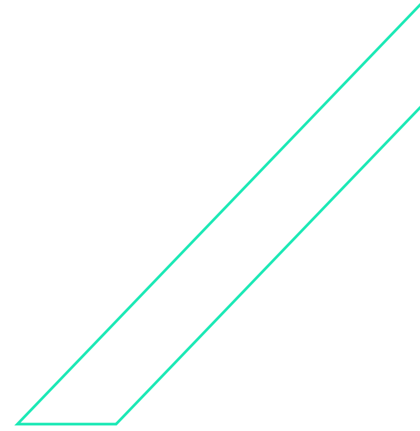
SIAPARTNERS

Central Clearing of U.S. Treasuries & Repo

A Study on the Impact to the Market and Market Participants

March 2023

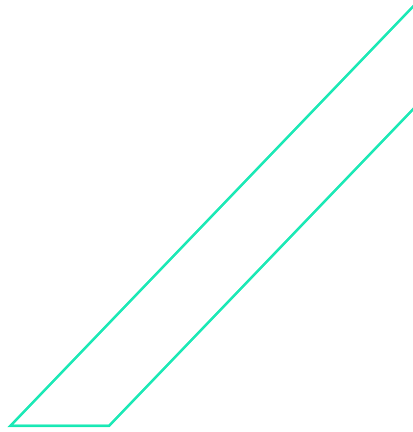
Study Background



Sia Partners (www.sia-partners.com) a global management consulting firm, undertook a major review of the SEC's proposed rulemaking related to required Central Clearing for U.S. Treasury and Repo Products. As noted, this proposal is part and parcel of a broader set of regulatory efforts meant to address issues of volatility and disruption in financial markets in 2014, 2019 and 2020 among other gaps in the oversight structure which the SEC seeks to address. In response to the proposed SEC rulemaking, and to attain as detailed and comprehensive industry input as possible on the rules, we undertook a several month effort to identify the key concerns of the market and recommendations for the path forward.

For background, in the summer of 2022, the Securities & Exchange Commission (SEC) set out a detailed proposal relating to mandatory Central Clearing of U.S. Treasury and Repo products. Central Clearing is part and parcel of a slew of proposals and rulemakings by the Department of Treasury, the SEC and other financial regulators which would seek to reduce volatility, increase transparency and enhance liquidity across fixed income and equity markets through enhanced oversight and regulation. The proposal point to instances of volatility which included the "flash crash" of 2014, the impactful market stress associated with the Treasury repo market in September of 2019, and the COVID related market shocks in March of 2020, where regulators assert that these added proposals would have a positive role in reducing market stress. The Central Clearing proposal from the SEC followed a similarly expansive proposal from the Department of Treasury in the spring of 2022 highlighting the benefits on "additional post-trade transparency in the Treasury securities market" which drew widespread commentary on the impact of investments in the on and off the run Treasury market. The SEC proposal on clearing would add a meaningful level of regulation and oversight (with limited exceptions) on both the U.S. Treasury and the Repo market and would compel participation on a full cast of financial institutions including banks, asset managers, hedge funds, PTFs (Proprietary Trading Funds) and a host of other investment entities.

The essential role of the U.S. Treasury and Repo markets---serving critical and dynamic functionalities for financial, sovereign and corporate entities is unquestioned. As Sia Partners noted in our 2022 Report completed on behalf of SIFMA on the Department of Treasury RFI on Post Trade Transparency, "the role of the U.S. Treasury market is unique, serving as the "primary means of financing the U.S. federal government, a critical store of value and hedging vehicle for global investors and savers, the key risk-free benchmark for other financial instruments, and an important conduit for the Federal Reserve's implementation of monetary policy." In our discussions across the Financial Industry, the SEC Central Clearing proposal, which impacts both the Treasury and Repo markets and a wider breadth of participants, has clearly drawn a far stronger sense of concern and opposition compared to other administration proposals.



Project Methodology

Our approach consisted of individual 'one to one interviews' with a broad set of investors and a select group of primary dealers. Consistent with our prior study on the Treasury RFI on Post Trade Transparency, our participants represented global firms from North America, Europe, UK and APAC. Our investor participants included a mixture of alternative investors as well as institutional asset and investment managers, pension funds and insurance companies.

Our report involved informal discussions with dozens of market participants in October and November and then followed in December-February with interviews with an additional fifty interviews on a specific set of questions which highlighted the specific challenges raised by the proposal. Individual interviews lasted approximately one hour each. Follow-ups occurred when required. Our questions were drawn from reviewing both the SEC proposal and was supplemented by specific topics identified in public documents and feedback from the market. As with all our projects, our report was subject to both internal and external peer review before sharing with the participants. Numerous institutions provided subject matter experts across treasury and repo trading and sales, operations, legal and other specializations. Several third parties also contributed to the report. Finally, we also reviewed letters which provided commentary on the SEC proposal and selective material in the public domain.

Consistent with the confidentiality commitments to the participants we do not disclose either the names of those interviewed or the exact breakdown of the participant groups. We have utilized both pie charts with numerical reflection of the answers as well as bar charts which reflect comparative views of the feedback on individual questions. Our report provides breakdowns between primary dealers and investors when appropriate as well as broader characterizations of the findings. Finally, we want to express our gratitude to our senior colleagues at Sia Partners—John Gustav, Eric Blackman and Joe Willing for their support throughout our project. The report drafting and review team included Chip Glover, Luke Higgins, Mark Hahn, Sebastian Warburton, Nicolas LaSala, Paul Collins, and Owen Anastas. This team gave unsparingly of their time working through numerous holidays and weekends and longer evenings post client work. Our Sia team worked tirelessly to ensure its organization and structure; analyzing the dozens of interviews and editing and drafting the individual sections. We appreciate everyone's efforts to ensure the quality of this effort.

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Participant Overview

U.SS Treasury Holdings

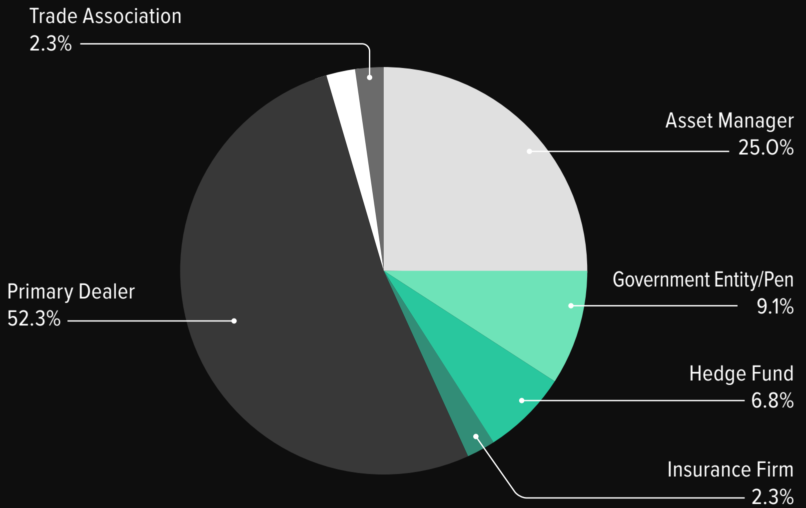
Total UST held by participants

Participants collectively hold

of U.S. Treasury Securities

Participant Firm Size

The below represents breakdown of types of participating firms



Participant Firm Size (by total firm AUM)

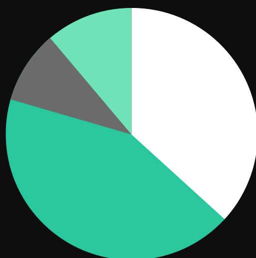
25%: $3 -$10 Trillion AUM

43%: $1 -$3 Trillion AUM

32%: < $1 Trillion AUM

Repo Holdings

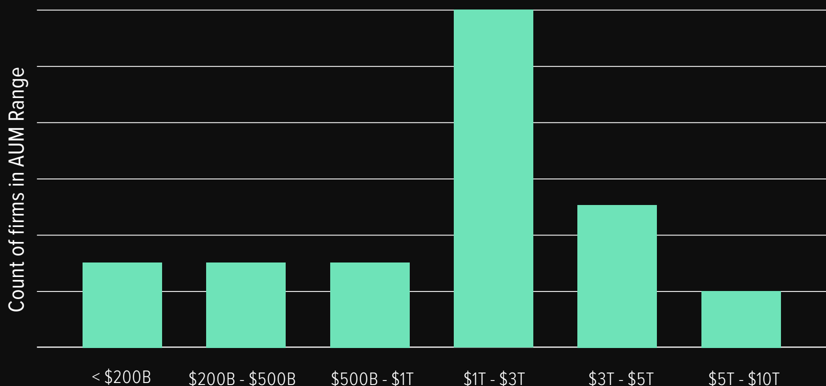
Breakdown of holdings by length of term



Overnight/ Continuous
Up to 30 Day
30-90 Day
Over 90 Day

Assets Under Management

Breakdown of participants by AUM



Investor Participant Overview

U.SS Treasury Holdings

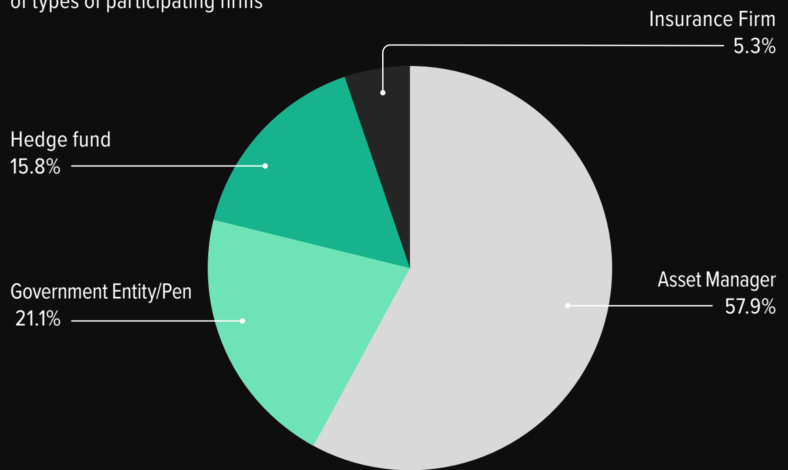
Total UST held by participants

Investors collectively hold

of U.S. Treasury Securities

Participant Breakdown

The below represents breakdown of types of participating firms



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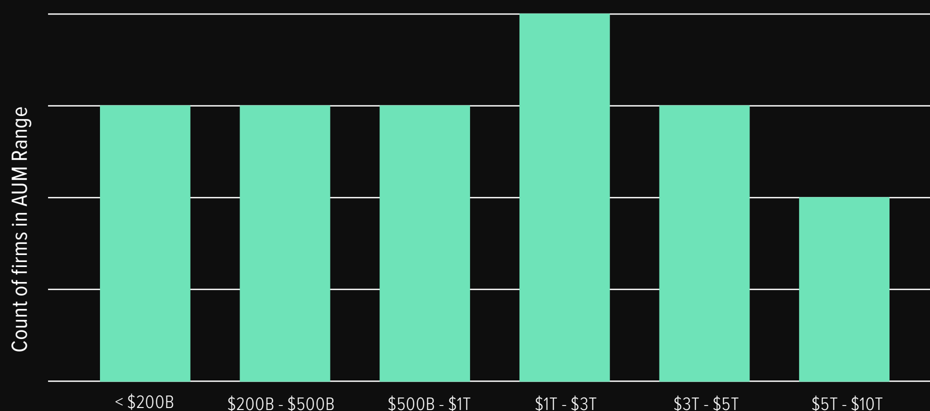
Assets Under Management

Breakdown of participants by AUM



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Executive Summary

Approach & Overview

Approach

Our research and benchmarking study identified a series of key concerns that market participants raised regarding the SEC proposal. By and large both major investors and primary dealers (with some exceptions in both categories) shared their thinking across a series of industry topics and questions discussed in our interviews. It is worth noting that the arguments raised by study participants did vary in both initial and follow up calls from October through February nor did it change after many of those individuals were involved in exchanges on industry calls and with regulators.

a. Core to the concerns we outline in the paper is the strong belief that insufficient review and examination has been given to the proposal by the official sector and that such work needs to be detailed and focused to properly vet a mixture of economic, operational, legal and market challenges before this initiative is enacted. Specifically, firms identified a need to consider:

b. Whether the market impact of mandatory clearing of both U.S. Treasury products and Repurchase Agreements (Repos) had been reviewed using both quantitative and qualitative considerations in meaningful studies conducted both by the official sector and academicians as appropriate.

c. Specific examination of whether those studies had looked at the economic costs vs. benefits of the investments the industry would need to make on substantial infrastructure upgrades; documentation and legal re-papering and re-negotiation across numerous master agreements and time considerations for on-boarding clients; liquidity and other related risks and assessing how Central Clearing for Repos and Treasuries would potentially impact liquidity in markets that are disrupted and volatile.

d. Whether other alternatives recommended by the industry including expanded netting features or decreasing capital requirements on banks to expand liquidity, or standardizing margin requirements had been appropriately evaluated.

A careful review of the ability of the FICC to be the sole provider of clearing and whether their operational infrastructure including margining processes, risk assessment, resources, system updates, ability to withstand cyber threats, a collapse of a large contributing financial institution and whether and how FICC would incorporate those challenges into the inevitable meaningful increase in the number of clients through the direct and mostly sponsorship business models. Study participants along with other market parties stressed the need for additional data to better understand the end impact of this mandatory approach on the markets.

Overview

Our report will focus on three sections drawn from our series of interview questions. We will first consider a condensed summary of the key conclusions relating to Repo & U.S. Treasury Clearing. There was an understandable set of overlap on our individual questions on the implications of the SEC proposed rulemaking focusing on the operational and infrastructure challenges, risk trade-offs and the potential resultant liquidity results from the proposed mandate and how this will impact the strategic direction of market making firms and their clients. So we have summarized those conclusions in a succinct section. Our second section considers the variety of business obstacles that institutions will encounter with this proposal and our last section examines the operational and infrastructure issues including Sponsorship that participants will encounter as they would be faced with implementation of the SEC proposal.

U.S. Treasury & Repo

U.S. Treasury & Repo

Our first section addresses the very core questions and issues related to the SEC proposal on clearing of U.S. Treasuries and Repurchase Agreements. We felt it was imperative to separate the essential areas of focus and concerns participants raised from a specific product perspective to include that feedback in one place.

Institutions across both the U.S. Treasury and Repo markets identified three outstanding concerns in our conversations.

First and foremost, in recognition that the SEC feels passionately about enactment of Central Clearing as a concept, they argued that there was an insufficient degree of research and appropriate cost benefit analysis to support this effort. We discuss this concern, in depth, at the outset of this section, but it bears re-focus given the issues raised by study participants.

Second, institutions noted that the proposal indicates that Central Clearing would stabilize financial markets, particularly during periods of market disruption, and that clearing would allow the markets to correct. Participants questioned whether there was any basis for this conclusion and indeed felt there were important reasons it could destabilize the market.

Finally, this initiative assumes that liquidity would improve across all market participants. Throughout our discussions, participants (investors and dealers) were skeptical that either Treasury or Repo Clearing would actually enhance liquidity in stable markets, or especially in disruptive markets and felt that Clearing would likely result in gapping on liquidity. Participants did not believe that the underlying assumption was supported by prior history, nor the way markets have treated clearing (voluntary) in the past, and hence suggested further research from the official sector.

Among the study participants, institutions were divided as to whether splitting off one of the products and proceeding with one would be a sufficient ‘compromise’ for the industry. Given the skepticism of the value of the entire proposal, that feedback was not surprising when we separated the products out. As we note elsewhere, institutions thought that clearing of on the run Treasuries would be far less impactful to the system.

This was similar to feedback in our Post Trade Transparency Study related to the Treasury RFI that we shared in October. Institutions noted that there could be some benefits in reducing counterparty risk (investor defaults/ major dealer risks similar to ’99 and ’07-’08). However, as always there were codicils to those arguments and participants felt that other risk categories could be exacerbated. Institutions who addressed the risk mitigation impacts noted that counterparty risk here often would be transferred into liquidity risk and that the upsides of defaults caused in the past would be counterbalanced by liquidity risks as well as concentration risk in the FICC, as we address later.

Institutions noted that one of the most formidable issues was the additional transaction fees that firms would be paying which would come on top of the spread on the transaction; which would reduce participation in the market by a group of smaller firms. According to some institutions, this could reduce the number of smaller trades as firms focused on trying to do larger and more operationally and capital efficient trades. This would reduce overall liquidity in a Treasury market, which already has been hindered by the amount of capital charges market makers are now subject to that is reducing their risk appetite compared to years past. Firms also noted concerns on data privacy, with data being shared among a larger group of firms, as well as cyber concerns which we address below.

Our Repo discussions identified a higher level of concern, as discussed in greater detail throughout the document. First, the operational lift, as we note frequently, would be a big lift and disproportionate to any benefit envisaged. Institutions flagged that the vast majority of the firms today are not set up to scale what is required here and that is true for even the largest dealers (who would have meaningful additional costs), but also smaller market making firms who would be compelled to build out without seeing the incremental benefits compared to their more selective bilateral trades.

Institutions were also curious about the modeling of Initial and Variation Margin. There were doubts on margin calculation, frequency of margin calls, impact on collateral being posted, netting prospects (which does not exist today in sponsored agreements) among other areas raised in our interviews. Firms who do not post margin would now be required to do so and that could lead to lowered participation in the repo (and Treasury market) diffusion of strategies using financing and less liquidity. Institutions spoke to the broader risk issues associated with the margin calculation being solely with the FICC—the opacity of their models and difficulties in calculation and posting challenges in times of stress. Current Treasury and Repo business that often traded with no upfront margin for better credits and the requirement for margin will result in lower volume with those entities and their strategies. This is yet another reason that liquidity would be impaired.

Lawyers and others also emphasized that the legal impacts were considerable. In this market, every dealer has their own, customized structure and hence negotiations are time consuming and require multiple months and tens of thousands of dollars for each onboarded entity. The current lack of standardization means that renegotiating these contracts would be a very inefficient process and the high volume of “re-papering” that Central Clearing would create, would be a very expensive and lengthy process.

The six months required for on boarding currently would likely be substantially exceeded. External counsel would need to be retained and the associated high costs would mean that the desks would need to pass on these costs in higher spreads. Fewer firms would be onboarded than the SEC or Treasury assumed in their models.

Participants were dubious that predicted higher volumes through introduction of Central Clearing, and therefore greater protection of the markets in times of stress, would in fact be achieved.

We considered some of the potential impacts of the costs incurred. The larger banks agreed that they would be compelled to stay in the business—business models would be re-examined—client selection would be narrowed in many cases—and operational upgrades would need to include ways for them to optimize or offset capital investments. Institutions agreed that smaller to mid-sized dealers would be squeezed to the point that they may be reluctant to actively participants in the market. Such concentration would also exacerbate the issues on the risk side with fewer dealers engaged and less liquidity provided. Whether that would be absorbed by the bigger institutions was questioned. Higher spreads, more legal costs, higher margin requirements, additional participation fees is not conducive to a stronger business. Participants in our study agreed that sorting this out was inevitable, but not necessarily with the results that the SEC or other regulators were expecting. And as we address in the document, dealers and sponsors may take on fewer clients and smaller entities may exit the market, resulting in greater concentration across the buy and sell side.

Finally, institutions agreed that Central Clearing was unlikely to result in liquidity growth. Rather they believed that it would not create liquidity but increase costs. PTFs which are instrumental in the SEC proposal are never seen as meaningful liquidity providers and rather exit the market when volatility occurs. Institutions had similar views on the robustness of 'All to All' Trading and whether that would result in greater liquidity.

Firms noted that their own data did not support official sector beliefs that Central Clearing would have resulted in enhanced liquidity experienced during the flash rally in 2014 or the stresses in September 2019 in the repo market or the Covid Market shock in March 2020. Indeed, we have found almost no participants, across our dual studies on Treasury Transparency in October 2022 or this study on Central Clearing, believed that this proposal would have resulted in lessened volatility. And indeed, many respondents thought it would increase volatility.

Finally, firms were very concerned about the FICC infrastructure and their "choke point" as one noted, including the risks associated with just a single clearinghouse. Our findings showed that almost no one felt the FICC had that capacity today for Repo clearing and agreed that the FICC would need a massive increase across technology, systems, operations, risk management, models, third party costs to get their infrastructure in appropriate shape to meet industry demands.

Business **Implications**

Business Implications

Our study found that the majority of participants believed that the Central Clearing initiative would likely inhibit their ability to both trade and invest in both liquid and illiquid securities. Firms identified that the major damage would likely be to the off the run and the 'deep' off the run treasury space which requires firms to step up with risk appetite both in the size of those trades and the frequency for investing. Institutions noted (as they also commented on in our prior report on Post Trade Transparency) that the expansion of Clearing would hinder the ability to maintain confidentiality of their market positions and preferred the current bilateral approach. Firms broadly felt that some firms would diminish their role in the market—heavier concentration of the businesses in the hands of the largest institutions. In particular, participants argued that there would be significant additional costs and issues with cash flow that would drive scaling back their commitments to some Treasury products (in both the on and off the run space) and others choosing to limit significantly and search for a substitute short term securities product. There were further concerns of a 'wave of unwinds' in the instance of a liquidity crisis which they felt could happen more frequently than the proposal envisions.

We explicitly asked institutions about the likely impact of the SEC proposal on the liquidity of the Repo market and two thirds of our study participants felt it would negatively impact that market. Firms emphasized that repo trading is a low margin business in general—firms often utilize Repo as a product to support butterfly or pairs trades and Central Clearing would impact that business in a knock on effect. Investors often use repo as part of a leverage or funding vehicle and some of those players in the PTF and hedge fund space might also seek to invest in other strategies and avoid the added costs associated with central clearing. Finally, institutions were broadly supportive of expanding access to the Standing Repo Facility to support the markets and industry.

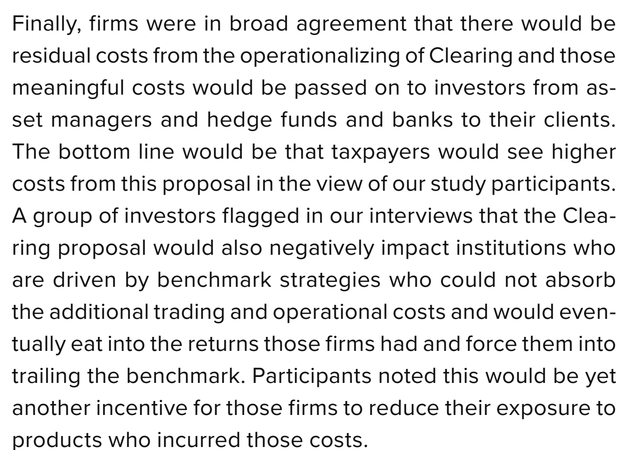
Participants considered whether the Clearing proposal would impact the ability of market makers to provide balance sheet and leverage to their client counterparties. A majority of participants felt that the Clearing model would likely reduce their ability to provide financing to their clients. Institutions noted that the Clearing model would impinge on the types of firms that would use funding and cut back on that use of balance sheet as well as firms that would exit strategies associated with funding given the additional costs of Clearing and the additive costs of higher margins that need to be posted. Institutions also noted that with strategies that focused on running collateral and looking to also offset risk or net that risk, there were concerns that the Clearing proposal would decrease those businesses. Finally on the risk side, participants noted that concentrating this risk with the FICC and having one entity responsible for both the risk management and operationalizing the Clearing facilitation was a poor tradeoff—increased concentration risk without having meritorious benefits that would justify this policy change.

Our document considered in detail how Central Clearing would impact the array of approaches firms have developed to minimize the posting of collateral if those postings and risks could be offset appropriately. Dealers and investors have for the past several decades built out very advanced cross product margin and netting approaches which has included risk systems that calculate the margin posting and creating advanced vehicles to offset the collateral that is being posted along with the legal infrastructure in their CSA's (credit support annex) to enforce these provisions in the case of bankruptcy. Their capabilities have been reviewed by regulators and taken into account for more efficient capital postings consistent with those models. Firms noted that the Clearing initiative would likely reduce their ability to use creative margining approaches since the business would shift from bilateral to cleared and reduce strategies on the relative value side that would also utilize these mechanisms.

The FICC currently has no provisions to allow for any netting or cross product margining so firms who use it would end up posting collateral on both sides of trades and not be able to net with their sponsor. Institutions who currently trade with no upfront margin would have to pay more in addition to the sponsorship fees making their strategies less appealing which is likely to reduce liquidity in the market and reduce volumes in the cleared products.

Our study considered the direct question of how participants viewed the regulatory oversight of Hedge Funds and PTFs which is specifically called out in the SEC proposal. We note that participants often did not distinguish between Hedge Funds vs. PTFs noting that often (although not even near the majority of hedge funds) had systematic or model driven strategies similar to PTFs. However, firms noted that often there were meaningful differences given bank due diligence of hedge funds, credit agreements, some regulatory oversight that differed from PTFs. Firms generally felt that oversight of PTFs was useful given a combination of the lack of opacity into their market behavior and the value of a more level playing field. Hedge Fund oversight was seen through a slightly different lens when differentiations with PTFs were identified. Banks in particular agreed that they had vigorous credit and risk reviews of their hedge fund clients and this particular oversight by the SEC was not necessary although some agreed that the 'level playing field' was a reasonable argument to include them in some oversight.

Many participants felt that the oversight of PTFs however could drive several firms out of cleared products (except the largest handful of entities) given that they would be unwilling to pay the ticket charges let alone the margin costs or arrange sponsorship arrangements given the operational requirements. Participants were unanimous in their view that PTFs do not provide liquidity in instances of market stress and indeed exit positions in the most untimely of instances, making them a poor contributor to market consistency.



Finally, firms were in broad agreement that there would be residual costs from the operationalizing of Clearing and those meaningful costs would be passed on to investors from asset managers and hedge funds and banks to their clients. The bottom line would be that taxpayers would see higher costs from this proposal in the view of our study participants. A group of investors flagged in our interviews that the Clearing proposal would also negatively impact institutions who are driven by benchmark strategies who could not absorb the additional trading and operational costs and would eventually eat into the returns those firms had and force them into trailing the benchmark. Participants noted this would be yet another incentive for those firms to reduce their exposure to products who incurred those costs.

Core to the SEC proposal is a belief that eventually encouraging "all to all" trading and maximizing the interests with buy side institutions to trade with one another will increase liquidity in the markets. Participants were broadly quite skeptical of the benefits, including those firms who were advocates of the effort itself. First, there seemed to be a broad recognition that only the largest investment managers would be incentivized to build out the necessary infrastructure to participate on both sides of the market and have both an end-user and market-making capacity. Second, related to that conviction, firms noted that there were few firms who had the requisite risk appetite to be on both sides of trades and especially in times of market disruption. Numerous banks noted in times of stress most institutions were on only one side of a trade and would rarely if ever have that appetite for risk. Third, there was near unanimity that the 'all to all' proposal would provide liquidity at the edges but would not have any real substantive impact on the other aspects of the proposal that would likely lessen liquidity especially in cases of market volatility.

Operations & Sponsorship challenges

Operations & Sponsorship challenges

Our report spends considerable time identifying the participants' major concerns across the arena of infrastructure, systems, technology, operations, collateral management, risk management, documentation & legal challenges that the industry will encounter if the proposal from the SEC is enacted.

Across the spectrum of investors and primary dealers as well as third parties, no one issue dominated the discussions more than the focus on the potential hardships that the industry would face with the implementation of this initiative. This view was widely held not only at the desk level (traders, portfolio managers, sales) but also in dedicated sessions we had with the Heads of Operations, Collateral Management, Risk Management, CFO's and senior lawyers at firms in our study. While there was overlap in the feedback, we chose to devote separate sections to the strengths and weaknesses of the FICC, a review of the sponsorship model in an expanded manner and a breakout section devoted to Operations and Legal issues that institutions highlighted for us.

The project identified an overriding concern that the thesis for taking this effort forward operates on the belief that expansion of the sponsorship model is feasible and desirable; that the FICC can manage that uptick in participation and that the operational and concentration risk would not be injurious to the system. Beyond that, of course, is the belief that this dramatic shift from bilateral transactions to a Centrally Cleared approach would improve market function and enhance liquidity. We will briefly summarize each of these arguments from the point of view of the participants.

First, participants noted that the sponsorship model today is often an unprofitable business and is run as part of a contribution to other execution businesses in their firms and as a bind for relationships. This is similar to some firms' prime finance businesses where the costs are often absorbed to ensure that institutions keep flows of transactions across fixed income, equities, credit products and more complex structured products. While the volume from sponsored businesses can be meaningful, participants made very clear that the costs to maintain those clients, starting with the on-boarding efforts, were substantial. Institutions noted that onboarding alone took up to six months (or longer in some cases) and involved customized legal agreements since the industry does not have a standard agreement. Many firms conceded that standardization could, and should, be addressed as a way to bring down costs but also stated that there would still be a large number of terms to discuss and negotiate. In addition, there is the necessary and separate due diligence process that firms need to conduct involving various parts of the front, middle and back office to effectuate the onboarding. Firms surmised that they on-board possibly 50-75 clients per year (given range) and resource constraints and a stretch of infrastructure could limit how that would expand. Study participants concluded that adding multiple thousands of clients would be an incalculable operational lift. Institutions agreed that the feasibility of adding "sponsors" (beyond the ~30 today) did not seem likely since firms did not want to add this business or take on smaller credits.

The resource commitment to meet the SEC proposal would be at the Dodd Frank level, or equivalent reach, and would take multiple years to conclude. Finally, larger institutions agreed that difficult business decisions would need to be reached; winnowing down the number of clients they would absorb and onboard and likely leaving a group of investor entities looking for a sponsor or trying to identify a way to go direct which was not practical.

Second, institutions identified the significant challenges in place for the FICC to accept the challenges posed by the SEC proposal. We should make clear that the FICC has recognized this in their own discussions in the public arena and noted that they would need multiple years to build out this effort. No other (competitive) clearing entity (i.e., ICE or equivalent) is available which ensures that the current approach with the FICC driving all this business is what the system would be reliant on.

At a baseline, sponsored clients, and the banks who serve as clients, believe that the FICC operations and risk approaches have decayed and not kept up with current demand let alone the enormous increase required from this effort. Firms noted that one of the initial steps that should be taken if the SEC moves forward is requiring the FICC to have an independent assessment of their offering and, more importantly of its complete operational, risk and legal infrastructure and identify for regulators and market participants those findings so they could be addressed. Institutions agreed that today the system is stretched but typically meets demands, but given what is contemplated the necessary investments would be enormous.

Firms also took issue with the broad opacity of the margin models at the FICC and the challenges that posed for members. This was a recurring theme in most of our interviews and especially among the dealer firms who noted that the FICC risk models were a black box and even their most advanced quantitative experts could not replicate it. This left the sponsors and their clients in the untenable position of not being able to accurately predict the daily (or more) margin calls to a reasonable degree and was ripe for a major liquidity challenge similar to what had occurred in the futures market in 2020. Firms noted that, at least currently, institutions cannot appropriately plan out their own risk analysis when the FICC is not more transparent. The margin posting requirements are absolutely key to the success of this effort and investors and dealers alike commented on the timing of those margin calls, and the enormous effort in understanding the underlying premise of the VAR approach and the impact on liquidity. The danger inherent here, participants noted, is the significant increase in the number of sponsored clients and possibly the number of sponsoring entities who would be interacting with the system.

Third and finally, institutions noted the risk implications associated with this effort. Our study inquired about contagion risk, liquidity risk drains (in multiple places) and the tradeoff implicit in this proposal between counterparty risk and concentration risk. We should note that the FICC is a SIFMU and hence is accorded some degree of both analysis and potential support in a backup regime. However, firms noted that the criticality associated with one or more key members of the FICC going down (given the events of 2008) would be enormous and right now not represented realistically in the calculations of firms' stress models.

Institutions argued that, at minimum, there should be consideration given to the expansion of those clearers who could compete with the FICC; although the operational challenges there would also add another layer of complexity. Institutions agreed that this was the creation of a different type of knock on or contagion risk—while you might be decreasing counterparty default risk in a bilateral manner you were identifying new operational and system risks which could drain other parts of the financial system and create new contagions. Liquidity risk was a given feature of any dialogue related to the FICC as institutions noted that any upset during volatility with frequent margin calls could drive up risks throughout a market downturn (such as the CME's calls for margin in 2020) and run the risk of driving firms out of the market. The result here could be the re-evaluation of the sponsored model and determining whether firms would find this to have poor revenue vs. risks tradeoffs and considering their continued commitment to the sponsorship paradigm.

As we noted earlier, firms felt areas associated with the SEC proposal required further study and no area received more frequent demands than the issues associated with the FICC.

U.S. Treasury Products

Is Central Clearing U.S. **Treasuries worth the potential costs?**

Overview

The market for U.S. Treasuries has been historically stable, allowing U.S. and international investors to turn to Treasuries in times of significant market stress. Pension funds are one of the largest holders of U.S. Treasuries, behind only mutual funds, the Federal Reserve, and foreign investors, which reflects the product's strength and fundamental stability irrespective of market conditions. A highly liquid Treasury market is essential for the successful execution of monetary policy and market functioning. However, the resiliency of the Treasury market was called into question during the pandemic. According to the Fed, ***"liquidity metrics, such as market depth, suggest that Treasury market liquidity has remained below historical norms… Low liquidity amplifies the volatility of asset prices and may ultimately impair market functioning"***. The lower-than-usual liquidity levels are sounding regulatory alarm bells across the Treasury market.

Regulatory bodies have placed a strong emphasis on enacting policy to ensure the future state of the Treasury market is an improvement on the market conditions observed throughout 2022: dubbed "the worst ever year for U.S. bonds". Policymakers put forth a proposal to centrally clear all U.S. Treasuries in response to market illiquidity. While firms across the market agree that addressing the issue of market illiquidity should be among regulatory bodies' top priorities, they are skeptical as to whether this proposal would in fact stabilize or improve the market. Additionally, they question why Central Clearing has been identified as the primary solution to the problem of liquidity. In fact, firms are concerned as to the potential negative ramifications that a structural overhaul of the secondary market might have on market liquidity.

To start, there is a strong concern among market participants that regulatory institutions are not armed with a sufficient degree of research and evidence to support such a large and sweeping effort. For a regulatory endeavor that shifts the day-to-day operational norms among nearly all of the largest money managers in the world to the degree implicit in the proposal, many firms argue that the evidence needs to be substantial before action should be taken. In this case, given the widespread industry criticism and a void of academic support, market players are concerned that Treasury and regulatory bodies are focusing on policies that are not well targeted towards the issue at hand. A dealer representative remarked, ***"a cost benefit analysis needs to be done here before determining the final proposal."*** Another expressed the same sentiment in a more all-encompassing fashion: ***"overwhelmingly everyone believes a cost benefit analysis needs to be done before we consider the final proposal."*** An overwhelming majority of market players – inclusive of both those who support the proposal and those who fundamentally disagree with its principles – believe additional research is needed before action should be taken. While Central Clearing exists for futures transactions and in other markets, firms note that U.S. Treasuries – given their different time horizons for maturity and dissimilar trading behavior – cannot be readily compared to these products. Firms recognize the need for regulatory action, with one primary dealer in particular noting that ***"hopefully they think this through before they formalize the approach."***

The cost benefit analysis needs to be directly and specifically targeted towards US Treasuries.

Benefits of Central Clearing U.S. Treasuries

Among the firms that cited benefits to the proposal, a strong majority focused on the potential for a reduction in counterparty risk rather than liquidity improvements.

It is important to acknowledge that a strong majority of firms focused exclusively on the negative ramifications that central clearing for Treasuries could have on market functionality. While participant concerns regarding the policy proposal vary, support is largely concentrated among a relatively small group of firms that believe the proposal will reduce settlement risk. Their beliefs are anchored to the theory that if the risk involved in each transaction across the market is confined to a single entity, then market resilience and standardization would improve. According to one participating representative of a primary dealer, ***"clearinghouses reduce default risk and buildup of both concentration risk and issues for the Central Clearing Party (CCP)."*** This creates, according to an investor representative, ***"a counterparty capacity that gets simplified and helps with the business."*** The current system lacks an underlying consistency to trade execution which, according to some, discourages the kind of trading behavior that could improve liquidity.

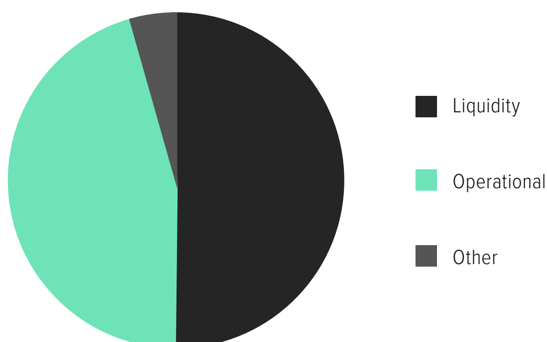
Research from the Dallas Federal Bank suggests that ***"the lack of consistent margin practices poses risks not only to the participants in trades with insufficient margins or haircuts but also to the broader market, especially the clearinghouse and the functioning of the centrally cleared market segment."*** While research exists for and against the role that central clearing could have in reducing settlement risk throughout Treasury transactions, this argument strays quite far from the SEC's established goal of rectifying market illiquidity. The correlation between risk reduction and liquidity improvement is, in the eyes of many market players, too indirect and hypothetical to justify the costs incurred by the proposal. A minority of firms support the theory that centrally cleared Treasuries would directly or indirectly make the market more liquid, which motivates much of the frustration that firms expressed throughout the interviews.

Even among firms that recognize the potential reduction in counterparty risk, there were contingencies and acknowledgements that diluted their support of the measure broadly.

Even among firms who believe that a mandate to centrally clear U.S. Treasuries could reduce counterparty risk, there is a belief that the magnitude of this risk reduction may be small, and that current market risk is relatively low. In other words, support for the measure is diluted by the fact that the primary benefit cited throughout these interviews does not address the pressing short term pain point in the market. One firm noted that ***"if I'm exchanging a treasury what do I care what the counterparty is? I have 1 day of settlement risk, it's just not major. If there was some central margining that would make a lot more sense, but in this scenario, I'm not getting cross netting benefits."***

Risk consideration is always essential for markets known for dependability and stability. However, the issue that market players asked regulatory bodies to address is not to bolster faith and resilience in the market, but rather to address illiquidity which is an auxiliary and theoretically downstream outcome of this proposal. The distance between the goal and established direct outcome weighs heavily on the cost benefit analysis, which firms see as an essential prerequisite to any and all forms of significant action.

What do firms see as the primary challange or pain point to centralize clearing in the UST market?



What are the most pressing concerns?

A mandate to centrally clear U.S. Treasuries could worsen the current state of market illiquidity.

The primary issue cited by market players pertains to the potential for lower levels of market liquidity which is the opposite of the SEC's stated goal. Some firms point to the negligible impact that central clearing would have had in previous trading environments or disruptions to market illiquidity and note that regulatory bodies should conduct the same exercise to inform their approach to policy creation. An investor participant noted that ***"clearinghouses would not greatly improve"*** market conditions during the 2014 flash crash or the pandemic induced market struggles in March 2020. This participant also expressed the view that ***"if you are calling for additional collateral posted to the CCP, that collateral needs to be more liquid. More U.S. Treasuries would have to be posted and that accentuates the problem [by creating] more issues [in the market]."*** The central clearing process requires liquid collateral, so a mandate that enforces central clearing in an illiquid market could create an even deeper strain on liquidity levels by increasing the need for moveable products.

Market players are concerned that this proposal means that the existing ***"counterparty risk is transferred in a different way... into liquidity risk."*** Firms are under the impression that this measure is essentially trading risk in one area to another, and that while clearing may make the Treasury market more fundamentally resilient against external conditions, it strains the already declining levels of liquidity that prompted the need for regulatory action.

A representative from a primary dealer stated that ***"there is certainly a chance that if everyone were compelled to clear then liquidity would diminish."*** Their justification focuses on the impact this proposal could have on the utility they provide to their clients, as they worry that their ***"service and relationships could diminish, [and that] bigger firms could be an unwanted cost for smaller counterparts."*** Liquidity concerns are understandably top of mind for firms who were told that this initiative would aim to rectify current liquidity struggles. The most likely outcome, according to many firms interviewed, is simply a deeper, more stable liquidity hole across the market for U.S. Treasuries, with one investor representative noting that they think ***"it will have the opposite of the intended effect."***

The operational lift required to centrally clear U.S. Treasuries across the market could be huge, and smaller players would likely be most adversely affected.

Participants also voiced concerns about the magnitude of the operational uplift that a mandate to centrally clear U.S. Treasuries would cause. One investor participant noted that the operational burdens will be substantial, and they cite pre-settlement wire charges and margin postings represent expensive operational challenges that will likely ***"limit access to the Treasury market."*** Firms stated that Treasury margins are already thin, so decreasing the margin even by a fraction of a percent due to increased overhead and operational costs could make the Treasury market a fundamentally cost-prohibitive environment. An investor participant felt an ***"additional transaction fee on every trade going forward on top of the spread"*** would reduce the incentive to enter the market, where liquidity is already a significant concern. The operational costs are tied to the issue of market illiquidity because the proposal establishes a fundamental disincentive for Treasury market participation. An investor remarked that this is ***"clearly a significant overhaul of structure"***, and it impacts departments from IT to legal, and will require firms to evaluate each step of the transaction process. Some have compared this to the shift to T+1, which was operationally devastating for some smaller firms. One primary dealer participant noted that ***"if you are only making $30mm versus $300mm [per year], every dollar of cost is more important to you."*** This point was echoed broadly by participants, as there was a clear and overwhelming concern for smaller players in the space who cannot afford to suffer additional cuts to Treasury trading margin: firms will need to ***"consider if [Treasury trading] will still work from a business model perspective."*** One investor participant argued that regulatory bodies are using March 2020 as the frame of reference for effective policy action, though this period of economic stress is uniquely outside of the scope of normal risk assessments. This representative believes that with the pandemic as the starting point, the ***"rules would have to be so draconian against those types of risks that there would be no maturity and transformation at all."*** This participant argues that market liquidity issues cannot be analyzed in the context of the pandemic, as market behavior was confounded by a number of external factors that could likely obscure the impact of historical analysis on future state success.

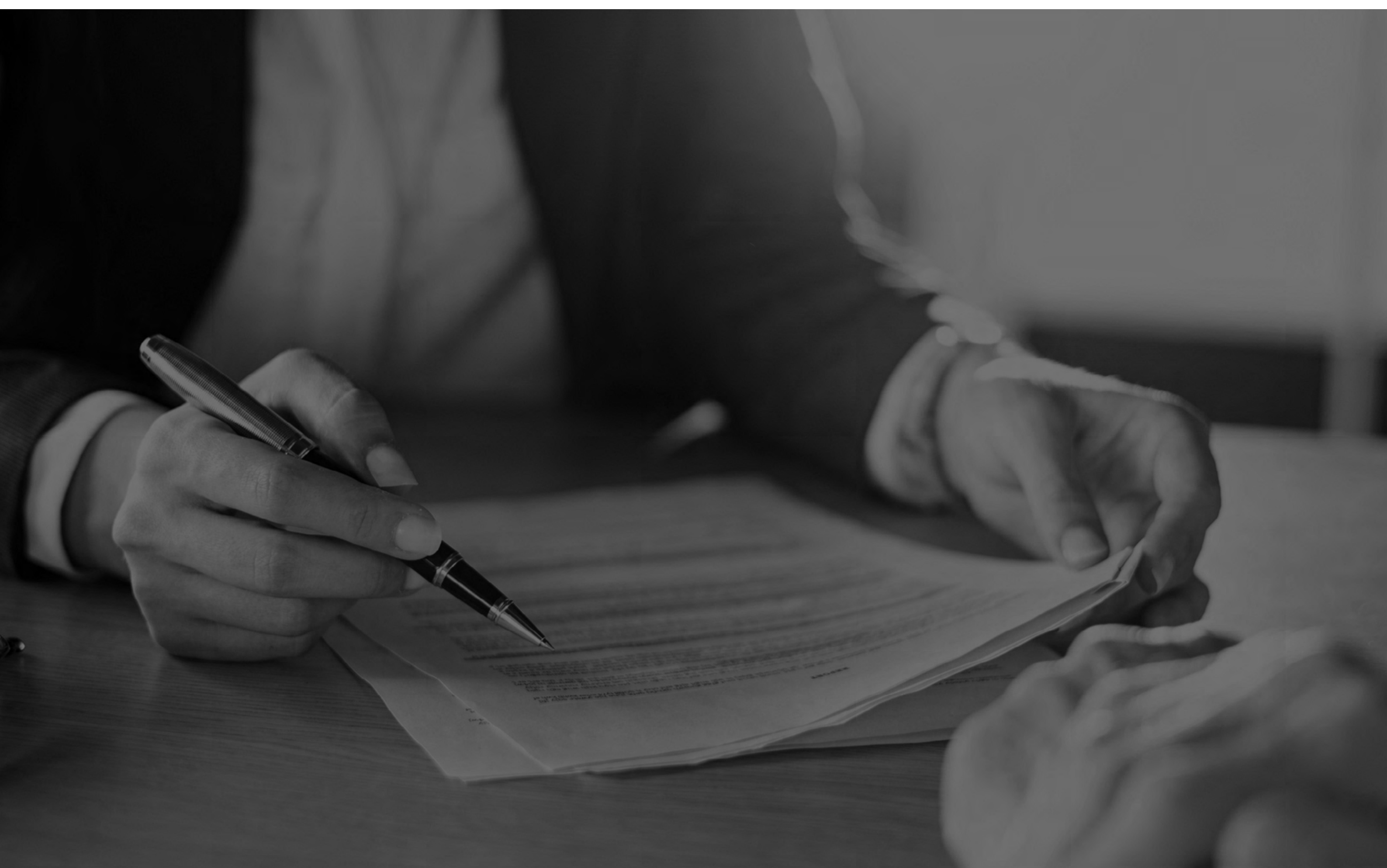
If U.S. Treasuries are ultimately cleared, what are important contingencies that regulatory bodies should take into account?

There is a strong sentiment that the decision to clear Treasuries is difficult and should be approached with a significant degree of caution. If it happens, a phased in approach with proper mitigants is essential.

There is a strong consensus that the proposal to mandate clearing for U.S. Treasuries is difficult and must be thoroughly studied, to consider all impacts, if regulatory action ultimately becomes inevitable. A primary dealer remarked that the "overarching feeling [in the market] is we should move as a market moves: slowly and incrementally" while continuing to recommend that a mandate of central clearing isn't the way to go. Some believe that this mandate is inherently antithetical to free market principles because it overly standardizes transaction and execution norms. If these processes are continuously roboticized, then both risk and margin could become similarly fixed and negligible with an even heavier concentration of firms at the top. If a blanket policy covers the entire market in too short of a window, then firms will struggle to adapt, and some may exit the market after bleak cost benefit analyses due to operational and liquidity-focused challenges.

Some firms acknowledge the immense amount of data that the CCP will have access to. One primary dealer for instance voiced its concerns, saying "how the data is being managed is a huge concern." It continued to say that their firm has "vendor and CCP's related to Treasuries that sell the data for profit. How does this information value get managed with everyone's franchise and gets sold to CCP for a fee?" Data management and issues of market fairness and predatory trading are an integral component of a proposal that suggests concentrating the entire activity of a market within a single body of entities.

Firms also note that on and off the run products must be considered separately, though they acknowledge that trading behavior within each group is not always as binary as the distinction suggests. As such, firms believe a research-based approach is an essential prerequisite to market action. Without it, firms will be forced to move forward without evidence of medium or longer-term benefits and would incur costs without properly adjusting for future state changes.



02 Repo Products

Will the mandate have the effect the **SEC hopes on the Repo Market?**

Central Clearing Mandate Goals

The repo market is a vital contributor to the success of the U.S. and global economy. The repo market enables participants to provide collateralized loans to one another and facilitate short-duration financing. It's essential that this market continues to operate smoothly and efficiently, as $2 to $4 trillion are traded in this market each day. Industry participants and policymakers have questioned the resiliency of the U.S. Treasury and Repo markets due to recent market disruptions including the volume spike in 2014, repo crisis in 2019 and the financial crisis as a result of the covid pandemic in 2020. As a result, the SEC has proposed mandating Central Clearing to a single CCP (FICC) on all [repurchase and reverse] repurchase agreements.

The SEC suggests this mandate will strengthen the repo market in several ways. Most importantly, the SEC believes that the mandate will modestly improve liquidity in the repo market. The SEC explains that mandating central clearing will be a first step in alleviating market participants' concerns addressing the lack of balance sheet provisioning with their clients and efforts to make capital management more efficient. Additionally, the SEC has argued that mandating central clearing in repo markets will enhance transparency and allow for additional industry developments and trade positioning among trading counterparties. The SEC and other members of the official sector believe that imposing a requirement for Central Clearing in the Repo and Treasury market will result in greater stability and public and private transparency in this market.

Current Repo Clearing Structure

The repo market is complex, with several different trading avenues for those in the industry. As the SEC describes in its proposal, ***"the U.S. Treasury repo market consists of four main trades: (1) non-centrally cleared, settled bilaterally, (2) centrally cleared, settled bilaterally, (3) non-centrally cleared, settled on a triparty platform, and (4) centrally cleared, settled on a triparty platform."***

As a result of this mandate, non-centrally cleared trades will be eliminated. However, some repo and reverse repo transactions are already cleared today, and that number appears to be growing. While the volume of repo transactions that are cleared is very low compared to the overall market, respondents indicated that mandating cleared repo transactions is unnecessary as the market is already headed in that direction. These firms argue that since there is currently a voluntary approach to clearing, it better reflects the ability of the firm to invest in the infrastructure required to clear through FICC. Companies that will be required to clear under the mandate may incur substantial cost increases. As one primary dealer states, ***"being required to pass through [FICC] creates a much bigger operational challenge, rather than if it's optional based on if it makes sense from a business decision."*** Instead, respondents emphasize that the SEC should incentivize repo clearing rather than requiring firms to do so.

As one trade group states, ***"the Commission should rely on an incentive-based approach to increase central clearing as a first step."*** Another firm expressed the need for, ***"provisions meant to encourage clearing rather than compelling it."*** Respondents indicated that the repo market functions efficiently as is, with participants noting that counterparty credit management is in good shape.

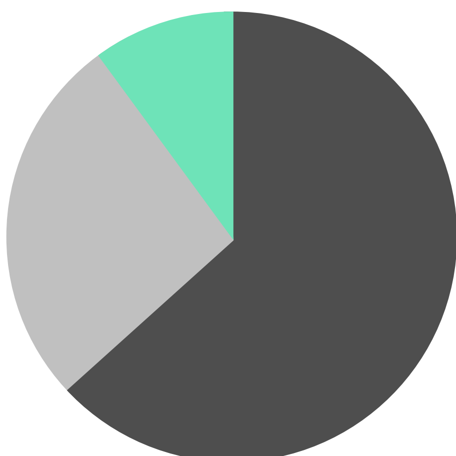
Additionally, participants explain they conduct detailed due diligence as required and are able to properly margin their clients and to avoid meaningful credit default. Considering that the market is already functioning efficiently and moving toward a clearing environment for repo transactions, respondents questioned the need for a Central Clearing mandate.

Participants believed there to be insufficient data to support the efficacy of the SECs proposal. They indicate that the SEC has not yet examined the impact on participants in the market or demonstrated that there is proper evaluation of the costs and regulatory requirements required under a Centrally Cleared environment. Respondents emphasized their desire that the SEC conduct further analysis to confirm any potential benefits of mandating Central Clearing. As SIFMA writes in their comment letter to the SEC, ***"the Commission should conduct detailed analysis on the costs and benefits of central clearing across market segments and participant types, as well as analyze the overall impact on market liquidity."*** They went on to say that ***"a central clearing requirement with respect to Treasury Repos should only be considered at a later stage if justified by robust analysis."***

Respondent Overview

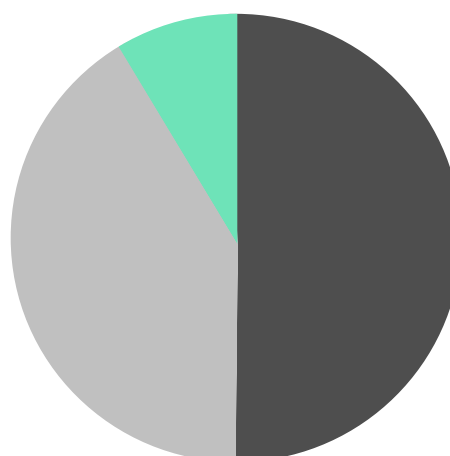
We held in-depth discussions with a diverse group of repo and Treasury market participants, representing both dealer and investor communities, to determine industry views on whether the SEC's proposal for mandated clearing will benefit the repo market. Participating firms suggested that the hypothesized benefits of mandated Central Clearing of repos would not be fully realized or result in a net benefit to the market. Over half of participants doubted to the proposed benefits altogether. Other respondents pointed to the added costs and unintended consequences which would ultimately negate any benefits gained through the central clearing of repos.

Will the mandate have the effect the SEC wants on the Repo Market?



No | Partially- are wary of costs & unindended consequences | Yes

Will the mandate have the effect the SEC wants on the Repo Market? (Sell side only)



No | Partially- are wary of costs & unindended consequences | Yes

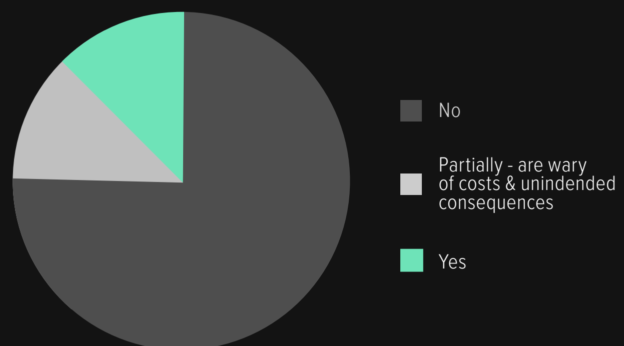
Dealer participants expressed concern regarding the massive operational investment needed to build out or improve clearing infrastructure from an operations and systems perspective. With the introduction of this repo clearing mandate, banks will now be faced with the difficult and costly task of upgrading systems and creating tools needed to centrally clear through FICC. As one primary dealer explains, ***"[the] operational build out is very big and it's a large investment to start so if it doesn't work, it's a large potential wasted investment."*** Another firm echoed a similar sentiment stating that, ***"on the repo side the operational uplift is challenging, and the infrastructure would have to cater to a lot of different firm needs."*** One primary dealer similarly noted that ***"most firms are not set up to scale to the level we are looking at here."*** They further suggested that ***"the kind of volume we're talking about for the infrastructure would have to be different and my gut says it'll be too large."*** Operationally, these firms need to create new systems that allow them to adjust to new margin requirements and properly manage collateral. Finally, a primary dealer added, ***"there will need to be a reconfiguration of the collateral management framework towards FICC. Specifically, there needs to be a solution on how the treasury margin framework will work. Initial Margin and Variation Margin will need to be thought out and worked out to be helpful for the market."***

Operational and Legal Issues

Participants highlighted numerous legal issues along with the mandate regarding the ability of banks to build out the proper documentation necessary to be compliant with FICC and the SEC. Mainly, participants are concerned with the need to create new trade agreements, new onboarding documentation, and other legal resources necessary to operate and trade efficiently in the repo market. For sponsoring members, every clearing relationship requires its own onboarding procedure and dealing with these costs can quickly become an enormous and time-consuming task. One primary dealer estimates that ***"the legal documentation to get some broker onboarded for a sponsored agreement costs us $150,000 at least."*** Another primary dealer agreed, adding that ***"the biggest cost to us is technology, onboarding, paperwork."*** They are also concerned with timing, as well, saying that ***"each document takes 3-4 months to put together."*** With another firm claiming it ***"could not be done in a six month launch window."*** From a lift perspective, respondents indicated that the resources required to achieve this proposal will be substantial. As one firm explains, ***"from an operational perspective we currently have almost a full body on our repo desk dedicated to just managing the operational burden that goes along with the FICC structure."*** They further remarked that ***"many counterparties active in repo markets are big and lethargic institutions and not adept for the sophistication for this."*** A third firm notes that it is ***"impossible to know number of lawyer hours and what type of operations teams will need to make to facilitate it and the benefit is questionable."***

Participants emphasized that there are several legal challenges that will need to be addressed prior to the implementation of a clearing mandate. For example, firms would need to create new Master Repurchase Agreements (MRA) and agreements with clients. This is especially difficult as there is currently no standard documentation relating to sponsorship, and each of those agreements continue to have to be customized and individually negotiated. As one primary dealer indicates, ***"each client is different, and negotiations are different."*** With another saying that ***"every broker has a different structure on what we send to them and what they send back to us. There's no real standardization and it creates a lot more work for us."*** Some participants also noted documentation issues regarding contributions to an indemnity fund. Firms will need to ***"have uniform agreements across counterparties so within annex for the MRA's can be differences in treatment of whether sponsored members need to contribute to the indemnity fund." Such costs will be significant for firms and could negatively impact the repo market as those trading may become less willing to participate.***

Will the mandate have the effect the SEC wants on the Repo Market? (Buy side only).



Investor participants expressed concern regarding additional costs associated with the clearing mandate. They explain that the primary dealer build out costs will likely be passed on to buy side clients in the form of higher spreads on their repo trades. For example, a large asset manager suggested that ***"when you mandate all repo transactions to be cleared, banks will not bear those costs."*** They continued, noting that banks ***"will find their way to wider bid ask spreads and force end users to increase operations teams."*** Buy side respondents were also concerned with increased costs in other areas associated with the clearing mandate.

They indicated that significant operational investments will be required to ensure that their systems are up to date. One investor said, ***"we have costs related to setup, hard to predict exact amount, but my guess is it will be significant."*** Investors also raised concerns around margin requirements.

Many investor participants will need to post excess margin on repo trades for the first time. Respondents also noted that repo trades currently made by hedge funds do not require excess margin to be posted. However, under the clearing mandate, these firms would be required to post both initial margin and variation margin to the FICC. This poses significant issues for firms in regard to finding the appropriate resources for posting margin. Additionally, these firms will need to establish systems and risk management practices, if not already in place. As one asset manager stated, these margins are ***"left up to the FICC and calculated for that sponsor member and that magnitude is hard to estimate as well as the potential rate impact."*** They went on to say that they ***"don't know if it's beneficial to our counterparties but it does have extra costs and challenges."***

Considering that profits in the repo market are already slim, imposing initial and variation margin on the market may have unintended consequences. One primary dealer feared that ***"margins are already so thin on the repo side, and this mandate will only exacerbate that."*** Additionally, buy side firms trading through a sponsor will also be required to pay FICC a fee for loss mutualization in the case of third-party default, including a potential fee to their sponsoring members. Some respondents explained that these fees were unnecessarily costly and would not benefit those trading in the market. For example, one large insurer noted that the fees ***"will be transaction based, and that is a cost to pay every time we trade."*** They further expressed concern that these two fees add no value. Additionally, respondents indicated that this ***"reduces their security as an investor since FICC has first claim on our assets and there is a liquidity event and FICC is the gatekeeper and does not have the freedom to sell."*** These various costs incurred by buy side firms in the repo market have made participants concerned about their ability to continue trading the market.

Industry view on the Impact

Respondents in our study indicated that they felt the impact of a clearing mandate on repo will be substantial for dealers, investors, and the industry as a whole.

Firms Pushed out of the Repo Market

Firms raised concerns that the costs associated with mandated clearing of repo transactions may be passed on to parties who cannot absorb these increases. Respondents indicated that some small to mid-sized dealers may also be squeezed out of the market as a result. They explain that the introduction of this new repo clearing mandate will leave market participants with the difficult and costly task of upgrading and/or creating the tools and systems needed to comply with SEC regulations. A primary dealer remarked, on the notion that smaller banks cannot afford the investment, ***"[they] have the potential to leave once they see the resources they'll need.".***

This may end up "consolidating power amongst the most powerful 10-15 banks who can handle the operational uplift." The investor side shares the same concerns regarding the ability of market participants to sufficiently absorb additional costs. Respondents in our study emphasized that the costs pushed from dealers to investors could eliminate players from the repo market as they will no longer view it as viable to operate in. As a pension fund remarked, this mandate will "cost more for dealers and, in turn, squeeze out the smaller firms on the demand side [because] costs will go up.»

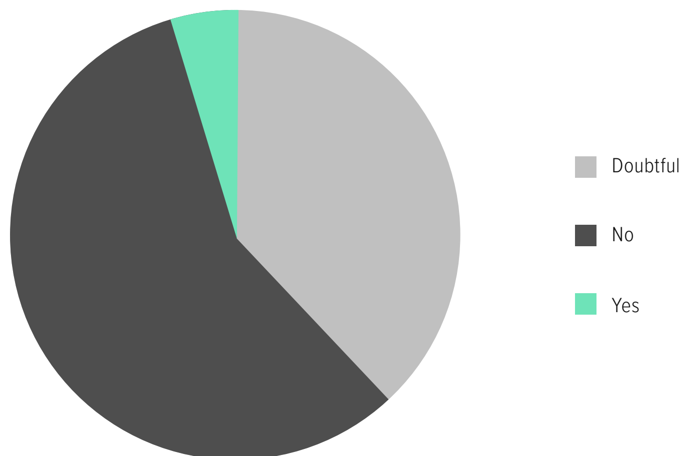
There are also potential knock-on effects this will have on the few bigger banks who remain in the market. Respondents suggested that if there were only a few remaining sponsored members in FICC, it will force those institutions to concentrate their business and not take on as many clients. In order to clear through the FICC, firms are encouraged to obtain sponsorship from a participating bank. However, there is no requirement dictating that these banks must sponsor them. As mentioned, the onboarding costs for banks associated with sponsoring members are enormous, and banks may not be willing to take on additional buy-side firms due to the legal uplift and related costs. One primary dealer stated that their "resources are much more likely to be spent on a $1T+ asset manager than a 100mm hedge fund."

In summary, many respondents expressed concern that firms on both the supply and demand side for repos may be pushed out of the market due to the increased costs and operational challenges associated with mandated central clearing.

Liquidity

Respondents in our study were very concerned about the effect that a repo clearing mandate would have on market liquidity. Most participants were not optimistic on whether mandating the clearing of repo transactions will add liquidity, with many stating that liquidity will likely worsen. One large asset manager explained, ***"it's not creating more liquidity but creating more costs."*** Respondent views directly contradict the SECs suggestion that a clearing mandate will help liquidity in the market. Respondents noted that the costs and operational build out required to comply with the SEC could worsen overall liquidity in the market. For example, increased costs on repo transactions have the potential to drive out both banks and investors, decreasing repo trading volumes and ultimately driving liquidity down. Considering that the repo business operates on lower profit margins, there is concern that day-to-day market liquidity could decline as participants migrate to other sectors and products. For example, one primary dealer raised the concern that ***"there are knock on effects of increasing costs and it will lead to lower liquidity and less players and less transactions and become more expensive with wider bid ask spreads."*** It concluded by suggesting that ***"this all leads to less liquidity and a more unstable market."*** Respondents also expressed concern regarding the disproportionate default risk on the dealer side. They explained that the repo market could become constricted to only include the largest banks who are able to handle the operational changes and legal obstacles associated with the mandate. Participants explain that if one of those large sponsoring entities defaulted, it would ***"wear on the performance, and sponsorship may go away entirely, and that won't be good for the market or liquidity.»***

Will centrally cleared repo improve liquidity

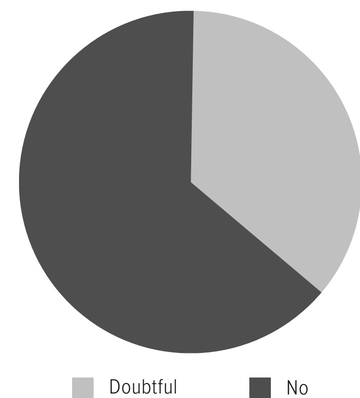


Liquidity in Times of Stress

Respondents were also concerned with the impact on liquidity during periods of market volatility or stress. The SEC proposal suggests that Central Clearing will help firms better navigate market disruptions that they experienced in 2014, 2019 and 2020. However, several market participants indicated that there would be no benefit derived from a clearing mandate. As SIFMA writes in their comment letter to the SEC, ***"we have seen no convincing data showing how a requirement to centrally clear along the lines proposed in the Proposed Rule would have fixed the issues and liquidity problems experienced during the flash rally of 2014, the stress in the Treasury repo market during September 2019 and the COVID-19 market shock of March 2020."*** As another primary dealer states, it is ***"not convinced that any of the recent volatility incidents would have been prevented by this mandate."*** Considering that FICC will act as a single clearing house for the repo market, it may not have the extensive risk management capabilities needed to react to extreme market disruptions. This is primarily because ***"concentration risk at FICC will be substantial, if things go south, that gets very bad very quickly."*** Another primary dealer echoed the sentiment and added that ***"when [clearing] gets moved to the public sector from the private sector it becomes less efficient."***

Participants are also concerned that the lack of clarity and understanding regarding FICC margining models makes it difficult to anticipate how FICC will react during periods of market volatility or stress. Firms are primarily concerned that if the FICC remains opaque post implementation of the clearing mandate, they will not know how to evaluate posting margin requirements. As one firm noted, ***"if they were to become sole clearing, they would have to become more transparent, or we'd be worried how they react in times of stress."*** Another asset manager explained that its firm, ***"needs to know how to manage out risk properly, especially for intraday margin calls. It would be beneficial to all market participants to have greater transparency around these things. Because if one member were to default it could cause a cascading effect."***

Will centrally cleared repo improve liquidity



FICC Infrastructure

Additionally, many respondents explained that if FICC issues are not addressed prior to the mandate going into effect, it may only worsen problems in the repo market. Respondents indicated that FICC is not ready to handle the influx of business that will be accompanied by the clearing mandate for repos. One primary dealer said, ***"FICC has experience, just not enough to handle this amount of repo volume."*** Participants in our study shared multiple concerns regarding their views of FICC. Respondents explained that FICC needs to improve its systems and infrastructure before it can manage the operational and legal issues accompanied by an influx in demand. An additional primary dealer indicated that ***"there is a lot of work to do on the FICC side. legally and operationally, [it] will be hard."*** Furthermore, a large asset manager suggested the FICC ***"should hold off on repo [clearing] and focus on improving the FICC ecosystem first so there isn't a single point of failure that's overloaded."***

Specifically, ***"the overall record keeping aspect would be need to be improved at FICC as any trades they novate they only know the Omnibus account, they do not know the sponsored members detail."*** Additionally, FICC needs to have resources in place to ***"set up a huge number of added accounts through the sponsored program, which they may not be able to do [in a] timely [manner]."*** Respondents also emphasized concerns over the general lack of transparency regarding the functionality and access to FICC models. One asset manager agreed, stating they ***"have no idea how the access models would look like it's hard to say how this is a good idea without that information first."*** A trade group expressed similar views, saying that the ***"fear is access models are not robust enough to allow non-members to participate."*** Respondents' skepticism of the FICC is a principal component of their opinion that the clearing mandate will not have the intended effect on the repo market.

Conclusion

Overall, participating firms interviewed for this study were unclear on the efficacy of the SEC's clearing mandate on repo and reverse repo transactions. Firms are primarily concerned with increased margin requirements on an already low margin business, doubts regarding FICC's ability to handle this mandate, including operational costs, legal costs and associated challenges. As a result, a large majority of market participants believe that the SEC's mandate will not have the intended effects on the repo market. Firms emphasized the need for further research and detailed analysis, proving the market wide benefits for centrally clearing repos.

03 Liquid & Illiquid Securities

Impacts of Central Clearing on a firm's ability to trade liquid or illiquid securities

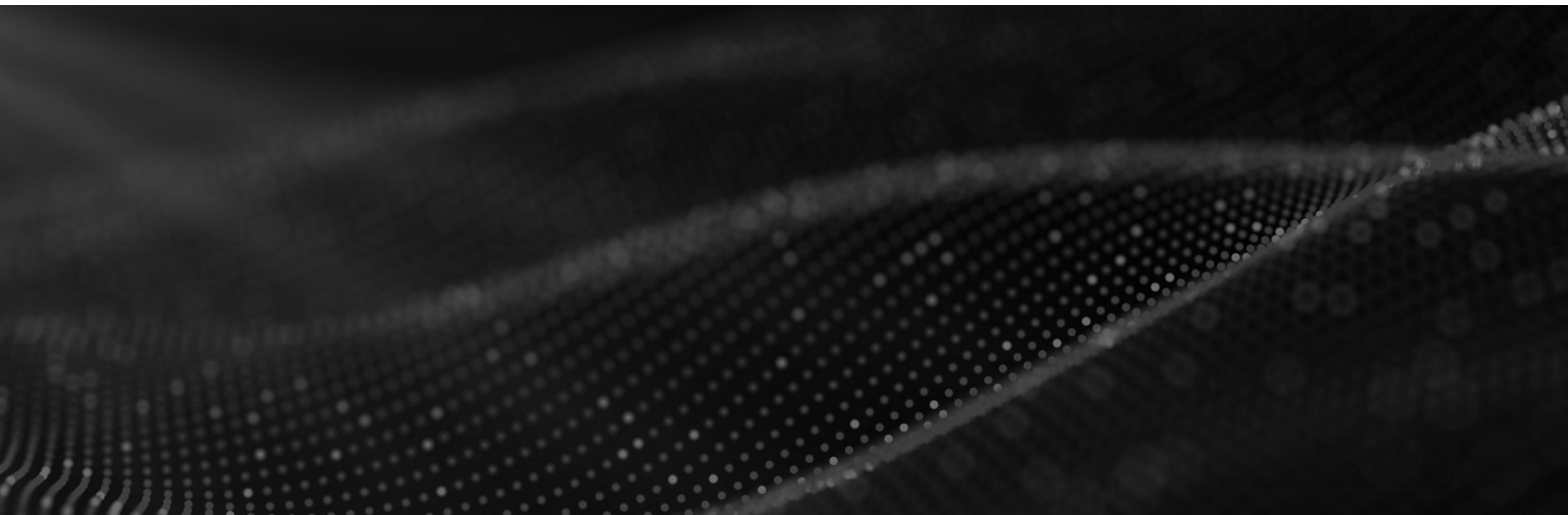
Overview

We asked market participants their views on the impacts of Central Clearing on a firm's ability to trade liquid or illiquid securities (On & Off the Run's), both in the Treasury market and in any fund/financing products.

The SEC proposal suggests that the Central Clearing mandate will increase trading activity in the U.S. Treasury and Repo markets. However, most respondents in the study, across all institution types, explain that the mandate would impact market operations and decrease levels of U.S. Treasury and Repo trading. Participants emphasize that demand for trading will not increase solely by changing the process for clearing securities. While the exact outcome of the clearing mandate remains unclear, participants referenced their previous market experience when providing feedback on the SEC proposal and identifying potential impacts on the market.

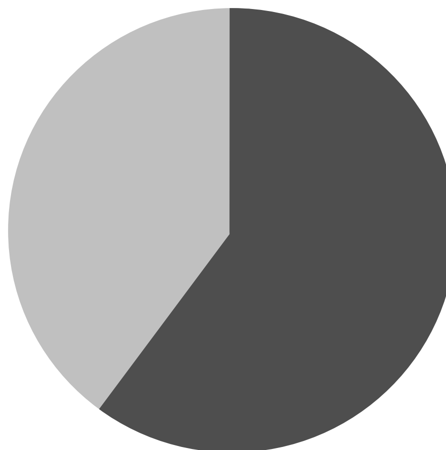
Liquidity

Respondents were unanimous in the view that the liquidity gap will likely remain between on-the-run and off-the-run securities, with off-the-run securities experiencing lowered levels of liquidity in the market. This gap is a function of the Treasury market and indicative of how different securities are traded and priced. Participants explained that the clearing mandate would not increase liquidity across the various securities, particularly during periods of market volatility or stress. One primary dealer noted, ***"they're trying to prevent the 2020 reaction, but I don't think they can."*** Additionally, respondents suggested that the mandate would not mitigate their concerns or the potential impacts to the market. One investment firm explains, ***"we do not see how clearing enhances liquidity at all—for the same reasons as transparency—to us it feels very piecemeal. [This mandate] is not really addressing the underlying issues in the market."***



Will central clearing impact your firm's ability to trade liquid or illiquid securities, both in the Treasury market and in any fund/fincancing products?

Do you expect the potential effects on your firm's ability to trade liquid or illiquid securities to be positive or negative?



Approximately 20% of participants believe that central clearing will impact their firm's ability to trade liquid or illiquid securities in the Treasury market and in any fund/financing products, whereas 30% believe that it would not. Additionally, half of the participants we spoke with believe that there is the potential for a meaningful impact on their ability to trade liquid or illiquid securities, but there is not a consensus between the respondents on whether that potential is positive or negative. Through our discussions with participants, we identified whether responses mentioned potentially negative or positive effects, or if responses were unclear as to whether the effects could be positive and/or negative, and then categorized the responses as such. Of the 50% of respondents that identified potential effects from the clearing mandate on their trading of liquid and illiquid securities in the Treasury market, 60% foresee the effect to be negative compared to the 40% who could not decide based solely on the information that they have.

Respondents explained that potential increases to both operational and trading costs would impact trading volume in the market. Participants highlighted potential increases to FICC margin requirements as one of the leading costs associated with the mandate, considering that many market participants trade bilaterally with no Master Netting Agreement/Collateral Support Annex (CSA). This would result in extra costs and cash flow requirements for counterparties that would no longer be allowed to trade bilaterally under the proposal. Such increases to cost could lead these participants to scale back their operations in the Treasury market or withdraw entirely for a substitute short-term securities product. One investment firm explained, ***"when you think of liquidity, we usually think about it in terms of costs, and no question a clearing mandate would increase costs."***

In addition to the new CCP margin posting requirement, most respondents argued that the adoption of Central Clearing would widen spreads, particularly in off-the-run securities, thus increasing costs to trade those securities. Participants explained that Central Clearing would add an additional layer of complexity and costs for those trading in the market. A small cost increase of 2 basis points could mean business continues as usual, whereas a cost increase of 30 basis points could make a big difference to firms both large and small. However, any cost increases could potentially make Treasury and repo trading cost-prohibitive to smaller participants. As a result, smaller participants may exit the market, thus decreasing overall liquidity. One third party participant, who works extensively with market participants, explained, ***"cleared transactions today have margin practices [with costs that] are significantly less than what FICC requires. If you [mandate these transactions] into [requiring clearing through] the FICC, these transactions [which were previously not cleared] will [see an] increase in margin costs. [The large players] absorb them, not the smaller players."***

Models

Additionally, institutions have so far been unable to replicate the models that the FICC uses in determining and calculating margin requirements. If there was another liquidity crisis and the FICC unilaterally increased margin requirements, as it has done in previous crises, costs could increase exponentially for market participants depending on the degree of leverage being utilized. Thus, necessitating a "wave of unwinds". These costs cannot be currently forecasted, which adds a degree of uncertainty and the need for higher capital reserves, which is, in itself, an indirect cost. For instance, a global asset manager remarked, ***"I just don't know [the impacts on the firm's ability to trade] without knowing the margin. It's really going to be a function of the margin. My gut says 'no' but I can't say for sure."*** They continued to suggest, ***"think about futures, that margin change changes our appetite."***

Implications felt in other markets

Several respondents explained they have had experience with moving to a centrally cleared model for other financial products, specifically interest rate swaps, and were able to offer insight that they believed would translate to the Treasury and repo market. For example, participants noted that the introduction of central clearing for interest rate swaps (IRS) derivatives did not significantly change the liquidity of 10-year on-the-run versus 10-year off-the-run swaps. However, the respondents explained that there is a possibility that Central Clearing could be beneficial for liquidity at the margin, particularly in deep off-the-run trades.

One participant referenced the move to cleared derivatives, noting the aversion to the change when it was first introduced before the rule ultimately received widespread adoption. They explained that market participants began trimming their risk exposure initially, which could likely be the case with clearing for U.S. Treasuries and Repos. One investment firm noted, ***"many investors had no interest in a similar derivatives proposal. Eventually, because it was mandated, they had to adjust. Resistance was very strong at the beginning."***

Respondents were also unclear on how central clearing would meaningfully increase liquidity for more illiquid securities. One primary dealer explained that central clearing ***"will not magically provide more securities to borrow against"*** for hard-to-find securities or smaller issue types.

04 Term vs. Overnight Repo

The liquidity or lack thereof of the Term vs. Overnight Repo market

Overview

The liquidity or lack thereof of the Term vs. Overnight Repo market has been flagged by participants as a concern. Given market conditions—rate hike environment—most firms do not want to invest in term repo. We asked participants what they felt was the prognosis for the impact of Clearing on the liquidity of the repo market and the demand for collateral and whether there should be a role for the Fed reverse repo facility.

Approximately two out of every three respondents shared the belief that Central Clearing would negatively impact liquidity, to some degree, and cause further challenges for term vs. overnight repo market. Of the participants sharing this belief, 28% definitively said that central clearing would cause Ill-liquidity challenges, 11% said that it would cause challenges specifically on longer-dated term repo transactions, and another 28% believed it has the potential to cause challenges.

Challenges

Respondents who indicated that the mandate would cause challenges explained that under Central Clearing, the term repo market will correlate with how the overnight repo market trades due, in part, to the margin required to be posted for term repo trades. Increased costs for trading in the term repo market could make it less attractive for financial institutions to participate, leading them to utilize overnight repo or open-ended repo transactions.

Do you expect the potential effects on your firm's ability to trade liquid or illiquid securities to be positive or negative?

Negative · Potentially · Yes · Yes - Long Term Repo

Expensive term repo trading along with additional operational costs in a Centrally Cleared environment could discourage institutions from participating and result in lowered levels of market liquidity. One investment firm explained, ***"I would agree with the term observation. It's hard to do a term in a cleared environment. We would do less term for sure, and I think it would have correlation to have the overnight market would trade. In a less volatile market you'd see a little less liquidity. In a very volatile market this could be a complete drain. We would just stay away in stressful times."***

As one primary dealer stated, ***"term is important [for] stability [and for institutions to be able to] manage their funding [requirements]."*** Respondents noted that in the current environment of increasing rates, a significant number of institutions are forgoing term repo on both sides of the trade. Institutions do not want to get locked into a lower rate in a repurchase agreement than they could if rates were to rise. Additionally, the move away from term repo would lead to firms' funding needs occurring on a less predictable basis, according to respondents. Overnight repo would become the primary funding mechanism for numerous participants, provided that the liquidity could support the pressures from all the additional need from institutions. This rise in demand would increase the costs for participants in the market. While costs may increase, there will still be a demand for repo as a means of borrowing, however other short-term lending options, such as commercial paper, may become more attractive, with some institutions directing their borrowing elsewhere. As a result, borrowing costs for accounts that need leverage would be impacted, ultimately increasing risk across the industry.

Standing Repo Facility

The Federal Reserve created the permanent Standing Repo Facility (SRF) in July of 2021, to act as a backstop for large banks in the event of a liquidity crisis. Considering the repo facility acts as a backstop tool, ***"the facility's minimum bid rate should be set above rates in overnight repo markets under normal market conditions, so as not to unduly influence price discovery in short-term funding markets on most days, while still providing effective control of the fed funds rate."***

Several market participants called for increasing access to the SRF beyond primary dealers and depository institutions to include ***"asset managers, sovereign wealth funds, and other large institutions [could] improve the effectiveness and efficiency of the SRF – and market liquidity and functioning [and that] doing so is consistent with the Group of Thirty's 2021 recommendations for improving market structure."***

In a less volatile market, this shift in borrowing behavior may lead to lowered levels of liquidity in the repo market. However, in a more volatile market, this shift could result in a complete drain of liquidity as some institutions may choose not to trade during periods of market volatility when they are less willing to take on additional risk. One investment manager said, ***"if all of the leverage [in the repo market] is rolling every day [instead of having a set] term, that is more dangerous than [if the leverage was] scheduled and termed out. For major events such as those in 2020, 2019 and 2014, central clearing will do nothing [to increase liquidity/decrease risks for] those products at all."***

05 Use of Leverage

The SEC proposal's **impact on the use of leverage**

Overview

We asked investor participants what they felt the SEC proposal's impact would be on the use of leverage. Additionally, we asked primary dealer participants if this proposal will impact their use of leverage or fixed income financing with their clients.

We spoke with market participants to determine what they foresee as the effects of leverage, from both the buy-side and the sell side, as the impact could differ considering that the buy side is a leverage taker, and the sell side is a leverage provider. We found that despite the type of institution, or the service that they provide, only a small percentage of respondents (14%) believed there would be no impact to leverage.

86% of respondents believe that Central Clearing would, or could, impact their institution's leverage or fixed income financing with their clients, with 36% taking a less definitive stance on the negative effects, sometimes also identifying potential benefits.

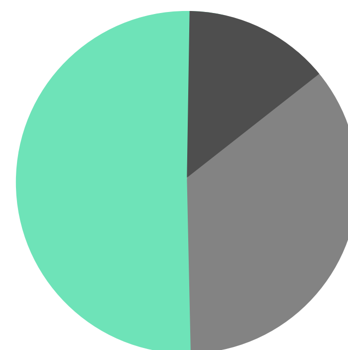
Cost Considerations

Respondents noted that the increased costs associated with central clearing could make leverage more expensive, which would change how financing desks operate. Such changes would require firms to re-evaluate the price of leverage, determine the calculations for what derivatives to use, and other factors.

Another respondent pointed to the erosion of sponsored repo transactions for banks in anticipating impacts under a central clearing mandate. Respondents that noted potential impacts to their business questioned how this mandate would be beneficial to the market, with a pension fund saying, ***"why would you post collateral and margin on a trade that settles the next day?"***

There are also shared concerns about the concentration of the market with the Fixed Income Clearing Corporation (FICC) as the single U.S. Treasury and Repo clearinghouse, including limiting access points to individual dealers in the market. Respondents explained that there is value in diversified funding in the repo market, and concentration would all but eliminate this value. One asset manager noted that the mandate could increase the cost of sourcing capital for hedge funds, however that will not deter them from attaining leverage. Such concentration in the market may force hedge funds to take on additional counterparty risk, which may benefit fixed income prime brokers, but harm the rest of the market.

Will centrally cleared repo improve liquidity



Cash provider institutions noted that participating in a centrally cleared mandate would require changes to their collateralized repo products and cause them to incur additional costs. Abandoning these products could increase U.S. Treasury and Repo market concentration and further limit the diversity of participants. One investment firm explained, ***"as a cash provider, we do have some products that do collateralized repo that would not be able to participate in a centrally cleared mandate without changes."***

A smaller group of participants shared neutral responses regarding the proposals' effect on leverage and fixed income financing. Respondents explained that as a result of netting practices through central clearing, firms could free up some capital on their balance sheets to utilize those resources elsewhere. One primary dealer explained, ***"it could clear up the balance sheet and other resources that could be redirected. But it comes with increased capital allocation to the CCP. I'm not necessarily sold that it will have a detrimental impact."*** Another primary dealer noted that, ***"from a balance sheet perspective, if that's the binding constraint, then this could add liquidity but that's not a certainty."***

Implementation

Most respondents agreed that the impacts will depend on the characteristics of the FICC model and costs associated with the mandate. In implementing the mandate, it's crucial that these models consider all market participants, and does not just benefit a select few (i.e., dealers). It's also important to consider a phased-in process for implementing any changes to identify the potential impacts on liquidity and market diversification, monitoring any negative effects while the mandate is executed. One primary dealer explains, ***"you could assume that every bank is trying to quantify what the forwards look like for their fixed income business. They know the forwards will be less, the question is by how much."***

06 Cross Product Netting

Implications regarding netting exposure for **market participants**

Overview

A major concern amongst industry participants is the implication that the clearing mandate would have on netting exposures for market participants to offset their risk and collateral obligations. Many study participants explained that mandating clearing for repos and Treasuries would force participants to post margin when they otherwise would not. Participants made it clear that this scenario would increase the cost of trading and ultimately reduce participation in the market. Currently, FICC rules dictate that netting does not reduce collateral for centrally cleared trades. Study respondents identified the lack of netting as a noticeable pain point of the SEC proposal. Participants recognized that a relatively simple netting solution that could offset risk would be beneficial. Specifically, respondents identified gross margining as an effective way to reduce the collateral needed to conduct centrally cleared transactions. These firms called on regulators to standardize netting for transactions for gross margining as it would benefit all market participants.

A primary dealer indicated that the simple netting of opposing exposures would be beneficial to reduce collateral costs. Additionally, they emphasized that regulators should standardize netting, saying that ***"one solution is gross margin. Anytime there can be netting benefits to reduce costs of collateral it will be a good thing. If it's a nonparticipant it starts to reduce the credit risk. Standardization of the haircut model and processes is an easy problem to fix. It's one of the primary issues, and it needs to be addressed."***

A dealer participant echoed the view that netting would lower transaction costs and increase market participation noting, ***"for us we view netting as a positive. More supply is always better for us. More market competition and lower transaction costs are a good thing."***

Participants also expressed the need for proper due diligence to standardize the netting process, if implemented. They explained that forcing bilateral trades into a Centralized Clearing model would impact market participants and their ability to trade U.S. Treasuries and Repos. Participants urge that regulators and DTTC provide further guidance to address this issue.

A primary dealer in our study shared this concern, acknowledging that netting would benefit centrally cleared Treasury products. They also expressed concern that central clearing would not benefit their organization due to additional costs associated with margin increases for cash treasuries and repos. They urged the DTTC to consider such concerns and stressed the importance of having a reliable clearinghouse explaining, ***"we are concerned with bilateral trades as the CCP poses fixed income challenges across asset classes. What will the haircut be? The contractually guaranteed for netting will need to be as effective as possible. The problem is that this will not be perfect. How does central clearing help me? To realize the benefits of centralized clearing there are questions to be answered."***

They added that ***"from a netting perspective what is guaranteed from this?" They continued by questioning, "if there is an issue and collateral doesn't rise, [we're] concerned with CCP settlements from equity issues; and for the benefit to be realized, there needs to be a lot of issues cleared up by regulators and the exchange."***

They added that ***"from a netting perspective what is guaranteed from this?" They continued by questioning, "if there is an issue and collateral doesn't rise, [we're] concerned with CCP settlements from equity issues; and for the benefit to be realized, there needs to be a lot of issues cleared up by regulators and the exchange."***

Expanding upon the netting of opposing long/short exposures within the same security, participants were concerned with moving out of a bilateral trading environment as they could no longer take advantage of cross product margining. Study participants in favor of implementing cross product netting through the FICC cited improved market participation, enhanced liquidity, and lessened impact on bank's Supplementary Liquidity Ratios (SLR). Participants recognized that cross product margining would most benefit primary dealer Banks, Hedge Funds, and Principal Trading Firms. They also suggested that repo products would be most affected by increased collateral requirements. Participants recognized that implementing cross product margining to help net exposures would be a substantial undertaking as intricate agreements would need to be put in place across exchanges.

As a result, some participants indicated it would be unlikely that cross product margining is implemented. Many participating firms called on regulators for additional guidance and to provide comparable regulation between different types of firms.

Benefits of Cross Product Margining

A hedge fund participant in our study explained that cross product margining would reduce the margin that participants would need to post when compared to bi-lateral trades, ultimately improving liquidity in the market. This participant also noted that with no clear way to achieve cross product netting, participation in the market would be reduced. They urge regulators to consider the full scope of consequences that a clearing mandate would have on this sector of the market.

A levered investment entity in our study explained that netting would be particularly beneficial for banks, in saying, "Cross product margining is important—if the FICC and CME have collaborated agreement— the market would take advantage of IR futures and IR swaps for both repos and cash treasuries to ensure that financial products are cross margined, and participants are provided liquidity relief." They continued in remarking that "right now, cross product does not exist on exchanges, and this will be crucial for the Hedge Fund community if they want to reduce the margin they want to post." They further noted that "[when] compared to a bilateral trade this will be more capital intensive. This scenario increases costs relative to bilateral trades and the SEC needs to be careful. They need to understand the consequences this would have on liquidity and not have an oversight with this risk. In the end we're not at the stage of cross margining for direct members and we're a long way off from having benefits for end user community."

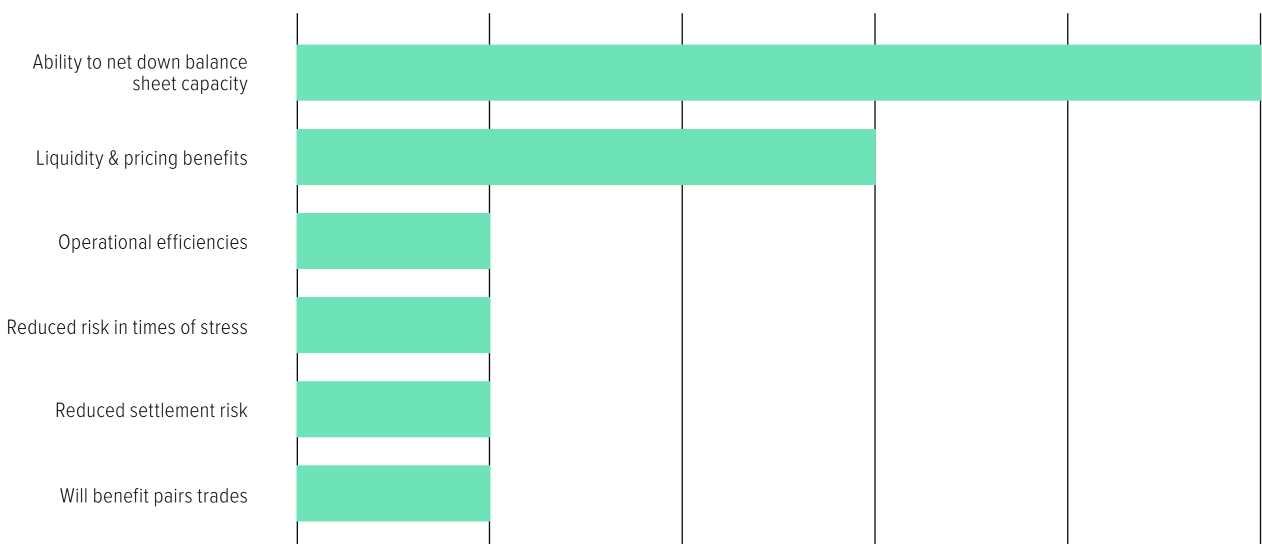
One primary dealer explained that if cross product margining were put in place it would help to reduce risk, specifically during periods of market volatility or stress (i.e., March of 2020). The dealer noted "[they] see cash and futures benefits. Cross product margining between cash and futures would reduce 2020 risk on Relative Value traders, allowing market participants to fund margins on the future leg and enabling off-sets."

A fellow primary dealer reiterated the benefits of cross product margining, stating that cross product netting would reduce the cost of collateral. They further acknowledged that if FICC allowed the standardization of haircuts, it would enhance the overall central clearing process. This dealer explained,

"Cross product netting involving treasury futures and customer treasury transactions would be beneficial. If the DTTC could allow proposed common margin and things like cross entity netting and cross product netting this would provide many benefits such as reducing costs of collateral requiring counterparties to post margin for non-centrally cleared treasury repos. Open clearing will be enhanced if the FICC has access to the Fed's standing repurchase facility and can allow standardization of haircuts."

While study respondents identified the benefits that cross product margining would have on Centrally Cleared Treasury transactions, they recognized the extensive costs for implementing in a Centrally Cleared exchange.

What do you consider to be the benefits relating to Cross Product margining?



Difficulties of Implementing Cross Product Margining

Study participants universally acknowledged that implementing cross product margining would be a lengthy and complex endeavor. They explained that cross product margining would require a netting of varying financial securities across different exchanges.

Participants emphasized that drafting the contractual agreements between different exchanges would be costly and logistically challenging. An effective cross product margining process would need to be supported by a robust risk management framework that is cooperatively managed by the exchanges involved. A hedge fund in our study identified the need for cross-collaboration among the various exchanges explaining,

"Currently there is not a clear way end users get cross CCP netting if possible. For a lot of Relative Value players there are risk off sets if they can't net exposures across exchanges. For netting to occur the various CCP's need to coordinate as dealers cannot net within CCP. They can only net with balance sheet and get directional book and repo trades in one direction."

A primary dealer furthered this view, acknowledging that cross product margining would require a large operational lift for those trading in the market. They expressed the need for a cooperative default management process and risk framework across exchanges saying,

"Cross product margining would need to be supported by robust risk management framework and conservatively managed. It would also need a coordinated default management process. In order for cross product margining to occur there needs to be close coordination among exchanges. We've discussed this with the CME and DTTC and no one has raised questions around OTC cleared products as the majority of these products are cleared by LCH. The ability for buy side clients to invest and meet these criteria from an operational perspective this is a big lift. Like NCDM (non-cleared derivative margins) it will be a long and delayed process for the industry to adjust and is a heavy lift."

Beneficiaries of Cross Product Margining

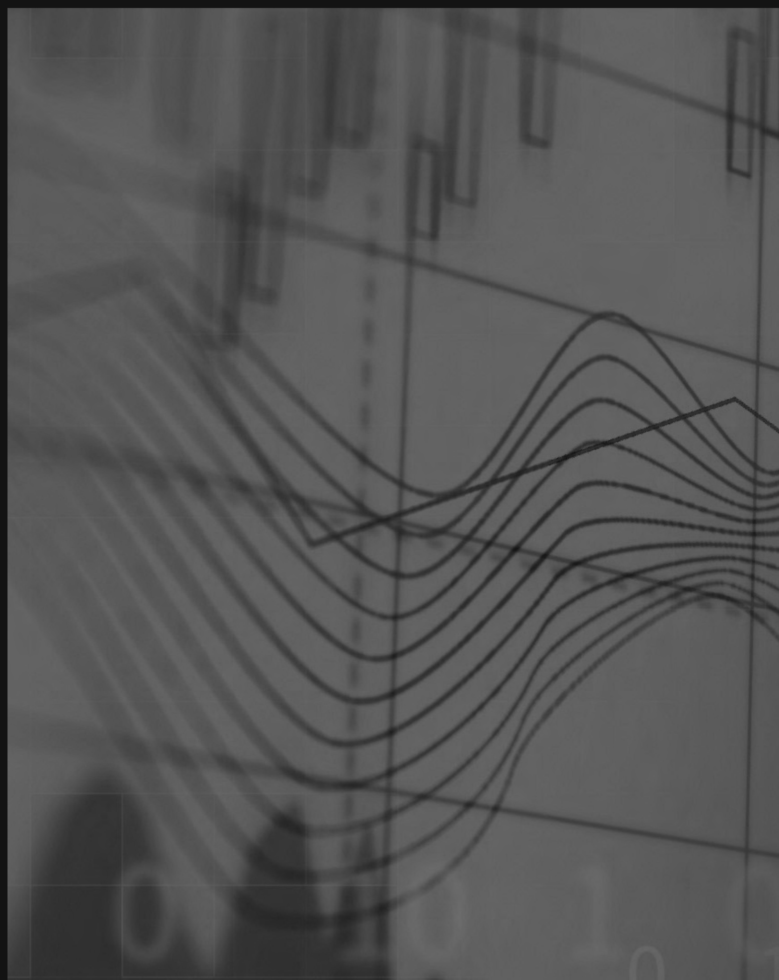
Participants recognized that cross product margining would not benefit everyone in the industry equally. Participants noted that highly leveraged participants such as Hedge Funds and Banks would benefit the most from cross product margining. Additionally, they indicated that repo securities would be most impacted as a result of cross product margining.

One primary dealer participant acknowledged that prime brokers and hedge funds would stand to gain the most from a margining and netting perspective. They also echoed participant views that repos would be the security most impacted by the clearing proposal. The bank explained,

"From a Prime Broker standpoint, we are in the middle of the trades. We would be affected by this proposal. Those who will be impacted are Hedge Funds and how we allocate margin specifically for repo trades as the margin we would collect would be impacted and we would be even more impacted from a Cross Product Margining perspective." A levered investment entity in our study explained that netting would be particularly beneficial for banks.

They noted that banks, specifically primary dealers, can assist by netting down their exposure and reduce exposure to risk weighted assets. This participant also acknowledged repos as being impacted the most by increased margin requirements. The investment entity explained,

"Netting is a big advantage for banks. If you think about how derivatives trade and you could net down the notional and net down to zero that has benefits to the primary dealer banks and has benefits for your SLR, notional element, off-balance exposure and risk weighted assets. If you can net a risk weighted asset against a derivative notional based on the counterparty this will allow for more trades to occur. Banks will get benefits with gross vs. net reporting. You already see this with derivatives and trade compressions that took hold after Dodd Frank that collapsed trades on the capital side. If you look at balance sheets---asset liability management for repo would collapse. Due to the developments of primary dealer scores with tougher stress tests—and stated goals for tightening the capital for Basel 4 regulations, there is very much a willingness to lower risk weighted assets. Derivative capital has gone down—this is a technical fix and non-obvious to the political folks. Centralized clearing—this makes sense—objectively moving bilateral to centrally cleared is safety but all factors should be considered."



Arguments Against Cross Product Margining

It's important to note that other participants in our study were not in favor of cross product margining and netting. These participants suggested that netting benefits would not impact their ability to trade, adding that only leveraged participants are likely to derive any benefit. Additionally, participants questioned the extent of the impact that cross product margining would have on those trading in the market. They explained that cross product netting would not benefit either buy-side or long only firms. Other participants expressed concerns regarding trades that would have exposures across multiple exchanges.

A primary dealer participant noted that netting benefits went solely towards parties that use leverage to trade in the market. They acknowledged that the benefits from cross product margining were minimal and that the new clearing model would not support it. The bank explained,

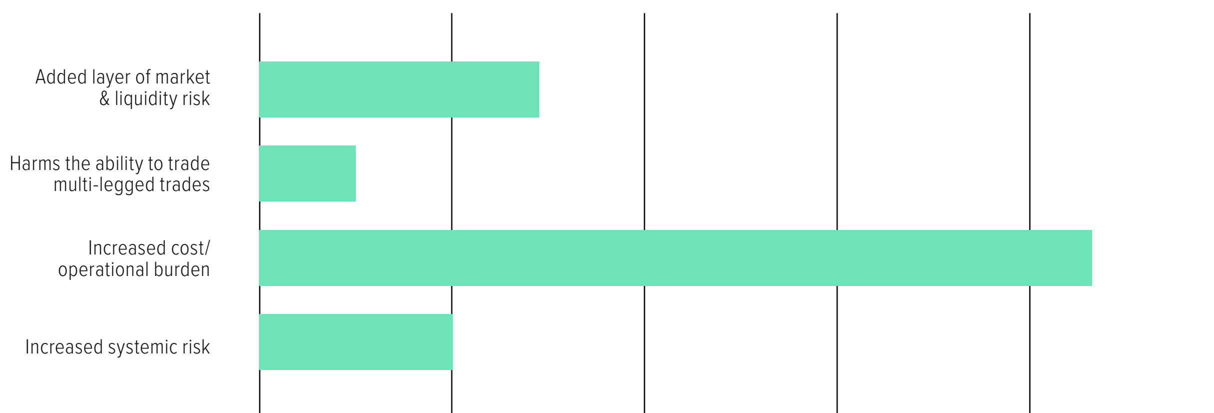
"The netting benefit is small for long only. There are only benefits from netting for leveraged participants. From a netting perspective, if those Principal Trading Firms / Hedge Funds use Inter Dealer-Brokers to facilitate for that regard by not novating to the CCP then the Inter Dealer-Broker will need to net those down. All that is naturally happening and to continue this process they may need the FICC to shift netting to another party. It is not clear that the netting benefit will be substantial. The transaction counterparty does those make material difference. The new clearing model will not allow cross product margining with a sponsored entity which creates difficulties for those doing this previously. However, real money can't really see benefit since they are only on one side of the trade. If you are not using leverage, you don't see benefits."

One investor participant explained that cross product margining would expose them to other exchanges which would violate their business operations. They remarked, ***"my concern is I don't want to be exposed to a different exchange if we do not have them on our approved list. Amongst the affiliates at the DTTC the margins cannot be crossed and at the prospect they could be crossed we would stop doing sponsored trading."***

Conclusion

In conclusion, the majority of respondents in our study identified potential benefits that netting and cross product margining would have on their trading activity and participation in the market, should the Central Clearing mandate be implemented. They explained that reduced margin requirements would improve market participation and make it less costly to trade. Participants acknowledged that primary dealers and Hedge funds stand to benefit the most and that repo securities would be greatly impacted by the proposal. Participants urged regulators for further guidance and consideration of the impacts that a central clearing mandate would have on netting capabilities. They noted gross margining as a realistic achievement to help reduce collateral costs. However, participants understood that achieving cross product margining would be a challenging endeavor. Nonetheless, participants were optimistic that cross product margining would remain a consideration among regulators across exchanges.

Should the ability to Cross Product Net be taken away, what would you consider to be the resulting difficulties that would arise?



07 Impact of CCP on Institutions' Business & Investment Models

Challenges which could impact **firm's Business Models**

Overview

The SEC's proposal for mandated Central Clearing of U.S. Treasury and Repo through the FICC will require market participants to navigate through a number of operational and cost related challenges. While the SEC expresses a view that mandated clearing will benefit market participants and overall market functionality, firms should first consider how the proposal will impact them, their clients and the market as a whole. In preparing for these regulatory changes, market participants should review their ability to absorb additional operational costs and to what extent their day-to-day business model would be impacted. Through our discussions with participants in both the dealer and investor communities, firms provided insight into what they consider to be the most notable obstacles in implementing mandatory clearing, including any costs impacting their ability to participate in the market.

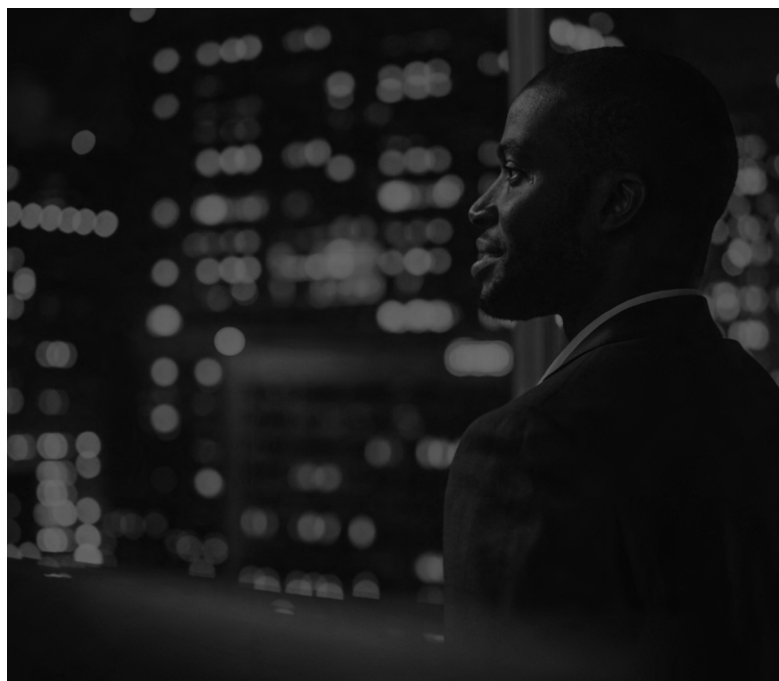
Impacts

Participants from both the dealer and investor communities explained that they will be impacted by increased costs as a result of the SEC's proposal. Additionally, participants shared that the degree to which a firm is impacted depends on several factors including, a firm's size, existing operational infrastructure, their exposure to the U.S. Treasury and Repo products, and their overall function in the market.

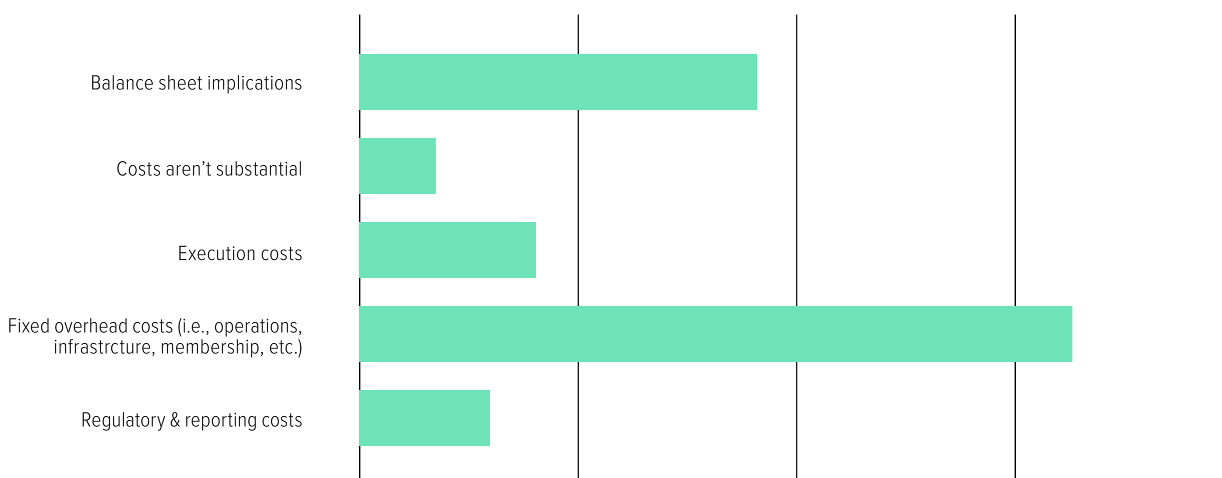
Many participants expressed hesitation in shifting from a bilateral to mandated central clearing model as they are concerned the migration will increase both initial and overhead costs (i.e., membership costs). Participants explained that such increases would have negative downstream impacts on the U.S. Treasury & Repo markets, with a large asset manager viewing this proposal as ***"raising the fixed costs of being on the buy side or sell side [while] the bigger players gain an economy of scale at the exchange."*** This primary dealer further noted that, ***"when you're only trading a small amount of treasuries a year, every cost is heavier on you."***

Several firms identified implications from a balance sheet perspective and raised concerns regarding the tightening of spreads, especially when considering that profit margins for the U.S. Treasury and Repo market are already low. A large insurance firm in the study said that ***"the issue for us is the imposition of the margin cost"*** and noted that the repo business is already the lowest yielding asset in their portfolio. A primary dealer also touched on this point, saying, ***"the Repo business is, for most banks, not a high ROI business"*** and they felt that this mandate could cause firms to reconsider their participation in U.S. Treasuries and Repos, in favor of higher returns elsewhere in the market.

The majority of participants agreed that increases to operational costs will impact smaller firms to a greater degree, specifically among smaller firms that may lack the existing operational framework, back-office budgets, and staffing resources necessary to handle a large transformative operational exercise. One primary dealer remarked that the ***"barrier to entry [in the market] would be higher, due to higher fixed costs"*** and pointed out that this will ultimately have a negative effect on liquidity. Another primary dealer explained that even larger firms, specifically those less active in the U.S. Treasury or Repo space, may not be able to justify substantial operational investments to migrate to a Central Clearing model.



Should the ability to Cross Product Net be taken away, what would you consider to be the resulting difficulties that would arise?

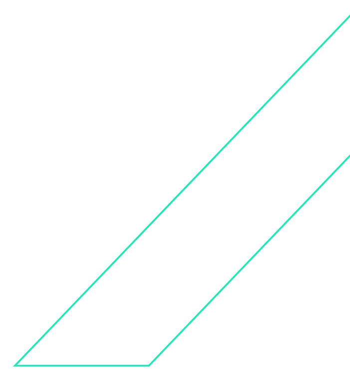


While many participants shared the view that smaller firms will be impacted the most by mandated clearing, numerous bank participants also raised concerns from a cost perspective. One primary dealer explained that this proposal would cause them to ***"consider savings in the back office and the shifting of risks"*** across their organization, in an effort to offset added costs incurred from the mandate. However, several participants disagreed with this perspective with one hedge fund noting that added costs facing dealers would be relatively inconsequential. A ratings provider emphasized this point, saying that the proposed regulatory changes would not impact large banks in their ability to clear trades.

Participants noted that the industry's approach to implementing mandated central clearing could be similar to the enactment of Dodd Frank, where firms will have to adapt to challenges from a changing regulatory landscape. Additionally, several participants were in favor of a multi-year phase in approach, as seen with Dodd Frank, for the migration to mandated Central Clearing. A primary dealer echoed this perspective, stating ***"if you did all of this in one day, [the market] would implode."*** They continued, noting that this implementation will take a significant amount of time to complete, and that a phased-in approach will ultimately lead to better outcomes.

While numerous participants held the view that smaller trades would be impacted to a greater degree by mandated clearing, other firms argued that the effect on smaller trades would be relatively inconsequential. For example, a hedge fund participant explained that ***"there are plenty of dealers out there that are willing to trade both big and small lots."*** Additionally, one large pension fund participant noted that trade size does not impact the ability to participate in the market under new regulatory changes. Furthermore, they described the impact on smaller trades, stating, ***"yes, it's going to cost more, but if we have to trade a small lot, we're going to trade it regardless."***

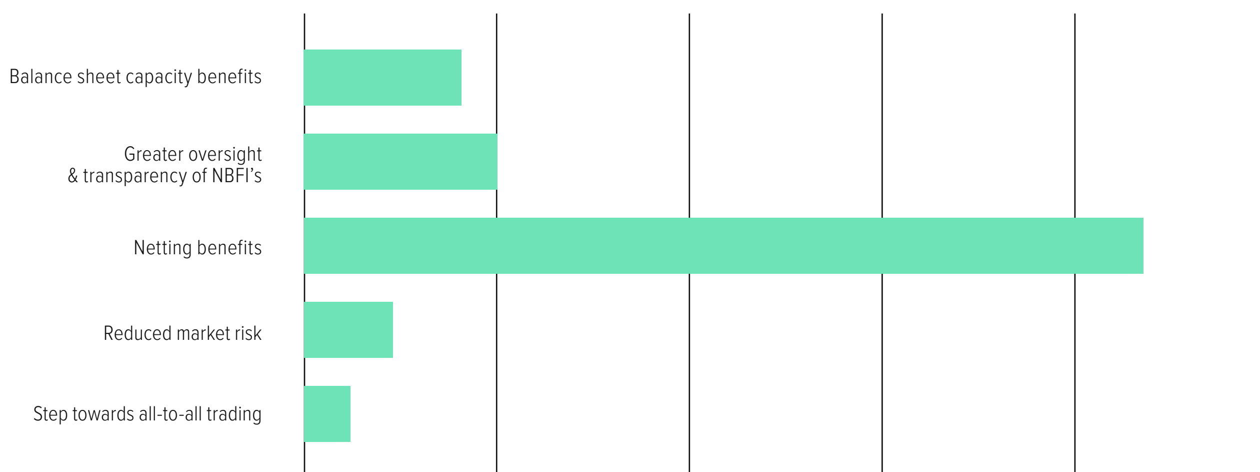
Most participants, in both the dealer and investor communities, held the view that implementing mandatory clearing would impact all participants in the U.S. Treasury and Repo market. This includes added regulatory requirements and associated costs directly impacting market participants, as well as any residual costs passed on from dealers to investors. In summary, participants emphasize that larger firms, in comparison to their smaller counterparts, will be better equipped to absorb added costs and operational challenges incurred in this mandate.



Cost vs. Benefit Analysis

A group of participants shared that the central clearing of U.S. Treasuries and Repo's would result in higher commoditization for firms in the market, noting a number of potential benefits to netting, balance sheet capacity and regulatory oversight. For example, one asset manager remarked on the potential benefits to netting saying, ***"theoretically if you have more flow, you should get more netting benefits at the exchange."*** Separately, one hedge fund explained the benefit in the ability to increase balance sheet capacity during times of stress, alleviating the ***"scarcity of bank capital, post-Dodd Frank."***

Should the ability to Cross Product Net be taken away, what would you consider to be the resulting difficulties that would arise?



In assessing how the Central Clearing mandate will impact the market, participants identified several potential benefits of heightened commoditization, relating to netting, balance sheet capacity, and regulatory oversight. Although such benefits were widely noted by participants, the consensus amongst both the dealer and investor communities was that any potential benefits do not outweigh the additional costs or operational effort involved.

Overview

Lastly, participants also raised their concerns with regards to the impact this proposal could have on their ability to generate returns. Respondents noted that excess trading and operational costs would eat into their returns and thus make them trail the benchmark. We asked participants if increased costs would change their risk profiles, and in-turn increase returns to keep pace with the market. We sought to understand if there would be pressure placed on investment managers to shift risk to gain extra basis points.

Investor flows are heavily correlated to the benchmark set for return on investment compared to the actual earnings on a fund. Many market participants rely on their ability to consistently beat or lag the benchmark and the market at large. Increases to operational and transaction related costs should be factored into the benchmark for comparing investment performance between funds in the market. Costs for participants in the market will differ depending on firm type, operational ability, and the nature of trading activity. Participant discussions also included analyzing increases in risk and strategy changes that would help to offset increased costs and properly benchmark performance.

Impact on Index Funds

The impact on index funds will be minimal as they are already limited in their investment strategies to have as few tracking errors as possible. Additionally, as most available index funds track equities returns, a significant portion of the market would not be impacted. Regarding benchmarks on total return funds, market participants would need to consider the incremental costs and impact of increasing risk, and whether their strategy should involve either cost-cutting or charging higher fees to offset the increased operational and trading costs. This could result in changes to the industry's current environment of reducing transaction fees.

Risk Considerations

Another consideration is potential changes to the risk profile of a fund. For example, participants may intentionally increase their risk profile by moving around the weightings of securities within a fund, or migrating to different sectors within a fund, to generate returns that offset the increased costs of Central Clearing. Finally, the mandate could result in more concentrated flows at specific periods of the day which could increase risk for those trading in the market.

PTFs & HFs

Market impacts felt from the inclusion of **PTFs & HFs in the CCP**

Overview

The SEC's proposal to mandate central clearing of U.S. Treasuries and Repos, suggests that including Principal Trading Firms (PTFs) and Hedge Funds (HFs) will provide regulators with more meaningful market data for oversight and enhance liquidity in the market. Through our discussions with study participants, we gained insight on the value of oversight for both PTFs and HFs and potential benefits of their inclusion in the Central Counterparty Clearing House (CCP). The consensus amongst both investors and dealers is that increased regulatory oversight of PTFs would provide benefits from a transparency perspective, but their inclusion in the CCP would likely diminish overall market liquidity, especially during periods of volatility or stress. Most participants were in favor of increased oversight for HFs' however the Dealer community noted that increased oversight could deter HFs from participating in the market, adding that current levels of oversight are sufficient.

Participants emphasized the unique position that PTFs and HFs occupy within the U.S. Treasury and Repo markets, highlighting the importance of defining the differences between the two. The SEC defines PTFs as ***"businesses that often employ automated, algorithmic trading strategies (including passive market making, arbitrage, and structural and directional trading)."*** A Hedge Fund is a private fund and considered ***"an issuer that would be an investment company as defined in section 3 of the Investment Company Act if not for Section 3(c)(1) or 3(c)(7) of the Investment Companies Act"***. While PTFs and HFs share similarities, they operate and trade in different ways, each providing unique value to the U.S. Treasury & Repo market. Most investor and dealer participants favored greater oversight for PTFs, with differing opinions regarding additional oversight for HFs. Participants also generally agreed that including PTFs and HFs in the CCP would have negative implications for liquidity in the market.

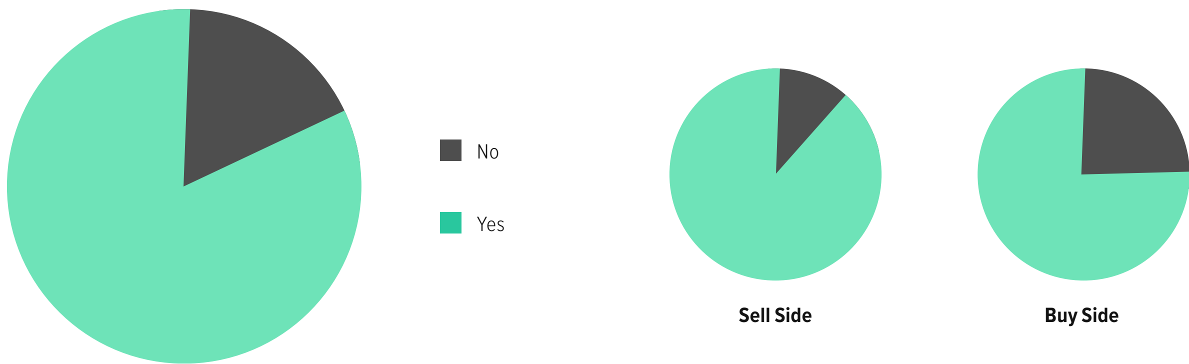
Regulatory Oversight Impacts

Regulatory bodies have suggested there are numerous benefits in including PTFs and HFs in the CCP, namely additional regulatory oversight, which they argue would enhance transparency in the financial market. The SEC noted that the enhanced monitoring of trading behavior will increase the ability to identify risks that arise from PTF and HF activity. Through our discussions with study participants, most firms agreed that greater transparency into PTFs and HFs would benefit the market, with one large pension fund emphasizing that, "oversight of that part of the market is a good thing." Participants also found that the level of oversight should differ depending on the type of firm and their trading activity (i.e., PTF versus Insurance firm trading in small volumes), with one pension fund adding that additional oversight "needs to be applied unilaterally", when implemented within the market.

Regulatory Oversight – How opinions varied by participant type & if oversight of PTFs and HFs would be a benefit to the market

Participants from both the dealer and investor communities agreed that further regulatory oversight for PTFs would benefit the U.S. Treasury & Repo markets, with approximately 90% of dealer participants supporting additional oversight for such entities. Participants also favored increased oversight for HFs to varying degrees, with most investors stating that increased HF oversight would be beneficial for the market. While dealers shared this view, their opinions were mixed with 40% of participants explaining there would be no benefit to the market with additional oversight for HFs. One primary dealer noted that they already have enough insight into their HF clients and there is no need for increased oversight. Another primary dealer echoed this view, stating that ***"the less oversight the better for HFs."*** In summary, participants were broadly supportive of increased regulatory oversight for both PTFs and HFs, with less of an incentive from the dealer community to implement additional oversight for HFs.

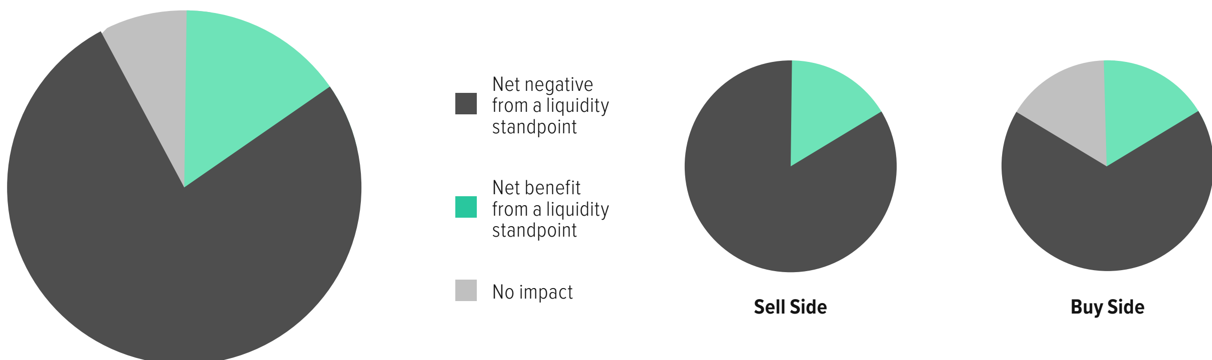
Will added oversight of PTFs benefit the overall market from strictly a Regulatory perspective?



Liquidity Impacts

The SEC proposal advances the argument that the oversight of PTFs and HFs and inclusion in the CCP mandate will encourage more participation in the market, enhancing U.S. Treasury & Repo market liquidity. However, both investors and dealer participants explained that the inclusion of PTFs and HFs in the mandate would not provide the market with additional liquidity, with most suggesting their inclusion would hurt overall levels of liquidity. Participants shared the view that PTFs and HFs are not reliable providers of liquidity, particularly during periods of market volatility and stress. Additionally, participants suggested that the obligations and costs associated with mandating central clearing would discourage PTF and HF participation in the market.

How would the inclusion of PTFs in the CCP affect available liquidity in the UST market?

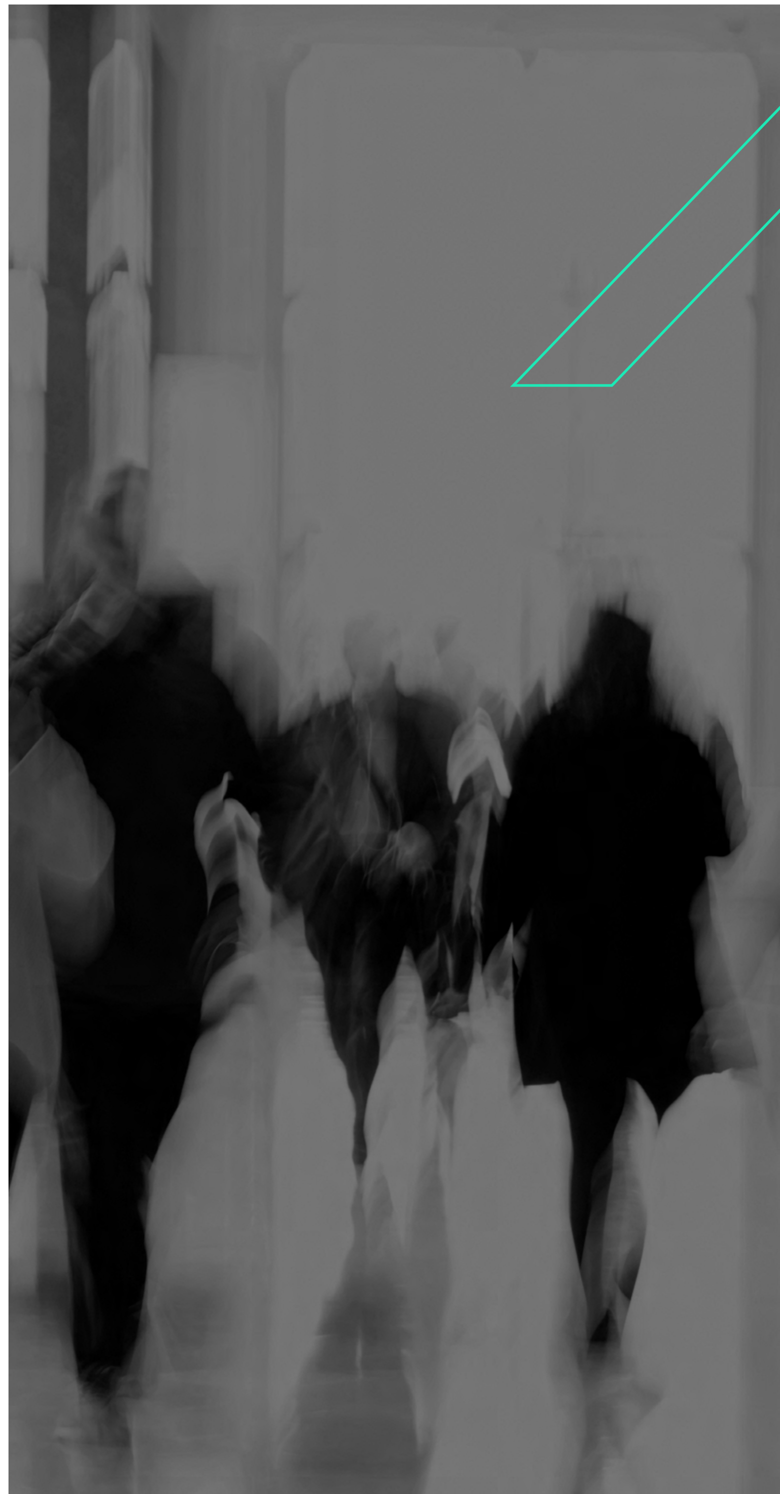


Most participants expressed the view that including PTFs in the CCP would hurt liquidity in the market. This, considering the structure and trading characteristics of PTFs, as they do not trade for sustained periods of time and don't provide stability to the market during times of volatility. Additionally, participants noted that PTFs frequently do not take overnight risk and will quickly trade out of a position as soon as volatility increases. For example, a primary dealer explained, ***"I don't see how you force PTFs to be better liquidity providers, as well as make them stay committed to treasury markets during times of market stress."*** They further explained that PTFs, rather than acting as liquidity providers when the market expects both dealers and investors to enhance liquidity, PTFs almost always exit, which can exacerbate a liquidity crunch. Participants also cited the flash crash in 2014, which was driven by High Frequency Traders (HFT) who were often structured as PTFs and were not reliable as providers of liquidity.

Participants also found that the operational costs and margin requirements, particularly for mid to smaller-sized firms, that PTFs would incur as part of the CCP would ultimately decrease their participation in the market. One primary dealer we spoke with said, ***"this could change the fundamental economics of the business model itself"***, while going on to note that ***"making them centrally clear would impact their business models and it's a risk that could deteriorate their participation in the market."*** Participants also suggested that due to the current nature of the Treasury and Repo market with thinly traded spreads would, at least initially, result in decreased market participation and a reduction in the provision of liquidity.

A smaller group of participants had differing views on the value of the CCP mandates for PTFs with one primary dealer, remarking that ***"the entire purpose is to shore up the UST market. To have a greater insight of their transactional data in the clearing market is a benefit for regulators, and [what's] expected is more stability in the market."*** A number of firms held similar views that were more focused on market stability rather than the impact based on trade volumes.

Participants emphasized the importance of distinguishing the characteristics between PTFs and HFs for inclusion in the mandate, and in assessing the proposal's potential impacts. While many participants noted that PTFs and HFs should be treated differently, regarding their impact on liquidity, some still sought further insight and specifics into the proposal before indicating if an entity type should be included or excluded from the mandate. In summary, the consensus held by participants from both the investor and dealer communities is that inclusion of PTFs and HFs in the CCP will have a negative impact on the availability of liquidity in the U.S. Treasury & Repo markets.



09 All-to-All Trading

The SEC hopes that this proposal, in the long run, could promote all-to-all trading platforms

Overview

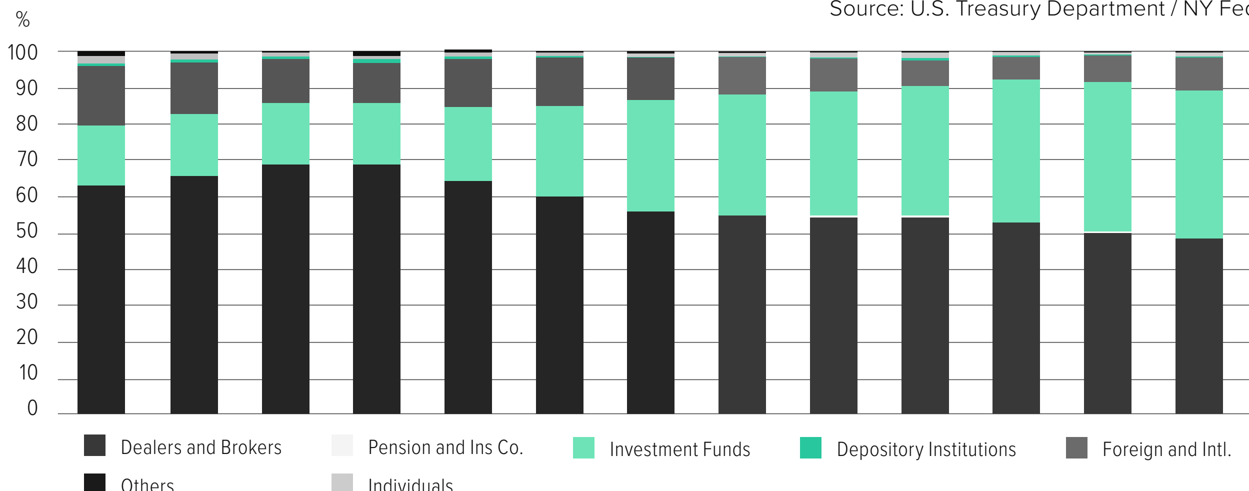
The SEC hopes that this proposal, in the long run, could promote all-to-all trading platforms. Firms have spoken in detail about the challenges this creates, including that it would only succeed for larger investment managers who have the capacity to play that role. Others have noted that mid-size market participants don't want to build capacity to both continue building out needs for Central Clearing as a buy side entity and separately act as a market maker and liquidity provider. Some have also reflected on the inability for this to meet liquidity gaps in times of stress. Given this, we asked participants if they could opine on what they view as the strengths and shortcomings of this approach and whether it would enhance liquidity and/or reduce risks in any manner.

In October 2022, economists at the Federal Reserve Bank of New York released a paper on all-to-all clearing in the Treasury market. The paper sought to address what all-to-all trading ***"would mean for the cash secondary Treasury market, the benefits it might bring, and the conditions that might make adoption of the protocol more likely"***, as well as reviewing ***"several trading protocols operating in the Treasury market at [at the present time and] the challenges to broader adoption of such protocols."*** Another paper by the U.S. Treasury Department was released in November, titled "Enhancing the Resilience of the U.S. Treasury Market: 2022 Staff Progress Report". This paper examined the same themes as the Fed's and identified similar conclusions regarding all-to-all trading.

Research & Planning

It is important to note that the Fed paper recognizes that there is currently ***"limited academic literature on how the introduction of all-to-all trading affects market functioning and quality."*** They explain this is due ***"in part because all-to-all trading has usually been adopted along with other changes in the market, such as increased transparency and central clearing, and in part due to the lack of adoption of pure all-to-all trading, making it difficult to isolate its effects."*** The authors of the Fed paper reference the Treasury market's success with its own version of all-to-all trading to support their conclusion that a similar arrangement would be beneficial for the secondary market. They state, ***"in the primary market for U.S. Treasury securities, investors can participate in auctions indirectly through a primary dealer or directly. Hence, the primary market for Treasury securities shares some similarities with an all-to-all market."***

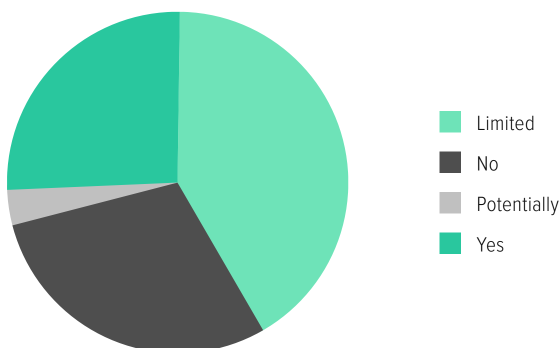
Investor Class Auction Allotments of Treasury Securities



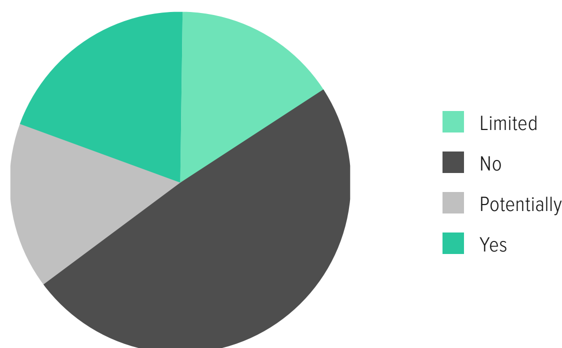
Additionally, the paper states that the benefits would extend across the market, from dealers to the smallest institutional investors, writing ***"this structure has generally been considered beneficial for Treasury, investors, and potentially primary dealers, as it reduces the reliance on primary dealers' balance sheets of needing to intermediate large auction sizes."***

The SEC has signaled its hopes that all-to-all trading, where market participants trade directly with one another, becomes the eventual standard in the industry. The SEC suggests that the clearing mandate will begin the transition to that model. The New York Fed, including the many observers engaged in their research reached the same conclusion explained, ***"many market observers argue that all-to-all trading in the secondary U.S. Treasury market would be more likely to develop organically if certain market structure conditions evolved, including broader central clearing and greater pricing transparency."***

Does your firm see any industrywide benefits to moving to an all-to-all trading environment?



Will all-to-all trading meaningfully increase liquidity?



Of the respondents, 29% believed that all-to-all trading would not benefit the industry, 3% were unsure but explained there was the potential for benefits, and 68% believe that there would, or could, be industry wide benefits because of the clearing mandate. 42% of Respondents that believed that any benefits would be limited.

Liquidity Impacts

However, only 35% of respondents believe that all-to-all trading could meaningfully increase liquidity, compared to the greater than 60% that believe there would be industry wide benefits beyond enhanced liquidity. 16% of respondents believed in the potential for liquidity increases and 16% believed that any increases would be limited. The 16% of respondents who believed liquidity enhancements would be limited explained that such an increase would occur only under normal market conditions, only for less liquid products, and primarily for smaller participants with smaller trade sizes.

Our quantitative and qualitative analysis of participant responses indicated that asset managers are more likely to support all-to-all trading and recognize potential benefits than their dealer counterparts. Asset managers shared the belief that an all-to-all trading environment would lead to "deeper liquidity and greater resilience to financial shocks" in the Treasury market, but also because it is in their financial interest. One primary dealer explained that ***"[asset managers] might benefit from [all-to-all trading]. Dealers [who are intermediaries for treasury and repo trades] right now [could be] destroyed. If you are thinking about a $1T+ asset manager —why [should they believe that they should be] beholden to [dealers] on the street?"*** Dealers are more likely to not support all-to-all trading or recognize any potential benefits.

Dealers noted that in an all-to-all market, they would still need to receive preferences that benefit their business and trading operations. However, other non-dealer respondents noted that every end-user should abide by the same rules with equal access to liquidity profiles, pricing, and other crucial information for trading. Respondents agreed that having the support of regulators on a platform will more easily facilitate a transfer, however they emphasized that any platform or solution should originate from the private sector.

Future Impacts

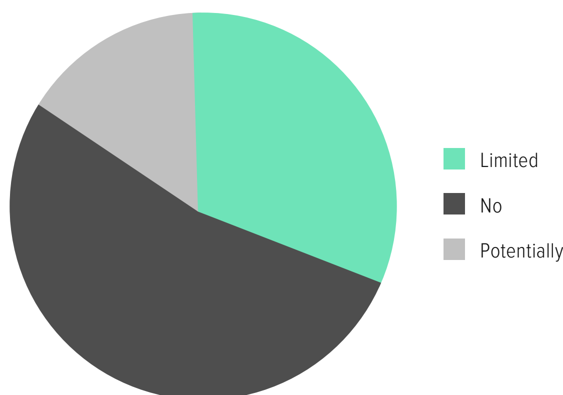
These views were reflected both in our interviews as well as in the comment letters provided to the SEC. In Citadel's comment letter to the SEC they note, ***"central clearing is also a necessary condition for further evolution in trading protocols, including the growth of all-to-all trading. Enabling end investors to utilize all available trading protocols will enhance liquidity and price discovery, particularly since end investors hold the majority of outstanding Treasury securities."*** The FIA Principal Traders Group Letter to SEC expanded on these views saying, ***"for example, central clearing will enable more liquidity providers to interact directly with market participants for cash transactions that are not executed on an order book (e.g., on-the-runs executed by market participants on RFQ platforms and most off-the-run transactions). At the moment, without central clearing, counterparty credit risk considerations typically limit the number of executing counterparties that market participants can interact with."***

Of the 42% of respondents who believe that all-to-all trading would have limited benefits for the industry, 54% do not believe that it would meaningfully increase liquidity. Aside from enhancements to liquidity, we asked the remaining 46% of respondents to Identify any other potential benefits. 15% of respondents believe that liquidity has the potential to meaningfully increase liquidity provided that the platform is rolled out correctly, there is regulation in place, and market conditions are optimal. 31% of respondents believe there could be limited increases in liquidity for more illiquid products, such as deep off-the-runs, and for smaller block trade sizes and participants in the market.

While some respondents indicated that all-to-all trading would have a minimal impact on liquidity, others explained that all-to-all trading would not lead to added liquidity in the current trading environment, with some noting that all-to-all trading would be «remarkably non-beneficial» for the market. One of the main challenges respondents identified with all-to-all trading is the significant amount of time it takes to find offsetting risk, with one primary dealer noting, "30% of the time you can go all day without finding an offsetting trade." Participants explain that for U.S. Treasury transactions, market conditions do not allow for such trades to be left open for such a long period of time.

Economists from the New York Fed, further supported with analysis of FINRA TRACE data summarized participants views stating, "analysis of FINRA TRACE data supports the conjecture that purchases and sales of less-liquid Treasuries at around the same time are uncommon. Looking at off-the-run notes and bonds, only 18% of customer trading activity has offsetting activity in the same security within the same 15-minute interval, as shown in the chart below."

If you see limited benefits from all-to-all trading, do you believe that all-to-all trading would meaningfully increase liquidity



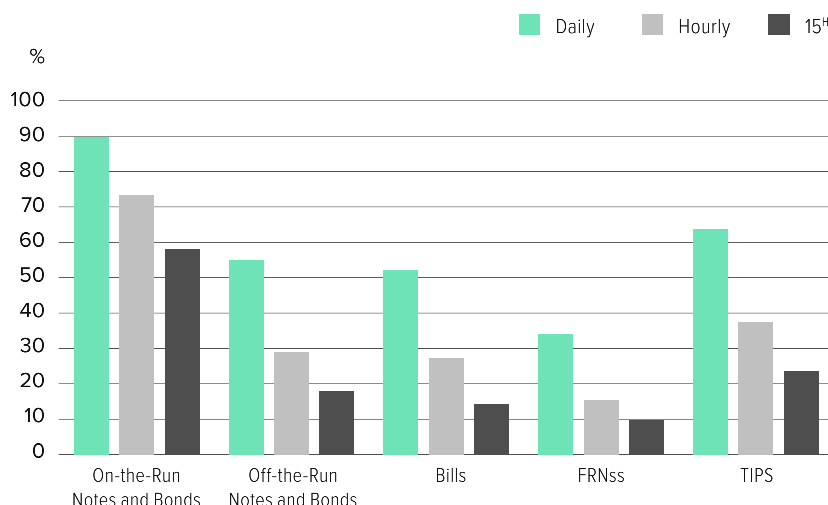
They further noted that ***"similar dynamics are seen for TIPS, bills, and FRNs. However, the prevalence of matching trades increases notably when the time frame for matching Is widened to the entire day, supporting the idea that routine batch matching auctions might provide opportunities for offsetting trades in less-liquid securities."***

All-to-all trading may be beneficial on the margin for smaller trade sizes and for more illiquid securities, since it already takes longer for these securities to find buyers and sellers in the market. However, all-to-all trading cannot replace a dealers' role in the market considering that they warehouse risk when there are no institutional trading partners.

There are around 400 unique CUSIPs on the Treasury curve which creates additional forms of risk. Additionally, if you are trading off the run or deep off the runs, intermediation is still needed due to the nature of the security and a dealers' ability to find specific securities. One primary dealer explained these views saying, ***"it is very difficult to create a central book for some of these deep off the run securities, so you need intermediaries. All-to-all is flawed because the vast majority of CUSIPs have their own idiosyncrasies."***

Additionally, the current all-to-all trading market is made up of smaller intermediaries that cannot deliver on large block trades. Even when utilizing platforms such as MarketAxess, many respondents cannot obtain the block sizes that they require.

Customer Buy and Sell Volume that Offsets



Participants emphasized the importance of having dealers with a risk appetite to take bonds onto their balance sheets and warehouse the risk. These dealers also provide research and strategy services to their asset manager and hedge fund clients, who don't want to lose those benefits should an all-to-all model be adopted. For example, one large asset manager said, **"our access to research and strategy would go to zero if we didn't face them at all in an all-to-all model."**

Contrary to participant opinions, the NY Fed staff concluded that **"[. . .] all-to-all trading, which could expand or deepen new avenues of trading– could also serve to enhance the Treasury market's depth, liquidity, and resilience."** Furthermore, they remarked that the **"increased use of all-to-all trading could also result in lower transaction costs for liquidity consumers and could improve transparency around trade data, both of which seem supportive of improved market functioning in times of both calm and stress."**

Market Volatility

Finally, respondents believe that all-to-all trading would not have helped during the events of 2020 and instead would have created additional pockets of concentrated risk that could have exacerbated the impact. In the event of an extreme market disruption, clearing solely through FICC and their platform could have adverse impacts on the market. One asset manager remarked, ***"in stressful situations it won't be helpful at all. I think it provides some incremental benefit in normal times, but less benefit to no benefit in stressful times."*** Many respondents explained that during periods of market volatility or stress, there are a limited number of investors willing to trade (i.e., 90% of trades are all one way). For example, a primary dealer explained, ***"in times of crisis there is no one taking the other side except for the dealers who have the obligation to make markets."***

Table 1: Daily Trading Volume of U.S. Treasury Securities

	On the Run		Off the Run		
Security Type	**ATS & Interdealer**	**Dealer to Customer**	**ATS & Interdealer**	**Dealer to Customer**	**Total by Security Type**
Notes and Bonds	$265.1 B	$154.4 B	$40.5 B	$86.8 B	$546.8 B
Bills	$12.9 B	$21.8 B	$20.2 B	$61.0 B	$115.8 B
TIPS	$3.0 B	$3.0 B	$1.2 B	$5.6 B	$14.6 B
FRNs	$0.1 B	$0.1 B	$0.1 B	$0.9 B	$1.5 B
Total by Segment	$281.1B	$181.4 B	$61.9B	$154.4 B	
Total by Seasoning	$462.5 B		$216.3 B		

10
Role of the FICC, Sponsorship, Alternative Approaches

As the clearinghouse, the FICC becomes the seller to every buyer and buyer to every seller

Overview

The FICC is at the center of this proposal as the clearinghouse that would be responsible for clearing all U.S. Treasury and Repo. The FICC is separated into two segments: The GSD (Government Securities Division) and MBSD (Mortgage-Backed Security Division, but this proposal will only refer to the GSD. As the clearinghouse, the FICC becomes the seller to every buyer and buyer to every seller. It acts as a central counterparty for the Treasuries and Repos traded in the U.S., with the purpose of reducing risk in the financial system. These risks include counterparty risk and contagion risk. One of the key functions of the FICC is the calculation and management of net positions and margin requirements for its members. This involves aggregating the positions of its members in various government securities and determining the risk exposure of each member. The GSD then requires its members to post margin to cover potential losses, which helps to reduce the risk of default by a member and thus maintains the stability of the market. The FICC was designated as a SIFMU in 2012. FICC members include banks and broker-dealers, but other market participants rely on relationships with these direct members to access central clearing through sponsorship models.

The SEC's central clearing mandate would require all participants, with some exceptions, to clear U.S. Treasuries and Repos through the FICC. Many participants raised concerns with such a mandate, most importantly higher collateral costs with FICC Initial Margin and Variation Margin requirements for clearing. Initial Margin is posted at the beginning of a trade and can be adjusted based on market conditions and the characteristics of the trade. It is meant to protect counterparties in the event of a default where a party cannot pay the Variation Margin on a trade. Variation Margin is posted daily, based on market conditions and serves to protect parties in the event of one-sided default.

For bilateral trading, Initial Margin and Variation Margin are posted only when there is a Master Agreement or a Collateral Support Annex (CSA) in place between two counterparties. However, the SEC mandate would require that both Initial Margin and Variation Margin be posted to the FICC] Participants emphasized that since FICC margin requirements could be higher than bilateral trading requirements, such collateral costs will increase for many participants in the Treasury or Repo market.

Participants also explained that the industry utilizes a number of complex formulas, which vary depending on a counterparties' trade characteristics and nature of a trade, to calculate margin. Additionally, they note that the FICC utilizes a proprietary Value at Risk (VAR) formula in order to clear trades. However, they worry that the FICC model can be difficult to replicate, leaving firms with an inability to properly forecast trade activity that would ultimately lead to lowered levels of liquidity in the market.

Measures to Increase Transparency

Study participants provided detailed feedback on the issues they felt the FICC should address to better facilitate transparency in their risk and margin models.

Participants raised several transparency related considerations to help alleviate counterparties concerned with clearing through the FICC, in light of the SEC's proposal. Participants suggest increasing transparency into how margin is calculated and changes to margin during periods of market stress. Additionally, they suggest adding clarity around the sponsorship model and which counterparties would be posting initial margin according to the mandate.

FICC Margin & Pricing Models

Participants highlighted the lack of transparency surrounding the FICC VAR model, stating that the details of the model and associated formulas are unclear, even to FICC members. In light of the SEC mandate, participants urge the FICC to consider providing additional transparency into their model for both sponsored and non-sponsored direct members. One investment fund explained its hesitation in central clearing through the FICC by noting, ***"the CCP proposal from the SEC is venturing into the unknown. Dealers and bankers can collect margin from us. The Magnitude of the IM and the variation margin left up to the FICC and calculated for that sponsor member is very difficult to estimate. It is hard to estimate the margin and rate impact for products that are going to be centrally cleared."***

Participants suggest that during periods of market volatility, additional transparency around the VAR model would help to determine the appropriate margin to post on a trade and set expectations for a trade's outcome. It's also important to note that some participants believe higher margins during periods of volatility are warranted in exchange for enhanced risk-taking capacity through central clearing. One investment manager explained, ***"you should expect to pay a higher margin on [trades] if it reduces volatility. Haircuts might still be fairly modest and even if the margin doubles, I could still see the margin being reasonable. But we should be aware that it could have a major impact [on firms]."*** However, participants reiterated that the lack of transparency causes uncertainty for counterparties mandated to clear through the FICC. Several study participants claimed that they have tried to replicate FICC's model and have failed to do so even with the substantial playbook that the FICC provides.

Several dealers also described the difficulties in their efforts to replicate the FICCs model, echoing the views from other investor participants. One primary dealer said, ***"we fully agree [on the need for transparency]. We put our smartest people on trying to replicate the model and we cannot tie it out. We agree it is opaque, it's a challenge, and not the right place to be in a crisis."***

Another bank agreed with this view saying, ***"on the principal side we have had difficulty replicating the VAR model. [The FICC] uses gap-based add-ons that we have not replicated, and we cannot back solve for them. We cannot get the tail to their model figured out."*** Another primary dealer referenced similar issues with the Capped Contingency Liquidity Facility (CCLF) commenting, ***"you cannot mitigate something that you cannot replicate. You need to know what to avoid and clearing fund requirements are not helpful from the FICC—their current "widget" is what would impact the requirements as they are not user friendly."***

In times of stress participants do not know what to expect and they cannot manage their own risk and it's important that they are protected in times of volatility. Participants emphasized that margin can be difficult to determine, specifically during periods of market volatility or stress and FICC's lack of transparency creates additional risk for counterparties mandated to centrally clear. One investment management firm said, ***"we do not have a lot of exposure into the margin methodology. The FICC could be more transparent and publish more on the model. Especially in 2020, the margin wasn't clear. Making sure you're not procyclical in your margin methodology is really important. That's true for any CCP but especially for the FICC."*** Participants ultimately suggest that this uncertainty increases the cost of doing business for participants and would discourage participation in the U.S. Treasury and Repo markets.

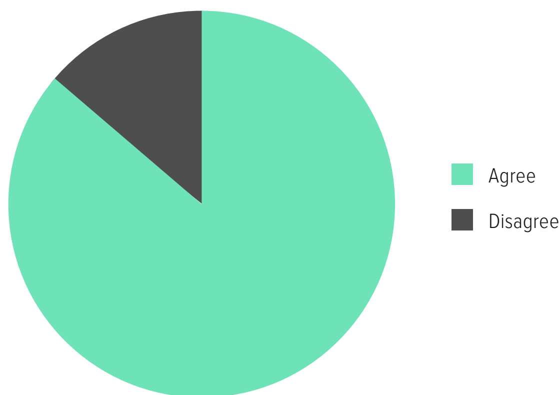
Additionally, participants explained that they would have to overprotect their own liquidity risk when accounting for these opaque models and margin shifts when they commented that, ***"a major problem is how you model your liquidity risk. It's perfectly natural and unfortunate for the official sector—if you think there is a chance you will get asked for that money so you build buffers. It all comes back to liquidity which is lower and takes away from market liquidity."***

A smaller group of participants indicated that the current level of FICC transparency is sufficient, stating that the industry will adjust to market conditions and regulatory changes on its own. One research firm referenced issues surrounding Comprehensive Capital Analysis and Review (CCAR) and availability of information noting ***"[the industry] fights this stuff, it is an operational headache and avoids capacity to do other things."*** Participants explained that while private entities would favor keeping their models confidential, the FICCs role as a clearinghouse should be of benefit to those trading in the market.

Margin Shifts in Volatile Markets

Participants were asked to provide feedback on the impact of posting margin and the fees paid to sponsors on their own business and to the market in general. A notable majority of our participants felt that the SEC requirements would likely result in more periods of volatility and ill-liquidity challenges.

The FICC requires posting of margin to both exemple (upfront margin) and variation margin. There would be separate fees to be paid to sponsors. Institutions have argued that these fees result in a broader ill-liquid market event as participants



Many participants highlighted that risk of changing margin requirements during periods of volatility or stress, noting that margin is adjusted to the given level of volatility in the market. For example, participants cite Covid 2020 and the Gilt market meltdown last year where margin requirements were raised by exchanges (as well as counterparties in non-cleared trades) in attempts to align with the associated volatility. Participants suggest that during these events, the margin often increased exorbitantly in a short period of time. Such uncertainty around margin expectations creates risk for entities clearing through the FICC, especially those with less advanced risk management processes in place.

There was consensus among participants that increases to margin during periods of volatility or stress could result in lowered levels of liquidity in the market. As one investment management firm explained, ***"look at the liquidity crisis with the CME in March and April of 2020, [where they] unilaterally increased their margin requirements, because they can, and caused a wave of unwinds. The cost of leverage and cost to hold the trade became immediately different than it had been the day before and that wave of unwinds occurred throughout a stressed liquidity (event) and exacerbated the situation."***

Other participants noted that during periods of volatility, market participants would be forced to sell off positions to pay margin and to maintain adequate levels of liquidity. One investment firm said, ***"margin requirements [during] times of stress will change and increase and [become] more punitive and less attractive to trade."*** Participants emphasize that considering the FICC has the authority to adjust margin requirements when needed, trading counterparties will have to cover additional costs and potentially unwind U.S. Treasury and Repo positions in the market. A primary dealer participant shared a similar view in saying, ***"to the extent the FICC has the ability to increase margin at any given time and without notice, there is a rush to the exit quicker."*** It went on to suggest that participation in the U.S. Treasury and Repo market will decrease or as a result of forcing such a diverse set of counterparty types to clear through the FICC.

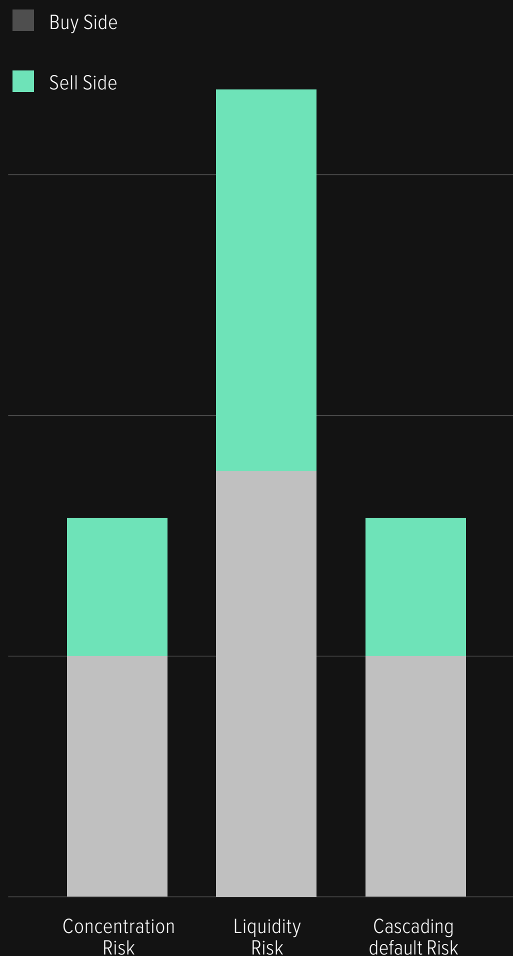
Potential Solutions & Looking Ahead

Should the SEC mandate be implemented, participants urge that the FICC notify market participants, within a reasonable timeframe, prior to changing margin requirements. Participants suggest this would allow additional time for counterparties to mitigate risks before margin changes take effect. One investor participant explained, ***"we saw to some extent, that the margin requirements during 2020 with the onset of the pandemic that were procyclical in nature and created more de-risking and more volatility. Firms, with securities were required to post more margin, exacerbating [the market condition. We would think any increase in margin requirements should be made clear in advance. Surprise haircuts and margin requirements were a problem during Covid. We need to be careful and guide the market for any [margin] increases."***

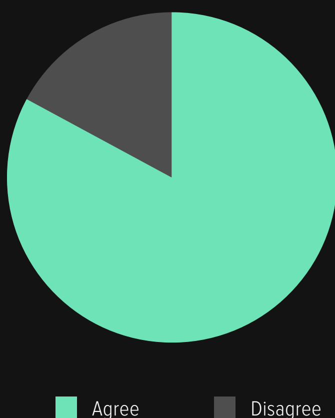
Participants urge the FICC to consider additional transparency into its model for calculating margin requirements while also recognizing the balance in identifying appropriate levels of transparency between the FICC and their clearing counterparties. One primary dealer explained ***"the FICC has an obligation to the market. That is who they are servicing and for safety and soundness, this requires transparency. The FICC is member and industry owned and they should be open and transparent."*** Participants suggest that a mismanagement of the FICC to clearing counterparty relationship, including a lack of transparency, will result in decreased market participation as trading costs in the U.S. Treasury and Repo market increase.

Market Risks

The SEC proposal suggests that a central clearing mandate would reduce counterparty risk, the likelihood of parties defaulting on a transaction. They indicate this will lead to lowered levels of systemic risk in the overall market. Participants, however, note that the SEC proposal does not address the potential impacts on market participants including increases to numerous other risks such as concentration risk, cascading default risk, and risks to market liquidity and stability. One investment management firm shares its view on the clearing mandate saying, **"it exposes everyone to default, and [this is] risk transformation rather than risk removal."** Participants emphasized that while the SEC has identified potential benefits, the mandate would intensify multiple other risks for trading counterparties.



Do you agree this mandate makes FICC a new «SIFI» and increases concentration risk?



Most participants indicated that centrally clearing through the FICC would increase concentration risk for market participants as they will be reliant on a single clearinghouse without the benefit of diversification.

One large investment firm argued: ***"we are not comfortable with having all our Repos on one platform. [The FICC model] has also have been reviewed by the SEC as being a risky model. The FICC is a few light-years away from becoming resilient enough for people to be comfortable with one platform."*** Another firm shared similar concerns when they commented, ***"we are worried about the risk and concerned about that given conversations we have had with our internal regulator. That is now the only shop in town for us—where do we go elsewhere? this locks up everything—it's the whole game. [What if] the Fed wire goes down; what if BONY goes down; that is a funnel and a keystone risk and personally [we] see that as a huge risk."***

Increased concentration risk was a primary concern shared by participants as the SEC mandate would require all U.S. Treasury and Repo transactions, with some exceptions, to clear through the FICC. Participants cited potential technical issues with the FICC clearing system that would pause counterparty trade transactions and lead to substantial losses for market participants. Discussions with participants included examining the possibility of the FICC defaulting and the impact this would have on market participants and the broader economy. An investment management firm commented on this view saying, ***"for the FICC to go out of business that will not happen. There is enough capital [in the market] to back them up. Eighty percent of firms would have to go under for the FICC to go under."*** Another participant echoed this view saying, ***"my opinion is that FICC and LCH are all too big to fail. We are making a societal decision to create these utilities and if the FICC is deficient then we are not aware of it."***

A smaller group of participants explained that they were not opposed to a single clearinghouse model through the FICC. One participant stated, ***"[the FICC] should be part of safety and soundness [measures] and not adding risk to the system."*** They also noted that the FICC has ***"adequate risk models and they have reasonably savvy people and increasing margin is necessary, if indeed, they have to."*** One investment management firm shared the view saying, ***"I do not hear people raise those concerns in the futures or derivatives market—so maybe it is the lack of detail that is bothering people, lack of a sound or well vetted approach. The futures market works quite well."*** However, they also went on to note that ***"to a certain extent – yes, this could create a problem with lender of last resort or in having have those protections, and that would be concerning."*** They continued by explaining that they feel this is being painted with a broad brush and that a more incremental approach should be taken instead.

The Independent Dealer & Trader Association, in their comment letter to the SEC on this proposal, noted their concern of potential enhanced concentration risk associated with the proposal, with FICC as the single clearinghouse for the U.S. Treasury and Repo markets. They said they believe that ***"relinquishing control of credit approval to a single entity, FICC, poses a significant problem. Particularly, with all transactions going through FICC and where margin requirements can be changed at any time. Every firm has a different appetites and quantitative and qualitative perspectives as it relates to credit analysis. Such perspectives are part of the professional services and expertise that well-run firms offer. Centralization of the credit analysis and approval, is a one size fits all policy for a very multi-faceted issue."***

Cascading Default

Participants also noted cascading default risk as a primary concern, a market disruption where a large player in the U.S. Treasury or Repo market defaults on their transactions causing others in the industry to default on trades as well. The SEC proposal suggests that a central clearing mandate would reduce counterparty risk, lowering the probability of defaults. However, participants disagreed with this view, indicating that a single clearinghouse model would ultimately increase the risk of defaults for those trading in the market. In a comment letter to the SEC, SIFMA summarizes these views saying, ***"the Commission states that its proposals would decrease the overall amount of counterparty credit risk in the secondary market for U.S. Treasury securities. However, absent significant enhancements to the existing clearing infrastructure and clearing offerings at FICC, we believe the Commission's proposal would increase the counterparty credit risk which exists in this market."***

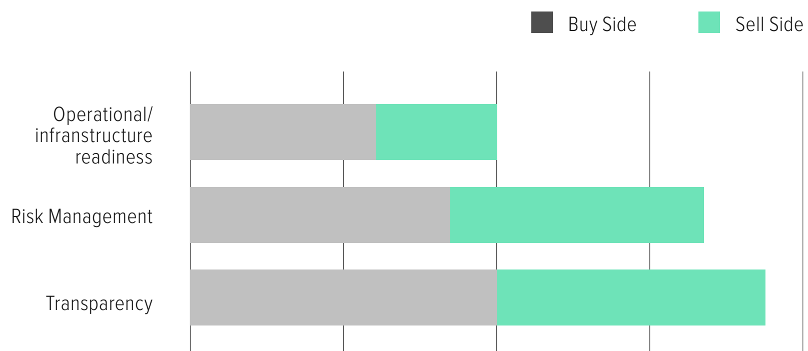
Participants emphasized that large players defaulting on trades in the market, including extreme disruptions to FICC operations, could impact all U.S. Treasury and Repo trading counterparties to a degree. They note numerous impacts to market participants as a result of the clearing mandate, including increased costs though risk mitigation efforts and higher margin requirements that would ultimately discourage participation in this sector of the market. SIFMA furthered these views in their comment letter to the SEC saying, ***"the increased costs of centrally clearing Treasury Transactions may have knock- on effects. For example, it may increase the cost of borrowing and capital formation for market participants as a whole given the integral role that Treasury securities play in the broader financial markets, and may drive market participants to other, similar securities markets not subject to a central clearing requirement (such as agency securities or other sovereign bonds). Additionally, increased loss mutualization resulting from any expansion of access to FICC, which would require current FICC members to bear additional default risks, could reduce the market-making capacity of such members."***

Liquidity Risks

Participants also expressed concern over potential liquidity deficits as a result of the SEC mandate, frequently commenting that keeping the U.S. Treasury and Repo market liquid is vital to the health and resilience of the financial market. Participants explained that there's a direct correlation between liquidity and overall participation or willingness to trade in the market. They suggested that the increases in cost, resulting from the single clearinghouse model through the FICC, will drive participants out of the market. Participants emphasize the importance of maintaining a liquid trading environment and explain that any regulatory mandates should enhance liquidity and benefit those trading in the market.

Key Priorities for FICC

Participants highlighted several issues that the SEC, FICC, and industry at large should consider in light of potential regulatory changes including increased levels of transparency, risk management, and operational readiness.



Increased Transparency

Participants urge the FICC to expand transparency surrounding their pricing and margin models to allow participants sufficient time to prepare to trade. Participants explained that such models should be representative of the market and increased insight would assist counterparties in replicating pricing and margin requirements, forecasting trades and mitigating associated risks. Participants reference periods of market volatility, particularly COVID 2020, where an increased understanding of margin models would have helped market participants develop enhanced risk management systems or resources.

Risk Management

Participants also identified numerous risks to industry participants that should be addressed before implementing a central clearing mandate such as concentration risk, cascading default risk, and liquidity risk. Participants suggest that extreme disruptions to the FICC under the single clearinghouse model could result in major issues for market participants. Additionally, they urge the FICC to adopt policies and procedures isolating firms that default on trades to protect the market from residual effects. Participants also highlighted impacts to liquidity, stating that considering the FICC has the ability to choose assets during periods of volatility, this will discourage market participation and lower levels of liquidity. In a comment letter to the SEC, The IDTA wrote, ***"the cost of central clearing for dealer to institutional counterparty trades under the Proposed Rule, when compared with alternative clearing methods currently utilized, could materially change the economics of a transaction for institutional investors, which would then negatively affect both liquidity and competition. These risks need to be understood before imposing such a mandate."***

Operational Readiness

A final concern, that was repeated throughout the discussions, was the operational readiness of the FICC. Today, the FICC only sees a fraction of cleared trades going through its system. Once central clearing is mandated there will be thousands more entities, either directly being members, or clearing through a sponsor. The volume would exponentially increase, and without proper infrastructure, technology systems and market-wide connectivity it could be a huge operational obstacle. One investor didn't agree with the idea that concentration was an issue but did feel like the operational capacity of FICC could prevent the proposal from happening quickly, noting ***"there needs to be a large runway (five years) to implement of something of this scale and dealer need to collaborate, and operational resilience needs to be FICC lead."*** Furthermore, a dealer participant echoed this sentiment noting that the uplift is very significant and this would take a long time for everyone to become compliant.

Overall, participants made it clear that if this proposal takes effect, just due to operational uplift, it should take years to implement. Some participants felt that this would take about 2-5 years to implement. Many felt it was better to take things slow, than to rush and create a riskier system.

Additionally, some participants said that they'll lose the ability to transform, which could have potentially helped the system. One investment firm had the following to say, ***"what it does not do—is allow for differences that business enjoy. Risk for running through pipes with no ability to transform—you take away the flavors or mutations that allow for the health of the whole of the system. Not only risk is concentrated and also singular in process. What if DTTC systems goes down for hours or a day? What would that do to the market if all this cash or security if locked up in a single party if that failed. CCP are slow to change—whereas if I am clearing at BONY—you can compare to a competitor. Stops growth and change in the market innovation and standardization kills."*** Furthermore, some participants felt that competition and innovation would decrease if a central clearing mandate is to occur, ***"[the] larger the government makes those institutions the less likely you will see innovation in the market. What if someone creates a better way for AM to net collateral or net collateral across one institution? Some innovative technology we can net across mandate is there a way it would be regulated and transparent—customers opt into someone suggests they could optimize it for you. Would they be prohibited from doing it?"***

Ultimately, the sheer infrastructure lift for this proposal would be difficult for any institution to implement. The participants felt there will be many obstacles hindering an implementation including the increase in participants through the sponsor system, volume of trades, and overall experience of clearing through the FICC.

Fed Backstop

of last resort, could prove useful in mitigating some of the risks associated with the SEC's proposal. The Fed acts as a lender to banks and other financial institutions to help stabilize the financial system during periods or market volatility or stress. Participants suggest that the Fed's lending activities, including its backstop function, are designed to mitigate the impacts of financial stress and promote market stability, helping to ensure the smooth functioning of markets. Participants urge regulators to clarify details surrounding the reliance on Fed backstop for direct members trading in the market.

One primary dealer shared their view on the Fed backstop saying, ***"[it would be] very interesting to create an entity clearing that does not allow access to Fed's backstop. [That would be] Counter-intuitive to us. The goal is all trades to be cleared and the Fed has tools for monetary policy and access to the same pool."*** Another dealer said, ***"desire for many participants is to get Fed backstop. Right now, as a primary dealer they have access to the FED's balance sheet. If they went to this centrally cleared model, then would the Fed really be able to provide that service to the whole market?"*** Participants explained that while risk may be centralized under a single clearing house model, the Fed would help by acting as a backstop to maintain market stability during times of stress. It's important to also note some participants did not find the Fed backstop useful as a tool for risk mitigation, with one bank saying, ***"[what if] a clearing house ever goes under? There's no backstop to that."***

Default Fund

Participants also noted that the FICC Default Fund, made up of GSD clearing member contributions, is a risk management tool to assist entities that have defaulted on trades. They explain that the Default Fund provides clearing members the resources to meet their financial obligations in the event of a default. Participants indicate that the Default Fund will help to minimize the impact of defaults on the market, other clearing members, and to promote the stability and efficiency of the clearing and settlement process. Additionally, they explain that the size and composition of the Default Fund is reviewed regularly and can be adjusted to ensure there are enough funds to meet potential losses in the event of a default.

A smaller group of participants noted that while the Default Fund could provide clearing members with financial stability in the event of a default, they were concerned with potential cost increases and overall participation in the market. One participant explained their view saying, ***"if there is going to be a default fund and post margin then you will reduce the participant number by 75% basically self-selecting the largest players in the market players."***

Another participant echoed this view saying, ***"default fund grows many times over. [it's] very costly to people and some shops will not move forward. you need those sub $50 bn funds and the capital they have—these firms do not have unregulated access to capacity."*** Participants suggested that a multi-clearing house model would help to ease concentration risk, eliminating reliance on the FICC as the only clearing house for U.S. Treasury and Repo trades. Participants were concerned that the FICC will monopolize clearing in the market and indicate that diversification, through utilizing multiple clearing houses, will benefit the market and lessen risks for trading counterparties. One participant said, ***"[this is a] huge concern and the obvious reasons why concentration risk [and a] monopoly and bigger fees for default funds."***

Sponsorship Considerations

Prior to implementation of the central clearing mandate, non-FICC members must either become a FICC member or obtain sponsorship to clear in the U.S. Treasury and Repo market. As a result, the FICC is relying heavily on its existing members and sponsorships to effectively execute the SEC proposal. Participants indicate that larger investor participants will be able to maintain their position in the industry, however smaller firms may be pushed out of the market. While participants suggest that firms can become direct FICC members, they note potential cost increases through evaluating the resources and infrastructure required to become a member. Participants also explained that sponsorship does not generate sufficient revenue for the sponsoring firm and even if demand for sponsorship increases, it may be difficult obtain a sponsorship agreement. Some participants explained that sponsors may turn away clients as the relationship is not profitable enough, with one primary dealer saying, ***"just think of the scale. I don't know how we would add 1000 new clients."***

Ultimately, many of participants indicated that the market could be impacted because of artificially increasing the sponsorship demand without a sufficient supply of sponsors. Participants suggest that firms should conduct stress tests and analyze the costs and benefits to determine their ability to continue participating in the market. For example, firms should create models replicating market activity during periods of volatility or stress to better predict future disruptions and issues. Some participants referenced Covid 2020, where sponsorship would not have prevented or helped the market due to the nature of the type of market disruption. Participants note that while sponsoring membership has been generally successful to this point, there is no guarantee that the anticipated increase in demand will assist those trading in the market.

One primary dealer summarized these views, noting that in the act of sponsoring a member ***"you are guaranteeing the member [and there are] limits to that"***, while raising the concern of ***"will firms find a home and is there enough capacity for the entirety of the market?"*** They suggested that ***"in order not to leave anyone behind, sponsor avenues will be the largest costs associated with all, and overwhelmingly everyone believes cost benefit needs to be completed before we consider the final proposal."***

Many participants questioned if FICC's current operational system would be able to subsidize all the new clients added to the sponsorship system. Participants explained that the FICC's systems and infrastructure musty be updated before the Central Clearing mandate is implemented.

Challenges of the Sponsorship Model

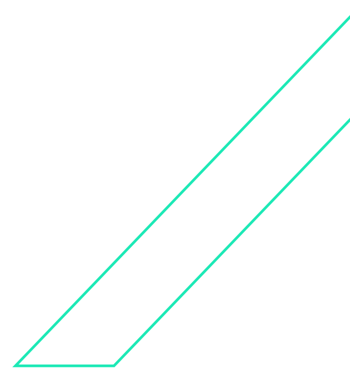
Participants noted several difficulties in relying on the sponsorship model including the cost of sponsorship, the margining requirements, and onboarding logistics for sponsored firms.

They also anticipate numerous operational challenges for the FICC and sponsoring members to implement the SEC's proposals.

Several dealers and investors highlighted the cost increases associated with sponsorship, referencing the fees that sponsoring firms charge to provide clearing services. Additionally, they noted that with increases to initial margin and variation margin, it will be crucial to determine how these costs will be absorbed by market participants. One primary dealer noted, ***"in ongoing discussions with [our] clients, [we discuss] what extent does a sponsor help buffer versus creating a direct pass through between the CCP itself. Who wears that cost? At FICC even if a term trade—margin daily and FICC can add ill-liquidity to that and adjust margin executing through FICC. Who is going to bridge that in the non-cleared side versus what FICC provides and who wears that risk is an evolving concept and discussion."***

Participants explained that the sponsorship model is a service and increases to costs could result in a loss of clients, particularly smaller clients unable to absorb additional costs to trade. One primary dealer said, "if we are going to charge IM and VM associated with a settlement service no one will sign up and we will have no ability to pass on those costs." They pointed out that there will be a need for members to be selective as to which clients they you sponsor into the FICC.

Participants also note that the SEC proposal would push many non-direct FICC members to trade through a sponsor. Participants explain that sponsorship agreements are specific to the contract and tailored to the needs of that sponsor and client. As a result, sponsorship fees can vary significantly and are absorbed by either the sponsoring firm or their client depending on the agreement. A dealer participant noted the incremental cost of taking on new sponsored members, noting ***"from a capital perspective—there are risk weightings to consider, which are lumped onto the costs to take [sponsored members] on."*** They further suggested, ***"in order not to leave anyone behind—sponsor avenues will be the largest costs associated with all."*** Another bank participant shares this view explaining, ***"same transactions but it costs me more. Reporting from them, credit risk rating, compare services. Yes, there would be new costs for ~80% of the players for the market."***



Impacts & Solutions

Many participants stated that relying on the FICC sponsorship model for clearing would lead to a reduction in overall participation in the U.S. Treasury and Repo market. Participants highlighted the challenges such as firms being unable to enter into a sponsorship agreement. For example, sponsors may be unwilling to take on firms they perceive as riskier, leaving these clients with fewer options to trade.

While the FICC may be willing to provide clearing for smaller firms, their sponsors may not want to take on the additional costs that come with FICC membership and clearing. This may cause market participants, specifically smaller firms, to migrate out of the U.S. Treasury and Repo market altogether. Participants emphasize that any reduction in participation will be correlated to lower levels of liquidity in the market.

A group of investor participants expressed the view that banks would hold too much power in negotiations with sponsored entities as many banks are aware that investors would be seeking sponsorship in a short period of time. Participants explained that such a relationship would be detrimental and likely increase costs, particularly for investors in the market. One primary dealer commented on this view, saying ***"it consolidates power to the banks for the negotiations—buyside have limited time and money. Need to add standardized documents or it pushes the power back to the banks."*** Participants also noted that FICC requires standardized documentation for the sponsorship relationship and they suggest a phased-in implementation to allow time for contract negotiations.

Many participants, throughout our study, questioned the SEC's intentions with their central clearing mandate, stating that there are numerous alternative methods for achieving the SEC's goals beyond clearing. Gary Gensler, SEC chairman, wrote ***"the Securities and Exchange Commission plays a critical role in how the Treasury market functions, including to help ensure that these markets stay efficient, competitive, and resilient."*** The SEC chairman continued, saying ***"one aspect of that role is our oversight of clearinghouses for Treasury securities. While central clearing does not eliminate all risk, it certainly does lower it. In 2017, however, only 13 percent of Treasury cash transactions were centrally cleared. Thus, I think there is more work to be done with respect to the amount of Treasury activity that is centrally cleared. I think that these rules would reduce risk across a vital part of our capital markets in both normal and stress times. This advances our three-part mission."*** Gensler suggests that a central clearing mandate will reduce risk in the market and lead to a more efficient and resilient trading environment. However, participants argued that the risk is already minimal and suggested that there are alternative initiatives to reduce risk without a clearing mandate.

Several participants felt that a clearing mandate was not necessary in the current trading environment, while suggesting alternatives to enhance the market. Some of the alternatives raised included the standardization of haircuts, the FICC having access to the Fed's Standing Repo Facility (SRF), and cross product netting in the existing system.

Standing Repo Facility & Market Stability Measures

The primary approach shared by participants was access to the Fed's SRF which would allow participants to exchange U.S. Treasuries for cash. They explained this as a loan from the Fed which would operate as a backstop during periods of market volatility and ultimately increase liquidity in the market. However, participants also note that the SRF is only open to eligible counterparties. The New York Fed outlines the criteria of joining the SRF, ***"in order to be eligible to become a Standing Repo Facility counterparty, a firm must be a state or federally chartered bank or savings association (or a state or federally licensed branch or agency of a foreign bank) with total U.S. Treasury, agency debt and agency mortgage-backed securities holdings equal to or greater than $2 billion, or total assets equal to or greater than $10 billion on the last quarter for which relevant FFIEC reports are available."***

Participants suggest the SRF could be a vital tool to help mitigate risk during periods of market volatility or stress, such as Covid 2020. Participants emphasize that by easing access to the SRF for those trading in the market, this should increase the overall resiliency of the U.S. Treasury and Repo markets. One investment management firm agreed with this view saying, ***"we would be very supportive of FICC having access to FED standing repo facility, and we see value from the systemic point of view and the Fed's standing repo facility helps a lot."***

Standing Repo Facility & Market Stability Measures

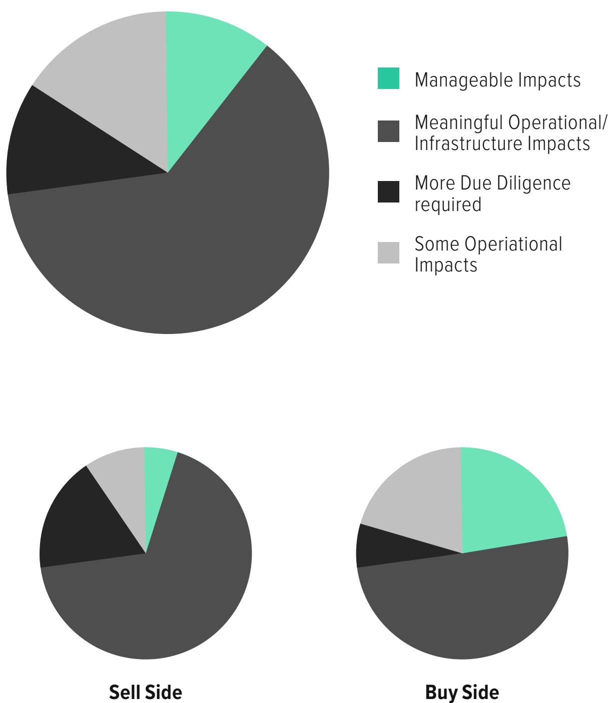
Participants argued in favor of standardizing haircuts, referencing the current competitive state of the market with many firms offering to trade with minimal to zero haircuts. The SEC indicates that this trading environment increases counterparty credit risk as collateral is being widely underpriced. Participants suggest that a market-wide standardization of haircuts would reduce this risk particularly during periods of market volatility or stress, increase risk management abilities and lead to a more transparent market. An Asset Manager we interviewed said they "would suggest they standardize the terms and [they] would be in favor of a floor, not a cap." They felt that setting a floor for haircuts would help to keep products from being underpriced, and further explained that a floor would help to reduce the amount of zero to minimal haircuts on transactions. Additionally, the participant explains that having transactions with no haircut cap would allow firms to increase the amount of IM they receive, particularly from riskier counterparties. One primary dealer participant agreed, noting that a model of standardization of haircuts and a process around it is "one of the primary issues, and it needs to address it." However, it's important to note that some participants were not in favor of haircut standardization, with one firm remarking they "think the market standardizes haircuts already and if it's too restrictive then the desk can't win trades." Ultimately, they felt that the market should work it out on its own.

Operational Impacts

Overview

In response to the SEC's proposal for mandated central clearing of U.S. Treasuries and Repos, many dealers and investors raised concerns over the significant operational and infrastructure uplift this would require. Participants identified numerous challenges in implementing the mandate including the immense documentation requirements, resource requirements, technology implementation and enhancement costs, and the organizational and operational changes to margin regimes. These operational and infrastructure concerns were reiterated by most participants, with dealers placing a particular emphasis on the importance of this issue.

Have you evaluated how substantial the operational challenges would be, and the investments and timing associated with implementation



Margin Calculation & Requirements

A common theme among participants was determining how to adjust to new margin requirements and properly manage collateral. Participants were also concerned with calculating and estimating margin and posting requirements for Initial Margin and the calculation of Variation Margin. Participants urge the FICC to establish proper procedures and guidelines for margin requirements to address when additional margin may need to be posted and for collateral squeezes for counterparties in the market. Participants noted that changes to these processes would impact market participants from both a risk and operations standpoint.

During discussions with the risk department of a primary dealer, they noted that “there will need to be a reconfiguration of the collateral management framework towards FICC.” They further specified saying, “there needs to be a solution for how the treasury margin framework will work.” They continued to note that “Initial Margin and Variation Margin will need to be thought out to be helpful for the market and if haircuts are reduced for the banks, then that could be helpful for the market.”

As a result of the SEC mandate, many firms will be posting margin on behalf of the buy side for the first time, therefore firms may need to adjust their operations and collateral management to meet FICC rules and procedures. Many study participants were unclear how the proposal would impact their day-to-day operations. Additionally, they called for increased guidance from the FICC on how to manage collateral, especially during periods of market volatility or stress. A large asset manager addressed this view, noting “the margin needed on a transaction is still unknown and we would need clarity on how FICC liquidates the collateral.” They questioned if FICC would charge members intraday and asked further, “In times of market stress, where would collateral get squeezed from? Would it be from the sponsor, or would the sponsor pass it on?” They emphasized that FICC is a private sector entity and stands to benefit from this mandate noting, “the SEC should conduct more due diligence and mandate stress testing going forward.”

FICC is also seeking additional clarity and guidance from the SEC regarding margin requirements. In FICC’s comment letter to the SEC, it stated, “we ask that the Commission clarify whether the Segregation Proposal or the Debit Proposal would also preclude Treasury CCAs from using Indirect Participant Margin or customer margin for liquidity and loss mutualization purposes.” It questioned how margin would be managed for indirect participants, particularly on the investor side. For example, FICC went on to say, “we suggest that the Commission bear in mind that, unlike in the cleared derivatives market, indirect participants are not required to post margin to FICC [and that] the posting requirement rests exclusively with the direct participants.” FICC further suggested that “as a result, ring-fencing Indirect Participant Margin or customer margin may not actually benefit indirect participants or customers.” Additionally, the SEC proposal states that indirect participants, who are not currently required to post margin, must post margin as part of the clearing mandate. As a result, many indirect participants express concern over execution of the mandate.

Legal Challenges & Considerations

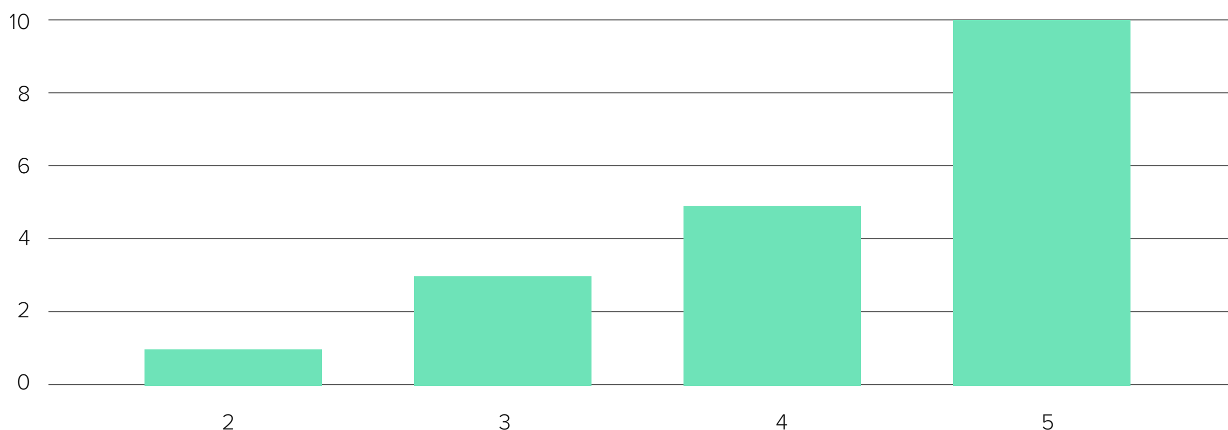
Participants were also concerned about the extensive process for onboarding new clients. Respondents in the study were particularly concerned about the legal, technological, and resource stipulations required to address changes resulting from the SEC proposal. Some participants in the study were significantly concerned with the potential strain on resources and organizational costs. In assessing the impact this proposal would have from an operational standpoint, One primary dealer, described it as, ***"an enormous legal and operational build"***, while further noting that ***"a major question here is whether banks will have to pass margin to their customers."*** They suggested that treasury participation would pivot to the largest firms in the market, due to the considerable uplift required in the proposal.

The operations team of a primary dealer highlighted the anticipated challenges in trading treasuries on behalf of its clients. They too explained that centrally clearing for buy-side clients takes a significant amount of time and effort, noting that the endeavor "takes legal resources and is particularly costly."

Documentation Requirements

Both investor and dealer participants expressed concern regarding changes to documentation, noting that current netting agreements would need to be re-drafted. As a result, firms may need to pursue enforcement opinions to include changes to netting and clearing procedures. Many buy-side firms, specifically those that have only traded bilaterally, would need to alter their portfolio fee documents and (or) prospectuses to communicate any fee structure changes to their investors. Participants reiterated that changes to firm policies and procedures, including amendments to previous agreements, would require costly legal consultation, technological upgrades, and resources to implement these changes.

How concerned are you regarding the legal & documentation challenges stemming from this proposal? (Scale of 1,5; 5 being very concerned, 1 being not concerned).



Documentation Requirements

Many Participants were concerned with the uplift required for both sell side and buy side participants to address the necessary aspects of amending firm documentation and a new centralized clearing process. Margin rules and agreements, pledge agreements and reimbursement would all need to be addressed as part of the mandate.

Respondents in the study urge the CCP to adopt the necessary rules and processes to implement clearing that is favorable to the market. Additionally, they emphasized the need for standardizing the documentation utilized between buy-side and sell-side market participants. One primary dealer noted, ***"new documentation would be needed in the cash space, and all documentation is bespoken and each dealer has its own form that they use with their clients."*** The primary dealer suggested that ***"as things stand, there needs to be a master document with principles that are identified"***, pointing to industry's call for standardized documentation within the market. A European primary dealer reiterated this view remarking that **"there would need to be standardization, and with each client so we would need to negotiate a GMRA or an MRA. This would require outside counsel."**

A European primary dealer expressed concerns regarding the technological and infrastructural constraints inhibiting efforts to amend documentation. They noted, ***"it would be very difficult to incorporate this change at scale and we could choose not to participate."*** Similarly, a primary dealer expanded the views on the need for technological upgrades, saying that ***"technology could be a difficult constraint, especially to sign up all the necessary accounts."*** Additionally, they cautioned that any changes to the current FICC sponsorship model would require a multitude of amendments to firm documentation. They suggest that ***"there will need to be a large push and effort put in to standardize documents and [obtain] buy in from all parties to establish centralized clearing."***

Technology & Infrastructure Challenges

Industry experts agreed that the current clearing infrastructure is not adequate to support transitioning to a sponsored clearing framework as part of the mandate. In a comment letter to the SEC, the Investment Company Institute shares this view stating, ***"as significant investors in U.S. Treasury markets, it is critical for funds to access them in an efficient and cost-effective manner, but the SEC's proposal to mandate clearing could restrict their ability to do so, harming both them and their investors."*** They further remarked, ***"it is premature for the SEC to mandate the clearing of funds' Treasury repo and reverse repo transactions. The sponsored clearing framework that funds use to clear these transactions is not sufficiently developed to support a clearing mandate."***

Many participants suggested that firms will need dedicated resources to help them address the changes that arise from the SEC proposal for centralized clearing.

To accommodate these changes, organizations may need to re-prioritize their objectives, dedicate human capital, and upgrade their technological systems.

Technology & Infrastructure Challenges

Participants anticipate a lengthy and gradual phase in process to fully implement the SEC's mandates. Many firms indicated it could take several years to complete implementation due to the complexity and scale of the proposal. As a result, firms may need to rely on advisory and professional services from industry experts to adapt to the new regulatory environment.

FICC's comment letter to the SEC acknowledged the challenges of this undertaking, stating, ***"even with a clear scope and clear implementation mechanism, it will take FICC and the U.S. securities industry as a whole substantial time to make the documentation, operational, organizational, and systems changes needed to comply with the Proposal. In addition, FICC will need to amend its rules, which amendments the Commission will need to approve. And FICC and market participants will need to conduct substantial testing to ensure that the systems and operational changes are effective and secure".*** FICC explains that it will take considerable time and effort to implement the SEC's proposal, requiring substantial coordination and guidance from the SEC.

In a comment letter to the SEC, Managing Director and Associate General Counsel of SIFMA, William Thum, reiterated this sentiment saying, ***"over the past 18 months, the Commodities and Futures Trading Commission's Market Risk Advisory Committee (MRAC) addressed a host of clearinghouse issues related to capital and skin in the game, stress testing and liquidity margin methodologies, as well as anti-procyclicality measures and governance. He further noted that "these are all issues under an umbrella of additional enhancements that the buyside and indeed, the sell side want. The SEC, as part of asserting a clearing mandate, needs to make sure that the infrastructure is as robust as possible."***

Technology & Infrastructure Challenges

Many participants were concerned that moving bi-lateral transactions to a centrally cleared exchange could result in cybersecurity breaches and technological errors impacting the U.S. Treasury and Repo markets. Respondents explained that pushing trades into one system will consolidate risk and that any disruptions to the market or FICC would greatly impact market participants. To protect against cybersecurity threats and breaches, participants suggested firms would require dedicated resources in place to handle any disruptions, including strong governance and procedural controls. This view was echoed by a primary dealer who remarked, ***"it will be important to see how the new infrastructure will concentrate risk in a new failure and controls environment; around the exchange there will need to be governance, transparency and oversight."*** They also noted, ***"it will be important to understand how the CCP's have access to Central Banks and impose proper Cyber controls."***

This concern was reiterated by another primary dealer that urged Clearing Houses to prepare for cybersecurity threats, noting, ***"cyber risk is one of the top risks across the board—we posed this concern to one of the large CCP's on the swap side and we have a back-up system."***

Risks & Cyber Threats

The FICC, in its role as the single clearing house for U.S. Treasury and Repo transactions, must also be prepared for cybersecurity threats and breaches. Financial firms store and execute actions upon sensitive financial data and will therefore be a target for ransomware attacks. For example, the financial data firm ION Trading UK was a recent target of a ransomware attack reported on February 3rd, 2023. It is likely that many of ION's clients were affected such as ABN AMRO Clearing. The Futures Industry Association (FIA) has said that this ransomware attack affected the clearing of exchange-traded derivatives. While the industry did not report issues with margin, it took several days to recover, and many brokers were unable to conduct trades or process exchange traded activities including centralized clearing services. The Italian bank Intesa Sanpaolo communicated to their clients that its clearing operations for exchange traded derivatives were impeded by IT problems from the ION ransomware attack and trade orders could not be processed. This ransomware attack is an example of the breaches that the FICC would need to prevent and exemplifies that a centralized clearing mandate would need robust controls, governance, and cybersecurity standards. These are factors that must be considered by regulators, exchanges, and market participants before implementation of the SEC proposal.

The industry also recognizes that errors made by exchanges can severely disrupt the U.S. Treasury and Repo trading environment. On January 24th, 2023, a manual error at the New York Stock Exchange created large market volatility at market open. Such errors support the argument to avoid placing trades on exchanges. A spokesperson for Charles Schwab commented on the incident, saying, ***"if exchanges will not accept accountability when they make an obvious mistake, it further heightens our concerns that routing even greater levels of retail orders to the exchanges will dramatically reduce the quality of the investing experience for America's retail investors."*** Many participants in our study reiterated this view calling for the FICC to implement robust controls, governance, and increased transparency to ensure that the clearing infrastructure operates smoothly, reliably, and consistently.

Participants emphasized the need for risk management measures when conducting business with third party technology providers and outsourcing functions. For example, the Bank of England remarked ***"CCPs, as risk managers, should apply adequate governance, risk management and controls to manage the risks arising from all their third-party arrangements that could pose a threat to the safety and efficiency of clearing services thereby impacting financial stability."***

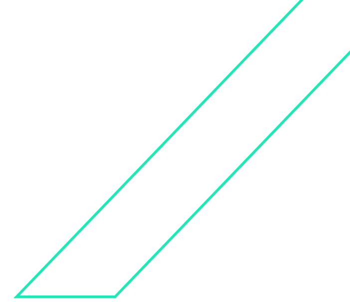
Additionally, the Bank of England noted the importance of establishing parameters for risk tolerance, further adding, ***"CCPs must take all reasonable actions to ensure it remains within its impact tolerance for each important business service in the event of an extreme but plausible disruption to its operations."***

Technology & Infrastructure Challenges

Many participants expressed the need for further guidance and clarity from the SEC on a variety of topics to understand the proposals' impact on their business operations. Participants urge the SEC to clarify what constitutes eligible secondary market transactions, including the scope and application of the membership proposal. Respondents in the study sought clarification on the explicit definitions for hedge funds, sovereign entities, and international financial institutions. Participants suggest this will help firms identify if they need to adjust their business processes. Additionally, participants asked for further specification on the type of secondary transactions that would be covered in the proposal. Participants also explain that the SEC should thoroughly define the scope of covered repurchase transactions to ensure that only U.S. Treasuries are in scope with minimal changes to Repos currently cleared through FICC. Specific and direct guidance from the SEC, including testing from regulators, could assist market participants in understanding the extent of the proposal and help firms avoid prolonged and costly legal analysis. Most participants in our study expressed great concern that a clearing mandate would result in a considerable overhaul to their business-as-usual operations and trading activity. Firms emphasized several concerns in executing the SEC's mandate including legal, technological and cybersecurity challenges as well as margining concerns and increases to costs and resources.

Conclusion

Summary of findings



Our report included feedback from dozens of discussions and included perspectives from larger banks who were all primary dealers and investors of all sizes and levels of sophistication in their investment strategies. It is telling that only a very small minority were in favor of the SEC proposal and generally firms coalesced their opposition around three concerns.

First, study participants noted that there was nearly a complete absence of research or analytical support for the wide ranging mandatory Central Clearing proposition. Institutions consistently noted that for a regulatory rulemaking that is this broad in its reach across all types of financial market participants, that persuasive evidence would be presented to support the arguments that were advanced in the documents, presentations and other public and private communications. There is evidence related to more targeted approaches for Central Clearing and, industry participants note that the swaps clearing eventually was implemented after major costs to the market and has proven valuable. However, many commented that the magnitude of this effort—involving two products that are core to institutions investment strategies, funding, portfolio rebalancing at month-end among other uses—with multiple trillions of dollars at stake—requires a compelling set of data to justify the proposals. Without that evidence, the industry doubts the value of these proposals.

Second, there were a series of policy objectives set out by the SEC and others in the official sector suggesting that Central Clearing will reduce risks in financial markets, increase liquidity in those same markets and increase the number of firms who will participate in the U.S. Treasury and Repo markets. Institutions noted that there is no basis to support these hypotheses. Participants noted that, at best, there would be a risk tradeoff between a reduction in counterparty risk while increasing concentration risk. Firms across the spectrum argued that the issues associated to market volatility in 2014, 2019 and 2020 would not have been prevented or minimized by Central Clearing. Issues associated with enhanced margin requirements will in many ways increase those risks, that the SEC seeks to lessen. This, in addition to the potential decline in market participants due to enhanced costs. With this considered, frms do not anticipate Central Clearing will aid in mitigating risks, but foresee a more likely outcome in which in certain instances they would grow.

Finally, institutions note that the Operational, System, Infrastructure, Collateral Management, Legal/Documentation challenges will be immense. Participants, ranging from the largest banks to mid-sized investors, flagged meaningful concerns which would be time consuming and immensely costly. Participants had significant skepticism that the FICC, as the sole Central Clearing entity, would not be able to meet the obligations set out by the SEC. Participants felt that the FICC would need enormous investments in Risk Management, Operations, and new Systems to handle the large increase of participants who would require sponsorships and clearing facilitation.

The findings in our study suggest that the industry believes that this public policy initiative requires additional study to support the wide-ranging efforts envisioned by the official sector and that consideration of striking some balance between regulatory and market participants views would be worthwhile as the dialogues continue.

Additional research, market commentary & SEC comment letters

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