

8th July 2025

Spotlight On: Central Clearing Webinar

Moderator

 Eric Badger, BNY Global Head of Sales & Relationship Management for Global Clearing & Global Collateral

Speakers

- Laura Klimpel, DTCC Head of Fixed Income & Financing Solutions
- Nate Wuerffel, BNY Head of Market Structure, Product Leader for Global Collateral
- Nehal Udeshi, BNY Head of Securities Finance
- Ted Leveroni, BNY Global Head of Margin Services

We are live. Good morning, everyone, and thank you for joining us. I'm Eric Badger, Head of Sales and Relationship Management for Global Clearing and Global Collateral at BNY. It's a pleasure to welcome you to today's panel focused on what is arguably one of the most consequential developments in U.S. market structure in recent years, the SEC's Treasury clearing mandate in its far reaching implications. At BNY, we've been deeply engaged across the ecosystem with clients, clearing houses, regulators and infrastructure providers to interpret the rules, impact and help build access models for participants to adapt with confidence.

Our recent paper Reassembly Revisited frames the central questions. How will the Treasury market evolve? How will liquidity be sourced and risk managed? And how can market participants modernize their post trade infrastructure to stay competitive? For context, U.S. Treasury market, with nearly \$29 trillion in outstanding securities, is the largest and most liquid bond market in the world, a cornerstone, a cornerstone of financial stability. Yet historically, only about 13% of cash trades and 25 to 50% of repo trades have been fully centrally cleared. The SEC's rule aims to shift roughly \$4 trillion in daily activity into central clearing, strengthening resilience, transparency, and systemic robustness.

3 core themes have emerged from our research and industry conversations to guide today's discussion. First, central clearing is becoming foundational to liquidity and risk management, not just an operational process. Centrally cleared trades can reduce balance sheet costs, improve execution and liquidity, but successful implementation will depend on strong coordination and practical, scalable solutions. To recap the timeline, for cash trades, central clearing becomes mandatory by December 31, 2026. For repo transactions, the deadline is June 30, 2027. Second, the transition brings both real challenges and meaningful opportunities. On one hand, firms face structural changes to legal frameworks, operations technology and collateral workflows.

On the other, central clearing enhances access to liquidity, improves netting efficiency, and reduces credit exposure. And momentum is building. On June 30th, FICC sponsored service volumes hit \$2.5 trillion, up 100% year over year. And 3rd, collaboration will be essential. Dealers, buy-side firms, clearing agents, custodians and infrastructure providers all have a role to play. Access models are evolving to serve firms not currently engaged in clearing. This is more than regulatory compliance. It's an opportunity to rethink how liquidity is access, how financing is structured, and how risk is managed in a modern Treasury market.

I'm honored to moderate today's panel alongside an outstanding group of experts. Nate Wuerffel, Head of Product for the Global Collateral Platform and Head of Market Structure on at BNY, with deep experience from his time at the New York Fed. Nehal Udeshi, who leads our securities finance business, who brings deep expertise in securities lending and financing markets. Ted Leveroni, Head of Margin Services at BNY and a respected voice in market infrastructure, and Laura Klimpel, Managing Director at DTCC, a leading fixed income and financing solutions and directly helping lead the regulatory implementation dialogue. Together, we'll explore how clearing is reshaping behavior infrastructure and practical steps firms can take to stay ahead.

With that, let's get started. Nate, since the SEC announced the extension of the implementation dates, there's been a lot of focus from the industry on the open scoping and implementation questions that drove this decision. You wrote about some of them in your recent piece Reassembly Revisited. Would you be able to tell us a bit about what those key issues are and where the industry and BNY are focused as we prepare for the rule to be implemented? Absolutely. Thanks, Eric.

You know, the central clearing rule, we really believe will reassemble the way that the Treasury market works. And there's a reason for that. And that's because the central clearing mandate is really transformative in the way that market participants will have to interact with their counterparties, interact with CCPs, and it changes the liquidity in the marketplace. And so that extension of the timeline by the SEC is really I think a welcome development given how significant the changes are going to be in the marketplace. You know, when we think about the different areas where change is happening, there are sort of five main areas I want to focus on and they include areas that the SEC contemplated when they were thinking when they pushed back the the deadline.

If we just go back one slide, we can take a look at those five areas. So first of all, the SEC acknowledged when they extended the timeline that one, there were some scoping issues that needed to be finally addressed and two, that there are implementation details and frictions that need to be addressed. And so this extended timeline allows for that one area. The first area I'll mention is around the global scope of the rule. The way that the rule works is that it applies to CCPs, and in turn, those CCPs promulgate rules to their members and then those members have to comply with the rule.

But of course, of course, the Treasury market is a global market. Market participants interact in the Treasury market around the world, and they do it through many different types of legal entities within their structures. So you might have a member of a CCP here in the US, but you also might have affiliates that are not members of the CCP. And So what that raised was the possibility that you might actually see global participation in the Treasury market shift to non CCP members in order to avoid the cost of clearing. The SEC was clearly concerned about that kind of evasion of the rule.

And what they said was that if you move securities through a repo transaction between affiliates, it's got to be centrally cleared. They also consider branches of a bank parent and the bank parent to be

the same legal entity under CCP rules. And so that too ensures that wherever you're conducting your activity, it's going to be considered a part of the Treasury market and its rule set. So it's a global rule, it's meant to be apply in a global Treasury market. However, there are complications here. You know, some firms move liquidity between legal entities and they're not trading repo externally with clients.

They're just managing liquidity within their firms. So the SEC acknowledged that they said you can exempt that kind of liquidity management activity, but it's a conditional exemption. If you choose to exempt that from the rule, then your affiliates need to clear their activity. There's still some work underway with SIFMA and other associations to help create some additional capacity because in addition to moving liquidity around, there are just certain types of firms that are out there that are going to be difficult to get into clearing. And so you kind of want to give a little bit of an escape valve for some of a small share of activity that could be not centrally cleared on a global basis.

So SIFMA and others are really trying to encourage the SEC to think about a small share, maybe 5 or 10% of your activity that wouldn't require central clearing globally. So that's one issue that's still out there. Second issues around mixed collateral and triparty. So what is a mixed collateral trade? In a general collateral trade, of course you could do an agency repo transaction, but if you don't have enough agency MBS to fill the collateral in that transaction, you can swap in some Treasury securities to fill out your collateral shell. That's basically what a general collateral trade does and it creates really flexible form of financing.

It's one of the reasons people really like general collateral triparty transactions. The SEC again, was worried about evasion. They were worried that people might book agency MBS repo trades and then finance their entire Treasury book through them. So they said mixed collateral trades where Treasury securities are used as collateral need to be centrally cleared. But there's some reasons why mixed collateral trades aren't likely to be used for evasion. First of all, they're more expensive to finance in mixed collateral because you're paying for the, for the type of collateral that can be included in those trades. And these are also very easy to identify where you, you know, on a historical basis, it would be quite easy to see if all treasuries were being used in agency MBS collateral trades.

So I think this is another one where SIFMA and others are trying to, you know, give SEC some helpful data on how much, how many Treasury securities are in mixed collateral and maybe exempt the mixed collateral trades from the role. I think that would be a useful outcome. Let me hit on a couple of other areas quickly. One, the third area here is really around new access models. I'm going to talk about the cost of clearing on the next slide, but clearing trades is expensive. And so one of the things that's happening is we're seeing a lot of evolution and innovation in access models, how to get your trade centrally cleared.

We'll talk about collateral in lieu, we'll talk about agent clearing, and even some of the new CCPs are working on models that lower the cost of clearing a transaction, which leads me to the 4th area which is we really are now seeing that there are at least two other entities that are seeking approval to become CCPs in the Treasury market. I think that creates some opportunity for innovation in the space. It could also result in sort of more fragmented market and liquidity. So more to come on that front.

But it is clearly it was on the SC CS mind when they extended the dates to give new SCC, PS and the marketplace time to digest what's happening in terms of access models and CCPs. The final area

really is around pure implementation of this. To set up clearing arrangements requires extensive legal documentation. DTCC did a survey and estimated that there's something like 7000 counterparty relationships that need to get documented. Those can take multiple months to document those relationships. And then there's the operational setup. New accounts. How do you pay for margin? So those are all the things that market participants are working on.

Now if we go to the next slide, I mentioned the cost of clearing. I think this is a really important part of the story and it's one of the reasons we're seeing innovations in clearing models. And it's also a key factor for both the buy side and the sell side in terms of what market liquidity will look like and what prices will look like. And that's because clearing entails a series of different costs. There's transaction costs where CCP's or clearing agents or settlements services are provided at a fee. These are generally quite low.

The bigger of the cost to clear transactions, centrally clear transaction tend to be capital costs and that's where you're guaranteeing the performance of a client into clearing. You have margin and default fund commitments so that those are funding costs. There are liquidity commitments, there are trade exposures. These capital costs can be 8-9 basis points for dealers on an RWA basis. So for each trade, you centrally clear capital costs are a big deal. And then there's funding costs, paying for the margin, paying for the liquidity commitments. Those can be a couple of basis points on average and that can vary, vary by dealer.

I'm sure Nehal will speak to these things. But these, these costs of clearing are exactly what I think CCPs are looking to lower and to make more efficient as we move into the central clearing mandate. The last thing I'll mention on the final slide is just that when you think about different types of solutions, how can you actually centrally clear transactions? We at BNY think about it in sort of four categories. One, if you need pure clearing services, who can you turn to clear a trade that you've done? That can be through an agent clearing service, for example. We do that through our Global Clearing platform.

We also offer centrally cleared triparty transactions. So if you want to do a triparty repo, how can you centrally clear it? We offer centrally cleared triparty through our sponsored GC and some of the new products we're rolling out with FICC. You want to, if you need to access centrally cleared financing, we're one of the largest dealers providing centrally cleared financing. And also if you want to manage your margin commitments that can also be done on a triparty basis, which we're working on with CCPs. So we feel like our history in the Treasury market is long standing and it is a commitment into the future as we think about solutions for central clearing.

Terrific. Thanks. Nate, you mentioned that the models that are being worked on to help ease the transition of central clearing that would include collateral in lieu and the agent clearing service. Laura would like to bring you in here. Would you would you be able to tell us a bit more about the work FICC is doing to help your clients prepare and more about the models that clients will be able to use under central clearing? Absolutely. Thanks Eric and thanks to the BNY team for including me in this conversation.

If you would indulge me, I'd like to before we talk about the access models, I'd like to take a quick step back and just orient folks in the conversation. That voluntary central clearing of repo activity at thick is, is not new. The sponsored service has been around since 2005 and as you pointed out, we've grown all the way to at the end of June 2.5 trillion of balances. And importantly, as Nate mentioned, we created through those balances over \$1 trillion of balance sheet capacity for the

industry through our novation and balance sheet netting. So folks, the point here is that folks have been coming to us for years for the economic and capital benefits of clearing and the transaction capacity that those benefits create.

But they get to make a decision right now, which is for every trade they do, they get to decide whether or not that trade is going to novate into central clearing. And you know, we'll attach with it the commensurate cost that Nate discussed or whether they're going to keep that trade outside of central clearing. They get to make that choice today as as you both have teed up that calculus is now going to change once mandatory clearing goes into effect and significantly more repo activity is going to be required to come in under the rule. Looking at, for example, money market fund treasure repo data as a proxy, we estimate that we're just about halfway there in terms of having covered repo balances inside of central clearing at FICC with the remainder still having to be onboarded.

And that doesn't count repo activity that may come in voluntarily even if it's not required to come into central clearing, and I think that's something we'll probably touch on again later in the discussion. And just as a reminder, in addition to the buy side repo activity that's covered by the mandate, we also already clear all dealer-to-dealer treasure repo activity at FICC today. So the question becomes, how do we get to the finish line on the Treasury mandate in a smooth and orderly fashion from where we are today to where we need to be by mid 2027?

And the key from our perspective, and as you all have teed up, is enhanced efficiency. We need to make the access models more efficient in order to bring in the remaining balances in a smooth and orderly fashion. So how are we going to do that? And it's really in a couple of key ways #1, you want to expand our done-away clearing capabilities. Why is that important from an efficiency standpoint? There's really two aspects to done-away that that make it efficient. One, it mitigates the need for by side to have to document with all of their trading counterparties that as we've talked about Nate alluded to is a big lift even with the standardized documentation coming into effect through the SIFMA working group, it is still a lift as any of us that have been in this space for any amount of time. No documenting with a client takes time and consolidating activity into a done away clear, one or more done away clears can certainly be very efficient for buy-side market participants. Also done-away can also consolidate margin obligations. So if you're a buy side participant that's interested in posting margin desegregation, potentially interested in cross margining, which I'll talk about in a minute. Being able to consolidate activity into a handful of clears that facilitate done-away activity for you, that can certainly create a lot of efficiencies for your portfolio.

So expanded done-away is is certainly important. Enhanced margin efficiencies in the existing access models is also very, very important. So we're going to talk about how collateral in lieu and agent clearing both solve for margin efficiency needs in different ways. And both seek to solve for the so-called double margining problem of the money market funds where they are classically given a haircut to satisfy their regulatory obligations and margin is collected by FICC to mitigate the market risk. And finally, the last efficiency area that I'll focus on is enhanced capital efficiencies. Now Nate alluded to this as well.

Although we already are providing significant capital efficiencies in terms of the novation capabilities that we offer and the benefits that come with that from a capital standpoint and also the balance sheet netting capabilities and the capital benefits that come up along with that including with respect to various capital requirements. But we can do more and we are doing more and I will talk about how further enhancements to the access models are going to be able to get us even further

and more efficient from a capital standpoint. So let me talk you through this slide. So here we focused for this particular audience on the triparty service enhancements.

So as I said first focus area done away capabilities in the sponsored GC service. So this is the classical sponsored GCGC service that we have today which is a gross margin product. So each individual sponsored member has separate margin up at the CCP and but those transactions are facilitated in triparty through the Bank of New York's triparty platform. We are today we only offer that for done with transactions. So transactions where the dealer is also the sponsor transacting with the buy side, we are expanding that to allow the sponsor to not be the pre novation execution counterparty to the client.

So we are opening up a done away capability which we believe is likely going to be attractive certainly to at least some of the buy side who enjoy transacting in a triparty platform situation. So that's one of the capabilities collateral in lieu. The collateral in lieu version of the sponsored service is the second one of these efficiency capabilities that we are rolling out, so in this and I'm going to spend more time on collateral in lieu in the next slide as well. But the way to think about this is that this is a version of the existing sponsored GC service. But what is different is that FICC is going to be taking a first of its kind lean on the purchase securities that are pledged to the we call CILGC funds lender classically a money market fund in triparty right now.

So the purchase securities today, they go directly to the money market fund and they stay in triparty. FICC does not have a lien on those purchase securities today in collateral and lieu. We would propose to take a lien on those purchase securities. And what that lien allows us to do is effectively mitigate the need for us to collect margin on those transactions in most circumstances due to the lien that we will hold. And I'll talk more about that in a second, but that is one of the margin efficiency plays in collateral in lieu.

We're looking at mitigating the need for margin specifically by the cash lender into triparty, OK. If it's a matchbook and there's a cash borrower on the other side of the sponsoring member, then we would be proposing that they would likely transact in typical sponsored member omnibus account and traditional margin would be posted for them. They could potentially also the clients could also potentially go into a segregated indirect participants account. That would probably be the most efficient model where the cash lender would be in a collateral in lieu account and the cash borrower client would be in a seg account and in a seg account they would be required to post the margin themselves.

So that would probably be the maximally efficient intermediation model for the sponsoring member that may not work for every, you know set of clients. So we offer different models to choose from because there are certainly different types of portfolios that we see coming through. FICC next model, the agent clearing service. OK. So the agent clearing service exists today and we have newly enhanced it. It used to be called our legacy prime brokerage and correspondent clearing services. And I would note that Pershing Bank of New York affiliate has been a long-standing participant in what is now the agent clearing service for its clients.

The agent clearing service is modeled on a classical agency clearing model and looks a lot like, if you look at our rules that were recently put into place in March of this year, it looks a lot like a futures commission merchant model or an FCM model that you would see in derivatives clearing. I think what's interesting about sort of how we at FICC have interpreted the FCM model is that we've said, OK, this will be a model that we can use for done-away activity, but also for done-with activity. We

wouldn't exclude market participants from being able to use the ACS model for done-with activity as well.

And what is unique about this ACS service that we're rolling out as compared to let's say the FCM model in derivatives clearing is it's going to have a net margin option. So if these the agent clearing member, excuse me, is posting the margin out of his own resources, we will be able to offer net margin. What does that mean? If you have a client that is the cash borrower and a client that is the cash lender in the same CUSIP, we can actually net those positions from a margining standpoint in a way that we cannot in the sponsored product.

The sponsored product is different in the sense that the sponsored members are members of the clearing house and we have direct obligations to them even in the default of their intermediary, which is why we have to collect on a client-by-client basis. We do not have those same obligations to underlying clients, the agent clearing service because they're not direct members of the CCP. They are underlying clients of an agent clearing member. So we are able to offer net margining, so less margin up at the CCP. Obviously there's puts and takes between the different models and whether you're a buy side or a sell side, you're certainly going to have to make your own decisions about what type or types of access models are going to make the most sense for your for your book or books of business.

But those are some of the puts and takes between the models and we believe that all of these capabilities are likely to be used very soon after we roll them out. And I would note here before I dig into collateral in lieu that we're targeting go live for all of these triparty repo enhancements by the end of this year subject to regulatory approval. OK, so now we're going to talk a little bit further about collateral in lieu. So as I said, this is a version of the sponsor GC service. Why did we do that?

Again, to Nate's point about efficiency onboarding documentation, we wanted collateral in lieu to look and feel and be able to leverage as much of the documentation as sponsoring members and their clients already have in place as possible. We wanted this to be as easy a lift as possible for the industry so that it would be used quickly and create and could create some efficiencies and capacity by relieving some of the margin constraints on the industry as quickly as possible. So it's designed to be very easy from an onboarding documentation standpoint and perhaps Nehal or Nate, we can cover back over, you know, everything we're doing to partner to make those documentation efforts as smooth as possible for the clients.

Second point about collateral in lieu, I had mentioned on the prior slide that what is unique and what collateral in lieu really means is that we're going to be taking a lien on the purchase securities and that that is going to obviate the need in most circumstances for us to have to collect margin on that trade. It also obviates the need for us to require the sponsoring member to guarantee performance of the client to us. That is one of the key elements of the classical sponsored model. We do not need that here because we do not need to be reliant on the sponsoring member because we have the lien.

We can action the lien. We have the rights to do that no matter if the client defaults and no matter if the sponsoring member does not take action. We do not need them to take action because we can exercise self-help based on our lien. So that is a big capital relief for a lot of the sponsoring members. Now everybody isn't as constrained by, you know, SLR and RWA as others, but certainly not having to account from a capital standpoint for the guarantee can be a material capital benefit for intermediaries. So that I think is an important feature that maybe doesn't get as much airtime as it

probably should, but just keep that in mind as one of the benefits of collateral in lieu ACS triparty, we do not have that same lien. So that product does require a guarantee. It could potentially result in less margin because if you have a matchbook, but it does require a guarantee. So just keep that in mind as you're thinking about the models. CIL will have done with done-away term and overnight activity facilitated through it. Another key feature of the collateral in lieu or CIL product is that we are going to be requiring a haircut. Now normally in clearing we don't prescribe haircuts because we have a margining process that we use to manage the market risk.

So we allow haircuts for credit and regulatory purposes, but we don't mandate them here. We are going to require the 2% haircut, at least 2% haircut to be posted to the cash lender. That's going to be a key feature of the product. And it's designed really to do 2 things #1 to ensure that all these transactions clearly meet the regulatory requirements for money market funds. And then secondarily, to ensure that we're able to leverage that haircut in lieu of margin in most circumstances, so we're essentially putting that haircut to work such that if necessary, if we can't otherwise unwind the train and we have to close out, that we can have access to that 2% haircut for purposes of calculating our PNL.

So that's really why that haircut is there to satisfy those two obligations. Another key feature of collateral in lieu, which I also think is going to be very popular, is that collateral in lieu will be our only product that we will be able to use joint accounts. And what does that mean? We know many asset managers like to trade in block or joint accounts where they have an investment advisor or execute on behalf of a block of funds that are participating in a repo. And then later in the day they do allocations of how much of that block was ultimately transacted by each funds.

Now with this is something we've struggled with in FICC over the years because our risk management is done classically at the legal entity level. So we can't effectively risk manage the trades or novate the trades until we know what the allocation is. Obviously that is not ideal in a Treasury clearing world because asset managers that use joint accounts are going to want to see those trades novated at the point they execute, not later when they get the allocation. So collateral new because we take a lean in lieu of margining in most circumstances, we are able to novate at the joint account level and I think that's going to be a very popular feature of the product.

Generally speaking, we will not have to collect margin from your intermediary unless that intermediary is both executing done with activity and also either has a segregated omnibus account within its own legal entity. Perhaps the FCM or PB disk or an affiliate of your sponsoring member has a segregated indirect participants account. Without getting into too many details here, basically the reason for this is because we have limited ability to use segregated indirect participants funds in the event of the default of the intermediary. And if there is a loss caused by the CIL funds lender, we wouldn't otherwise be able to use segregated indirect participant funds to cover that loss.

It can only be used to cover the loss caused by that segregated indirect participant. So we have to have additional margin for that type of activity. But if your sponsor doesn't have a seg account or enters into exclusively done away activity through CIL, then they will not be required to post additional clearing fund to FICC will only be, if applicable, the 2% haircut that we require from the product if they are the trading counterparty on the trade. I'm cognizant of time and I want to make sure there's plenty of time for further discussion. I won't spend a ton of time on end user cross margining unless there are questions.

If there are, happy to field them, but I just wanted to complete the conversation to say in addition to our triparty enhancements, we are also focused on market participants, particularly by side firms typically more on the leverage side of the equation who have offsetting futures positions cleared at CME and cash and repo positions cleared at FICC. In many cases and for many strategies these positions can be very much offsetting from a risk management standpoint. Right now they are not allowed to cross margin those positions or recognize those positions as an offsetting portfolio across FICC and CME. That requires a new set of regulatory approvals to what we call bring down end user cross margining which right now is only available for house activity between FICC and CME and our common members bringing it down to the end user customer level.

So this is also a very important enhancement in our view to ensure the orderly transition to central clearing because in many cases these levered funds may not be posting margin at all on the repo and cash side of the equation today. But we believe that offering them end user cross margin will incentivize them to post because they could for an offsetting portfolio ultimately be posting less too thick in CME than they are just to CME today, which is required by law. And for a perfectly hedged portfolio, we can offer up to 80% in margin savings across the two CCP. So it's a very, it's a very impactful savings and we believe it's going to be very useful to the transition into central clearing.

And with that, Eric, I will hand it back to you. Thanks, Laura. There's obviously a lot for market participants to consider around the different access models, but lots going on over there at FICC. Thank you. I want to go over to Nehal next. You run one of the largest sponsored repo books on the street, would you be able to help give us the dealer's perspective on these models and how you think about the differences and steps needed to prepare for central clearing? Thanks, Eric.

It's great to speak to everyone today. So as you say, BNY sponsored repo offerings, a core part of our securities finance business. It's alongside complementary capabilities that include our agency securities lending business, cash reinvestment, principal lending and prime services. And together the offerings provide a comprehensive liquidity and financing ecosystem for our clients across cash and securities. Our sponsored repo platform provides access to U.S. Treasury and agency MBS financing as well as overnight cash investment alternatives where BNY acts as both the sponsor and the counterparty for clients transacting through FICC sponsored member program. The models largely off balance sheet as Laura acknowledged, which enables us to deliver scalable, consistent financing solutions and capital efficient liquidity to our clients.

So whilst the SEC is clearing mandate for U.S. Treasury repo has been extended to June 2027, we're still seeing strong voluntary adoption with over \$2 trillion in balances already utilizing FICC's cleared repo program. BNY supports approximately 20% of all sponsored flow through FICC SMP, which positions BNY as one of the top providers in the sponsored member program. We expect market liquidity to increasingly concentrate in cleared venues. And so even for clients that are currently out of scope, whether that's due to the entity scoping of the rules or the documentation scope, so for example, they're trading under MSLAs, we would still suggest establishing A sponsored clearing relationship to preserve access to liquidity, particularly in times of stress in the market when access to deal a balance sheet can be more challenging.

In turn, dealers are actively assessing how to align their operating models with client needs and the regulatory developments, which includes us here at BNY where we're also evaluating our own architecture and models to ensure that we can continue to provide robust support and capacity for our clients. In particular, the industry's reviewing the enhancements that FICC and BNY are building out. So that includes the sponsored clutter in lieu, the agent clearing service, as well as assessing the

role that a done-away model could play as a solution for the market. And so as a reminder, as Laura went through done-with transactions, which is how the dealers and clients currently trade through FICC are where the counterparty and the clearer or sponsor the same entity.

And done-away transactions are where the counterparty and clear or sponsor are different entities. So dealer considerations for these models. So for sponsored collateral in lieu, it's obviously an enhancement to the current sponsored model and it allows the cash investors to grant that targeted lien on assets held in BNY's triparty environment. So it removes the need for the dealer to guarantee the trade, which can therefore reduce the RWAs and reduce the liquidity the dealer needs to provide to satisfy the default fund, which as in a combination, we would anticipate would increase dealer capacity for any dealers constrained by RWA or liquidity to support additional client financing.

Collateral in lieu obviously being developed jointly between the two entities is intended to be plug and play for dealers that are already operating within the sponsored framework, so more straightforward to implement. And alternatively, the agent clearing service enables agent clearing members to submit repo transactions to FICC on behalf of their clients who are not members. Both are done with and done away transactions and so the benefits there would include streamlined documentation, reduced jurisdictional hurdles and also efficient margin netting. Now, although some balances currently do run through ACS, the industry is obviously evaluating whether it's a scalable access solution and that adoption is going to be subject to the pending SEC approvals of some of the rule changes that Laura and the team are going through FICC, but also dealers comfort with the legal and the accounting opinions.

And one important consideration is for those money market funds, they're a key market participant as cash providers and they already leverage sponsored model., so for ACS to scale, it will require broader adoption by money market funds. Ultimately, both of these solutions are designed to enable the dealers to more efficiently support the increased needs from their clients to provide cleared capacity under the mandate. The optimal solution for each dealer or client is going to differ based on the entity's individual business mix and their constraints. What is clear is that this transformation to mandatory clearing is not just a compliance exercise, it's a structural shift in market liquidity dynamics.

And so BNY we're obviously supporting clients and dealers through understanding their options and preparedness. And in terms of next steps, I'd say regardless of your direct scope under the mandate, we would encourage clients to proactively engage with us, evaluate your clearing readiness options early and give time to find the optimal solution for your business. Yeah, terrific.

Thanks, Nehal. We've mentioned a couple times here the importance of done-away as a solution for the market and at BNY that's a big focus for us. Ted, over to you now can you talk a bit about done-away and the potential impact on the market? Sure, sure. Thanks Eric. So as it was mentioned, done-away is, is viewed as an important tool to gain access and comply with the regulations. And I think most industry participants, myself included, think it's a given that it is required if we are going to move to a fully or virtually fully cleared environment today. And, and the reason for that is it's simple math. You talk about the documentation challenges, say you're a money fund and you trade with 15 counterparties today.

You're going to want to maintain most of those counterparties as as trading relationships if you want to maintain your liquidity in your counterparty mix. And so without a done-away service, you need to

enter into sponsorship done with arrangements with all 15 of those counterparties as Nehal mentioned the size of our sponsor done with program today and our experience putting in place and executing documents with the money fund can take anywhere between 6 and 12 months per money fund and realize that that's in good times, that's not when everybody is struggling with struggling with legal capacity and their focus and their resource constraints.

And so if you multiply that effort by 15, the answer is that's a lot of work and that's a lot of resource. That's a lot of calories burned and it's very difficult if you're a dealer say you trade with 30 counterparties, same situation. If you want to continue to trade with those counterparties and there is don't no done-away offering available in the market, you're talking about 30 done-with documentation exercises that you have to go through. Now you'll probably have a mix of hedge funds and money funds. And we have found that hedge funds the length of time it takes to put in documentation in place is a little bit less, but it's still significant.

So these are good times. This is not what everybody is rushing to the street when not everybody is fighting over attention and prioritization, but it is a challenge. But you have to think about that. If you're a mid-sized money fund, if you're a mid-sized dealer, you're probably not going to be prioritized with those that you are prioritizing your efforts with, so you will be back burnered in many instances. We saw this last decade in the in the swaps clearing exercise where in the run up to required swaps, clearing firms were being put in place, clearing agreements right in front of them and they said you can sign it or you cannot clear.

We don't have time for negotiation. And that was an environment where there already was a mature kind of done away FCM model where they're clearing brokers and you weren't trying to put in these arrangements with every one of your counterparties. So this is something that needs to be avoided in my mind at all cost and This is why it's very important for a done-away service to evolve robustly within the market. BNY as Eric mentioned is launching a done-away service and it is built in our mind on top of the SMP program that we have today, the documentation that we already have in place today, the leveraging of triparty and eventually when collateral in lieu is put into place, collateral in lieu as well.

And this will expedite and make it easier for firms to clear their trade. So, how would it work? Say you have a money fund and you're currently in our sponsored member program. You would sign an addendum to that agreement and then you could trade with any dealers that had an arrangement with us to sponsor the trades. We would go out to the dealers, we would likely do an addendum to the existing CUMRA in triparty. And now any trade that happens between that money fund and that FICC dealer could be cleared. They transact the trade, they notify BNY of that transaction, notify I said is done-away, the FICC member clears their side of the trade with FICC and the money fund leaning on our sponsorship, our agreements, gives up that trade to FICC.

At the end of the day, the trade is cleared, it's novated, it's cleared. And at no time during this period is BNY actually a member or a counterparty to that trade. It goes from money fund to dealer and then money fund to FICC and dealer to FICC. So the way we view this is probably not the silver bullet to all a firm's compliance efforts. But if we focus on just the money fund piece, just a triparty piece, we can take a large portion of the effort in coming compliant for these regulations off the plate of the dealer, off the plate of the money fund and they can focus on other areas of the business.

Yeah, terrific. Thanks, Ted. We have a number of questions that are coming in from our audience, which are fantastic. But maybe before we get to those, I'll just ask this question to all panelists maybe

one or two minutes on, on a response. There's a lot out there, time is time is ticking by. What is the one thing that you believe firms should be doing now in order to prepare for the mandate? And so, Laura, maybe I'll start with you on that. Yeah.

Thanks, Eric. I think from my perspective, given where we are in the calendar, what I would recommend is that anyone who believes that they are scoped in or could be scoped in by the clearing requirement should identify at least one intermediary, whether that be an agent clearing member or a sponsoring member, who, who they can partner with for their day one compliance. I think it's very important just to think about the fact that we're really not that far away in the calendar from go live, right? And so you need a day one compliance plan. And then what I would suggest is more of a of a medium-term compliance plan.

And I think the meet the day one compliance plan is critical. I would have it in place now and really ideally you would have the pipes, the plumbing and everything set up and start using it at least on a test basis so that you're ready for day one. Then in terms of more medium-term, I would be thinking about access model optimization. Depending on who you are and what kind of portfolio you have, you may, it may make sense to be in one, two or three of these models. You may have some done-away activity like Ted talked about.

You may have some done-with activity. You may some of your intermediaries may want to route you through ACS net. Other intermediaries may want to put you into collateral in lieu depending on their portfolios. So I think understanding access models, having a point of view on what's going to be best for you and your partners, and having the day one compliance plan are critical. Yeah, I think it's a great point on day one. Thanks, Laura.

Nate, preparation yeah, it's a good question because you know, as Laura said, I think although it's, you know, we've got two years until the repo deadline, actually there's a tremendous amount of work that needs to be done. And I guess the thing that I would say, you know, the earlier this year I was in the Asia Pacific region for a couple weeks visiting and talking with clients about central clearing and the implications for the market. And one of the things that I heard repeatedly was sort of like this idea that, oh, maybe we won't be affected by this. you know, we're transacting today with broker dealers that are not direct members of the CCP.

And I, I would tell you that this is a global rule. It is a rule that will affect firms on a global basis. You need to be out talking to your counterparties, your dealer counterparties. You need to be asking the question how are they going to handle your transactions going forward? Because most of the repo activity in the marketplace is going to be centrally cleared. And beyond that, when we speak with clients that are exempt clients, a number of them because there are some exemptions in the rule, central banks and international financial institutions and others.

But a number of them are asking the question like, how am I going to access liquidity in the marketplace? And so they may want to voluntarily be a part of this central clearing. Because if you know \$4 trillion of activity shifts into centrally cleared products, guess where the liquidity is going to be? Where can you get the best execution? Where are you going to get the best investment for your dollar? It's going to be in centrally cleared markets. Yeah, no doubt. And there are long lead times as we all know to all of these, all these initiatives.

Nehal, if I could get your view as well on preparation. Yeah. Look, I think the key is to really think through your own business mix and your operating model holistically, right? We've talked about the different models, but really you need to understand what your key constraints are as you're operating. Is that going to be legal structure? Is that the documentation that you're working to? Is it RWAs? Is it balance sheet? Is it liquidity? And I recognize some of these probably on more on the dealer side, but I think clients also need to think about what their operating models are, whether they're in or out of scope.

We've already talked about, but how are they thinking about their ability to access the market. And so once you've mapped out what your business mix and operating models look like and then understand your constraints, that will drive you to the answer about which of these access models strategically make the most sense for you, whether that's sponsored, ACS done away, etcetera. And so as others have said, waiting for the deadline is just is not an option here. We need to get moving and assessing what each counterparty client, dealer needs in these arrangements. And so making sure you've really understood how you're accessing the market and how your business is set up is going to be key to getting to that clarity that you're going to need.

Yeah, terrific. And Ted, any additional thoughts to add? It's always tough to be the last one for a bit of advice. So I'd say what Laura said, what Nate said and what Nehal said. I think just to add a little bit to it though, you evaluate your book. It's very important to do that. Like Nehal said, formulate a plan on how you think that you will solve these challenges because it is going, they're going to be pieces and different tools that you're going to put together for the plan.

And then you have to test that plan with your counterparties because it's an ecosystem. So if you think you're going to use done-away for a subset of your book, you need to talk to those counterparties that you are planning to do Done-away with. If you're going to use collateral in lieu, same thing, you have to make sure the other side is OK with it. So, ultimately you need to test your plan with your counterparties and then you know, it start early. The prioritization efforts, the impact if someone doesn't prioritize you and their plans, doesn't think you're the top kind of party, that is less important early and it becomes very important late.

So get in line now because it's when we get closer to the to the deadlines that you're really going to be impacted by not being number one on a counterparty list. Yeah, absolutely. Maybe a bit like the parkway traffic on a holiday weekend, everyone's going to be heading in the in the same direction. So starting early will be, will be good. OK, very good. So we'll go to some of the questions submitted by the audience. Nate, we'll, we'll start with you.

What are the most significant changes for market participants introduced by the SEC central clearing rule? Yeah, it's a great question and we covered some of this earlier, but I do want to just highlight, we put out a couple pieces. One is called Reassembly Required and it talks about all the changes that are going to happen in the marketplace. And then most recently, we put out a piece called Reassembly Revisited, which talks in more detail about some of the models and the implementation challenges that we've seen since the rule was announced. And there's a lot of things that are hard about the transitioning and there are costs associated with it.

But I guess I wanted to focus on there's also a really exciting aspect of the mandatory clearing rule, which is that the rule is requiring this significant change. And what we're actually seeing is innovation on large scale right now and that's really, really cool. If you take our Global Collateral platform triparty, it's, you know, we have \$6.5 trillion dollars of financing activity that's happening on it. It's the

largest triparty platform in the world and we're the largest single source of U.S. Treasury securities liquidity in the world. So if you want to finance the Treasury security, there's no better place to do that than in our Global Collateral triparty platform.

And so what's happening there? We've had centrally cleared sponsored GC within triparty for years. But as Laura was highlighting, we're seeing tremendous innovation here because we, you know, we recognize the need to get market participants through clearing in a more efficient and effective way. Collateral in lieu is I think going to be a game changer because it not only reduces the margin cost, it also reduces the capital cost of clearing a trade. So you get the balance sheet netting efficiency that central clearing brings, but then you can reduce your margin commitment, you can reduce your capital commitment, which lowers the cost of clearing a trade.

ACS is another great example where the agent clearing surface is going to lower your margin. It might not address the RWA, but as Nehal said, you know, figuring out your mix of these different products, that's really exciting because it's all this innovation that's happening. And I think it's going to actually modernize the Treasury market in the process of going through this clearing rule. Yeah, terrific. Thanks. Let's see. Laura, we have a question for you. You walked us through a lot of the changes in the new access models and Nate mentioned the innovation, all very impressive, just maybe more broadly, how is the FICC evolving its model to support broader market participation?

Yeah. I mean, I think Eric, it's sort of how we, how we've already described it. I think we want to at FICC build upon what works really well. You know, as I said, central clearing in the repo market has been serving a critical function for years both in the dealer-to-dealer community and with the buy-side community. So we want to make sure as we evolve the access models, as we create these new efficiencies that we stay true to what is incredibly powerful about our innate value proposition, multilateral net settlement balance sheet netting, orderly liquidation of a defaulted member in the event of a default and the systemic risk mitigation benefits that those provides.

How do we do that? We do that through our top-notch risk management, right? None of that is being compromised or will it be compromised through this evolutionary process that Nate mentioned. But what we are doing is enhancing and tweaking our access models to give people more choices, more, more. I talk about the doors into the tent, I'm opening up more doors, right? Each of them has a different path and a different opportunity cost benefit analysis. But we believe that having more pathways in so that not everybody has to go in the same, you know parkway lane right is a good thing, right?

Because what we know about the Treasury market, it is probably arguably the most diverse market in the world and one way is not going to fit everyone's needs. Yeah, terrific. Thanks. Laura, a question here. How are dealers preparing for the shifting collateral management practices? Nehal, maybe if you could give us any insights on that one? Yeah. It's an interesting question because I guess for some time dealers have continued to invest in their collateral optimization engines as you know very well, whether that's via third party offering such as our CPO engine or internal models that they may develop themselves.

And so those models are going to factor in triparty eligibility rules, margin requirements potentially and then also their own internal cost considerations such as capital liquidity. So looking to minimize capital footprint or funding drag as they look to optimize collateral. And so I think as you think about a world of mandatory clearing, there's likely to still be some cleared activity, some non-cleared activity, there's going to be activity that may occur across different CCPs on the forward. And so

thinking about how we're going to optimize the use of collateral in that world is going to be key to satisfying the margin requirements and utilizing sort of the best clearing models, the best optimization models for the business.

And so I think dealers are evaluating all of these options to make sure they're being very thoughtful. Do they understand what the margin frameworks looks like? Can they then optimize around them with the right tools in place? Yeah. And I would expect that dealer-defined definition of optimization to evolve depending on market conditions and time of year and other things. So, yeah, excellent point there. I think rightfully we've we've had a lot of interest on done-away. And so next question here, how might Done-away clearing influence dealer client relationships and market access?

Ted, we asked you to comment on that bit earlier. Anything on that? I love that question because it speaks to a concern that we have heard from certain dealers as we've shared our ideas about what we plan to what we plan to offer. So I'll start with the market access. The market access, I think that it's, it's apparent, it only helps market access for everybody. It allows you, as I described earlier, to retain your counterparty mix. And ensure that your trades can get cleared with the trades that you execute with who we want to gets cleared so that it's clearly a positive.

There is a concern that I have heard from some dealers as we have gone to market with ideas about us intermediating or disintermediating that dealer client relationship and that is not the case at all. It actually allows the dealers to continue to trade with their full breadth of clients either because we're providing done away services some of those clients or it allowed them to focus on the clients papering done with programs with the clients that they want to keep. And then they can keep the rest through trade the rest through a done away service like us. The transaction, the trading transaction is still between them and their counterparties and we are only looking to provide a service that the dealer is not providing directly to them.

So it's a partnership, it's an enhancement to the relationship. It by no means is getting in between the dealer and their trading client. Perfect. Kind of a two-part question here and Laura, maybe I'll direct this to you first, but there's a question here on the core value proposition of Treasury clearing. I think we've largely touched on that, but also when we think of this an application globally, Nate, as you've highlighted the direct question here, how will this impact U.S. Treasury settling and other depots such as Euroclear and Clearstream or any comments on that? It's a two-part, you know, a two-part question, right.

So I think the first question on sort of what is the value proposition, you know, we've already you know, spoke at length right about the what's called the economic or the commercial values of central clearing. I touched on what I would call the market resiliency benefits of central clearing, having more activity in a central clearer and I speak from years of experience now helps mitigate risk in a stress event. We've seen that with member defaults that we, we've been able to manage including, you know, at the height of the pandemic without the market really flickering. We've also seen central clearing be critical in helping to manage settlements and potential failure to settle risks in a cyber event of one of our members.

So you can't really talk enough about really the systemic risk mitigation benefits of central clearing. And I think those are very important to particularly the official sector, but they should be important to all of us as participants in this market. I think the other thing that I think a lot about is transparency, Eric, central clearing certainly does improve the transparency of the market, both in terms of what the CCP is able to see in terms of where transactions are and concentrations of risk. But also the

supervisors are able to see a lot better what is actually happening and who you know who is transacting what in this market.

On the second point about what about transactions that are executed on platforms, international platforms, I would actually add that to Nate's list of areas where there is still some ambiguity on the application of the rule just because currently we don't have any international platforms plugged into FICC for Treasury repo. One of the criteria at least as we interpret the rule, and I would note we are just one reader of the rule. We are not the definitive source. The SEC is going to be the definitive source on this point, but we do not clearly currently plug into international platforms and therefore that activity is not something fit clears today.

So the question is whether or not that would exclude it or not from the clearing requirement. But I do I would add it to as an area of ambiguity that I understand is being considered by the SEC. Yeah, thanks, Laura. So we're right at time. So we'll go ahead and draw today's discussion to a close. Want to thank the audience for joining us. Thank you to the panelists for a very good discussion. Would courage encourage everyone out there in the market.

Please reach out to your client coverage at BNY at FICC. If you still have questions or want to engage more deeply on this, please, please do contact us. And with that, we will say thank you and good day.

DISCLAIMER

BNY is the corporate brand of The Bank of New York Mellon Corporation and may be used to reference the corporation as a whole and/or its various subsidiaries generally. This material does not constitute a recommendation by BNY of any kind. The information herein is not intended to provide tax, legal, investment, accounting, financial or other professional advice on any matter, and should not be used or relied upon as such. The views expressed within this material are those of the contributors and not necessarily those of BNY. BNY has not independently verified the information contained in this material and makes no representation as to the accuracy, completeness, timeliness, merchantability or fitness for a specific purpose of the information provided in this material. BNY assumes no direct or consequential liability for any errors in or reliance upon this material.

This material may not be reproduced or disseminated in any form without the express prior written permission of BNY. BNY will not be responsible for updating any information contained within this material and opinions and information contained herein are subject to change without notice. Trademarks, service marks, logos and other intellectual property marks belong to their respective owners.

©2025 The Bank of New York Mellon. All rights reserved. Member FDIC.

BNY Global Clearing Disclaimer