A primer on sponsored repo

- Post-crisis regulations have limited the amount of repos dealers can do with clients by significantly increasing the cost of bank balance sheets. Dealers are unable to offer as much financing/collateral and, consequently, as much liquidity to the fixed income markets, relative to pre-crisis.
- Sponsored repo seeks to alleviate these pressures by better aligning the economics of repo with net exposure. It does this by allowing FICC netting members to sponsor non-dealer counterparties in a cleared bilateral repo trade with FICC.
- So far, sponsored repo transactions have been mostly limited to large US banks willing to sponsor their clients onto the FICC platform, given FICC eligibility requirements.
- However, over the course of this year, more counterparties are expected to gain access to sponsored repo. In effect, US dealers of foreign banks and smaller .dealers, among others, could become sponsors and engage in sponsored repo.
- For banks, the most important benefit of doing sponsored repo is the ability to net those transactions off balance sheet, thus freeing up additional capacity to operate in the repo markets or additional capital to redeploy for other uses.
- For end users such as MMFs and hedge funds, sponsored repo may make access to collateral/financing more readily available.
- While the market for sponsored repo could grow in the coming year, there are limits as to how much this could grow.
- In reducing the cost to provide and intermediate the extension of balance sheet, sponsored repo should on the margin narrow GC/OIS spreads. It should also make the implicit leverage available via derivatives less valuable to the market. The result would be the outperformance of Treasuries versus both swaps (Libor and OIS) and futures.

US Fixed Income Strategy

Teresa C Ho AC
(1-212) 834-5087
teresa.c.ho@jpmorgan.com

Joshua Younger
(1-212) 270-1323
joshua.d.younger@jpmorgan.com

Alex Roever
(1-212) 834-3316
alex.roever@jpmorgan.com

Ryan J Lessing
(1-212) 834-5063
ryan.j.lessing@jpmorgan.com

J.P. Morgan Securities LLC

See page 9 for analyst certification and important disclosures.

Teresa C Ho
(1-212) 834-5087
teresa.c.ho@jpmorgan.com

Joshua Younger
(1-212) 270-1323
joshua.d.younger@jpmorgan.com

Alex Roever
(1-212) 834-3316
alex.roever@jpmorgan.com

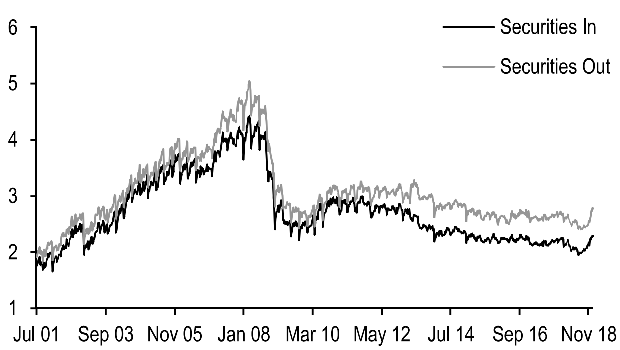
Ryan J Lessing
(1-212) 834-5063
ryan.j.lessing@jpmorgan.com

A primer on sponsored repo

While the repo market has evolved in many ways since the Global Financial Crisis, repos are still a way for dealers to borrow or lend cash on a collateralized basis for a short time period. Based on the Fed's most recent primary dealer financing data, the gross size of the repo market is around $5.1tn (reverse repos: $2.3tn, repos: $2.8tn). However, these balances are a far cry from where they were pre-crisis in 2008 as **post-crisis regulations have limited the amount of repos dealers can do with clients by significantly increasing the cost of bank balance sheets** (as reflected in GCF/tri-party repo spreads; **Exhibit 1 & 2**). As a result, **dealers are unable to offer as much financing/collateral, and consequently as much liquidity to the fixed income markets, relative to pre-crisis.** Indeed, the amount of Treasury repos supporting the overall Treasury market has declined from a high of ~60% to now 10-20%.[1]

Exhibit 1: Current balances are significantly lower than pre-crisis as post-crisis regulations have limited the amount of repo dealers can do...

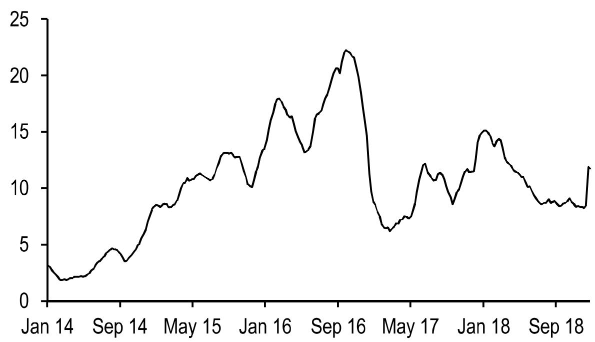
Primary dealer financing securities in versus securities out ($tn)



Source: Federal Reserve Bank of New York

Exhibit 2: ... by significantly increasing the cost of bank balance sheets

Spread between ON GCF repo and ON BNY tri-party repo (bp)



Source: J.P. Morgan

Specifically, **much of this decline in availability and increase in cost of balance sheet is a result of new regulatory constraints on the banking system**. Both the Supplementary Leverage Ratio (SLR) and the Global Systemically Important Bank (G-SIB) capital surcharge require large banks to hold additional capital against exposures associated with secured lending, including Treasury and Agency repo as well as other markets like FX forwards**. This is in large part because both measures focus on gross rather than net risk in assessing exposure, to which large notional but low-margin business lines, such as short-term secured lending, are particularly exposed.** Though both rules offer tangible and important benefits with respect to financial stability considerations, their impact on funding spreads is a well-known and important cost to the market.

Beyond their impact on repo, these constraints have implications for other markets as well. Though by no means the only driver, **higher GC rates are one reason for wider unsecured funding spreads** (e.g., FRA/OIS) as well as increases in the effective Federal funds rate (EFFR) owing to greater competition for cash between these markets (see e.g., Interest Rate Derivatives and Short-Term Fixed Income, *US Fixed Income Markets 2019 Outlook*, 11/20/18). Perhaps more

[1] Calculated as Treasury Securities In/Out divided by total Treasury market outstanding

Teresa C Ho
(1-212) 834-5087
teresa.c.ho@jpmorgan.com

Joshua Younger
(1-212) 270-1323
joshua.d.younger@jpmorgan.com

Alex Roever
(1-212) 834-3316
alex.roever@jpmorgan.com

Ryan J Lessing
(1-212) 834-5063
ryan.j.lessing@jpmorgan.com

fundamentally, **structurally lower (and sometimes negative) swap spreads in part reflect this increase in balance sheet and intermediation costs, particularly during periods of excess secondary market supply** (see e.g., *Dogs and cats living together*, J. Younger et al., 11/6/15). And more generally, the relative pricing of derivatives (e.g., Libor and OIS swaps) versus securities (Treasuries) is in large part driven by repo markets.

Sponsored repo seeks to alleviate these pressures by better aligning the economics of repo with net exposure. By allowing netting members to sponsor non-dealer counterparties onto FICC's centrally clearing platform, dealers are able to provide balance sheet to end users without incurring as much capital. For end users, they get the benefit of obtaining another type of financing/collateral from dealers.

What is sponsored repo?

As its name suggests, **sponsored repo is a type of transaction whereby the dealer sponsors a non-dealer counterparty in a cleared bilateral repo trade with FICC** (Fixed Income Clearing Corporation).[2] Functionally, the transaction is similar to a typical delivery-versus-payment (DVP) repo transaction: dealers and end users negotiate on the specific collateral in exchange for cash. However, there are some key operational differences: 1) the trades are novated to FICC, and 2) the sponsoring dealer facilitates all details of the trade with FICC, acting as processing agents on its clients behalf for all operational functions, including trade submission and settlement with the central clearing counterparty.

Specifically, eligible sponsored repo transactions include two-direction (i.e., cash borrowing and cash lending) DVP repo in US Treasury and Agency securities. Currently, only overnight maturities are available, although it's expected term maturities will become available at some point in the near future.

Who is eligible?

Currently, access to sponsored repo is limited given eligibility requirements. First, a sponsoring member must be a Bank Netting Member of FICC's Government Securities Division (GSD), which as of November 2018 has over 150 GSD member entities from about 90 different parent companies.[3] **Second**, the sponsoring member must demonstrate that it is "well-capitalized," which according to FDIC means that its capital must exceed the required minimum levels for each relevant capital measure. **Third**, the sponsoring member must have at least $5bn in equity capital. **Fourth**, to be sponsored, the end user must be a qualified institutional buyer client of a sponsored member (previously it was only available to registered investment companies).

As a result, sponsored repo transactions have so far been mostly limited to large US banks that have been willing to sponsor their clients onto the FICC platform. In fact, there are only a handful US G-SIBs that are currently engaged in sponsored repo, even though many more are eligible.

However, over the course of this year, more counterparties are expected to gain access to sponsored repo. Last month, DTCC submitted a proposal with the SEC to expand eligibility to include all other GSD Netting Members, with the exception of

[2] http://www.dtcc.com/clearing-services/ficc-gov/sponsored-membership
[3] http://www.dtcc.com/client-center/ficc-gov-directories

Inter-Dealer Broker Netting Members (collectively known as Category 2 Sponsoring Members).[4,5] This expansion means that in addition to Bank Netting Members, Dealer Netting Members, Futures Commission Merchant Netting Members, and Foreign Netting Members will be eligible to become sponsoring members. **In other words, US dealers of foreign banks, US branches of foreign banks, and smaller dealers, among others, could become sponsors (provided they are members of GSD) to engage in sponsored repo.** Additionally, the proposal seeks to allow sponsored members to trade sponsored repo with netting members other than their sponsoring member. The proposal is open for comment until January 22. The SEC has until mid-February to late March to approve the proposal.

The timeline to become a sponsoring member is unclear. Based on FICC's GSD rulebook, if a GSD netting member is eligible to become a sponsoring member, it must file an application with FICC. FICC's Board will then review the application and decide how to proceed.[6]

As for sponsored members, there are some legal agreements clients need to have in place with the sponsoring member and FICC. Our understanding is that this could take anywhere from a couple days to a few weeks (or longer) before the client can engage in sponsored repo.

What's the benefit of doing this for banks?

One of the most important benefits of doing sponsored repo for banks is the ability to net those transactions off balance sheet. By engaging in sponsored repo, banks can decrease the amount of leverage capital they have to hold which under SLR is a minimum 5% on their gross asset repo balances. They can also reduce the amount of cross-border repo exposures on their balance sheets (i.e., by sponsoring their offshore clients onto a domestic platform), and accordingly reduce their G-SIB score and potentially the amount of G-SIB capital surcharge they have to hold.[7] In both instances, **sponsored repo gives banks the ability to free up additional capital on their balance sheets. In light of this, we suspect sponsored repo is most beneficial for those banks that are leverage and/or G-SIB constrained.** On the other hand, smaller banks that have to comply with neither G-SIB requirements nor leverage ratio requirements may find limited benefit in engaging in sponsored repo, especially given the ancillary costs incurred.

How does netting work in sponsored repo? Consider a scenario where a dealer participates in matched book repo. The dealer 1) borrows $100 versus Treasuries with a MMF in an overnight tri-party repo trade, and then 2) lends $100 versus Treasuries to a hedge fund in an overnight bilateral reverse repo trade (**Exhibit 3**). Although the trades have the same collateral and same maturity dates, they are executed with two different counterparties and hence cannot be netted off balance sheet. In this instance, the dealer needs to hold capital against a gross asset balance

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[4] http://www.dtcc.com/~/media/Files/Downloads/legal/rule-filings/2018/FICC/SR-FICC-2018-802.pdf
[5] FICC does not believe it would be appropriate for Inter-Dealer Broker Netting Members to become eligible sponsored dealers as currently there's a cap that applies to their respective loss allocation obligations to FICC.
[6] Rule 3A, Section 2b (page 91): http://www.dtcc.com/~/media/Files/Downloads/legal/rules/ficc_gov_rules.pdf
[7] Currently, under the G-SIB capital surcharge, cross border repo exposures cannot be netted off balance sheet.

Teresa C Ho
(1-212) 834-5087
teresa.c.ho@jpmorgan.com

Joshua Younger
(1-212) 270-1323
joshua.d.younger@jpmorgan.com

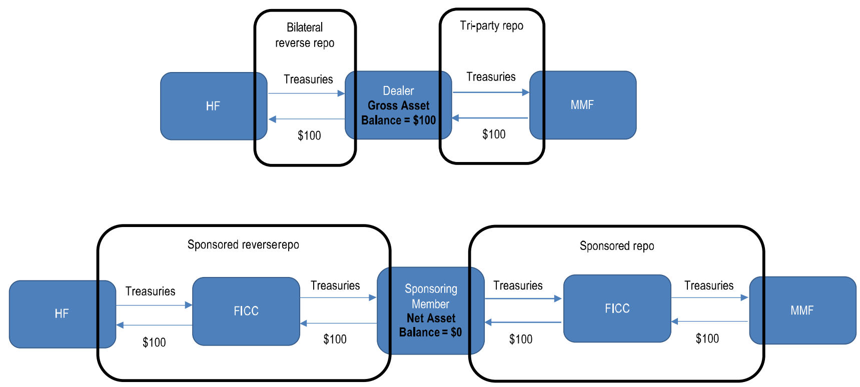
Alex Roever
(1-212) 834-3316
alex.roever@jpmorgan.com

Ryan J Lessing
(1-212) 834-5063
ryan.j.lessing@jpmorgan.com

of $100. If both sides of the trade are done via sponsored repo, and novated to FICC, the dealer then would hold capital against a net asset balance of $0. The netting would work the same way if a dealer funds via sponsored repo and then lends the cash out in FICC (via GCF or DVP) or if a dealer funds its client via sponsored repo by borrowing from FICC. **All told, sponsored repo reduces the amount of capital banks have to hold, giving banks either greater capacity to operate in the repo markets or additional capital to redeploy for other uses.**

Exhibit 3: Sponsored repo allows banks to net their reverse repo and repo transactions off balance sheet

Diagram of a matched book repo trade via sponsored repo and non-sponsored repo



Source: J.P. Morgan

That said, we'd note that the netting benefit also comes at a cost. Not only do dealers have to post additional capital to FICC into the Clearing Fund, but they also have to provide a guaranty to FICC with respect to all obligations of its sponsored members. They may also have to post additional liquidity at FICC's Capped Contingent Liquidity Facility.[8] Even so, we suspect for large leverage/G-SIB constrained banks the regulatory relief provided by engaging in sponsored repo still outweighs its costs, though it's probably not the windfall gain in efficiency that some banks were hoping for. Smaller banks, however, will likely be less receptive to become sponsoring members, given high capital and liquidity costs.

What's the benefit of doing this for end users?

End users that lend cash versus collateral benefit from sponsored repo as well. This would include users like MMFs that have a significant need for overnight liquidity. Sponsored repo gives them the ability to access collateral on days when it may not be otherwise available (e.g., quarter-ends) when dealers pull back their balance sheets for regulatory purposes (**Exhibit 4**). It's also a good investment alternative if they have late day cash needs as it settles DVP versus tri-party. It tends to yield similarly to tri-party repo. Lastly, it provides counterparty diversification benefits as the trades are novated to FICC.

[8] Capped Contingent Liquidity Facility (CCLF) is a liquidity requirement mandated by DTCC that requires firms to attest that they have committed liquidity available in the event of a clearing member default at FICC.

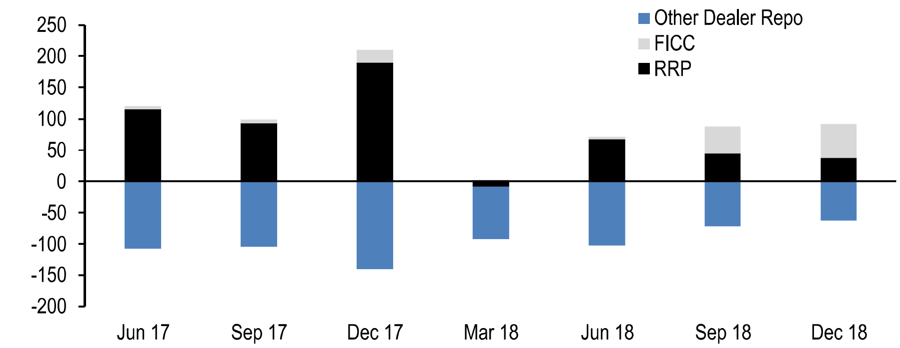
Teresa C Ho
(1-212) 834-5087
teresa.c.ho@jpmorgan.com

Joshua Younger
(1-212) 270-1323
joshua.d.younger@jpmorgan.com

Alex Roever
(1-212) 834-3316
alex.roever@jpmorgan.com

Ryan J Lessing
(1-212) 834-5063
ryan.j.lessing@jpmorgan.com

Exhibit 4: FICC sponsored repo seems to be increasingly taking up the slack at quarter-end
Fed RRP, FICC repo, and other dealer repo, month-over-month change in balances with MMFs at quarter-end ($bn)



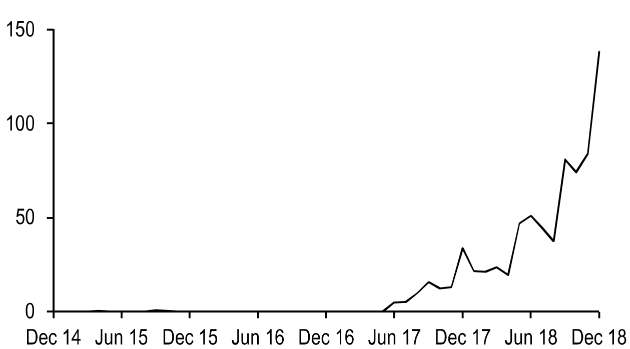
Source: Crane Data, J.P. Morgan

For those that lend collateral versus cash (such as hedge funds), its benefit is mostly in financing availability. While dealers may have previously been hesitant to engage in reverse repos that would gross up their balance sheet, sponsored repo changes this dynamic as it now gives dealers netting capabilities. Clients may find access to repo financing more readily available, relative to previously.

How big is the market? How big could it be?

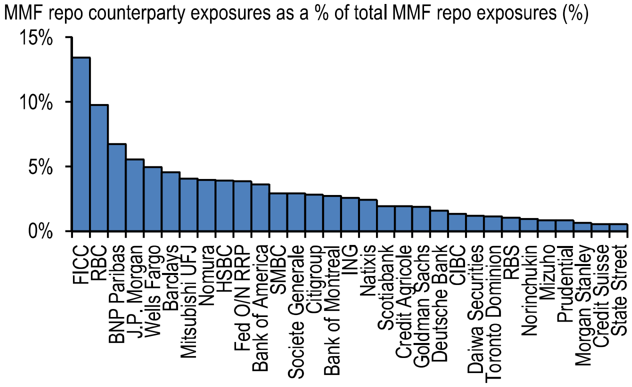
Transparency into the sponsored repo market is limited. Our only visibility is via MMF holdings which as of December 2018 showed funds holding $138bn of sponsored repos. Though this is only a fraction of the $2.8tn repo market, sponsored repo has come a long way since mid-2017 when MMFs began participating in this product and acted as cash providers into FICC (**Exhibit 5**). In fact, it was the single biggest MMF repo counterparty at December year-end (**Exhibit 6**). In contrast, there is no publicly available data on how much collateral is being provided into FICC. Recent news articles have noted that there are nine large collateral providers that have become sponsored members, though it's unclear how much activity they currently do.[9]

Exhibit 5: Use of sponsored repo in MMFs has materially increased over the past 18 months…
FICC repo exposures in MMFs ($bn)



Source: Crane Data, J.P. Morgan

Exhibit 6: … in fact, it was the single biggest MMF repo counterparty at December year-end
MMF repo counterparty exposures as a % of total MMF repo exposures (%)



Source: Crane Data, J.P. Morgan

9 https://www.risk.net/derivatives/6288436/ficc-takes-firm-grip-of-us-repo-market

Teresa C Ho
(1-212) 834-5087
teresa.c.ho@jpmorgan.com

Joshua Younger
(1-212) 270-1323
joshua.d.younger@jpmorgan.com

Alex Roever
(1-212) 834-3316
alex.roever@jpmorgan.com

Ryan J Lessing
(1-212) 834-5063
ryan.j.lessing@jpmorgan.com

Given the benefits sponsored repo provides to market participants, **we would not be surprised if the market grows materially in size in the coming year, particularly as FICC is expected to expand its sponsoring and sponsored eligibility requirements to include more counterparties.**

How big could it be? As noted earlier, we think the economic incentive to engage in sponsored repo is greater for large banks than small banks, particularly if the former group is leverage/G-SIB constrained, though the incentive is offset by ancilllary costs sponsoring members incur. **Furthermore, we'd note there are probably limits as to how much sponsored repo could grow.** For instance, **FICC places a cap as to how much Category 2 Sponsoring Members (i.e., non-Bank Netting Members) can engage in sponsored repo**, generally to account for the somewhat riskier nature of these members relative to "well-capitalized" Bank Netting Members. Specifically, Category 2 Sponsoring Members cannot participate in new sponsored activity if their aggregate VaR charges, inclusive of its sponsored member activity and its netting member activity, exceeds its net capital. FICC does not impose any limits on Category 1 Sponsoring Members (i.e., Bank Netting Members). However, we note that regardless of the category of the sponsoring member, **sponsoring members generally have caps as to how much sponsor repo activity they can do with each sponsored member in order to manage counterparty risks.** Afterall, the sponsoring member needs to guaranty all obligations of its sponsored members to FICC.

Additionally, sponsored members could have their own limits as well. **In the case of S&P-rated government MMFs for example, Treasury repos are capped at 50% of rated funds' AUM per A-1+ counterparty (e.g., FICC).** Currently, S&P rated government MMFs comprise about 65% of total government MMF balances or roughly $1450bn. Even if they decide to deploy the maximum amount to sponsored repo, the upper limit would be ~$725bn. Unrated government MMFs, which have about $570bn of AUM, do not have any hard limits: from a credit perspective, the MMF would look through the counterparty and treat the security as an acquisition of Treasuries. Though realistically, given the availability of other cash investments, the total capacity from MMFs towards sponsored repo is likely going to be much lower. Over the past two years, the highest percentage government MMFs allocated to Treasury repo (ex-RRP) was 25%. Furthermore, the most Treasury repo that's ever been allocated to one repo counterparty as a percentage of MMFs' Treasury repo exposures was 24%. Potentially, allocation to FICC could be higher given that it's a fianncial market utility as opposed to a bank counterparty.

What are the market implications?

Arguably, the development of sponsored repo would suggest overall repo balances could materially increase in the near-term, as banks now have greater capacity to operate in the repo markets. While that may be true, we do not necessarily see this as the base case for a variety of reasons. **First,** we see sponsored repo largely as a form of repo subsitution, with dealers moving away from balance sheet intensive repo trades to something that's more balance sheet efficient, presumably with the same counterparties. **Second,** the efficiency gained from doing sponsored repo is limited by ancillary costs sponsoring members incur. **Third,** we suspect the efficiency/capital gained in the process may not necessarily be deployed back into the repo markets but instead be redeployed towards other uses that may have higher margins.

Teresa C Ho
(1-212) 834-5087
teresa.c.ho@jpmorgan.com

Joshua Younger
(1-212) 270-1323
joshua.d.younger@jpmorgan.com

Alex Roever
(1-212) 834-3316
alex.roever@jpmorgan.com

Ryan J Lessing
(1-212) 834-5063
ryan.j.lessing@jpmorgan.com

All told, **we believe sponsored repo primarily cannibalizes less efficient forms of repo. And while in freeing up capital it creates more capacity for banks to operate in the repo markets, the impact on the repo markets ultimately depends on whether sponsoring members decide to keep the freed up capital allocated to the repo business or shift it elsewhere.**

Broadly speaking, **sponsored repo, in reducing the cost to provide and intermediate the extension of balance sheet, should on the margin narrow GC/OIS spreads**. It should also make the implicit leverage available via derivatives less valuable to the market. **The result would be the outperformance of Treasuries versus both swaps (Libor and OIS) and futures**. To be fair, this is but one reason we expect balance sheet to cheapen in the coming weeks and months, but an important one nonetheless. **We have recommended a number of trades in this regard**, including a structural bias towards being long the front end versus OIS (see Interest Rate Derivatives, *US Fixed Income Markets 2019 Outlook*, 11/20/18), 5-year swap spread wideners (see Interest Rate Derivatives, *US Fixed Income Markets Weekly*, 1/4/19), spread curve flatteners (see *More than a few reasons to be in spread curve flatteners*, J. Younger et al., 1/9/19), and short futures verus Treasuries (see Interest Rate Derivatives, *US Fixed Income Markets Weekly*, 12/14/18).

How is this different from CCIT?

FICC offers another service called Centrally Cleared Institutional Tri-Party (CCIT). Similar to sponsored repo, this service leverages existing FICC infrastrcucture for GCF repos to allow non-dealer counterparties to engage in centrally cleared tri-party repo trades. But as opposed to being sponsored, non-dealer counterparties could become "members" of FICC and directly use FICC's cleared repo services.

That said, since its rollout in mid-2017, this product has garnered very little interest among the repo community, largely because there continues to be unresolved SEC issues with MMFs becoming a "member" of FICC. And given the availability of sponsor repo, there's been no sense of urgency to resolve those issues anytime soon. Most likely, CCIT will remain unused for the foreseeable future.

Teresa C Ho
(1-212) 834-5087
teresa.c.ho@jpmorgan.com

Alex Roever
(1-212) 834-3316
alex.roever@jpmorgan.com

Joshua Younger
(1-212) 270-1323
joshua.d.younger@jpmorgan.com

Ryan J Lessing
(1-212) 834-5063
ryan.j.lessing@jpmorgan.com

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Teresa C Ho
(1-212) 834-5087
teresa.c.ho@jpmorgan.com

Alex Roever
(1-212) 834-3316
alex.roever@jpmorgan.com

Joshua Younger
(1-212) 270-1323
joshua.d.younger@jpmorgan.com

Ryan J Lessing
(1-212) 834-5063
ryan.j.lessing@jpmorgan.com

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Teresa C Ho
(1-212) 834-5087
teresa.c.ho@jpmorgan.com

Alex Roever
(1-212) 834-3316
alex.roever@jpmorgan.com

Joshua Younger
(1-212) 270-1323
joshua.d.younger@jpmorgan.com

Ryan J Lessing
(1-212) 834-5063
ryan.j.lessing@jpmorgan.com

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