GLOBAL MARKETS ADVISORY COMMITTEE MEETING

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P R O C E E D I N G S

MR. JUNG: Good morning, everyone. Thank you all were joining. Welcome to the second GMAC meeting of 2024. Before we begin, for the record, we have 30 of the 37 GMAC members in attendance. Therefore, the GMAC -- as designated -- GMAC designated federal officer, it is my pleasure to call this meeting to order; since we have quorum.

Also similar to the March meeting, after each subcommittee recommendation presentation, we will hold a voice vote. I would ask members to raise their hands for -- raise their hands for either a yes, no or an abstain. Before we begin this discussion today, I would like to turn to Commissioner Caroline D. Pham, the GMAC sponsor, for the welcome and opening remarks followed by prerecorded virtual remarks by Commissioner Mersinger.

The floor is yours, Commissioner Pham.

COMMISSIONER PHAM: Hello, everybody, and welcome to the CFTC's regional New York office. It's such a pleasure to see you all here in person. We try to come to you and make us really accessible to the public, so I really appreciate you all coming in person. I want to thank everybody who's also joined online, virtually. It's great to convene another Global Markets Advisory Committee meeting here in New York.

I want to start by thanking everyone for taking time to share your expertise with the GMAC today. I know that a lot of time and work goes into preparing for these meetings, so I also want to thank you for agreeing to serve on the GMAC, and for all your efforts to develop the recommendations and presentations that we will be considering today.

I especially want to thank those who have flown across oceans, or several oceans, to be here today. It's the dedication of the public in engaging with the CFTC that's so meaningful.

I especially want to recognize the GMAC's leadership team: Amy Hong, Darcy Bradbury, Brad Tully, Michael Winnike, Alison Lurton, Tara Kruse, Caroline Butler, and Sandy Kaul for your continued stewardship of this committee, and to all of the subcommittee work stream leads for their tireless efforts.

Of course, I want to acknowledge my team, Harry Jung the GMAC designated federal officer, and Nicholas Elliot, the GMAC alternate designated federal officer, as well as Meghan Tente and Taylor Foy for helping to make today's meeting possible. And, as always, many thanks to all the CFTC staff in both the New York office and our D.C. headquarters, some of whom have trouble to New York today, who helped to facilitate the GMAC meeting.

Now, one of the things I want to emphasize is that the GMAC continues to deliver. We are making great progress developing thoughtful recommendations and insightful work product to aid the CFTC and the entire financial services industry. This committee was created to examine and advise on issues that affect integrity and competition in markets, including global markets. And this is critically important given the increasingly interconnected market environment, ever changing global dynamics and emerging and innovative products and tools.

Understandably, every jurisdiction has been making different approaches and trying to get some different advantages here. But I think what's important is, that we continue to focus on promoting regulatory coherence and mitigating market fragmentation. It's essential that we examine these trends and take the necessary steps to ensure that we have open access to markets while safeguarding integrity.

In less than a year, the GMAC has adopted 11 recommendations on a variety of issues, including U.S. Treasury market liquidity, well functioning repo and funding markets, exchange volatility controls, T+1 security settlement, improved collateral management, CCP default simulation, streamlining trade reporting data to monitor systemic risk, and a foundational taxonomy for approaching digital asset regulation.

These recommendations provide thoughtful and transparent guidance for the CFTC and our counterparts around the world. For example, I've heard from various international stakeholders that the digital asset taxonomy is garnering attention around the globe, as various jurisdictions are continuing to implement and understand how to approach crypto asset regulation. This is a testament to the foresight and critical thinking by this committee.

As the GMAC sponsor, I'm honored to help provide a public venue for some of the preeminent industry experts to discuss and develop these approaches to addressing the biggest issues in global financial markets. I will share now a brief update on the status of each of the GMAC's recommendations and potential next steps, demonstrating that the work of the CFTC's advisory committees has real impact and value, to not only the commission, but also that the GMAC is contributing to the international policy dialogue.

First, I want to acknowledge that the GMAC kicked off with a tremendous undertaking to do a global stock take of the most significant issues and challenges facing global markets, which we had at our inaugural meeting last year. That effort, particularly in identifying and focusing on the most significant issues, not only demonstrated the alignment with the agendas of the financial stability board and of

IOSCO, but also showed that the GMAC is truly poised to contribute to international standard centers and the work that they're undertaking.

First, beginning with the Global Market Structure subcommittee, for the recommendation on new block and cap sizes, which found that appropriately calibrated block and cap sizes are vital to the proper functioning of derivatives markets, including price discovery and transparency. I was pleased to see that the CFTC was able to issue a letter recently that provided for additional time to study and understand the implications of the new sizes and thresholds, and to provide additional time for firms to implement such new requirements. I think, again, this was a really a great example of how the GMAC's data driven efforts and presentations have helped to contribute meaningfully to the CFTC's efforts.

Second, for the recommendation to add CCPs as permitted counterparties, the GMAC found that further alignments of SEC and CFTC regulations would support critical risk management functions, that will promote well functioning repo and funding markets. While CFTC rules impose customer protection requirements and permit an FCM or DCO to utilize repos to manage customer funds, an SEC registered clearing agency is not a permitted counterparty under Rule 1.25(d)(2).

Therefore, the GMAC recommends that the commission allow a CCP, that meets the definition of a covered clearing agency under SEC Rule 17-Ad-22(a)(5), to be designated as a permitted counterparty pursuant to CFTC Rule 1.25(d)(2). This is another recommendation that I think is a no-brainer, to show how we can have continued alignment between SEC and CFTC regulatory frameworks. And importantly, my understanding is that this recommendation will meaningfully assist in the implementation of the Treasury clearing mandate that the SEC recently finalized.

I'm pleased to say that in my discussions with chairman Behnam, he has been supportive of the CFTC examining this recommendation to do a rule making proposal. And so I look forward to continuing to work with the CFTC staff, as well as examining the recommendations from the GMAC in order to move forward with this rule making proposal, which, again, I think will help to promote and strengthen resiliency and the safety of the U.S. Treasury market.

For the recommendation on the FICC-CME customer position cross-margining structure. As you all know, the CFTC and the SEC for decades have approved cross-margining for Treasury securities transactions and Treasury futures, promoting the efficiency and well functioning of the U.S. Treasury markets; the backbone of the global financial system.

The GMAC had recommended that the commission make the benefits of cross-margining available to a broader range of sophisticated customers, including those customers that will be subject to the new SEC Treasury clearing requirements, as well as to all customers that voluntarily elect to clear Treasury transactions and will post margin.

My understanding is, of course, as firms are examining the Treasury clearing mandate and understanding what market infrastructure changes will be necessary in order to successfully mandate Treasury clearing, that there's ongoing work in examining the benefits and how to do further cross-margining. And so, again, I'm pleased to see that not only through the leadership of FICC and CME, who were both members of the Global Market Structure subcommittee, but that the GMAC was able to support this important initiative.

For the next recommendation, which was the endorsement of the futures industry association volatility controls mechanism. Of course, it's no surprise that the efficient management of financial market volatility is paramount. And during the recent prices and markets, such as during the COVID-19 pandemic, as well as in commodity markets, FIA has noted the pivotal role volatility control mechanisms have played in preserving market integrity.

The GMAC had recommended that the commission use the best practices published by FIA as a tool for understanding exchange market risk controls and when engaging with global regulators and international standard setters. The GMAC recommendations have been indeed shared with not only the FSB and IOSCO, but with our international counterparts around the world. And so, again, this paper has been of great interest in understanding how best to deal with future market shocks and dislocations, as that seems to unfortunately be coming more frequent; particularly in the current macro and geopolitical environment.

For the recommendation of the inclusion of U.S. Treasury ETFs as eligible initial margin collateral. The GMAC had recommended that the CFTC expand the universe of liquid assets that can be posted as uncleared margin, specifically to include U.S. Treasury ETFs, because it would help to diversify and support greater liquidity and depth for uncleared swap markets, and it can help to mitigate idiosyncratic risk.

This is a recommendation that the CFTC has been considering, and I look forward to hearing more from the GMAC subcommittee or work stream leads, about what specific steps would be necessary to be able to capture the benefits here, of including U.S. Treasury ETFs as eligible initial margin collateral.

For the technical issue subcommittee, there were a couple of different recommendations. On the global default simulation, CCP Global had conducted a global default simulation across CCPs in November of 2023, and it was a range in consultation with input from regulators. The GMAC had recommended that the CFTC consider inclusion of lessons learned and best practices arising from such simulations into its capacity building programs with, especially some emerging markets.

The CFTC has been considering current rulemaking proposals around the resiliency and recovery of CCPs. And, again, this is a prominent topic on the international standard setters agendas. So it's been fantastic that this recommendation, again, has been meaningful in contributing to both the international work as well as to the CFTC's own rulemaking proposals that are currently outstanding.

Another recommendation was regarding money market funds as eligible collateral and here, the GMAC had recommended that the commission finalized the CFTC's proposed rule amendment to remove the asset transfer restriction from MMFs used as eligible collateral for non-cleared margin, in order to harmonize the parameters for MMF use with the UK and resolve one of the impediments to the use of MMFs between the US and the EU. It also would allow the CFTC to self-align MMFs with its eligible collateral requirements for cleared margin for CFTC Rule 1.25, which governs the investments of customer money by FCMs without similar transfer restrictions.

The GMAC had also recommended that the commission encourage the U.S. prudential regulators to adopt a corresponding amendment to their non-cleared margin rules, including allowing third country funds and then also to encourage the EU policymakers to remove the third country fund restriction for eligible collateral from their non-cleared margin rules.

Again, this is an active rulemaking proposal that the CFTC is currently considering. And, again, because of the international and cross-water implications of this, this has been helpful in contributing to the important international dialogs that are going on. I just returned last week, for example, from the IOSCO annual meeting.

There were two recommendations from the technical issue subcommittee regarding improving trade reporting for market oversight. And so one was regarding streamlining a potential 40 percent increase in CFTC reportable data elements. That was in connection with the CFTC's recent proposal to amend its Part 43 and Part 45 spot data reporting requirements.

I was pleased to see, that given the timing of that GMAC recommendation, it was able to be submitted to the

CFTC's comment file and did, in fact, have an impact on the proposal that was published. And I look forward to having the GMAC recommendations being furthered considered as we finalize that rule making proposal. But again, an immediate and demonstrable impact even in having an impact on the proposal that was published.

The other recommendation was to improve data sharing and systemic risk analysis, and in particular, to recommend that the commission facilitate discussions with key regulators, both market and prudential, on the desire to share data elements and agree upon the MOUs needed to allow such activity; starting with the U.S. and then to prioritize other G20 regulators for their significant overlap.

As you may know, trade reporting and transparency is a priority for the FSB this year; also for IOSCO. And so again, a very meaningful and timely recommendation by the GMAC that will contribute to both of those international work streams.

Finally, the technical issue subcommittee published, worked on, and had the GMAC approve the publication of a resource document to support the transition to T+1 security settlements. Of course, we have indeed now transitioned to T+1 security settlement, and I appreciate that the GMAC, again, provided such a useful resource in the lead up to quite a momentous occasion actually, for our securities markets.

And then last but not least, the digital asset market subcommittee worked on, and the GMAC approved, the publication of an approach for the classification and understanding of digital assets. And here the GMAC found that a clear consensus driven approach to classifying assets, and the functions they serve, will underpin robust markets and effective regulation.

Evolving digital asset ecosystem has led many to develop proprietary taxonomies to classify digital assets and their related technology. Recognition of this progress, the GMAC subcommittee has engaged digital asset stakeholders, across the broader ecosystem, to build a common approach for the classification and understanding of digital assets.

This approach aims to set out consistent language for participants, in the digital asset ecosystem, to promote innovation, identify and address risk considerations, and enable effective regulatory understanding. With this objective in mind, the approach builds upon the considerable classification efforts of global prudential standard setters and regional authorities, including the bank for international settlements, the FSB, and others.

The GMAC had recommended that this approach be considered an initial basis for consensus driven functional taxonomy. And as the digital asset ecosystem continues to evolve, so too will the terminology use to classify it. The subcommittee plans to reassess any future developments to provide further recommendations to this approach based on the guidance of its members. And the subcommittee seeks to support effective rules and regulations for digital assets, and recommends continued collaboration between industry standard setting bodies and the regulatory community.

As I mentioned earlier in my remarks, this document has proven to be incredibly useful as foundational guidelines for developing a common understanding of cross-jurisdictions for how to approach digital assets. And indeed, I think it's been a helpful educational document and resource for U.S. policymakers, as well. So this was a lot of hard work in coming together and building a consensus driven document, but I'm really pleased that the GMAC was able to accomplish this.

So those are all the GMAC recommendations, 11 in all, and the next steps. And I hope that this again shows that the work that we've been doing here has an impact and has real value and that indeed, this is the purpose of the federal advisory committees in order to provide the federal government with these types of expertise from the public.

Now, I want to move on and welcome a few new faces to the GMAC and to our subcommittees. We've added a few new experts and leaders to our ranks since we last met. And so joining the GMAC as members, we have Chuck Mack, the head of Strategy for North American markets from NASDAQ, and Derek Kleinbauer, president of Bloomberg SEF.

Joining the digital asset market subcommittee as members, we have Mo Shaikh, Co-founder and CEO from Aptos Labs; Terrence Dempsey, Senior Vice President Head of Product Strategy from Fidelity Digital Assets; Ian Grieves, Vice President Product and Strategy from Cboe; and Chen Arad, Co-founder and Chief External Affairs Officer from Solidus Labs. Please join me in welcoming these new members to the GMAC and to their subcommittees.

Now, then moving on to today's addenda. So for today's GMAC meeting, we're going to continue to build on the significant progress that we've already made. We're going to start from a presentation from the Global Market Structure subcommittee on the impact of proposed U.S. implementation of Basel III Endgame's bank capital requirements would have on end users who rely on clear derivatives markets.

This, I think, is particularly important because one of the things that is key to the CFTC's identity, and to the culture of this agency, is remembering where we came from. And that, at the end of the day, we are here to serve the producers, the growers that utilize our markets, and the commercial endusers that utilize our markets for risk management and price discovery; and the liquidity providers that help to enable that. So I'm really pleased that we're going to be able to hear this perspective.

We will have a presentation from Kyle Glenn from FIA and also from Thane Twiggs, Chief Compliance Officer for risk management at Cargill. We'll then have a panel discussion on swap execution facilities. Our esteemed panelists are Thomas Pluta, President of Tradeweb; Scott Fitzpatrick, CEO of Tradition SEF; and Adam Lister, the Interest Rate Swaps Electronic Trading Product Manager at Bloomberg.

Then Tara Kruse will lead our technical issue subcommittees discussion on its proposed recommendation on variation margin processes in non-centrally cleared markets. Tara is the global head of infrastructure, data and non-cleared margin at ISDA.

Following a brief break, we'll receive an update on global commodity markets from Derek Sammann, Senior Managing Director and Global Head of Commodities, Options and International Markets at CME Group.

Finally, we'll receive a presentation on the CFTC's international engagement and initiatives from Andrea Musalem, Associate Director of the CFTC's office of International Affairs.

We'll close out today's meeting with updates from each of the subcommittees on ongoing work streams and future agenda items. I'm very much looking forward to these presentations and the consideration of the latest round of recommendations. Once again, thanks everyone for being here and making the GMAC such a success over the last year.

MR. JUNG: Thank you, Commissioner Pham. We will now hear a prerecorded opening remarks from Commissioner Mersinger.

(Recorded message plays)

COMMISSIONER MERSINGER: Good morning. I'm sorry I'm unable to join you in New York today, but I wanted to thank all the members of the GMAC, and it's, subcommittees, for their continued efforts to address challenges in our evolving global market. I'm always impressed by the breadth and depth of knowledge the GMAC members bring to these meetings, and the work being completed on the various subcommittees.

I recognize you have a full agenda today, so I'll keep my remarks short. And although I'm not there to join you, I will be watching the recording, and I look forward here about the new subcommittee proposals, learning more about the current landscape for swap execution facilities, as well, hearing more about the current state of global commodity markets. Once again, thank you for your service on the advisory committee. Please know that your input is truly valued and it's incredibly important to our work at the agency.

Additionally, thank you to Commissioner Pham for all the effort and energy she has put into sponsoring the GMAC. I know she is passionate about the GMAC and the work you all do. Thank you to Harry Jung and Nick Elliott without whom these meetings would not be possible. And last, but certainly not least, thank you to the staff here at the CFTC, who work hard to ensure these meetings are a success. And a special thank you to telecom team, who made it possible to share this message with all of you. I'm very grateful for your expertise and your kind assistance in all things at the agency.

MR. JUNG: All right. Thank you, Commissioner Mersinger. And thank you all for your opening remarks. Before we begin the first segment, I just want to go through a few logistical items that I wanted to mention to the committee members.

Similar to the prior meetings, please make sure that your mic is on when you speak. Please remember to turn the mic off when you're not. This meeting is being simultaneously live streamed, so it is important to keep your mic on, and so others can hear.

If you like to be recognized during the meeting, for those who are in-person, please raise your hand or flip your name card, or for those who are on Zoom, please use the raise hand function, and we'll recognize you and get you at the mic.

And for those who are presenting today, with slides, we will be controlling the overall master deck up here. So if we just say next slide, we will -- we will move the slides accordingly.

And before we begin, I'd like to do a readout of the members participating virtually, so we have attendance on record. I'll just go down the list now: Jason Chlipala, Stellar; Gerry Corcoran, R.J. O'Brien; Adam Farkas, GFMA; John Murphy, CMC; Joe Nicosia, Louis Dreyfus; Chris Zuehlke, DRW. With that, I'll turn things over to the GMAC chair, Amy Hong.

GMAC CHAIR HONG: Great. Thank you, Harry. It's a pleasure to be here today with Commissioner Pham, the sponsor of the GMAC, and all of our GMAC members. I thought it was really impressive to hear the commissioner recap all of the work that the GMAC has delivered, the insights and recommendations. And I particularly appreciated the commissioner's update on where each recommendation stands today.

I'd like to thank our GMAC members and presenters for their time and welcome all members to share your perspectives during our open discussions today. I'll hand it over to my co-chair Darcy for her opening remarks and to introduce the first subcommittee recommendation for today.

GMAC VICE CHAIR BRADBURY: Thanks, Amy, and thank you, commissioner. It's great to be here in New York and everyone, just about everyone, in real life; which is going to make for better discussions. So thank you, very much.

I think we should go right into our first subcommittee recommendation. The Global Market Structure subcommittee has, as you heard from the commissioner early, has been very active this year and has a recommendation for us today and sort of a presentation. I'm going to turn it over to Kyle Glenn of FIA and Thane Twiggs of Cargill to present their recommendations on the impact of the U.S. Bank capital proposals on end users that rely on clear derivatives markets.

MR. GLENN: Great. Thank you so much, Amy and Darcy for your leadership at GMAC, and Commissioner Pham for your sponsorship of the committee. And thank you to Michael and Brad for co-chairing our Global Market Structure subcommittee and helping to keep us on track with this report. Harry, maybe if we could go to the next slide.

So just a little background on the pending bank capital proposals. I know we've talked about this at prior meetings, but it's hard to believe that it's been less than a year since the Fed OCC and FDIC proposed the Basel III Endgame proposal. Separately, on the same day in July, the Fed requested comment on a proposal that would make significant adjustments to the U.S. globally, a systemic important bank holding company surcharge; the G-SIB surcharge proposal. Harry, can we kick it to the next slide? Thank you.

So these proposed rules are going to be a -- represent a very comprehensive rewrite of the regulatory capital standards, that the biggest U.S. banks are subject to, and it's going to impact every activity that the U.S. banks engage in.

Just focusing on client clear derivatives markets specifically, which we focus on in the report. The Basel III Endgame proposal would significantly raise the capital requirements for U.S. banks that offer clients access to futures options and cleared OTC swaps. And the G-SIB surcharge proposal would significantly raise those capital requirements for U.S. banks that offer clients access to cleared OTC swaps. So, next slide.

So just to kind of demonstrate the -- the impact. FIA and ISDA did a joint data collection of the six U.S. G-SIBs that provide client cleared derivatives --

MR. JUNG: And we'll do a quick pause. Until we get the slides on the right format.

COMMISSIONER PHAM: Sorry. We are experiencing technical difficulties. Our interoperability is -- between the D.C. headquarters and the New York office is not working quite right at this moment.

MR. JUNG: All right. We're live.

MR. GLENN: Okay. Well, thank you. So as I mentioned, FIA and ISDA did a data collection, an independent data collection, of the six U.S. G-SIBs that provide client clear derivative services as of June 30, 2023. And you can see here the impact of both proposals that the Basel III Endgame proposal, we estimate would increase the capital requirements for those six U.S. G-SIBs by about 22.4 percent or $2 billion, and the G-SIBs surcharge proposal, 58.1 percent increase for $5.2 billion.

So in total, that's a $7.2 billion increase in capital requirements for those six U.S. G-SIB banks for an 80.5 percent increase. And just, you know, as you look at the landscape of -- of FCMs that provide clients access to clear derivatives markets, the vast majority of -- of the business goes through U.S. G-SIB banks. So this is a pretty substantial increase from today. Next slide.

So the -- the report is broken out into various sections, that put a spotlight on how the proposed U.S. bank capital rules will impact the clear derivatives markets and the end users that rely on access to those markets. Each section has a high level description of the impact, and then quotes and citations from the specific comment letters, that directly raise the concerns of end users and exchanges.

Comment letters that we cite include agricultural trade associations, energy trades, insurance, life insurance, pension funds, manufacturers, others. So it's a wide range of -- of comment letters that we've -- I identified and cited in the report. And the report focuses on these -- these key areas, reducing the capacity of U.S. banks to offer client access to derivatives markets.

The proposals would reduce liquidity in the derivatives markets, increase the cost of hedging for end users, and as a result, increased costs for their customers, disproportionately harms smaller end users and nonpublic companies, increased systemic risk and creating an unlevel playing field for market participants; including across jurisdictions. So we're breaking -- the report's broken down into all those different sections. I'll keep us moving here; maybe next slide.

I think the other thing I -- we cite in the report and -- and credit to the GMAC and -- for highlighting the impact of these proposals in prior meetings. We cite specifically in November 2023 GMAC meeting. There was a discussion from the chief revenue officer of Cypress Creek Renewables, about concerns with the pending bank capital rules significantly raising costs for banks that provide hedging services for their clients, like Cyprus Creek.

And then more recently in March, we had Reggie Griffith from Louie Dreyfus and Dan Gallagher from -- representing the Rural Electric Co-op Group, raising concerns about the potential unintended consequences of these bank capital proposals on, kind of, the futures markets and -- and those folks that rely on them.

So there's been a lot of work done by GMAC already in this space. I think we just wanted to use this report to really tie it all together. And -- and like I mentioned, pulled directly from the comment letters that we've seen that touch on clear derivatives market issues. Maybe next slide are.

And so we did want to highlight to -- a couple recommendations that should be considered, that would specifically promote client clearing; make sure that it's not being disincentivized. And then we -- we cite a couple quotes here. One from the Fed Chair, Jerome Powell, who stated publicly in 2017, "That regulators globally have a responsibility to ensure that bank capital standards and other policies do not unnecessarily discourage client clearing."

And then more recently by Chairman Behnam, he was quoted as saying, "We want to incentivize clearing. We want to focus on understanding the benefits of it and not creating unnecessary costs that disincentivize clearing."

So if we want to accomplish this and not disincentivize clearing, we lay out a handful of key areas we think the proposals could be amended. And to not disincentivize clearing, we've got one specific proposal for the G-SIB surcharge and then a handful for the Basel III Endgame proposal. And then maybe we can go to the next slide.

And, you know, an issue that we wanted to put on the GMAC's radar, something that's -- that's going to come up more and more over the coming year, and something that we're focusing on a lot at FIA, is, you know, the bank capital proposals that -- cannot be viewed in a vacuum. There's a lot of other things happening. And while outside the CFTC's jurisdiction, the SEC recently adopted final rules that are going to require most market participants to clear repos they entered into on U.S. Treasury securities, as well as certain cash purchases and sales of Treasury securities.

And the implementation of those rules and the bank capital rules are expected to be implemented around the same time. There's going to be interrelated repercussions for market participants whose activities span across derivatives and securities. And, you know, we're viewing this through a capital lens, through along a legal lens, and -- and some of the challenges with -- with kind of the SEC/CFTC rules.

And so, and then -- and then the last point, you know, there's definitely going to be some cross-margining issues that we're taking a close look at, at FIA. I know other trades are, as well. And it's something that I'm sure we're going to be having a dialogue about for -- for the coming year plus. But I just wanted to put that on the radar of the group as well. So that's something that's contained in the report. And maybe the next slide, Harry.

So and we conclude the report with some recommendations for CFTC action. The first one, continue engaging with the relevant U.S. bank regulators about the pending proposals and the impact they will have on the markets that fall into the CFTC jurisdiction. We -- we at FIA and our members, we've met with the CFTC a number of times, and I think generally they -- they're doing this and we have had great discussions with them.

As the regulators that understand our markets best, it's helpful to have them in the room, and as somebody that can work and meet with the bank regulators and -- and, you know, be the market expert. So we've appreciated the opportunity to meet with the CFTC. I think we just want to continue to engage -- encourage them to continue engaging with the bank regulators on these proposals.

The next item, conduct an independent study of the proposals to better understand the impact of the proposals on the users of derivatives markets. And then the last one, consider organizing a roundtable with U.S. bank regulators focused on derivatives markets.

So those are the -- the three ultimate recommendations. And, then, as you can see here, in the appendix, we've included a broad sampling of public comment letters highlighting the concerns with the bank capital proposals. You've got AG Energy, a broad coalition of end users, risk management advisers, manufacturers, insurance, pension funds and investment management, and then exchanges and clearinghouses. So it's -- it's not, you know, this is definitely a diverse group of -- of comment letters, and we've included links to all of them, so folks could access them easily if they like.

I've been speaking for a while. I think maybe I'll turn it to Thane, if that's all right.

GMAC VICE CHAIR BRADBURY: Harry, if you could just go back one page. So these are the recommendations that we're asking the committee to consider today. And I want to open it up for questions and comments. Oh, I'm sorry. Blanked out. Of course, Thane.

MR. TWIGGS: Thank you. I'm here today to talk a little bit about some of the impacts that this may have on end users. But before I do that, I want to thank Commissioner Pham for her thoughtful sponsorship of the GMAC committee and the work that has been done with this committee, and then also the Global Market Structure subcommittee, on this report.

It really puts together a lot of the concerns that the industry has had. And as we sit back and think about this, this is not about safety and soundness. I think we could probably all agree that safety and soundness of the financial industry and financial institutions is important. This is what some consequences or unforeseen, or, unanticipated, consequences may be for the markets.

And so when we think about an end user as others, we rely on markets for price discovery, for hedging, and for many of these different activities. Now, an end user faces a number of risks. Most of them are out of the control of an end user. We think about a geopolitical event. We've seen some of those in the past few years. Those are really out of the control of end users. We've seen climate events that have impact -- impacted end users as well. So where do they go?

If they want a chance to be able to hedge, they need to go to these markets. And the consequences of the capital rules will limit that. And primarily because of -- because of cost. The costs are going to go up. I, you know, Kyle gave the estimate that overall it's about 80 percent. I think that's a pretty good estimate. I really don't know because part of it's on the capital structure for each of the individual G-SIBs, and how they look at them, but the cost will go up to the market.

So what happens when cost goes up? When a cost goes up, you think rationally and say, well, that's more expensive. I may or may not participate in that market. So you start to think about, do you really want to get into that market and what you're willing to go unhedged, or do you want to participate.

And even if you're not a hedger, hedgers need other people to take the other side of a trade, in order to be able to hedge their risk. And if those people aren't willing to enter the market because of costs, it reduces the liquidity. You have reduced liquidity, likely have more volatility. And so when the next geopolitical or climate event comes around, what do you do? Right. If you're in the market, it's going to cost you a lot more. If you're not in the market, you're unhedged, then you have that price risk.

Reggie Griffith from Louis Dreyfus and Dan Gallagher, they spoke recently at GMAC about some of these costs, and what it can do and the unanticipated consequences. But when we think about end users, who are they? All right. So we think about end users, and you may say, oh, Thane Twiggs is representing Cargill. Reggie Griffith represented Louis Dreyfus. So these are end users. So they're big corporate -- they're big companies that can handle this.

Well, that's really not the case. End users may be large companies, but they're also smaller individual farmers, ranchers, they may be production companies. They're basically the whole gamut. And so end users may or may not have the financial wherewithal or sophistication to self clear, right? So if the cost goes up, they look for another avenue. Maybe they self-clear, but that's really not available because there are also consequences of this if you're self-clearing.

Another thought that has been expressed is, well, just go to an FCM or futures commission merchant that's not a G-SIB. Well, part of my concern about that is there may not be enough capacity. Some of the -- Kyle mentioned that, or in the report it mentions, that 94 percent of the market of FCMs with the top six G-SIB. So for all of that activity to move to a nonbank, there's just not capacity.

Another thing I've heard is all foreign banks. Well, same issue. May not be to capacity. Why not have our U.S. banks? I have nothing against foreign banks, but we should have a level playing field.

The other thing that -- that I think about is, there are some penalties here for entities and end users that may be financially very sound, but because they're not publicly traded, they're treated unfairly, on the proposed rules. There's no rationale for that, but it is part of the rule.

And so as we look at these activities, the -- the costs will increase. We may or may not have capacity for other FCMs in the market if the market tries to shift to nonbank. We may not have capacity if we shift to foreign bank. Okay. Don't access the market. Well, an OTC market is a way that people can hedge. These end users can go and if they're an eligible contract participant, they can enter into a swap or a derivative to help hedge their risk. But the person that offers that swap, how are they going to hedge? They're going to have to go to the market. Costs are going to go up, and so the impacts of this flow all the way down.

And so I think those are some of the concerns that have been expressed. It's not simple to think about this, but I think the reality is, there will be impacts to people that we do not even anticipate. Farmers that may not even enter into an OTC swap for a future. Well, they're going to be maybe trying to hedge with forward contract, but the increased costs in these markets will also impact the forward contract. It may go unhedged, which is also can be problematic. And so, I would recommend that we adopt the -- the subcommittee, the market structure subcommittee, and the rationale and recommendations that they have and that we continue to press on this issue because it does have unintended consequences.

And as a last point, I always like to think about people that may not be in this room, may not even know what a derivative is. But if we think about the world right now, according to some of the most recent world food program estimates, there are 42.3 million people that are facing acute food instability. These people are also impacted by decisions and actions of this sort, as well. So it's not just an end user that's going to access the market, but it goes all the way to the table. And that's why this is a critical issue, and we should have additional reconsideration. Thank you.

GMAC VICE CHAIR BRADBURY: Thank you. So now, I'd like to open it up for comments or questions on the recommendations. We understand that the GMAC doesn't advise the bank regulators directly, but we do advise the CFTC, and they have a very important voice in this discussion and the impact of other regulators proposals on the derivatives markets. And that's what these recommendations specifically address. So are there questions or comments from GMAC members?

MR. PERKINS: Hi, Chris Perkins, president of CoinFund. I wanted to unpack the capacity issue and like to note that, someone who operates in the digital asset space, the capital rules are incredibly punitive, thus depriving market participants of access to risk management, frankly. Not -- and that's too fold. I think capital rules are part of it. The other part of it is that we simply don't have clarity around products that allow us to hedge risk.

But I wanted to unpack this other issue that I see. And -- and as someone who used to run an FCM, I'm very concerned that, it's not a very healthy market structure right now. In fact, the number of FCMs has materially decreased from about a high of a 188 in 2004, just 61 in 2022 -- in 2022. Meanwhile, assets under segregation have gone from 60 billion to 470 billion. So from a buy-side perspective, particularly through a digital asset lens, we have very little capacity in access.

My question is, you know, to the extent that these Basel -- these rules that impede -- that'll further be punitive to G-SIBs go into effect, is that going to accelerate or decelerate this precipitous decline in FCMs that we're seeing?

MR. GLENN: It's hard to say. And I think to your point about the number of total FCMs, I think you cited a number in the 60s. When you look at the actual number of FCMs that are providing customers access to derivatives markets, the numbers closer to 45 at the end of 2023. So it's an even more significant decline over the past 20 years. I think bank capital rules certainly play a part in -- in this trend. There's other factors, of course, technology and just general consolidation in the financial markets. But, you know, I think we definitely think that the capital rules will play a role in that trend.

MR. TWIGGS: And just what I would add to that is, you know, that is a topic that needs to be looked at, I think, but not through these capital rules, as proposed. It's almost like going after with a huge hammer for a problem that may need a very small hammer. But I -- I think the point is well taken, but I don't think this is the mechanism to do it.

GMAC VICE CHAIR BRADBURY: Other comments or questions from GMAC members and online?

COMMISSIONER PHAM: I have a comment. I -- I just want to again thank, Kyle and Thane for their presentations. And I especially appreciate your presentation, Thane, and tying it back to the food insecurity issues, and the real impact of what commodity markets are, and how important it is that end users have the access and that clearing firms have the capacity to enable that. So thank you for highlighting that point.

The figures that were shared are some very large numbers. I think sometimes people get used to throwing around big numbers, but I believe that showed almost a 12 billion net increase in requirements, and I think one of the categories did show an 80 percent increase in the requirements. And so, just given that the mission of the CFTC is to ensure the integrity of the markets that we oversee, and given the concerns that have been repeatedly raised over the last decade or so, around FCM concentration and the resiliency of our clearing model, central clearing model. I think it is very important that we need to carefully consider any implications or anything that will reduce or restrict access to clearing.

GMAC VICE CHAIR BRADBURY: Thank you, Commissioner. So committee members, we've discussed the recommendation. And is there a motion from this body to adopt the recommendation?

MEMBER: So moved.

GMAC VICE CHAIR BRADBURY: And a second? All right. It's been moved and seconded. Any additional questions or comments from committee members. So the motion on the floor is for the GMAC to adopt the Global Market Structure subcommittees recommendation regarding the impact of U.S. bank capital proposals on end users that rely on clear derivatives markets and to submit them to the commission for consideration. A simple majority vote is necessary for the motion to pass. I'll turn it over to our designated federal officer to conduct the vote.

MR. JUNG: Thank you, Chair Bradbury. Committee members, last time to vote. Similar to the prior meeting, we're going to do a voice vote. And for those in virtually, I'll give specific directions as to, you know, if you raise your hand, we'll give us -- we'll give some time for those to put their hands down virtually. I know there's some tech lag, so we'll start the voting soon.

All right. Members, in agreement, please raise your hand and say, aye. All right. Thank you. In disagreement, please raise your hand and say nay. And abstentions. Okay. Please give us a moment while we tally the vote. Chairman Bradbury, you have 28 yes votes, zero no votes and zero abstentions.

GMAC VICE CHAIR BRADBURY: The ayes have it. The motion carries and the recommendations will be transmitted to the CFTC from the GMAC. Thank you, very much. And thanks to the subcommittee for all of your hard work pulling it together and going through all of those comment letters. So we really appreciate it.

Now, we're going to have a presentation on swap execution facilities. I'm going to turn it over to Thomas

Pluta of Tradeweb, Scott Fitzpatrick of Tradition, and Adam Lister of Bloomberg.

MR. PLUTA: Good morning. Thank you, to all of the GMAC members for having me today, and thank you, Commissioner Pham for the opportunity to speak. My name is Thomas Pluta, and I'm the President of Tradeweb Markets. I'd like to start today by giving a little background into Tradeweb's role in the derivatives markets. Today, Tradeweb operates two swap execution facilities, DW SEF, which offers voice trading and central limit order book trading, and TW SEF, which offers disclosed electronic trading.

Through the first quarter of 2024, more than $28 trillion in notional volume has been executed through the DW SEF and more than $390 trillion has been executed through the TW SEF since their launch in 2013. These trades include a mix of interest rate swaps, CDS, basis swaps, OIS, and others. For the purposes of this discussion, I will focus on the interest rate swaps market were Tradeweb has a leading position.

For some perspective on that, electronic trading volume of cleared interest rate swaps reached $937.3 billion per day in February of 2024; according to the latest data available from FIA. That's up nearly 16 percent year over year. While those are impressive sounding stats, it's important to note that this didn't happen overnight.

In fact, the evolution of Tradeweb SEF platforms actually dates back 20 years, before the financial crisis and reforms implemented under Dodd-Frank and MiFID mandated central clearing for most interest rates derivative products. For our part, by the time these regulatory mandates came to fruition, Tradeweb's infrastructure was set up so that we could quickly and efficiently align our offerings with the provisions outlined by the mandates, which proved beneficial to our clients, regulators and broader market participants.

Our deep and longstanding presence in these markets has allowed us to reflect on how we got from there to here, which can help us better understand the future of the interest rate swaps market. There is a common misconception that the birth of electronic swaps trading coincided with the central clearing mandate. While these reforms were certainly a catalyst, they did not become a significant factor until several years after the initial seeds of electronic swaps trading had already been sewn.

In fact, the first real step in the evolution of electronic swaps markets had nothing to do with derivatives. It was the development of a request for quote, or RFQ, protocol in the market for U.S. Treasuries in the late 1990's. This relatively simple step, putting dealers into competition and essentially mimicking the phone based fixed income trading workflow on a digital platform, is what created a proof of concept and importantly had large banking institutions comfortable with trading highly liquid securities electronically.

Still, however, despite the proof of concept, when Dodd-Frank and MiFID were introduced, many pundits and analysts were suggesting that the mandatory clearing and electronic trading of swaps trades would kill the interest rate swaps market. It didn't. As illustrated on this slide, we saw an increase in volume on TW SEF and across the market, we saw electronic trading actually spike; a trend that continued for the next two decades.

According to ISDA through 2023, the cleared share of interest rate derivatives was 78.2 percent or roughly $291 trillion. The implementation of Dodd-Frank, and the phase one go-live of mandatory SEF trading, served as a catalyst to rapid fire growth in electronic trading of interest rate swaps. Along the way, we see another boost in 2018 with the MiFID II go-live, and then again with the cessation of trading benchmark to LIBOR in 2023.

Ultimately, with each new step and the reform of the derivatives markets, electronic trading grew significantly. While this growth was no doubt spurred by regulation, it was also supported by a great deal of innovation. Could you move to the next slide, please.

Importantly, as we look at some of the key milestones on the regulatory timeline, we have the made available to trade, or MAT determination, which sets the terms for which derivatives trades are required to be executed on-SEF and which can occur off SEF; effectively establishing the ground rules for electronic derivatives trading. We also have the introduction of new benchmark rates, such as SOFR and SONIA, which introduced new MAT requirements.

Last April, in an effort to promote further continuity across global swap market mandates, Tradeweb asked the CFTC to expand the products required to be traded on-SEF to include SOFR and SONIA. More specifically, to foster more global connectivity, we took the FCA's mandate for SONIA and applied it to SEFs. Between those major bookend events, however, much of the growth in electronic trading of interest rate swaps was driven by innovation on the part of market participants and trading venues, who kept making it easier and more efficient to trade electronically; regardless of the mandate.

In 2013, for example, when we launched the DW and TW SEFs, we had just four currencies reported to the SDR, and by the time we go to the 2020's, we were supporting 27 different currencies across developed and emerging markets, with multiple indices within those currencies.

We also develop new capabilities along the way, like portfolio trade compression and netting tools, which allow participants to reduce the number of line items they have outstanding at the clearinghouse by netting offsetting positions in a single trade and helping to reduce trading costs. New electronic trading functionalities, like request for market or RFM, which allows clients to ask dealers for a two-way market, rather than a price based on direction, have made it possible to rely on electronic trading throughout periods of heightened volatility. Next slide, please.

As a result, we found that as electronic trading of interest rate swaps continue to grow, even swaps trades that were not subject to the central clearing mandate began to trade electronically with greater frequency. In determining which instruments should be designated MATs, Tradeweb has long held the view that SEF should not be responsible.

As you can see on this slide, MAT instruments currently comprise a significant minority of our overall SEF volumes, suggesting there is a broader universe of swap instruments that lend themselves to and benefit from the liquidity found on-SEF. Due to the structure of the MAT process, commercial considerations may inhibit the growth of derivatives trading mandates in the U.S. What's more, structural impediments remain to bring certain instruments, namely invoice spreads, on-SEF.

CME Rule 538, which prohibits the nonfutures leg of an EFP package from trading on a SEF, has resulted in these instruments continuing to trade via phone and chat; despite market participants vocal and continued desire to move these trades on-SEF. On this slide we can see the volume of non-MAT swaps executed electronically has continued to tick up considerably. While part of this is due to structural issues surrounding the cessation of LIBOR, another big part of the story is the evolution of trading behavior toward a more electronic first stance.

Ultimately the seamlessness with which market participants were able to get a price, execute a trade, and automate trade processing and settlement started to become the norm, and it was just easier and more efficient to trade electronically. What's more, we've seen market participants turn to electronic trading in almost every market season. In the past few years alone, we've been faced with historic interest rate moves, the regional bank crisis and massive geopolitical instability. Events that would have caused massive disruption to the broader market, in any other circumstance.

Despite these challenges, Tradeweb and our markets adapted and remained resilient. More recently, our markets have experienced new questions and considerations around the upcoming block size requirements, set forth by the CFTC, which are starting on October 7, 2024. Tradeweb is a proponent of healthy and thoughtful regulation, that encourages more transparency and the derivatives markets, and we urge the CFTC to continue this move toward more transparency, as it determines the data sets used to calculate and analyze the block sizes.

As we look ahead to the next 20 years of interest rate swaps market evolution, we believe we will see increasingly sophisticated trades executed faster, at better prices and with more liquidity each year. Currently, our focus at Tradeweb is on multi-asset trading, fostering new use cases for automation and continuing to create more efficient markets. These are the new frontiers an electronic swaps markets where, for example, we're seeing the number of desks, trading both swaps and cash, grow steadily.

What all of this tells us is that there is an immense opportunity for these markets to move even more electronic, and we will continue to work closely with clients, regulators and market participants to create a more efficient and transparent marketplace through the use of electronic tools. Thank you for your time.

MR. FITZPATRICK: Good morning. Thank you, Commissioner Pham, Amy, Darcy, members of the committee and esteemed guests for providing me the opportunity to present to you today. My name is Scott Fitzpatrick. I'm the CEO of Tradition SEF. Tradition SEF is a part of the wider Tradition Group represented in over 30 countries servicing over seven and a half thousand wholesale market clients in 200 products and 25 product areas across five major asset classes and listed in OTC derivatives facilitated by over 300 desks around the group and products such as FX, rates, credit, equities, and energy and commodities.

As Tom said, as a SEF group, we were asked to give a perspective on-SEF trading over the last few years, provide a view into what our SEF world looks like 10 years in, and highlight some of the areas that may be subject to consideration in the context of purpose, effect -- efficiency and effectiveness.

Echoing Tom's thoughts there, on the development of markets over time and the resiliency and effectiveness of our businesses during the transition brought on by Dodd-Frank, having been operating in these markets as intermediaries and in swaps facilitation for somewhere in the region of 25 years before Dodd-Frank.

So what I'm going to do is, I'm just going to give you an idea here and have a look at how things are progressed. I haven't gone back a full 10 years of operation. Instead I chose to focus on the last five years examining what is actually traded on-SEF, and bear in mind, I represent what we know today as IDB SEFs, so interdealer market, which serves a different purpose and Tradeweb, which is predominantly a dealer to client and SEF.

So we'll look at the products that have actually traded on the SEF across asset classes. But more importantly, I think, as Tom mentioned, differentiating the made available to trade on MAT swaps versus non-Mat activity. The reason why we see so many trades are not subject to a clearing and/or trading mandate. They've been executed on SEFs, like the one run by Tradition and equally my fellow IDB SEFs.

As you can see here in the annual numbers, but when aggregated over a five year period, interest rates and credit derivatives, which are the asset classes that house MAT swaps, account for approximately 42 percent of executed transactions. Various currencies and equities which incorporate no MAT swaps, account for approximately 58 percent of executed transactions.

If we break that down further, within the interest rate asset class, using 2021 as an example. 2022 and 2023 were a bit strange as Tom mentioned, due to SOFR being non-MAT for a period of time while we were going through the LIBOR transition in 2021. The number of MAT interest rate swaps within that interest rate category represented about 30 percent of the total number of interest rate swaps, or 30 percent of the 42 percent were actually MAT swaps.

The remaining non-MAT executed products being things like inflation swaps, industry options in the U.S., similar desks around the world, and obviously many non-MAT currencies such as Canada and Latin American currencies and Asian based currencies. Next slide.

This here picture depicts our setup, effectively, on -- depending on your perspective, how you're looking at the -- on that side, on my right, your left, is where the MAT or the swaps subject to a cleaning and trading mandate operate. And on the other side of the red dotted line is the non-MAT or swaps that are not subject to any trading mandate.

The access and operating model in respect to -- to MAT swaps is where participants of the SEF have direct access to central limit order books, in the form of either trading platforms and rates and -- and credit index or access to void brokers -- voice brokers, who form part of the hybrid order book environment. Liquidity, price formation, management of that liquidity, inclusion of transactions and then everything that happens post-trade, is all handled within the facility with complete transparency to all market participants.

On the other side of the fence, however, which in fact, actually represents the majority of the swaps that are actually executed, is where you have non-MAT swaps. They are not subject to an execution mandate, the liquidity formation is not on-SEF. Liquidity is typically formed in either NFA regs of the IBs for platforms that have U.S. persons involved and or overseas venues. Brexit, for example, has handed us an issue whereby UK clients cannot execute an a European MTF and European clients can't execute a UK MTF.

So the most common denominator for those trades was SEF, and as a result of that, we've seen approximately 50 percent of U.S. swaps trades going on-SEF even when there is not a U.S. person involved in the transaction. The reason for this is Footnote 88 in the SEF rules and the nexus to the U.S. via the U.S. person means that we now operate unnecessarily cumbersome logistical and regulatory hurdles, platform structure around the globe.

Rules for multiple to multiple venues, employs operational requirements that assume that nearly every single swap a U.S. person enters into, no matter where and how transacted, has a direct and significant connection with activities in and effect on commerce of The United States, that requires the in possession of CFTC transaction rules.

Equally rules for multiple to multiple venues oppose operational requirements that assume that nearly every single swap a U.S. person enters into in the U.S., no matter where and how organized, must be executed on-SEF, irrespective of whether it is subject to the MAT status or not.

As I mentioned, as a result, firms like ours, in addition to your domestic IBs, are now required to maintain a complex overseas network of NFA registered IBs to support a small number of U.S. entities executing swaps in local non-U.S. liquidity pols. Overseas, non-MAT execution is essentially a reporting function using a portal provided by a SEF. SEFs -- the result of liquidity forming off, venue SEFs are not trading venues for non-MAT swaps. Next slide please.

So in addition to looking into the liquidity profile of our business, we were also asked to take a look at the comparison across regulatory environments for the like structure, the purpose vehicles for the facilitation of liquidity and the execution and processing of swap transactions. The good news is that the sections in this slide predominantly green, showing functional similarity and purpose. However, naturally, I'd like to draw your attention to the red boxes, which highlight some key differences, and some can argue anomalies.

SEFs SROs, as individual SEFs, we can only be responsible and accountable for what happens in our own classroom. Due in part to the fact that we do not own contracts like an exchange, nor do we provide clearing solutions for these markets. We're not aware of the wider implications of market activity of our clients in universal freely tradable swap products and underlying instruments of futures.

IBs not being able to execute swaps, again, due to Footnote 88, even though 95 percent of the business conducted within these entities is associated with swaps that are not and were not intended to be subject to trading mandate, that is no SEF or DCM has made them available for trading. These entities, as a result, are not permitted to execute those swap transactions and must register as a SEF or process them through a SEF as prearranged non-block swaps.

And then finally, their club RFQ, simply, this does not match the statute of any means of entities state commerce, with no other venue type operating under any similar restrictions, which results in -- and Tom mentioned, options and things like that, kind of shoehorning various trading models into either the status of an RFQ model or -- or a central order book which not always is the case.

All told, the introduction equally of Footnote 88 combined with the U.S. nexus has resulted in an optic that makes it look like a lot more swaps trade on-SEF than actually do in the true sense of the word.

As a footnote to these discussions, the outcome of this structure has led to bifurcated liquidity pools in overseas jurisdictions that divide swap pricing into pools for trades involving U.S. persons and swap prices into pools for trades for local or non-U.S. participants only. Next slide, please.

Now looking at the MAT versus non-MAT. So it looks relatively similar to the -- the slide that Tom put up earlier. Whilst remembering my first slide showing trade volumes by asset class, what this means is that despite being created for the purposes of liquidity concentration, information, price discovery, and ultimately execution of swaps subject to a clearing and trading obligation, the reality is that the majority of swaps executed on SEFs, like ours, are swaps not subject to the trading obligation.

Note the drop off in 2023 due to LIBOR being phased out and SOFR not being MAT at that point. Incidentally, and I think Tom alluded to it, during that period, mainly due to the inevitably of a MAT determination for SOFR swaps, following the clearing mandate being established, the market in these products actually continued to trade as if they were MAT, even though they were not.

From a commercial perspective, you can see in the top right-hand corner there, that our revenue profile of our businesses polar opposite of that, the trading profile of the business, in that MAT swaps are the bulk of our revenue. This reverse profile further highlights the reality of the situation. MAT swaps derive more revenue, due to the fact that we are a full service organization being provided by the SEF in the form of liquidity development, order management, trading, and full post-trade processing through complex trading systems, working in conjunction with highly skilled, voice broking desks.

Non-MAT swaps, in comparison, are handled in an administrative processing function and charged, accordingly, similar to that of market wide or other third party made a weird and infrastructure services.

That concludes my remarks for today. I hope you find it interesting, informative and helpful. Thank you.

COMMISSIONER PHAM: Actually, I have a question. If we could go back to your slide where you compare -- yes. This one. I think this slide really helps to illustrate the stark difference in the U.S. Market structure or the CFTC Market structure versus even the SEC or non-U.S. Markets. Do you find that this distinction of the CFTC's Market structure, and I think, you know, based on some of the comments and very helpful information in these slides, inhibits access to markets and should there be any additional consideration about the unique CFTC Market structure?

MR. FITZPATRICK: I mean, I'll -- I'll let Tom and Adam comment as well. I'm -- I'm not sure as to whether it necessarily inhibits. If you focus on MAT swaps and those swaps being the swaps that are intended to be onset. So I don't think it necessarily inhibits. I think what you see there is -- is that at the outset, when the SEF rules were being developed and applied, a lot of the futures rules for markets were transposed into the baseline for the development of OTC swap markets. And I think that's where you see maybe some of the inconsistencies develop, because OTC markets are not listed markets and -- and therefore, I think that's -- that I think maybe the -- the biggest difference.

MR. PLUTA: Yeah, I agree. I don't think it inhibits access, but to the extent that there's -- better. I agree, I don't, I think, that it inhibits access. But to the extent there are fewer tenders required to be MATed and may reduce the transparency and the benefits that we get from trading on SEF.

COMMISSIONER PHAM: Thank you. And I think that's an interesting point, also, that you raised. That when this market structure was being created, essentially attempted to take a market structure that was perhaps more similar to ECNs and -- and sort of participants on trading facilities and transpose a member based exchange SRO model onto the existing OTC swaps market structure, as you say. And it does seem that -- are there issues, should the CFTC continue in its trend, of -- of having SEFs become more and more like futures or securities exchanges?

MR. FITZPATRICK: I think Tom made the point during his presentation, that the way that the OTC markets develop, in terms of the management of liquidity in the processes of transactions, is -- is much more evolutionary in its development over time than a listed exchange. As where you launch a contract, you put it up on the exchange, and people come in and -- and trade the contract on the exchange.

In the OTC markets, and I do have a nice slide, but I didn't put it up today. Where you -- you get the beginning of life, which if you look at the SOFR market, for example, when it started to form, we had data before we had market pricing, before we had any form of markets, before we had executions.

So and then, you know, as data becomes more prevalent, the voice information, then you'll get a limited number of participants. Not very few -- not lots of trades and not so much liquidity. And then over time you move more towards hybrid systems. And then ultimately, in our world, it's a little bit different. You know, you end up with full central order books, where people are streaming liquidity and electronically; but that process can take years.

And -- and I -- and I think, you know, the -- the point of the RFQ and the central order book, I think that has to be more consideration for -- for the many different types of ways that -- that we design and develop systems to -- to bring as much efficiency as we can to liquidity formation, price discovery, ultimately, and -- and then execution for participants.

MR. PLUTA: Yeah. I -- I think that the -- the benefit of today's swaps market structure is that there's multiple protocols and multiple ways to access the markets, not one size fits all rather than just a future style. And I think that's what's allowed to continue the growth, and we'll continue the growth as we all innovate and create new protocols.

COMMISSIONER PHAM: And I think that point is especially highlighted by the -- seeing the volumes of the non-MAT trades that are being executed on SEF. So thank you for that.

GMAC VICE CHAIR BRADBURY: Adam, do you want to close us out here?

MR. LISTER: Yeah. Hello, everyone. It's Adam listed here. I -- I look after swaps electronic trading at Bloomberg. Thank you very much to Commissioner Pham and staff, GMAC chair and members for allowing me to present Bloomberg's observation on the derivative marketplace just over 10 years on from the pivotal period in late 2013, early 2014, which saw the launch of swap execution facilities and trade execution requirement by the made available to trade process.

I will attempt to provide context for the journey of tremendous growth we've seen in the electronic space, while highlighting some of the contrasting approaches we see in other regulatory regimes around the world in the intervening period. What we believe has worked well within CFTC's jurisdiction and areas which might yet be improved for the common good.

Firstly, I will start with the -- the market structure with respect to the made available to trade execution requirements. Bloomberg SEF offering consists of interest rate swaps and credit default swaps, both predominantly cleared and subject to the clearing mandate and FX MDFs and options. I -- I'll just focus here on the IRS and CDS cleared instruments.

As Tom has already shown in his slides, the growth of IRS trading on SEFs has been a success story of the Dodd-Frank Act viewed through the lens of transparency, fair market access, and operational efficiencies. It's worth noting that, as a percentage of total volumes and not just new risk, trades and interest rate swaps subject to the trade execution requirement represent a smaller fraction of total swaps than at the launch of SEFs.

For example, our SEF sees great volume in list trading offsets/collapses where customers choose to benefit from the overall experience, even though that's not compulsory. Just next slide, please.

I've -- I've actually, in contrast to IRS, I thought I'd get a CDS slide just to get the perspective there. As you'll see on the screen, those volumes over the past decade have -- have seen a consistent growth pattern, but we -- but we do see that the -- the percentage of MAT to non-MAT has remained pretty constant. It's a very standardized instruments and we don't see the twists and turns of the IRS market, with trading of MAT instruments very much the norm in that CDS market. Yeah. Next slide, please.

Trading IRS over SEF in Q-1 2014, when the trading mandate was introduced, was widely treated as compliance with the law. Whereas, in contrast, trading in OIS swaps fixed against the SOFR index grew relatively untroubled in the interregnum between the de facto dollar LIBOR retirement for new risk at the beginning of 2022 and subsequent clearing mandate and trading mandate.

Customers put through incomp RFQ on SEF, not because they had to, but because it's just how they do business. The MAT listing process before the first iteration of the execution mandate was fraught with the various SEFs weighing out the implications of MATing this instrument or that instrument, not yet having any kind of commercial blueprint for what might happen next. When the SOFR and SONIA trading mandates were proposed this time last year, it barely caused a ripple, save for discussions related to the block size changes. No small conversation, but a calibration exercise more than a fundamental disagreement.

Regarding the process of MAT itself, unlike futures contracts with intellectual property owned by a particular DCM. No SEF intrinsically owns a five year SOFR swap. When Tradeweb filed last year, I was asked a number of times whether we too would file a MAT application for the same swaps. This to me seemed wholly redundant, because their five year swap is exactly the same as ours.

In contrast, trading obligations in UK and Europe are initiated by regular -- regulator lead consultations, which, in my view, represent a less contentious approach. The concern in the U.S., at least initially, was the asking SEFs to mandate SEF trading was akin to asking the barber if you need a haircut. That said, the outcomes have been broadly similar with the focus on benchmark tenors only in the most traded indices and SEF reputational risk a powerful curb against MATing the world.

In terms of participants, how SEF is generally considered to be a D to C marketplace, which broadly means that fund managers, insurance companies, pension funds, bank treasuries will typically act in the capacity of liquidity taker versus the dealer community acting as liquidity providers via disclosed request for quote. This structure has remained remarkably constant over the years, not only in the U.S., but in other jurisdictions where Bloomberg operates.

While Bloomberg offers anonymous order book trading for our products, it is only the CDX index suite that sees activity by this execution method, a small but relevant portion of our overall business. This does mean that a diverse set of participants is able to transfer a risk to one another directly. Why is this not taken off in IRS? I think the shear breadth of tenors is a factor, but also customer's ability to leverage a relationship to transfer bigger blocks of risk in one go is still of value.

With so many different use cases from standard tenors to bespoke hedging structures, we have not seen the futurization of swaps. But we are starting to see more activity and requests for two way markets disclosed, creating effectively an on demand book of sorts. This has the advantage of mitigating the winner's curse, where only the willing dealer -- the winning dealer, sorry, explicitly knows the direction of the trade.

A couple of areas to also highlight. In the early days of SEF, it was common to only trade three or four major currencies, but our SEF now offers products in 27 currencies, and there are plenty of funds that will have exposure in all of these. So that has been an exciting development, as these markets have opened up.

In currencies beyond the majors, it is not uncommon for local liquidity providers to be important players in their respective markets, and many now wish to meet their natural custom -- customer base through SEF, given the benefits of pre-trade credit checks and post-trade clearing reporting, but also expand their distribution through the impartial access rules.

For example, a Brazilian hedge fund may trade Mexican Peso swaps with a Mexican bank because of the SEF, where they may otherwise not know each other or have the requisite legal framework to deal. We view this as a positive for overall price transparency and liquidity in the market.

However, those that are not registered with the CFTC as swap dealers, and who wish to remain below the -- the minimus threshold, will not provide prices to U.S. persons, even though the trades would necessarily be intermediated by their ECO/FCM per the SEF and CFTC rules.

If this -- if this trade were anonymous, the investor would benefit from this liquidity, but because the standard execution method of the marketplace is disclosed, their access to that liquidity is curtailed for practical purposes.

I would ask the commission to consider whether it might be of interest to revisit this topic and weigh up the benefits of improved pricing access for U.S. investors versus any adverse impacts of extending the swap dealer exemption. I note, that as this issue relates exclusively to foreign entities, the natural -- the natural advocacy here in the U.S. may be lacking. U.S. investors aren't aware of the potential liquidity available, and the voice of the non-U.S., non-swap dealer actors is naturally not going to be strong. But we as a market venue, would like to pass on these observations.

I commend the work of the CFTC in codifying the majority of package transactions, but I -- I do want to highlight one area of the rules which remains noticeably unresolved, that of MAT versus futures package transactions, which Tom alluded to earlier. The invoice spread is a very popular and very liquid trade in the marketplace. I note, that the no action relief from 2014 continues to this day, with a proposed final date in November 2025.

The CFTC's DCM core principles details allowable off exchange transactions, which includes a swap being the related position versus a future. So far so good. In my role, I speak to a lot of our participants, and I'm asked often by the customers why they can execute all manner of swap business through the venue, but they cannot trade the swap leg of the dollar package electronically on SEF; which they view as an aberration, given the efficiencies and transparencies that we've discussed in this meeting.

In the European jurisdiction, we are starting to see electronification of the Euro invoice spread market with the benefits that automation can bring to the speed and accuracy of the off book contract reporting and commensurately transparency efficiency for the swap leg executed on venue. While each DCM has its own set of rules of what is and isn't permissible in each particular market, I would like to suggest to the GMAC, that addressing the outstanding no action relief to provide clarity on whether or not the CFTC itself objects in principle to the swap component of an invoice spread being traded on -- traded via SEF execution methods. This would provide some legal certainty in our further conversations with DCMs in efforts to promote competition and transparency in line with the Commodity Exchange Act.

In conclusion, I would like to thank the GMAC again for the opportunity to share our views. It's been an extraordinary period to work in this particular corner of the industry. And while we still face many interesting challenges, we believe the benefits of Dodd-Frank have been felt by industry participants over the past 10 years in increased transparency, access to liquidity, more efficient processing, and ultimately a more secure market in which to move risk. Thank you.

GMAC VICE CHAIR BRADBURY: Thank you, Tom, Scott, and Adam. Are there any additional questions or comments from the committee? Michael Winnike from BlackRock.

CO-CHAIR WINNIKE: Thank you, very much for this informative presentation. First of all, I -- just a comment. We wholeheartedly support the work by the industry partnership between SEFs and exchanges to find a solution for electronic creating an invoice spread. It is totally sensible and would be very supportive of the industry efforts to -- to move that forward.

In terms of -- my question, I have two questions really about the relationship of MAT requirements to market participant behavior. And, you know, we wholeheartedly, you know, agree about the benefits of electronic trading of swaps. We voluntarily trade swaps electronically that are not subject to the MAT mandate, because of the operational efficiency it brings, the reduction in operating risk, the post-trade efficiencies.

There's a lot of benefits, but there are also some unintended consequences when a MAT requirement runs up against, you know, an operational outage. Where you're unable to potentially access a SEF, may be unable to trade, you know, when you have the application, in particular, of an RF2 to 3 requirement where box sizes aren't perfectly calibrated. You may be forced to put trades into competition that, you know, could result in worse outcomes for your clients.

So when we think about the -- the purpose of the MAT requirement in creating these markets and driving adoption of electronic trading, it -- it seems like from the data you've presented, that most market participants are out there voluntarily engaging in SEF execution even when it's not mandated.

And do you think that MAT requirements are required for, you know, for further expansion of this market or when you look at events like the movement of SOFR from non-MAT to MAT, did that really change market participant behavior, or was that sort of already well accepted?

And then similarly, with RF2 to 3, do you find that market participants are already voluntarily engaging in putting trades into competition, when it's sensible and -- and don't need a sort of direction from a mandate to create the adoption of that protocol?

MR. PLUTA: I can start. I think, the point -- the point that I made and -- and others made is that, yes, as trading on-SEF becomes more common place and people see the benefits, all the benefits that -- that are -- they're well known and articulated. Yes, there's more and more, there can be more and more non-MAT trading. However, maybe that's some or -- or most, but -- but not all. So I think the benefits of having the MAT determination is that it does bring much more into the SEFs and -- and then giving those transparency efficiency benefits.

MR. LISTER: Yeah, I echo what -- what Tom's saying there. I mean, we have 27 currencies, so 24 of those are voluntary. And, you know, that -- that's just it's -- it's only growing. So, yeah, we didn't really see the -- the impact of the -- of the trading mandate itself. It kind -- it was kind of a lacking indicator of -- of the SOFR market growth, which had exploded once the, you know, the -- the mandate for no new risk came in and that lead up to SOFR first.

So it didn't -- it didn't have as much of an impact as I was kind of looking for at the time, really, because people were already trading and they were already putting their trades into competition. And I think we've actually seen, I mean, RF2 to 3 is like, a minimum limit. I -- I think I've seen lately that that's -- that's increased almost. You know, I'm seeing more activity RF2 to many.

So, you know, our job is to put the, you know, the protocols that customers want to use and -- and they're using them. So, yeah, I don't know whether the trading mandate itself had so much of an impact this time around. It was it was certainly a very different environment 2013-14 when it first came in, when trading electronically might have been anathema to a lot of market systems. But now it's, I -- I think it's, when someone tells me that they don't trade on SEF, it's almost their the aberration rather than the other way around.

MR. FITZPATRICK: I feel like I say this a lot when I come to these sessions, but my world was very different, to the -- the words that -- that Tom and Adam live in. I think the intention originally of -- of MATing swaps was not only to concentrate liquidity and to regulate venues, but also there was a pitch for transparency and the sort of mitigation of sort of single dealer platforms and bringing competition to -- to the market.

In the IDB world, we essentially run order books across our entire global organization, where whether a swap is MAT or not, we are operating in those swaps in the same fashion as we do in MAT swaps. Right?

The only difference really being that when SEFs were introduced. And specifically when MAT swaps were introduced, we -- we were forced to take the interest rate relative desk that was subject to that world and the credit relative desk that was subject to that world, and put a nice regulatory wrapper around those businesses and call them SEFs. Right.

And at that point, you know, going back to Footnote 88, the world as we saw it, and what we thought it would look like, is we would have SEFs for those MAT swaps and adhering to all the requirements that that brings with it, and we would be operating our IB and other regulatory structures, that would facilitate in non-MAT swaps. And then Footnote 88 turned up.

And what that did for, us, was mean -- that all of these other efficient operating models that we have, and still have today, doing exactly what they do with all the different liquidity formation tools and trading platforms and all these brokers that we have facilitating those markets. Essentially, we're now no longer allowed to execute swap. We could do, everything else but, and we either had to register all of those businesses as SEFs, which was completely counter productive, or at that point, take that as a prearranged transaction, pass it through the SEF for execution.

So for me, the MAT versus non-MAT thing is a very, sort of different argument. It's more a structural thing than is a liquidity thing.

GMAC CHAIR HONG: All right. Thank you. I found it useful to hear about the industry's journey over the years, including the market's voluntary adoption of electronic trading. And also appreciate how you laid out the global nature of the swap markets and the jurisdictional differences in trading mandates around the world.

I would now like to welcome Tara Kruse, global head of infrastructure, data and non-cleared margin for ISDA and co-chair of the technical issues subcommittee, to present the subcommittees recommendation on variation margin processes in non-centrally cleared markets. Tara you have the floor.

CO-CHAIR KRUSE: Thank you, Amy. Thank you, Commissioner Pham, and Chairs Bradbury and Hong, for the opportunity to present on behalf of the technical issues subcommittee, my co-chair Allison Lurton, on streamlining variation margin processes.

Following the global implementation of margin requirements for non-cleared derivatives, there was an exponential increase in margin call and settlement volumes, raising the necessity for efficient collateral and liquidity management practices; especially during the times of market volatility. The importance of streamlining variation margin processes is recognized by market participants who are using standards and solutions, and by global regulatory authorities who are putting forward recommendations on that front. You can move to the two slides forward, you like.

Background there. Periods of market volatility, including the global pandemic and afterwards, prompted BCBS, IOSCO and CPMI to publish consultative reports on review of margining practices in 2021 and in 2022. They propose that there be further international coordination to look at ways that they could foster market participants ability to be prepared for liquidity and increased collateral volumes in times of market stress, in particular. In January of this year, that work culminated in a report by the BCBS and IOSCO's working group on margin requirements, with a set of recommendations for streamlining variation margin practices. Next slide.

The technical issue subcommittee request that the GMAC adopt its recommendation for the CFTC to support and facilitate industry implementation of the BCBS and IOSCO recommendations for streamlining of variation margin practices. It's worth noting that during the process for the consultation, there were no major issues that were discovered with respect to collateral processes. Rather, there were more isolated issues, and there were certainly consensus across the board, there were opportunities to mitigate future similar events by automation, streamlining of work flows, and implementation of industry data standards. There were four recommendations put forward by BCBS-IOSCO in respect of variation margin practices. Next slide. Next slide.

BCBS-IOSCO Recommendation No. 1: Dealer banks and other in-market intermediaries should address the operational and legal challenges that could potentially inhibit a seamless exchange of margin and collateral calls during a stress period.

The subcommittee supports this recommendation knowing that, for instance, online negotiation tools and digital output solutions can reduce the cost of legal documentation negotiations and streamline onboarding timelines. Digital documentation output can automate input to relevant systems, reducing collateral management disputes and respective operational risks. Next slide.

BCBS-IOSCO Recommendation Number 2: With the intent to mitigate liquidity issues and subsequent dash for cash during periods of stress, firms should consider providing flexibility and bilaterally agreed acceptable collateral from within the set of permissible collateral types.

Two points to make in regards to this recommendation. First, in times of market volatility, having constraints within eligible collateral schedules, such as only cash or only cash and government securities, can increase operational risk and liquidity constraints. Although there are a number of considerations the parties have to make, they should consider entertaining a broad list of eligible collateral and ensure that they have streamlined operational capabilities for delivery and return of each of those collateral types. Next slide.

Rule amendments and clarifications can enable use of a more diverse pool of collateral within the WGMR parameters. As mentioned by Commissioner Pham earlier, the CFTC proposed amendments to harmonize cross-border use of government only money market funds, by eliminating the fund restriction on asset transfer within securities lending and repurchase agreements. On November 6, 2023, the GMAC recommended that the CFTC finalize this rule proposal. And then on March 6th of 2024, the GMAC adopted a recommendation that the CFTC clarify that U.S. Treasury Exchange traded funds qualify as eligible collateral. Next line.

BCBS-IOSCO Recommendation No. 3: Firms should consider the advantages of standardization and automation of their non-centrally cleared margin processes to reduce friction and the possibility of operational delays or failures. Firms that have unique processes for margin calls and collateral settlement create operational friction and rising overhead costs and resources. Implementing suggested operational practices, like those published by ISDA, and automating work flows will reduce these challenges; mitigating disputes. For instance, if you streamline margin calls with standardized fields across counterparties, it'll help ensure that discrepancies can be resolved timely and easily. Next slide.

Furthermore, using mutually developed and open source data standards to represent eligible collateral, the terms and operational functions of legal agreements and margin call and cash collateral processes, can reduce operational friction, improve collateral optimization and expedite processing within and between counterparties, vendors and market infrastructure providers.

For example, members of ICMA, ISLA and ISDA have collaboratively build eligible collateral representation in digital form with the common domain model. By digitally representing collateral in a uniform way across multiple products and systems, data transfer issues related to collateral sourcing and collateral management among repo, SEC lending and OTC derivatives can be decreased. Next slide.

Finally, BCBS-IOSCO Recommendation No. 4: Says, firms should consider whether the utilization of third party services would be helpful in their efforts to improve non-centrally cleared BM processes. It is sensible that firms do not have -- that do not have the scale or infrastructure to build efficient in-house operations and processes, could research and analyze infrastructure providers with robust technical offerings and streamlined operations for collateral management calculations, margin call messaging, lateral operations optimization and portfolio reconciliation. Firms should encourage those providers to align with industry suggested operational practices and leverage common data standards whenever possible to promote consistency, accuracy, and interoperability.

These are the four recommendations that the subcommittee would like the GMAC to support.

GMAC CHAIR HONG: Thank you, Tara, and thanks to the technical issues subcommittee. Are there any questions or comments from the committee? All right. Committee members, we have now discussed the recommendation on variation margin processes in non-centrally cleared markets. Is there a motion from the body to adopt this recommendation and submit the recommendation to the commission?

MEMBER: So, moved.

GMAC CHAIR HONG: Do we have a second?

MEMBER: Second.

GMAC CHAIR HONG: Thank you. It has been moved and seconded. Are there any additional questions or comments?

With that we will move to a vote. The motion is on the -- the motion on the floor is for the GMAC to adopt the technical issues subcommittees recommendation and to submit it to the commission for consideration. As a point of order, a simple majority vote is necessary for the motion to pass. I will turn it over to the DFO to conduct a voice vote.

MR. JUNG: Thank you, Chair Hong. Committee members in agreement, please raise your hand and say, aye. Thank you. In disagreement, please raise your hand and say nay. Abstentions? Please give us a moment while we tally the votes. Chair, you have 27 yeses and one abstention.

GMAC CHAIR HONG: Thank you. The ayes have it and the motion carries. The technical issues subcommittee's recommendation regarding variation margin processes in non-cleared markets has been adopted by the GMAC and will be submitted to the commission for consideration.

We're running a few minutes behind schedule, and so we're actually going to shorten the break to just five minutes. If folks could please return to the room by -- actually, if folks could return to the room by noon, that would be great. So we'll have a 10 minute break. Thank you.

(Break.)

GMAC CHAIR HONG: Thanks everybody. I would now like to welcome Derek Sammann from the CME, who will present on global commodity markets. Derek, you have the floor.

MR. SAMMANN: Thank you. Thank you, Commissioner Pham. Appreciate being here. I'm fortunate to sit on Chairman Behman's advisory committee as a member of that committee, as well as chair -- Commissioner Mersinger's energy and environmental markets advisory committee. So, thanks for letting me come talk about commodities with the group today here.

Commodities, if you can go forward two slides for me. Pass the disclaimer, there we go. I'll talk about commodities with a capital C. So we're talking about Ags, energy and metals, and I'll do a quick deep dive into what we've seen most recently in the copper market, as what we've seen in the wheat market and agricultural markets, generally.

When we think about the commodities markets overall, you're talking about physical markets. Now, I spent the first 17 years of my career trading as an InterBank FX option structure products trader. I came to commodities in kind of the mid-teams within CME group. And there's a fundamental difference, as many around this table already know, between the physical delivered world of railcars of cattle or pallets of copper or bushels of wheat and Treasury baskets and currencies that get delivered. So they're unique drivers and impacts that move markets and impact physical supply chains and create unique risks. Actually, many of those that Thane had mentioned at the top of the conversation that Cargill deals with every single day.

When we look at the overall commodities business and markets overall, over the last certainly, 6 to 12 months, we've seen substantial increases in volume, participation, globalization, client segment growth. When you look across CME groups overall portfolio, or commodities portfolio represents a little over a third of the revenues of the entire firm. A lot of people will think about CME group as a fixed income shop, and that's absolutely true, but an increasing proportion of our activity takes place across this commodities portfolio overall.

The commodities markets are impacted by a number of things that also impact financial markets, but some have outside impacts and physical markets, whether it's geopolitics, inflation, wars in The Middle East, Ukraine, Russia. Weather events, seasonality of each of these individual markets and the energy transition and energy policies are having an increasing impact on both supply and demand of a lot of the input costs that drive inflation elsewhere, that are parts of the supply chain across many of our customers.

When you look at the activity over the last 6 to 12 months in our markets, a couple of observations I would make.

First of all, the commodity side of the business is the fastest growing at CME Group this year. Metals is up 22 percent this year. Our energy business up 17 percent. Our agricultural products markets is up 15 percent. That's on the volume side. What's also important is to say what's happening with open interest and where's the risk being carried. And we're seeing significant growth in open interest holdings and I'll talk about the client segment growth as well, but our metals open interest is up almost 30 percent this year. Energy, up 13 percent, agricultural products up 10 percent. So we're seeing increases in volumes, increased participation and increase in holdings of these products as well.

So we're also seeing a another trend which I think is probably industry wide, but even faster on the commodity side. Which is the increasing proportion of risk being carried in options in our markets. And I'll touch on this relative to copper specifically. We've actually seen open interest in our copper options market exceed open interest in our copper futures market for the first time, just last week, both of which stand at record levels right now.

What's important about our observations of what we see across the Ags, energy and metals nexus is a couple of things. Client growth, we're seeing every single client segment increase their exposure and activity in our markets. That's everyone from commercial participants and the buy-side, who are two fastest growing client segments across all three of these businesses. We're seeing banks, which are primarily indexing desks now. There's no such thing as a primary dealing desk in -- in oil at a bank or in corn or in beans. We're seeing increasing participation even for the retail side. And so we're seeing every client segment that we track is growing in commodities this year, true last year as well. We're seeing our fastest growth take place led by our EMEA business, secondarily in APAC. Our U.S. business continues to grow, but is outpaced by non-U.S. participation as many of our products increasingly globalize.

And the last trend I'd note is, that we're seeing an increasing convergence across these asset classes. We're seeing more typically historically energy only traders trading more into agricultural products. Whether it's the crossover products or heating oil, bean oil or any of the environmental products. We're seeing metals traders, whether it's the entree into copper or battery metals, now trade into energy markets.

Those lines of distinction, that used to distinguish an energy market from an agricultural products market to a metals market are blurring, and we're seeing increasing participation across all three, as customers are looking to gain global exposure. Whether it's non-correlated returns in a market of uncertain rates and an uncertain equity market. That's been a primary driver of increased activity by the buy-side across our markets. If you can go forward one page for me, two pages. Yeah, there we go.

Very, very briefly. And many of you are partners and customers around this room, so I won't belabor this, but we have seen over a decade of consistent growth in our metals portfolio. Our metals portfolio when we bought COMEX back in 2008 was probably 90 percent precious metals and 10 percent base metals. Since then, our business has more than doubled, and that's probably 70 percent precious metals and 30 percent base metals right now. So if you do the math on that, you'd see the base metals business continues to significantly out perform as a proportion of overall footprint in our metals markets. And if you just eyeball and squint at that graph, you'll see that that light bar at the top is options, and options continues to be an outsized growth driver for commodities portfolio overall, and certainly is the case here for the metals market as well. Can you go forward one more for me?

The -- taking a quick pause on copper, and knowing that we're short on time, I'll -- I'll run through this pretty quickly. Copper market activity is particularly been a point of growth. And we'll talk specifically about the events of just a couple of weeks ago, on the back of the Biden Administration's announcement on Russian sanctions. But overall when you take a step back, CME Group's copper business, in both options and futures, has been a continued upward trend. There's a lot going on in that graph. Everything is up and to the right. That's volume, that's open interest in options and futures. And that top blue line is the price of copper.

So as you're seeing increasing demand, you're seeing, in some cases constricted supply; that's obviously pushing price up. You're seeing increasing participation. The green line is worth noting, that's open interest in copper options. You'll see that just eclipsed in May of 2024 to now have more open interest in copper options than futures. We've not seen that happen until just this past month.

So we are seeing, as I said, the fastest growing client segments across our copper market. True of -- of metals overall, is number one commercials and when I use that term as end users, it's folks like Cargill. It's the big trading house, the merchant traders, the Vitales, the

Bunge, the -- the Vitales of this world, as well as small manufacturers. So the end user participants, second fastest growing is the buy-side, hedge funds, asset managers, pension funds and that's the search for uncorrelated return. Those looking to diversify their portfolios and carry an amount of exposure to asset classes will give them some sort of a return, beyond just the typical fixed income and equities markets in which they operate.

Flipping over one more page. I want to spend just a moment on some of the supply and demand dynamics that were seen in the copper market. On the right hand side, that's just a graph. We've all seen some version of this, significant increased expected growth of electric vehicles. Anytime you talk about energy transition, green transition, that's going to put a significant focus on copper.

Copper is a part of every single portion of the energy transition. You can't build an offshore wind turbine without copper. You can't build a charging station for any EV without copper. You can't build and invest in infrastructure without copper.

So there are some expectations here in terms of just pure EV growth, which is on the chart there, but there's also an expectation, as noted in that first bullet point there, about the significant increased demand for copper over the next 15 years, that will significantly out strip availability today. That's putting pressure on supply chains. And what does that mean for what we're seeing in our markets right now?

So number one, as I said, we're seeing a great deal of demand. So demand is outstripping supply right now. So as you're seeing both the increasing needs of physical copper, which our copper contract reflects, you're also seeing some tight supply right now. Whether it's drought in South America, whether it's a lot of the demand draining physical supplies. And we're seeing physical supplies go right into consumption. That's putting pressure on infrastructure. That's putting some pressure on supplies, that is putting pressure on existing inventories and eligible material.

So what we're seeing is continued demand and increase. That's, I think, why we're seeing record levels of open interest in both futures and options as customers are preparing for what is going to be, I think, increasingly and continued a tight supply of the copper market. You can go one page over for me.

I want to talk a little bit about some of the -- what safeguards and processes we have in our markets. And then we'll talk about specifically how each of these performed in the events of earlier May, when we saw the reaction to the Biden Administration's announcement on

Russian sanctions.

We've got a number of -- of ways in which we continue to maintain regular markets, consistent markets well managed markets. Again, looking around the table, we see clearing firms and customers. So you know this well, but it's the hallmark of what we do and how we operate from within a market reg in a clearinghouse risk perspective. First and foremost, we have clear defined circuit breakers in almost all of our markets and copper specifically, we have a mechanism for using a velocity logic mechanism to chart how far markets move in a prescribed time period. If they exceed that time, we -- our markets go into a halt state, let the market recollect itself and then reopen and allow price discovery to continue to happen.

Those are deterministic behaviors, so people know exactly how those operate. What to expect when we hit a velocity logic event, so customers can be exactly understanding fully what is going to happen in the event of what kind of price action taking place.

We've got extensive work that we've done across all of our asset classes around spot month position limits. This is imperative as our market reg incurring house risk, people are continually oversighting who's in our markets, with what kind of positions. They have a right at any point in time to pick up the phone on the market regs side and reach out to end user customers and ask them what's on the other side of their position. We have a mechanism to allow end user customers that have the physical, whether it's copper, whether it's corn, whether it's oil, what they have on the other side, to make sure that our risk management practices are intact. So that we know that there is a position on the other side of that. That maintains market integrity.

We've got proactive risk management functions. We have twice daily margin runs that go through the system to make sure that we pay and collect and make sure the system is made whole. That's a process we can call more than those two minimum functions a day, but that's part of the regular sediment cycle, and that keeps folks in the market. And I think it lends itself to the trust and the transparency of our risk management practices.

Additionally, we also have a liquidity and concentration, a top up so the clearing house can call. So if in looking at each individual underlying market, our market reg can look into the positions of end user customers. I on the commercial side can't see that. That is a pure market reg function, and they can look into that and say, hey, they -- they are concerned about what that might mean for overall liquidity considerations and increase individual top ups on firms and/or look at concentration risk, even if they might be below position limits, if there's still an outsized proportion of the total, they can manage that so that we've got healthy proactive risk management in times of not just market stress, but normal activity as well. So we're very, very proactive on the risk management side.

If you go over one more page, I'll talk about just a -- a moment or two about these practices in place. And what we saw happened earlier this month. As I mentioned, back in the 2nd week of May, we saw the Biden Administration announced additional sanctions on Russian products. There was a concern from the market that that would mean that Russian material, particularly copper, would not be eligible going forward into COMEX stocks.

Question about what sort of Russian materials would be allowed into any global stocks of any exchange or physical delivery mechanism. And so there was a market reaction to that. We saw certainly headline price movement. What we saw in our market was the spread between July and September move out as demand significantly increased for that September time period, around the concerns that there was a lack of clarity as to where the physical supply would be able to be sourced from. To be able to acquire that copper for deliverable into out months.

We saw there was certainly an increase in that spread price went from 10 cents to 30 cents. There was a -- volatility certainly increased, circuit breakers were hit. As I said, deterministic behavior. People knew exactly what to expect. The market operated as the market had expected. At the same time, margins were addressed by our clearinghouse. What did we see? This is very much a risk on environment. Oftentimes, and we've seen this over the last couple of cycles. We have seen events that have been a risk off environment. We see a flurry of activity, customer closing positions, stepping back and trying to figure out what was going on. This is very much a risk on activity. And here's what I mean by that.

We saw volume increase as expected. We saw markets run through the process and risk management as expected, smooth market price discovery continued to take place. We saw all customers continue to operate in our market. We saw not just volume go up, we saw open interest now hit record levels over the last three weeks. So it's an indication that the customers are looking for safety and secured and regulated markets. The CFTC is the best in the business for that.

Global customers are continually adopting U.S. based products under the CFTC because this is where they feel comfortable managing risk, in both quiet but also in moving markets. So from the -- the basis of where we've seen the outcomes of that, the market normalized over the first couple of days, we've see margins start to normalize back down. As I said, increased activity and increased open interest on the back of the last couple of weeks. So, to the extent that we've got processes on paper, processes in application, and how that displayed itself and how we're seeing at record levels of open interest and activity across all client segments in copper, is a positive sign for the adoption of CFTC's risk management expectations over DCMs and DCOs, like CME Group.

Quickly turning over to the agricultural products market or we've got a broad and diverse portfolio products. On one side, we got our grains and oil seeds business, which is the biggest of what we have. Our three biggest benchmarks there are corn, wheat and soybeans. We've got a livestock business, which is basically various products in -- in cattle and hogs, and then smaller markets both in dairy and lumber and a few other smaller products, on the -- on the doc there.

What I'd say about this business, if you flip over one side for me. Again, we're seeing record levels of activity in our agricultural markets. And the -- the comment I made at the top of the conversation about the client segmentation participation. Fastest growing businesses are commercial end user participants. It's

Cargill and customers like that. Its ranchers and farmers. It's both institutional clients on the -- on the commodity side, as well as a number of financial players, hedge funds, asset managers, broadly, what we refer to as buy-side clients; our two fastest growing client segments.

I would say that every single client segment is growing. Banks in that category. Banks, as I said, in commodities, tend to be the indexing desks. Matching returns, and they trade back into our futures products, either to replicate the index or to hedge out their index exposure for their customers or structure products they sell to their customers. But the underlying exposure to commodities overall continues to increase.

So in aggregate, commercials growing the fastest, followed by end users, but all client segments, including even what we call retail, which is more professional retail, not individual self-directed, but professional retail growth is -- is what's driving and lifting our business. You set a record volume in participation in 2024 and the business is up another 16 percent so far year to date this year.

Moving forward, there's a slide or two on our wheat contract, and this is our -- we have two wheat contracts, one with the Chicago wheat. Kansas City wheat, through an acquisition of the Kansas City Board of Trade a number of years ago. We're seeing significant growth here in participation.

True in soybeans as well. Soybeans is probably the one market along with corn where we're seeing the most crossover of energy traders entering into explicit trading desks in these Ag products, just given the crossover corn into ethanol, soybeans into renewable biodiesel, et cetera. Since we have benchmark liquidity in both of those products, were seeing more participation. We're also seeing more Ag customer setup energy trading portions of their teams and allocating capital to that as well. So it's a really interesting convergence of asset classes, but then a porting of clients across these asset classes as well; breaking down those traditional silos of differentiation. One more page over.

When we talk about activity and events and disruption in markets. We go back to Ukraine's invasion by Russia and the impact. Not surprisingly, we were all in the markets at that time. We saw what happened there. At a point in time an unexpected removal of 25 percent of the global wheat market had a significant impact in our markets and in global pricing generally. Customers continue to operate in our markets. We did see activity significantly increase. We did see bid-ask spreads go out. We saw depth book go down, but we didn't see people exit the market. We saw people trusting in the infrastructure, trusting in the clearing capabilities, and I'll talk about those in just a moment. Entrusting in the ways in which we manage fairly significant risk in all of our physical markets. You can flip over one more page.

This is just a two charts of looking at the -- the bid-ask spread significantly increased and then came back. And that's the depth of book going into the event at the event. And you can see the recovery of that depth of book over time. So when we look at our markets and the operating principles that we have on the clearing and risk management side, our markets provide as any exchange do. You can go one more page forward.

Our markets on the DCM side, responsible for making sure that we provide lit markets, greatest transparency, depth of book, active participation, and make sure customers can price discover in any kind of market environment. The other side is risk management, on the -- on the DCO side, making sure that we risk management in a way that is reflective of underlying risk, that maintains integrity in our system and make sure that there's always a buyer for every seller, seller for every buyer.

So, as difficult and challenging and unexpected as that event was, our markets continued to operate, proactively managing, margins, both up and down and kept customers in our market and kept that process in the --

in -- in motion for our customers.

So similar to what I mentioned on the metal side, a couple of things that are worth noting. On the market safeguard side, continuous monitoring of market conditions. So our market reg and clearing house risk phones don't look at events just after they happen. Were constantly looking at and scanning the horizon for events as they start to unfold. So as you started to see concern, oftentimes, most oftentimes, our risk management would be ahead of the curve and start to implement levels of concern. Looking at margin levels and making sure that there's a general health check from a risk management and a client perspective. So that we're not caught surprised when there's an event that actually takes place.

The Ag markets are the one market where, I think as you are aware, we have federal imposed position limits and federal imposed price limits. So to the extent that our markets can't move beyond a prescribed amount. And they, again, deterministic behavior for how those price limits are managed, how they're determined linked to underlying deliverable supply. And on the market limit side, the position limits side and the price banding side, through our responsibility to report to the CFTC, we have clearly defined pricing rules for how much any market can move on any given day.

Position limits and spot month, particularly in physically deliverable products is absolutely imperative. As I mentioned, on the -- on the metal side, our market participants know exactly what they can carry into the spot month for delivery. The market Reg department has the right, and regularly does, reach out to customers in those delivery windows to ask what they're carrying, their positions are, what their intention is. Again, I can't see that on the business side, this is a pure market risk and market reg conversation. So that we, on the DCO side, in our risk management principles, know exactly what risk is in our markets, what sits behind that, and to make sure that our -- our full integrity of our market risk capabilities are being brought to every one of these markets.

Margin. As I said, proactive risk management principles and making sure that we're raising and lowering margins reflective of market liquidity, concentration risk over line under -- overarching volatility, not just in one particular market, but associated markets as well. Whether it's out into physical markets, out into associated markets or out into spot or swap markets. Our market reg department oversees all of those markets to make sure we're seeing the whole picture, and are in front of, any event that might create risk in the system.

And then the last point I would make is on the liquidity and concentration concerns. Our market reg continues to look at, as does the risk team, at individual participants in our market. If there is a level of concern about the position that they have relative to open interest and/or overall liquidity, they have the right to allocate additional top ups for positions to make sure there's integrity in the system overall.

One last slide here, and then I will pass on is, as I mentioned at the top of the conversation, this is true in agriculture products, and I shared this as part of a much broader conversation with Chairman Behnam's Ag advisory committee in Kansas City a few months ago. We're continuing to see a significant growth in commodities options. That's true in Ags, energy and metals. I think we're seeing both lit markets, globalizing. Our fastest growth in our commodities options business is in -- first in Europe. Secondly, in APAC. U.S. is growing, but we're seeing outsized growth in Europe, particularly in the -- the growth here. We had set records in our Ag options in 2023, we're set another record in the first quarter of 2024, and that growth continues.

I think all around this table are looking at options, are involved in the options market in some way. It's continuing to bigger -- be a bigger piece of all of our customers portfolio. It's an important part of our risk transfer and tools that we have. Very much a theme that's in place in our physical commodities markets at CME Group overall, as well. So with that, I will stop short of talking about energy and cut off here, because I know we're little short on time.

COMMISSIONER PHAM: Actually, we still have time. We managed to catch up, and this has been a fascinating presentation. So if you do have more, please go ahead. Otherwise, thank you for filling out your bingo card with the CFTC advisory committees three out of five. So there's still time. Two more.

MR. SAMMANN: Yeah, I've got two more to hit. Three down, two to go. So yeah, I think I'll probably stop there. And the energy was just background slide. Please consider this referential material. This is all public information. It's more just sort of what we're seeing globally in the energy market. But relative to, I think, the requests from the -- from the -- that got to me from Julie Winkler, speaking about what's seen in commodities markets, particularly in events, and how the risk management capabilities are playing out and how our markets are responding.

So hopefully that gives the committee a sense for what's happening in Commodities with a capital C, there's a lot of individual product growth stories, whether it's natural gas, whether it's TTF in Europe or here we have in the U.S., and we're seeing a lot of, you know, battery metals, transition products, biofuels, renewables, frontier markets that are moving through energies. It's as fascinating space. But in aggregate, I think we're seeing, again, fastest growth across commercial participants, number one, which you would expect to see in a market like this. As well as, buy-side that are increasingly seeking exposure to these markets and doing that in regulated markets, to make sure they've got the all the investor safeguards and protections that they come to expect out of DCMs and DCOs in the U.S.

COMMISSIONER PHAM: Thank you. I think this presentation is extremely helpful because of the -- the in-depth detail on the market characteristics and trading activity and -- and client segments, as you said. And also the insight into the fundamentals that are driving a lot of this activity. It's incredibly helpful. Thank you.

MR. KENNEDY: Can I ask you a quick -- quick question. That was a great presentation. Thank you. So you mentioned a couple of times the impact of the Russian Ukraine War on volatility and risk. And that's kind of had a knock down effect, because now policymakers are starting to look at liquidity preparedness of NBFI's, amidst some of that commodity market volatility. We see that in the -- the

FSB has a consultation paper on this, and the European Commission, just issued a consultation paper on it.

I'd love to get your -- your thoughts, if you guys have had a chance to think through those issues.

MR. SAMMANN: I'm fairly certain we've got a number of comment letters forward, not just in our own name, but I also sit on the executive committee of the commodities market counsel. So to the extent that they're a voice of the physical end user community into the concerns; and I think Thane did a terrific job -- is Thane still here? Talking about the concerns from a physical end user and what that looks like. We share those concerns.

I -- I shared this at the -- at the EMAC, I think, two months ago with Commissioner Mersinger; the concerns that we have, as a firm, around the increasing capital charge and what that means, that will impact everyone in the entire supply chain all the way down to the end user, individual firm on rancher out there. The impacts are going to be broad. And we, I think, are all concerned about pushing that business out into unregulated markets or worse case scenario, leaving positions on hedge. That's -- that should not be the outcome of -- of the direction and travel we want to go.

COMMISSIONER PHAM: Jackie Mesa, from the FIA.

MS. MESA: Thank you. That -- that was a really interesting presentation. Really out of curiosity, you said that the commercial end users were the fastest growing segment. And options also, of course, are -- are growing very quickly. How do you see the client segments maybe differ in growth from options markets versus futures? Are they completely aligned?

MR. SAMMANN: I would say they're fairly closely aligned. When I'm -- I'm just going to try to reference my stats here. To the extent that we track each one of these client segments, we track them on prop firms, buy-side banks, corporate retail. I would say in -- in order, in descending order of activity. I'd put, you know, commercials for the most part as the fastest growing, and then probably buy-side as second fastest. Banks, again, mostly indexing desks, probably third and fourth. Middle of the pack are props and liquidity providers, are absolutely crucial to make sure that we've got liquidity in each one of these markets. And probably one of the things that I missed touching on was the regional growth of the futures and options as well.

Options is seeing an outsized growth rate overall and outsized growth rate outside the U.S. Now that's coming from a lower overall base, so it's going to show higher percentage gains. But we are seeing an increasing proportion of our total business, I'm talking, you know, at the portfolio level overall, coming primarily out of Europe, you know, in the 30 to 40 percent range, and then followed by APAC after that. U.S. continues to grow, it's a more mature market than the other two, but we're seeing an increase in record levels of participation coming from outside the U.S. in options as well, yeah.

And I think that's a function of -- of as we continue, as Asia continues to adopt more options practices, as we all invest in technology to make sure that we can provide lit markets into early Asian trading hours all the way through to the, you know, The West Coast close here in the U.S. These are markets we, you know, the only trading pit we have left at CME group is the SOFR options pit. Everything else, you transition electronically. So as much as we can port liquidity and complex spread trading capabilities onto a trading screen with lit markets, that's continuing to accelerate growth.

GMAC CHAIR HONG: Tom.

MR. SEXTON: Thank you. Thank you, Amy. Derek, thank you for that interesting and well articulated presentation, as always. I just wanted to focus on retail for a moment and some of the -- some of the growth that you're seeing there. I -- I know you used the term professional retail. If you could just explain a little bit about what you are seeing and how you kind of define retail and what professional retail means. And just to follow up as to Jackie, are you seeing this in both the listed futures and options markets or is it in the minis, or where exactly are you seeing that growth in your portfolio?

MR. SAMMANN: Yes. On the commodity side specifically, it's a little asymmetric. We're seeing -- we're seeing probably flattish is slightly down retail and energy. We're seeing significant amounts of increased activity in metals, particularly precious. We're starting to see some retail participation in copper. We launched a -- we have a micro copper contract, so one tenth the size of our main institutional contract; and that just set a record over the course of May. So that's coming along for the ride and outperforming there.

When we talk about retail in our world, we -- we like to make up terms all the time? We -- we use the term pro tail, professional retail traders. Folks that are either very small institutional, that -- that don't have their own accounts, are certainly not self-clearing, but are known to us as active participants in markets. So it's not the, you know, individual, you know, $50 card swipe on a -- on a trading app kind of activity. It's a customer trading a handful of contracts a day or a month. So someone that's regularly in the market, where this is their primary business.

So that's how we think about that retail community. I would say the exchange overall, probably the -- the largest growth that we're seeing in retail, is on the equities side within the commodities complex. I'd probably go in order of metals, primarily precious, but now we're seeing an uptick on the -- on the base metal side, particularly copper. And then Ags, and then I said energy is kinda flattish to downish. Yet we're seeing significant -- the fastest growing across all three asset class in commodities is commercial; is in energy. Which, again, you'd expect in -- in market of circumstances that we're seeing, right now.

MR. SEXTON: Thank you.

GMAC CHAIR HONG: Derek, thanks so much for your presentation. We will move on to our final topic for the day. Apologies. We have one more question online.

MR. NICOSIA: Thank you, and thank you for the presentation. This is Joe Nicosia with Louis Dreyfus. My question really centers around, as we've seen additional overseas participation in the markets and more importantly, into the agricultural markets. And whether we're dealing with some of the larger foreign entities that are not necessarily active in The United States. What are you doing from the standpoint of reporting from position limits, from reporting of whether it be for their cash positions or for justification of their trading activity?

MR. SAMMANN: Let me make sure I -- I understood the question. I think the question was for overseas agricultural activity, what are we doing from a reporting point of view; is that the question?

MR. NICOSIA: Yeah. There's, you know, state owned operations from -- from different groups and overseas entities that are heavily involved in our markets, that don't seem to have the same recording requirements. To what level are you able to extract and/or demand the same level of -- of cash recording positions on the overseas entities?

MR. SAMMANN: So I -- I think, as folks are aware, running a -- a U.S. based, DCM with a DCO based here in the U.S., we are subject to all the same rules and requirements for how people access our markets. They come through our FCMs globally. So every piece of infrastructure that captures a U.S. client or an Asian client or a European client is in place globally.

So we, when you look at the growth, I'll mention that the -- the agricultural products growth outside the U.S. year to date, our EMEA business is up almost 40 percent. Our Asian business is up to about 16 or 17 percent. When we see that activity, we're talking about customers physically located in those zones, and they're coming through either directly or indirectly, all of our same safeguards and infrastructure for our mutualized risk environment through our clearing firm group.

We are seeing smaller customers outside the U.S., and this is where some of the retail is picking up, coming through again, our broker network also coming through all approved FCMs. So all that risk is managed exactly the same for non-U.S. clients as it is for U.S. clients. Reported the same, requirements the same, all capture the same margin requirements, and all subject to the same -- the same responsibilities of reporting and transparency that U.S. clients are as well. So no -- no difference there. So hopefully that was a correct understanding of the question.

MR. NICOSIA: I was reading -- referring more to their reporting to you, not your reporting of them.

MR. SAMMANN: Sorry. Can somebody repeat that question?

MR. NICOSIA: I was -- I was referring more to, for example, of the cash reports that the entities here in the U.S. have to report and justification of position for bonafide hedging. So that their cash reporting and physical activity being reported to the exchange at CFTC, in -- in equality with the standard U.S. based reporting.

MR. SAMMANN: Yeah. I see. So you're saying from the market reg perspective I talked about, the oversight of our market reg, saying, hey, what do you have against this position? Yes. Same -- same requirements in terms of those conversations, regardless of where they're positioned. It's the same -- same expectations and same reachout from market reg. We have market reg teams, but not just in the U.S., but in Europe and Asia as well.

We've actually beefed up that client facing market reg team in Asia, particularly. As we've seen that business continue to grow and as we've seen more non-historical U.S. DCM market participants come into our markets, we've needed to educate them on the market reg practices and expectations. And so we've got teams locally, on the, ground, in region, to handle those communications and conversations for folks that are global food producers or regional food producers. We've got a local team in support of our global efforts, to make sure that all that reporting and all of that investigation is done by our market reg team in real time, in region.

MR. NICOSIA: Thank you.

GMAC CHAIR HONG: I believe we have one more question or a comment from John Murphy from the Commodity Markets Counsel online.

MR. MURPHY: Thanks, very much. Derek, thank you for an excellent presentation. I just wanted to ask very quickly, around electricity and utilities. We've seen significant growth in Europe. Starting to see growth in

Asia there, as well. What are you seeing on your side and -- and do you have any -- any plans for the near future there?

MR. SAMMANN: Yeah. Hey, Murph. I -- I missed the -- the part of the question. Something in Europe and Asia increasing what?

MR. MURPHY: The electricity and utility trading.

MR. SAMMANN: Did he say utilities trading? Oh, electricity. We are not actively in that market. I think Mr. Williams over there, could probably talk about electricity markets, but we're not active in the electricity markets in -- in Europe.

MR. WILLIAMS: That was a hospital pass, if there ever there was one. What -- what was the question? Sorry.

MR. MURPHY: It was electricity market trading in Europe.

MR. WILLIAMS: Just as a -- okay. So -- so Stu Williams, here from ICE. So the -- the utility markets in Europe, of course, are -- are growing extraordinarily quickly. If you start with a gas market, TTF in particular, is increasingly playing the role of Brent in -- in the gas market.

So Europe has become, to a large extent, the balancing market for physical gas, and that's representing its way through the markets in -- in the activity we're seeing in TTF, which is the Dutch gas market. So put differently, any -- any spare L & G globally will make its way to Europe, depending on the price formation structure of TTF. Obviously, then as you've seen the coal to gas migration from -- across Europe.

So, UK in particular has got called out of the merit order almost entirely. So electricity production in -- in the UK is almost entirely natural gas or nuclear or -- or environmental. So coal is -- is largely out of the merit order. That is the trend in Continental Europe as well. And the reason I mentioned that is because, therefore power becomes a derivative of natural gas. So the price of natural gas and the price of -- of EUAs, which is the price of carbon in -- in Europe, is -- is then, power is a derivative of those two prices.

So to your specific question, we are seeing increased activity in power markets in Continental Europe. Obviously, the German power market is still the main benchmark. So pretty much all other power markets will trade at some differential to either German power or to TTF as -- as the underlying. That activity is growing. It's still quite heavily skewed towards the broker bilateral market or broker cleared market. So less directly on screen. But you know, liquidity begins liquidity. So the more participants that come into that market, the more we'll see activity on -- on screen.

MR. MURPHY: And, I appreciate that very much. And my -- my question was really around whether the CME had any plans to move into that market, whether in the U.S. or in Europe?

MR. WILLIAMS: It's interesting that Derek then passed that question to me.

MR. MURPHY: I agree.

MR. SAMMANN: Yeah, I missed that one. So yeah, look, good question. We're -- as we've seeing increasing cross-over as I mentioned before, between energy, Ags and metals. We're seeing more customers look at building and -- making sure that we've got the complete portfolio of products. They can trade all those inputs and outputs. To the extent that Stu was talking about the natural gas market and role that TTF has. We're seeing the physical Henry Hub market go from strength to strength.

When we look at the activity that we've seen in Henry Hub in both our futures and options, that set records over the course of this year and in May, we're seeing more as the U.S. continues to export both produced and export physical Henry Hub source gas here in the U.S., increasingly that's putting that out into the global market. So that's giving us an opportunity to think about, not just the input -- the input side, but the -- the output side of power markets as well.

So short answer is, yes, we're looking at ways in which we can connect each of our products inside the portfolio to the broader nexus of risks that all of our customers face. So, yeah, John, constantly looking at that and happy to take that up with you offline.

MR. MURPHY: Thank you both. Great answer.

GMAC CHAIR HONG: Great. Thanks so much, Derek. And thanks to the committee for all of your engagement. We will now move on to our final presentation. I'd like to turn it over to Andrea Musalem, associate director of The Office Of International Affairs with the CFTC.

MS. MUSALEM: Thank you to the co-chairs, Amy and Darcy, and DFO's Harry and Nicolas. And a special thanks to Commissioner Pham for inviting me to speak about the ongoing work in the commission's office of International Affairs.

The Office Of International Affairs, or OIA as we call it, leads the commission's international and cross-border policy efforts. OIA provides strategic advice, specialized knowledge and practical expertise regarding international affairs and foreign legal and regulatory systems. OIA's portfolio encompasses international regulatory policy through multilateral engagement and standard setting bodies in similar fora, bilateral policy engagement, including for supervisory cooperation and technical assistance to developing and emerging economies.

My remarks today will be focused on OIA's international regulatory policy work. Most prominently, OIA staff actively participates in the various task forces, policy committees and standing groups of the international organization of securities commissions, or IOSCO, and the joint arrangement of the Bank for International Settlements Committee on payments and market infrastructures, CPMI and IOSCO. We also provide support to Chairman Behnam in his role as vice chairman of The IOSCO Board And co-chairman of CPMI-IOSCO steering group, a role which he shares with Banca d'Italia Governor Fabio Panetta.

OIA staff also provides support to the chairman in his membership in IOSCO's financial stability engagement group and the Sustainable Finance Task Force. OIA staff represents the CFTC in the following committees: Regulation of secondary markets, regulation of market intermediaries, enforcement and exchange of information, investment management, derivatives, retail investors, assessment, and emerging risks.

As some of you are aware, due to your personal participation, IOSCO held it's annual general meeting in Athens last week, during which we were proud to have Commissioner Pham and commissioner Johnson engage in several events and to support Chairman Behnam's participation in the annual meeting program. Among other things, during the course of the IOSCO annual meeting, Chairman Behnam was reelected as vice chairman of the IOSCO board. In addition, some of the topics of discussion at the annual meeting included digital assets, artificial intelligence and FinTech, sustainability and a subject Commissioner Pham engaged on; supervisory technology or SupTech.

Moving on to discuss substantive areas of work. I'll start with the collection of international work streams on margin. Together with The Bank Of England, the CFTC co-leads this work, which integrates IOSCO, CPMI and the Basel Committee on Banking Supervision, BCBS. As GMAC members know, Phase One of this work examined the dynamics of cleared and uncleared derivatives margin in March 2020 upon the onset of COVID-19, including impacts on the broader financial system and client liquidity preparedness.

The Phase One report describing margin practices during the onset of the pandemic was published in September 2022. Phase Two of this work has four work streams, including further work on initial margin in the cleared space. As well as coordination work with other margin work streams, recommended by the Phase One report. A second group, the working group on margin requirements, which was discussed earlier is a BCBS-IOSCO group tasked with examining how to streamline variation margin processes in the uncleared space.

A CPMI-IOSCO subgroup was formed to undertake work on streamlining variation margin in the cleared markets as part of this Phase Two margin work. And finally, the working group on margin preparedness, or WGMP was established by the Financial Stability Board Standing Group on Supervisory and Regulatory Operation in January 2023, to consider the liquidity preparedness of market participants during periods of stress. As well as, regulatory data gaps and reporting bearing on margin.

The consultation period for the first three margin work streams has now closed, and members of these work streams are currently working through the comments received. The WGMP's consultation is currently ongoing, and we encourage you to submit your comments by June 18.

Moving on to digital assets. IOSCO's board level FinTech task force was formed in March 2022, and it is tasked with developing. Implementing and overseeing IOSCO's policy agenda regarding FinTech and crypto assets.

The FTF form three working groups. The first is the implementation working group, which continues the task force's work on the regulatory approach to crypto asset markets. The second group is the tokenization working group, and the third group is the artificial intelligence working group.

Meanwhile, the FSB's financial innovation network, under the auspices of the standing committee on assessment of vulnerabilities, has set out its work plan specifying, that in 2024 it will assess financial innovations and the impact on financial stability. It will monitor developments in crypto asset markets and assess financial stability risks. It will contribute to the analytical group on vulnerabilities deep dive on depositor behavior. It will also conduct a deep dive on the financial stability implications of tokenization. And finally, it will prepare an overview report on the financial stability implications of artificial intelligence.

In addition, another FSB work stream, the crypto working group, under the standing committee on supervisory and regulatory cooperation recently published two reports on crypto asset markets and global stable coins. This fall, the FSB and the International Monitory Fund will jointly deliver a status report to the G20 on the progress of the implementation of the FSB and IMF crypto asset recommendations.

On another front, operational resilience, I will note that CPMI-IOSCO recently established a new standing group, the operational resilience group, or ORG. In addition to its policy standing group and its implementation monitoring standing group. The ORG's work involves topics related to operational resilience of financial market infrastructures, such as central counterparties and swap data repositories.

Specifically, the ORG will promote consistent and comprehensive implementation of Principle 17, which relates to operational risk and certain relevant other parts of the principles for financial market infrastructures and associated guidance, as they relate to operational resilient. The ORG is comprised of two main work streams, one focused on third party risk and the other focused on cyber risk. Both work streams commenced work in January of this year.

Finally, the last topic that I will touch upon is sustainable finance. For two years now, Chairman Behnam has been co-leading a carbon markets work stream under the umbrella of IOSCO's sustainable finance task force, alongside Chair Verena Ross of The European Securities And Markets Authority. This work began in the wake of COP26, with the goal of developing a better understanding of carbon markets, both compliance and voluntary, including their challenges and potential risks.

With respect to compliance carbon markets, last July IOSCO published a final report outlining a set of recommendations aimed at improving efficiency and integrity at both the primary and secondary market level. With respect to voluntary carbon markets, or VCMs, in November 2022, IOSCO published a discussion paper setting out key considerations for the sound functioning of these markets.

The discussion paper, along with stakeholder engagement, became the basis for the VCM consultation report on good practices that IOSCO published last December. This consultation report sets out 21 good practices for promoting VCM integrity and which may be helpful to financial market regulators, other relevant authorities, as well as market participants to foster the further development of these markets.

The good practices are divided among four areas of focus. The first is regulatory frameworks and clarity around the regulatory treatment of carbon credits. Second area of focus is the primary market issuance. The third area of focus is the secondary market trading. And finally, the fourth area is the use and disclosure abuse of carbon credits. The consultation report was well received, and the thoughtful responses submitted by stakeholders are being considered by the members of the carbon markets work stream, as they look toward finalizing this work later this year.

This concludes my remarks, and I thank Commissioner fan once again for inviting me to speak briefly about OIA's international engagement.

COMMISSIONER PHAM: Andrea, I just want to thank you so much for that comprehensive presentation, especially since OIA was very busy supporting the chairman and us at IOSCO's annual meeting last week; which is a tremendous amount of work. I think oftentimes OIA does not get enough credit and public recognition for their tremendous efforts in ensuring that the CFTC continues to be a leader in international policy development. And so again, thank you so much and thank you to OIA for all of your efforts.

MS. MUSALEM: Thank you, commissioner, and I'll take that back to the entire team.

GMAC CHAIR HONG: All right. Thank you, Andrea. Before we conclude, I'd like to ask that the subcommittee co-chairs briefly give the committee visibility into the forward work plan, subcommittee by subcommittee. Perhaps we'll start with the Global Market Structure subcommittee, move into technical issues and then digital asset markets.

CO-CHAIR TULLY: Thanks, Amy. And thank you, Commissioner Pham. The Global Market Structure subcommittee continues to explore a range of important derivatives market structure issues for future consideration of the GMAC. Thanks to the thoughtfulness -- thanks to the thoughtfulness and diligence by our members, the subcommittee has now presented six recommendations on a wide range of topics that have been adopted by the full GMAC, including inclusion of U.S. Treasury ETFs as eligible initial margin collateral;

appropriately calibrated block and cap sizes for swaps; addition of certain CCPs as permitted investment counterparties; expansion of cross-margining between CME and FICC; best practices for exchange volatility control mechanisms; as well as today's recommendation, regarding the impact of pending U.S. bank capital proposals on CFTC regulated markets.

Going forward, we will continue to reflect on a number of the important themes at today's meeting, including the impact of the pending U.S. bank capital proposals and the SEF framework. As we've heard today, these topics are critical to the smooth functioning of our markets. We look forward to providing further updates on our work at the next GMAC meeting. Thank you.

CO-CHAIR KRUSE: At the technical issues subcommittee, further work this year is likely to focus on trade reporting. There's a recurring theme with lingering inconsistencies in the global use of identifiers like UTIs and UPIs and data standards, like critical data elements and is 20022. They think there's a recommendation in there to ask the CFTC to leverage its leadership role in the global CPMI and IOSCO work to drive further consistency and standardization, since those differences are actually undermining data quality and hinder aggregation.

The committee is also looking at some other topics and determining whether there might be value in developing a playbook for future potential U.S. debt ceiling disruptions or a compendium regarding unexpected market closures. We're also looking at the use of money transfer ACH for making payments to brokers.

MS. BUTLER: And on the digital asset market committee, we've got somewhat an aggressive schedule between now and year end. We're looking to propose up to five potential recommendations. The first two are very, very close, and they pertain to NFTs, so non-fungible tokens and utility tokens, led by Chris Perkins and team.

And that will actually build on the taxonomy framework that Commissioner Pham highlighted in the beginning, that was approved in the last GMAC meeting. And will hopefully be able to extend that framework to cover both the NFTs and the utility tokens and really delineate underneath those categories, where there are financial assets and where there are nonfinancial assets, and a couple of more recommendations within those categories.

We are also looking at proposing at tokenize assets as eligible collateral, with a particular focus on money market funds in the first iteration and we hope to bring that to the next meeting as a recommendation. And, again, this is leaning into the recommendation that was highlighted as part of the 11 recommendations that have already been passed through the GMAC, really looking at tokenization as a technical wrapper.

So focusing on where the underlying asset is eligible for collateral, our notion will be that just because it is tokenized and therefore there's a technical wrapper around it, the asset itself, if it is permitted for collateral, if it is tokenized, it should follow the same suit. So we are hoping to bring that to the next meeting for recommendation.

And then the last two really pertain to best practices and report guidance. First one, a RAN bankruptcy remoteness for custody to assets. I think there's a lot of great intelligence across the community and sitting within the work stream, and we -- we think there will be great value to bring a lot of those best practices across both the digital native and the banking community to bear, focusing on bankruptcy.

And the second is a potential proposal on report around private and public chains, and the novel risks and unique attributes that sit across both. There is a market infrastructure survey that has been -- is working in circulation at the moment. Hopefully we'll have that complete by the end of June. A lot of layer one's are providing their input into that at the moment, and pending the result side of that survey, we'll be able to actually make a, hopefully, good recommendation across public and private chains.

So quite a -- quite a heavy agenda, between now and the end of the year, we're actually doing a restructure of the members and aligning them to those five outcomes. Really to make sure that we have both the diversity of input and take advantage of a very diverse market group that we have. But also spread the capacity across those different outcomes, just to make sure that we can drive the outcomes forward.

GMAC CHAIR HONG: Great. And thank you to -- to the subcommittee co-chairs and the subcommittee -- subcommittees at large. Really appreciate all of the work that continues to go into the Global Markets Advisory Committee. I'll hand it back over to Harry to -- to close this out.

MR. JUNG: Great. All right. So thank you all for -- thank you all to the presenters, those that were in person and virtually. At this time, I'll like to pass to pass the mic over to Commissioner Pham for closing remarks.

COMMISSIONER PHAM: Today highlights that the CFTC is a market regulator, and I'm pleased that we could get back to basics with today's presentations and discussions of very important issues, including focus on market characteristics, trading activity, and market fundamentals that drive both.

This is the bread and butter of our core mission to oversee derivatives markets and to ensure that they are well functioning. This doesn't get the headlines, but is absolutely our day job. And I appreciate Chairman Behnam's focus on this.

Lots of interesting discussion on ways to increase liquidity today in markets, and I think that this could be the basis for additional GMAC initiatives. And I especially again thank the CFTC's OIA for their presentation and international leadership.

As I mentioned in my opening remarks, I was honored to present the GMAC recommendations last week at the IOSCO annual meeting. Thank you again for making an impact and ensuring the integrity and resilience of global markets, to promote financial stability and mitigate systemic risk.

MR. JUNG: Thank you, Commissioner. I want to thank everyone for attending our second GMAC meeting of 2024. I hope everyone has a great summer, and the meeting is adjourned. Thank you, all.

(Proceedings end.)

CERTIFICATE OF REPORTER

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I, ILDIKO NYARI, Digital Reporter, State of New York, do hereby certify that I was authorized to and did electronically report the GMAC Meeting on the date indicated; and that the electronic recording of the proceedings was provided for transcription.

I FURTHER CERTIFY that I am not a relative, employee, or attorney, or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorneys or counsel connected with the action, nor am I financially interested in the action.

DATED this 4th day of June,2024.

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DATED this 25th day of June, 2024.

M Iadimarco

Melissa Iadimarco