Main developments in the money markets

Focus on FX swaps, Unsecured and Secured segments

ECB Money Market Contact Group

16th March 2022

See Appendix for important notices.

Item 1.1:
Evolution of Risk sentiment since February

Overview of the Main developments in the money markets from Dec 2021

Starting from Dec the main developments in the money markets have been the consequence of:

- **Market expectation** related to monetary policy evolution and **reactions to ECB decisions**; in particular ECB meeting last 10° march:
  - generated a sharp repricing of the EUR rates
  - no news on TLTRO despite some market expectations (credit and rates related)
  - focus remained on data releases and in the current situation the conflict is a substantial upside risk for near term inflation.
  - monthly net purchases under the APP will amount to €40 billion in April, €30 billion in May and €20 billion in June
  - optionality, agility and flexibility are part of the "toolkit"

- Effects of the **Russian-Ukraine war**
  - High volatility in financial markets
  - No liquidity stressed conditions in the euro area

Feb ECB meeting

March ECB meeting

Euro Future Dec 2022 3M contract

Source: Refinitiv, Intesa Sanpaolo

Item 1.2: FX Swap segment

Short Term USD market

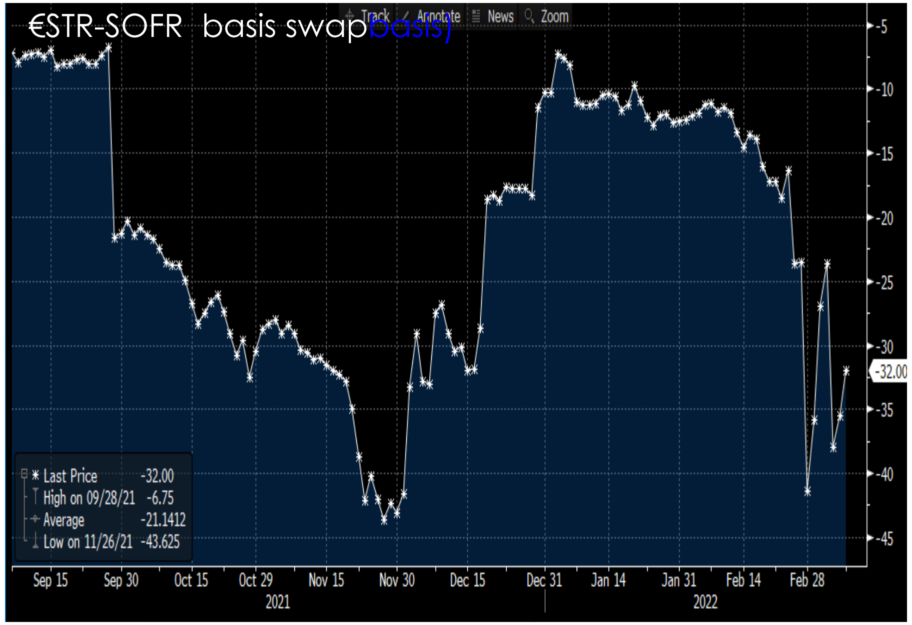
- Short term funding USD market after the relatively quite period after the year end, during the last few days has been **volatile and stressed** amid geopolitical turmoil even if liquidity remained huge

- At the beginning of march the premium on basis swaps **3mth ESTR/SOFR** reached levels around 30bps wider than levels recorded in standard market situation.

- Relevant impact on usd market is also related to expectations – the market is currently pricing **six 25bps rate hikes** this year, compared to 5 hikes last week which is, overall, a small sign of stress' softening.

- Some improvement has been observed also in **swap market spreads** which are nearly back to the average

	21/02/2022	28/02/2022	09/03/2022
EFFR fixing	0.08	0.08	0.08
SOFR fixing	0.05	0.05	0.05
3mesi Estr/sofr basis swap	-17	-42	- 24
Jan 23 FF implied rate	1.57	1.44	1.69
3M $ Libor fixing	0.464	0.50429	0.74500
1y OIS vs SOFR	1	0.95	1.14
2y OIS vs SOFR	1.435	1.39	1.58



Source: Bloomberg, Intesa Sanpaolo

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Main effects of the war on other currencies: Rouble market

- Stressed **liquidity conditions**
- Very **few counterparty** still in the market and no fx prices on electronic platforms
- Massive **spreads widening**, pricing mainly market makers' de risking approach.
- **Swap market implied rate** ballooning
- Capitulation of **RUB value against Euro and Dollar**
- **Central Bank of Russia** hiked reference rate to 20% trying to avoid additional sell off
- **NDF market** is becoming more relevant than in the past
- **RUB settlement** is still working properly among banks not banned from SWIFT payment system and majors international players are not signaling so far any RUB payment disruption.

FX spot EUR/Ruble

1-3-6 months implied swap rates

Source: Refinitiv and Bloomberg, Intesa Sanpaolo

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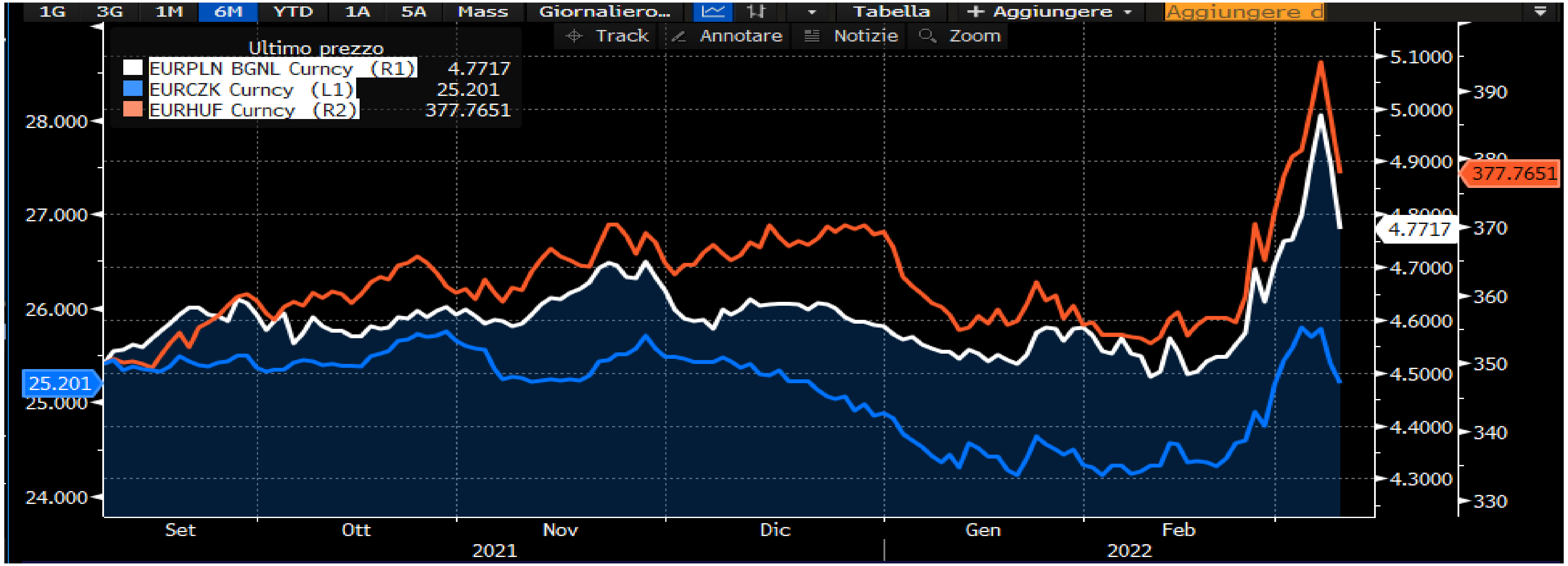
Main effects of the war on other Eastern Europe currencies

- Volatility and liquidity stress is tangible after the beginning of the war also in **Poland, Hungary** and **Czech Republic**.
- **Spread widening** although in a still liquid environment.
- Poor **performance of local currencies** both against Euro and Dollar
- **Liquidity injection by local Central Banks** had small effect so far
- **Implied swap market rates** are moving higher not only for reference rates increase by CBs.
- **Inflation risk** at his peek due to imported component energy related.

FX spot EUR/PLN, HUF,CZK



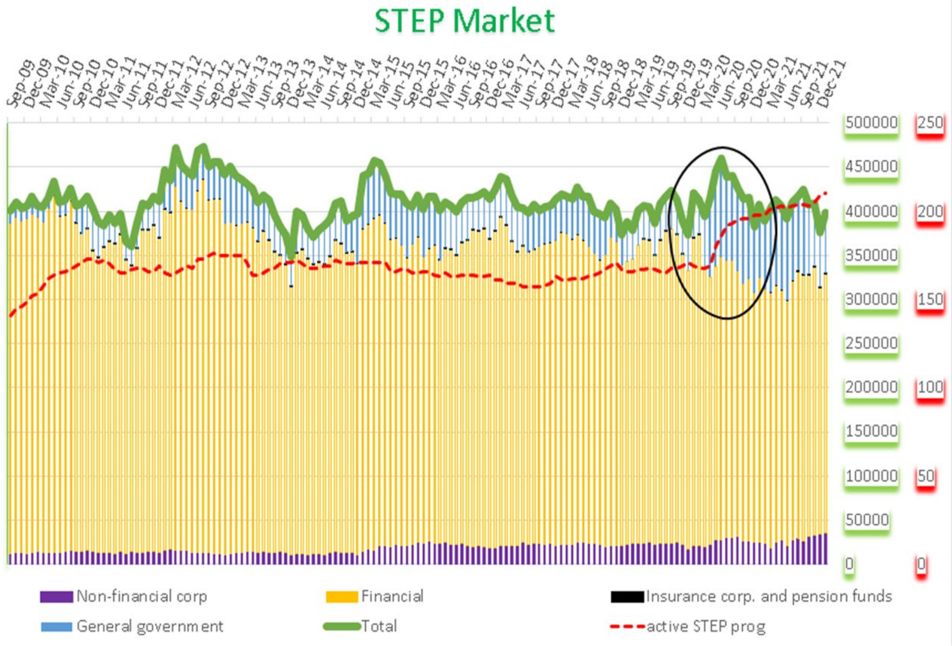
Source: Bloomberg, Intesa Sanpaolo

Item 1.4: Unsecured segment

Euro Commercial Paper Evolution

CP/CD - Volumes

STEP Market Issuers and outstanding (EUR Bn)



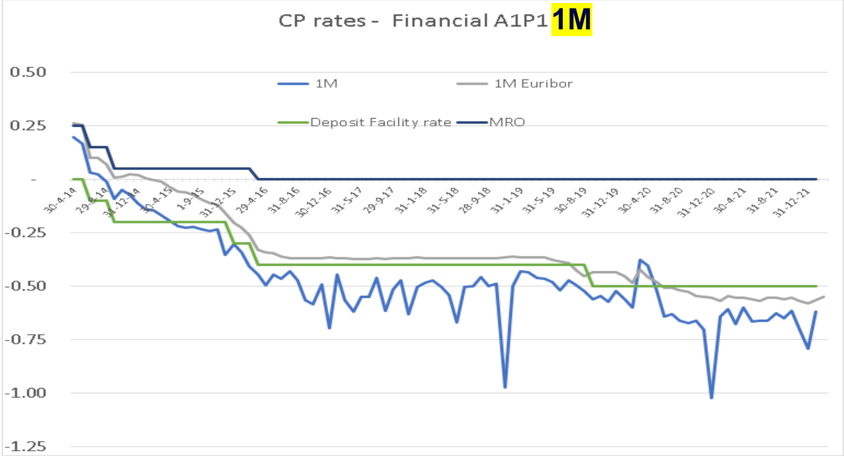
Source: Step Statistics, Intesa Sanpaolo

- **Outstanding** reached a peak before TLTRO III and remained largely stable in 2021

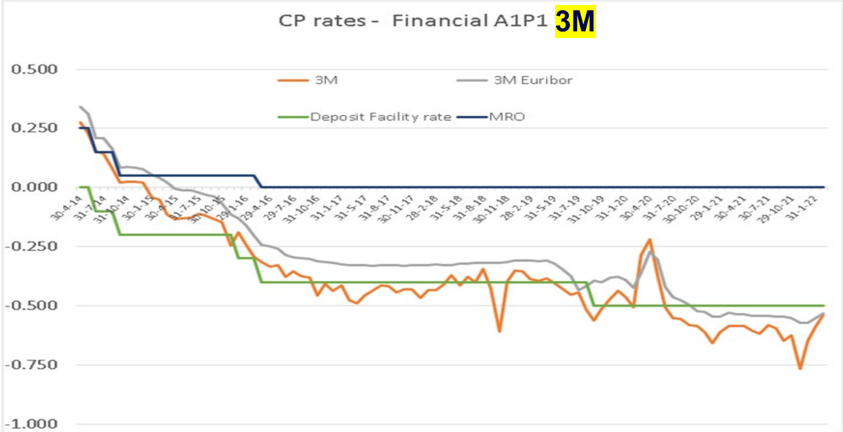
- **Volumes** in the first part of 2022 have been affected by:
    - gen- mid feb: market volatility and expectations for possible anticipated euro rates hikes with a reduction of maturities up to 6 months
    - end-feb-mar: tensions due to Russian-Ukraine crisis and related risk aversion and further reduction of maturities on average from 6 to 3 months, together with the request of some disinvestments from asset managers

- The recent increase in the **number of programs** is the confirmation in any case of the importance of CP/CD market for many reasons:
    - Back to normal for issuers after TLTRO repayment, considering that financial issuer are the most relevant for CP/CD market
    - Diversification of asset allocation for investors
    - ECB eligible instruments in the portfolios

CP/CD- Rates 1-3-12m



*Tweb platform opening prices



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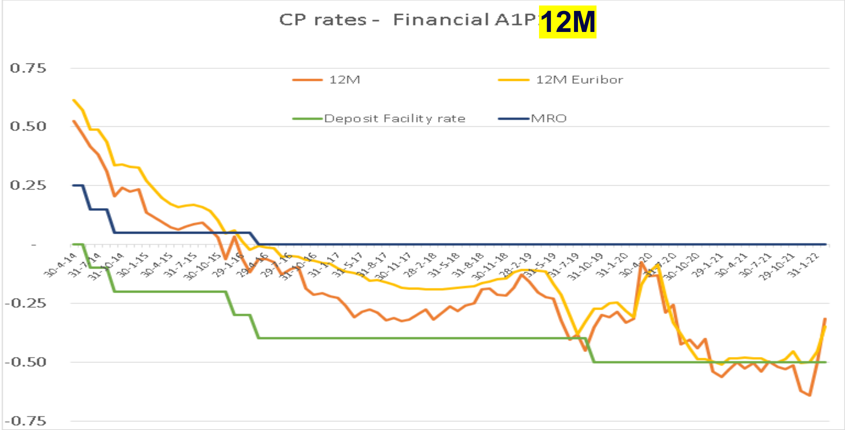


*Tweb platform opening prices

Source:TraadeWeb Platform, Intesa Sanpaolo

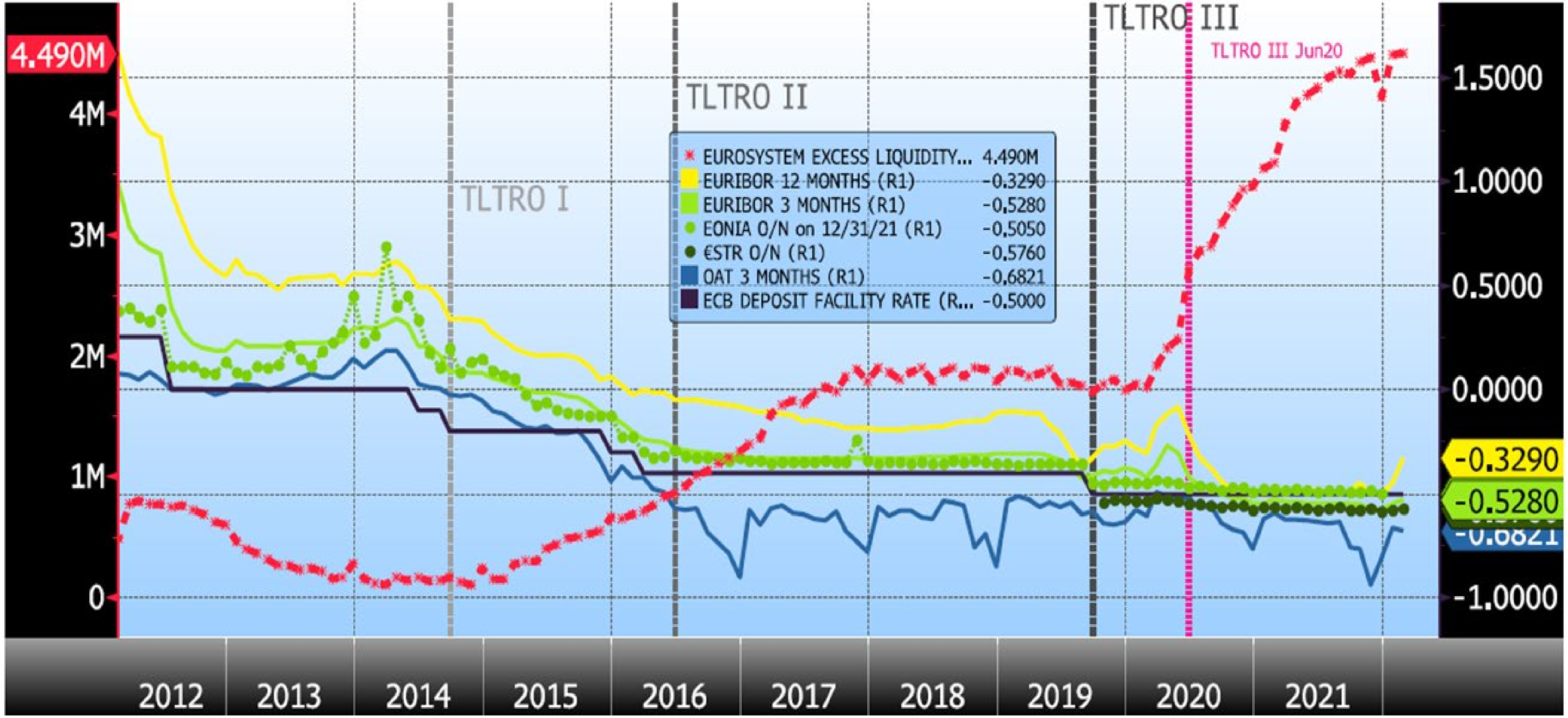
- For **very short maturities** issuances the Deposit Facility remains the main reference rate with no interest of the issuers to show higher rates so far

- Increase in rates in **longer maturities** before Russian-Ukraine crisis was mainly related to expectations for a rate hike in sept/dec 2022 and during the first days of the war the previous expectations disappeared but have been substituted for some days by the effects of the crisis itself and later by the market reaction after the last ECB meeting – volatility generally speaking doesn't help CP/CD market

Main developments related to TLTRO III

EURO area excess liquidity and rates evolutions - TLTROs have been one of the most important drivers

EU Excess Liquidity and Market Rates since 2012

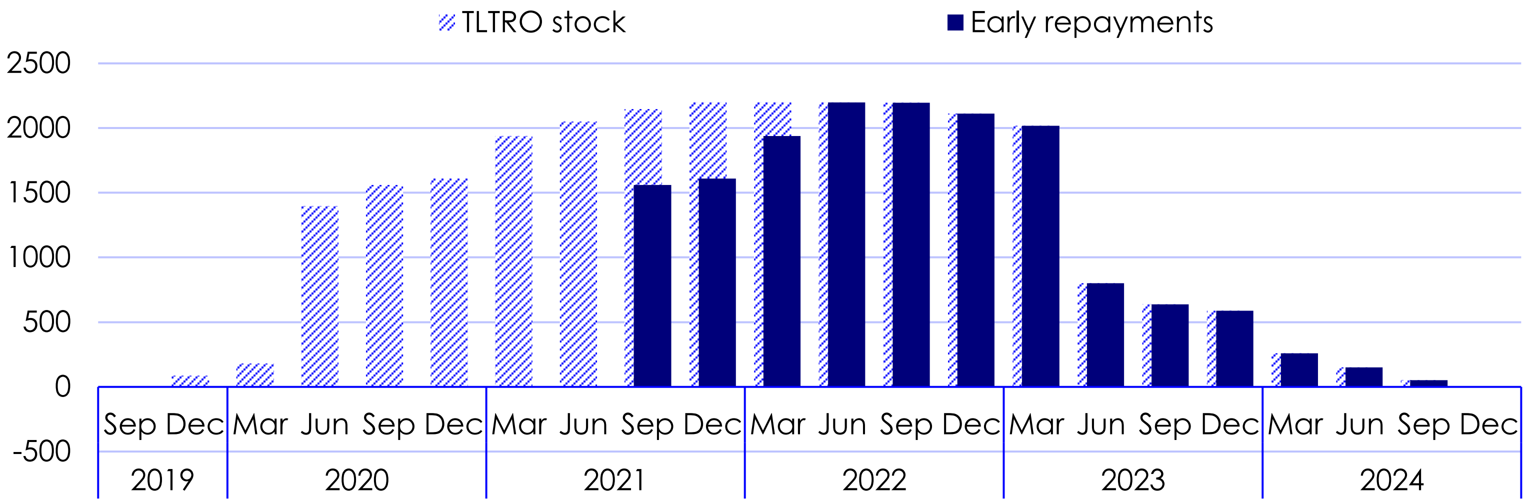


Source: Bloomberg, Intesa Sanpaolo

Voluntary early repayments of TLTRO's tranches worth a cumulative amount close to 2 trillion euros in 2022 and will be relevant for the future trend of excess liquidity

- **starting from June 2022** participants in the additional operations have, on a quarterly basis, the option of withdrawing from or reducing the amount borrowed in the new TLTRO III operations before maturity.

Cumulative amount of potential early reimbursements of TLTRO IIII (EUR Bn)

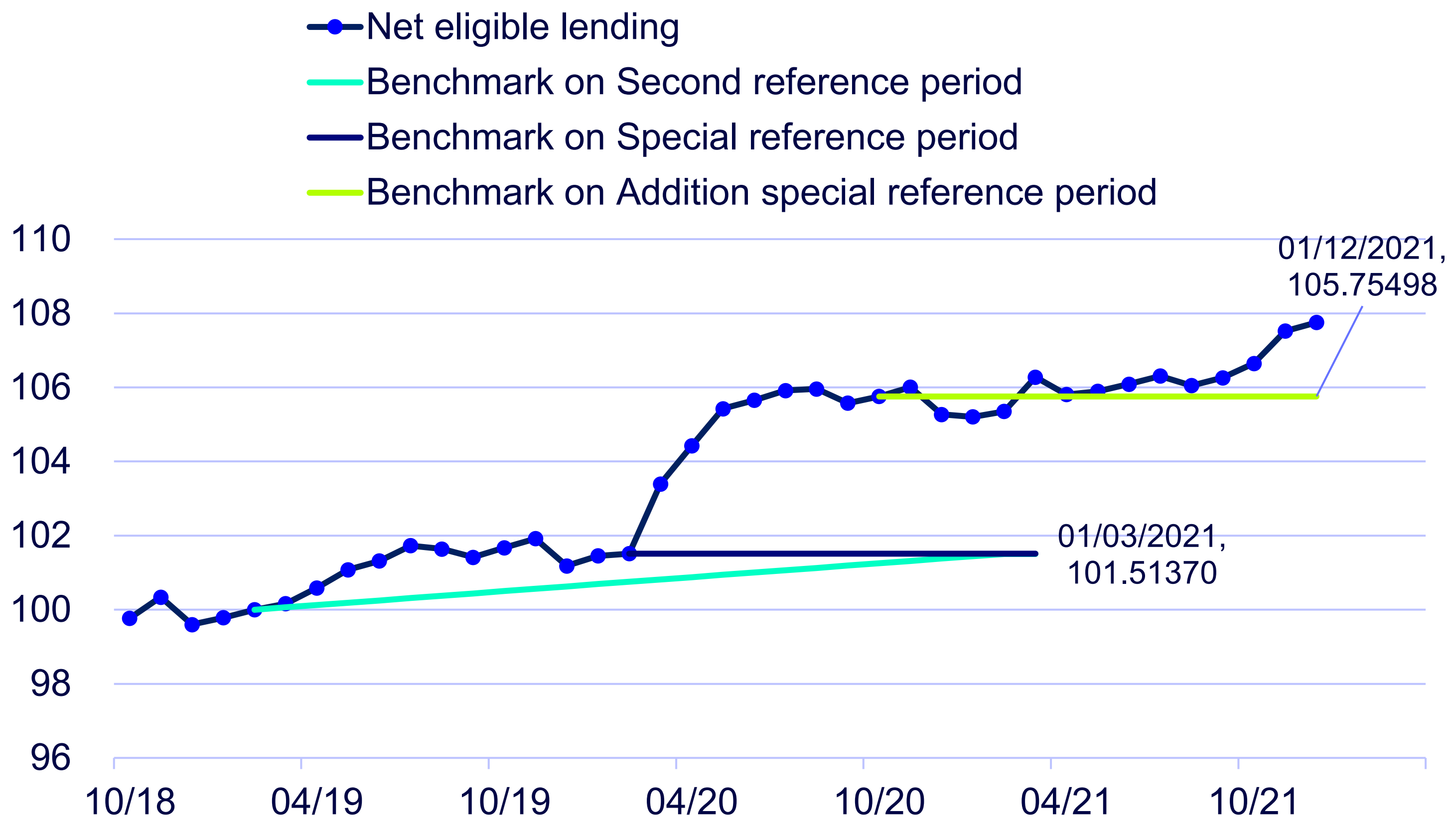


Source: ECB, Bloomberg, Intesa Sanpaolo

- Compared with some months ago the **new geopolitical situation,** together with the possibile **arbitrage in case of rate hike** (given that the rate applied to TLTRO borrowing after June 2022 is the average depo rate during the entire life of the operation), how much would change the intentions to reimburse the TLTRO III in advance? What will be the impact on short term rates?

Eurozone banks, at the aggregate level, reached the lending benchmark on the Oct'20-Dec'21 period to secure the minimum rate on the ASIRP

Benchmarks on net lending for the aggregate Eurozone (index 100=feb19)



Source: ECB, Bloomberg, Intesa Sanpaolo

According to the ECB's bank lending survey, the profitability motive was the most important reason for banks to participate in TLTROs and banks confirmed they used a large part of borrowed funds for loans and carry trades

Source: ECB,Bank Leniding Survey 3Q 2021
https://www.ecb.europa.eu/stats/ecb_surveys/bank_lending_survey/html/ecb.blssurvey2021q3~57cc722cfb.en.html#toc22
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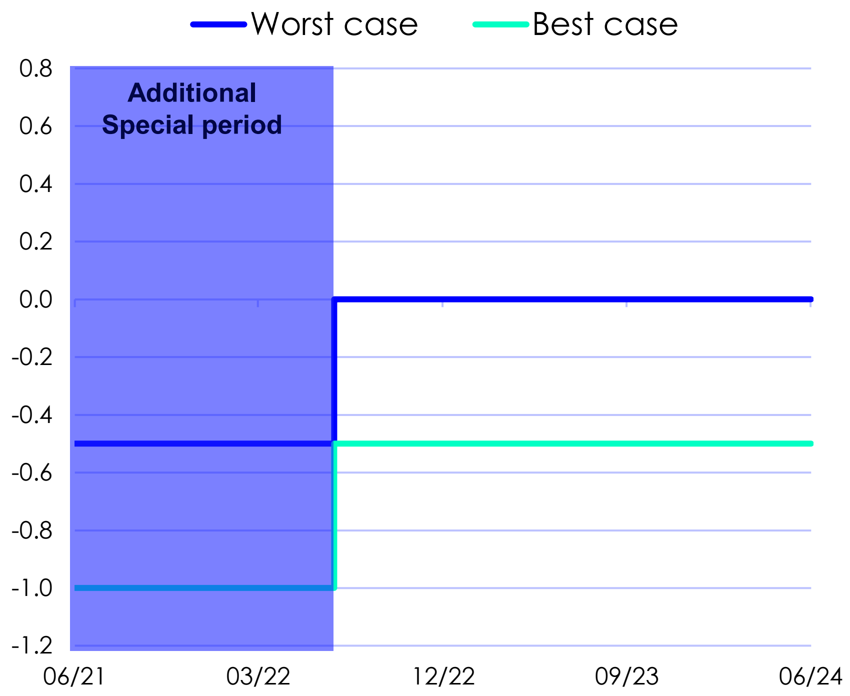
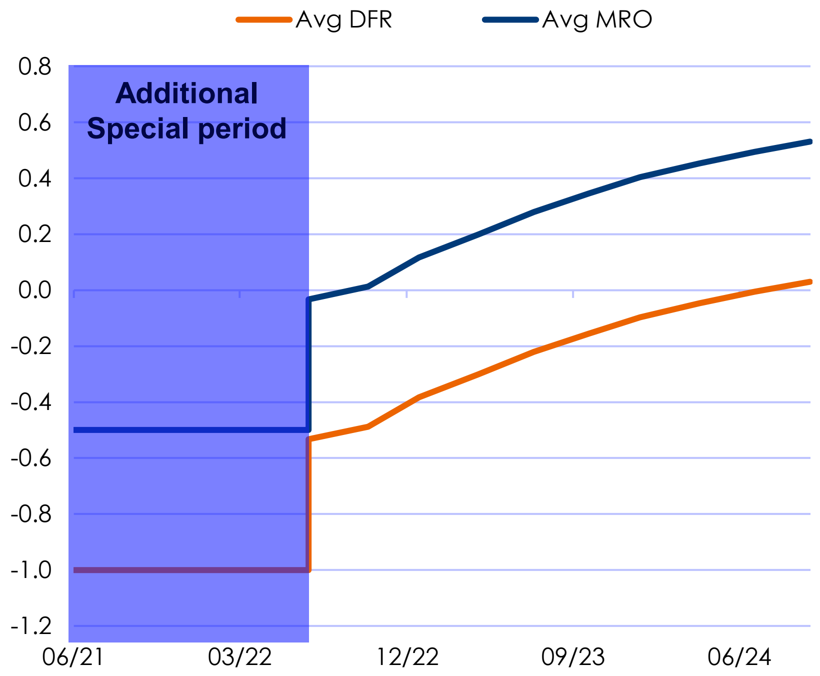
Expectation of rising policy rates increases the expected cost of TLTRO funding after the end of the special period next June

Average rates on TLTRO III tranches from Jun 2022 until maturity (%)

Unchanged official rates



Actual ECB rate hike expectations implied into ESTR OIS curve

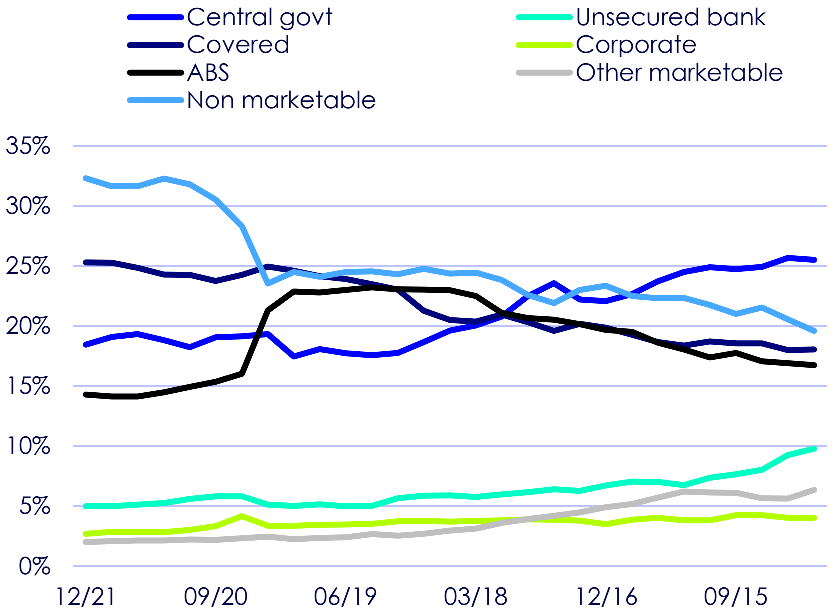


Source: ECB, https://www.ecb.europa.eu/pub/pdf/other/ecb.ECB_2019_21_unofficial_consolidated~ad92b41daa.en.pdf?024299400e4d5cd0293ab83c8767364b
Bloomberg, Intesa Sanpaolo

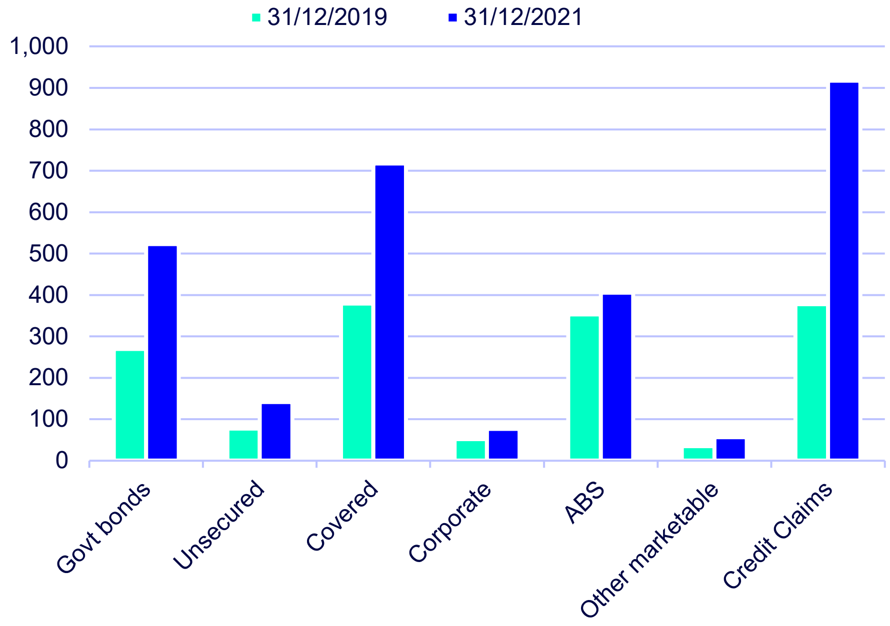
Liquidity outflows from TLTRO's (early) repayments could exert upward pressure on some market sectors

- At the end of Q4 2021, 1,921 billion euros of marketable assets and 917 billion euros of non-marketable assets (or credit claims) were posted as collateral for Eurosystem operations.
- The increase of total used collateral was down to 243Bn in 2021 from 1052Bn euros in 2020.
- **Government and covered bonds represents 18% and 25% respectively of total collateral posted respectively, while credit claims share is 32% of the total.**

Pledged collateral at the ECB by asset class (% total pledged , as of Q4 21)



Pledged collateral by asset class (EUR Bn))



Source: ECB, Bloomberg, Intesa Sanpaolo

Item 1.5: Secured segment

Main Developments in the Secured market

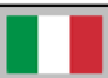
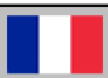
- **GC Core** countries rates have been very volatile in March, trading in a range between -0.68 and -0.58 (after the future delivery), while **peripheral countries** short rates remaind on average in the range -0.55 / -0.58

- The geopolitical situation has not created any market disruption and volumes reached the maximum of the last years

- Lower pressure has been recorded on German specific bonds (it was not directly related to the war but it was due to short position management in the second part of February)

Repo volumes ON-TN_SN GC+Spec. ITA,SPA,FRA,GER

Repo fund rate GC ITA, GER,FRA

GC				
TN	-0.570	-0.570	-0.580	-0.580
1W	-0.570	-0.590	-0.630	-0.590
2W	-0.570	-0.590	-0.630	-0.600
1M	-0.580	-0.600	-0.650	-0.620
2M	-0.580	-0.590	-0.670	-0.630
3M	-0.580	-0.590	-0.670	-0.630
6M	-0.530	-0.570	-0.650	-0.600
9M	-0.480	-0.550	-0.620	-0.550
1Y	-0.370	-0.510	-0.600	-0.460

Source: Bloomberg, Intesa Sanpaolo

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