First Report for Consultation: Central Clearing Solutions for Pension Scheme Arrangement
Response of ICMA's European Repo and Collateral Council
June 15 2020

The European Repo and Collateral Council (ERCC) is pleased to respond the ESMA consultation on its First Report on Central Clearing Solutions for Pension Scheme Arrangements.

The ERCC has limited its response to the Questions related to Section 6.3 of the report. *The market-based repo solution.*

The ERCC remains ready to discuss with ESMA the answers and data provided.

The ICMA European Repo Council

The ICMA European Repo and Collateral Council (ERCC) is the industry representative body that fashions consensus solutions to emerging, practical issues in a rapidly evolving marketplace, consolidating and codifying best market practice. The ERCC is also responsible for promoting the wider use of repo in Europe by providing information and education. ICMA is an active force in standardizing repo documentation, and sponsors the Global Master Repurchase Agreement (GMRA), which is the most predominantly used master agreement for repo transactions in cross border markets.

https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/repo-and-collateral-markets/icma-ercc-governance/icma-ercc-members/

Andy Hill, Senior Director, ICMA
andy.hill@icmagroup.org

Section 6.3: The market-based repo solution

Q23: What is your view on solutions based on collateral transformation via the repo market? Do you think that initiatives on collateral transformation solutions via the repo market constitute one possible solution? What other solutions are worth exploring?

The ERCC would posit that the repo market is an important vehicle that is already used extensively by PSAs for collateral transformation in order to manage variation margin and other liquidity requirements. However, this is not sufficient in itself, particularly in times of periodic illiquidity or unexpected stressed scenarios, which is discussed and illustrated in more detail in the response to Q24.

The ERCC therefore believes that there are a number of other potential initiatives that should be considered alongside the market-based repo solution. As outlined in the response to Q24, the main constraint on access to the market, particularly for PSAs, is the limited capacity of bank intermediaries. Therefore, supplementary solutions should focus both on increasing intermediary capacity to support access and on back-stopping it in extreme cases of market deterioration.

Balance sheet relief

While it is not the only constraint on banks' balance sheets, the Leverage Ratio creates significant costs with respect to repo activity (which is predominantly a high volume, low margin business). While banks are able to find netting opportunities to optimize balance sheet usage in the case of activity with clients that engage in two-way repo flows (such as relative value hedge funds), this is not possible with client business that is predominantly one-way: such as PSAs, that are broadly lenders of securities and borrowers of cash. Such activity sits heavily and expensively on banks' balance sheets. Given the fact that PSAs provide a critical social and economic function, and to the extent that their use of the repo market is generally not to generate leverage, it would not seem unreasonable to provide Leverage Ratio relief to bank intermediaries for short-dated repos with PSAs.[1] However, as mentioned, the Leverage Ratio is not the only binding balance sheet constraint on repo intermediation, and this would potentially also need to be considered alongside the impacts of PSA repo activity on banks' risk weighted asset (RWA) capital charges and Net Stable Funding Ratio (NSFR).[2]

Client clearing

Balance sheet netting opportunities potentially also provide the possibility for increased intermediation capacity, which underlies the proposed solution of sponsored client clearing services for repo. Client clearing has the potential to provide PSA's with access to deeper and more stable sources of repo market liquidity, both in benign and stressed markets (noting that cleared repo markets performed relatively well during the recent Covid-19 crisis – see answer to Q24).

While CCP client clearing solutions in Europe are relatively nascent, their development in the US perhaps give some cause for optimism. In the first half of 2020, total daily volumes of sponsored serviced transactions have been above $400bn (reaching $560bn in March 2020), compared with less than

[1] It is not clear exactly to what the point on changes to the Leverage Ratio raised in paragraph 71 of the report relates, or how this applies in the case of reverse-repos with PSAs

[2] Many banks are also subject to G-SIB scores, which put further constraints on balance sheet over reporting dates

$300bn a year ago.[3] Furthermore, CCPs continue to take strides to develop a highly efficient client clearing ecosystem in Europe, including: (i) the expansion of eligible fund types to a broader range of regulated funds; (ii) providing access to a broader range of underlying markets and asset classes; (iii) connecting to a wider set of execution venues (allowing PSAs "choice" of execution venue when accessing clearing); (iv) expanding connections to a broader range of custodians (better reflecting the range of custodians used by PSAs); and (v) working to increase the number of sponsoring "agents" to sponsor PSAs into clearing.

Ongoing consideration will be required with respect to the availability of clearing members providing client clearing services for repo, as well as guarantees related to available capacity, the risks imbedded in the clearing models, and also operational and intraday liquidity risks related to client clearing. Additionally, to support this solution, and to mitigate the potential credit risks related to client clearing, it would seem to be a prerequisite that PSA's have the ability to have their own Target2 accounts. A further advantage of this is that it would also provide an alternative 'safe haven' vehicle for PSA's to manage their reinvestment risk, rather than relying on money market instruments with their associated credit risk.

However, it also needs to be remembered that whether PSAs are accessing the market bilaterally or through client clearing models, the market will still be required to absorb the same quantity and direction of activity, which, in stressed scenarios, could be significant. [4]

Central bank backstop lending facility

Ultimately, some form of back-stop provision for collateral transformation, ideally in the form of access to a central bank repo facility, would seem prudent, and potentially necessary in extreme cases of market stress or illiquidity. This could be bilateral or via a CCP arrangement (subject to an assessment of the risks and challenges previously highlighted), and would likely need to be offered on terms that are not as favourable as those offered to banks, in order to ensure that this facility is only utilized as a last resort.

[3] Source: DTCC

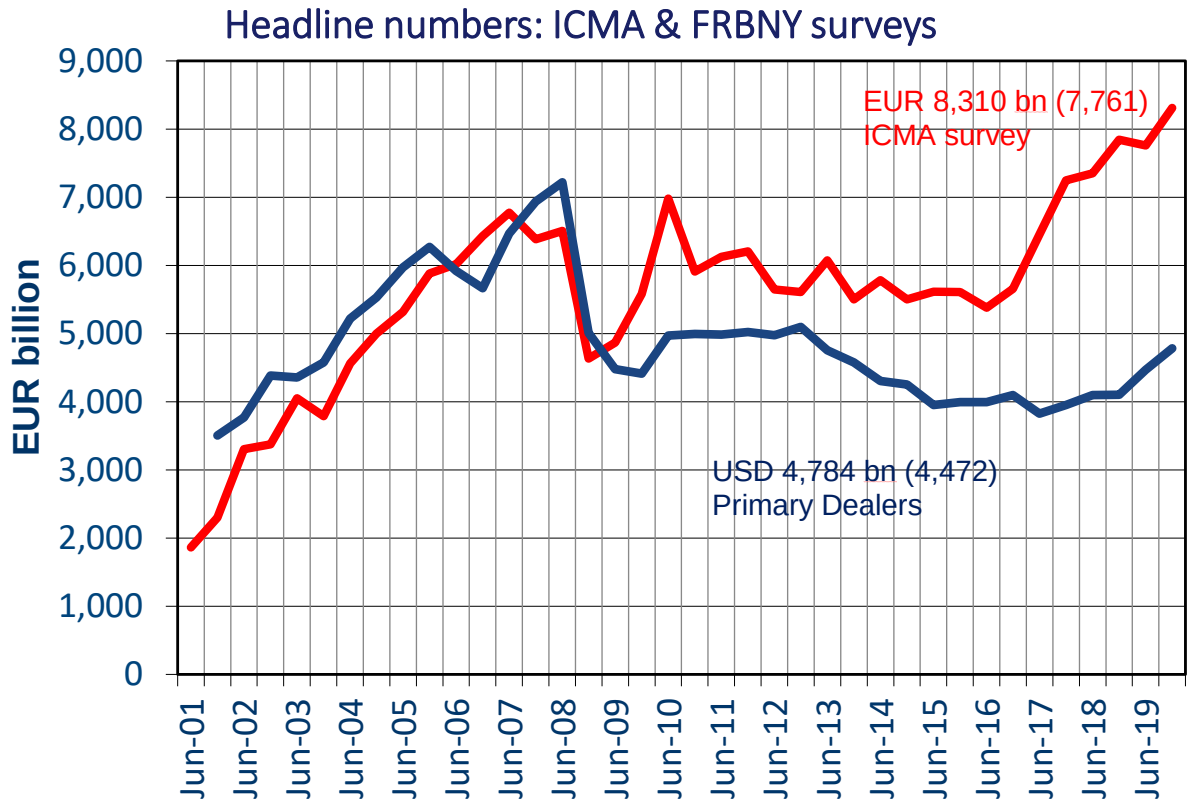
[4] Theoretically it could be argued that for every VM call there is an equal and opposite VM post, which should eventually net through the system. However, this does not take account of the fact that not all VM will find its way back into the repo market, and almost certainly not instantaneously.

Q24: Do you think that the repo market is suitable for PSAs' needs? If not, what are the impediments for PSAs to access the repo market? Please elaborate on the reasons for your answer, specifying if these are related to cost, operational complexities or regulatory constraints.

Size and functioning of the European repo market

The ERCC would agree with the observation of a steady growth in the size of the European repo market in recent years, as highlighted by the semi-annual ERCC European Repo Market Surveys (see Figure 1). This growth can largely be attributed to four main factors: (i) increased demand for collateral management and collateral transformation due to regulatory requirements (including Liquidity Coverage Ratio and various clearing/margin rules); (ii) improved netting efficiencies and balance sheet management by bank intermediaries; (iii) expansionary monetary policy with a ballooning of banks' excess reserves; and (iv) continued growth in the size of the underlying bond markets.

Figure 1: the size of the European repo market



Source: ICMA ERCC European Repo Market Survey, December 2019

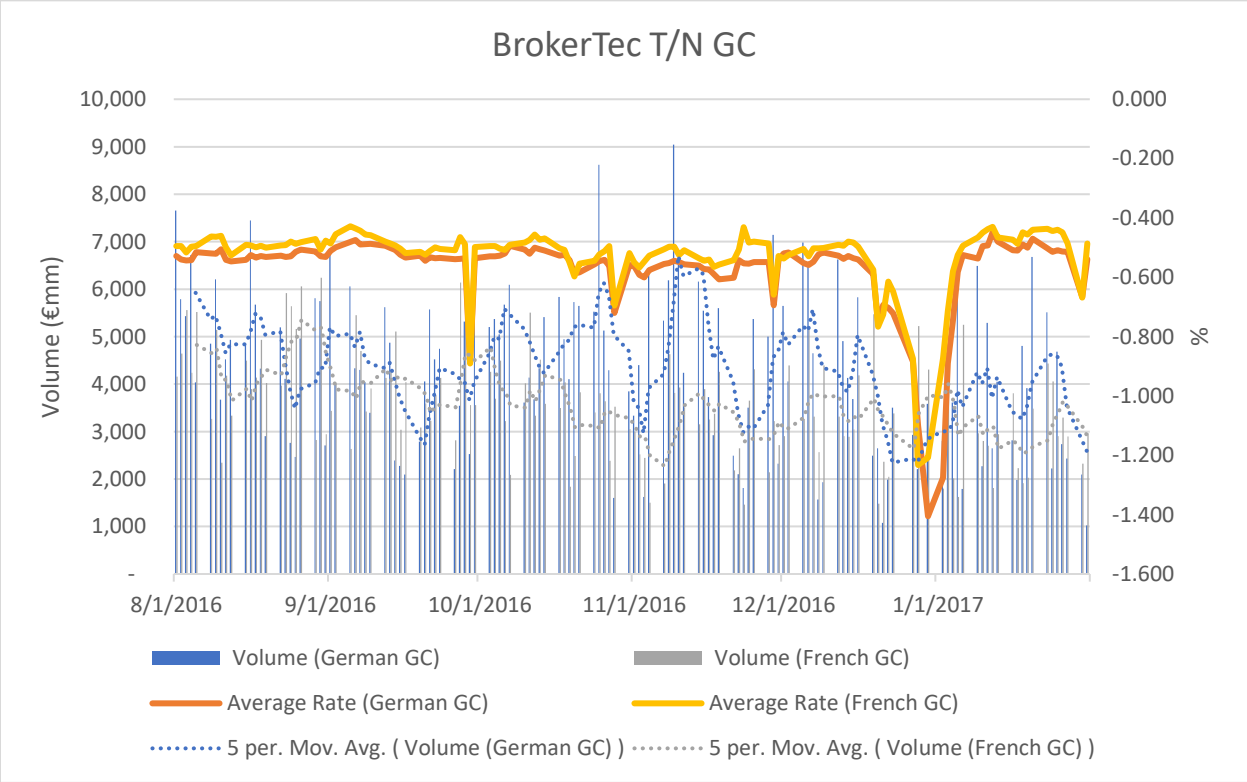
The ERCC would also agree with the observation that while the European market functions well for the majority of the time, there are occasions when the market become vulnerable, and when intermediation capacity may struggle to support the required demand for market access. This tends to be over key balance sheet reporting dates, in particular financial year-ends, but also, as we have seen more recently, during less predictable conditions of market stress.

Stressed market conditions

Perhaps the most pertinent point of reference for recent repo market dislocations is the 2016 year-end (documented in the ICMA report *Closed For Business: A post-mortem of the European repo market break-down over the 2016 year-end*). In many respects this was the 'perfect storm' as a result of a number of factors acting in confluence, including a shortage of readily available HQLA as a result of central bank purchases and deficient lending programs, a reluctance, or lack of capacity, of banks to provide year-end liquidity, as well as market positioning, both in government bonds and currency basis. But also, importantly, the market was caught largely unaware.

The analysis of 2016 year-end suggests that buy-sides struggled to source liquidity as banks were unable (or unwilling) to provide balance sheet. While ICMA does not have access to overall market trading volumes at this time, it can be observed that interbank volumes decreased significantly (see Figure 2). The lack of market capacity is also reflected in the extreme repo rates that were printed at this time, with GC in the interbank market trading as low as -7%, with reports of dealer-to-client trades at -20%.

Figure 2: BrokerTec tom/next activity (German and French GC)

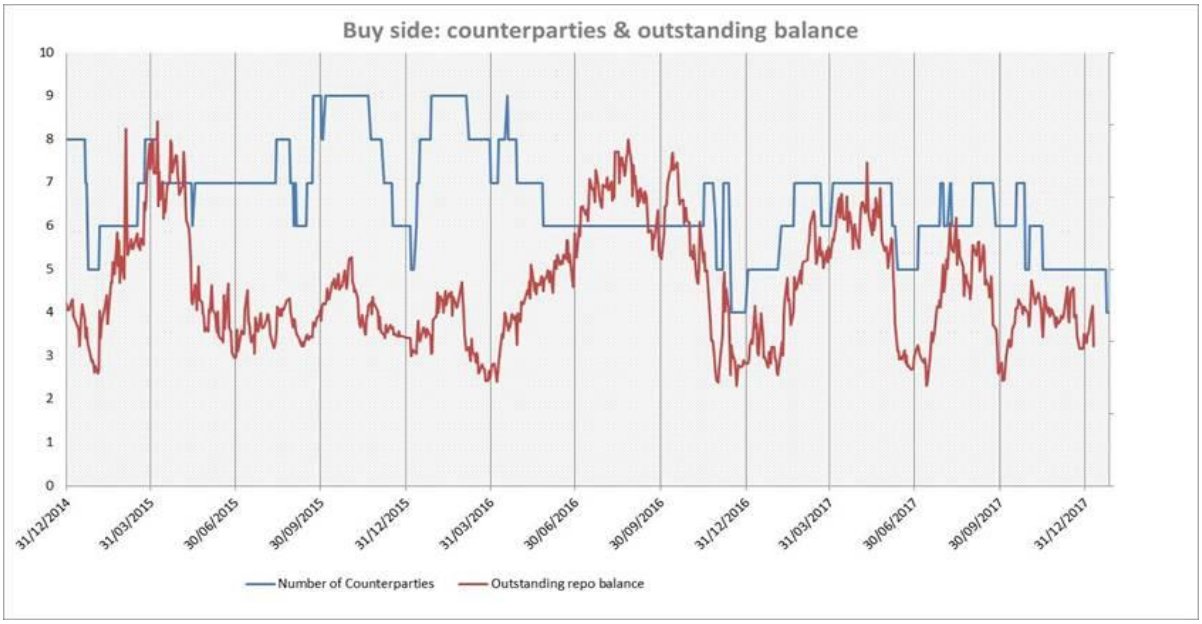


Source: ICMA analysis using Nex Data Services Limited (BrokerTec) data

While subsequent year-ends have been less disruptive, largely as a result of greater market preparedness, both by investors and intermediaries, ICMA's analysis continues to highlight challenges to accessing the market. This is particularly the case for investment funds that: (i) are required to manage their liquidity on a short-term (in many cases daily) basis, which makes it difficult to lock-in their funding

needs months or even weeks in advance; and (ii) engage in primarily one-directional flows (either lenders or borrowers of cash), which provides few netting opportunities for intermediary banks and is therefore heavily capital intensive. This is highlighted in Figure 3, which is based on data provided by a European PSA, and which shows how the number of bank counterparties increases over key reporting dates, even when repo balances decrease (taken from the ICMA report, *The European repo market at 2017 year-end*).

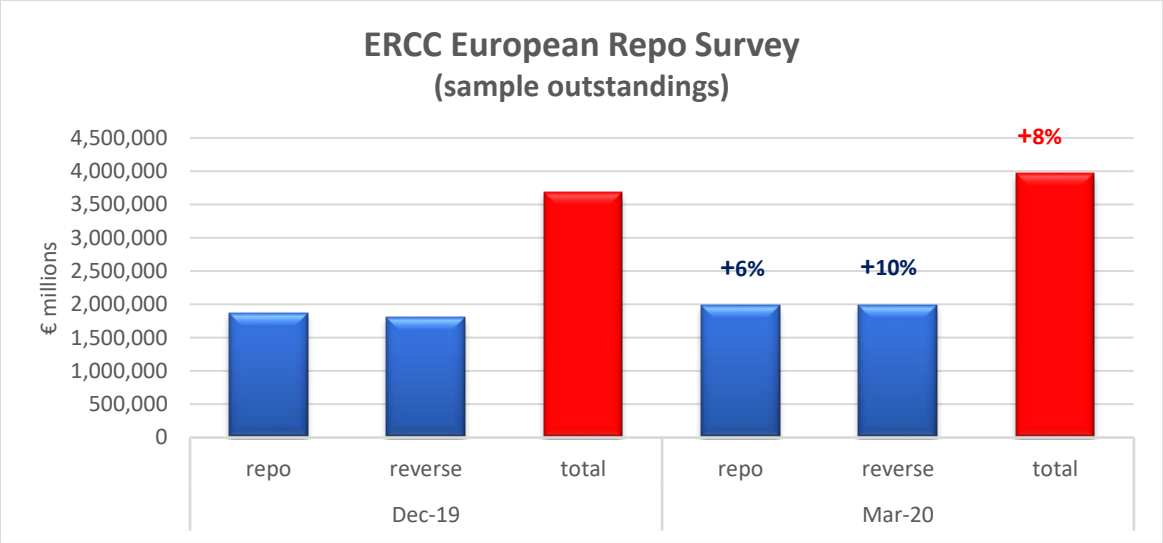
Figure 3: Example of a buy-side firm's bank repo counterparties and balances



The market turbulence in early 2020 created by the Covid-19 pandemic is also a reminder of how stretched repo markets can become under unexcepted, stressed conditions. ICMA's analysis (reported in the publication, *The European repo market and the COVID-19 crisis*) suggests that while the European repo market functioned relatively well through this period, this was in the face of a number of constraints, not least on banks' capacity to intermediate at a time of heightened demand, and which again highlights the dependence of market functioning on central bank intervention.

ICMA's ERCC conducted a snap repo survey at the end of March 2020 to ascertain changes in banks' balance sheets during the crisis. While only 22 of the usual 60 or more participants provided data, this nonetheless helps to corroborate the anecdotal reports (see Figure 4). The data suggests that most larger banks did increase their balances through March, although many smaller banks tended to reduce their repo footprint, in some cases dramatically. The sample data points to an overall increase in outstandings of about 8% from the December 2019 survey, but a median adjustment of -4.0% across the sample, indicating a greater concentration in terms of dealer capacity. It is important to consider that to the extent that trading volumes are concentrated with a few larger dealers, this actually reduces the sources of liquidity available to PSAs.

Figure 4: ERCC March 2020 'snapshot' survey



Buy-sides who were interviewed for the ICMA report suggest that while they were successfully able to manage their liquidity through the early part of March (offsetting fund outflows with positive margin inflows), as this became more challenging, and as access to the repo market became more imperative, they report that banks simultaneously began to reduce their repo capacity. Partly this was due to the approaching quarter-end (when banks ordinarily wind-down their repo books), but potentially also the result of banks increasing their direct lending to corporate clients (as the commercial paper market dried up), reducing the cash available to lend through the repo market. They note that it was ultimately ECB (and other central bank) intervention that helped to ease the mounting tension, reversing the ongoing sell-off in risk assets and freeing up banks' credit lines. They are also keen to emphasize that as helpful, and necessary, as the central bank actions were, a timelier response would have been preferred, not least as by this point some firms report having run down their liquidity buffers and were struggling to generate cash against their assets to meet margin calls.

Repo market liquidity for T+0

A further, and important, consideration with respect to collateral transformation to meet CCP margin calls is the market depth and liquidity in the overnight market, which PSAs will need to access in order to meet same day margin obligations. In other words, the ability to transact repo trades for T+0 settlement is a key consideration in the market-based repo solution. Furthermore, PSA's will need enough time to work and execute the required repo transactions, process these, receive the cash on settlement, and reprocess this to meet the margin call.[5]

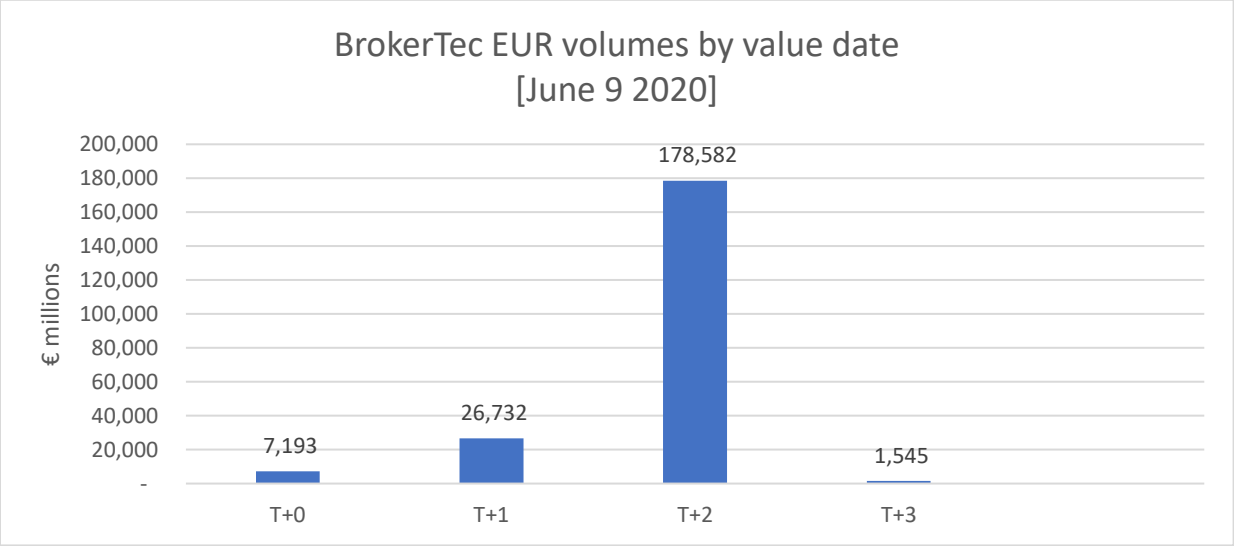
[5] One possible means to mitigate some of this liquidity risk is to anticipate margin calls and mange this process in advance of the actual call.

As ESMA will be aware, there is no standard settlement cycle for securities financing transactions, which are purposefully intended to be highly flexible transactions in order to meet the user's specific liabilities and financing requirements. However, certain 'terms' do attract more liquidity and activity than others (notably 'tom-next' and 'spot-next'), which is largely a function of the standard settlement cycles in the underlying market (with liquidity normally consolidating on the settlement date that is one day short of the standard underlying market settlement date: e.g. T+1 in the case of T+2 markets). Based on this observation alone, one could conclude that shortening the standard settlement cycle in the Euro bond markets to T+1 from T+2 would help to generate more liquidity in the same-day ('overnight') market, similar to that observed in the US and UK repo markets.

However, another important consideration the context of the Euro bond markets is the capacity and interoperability of the underlying settlements and payments infrastructure to support a deep same-day repo market. Unlike the US or the UK, the Eurozone consists of multiple CSDs, CCPs, and payment systems, with different process cycles and cut-off times. Accordingly, liquidity for T+0 in the Euro repo markets is relatively thin, particularly by late morning or early afternoon. It should also be noted that when the Euro bond markets moved to a T+2 standard settlement cycle, a significant proportion of repo market activity did not migrate to T+1, particularly in the case of specifics, where there is greater price sensitivity to liquidity.

This disparity in liquidity conditions for different settlement dates is illustrated in Figure 5, which shows total volumes by value date for euro denominated repo activity on the BrokerTec platform on a 'snapshot' day.

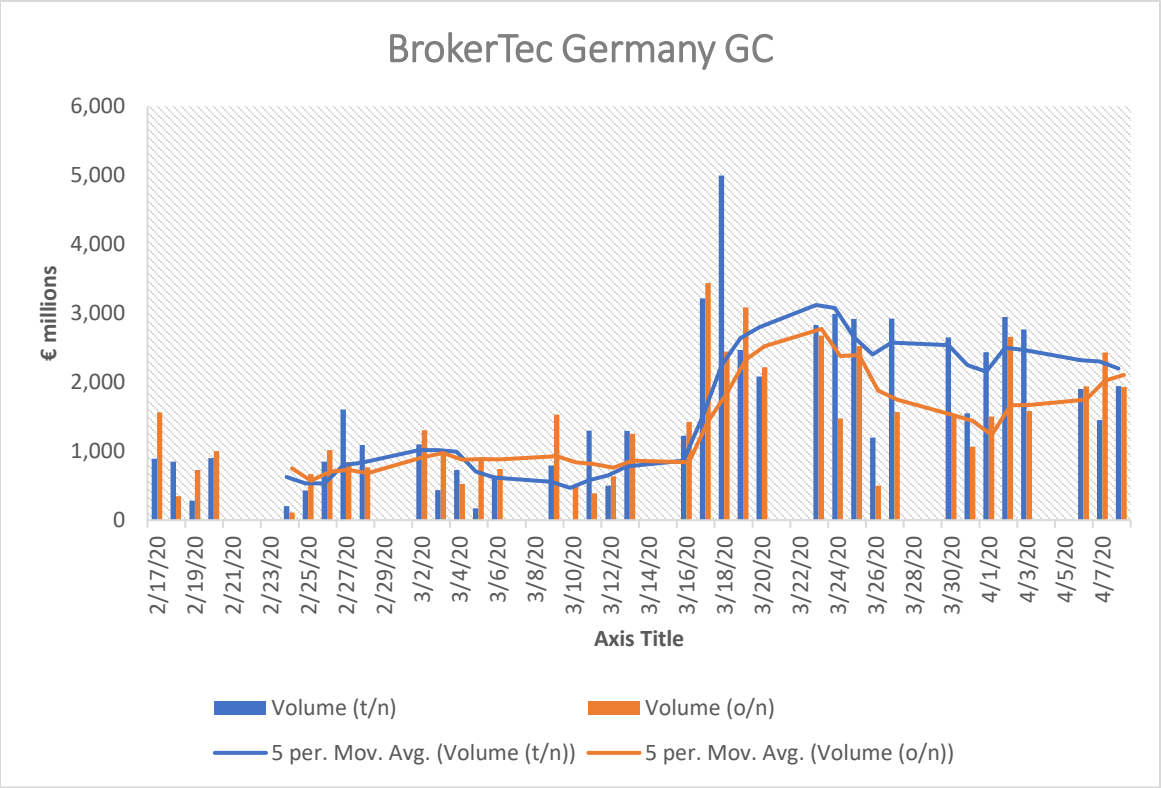
Figure 5: BrokerTec total euro repo activity by value date (6/09/20)



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

Interbank GC repo activity during the recent crisis also illustrates the disparity between activity in the overnight and tom-next markets when the market was at its most stressed (see Figure 6).

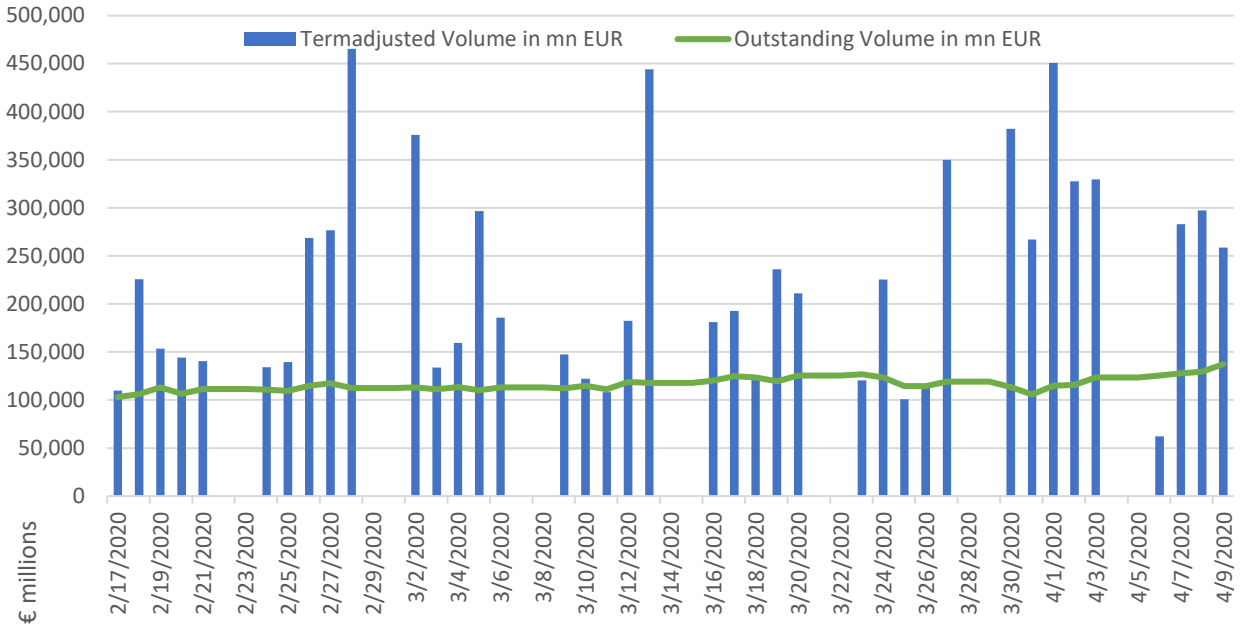
Figure 6: BrokerTec overnight and tom-next German GC volumes



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

Triparty repo could potentially provide a more efficient means of accessing T+0 liquidity for PSAs, either bilaterally or through sponsored clearing models, and is a source of liquidity management already being utilized by some PSAs. For example, traded volumes in Eurex GC Pooling Repo, which supports a wide range of eligible collateral, and where T+0 and T+1 settlement is highly standardized, remained consistently deep throughout the Covid-19 crisis (see Figure 7).

Figure 7: Eurex GC Pooling



Source: Eurex Repo

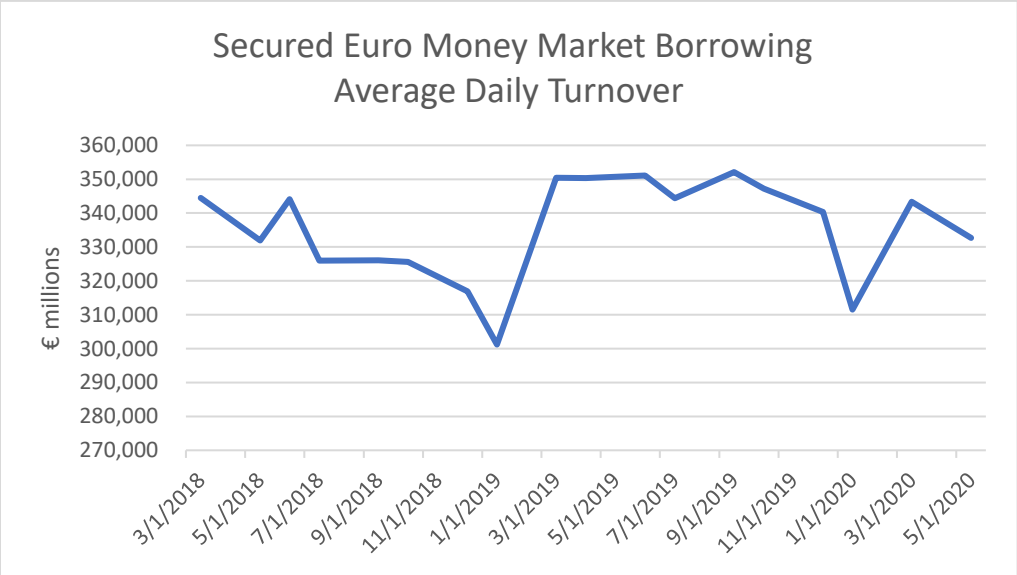
Conclusion

It is therefore the conclusion of the ERCC that while the repo market functions sufficiently well, most of the time, for PSAs to support the access and liquidity they require to undertake the necessary collateral transformation to manage their cash variation margin requirements, there will be times when the market cannot be relied upon. Most significantly, the timing and extent of such stressed market conditions cannot be predicted.

Q25: Do you have any data with respect to PSAs' potential liquidity demand in business-as-usual? Also, do you have any data with respect to PSAs' maximum liquidity needs in stressed market conditions?

The ERCC would defer to the responses provided by PSAs and their representative bodies. However, one possible point of concern, as discussed in the answer to Q24, relates to the capacity of the European repo market to absorb a significant increase in demand (whether cleared or bilateral) resulting from large and sustained margin calls against PSAs. The ECB's data suggests that average daily turnover in the European repo market fluctuates between €300bn and €350bn (see Figure 8). Based on the independent analysis cited in the report,[6] which suggest that a 1% move in swap rates would result in a EU27 PSA cash collateral requirement of €105bn to €130bn, this would appear to be a relatively significant proportion of average daily repo market turnover, which one can assume largely consists of interbank transactions (also noting that in the recent Covid-19 turmoil we saw long term euro swaps rates move in the order of 0.5%).

Figure 8: Secured Euro Money Market Borrowing Average Daily Turnover



Source: ICMA analysis using data from the ECB Statistical Data Warehouse

[6] Baseline report on solutions for the posting of non-cash collateral to central counterparties by pension scheme arrangements: a report for the European Commission prepared by Europe Economics and Bourse Consult

Q26: Do you think that PSAs fulfilling their liquidity needs via the repo market will have strong implications on this market's liquidity and procyclicality? Can you provide quantification of the risk of the likelihood of a failure of market-based repo solutions to meet PSAs' needs? Under which conditions?

As highlighted in the answer to Question 24, and also in the recent ICMA report, The European repo market and the COVID-19 crisis, in stressed market conditions the demand on the repo market and collateral transformation naturally increases. This is driven by the need to meet margin calls as volatility increases, in order to help manage fund outflows, as well as absorbing inflows of cash seeking a safe haven as investors disinvest holdings of risk assets. At the same time banks' capacity to intermediate this increase in demand is limited by regulatory capital restrictions and, in some cases, also by an aversion to increasing risk (whether counterparty risk or matched-book exposures). The analysis and data cited in Question 24 and the aforementioned ICMA report help to illustrate these observations.

It is therefore not unimaginable that in a scenario similar to that of March 2020, where dealer capacity is already stretched to its limit, a sizeable increase above the already high demand for repo market access in a situation, would not be absorbable. Anecdotal evidence suggests that by March 18, when ECB intervention prompted a turnaround in market sentiment and direction, some buy-sides were already close to technically defaulting on margin calls.

In such scenarios it would seem that some form of pressure valve, most likely in the form of a back-stop central bank repo facility for PSAs, would be in the best interest of prudential financial stability.