ICMA

International Capital Market Association

The European repo market at 2019 year-end

An ICMA ERCC briefing note

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Overview

The ICMA ERCC has produced an analysis of the repo markets at calendar year end since end-2016.While thinning liquidity and an uptick in repo rate volatility is nothing new in repo markets over the 'turn', the stresses and dislocations witnessed in the euro denominated market at 2016 year-end were unprecedented, and caught market participants and authorities off guard. In many respects, the extremities of 2016 were the culmination of a perfect storm of factors, including market positioning, dislocations in the EUR/USD FX basis, an excess of euro cash in the banking system, and a reduction in the intermediation capacity of dealers due to regulatory reporting requirements.[1]

While subsequent year-ends have not been as stretched, they have nonetheless continued to raise concerns among both liquidity providers and market users. What the 2017 and 2018 year-end reports reveal is a change in behaviour, both on the sell-side and buy-side. In the case of dealers, we observe more balance sheet being put to use over the turn (particularly by the non-GSIB community), while asset managers have stepped up preparedness, locking in financing needs early, negotiating balance sheet allocation from their dealers well in advance, or turning to alternative money market instruments to manage their liquidity. This has not, however, prevented significant price moves in both general collateral and specific issues.

In this report, we analyze the repo market over the 2019 year-end, focusing on the euro, sterling, and USD markets. The analysis is based on market data and accounts provided by market participants (both sell-side and buy-side). Ordinarily we begin the analysis with the euro denominated repo markets but given the significant attention on the USD repo market since September 2019 and in the build-up to year-end, this is our starting point for the 2019 review. Indirectly, the Federal Reserve's market intervention has also played a stabilizing role in the non-dollar repo markets.

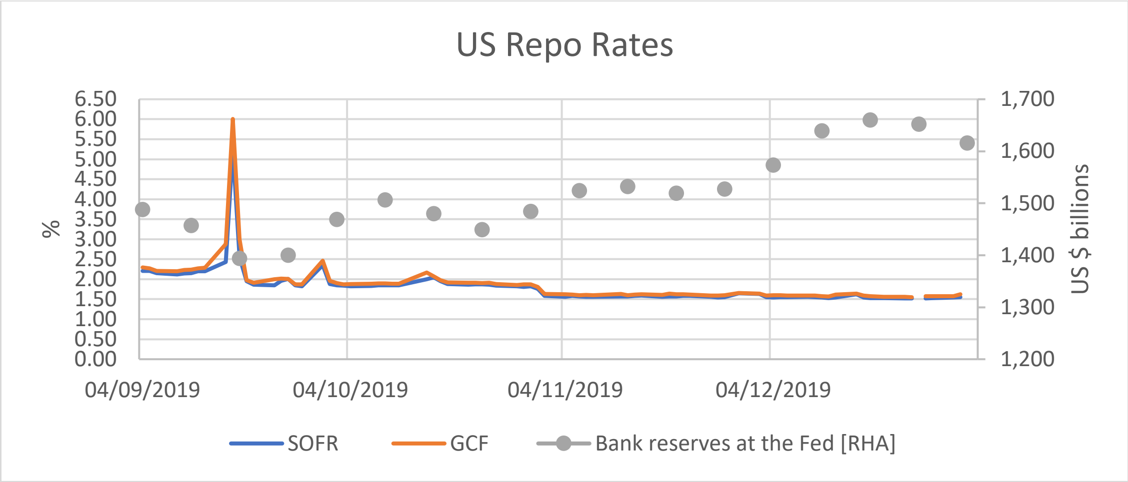
In brief, compared to previous year-ends, 2019 was relatively uneventful. As one market participant commented, it was possibly the most subdued year-end of the decade. But the reasons for this are in themselves worthy of analysis and further discussion.

USD repo

Following the much publicized and discussed spike in repo rates in September, there was understandably a lot of focus on how the market would behave over year-end. The extent of market nervousness was reflected in the turn being priced around 4% up until a month before the date. However, the Federal Reserve's attempts to keep bank reserves comfortably above the $1.5tn mark (see Figure 1), through its open market operations and bill purchases, has proved successful in stabilizing money rates, and was further bolstered by an injection of increased liquidity over year-end (see Figure 2). This also seems to have prompted a transfer of balance sheet by US banks from their European business to the US, providing for improved intermediation capacity.

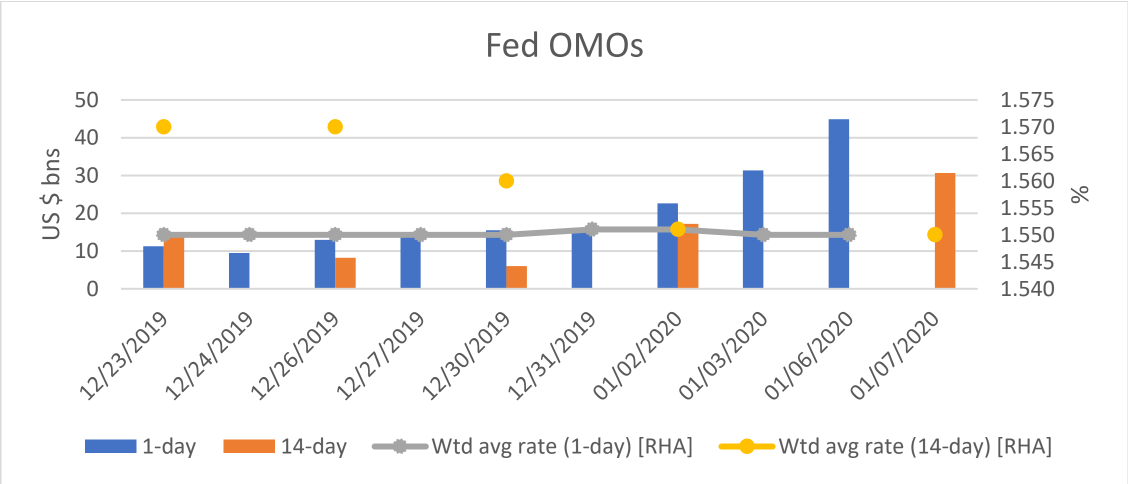
[1] See: Closed for business: a post-mortem of the European repo market break-down over the 2016 year-end, ICMA, February 2017

Figure 1: USD repo rates



Source: ICMA analysis using Bloomberg data

Figure 2: Federal Reserve open market operations



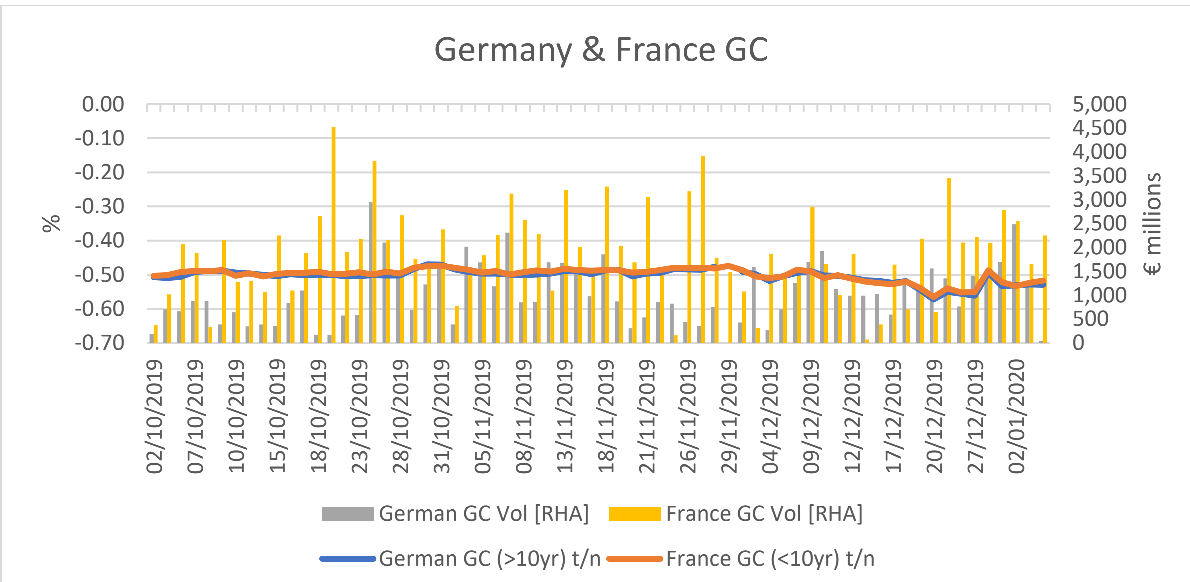
Source: ICMA analysis using Federal Reserve Bank of New York data

Euro repo

Core GC

Leading up to year-end, German GC for the turn (essentially the benchmark rate for year-end funding costs) was being priced in a -1.25/-1.75 range; more expensive than the -0.50 level where it has been trading normally, but notably cheaper than in advance of previous year-ends (leading up to the 2018 turn it was quoted around -4.00/-4.50). As the year-end date rolled into spot-next (S/N), this began to cheapen through -1.00, and it soon became apparent that unlike previous year-ends, there was not the usual abundance of cash and shortage of collateral, and that banks' balance sheets were relatively long collateral. As the date rolled into tom-next (T/N), which is the most active date for euro GC, rates cheapened further to average around -0.50, in line with the ECB Deposit Rate (see Figure 3). French GC (which has very much become the substitute European 'safe asset') followed this pattern closely, only printing at slightly cheaper levels.

Figure 3: Germany and France weighted average GC rates



Source: ICMA analysis using data provided by BrokerTec Europe (CME Group)

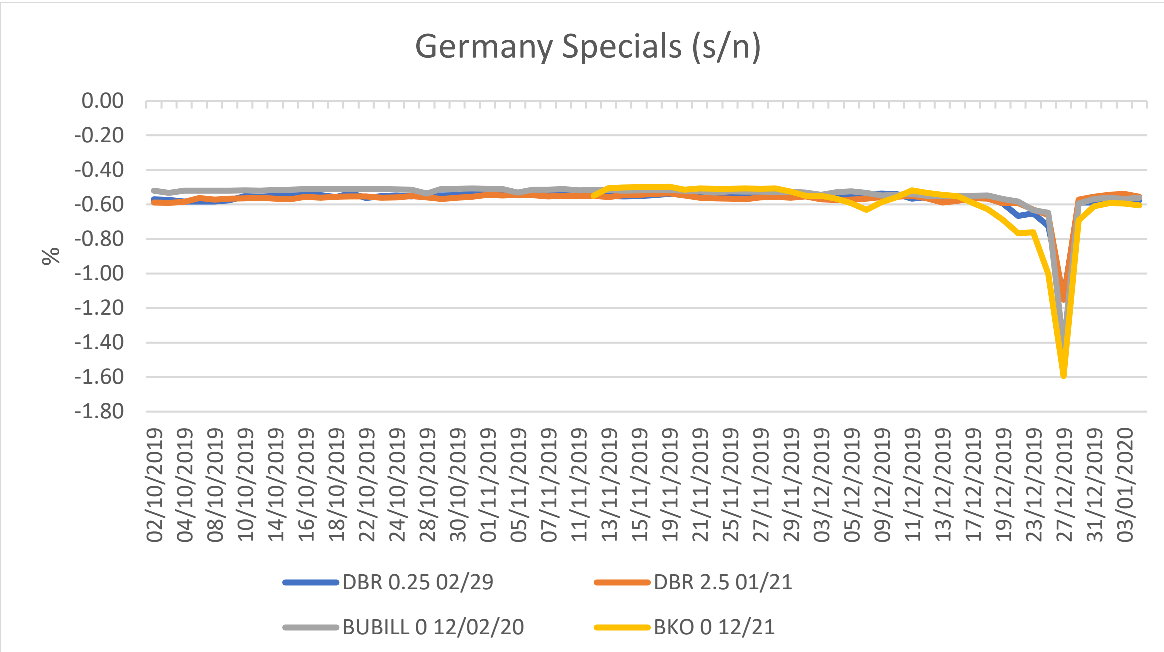
Core specials

German and French specifics tracked the cheapening in GC, with the S/N levels averaging around 1% (which is reflected in the RepoFunds Rates – see Figure 6). Accordingly, specials premium was much lower than previous year-ends. There was some short interest in the futures contracts' cheapest to deliver (CTD) bonds, in particular the 2yr (Schatz 0% 12/21) and 10yr (Bund 0.25% 2/29), although dealers report that the implied CTD repo rates remained relatively stable at around -0.70[2] which was not

[2] Buying the futures contract and selling the CTD bond is the synthetic equivalent of shorting the term repo to the contract delivery date.

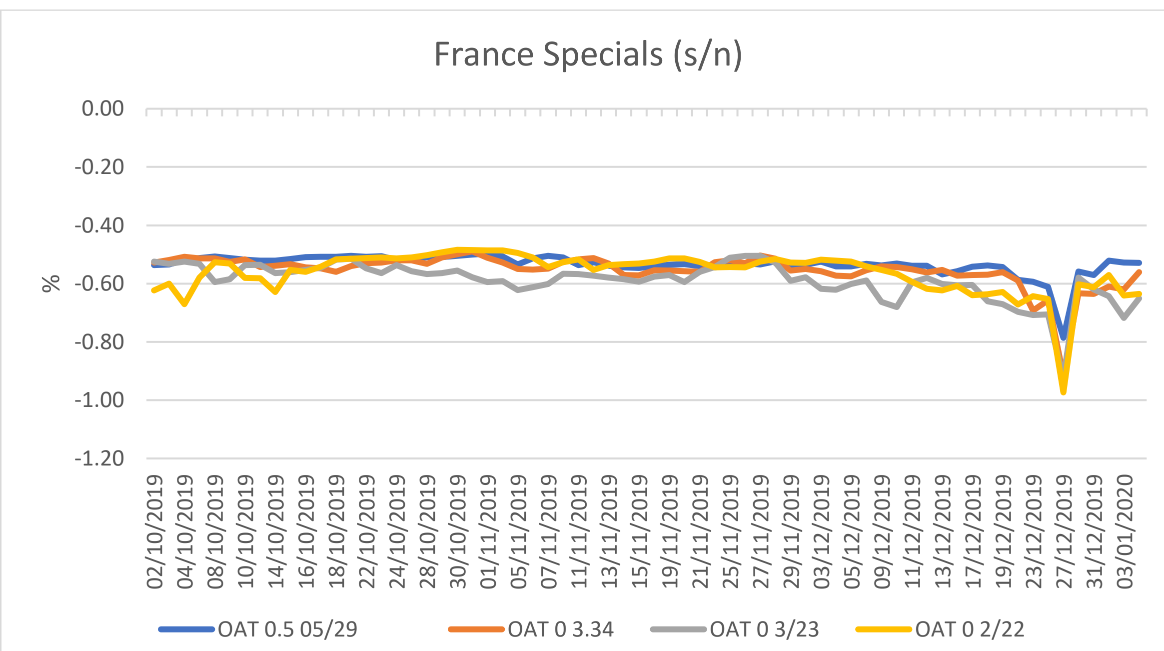
expensive enough to prompt significant selling. The most expensive specials levels are illustrated in Figure 4. Meanwhile the most expensive French specials (illustrated in Figure 5) traded between -0.90 and -1.00.

Figure 4: Germany specials



Source: ICMA analysis using data provided by BrokerTec Europe (CME Group)

Figure 5: France specials

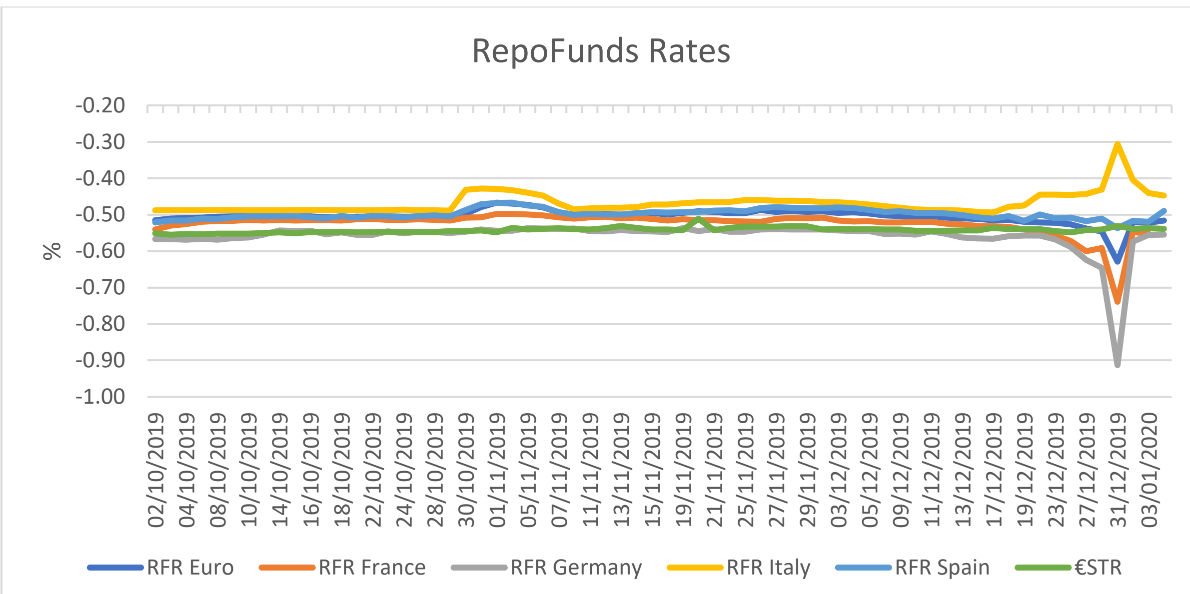


Source: ICMA analysis using data provided by BrokerTec Europe (CME Group)

Periphery repo

Periphery GC rates tend to cheapen over year-end, in particular Italy, and 2019 was no exception although the moves were relatively range bound. Italy GC averaged -0.30, around 17bp cheaper than usual levels (see Figure 6), with specifics around 5 to 10bp more expensive (see Figure 7). This relatively modest cheapening of Italian collateral was slightly surprising in light of the reserve tiering provisions, that were expected to drive more excess cash held by Italian banks out of Europe's biggest domestic repo market and into higher yielding bank reserves, putting further upward pressure on Italian repo rates. Italian GC rates, however, have otherwise remained stubbornly close to the ECB Deposit Rate. Meanwhile, Spain GC traded around the -0.50 level (unchanged), with Spanish specifics averaging around -0.60.

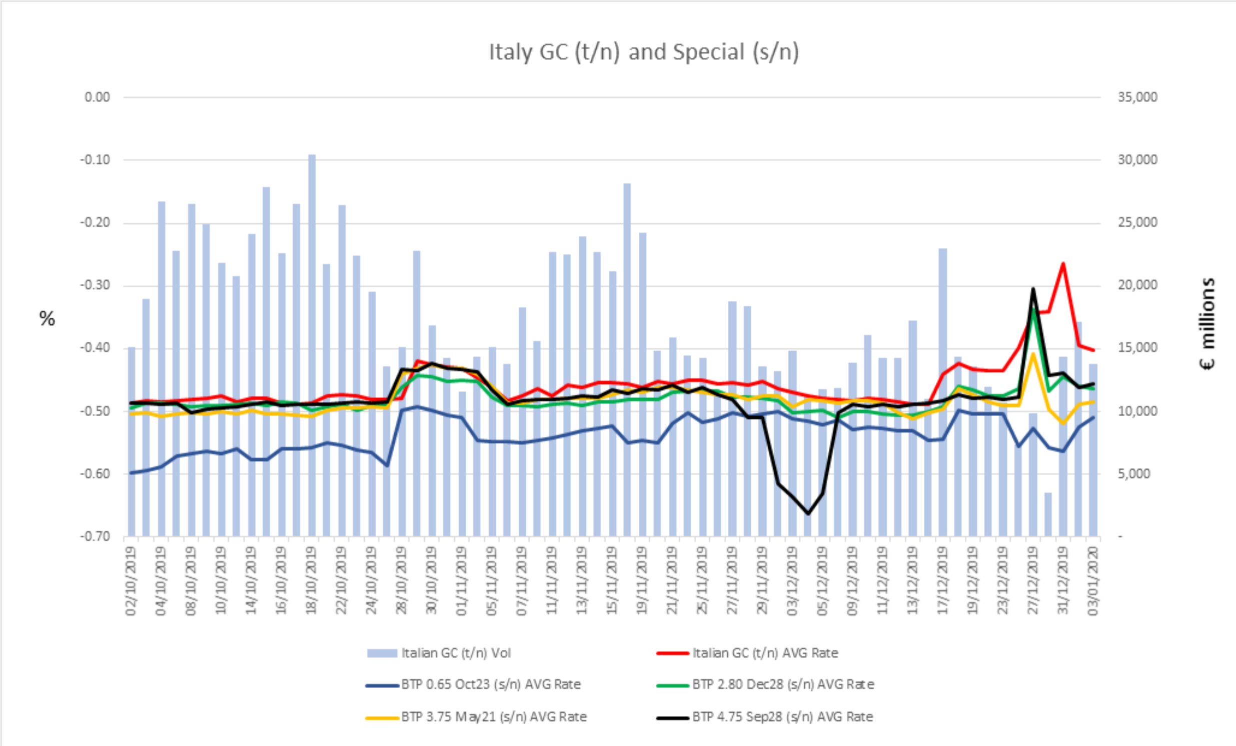
Figure 6: RepoFunds Rates[3]



Source: ICMA analysis using data provided by MTS Markets and BrokerTec Europe (CME Group)

[3] The RepoFunds Rate (RFR) is a daily euro repo index calculated from trades executed on the BrokerTec and MTS electronic platforms. All eligible repo trades are centrally cleared and RFR Euro is calculated and published by Nex Data Services Limited. RFR Euro is calculated with repo trades that use sovereign government bonds issued by any country in the Eurozone.

Figure 7. Italy GC and specials



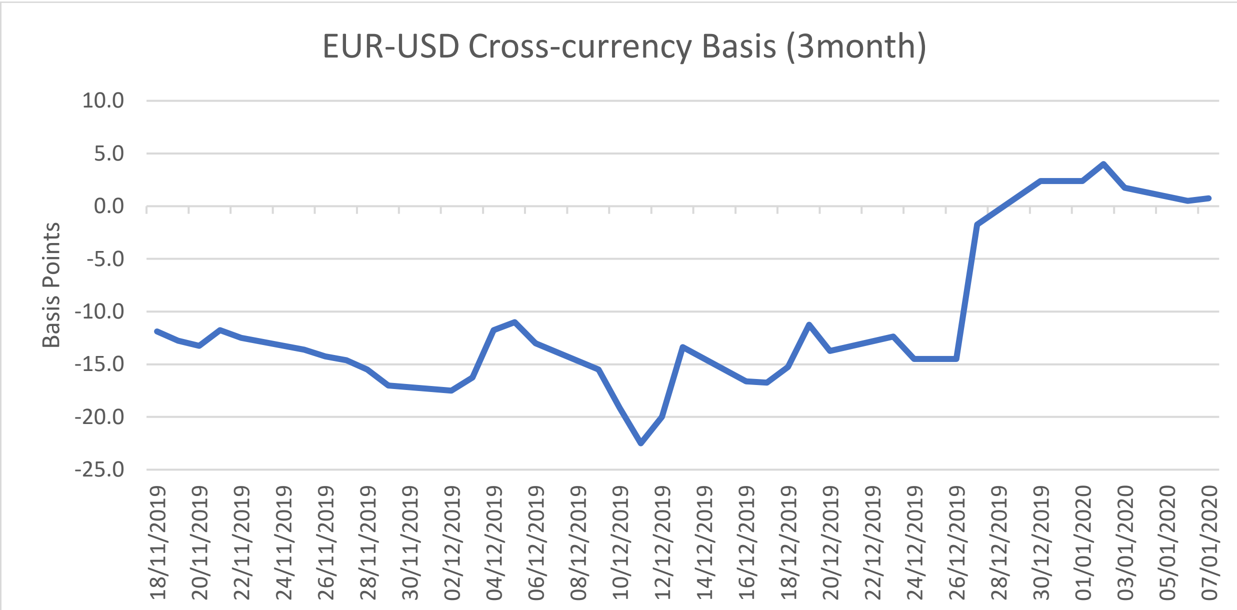
Source: MTS Markets

Currency basis

In previous year-ends, the EUR-USD cross-currency basis[4] has been a meaningful driver of euro repo rates, as imbalances in relative liquidity conditions accentuate market moves. It was noted by contributors that the basis moved from deep negative territory (favouring euro rates) in early October, to close to parity by year-end (see Figure 8). This seems to be largely the result of the Federal Reserve's market operations, flooding plenty of excess liquidity into the system.

[4] Interest rate parity theory suggests that the foreign exchange forwards markets will always ensure that the relative LIBOR cost of borrowing in any currency will be the same. However, it can often be cheaper to borrow in one currency through the FX forwards. The currency basis swap reflects this relative disparity. Basis swaps are usually expressed as one currency against the USD, and a negative basis suggests a relative cheapness to borrow in that currency with respect to USD.

Figure 8: EUR-USD Cross-currency Basis Swap



Source: ICMA analysis using Bloomberg data

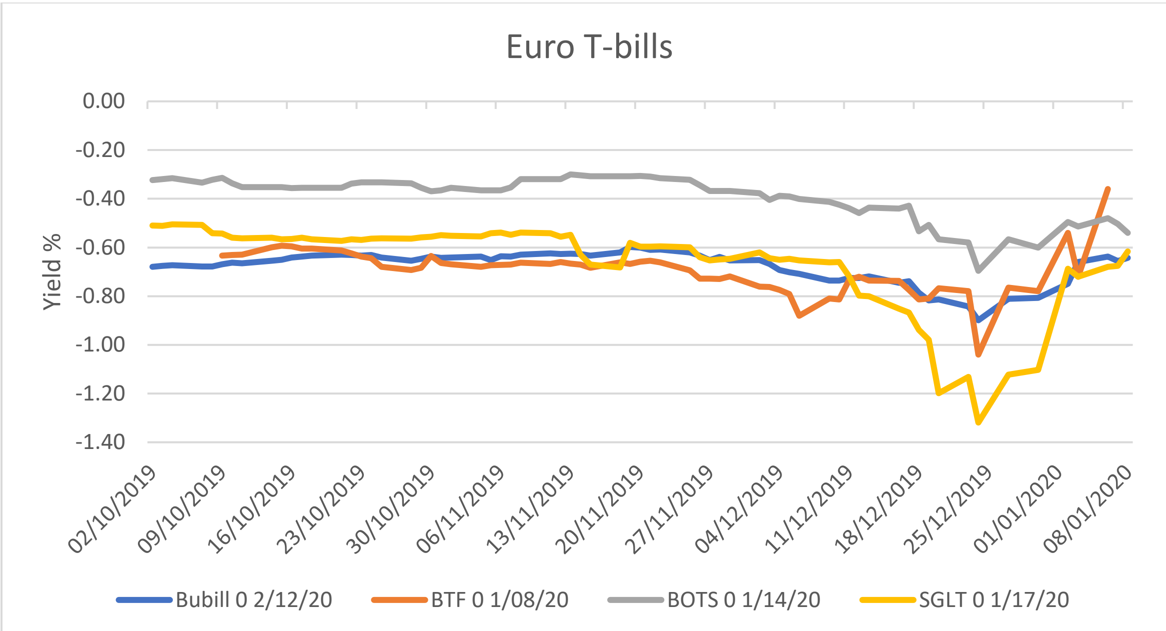
T-bills

The price action in euro denominated T-bills is often a good barometer of market stress, particularly around year-end, as access to the repo market becomes restricted for many participants, and so they turn to alternative instruments to manage their liquidity. Furthermore, directional investors often use T-bills as a means to achieve balance sheet netting with their bank counterparties,[5] which again becomes a more important consideration in light of year-end regulatory reporting requirements. It is reported that French T-bills (BTFs) are the security of choice for netting against short core government bond positions, as they tend to be less volatile than periphery bills.

Interestingly, short-dated BTF yields remained relatively stable over year-end, as did German Bubills and Italian BOTs, with implied year-end rates relatively consistent with turn money rates. This could partly be explained by a relatively small short open interest in government bonds, but also by more bank balance sheet being available for repo. Spanish Lettras tightened the most (see Figure 9).

[5] Regulatory balance sheet netting is achieved by a party having a matched repo (loan) and reverse (borrow) with the same counterparty for the same term. Where investment firms borrow bonds on a term basis to cover a short position (such as in a futures basis trade), they may simultaneously look to buy short-dated T-bills for a similar value and repo these back to their lending counterparty for the same term.

Figure 9: Euro T-Bill yields

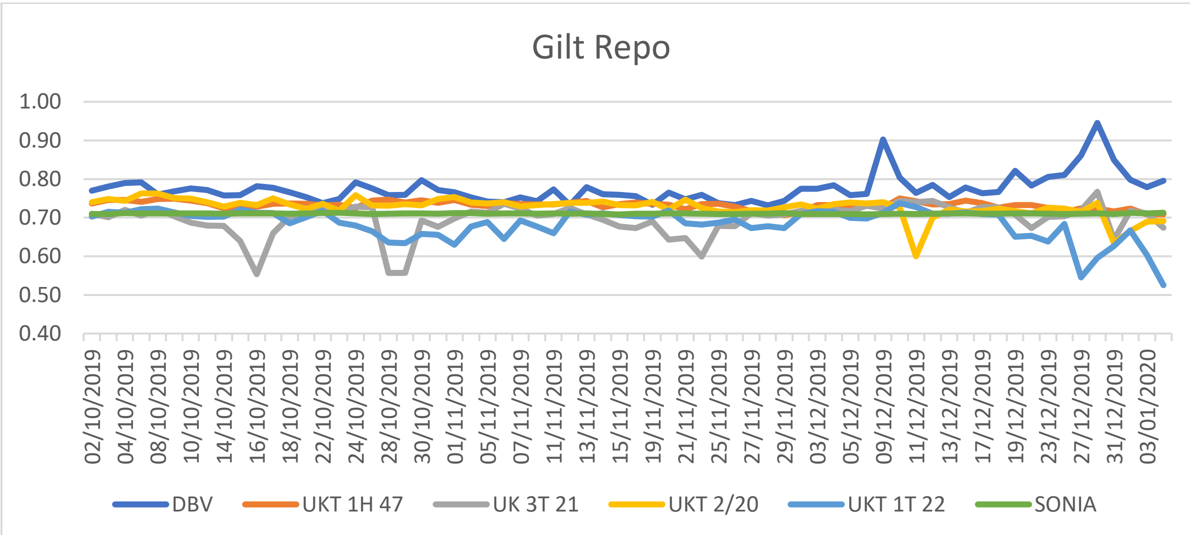


Source: ICMA analysis using Bloomberg data

Sterling repo

Contributors report that the sterling gilt repo market was relatively subdued over year-end. Many directional market users (principally LDI – liability driven investment – based strategies) had locked-in term funding well into 2020 earlier in the year, largely to hedge against the uncertainties around the UK's withdrawal from the EU, which reduced some of the funding pressures. Otherwise, funding levels in gilt GC over the turn spiked by a relatively modest 20bp in the interbank market (see Figure 10), and by around 30 to 40bp of non-netted client business, suggesting availability of bank balance sheet. Meanwhile, there was some muted widening of specials premia, particularly in the case of selected bonds in the 2yr to 10yr segment of the curve, where there seems to be the greatest concentration short interest.

Figure 10: Gilt repo rates



Source: ICMA analysis using data provided by BrokerTec Europe (CME Group)

Year end and the buy-side

While the 2019 year-end was relatively calm, compared to previous years, buy-side contributors report that it was not without significant planning effort, behavioural change, and uncertainty. Firms leveraged their relationships to negotiate repo capacity from their dealer banks long in advance of year-end, while also looking to reduce the business that they would need to execute by locking-in term financing where possible. They note that the larger global banks, as usual, reduced their intermediation capacity over year-end, in order to optimize their G-SIB scores or to transfer balance sheet to their US entities. However, recent years have seen non-traditional repo intermediaries looking to fill some of this liquidity void, most notably Australian and Canadian banks. In other cases, particularly for directional (i.e. non-nettable) business, firms reduced their repo market reliance completely, placing cash balances either in the bill market, with money market funds, or on unsecured deposit.

The ability for asset managers and investment funds to navigate their way successfully through the year-end, however, is largely contingent on the stability of their fund inflows and outflows, as well as an absence of surprises with respect to margin requirements. Contributors are keen to emphasize that while the 2019 year-end did not deliver any shocks or serious market dislocations, the underlying risks and vulnerabilities of limited intermediation capacity have not yet been resolved.