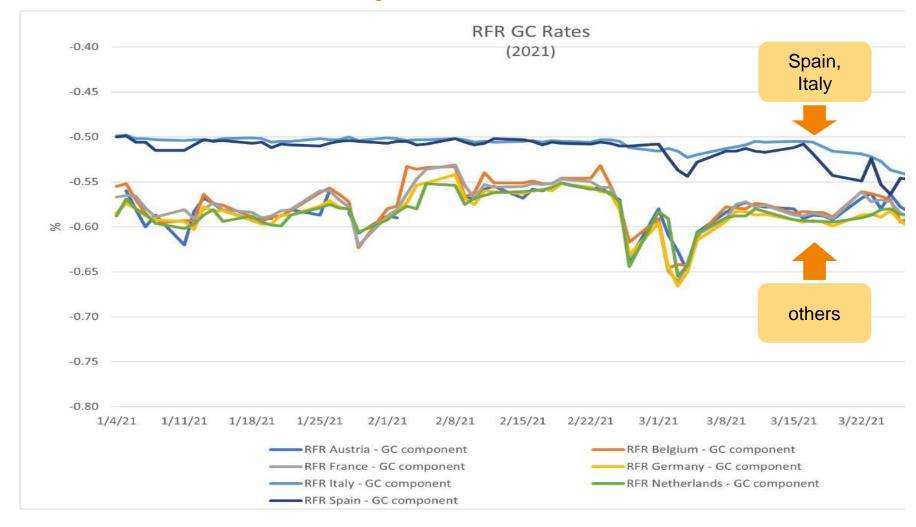


Government Bonds Repo Rates



Source: ICMA analysis using data provided by CME Group Benchmark Administration Limited (April 2021)

Some take-aways on GC repo yields:

- Repo Funds Rate (CME Group Publication) showing GC Gov. spreads with Spain/Italy GC tightened vs. i.e.
 Bunds/ Austria GC since March 2021
- Majority of other European GC steady or close around -0.60%
- some spikes seen as of preparations for TLTRO III participation possible

Central Bank activities:

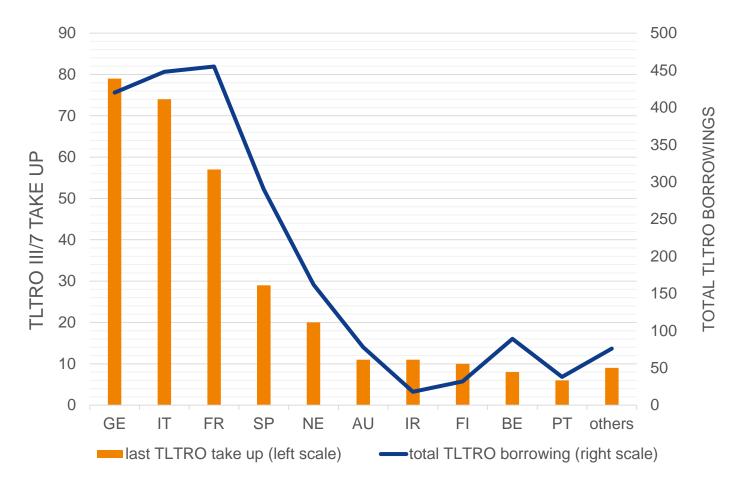
- Eurosystem active in lending and repo activities due to QE's APP/PEPP.
- Deutsche Bundesbank active since April'15 within Eurosystem Lending / Repo activities
- Deutsche Finanzagentur/ German Federal Agency active in commercial repo market bilaterally and via i.e.Eurexrepo/CCP offering active market liqudity in i.e.: Bunds
- Italy MEF active on MTS plattform since May 24th

Some take-aways of CB-activities:

- Aiming at supporting market depth and market relief i.e.case of bond squeezes, short coverings,pressure on spreads
- Welcomed by markets
- Easing volatilites and lifting constraints on shorts (i.e.: Future CTD's)



ECB total and TLTRO III/7 borrowings by Country

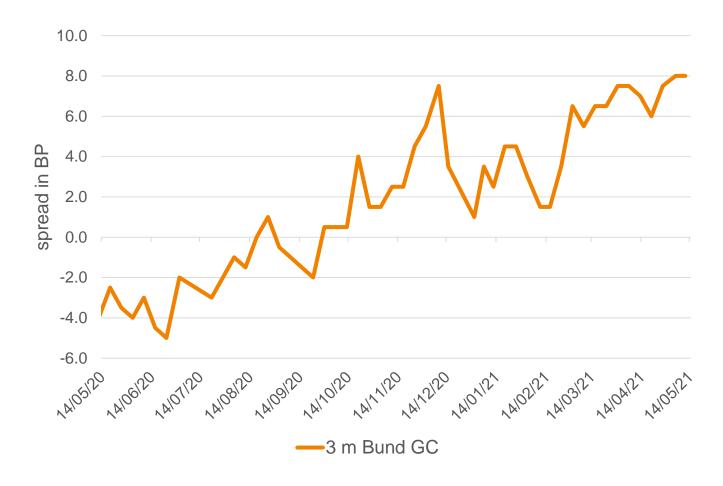


- Germany major participant in last TLTRO III/.7 Tranche
- Overall total ECB borrowings lead by participants from France, though with less participation in TLTRO III/.7 Tranche
- TLTRO III's take-ups up to Tranche No.6 majority was from four countries
- Some short-lived scarcity impacts seen in HQLA collateral in Q.1'2021
- Some impact on temporary repo spreads in various market segments
- Repo markets having excellent liquidity and marketability at all times.

Source: ECB



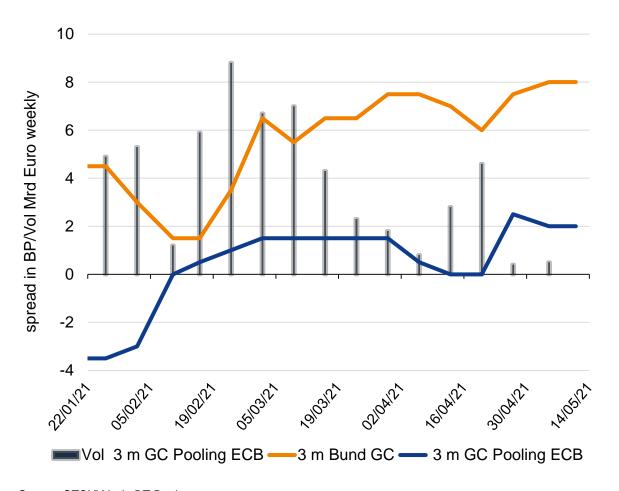
3 Month GC Germany Sub 10 years vs. 3 Month €STR SWAP Rates



- Spread between 3 Month German Government GC and 3 month €STR Swap rates widened in peak to up to 12bp in last 12 month
- End of Year Effect 2020/2021 at ≈ 5 BP
- Was this driven by liquidity spreads or by "specialness" of the underlying Bonds or maybe by scarcity of HQLA offerings overall?

Source: DZ BANK AG

3 month German GC sub 10 years and GC Pooling ECB Basket spreads vs 3 m €STR Swap Rates 2021

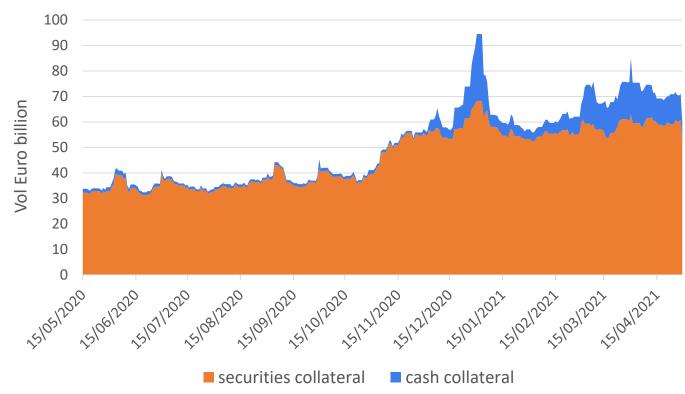


- Volumes in Euro GC Pooling trades reached its highs shortly before the start of the last TLTRO III/.7 distribution
- Spreads between 3 Month EuroGCPooling and 3 Month German GC <u>narrowed</u> during that period = > but just temporarily since afterwards speads widened again

Source: STOXX Ltd., DZ Bank

Eurosystem PSPP and PEPP securities lending balances





- Over the last year overall outstanding volume of lent securities by the Eurosystem doubled
- There was a strong usage of the lending programmes, in specific against cash collateral over the year end 2020/2021
- In 2021, the usage against securities as collateral remains high,
- In addition, first months in 2021, volume against cash as collateral increased

Source: https://www.ecb.europa.eu/mopo/implement/app/lending/html/index.en.html

