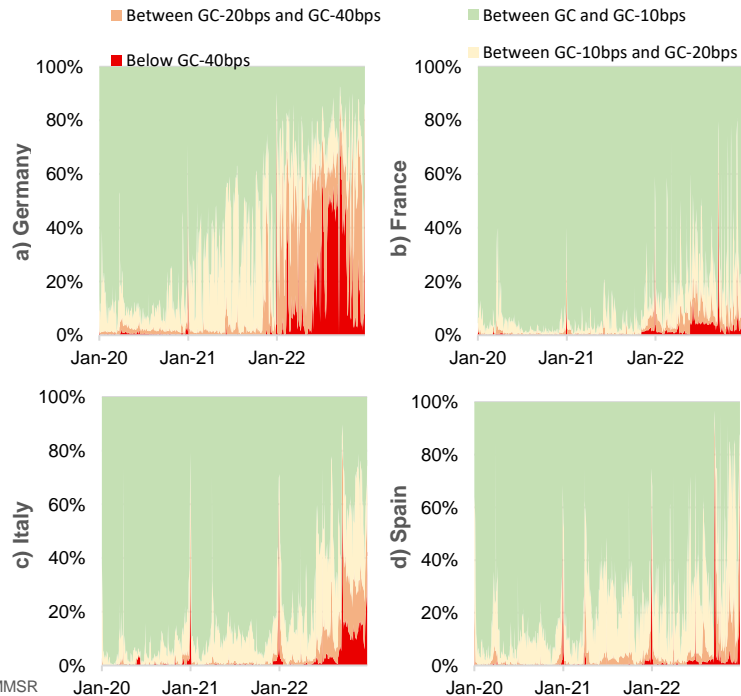
Collateral scarcity exerted downward pressure on repo rates

Secured rates drifted away from the ECB deposit facility rate (DFR), especially for trades collateralised by German securities

Repo rates spread to DFR by collateral jurisdiction



Share of repo volume trading below the GC repo rate (%)

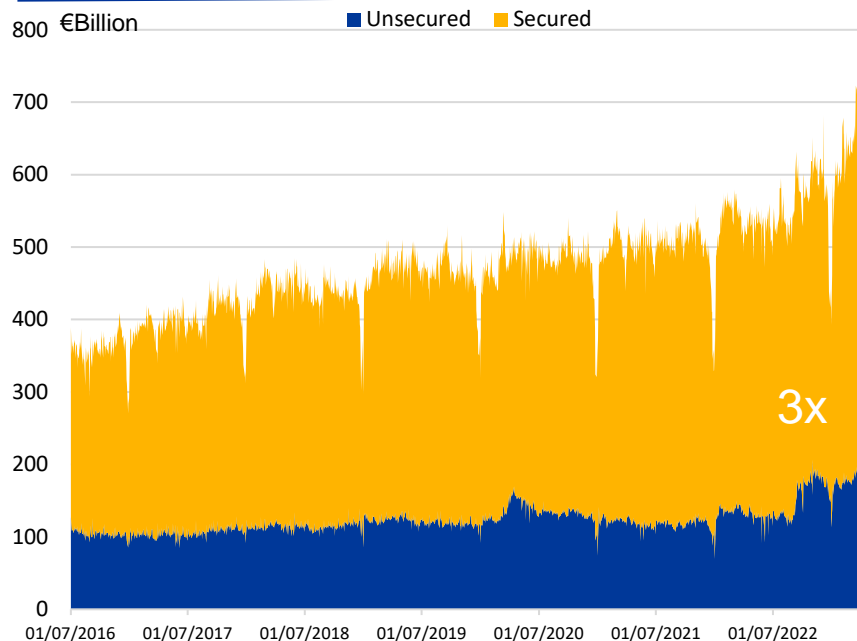


Source: MMSR, BrokerTec and MTS

Sources: MMSR

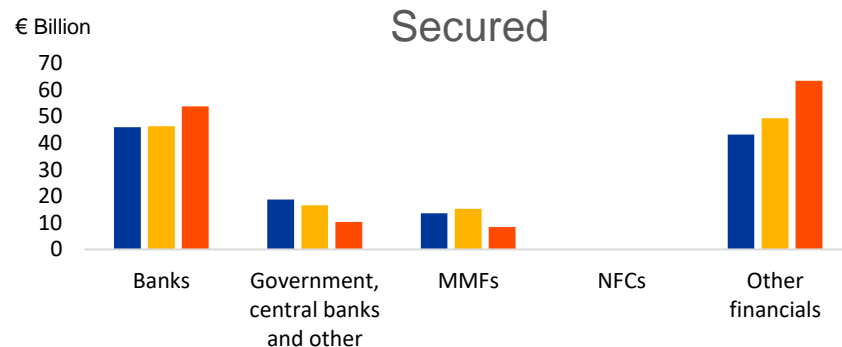
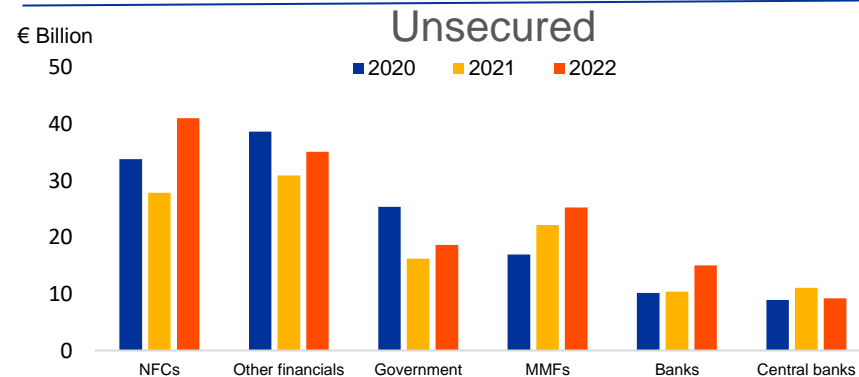
Effect of ample reserves in the system

Daily borrowing transaction volume



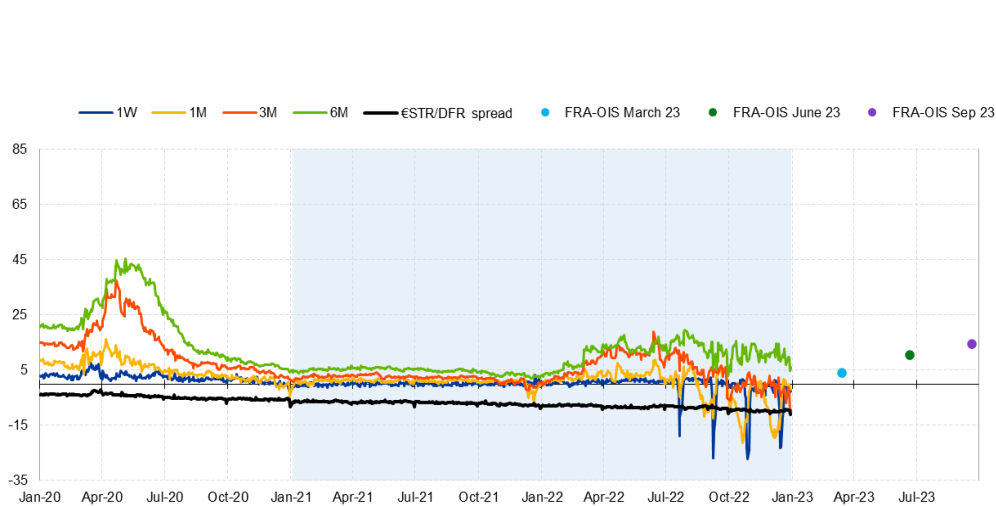
Sources: MMSR

Sectors EA banks borrow from



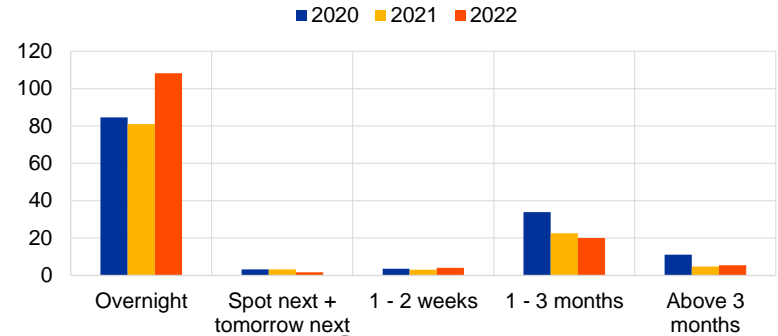
Short investments horizon exerted downward pressure on unsecured rates

€STR vs DFR and Euribor vs OIS spread

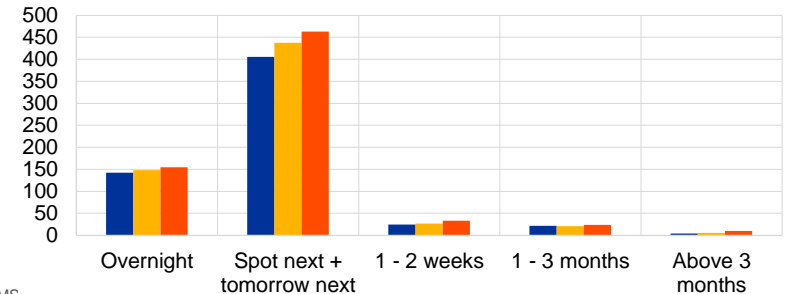


Source: MMSR, BrokerTec and MTS

Unsecured



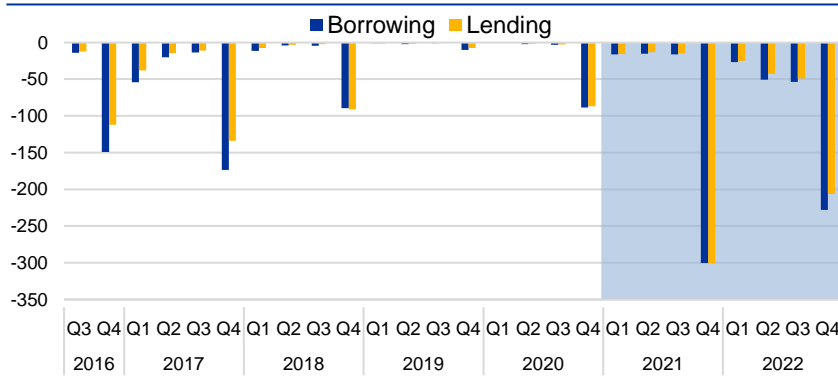
Secured



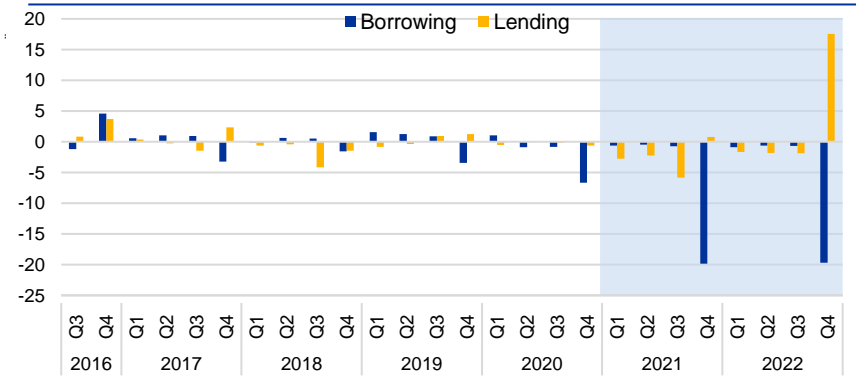
Sources: MMS

Calendar reporting effects or seasonal patterns observed in four segments

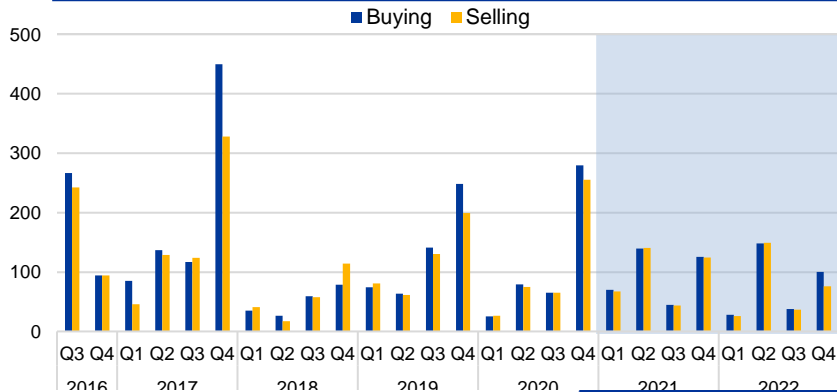
Secured rates at quarter ends



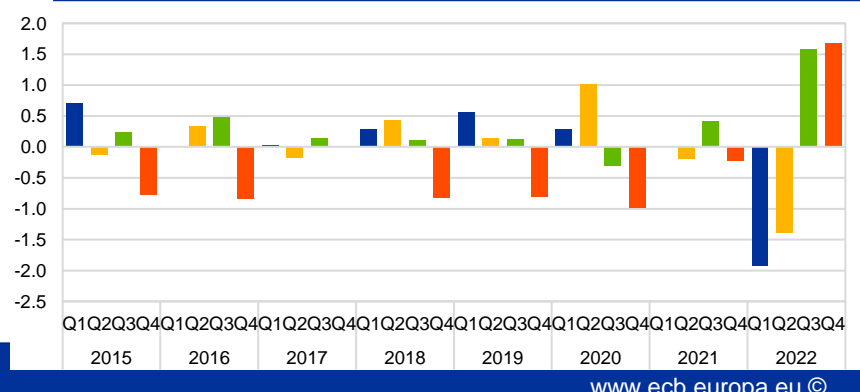
Unsecured rates at quarter ends



Foreign Exchange Swaps premia at quarter ends



Short-term securities issuance volume pattern





Conclusion

Euro money market developments in 2021-2022 highlighted in the Study

Volumes

- Turnover dominated by **secured transactions (56%)** and **FX swaps (24%)**
- Aggregate daily activity across all segments grew by 23% from €1 trillion at the end of 2020 to €1.3 trillion at the end of 2022

Maturities

- **Secured and unsecured trading concentrated on the one-day tenors.**
- Investor focus on short tenors led to market rates trading below DFR as banks paid little for deposits with no regulatory value

Counterparties

- **Central Counterparties (CCPs) are involved in 70% of secured trades and 90% of overnight index swap trades**
- Money Market Funds accounted for 28% of **unsecured** trades in 2022 (19% in 2020 and 7% in 2018) and hold 73% of total banks issuance of **short term securities**
- Investment Funds accounted for 31% of **bilateral secured** trades in 2022 (25% in 2020 and 15% in 2018)

Rates:

- **OIS** reacted swiftly to policy tightening signals by ECB Governing Council members and anticipated well policy rate hikes
- **Full pass-through of ECB interest rate changes to unsecured rates; less even and partially lagged transmission in secured market;** Eurosystem support, via higher amounts available via the Eurosystem Securities Lending facilities and changes to remuneration of non-monetary policy deposits, helped to alleviate somewhat high-quality collateral shortage concerns
- **ECB deposit facility rate (DFR) works well as an anchor for money market rates** but trades occur below the DFR reflecting the predominance of non-bank actors without access to ECB facilities