U.S. COMMODITY FUTURES TRADING COMMISSION (CFTC)

GLOBAL MARKETS ADVISORY COMMITTEE (GMAC)

Thursday, March 11, 2021

9:00 a.m.

Meeting

BEFORE:

Dawn D. Stump, GMAC Sponsor, Commissioner, CFTC

Rostin Behnam, Acting Chair, CFTC

Brian D. Quintenz, Commissioner, CFTC

Dan M. Berkovitz, Commissioner, CFTC

AGENDA

P R O C E E D I N G S

MS. GOLDSMITH: Good morning, everyone. Thank you for joining.

As the Designated Federal Officer for the Global Markets Advisory Committee, it is my pleasure to call this meeting to order. I would like to welcome everyone to today's meeting. This is the first GMAC meeting of 2021.

In light of the global response to COVID-19, we are holding today's meeting as a virtual meeting to protect the safety of agency personnel, GMAC members, guest panelists, and the public. To ensure that today's meeting goes as smoothly as possible, I would like to just list a few logistical items. Because this is a virtual meeting, it is also being broadcast in a livestream on the Internet. So please be sure to identify yourself before speaking. Also, please signal when you have completed your comments so that we can continue with the next speaker or question.

Please ensure that your phone is unmuted before you start to speak, that you speak clearly into your phone, and that you re-mute your line when you are done speaking.

For GMAC members and commissioners, if you would like to be recognized during the discussion portion, please use the WebEx chat icon at the bottom of your screen, select the “All Panelists” option within the dropdown menu, indicate that you have a comment or question, and press ENTER.

If any meeting participant needs assistance during the call, please dial *0 to connect to the conference operator or message me directly within the WebEx chat.

Finally, please keep your telephone line muted when you are not speaking. If you do not mute your line, the conference operator may need to mute it for you.

I would now like to turn things over to the GMAC sponsor, Commissioner Dawn Stump, for her opening remarks. Commissioner Stump?

COMMISSIONER STUMP: Thank you, Andrée.

Good morning and welcome. I want to begin by thanking our Acting Chairman Behnam and my fellow Commissioners for attending today’s meeting. We look forward to your contributions to our discussion, and it is much appreciated that you are able to attend today.

I also want to recognize that due to the global nature of this committee, there are many participating in less-than-ideal local time zones. And I am extremely grateful for your willingness to do so.

I would especially like to thank all of today's esteemed presenters for being here and for taking the time out of your busy schedules to contribute to today's important discussion. Additionally, I would like to thank Chair Angie Karna for her leadership of the GMAC and Andrée Goldsmith, the GMAC Designated Federal Officer, for organizing today's meeting.

I also want to welcome Dr. Janet Kong, our newest member to the GMAC, who is CEO of trading and shipping for bp Americas. Welcome, Dr. Kong. And we look forward to your participation with the GMAC membership. And I would also like to thank Clive Christison for his previous service to the GMAC representing bp.

Today's meeting will focus on two distinct topics. The first panel will feature presentations about recent trends in retail investing activity and the impact on the global derivatives markets. Dr. Mel Gunewardena, Chief Market Intelligence Officer; and Eugene Kunda, Market Analyst in the Market Intelligence Branch of the CFTC's Division of Market Oversight, will present the data surrounding the recent retail investment activity and the effect of such activity in the markets that the CFTC oversees and the indirect effect from retail activity in other markets.

Following their presentation, Jonathan Lave, Associate Director in the Division of Market Oversight, will provide an overview of some of the CFTC's core principles for designated contract markets and their particular relevance to retail market participants.

Our last presentation in Panel 1 will be from Alison Beer, senior legal counsel in the Derivatives Branch at the Ontario Securities Commission. She will describe how the OSC oversees transactions by retail market users and the differences in the OSC's approach to retail investors versus that of the CFTC.

We have all seen increased activity and developments regarding retail participation in many of the markets that we are interested in. And the trend, should it be here to stay, is one that I am hopeful today's discussion will assist in our efforts to ensure that retail market participants are adequately educated and protected.

The second panel will continue the discussion from the GMAC's last meeting, in December, on the impact of the COVID-19 pandemic on the global clearing ecosystem. Since our last meeting, market participants and regulators around the world have continued to analyze the impact of the pandemic on central clearing. And there are a number of additional perspectives that our presenters will share. First, we will hear from Pedro Gurrola-Perez, Head of Research at the World Federation of Exchanges, who will highlight how CCP and margin procyclicality should be approached from a systemic perspective.

Second, Nicholas Lincoln, Group Head of Market Risk and Liquidity Risk at LCH Group, will demonstrate how LCH's margin model responded to the pandemic-related market volatility.

Lastly, Ulrich Karl, head of clearing services at ISDA, will present a clearing members' perspective on CCP margin requirements during the pandemic, including recommendations for decreasing the procyclicality of CCP margin calls in times of increased volatility.

I am hopeful that these presentations will provide a starting point for a continuation of the robust discussion among the GMAC members that we started in December. I am cognizant that there continue to be many ongoing dialogues regarding lessons learned from the market volatility in the spring of 2020. My hope in providing a forum to continue this dialogue is to help ensure that the global clearing system remains resilient in the face of future market stresses.

I am very much looking forward to all of this morning's presentations. And, again, I want to thank our panelists for being here today and furthering these important conversations.

I would also like to take this opportunity to reflect on the important work of the GMAC in the area of margin requirements on transactions not subject to central clearing. In May 2020, the GMAC adopted a number of recommendations for the Commission to consider regarding the implementation of margin requirements for non-cleared swaps. Since then, the Commission has acted on a number of these recommendations, and we continue to consider many of the others. In addition, due to the pandemic, the Commission, along with its fellow regulators around the world, extended the implementation dates for phase 5 and phase 6 of the uncleared margin rules to September 1, 2021 and September 1, 2022.

As the phase 5 implementation date approaches, I am hopeful that the Commission’s actions have made it easier for those firms who will come into scope on September 1st to ensure that they are able to comply with the uncleared margin rules. However, I am cognizant of reports that some phase 5 firms may not yet be properly preparing. And many are still scrambling at this late date to complete the required documentation and set up the required custodial accounts. These reports are somewhat alarming.

The purpose of the one-year extension was to provide firms with the necessary breathing room to ensure that they would be in a position to begin exchanging margin on the implementation date, while also adjusting to a sudden remote working environment. For those firms that have yet to enter into the requisite custodial and vendor agreements, I just would like to say the time to do so is now. And I encourage focus in this area.

Thank you again to everyone for being here today. And I very much look forward to the meeting. Back to you, Andrée.

MS. GOLDSMITH: Thank you, Commissioner Stump.

Chairman Behnam?

CFTC ACTING CHAIRMAN BEHNAM: Thank you, Andrée. And good morning, good afternoon, or good evening, wherever you may be, to everyone who is listening or participating in today's GMAC. Special thanks to Commissioner Stump for her leadership on these important issues.

The GMAC has been really phenomenal, certainly in the past year during the COVID crisis and the discussions around market fragility and stability that we have all experienced. But certainly, as a general matter, whether it is clearinghouse risk or margin issues, and certainly today's discussion around retail trading, these are the most ripe and important issues that I think we all care about in our market. They are welcome discussions from a Commission's perspective, certainly from mine, so that we can get experts and we can have an open dialogue about what we can all do to collectively make our markets better.

Certainly a special thanks to Andrée Goldsmith for her leadership as DFO; Angie Karna as Chair; and a big welcome to the new members of the GMAC; and also welcome back to the existing members and thank you for your participation; and, of course, the panelists who will be speaking today.

It is pretty remarkable to think that it has just been about a year since we all sort of shut down from COVID. And now we have I think a lot to look forward to but certainly much to get through in the next coming months. But we can certainly look forward to 2021, learning many lessons from 2020, both from the markets perspective, but also health perspective and from certainly a work and family perspective. So I am very pleased that we are still able to have these meetings, to have dialogue and discuss these important issues. They are extremely important to the Commission, to me, and my colleagues.

And just a special thanks to all of the members and the participants for sharing their views today. Thanks again to Commissioner Stump for her leadership. And, Andrée, I will send it back to you.

MS. GOLDSMITH: Thank you, Chairman Behnam.

Commissioner Quintenz?

COMMISSIONER QUINTENZ: Thank you. And good morning or welcome to everyone listening and participating today. I also would like to thank Commissioner Stump for her tireless leadership of the GMAC and the multitude of issues they have been able to explore over the last number of months and years that have had a critical impact on Commission policymaking and in trying to evolve for the integrity of our markets. Certainly today's topics are some that could be included in that, lessons learned, or ideas to carry forward, from some of the most dramatic moments in the derivatives industry I think over any period of time that we could look. And, yet, the markets operated extraordinarily well, with integrity and resilience, and it's something I think all of us can be very proud of.

Also, looking forward today to hearing a presentation by our Market Intelligence Branch. They are a true asset to the Commission. The work is vital to our understanding of the markets. And I think it is crucially important that their research is shared within the advisory committee to gain insight from market experts and feedback so that we can better understand market participants' perspectives and our own research, market participants can understand how we are looking at and evaluating market dynamics.

Thanks again to all of the members of the GMAC; all of the participants today for your preparation; once again, to Commissioner Stump and Andrée and Angie for your leadership. Thank you.

MS. GOLDSMITH: Thank you, Commissioner Quintenz.

Commissioner Berkovitz?

COMMISSIONER BERKOVITZ: Thank you, Andrée. And thank you, Commissioner Stump, for your leadership of this excellent committee. And thank you, Angie, Angie Karna, for your leadership on the committee as well.

This is yet another excellent agenda by the GMAC. We have come to expect, really, very timely, informative discussions at these GMAC meetings. And today it will be no exception. The two topics that we are going to be discussing are extraordinarily timely. Looking back at what happened, at 2020, truly an extraordinary year globally, obviously health-wise but also with respect to the global derivatives markets. And as we continue to analyze and try and understand how the markets performed and what lessons are learned going forward, the input of this committee certainly is crucial to that.

The first panel that we have today, Trends in Retail Investing, and the presentations by MIB and DMO and the Ontario Securities Commission, also very timely. We have obviously seen most dramatically in the equities markets some of the impacts of retail, greater retail participation. And we are seeing at the Commission greater retail interest in terms of licensed facilities and expectations and market participants working to meet what they see as a new demand by this class of market participants. And I think it is absolutely critical that we stay abreast with the curve on this, that we get ahead of this and be aware of the implications for this increase in retail investing. So I am very much looking forward to our presentations today on that.

I would like to thank the CFTC staff for presenting today and those who worked to support the presentations. I know it takes a lot of work and analysis to go into this and present to this global audience. So I thank the CFTC staff. And, then, I also, again, thank Commissioner Stump for her leadership in really setting forth today an excellent agenda.

I look forward to the discussions. Thank you.

MS. GOLDSMITH: Thank you, Commissioner Berkovitz.

Thanks again to all of the Commissioners for taking part in this meeting of the GMAC and for sharing your remarks with the committee.

Before we begin with our presentations today, I would like to do a roll call of the GMAC members on the phone so that we have your attendance on the record. After I say your name and firm, please indicate that you are present.

Angie Karna, Nomura Securities International?

CHAIRPERSON KARNA: Present, Andrée.

MS. GOLDSMITH: Chris Allen, Standard Chartered Bank?

MR. ALLEN: Present.

MS. GOLDSMITH: Ted Backer, Morgan Stanley?

(No response.)

MS. GOLDSMITH: Ashley Belich, RBC Capital Markets?

(No response.)

MS. GOLDSMITH: Shawn Bernardo, TP ICAP SEF?

(No response.)

MS. GOLDSMITH: Darcy Bradbury, D.E. Shaw & Co.?

MS. BRADBURY: Present.

MS. GOLDSMITH: Maria Chiodi, Credit Suisse Securities?

MS. CHIODI: Present.

MS. GOLDSMITH: Joe Cisewski, Better Markets?

(No response.)

MS. GOLDSMITH: Jim Colby, Coalition for Derivatives End-Users?

(No response.)

MS. GOLDSMITH: Gerry Corcoran, R.J. O'Brien and Associates?

(No response.)

MS. GOLDSMITH: Sunil Cutinho, CME Clearing?

MR. CUTINHO: Present.

MS. GOLDSMITH: Thank you.

David Goone, Intercontinental Exchange?

MR. GOONE: Present.

MS. GOLDSMITH: Thank you.

Paul Hamill, Citadel Securities?

MR. HAMILL: Present.

MS. GOLDSMITH: Great. Thank you.

Amy Hong, Goldman Sachs?

(No response.)

MS. GOLDSMITH: John Horkan, LCH Group?

MR. HORKAN: Present. Thank you.

MS. GOLDSMITH: Thank you very much.

Adam Kansler, IHS Markit?

(No response.)

MS. GOLDSMITH: Bob Klein, Citigroup Global Markets?

MR. KLEIN: I’m present. Thank you.

MS. GOLDSMITH: Thank you.

Agnes Koh, Singapore Exchange?

MS. KOH: Present.

MS. GOLDSMITH: Thank you.

Janet Kong, bp Americas?

MS. KONG: Present.

MS. GOLDSMITH: Thank you.

Ben MacDonald, Bloomberg?

MR. MacDONALD: Present.

MS. GOLDSMITH: Thanks. Erik Müller, Eurex Clearing AG?

MR. MÜLLER: Present. Thank you.

MS. GOLDSMITH: Thank you.

Joe Nicosia, Louis Dreyfus Company?

(No response.)

MS. GOLDSMITH: Murray Pozmanter, DTCC?

MR. POZMANTER: Present. Thanks.

MS. GOLDSMITH: Thank you.

Tom Sexton, NFA?

MR. SEXTON: Present.

MS. GOLDSMITH: Thank you.

Jessica Sohl, HC Technologies?

MS. SOHL: Present. Thank you.

MS. GOLDSMITH: Thank you very much.

Thane Twiggs, Cargill Risk Management?

MR. TWIGGS: I am present. Thank you.

MS. GOLDSMITH: Okay. Supurna VedBrat, BlackRock?

MS. VedBRAT: Present.

MS. GOLDSMITH: Thank you very much.

And Masahiro Yamada, JPMorgan Securities?

MR. YAMADA: I'm present.

MS. GOLDSMITH: Thank you.

If there were any GMAC members that were unable to indicate your presence on the call, please email me or message me directly in the WebEx chat to confirm your attendance for the record.

And, with that, I would like to turn the program over to Angie Karna, chair of the GMAC, for an introduction of our presenters on panel 1.

CHAIRPERSON KARNA: Thank you, Andrée.

Just a few logistical reminders. Please keep your phones on mute while you are not speaking. Following the presentations, if a GMAC member or a commissioner would like to be recognized to speak, please use the WebEx chat icon at the bottom of your screen. Then select the "All Panelists" option within the dropdown menu, indicate that you have a question, and press ENTER. Please identify yourself and your firm prior to speaking and indicate when you are finished speaking.

Our first panel will focus on retail activities in the global derivatives markets. Our first presenters are Mel Gunewardena, Chief Markets Intelligence Officer; and Eugene Kunda, Market Analyst, from the Market Intelligence Branch of the CFTC's Division of Market Oversight.

Please go ahead, gentlemen.

MR. GUNEWARDENA: Thank you, Chairman Karna. Good morning, Commissioner Stump, Chairman Behnam, Commissioner Quintenz, Commissioner Berkovitz, and members of the committee. I am Mel Gunewardena from the Market Intelligence Branch in the Division of Market Oversight. And, along with my colleague Gene Kunda, also from MIB, we will be speaking today on this important topic. We thank you for allowing us to share some of the ongoing work on the retail influence on the derivatives markets.

Just let me begin by saying that our views today represent only those of the staff in the Market Intelligence Branch who have worked on this initiative and do not necessarily reflect the Commodity Futures Trading Commission's view, Chairman, or any other Commissioners or staff at the Commission.

Additionally, consistent with section 8(a) of the CEA, our presentation does not contain data or information that would separately disclose the business transactions or market positions of any person, any trade secrets, or names of persons.

Very briefly, the Market Intelligence Branch within the Division of Market Oversight monitors the health, performance, and structure of U.S. futures, options, and swaps markets, which we call the derivatives markets, highlighting and responding to emerging trends, threats, structural and systemic risks to the Chairman, Commissioners, and staff at the CFTC.

The Market Intelligence Branch has been undertaking an ongoing initiative to analyze the retail influence on the derivatives market microstructure. As you know, a microstructural analysis focuses on trading venues, the price discovery process, determinants of the spreads, price quotes, liquidity, intraday trading behavior, and transaction costs.

For this study’s purpose, we have defined retail as a market participant who is not registered as a commercial entity or other reportable participants who trades less than 50 contracts a day during this whole period. It is an interim report as our work is still ongoing.

I am going to hand over to my colleague Gene, who will provide an introduction to these retail growth in futures markets. And I will pick it up after he completes the introduction.

Over to you, Gene.

MR. KUNDA: Thank you, Mel.

As this first slide indicates, the daily transaction volumes of U.S. futures and options across all exchanges has increased dramatically during the past 14 years. The light blue columns in this graph represent the daily futures transaction volumes. And the red stacked column represents options volume.

As you will note from the graph, historically, as volatility, represented by the VIX, as the dotted line on the graph indicates, would increase during periods of market volatility. And, generally, in the past, we saw the markets would become risk-averse, leading to lower volumes. However, remarkably, in the past 10 years, a noticeable change is seen where a stronger correlation now exists between volatility and volumes where daily trading volumes increased with higher volatility.

Next slide, please. This slide shows that the number of new participants trading for the first time in our markets peaked during the early pandemic months of March 2020. Over 85,000 new participants traded in our markets. As the graph indicates, the number of new participant names that we identified has seen a threefold increase since January 2020. We observed the increased order flow through retail FCMs and introducing brokers who offer easier market access, such as online account openings, reduced fees, and lower minimum balance requirements, to those that offer traditional brokerage accounts. We have also seen a rapid growth of smaller retail-friendly contracts brought to market by both existing and emerging new exchanges.

Next slide, please. Although we observed over 750,000 unique new accounts traded since 2016, only around 375,000, or 50 percent, of these accounts traded more than once during the period of their life. We are still analyzing this information to ensure that this difference is not entirely attributed to FCMs setting up account names after an initial registration or after a first transaction. Though, regardless, this 375,000 increase is still substantial.

The graph here on this slide represents the number of total participants, unique participants, each month in the futures markets. They include all of the retail and other participants, including all of the market makers and professional traders, commercial, and asset managers.

You can see from this graph the current monthly average of approximately 200,000 unique participants in the U.S. futures markets is a 75 percent increase in the number of futures market participants than just one year ago.

This slide looks at the maximum participation level by retail traders in each of the futures contract markets. The dates above the columns indicate the highest level of retail activity in these contracts. And the percentage represents the highest participation level compared to the average participation level by retail accounts or participants in each contract between January 2020 and February 2021.

As the graph indicates in silver, we observed three times the average participation in February this year. In the crude oil, WTI, contract, we observed nearly two and a half times the average participation level during January of 2020.

When we further analyzed this data, several trading behavioral patterns emerged. These are, one, retail participants don't typically trade regularly or uniformly. They appear to seek specific market opportunities. And, two, most retail traders are short-term traders. They are not like high-frequency traders seeking microsecond opportunities or hedgers with long-term positions. They tend to be dramatic and seek shorter-term trends. Almost 50 percent of these retail traders are day traders, meaning they don't carry overnight positions. And the other half of traders that do hold positions overnight are not seeking longer-term investments and tend to be seeking shorter-term opportunities.

Next slide, please. And this slide shows the impact of social media by taking a closer look at the volumes of retail trading in silver and crude oil. As a part of the analysis, we looked at the highest number of search activities on Google Trends during this period shown in the yellow line. And the blue column represents the retail position trades. And the red columns represent the retail day traders. It is fascinating to see the high correlation between the increased participation and social media interest.

The Google search score on this slide is from public information made available by Google through its service Google Trends that analyzes the popularity of top search queries. Both February 1, 2021 for the silver market and April 20th, 2020 for the WTI contract recorded the maximum score, or a number of 100. The number represents the search interest relative to the chart’s highest point for the selected region in time. And the value of 100 is the term’s peak popularity.

With that, I will turn it back over to Mel.

MR. GUNEWARDENA: Thank you, Gene.

The next slide looks deeper into the microstructure of derivatives markets by further analyzing those same crude oil and silver examples that Gene discussed. Gene’s analysis explained the growth of retail accounts accessing futures markets directly. In this slide, we look at the asset managers, namely the exchange-traded funds or exchange-traded notes, that include commodity or financial references in their products and also in both the futures and derivatives markets.

Our analysis observed that there are three specific ways futures markets are affected by a sizeable retail engagement in the securities markets, particularly the ETFs or the ETNs. First, many ETFs and ETN managers directly risk-manage using the futures markets. As there may be exchange of ETF or ETN terms required, these managers will directly add, change, or reduce their futures positions. Two, ETF and ETN managers and other asset managers who provide retail-type products use swaps to hedge their exposure. And the swap dealer may hedge the residual exposure in futures markets. And, three, ETF and ETN managers may trade swap or cash markets. However, the cash in futures markets could emerge, as you know. And in the silver example, a significant amount of cross-market arbitrage occurs and tangentially affect our markets almost in real time.

As you can see from this slide, the activity associated with ETFs directly, indirectly, and tangentially grew to the highest level during the same periods where we saw direct retail activity affect futures markets in the silver and crude oil example.

Next slide, please. When we compare the social media-fueled activities in equities to the futures markets, there are several similarities, but there are also some differences that we noted. These are, one, the size of the physical commodity markets are significantly larger than the typical small cap equity. Two, the futures markets don't have a short-selling to securities-borrowing concept. Futures markets have a long and short open interest. Every buyer has a seller on record. And, three, a difference that is critical is that futures contracts do have an active contract with a specific expiry date unlike any securities contracts. When these active contracts reach expiry, noncommercial participants will need to exit the market by selling or holding their positions because they are unlikely to take or make delivery.

Next slide, please. In analyzing the bid-offer spreads, order book depth, price scores and price volatility in both crude oil and silver, which are the largest examples in our markets. There were various periods where there was reasonable bid-offer spreads and order book depth. And there were also other periods where there was deep dislocation in these markets.

When we looked and analyzed that deeply, we noticed that most retail activity that we observed are limit prices, which means that they are adding to liquidity, as opposed to taking liquidity. In most cases, retail appeared late into the market trend and typically held onto their positions until the end or a little bit late. In silver, it is also noticeable that most silver prices occurred in the Asian open. And the significant inflows on February 1st into futures and ETFs mostly missed that move. In the WTI contract, the large retail participation exited late, mostly selling into or at the close where prices fell dramatically below zero.

Next slide, please. In this slide, we show the performance of the overall retail activity in the futures markets between January 2020 and February 2021. That is a 14-month period. The horizontal line shows the level of participation, where further to the right, it will be the higher the participation levels, meaning the number of participants actively engaged in this market. The vertical axis shows the level of returns.

If it is above the horizontal axis, it indicates, overall as a portfolio, positive returns. And if it is below the horizontal line, it indicates a negative return. You will note from the bubbles that they are proportionately adjusted to indicate the relative return differences between each other.

So, as this slide indicates, the overall retail performance across various types of traded asset classes in the futures and derivatives markets, which included U.S. Treasuries, equity indices, agriculture contracts, metals, energy contracts, currencies, livestock, and soft commodities, overall had a very weak retail return profile.

In summary, we observed a visible growth of retail interest across derivatives markets, fueled by easier market access, both directly and indirectly; social media hype; smaller and retail-friendly contracts; and retail-friendly terms at new and existing exchanges. The potential economic outlook for commodity super cycles may further incentivize growth.

As we stated, although the number of retail participant accounts has grown exponentially, when you really look at the actual trade activity, the trade volumes are relatively small, between 10 to 15 percent of total activity.

The different trading behavior of retail traders to HFTs and other potential investment strategies definitely add to the diversification of liquidity derived from their participation.

Asset and money managers who offer retail products, like ETFs and ETNs, increase both the direct, indirect (via swaps), tangential, which is cross-market arbitrage, impact to derivatives markets.

We observe the retail trading will significantly influence our markets, even though physical commodity markets are much larger than the small-cap equities. As we saw from the crude oil contract in April, that even though the market is similar, the physical market is similar, it could be over two trillion in size, the futures markets were not immune to kind of an impact or at least having the retail participants get impacted due to an adverse price model.

And, then, finally, our interim conclusions -- and, obviously, as I mentioned, this is an ongoing project -- that retail participation, both directly and indirectly, is here to stay. The additional retail interest provides diversification and liquidity to our markets. However, if this sector is to develop fully, a more even return profile is needed to emerge. Specifically, two areas that we discussed that everyone has been discussing already, first, continuing the work in developing investor protection, disclosures, education, suitability standards, and establishing unambiguous obligations on the FCMs and introducing brokers to protect investor interest.

And, two, it is equally important that we further analyze the microstructure of our markets around these trading venues, price discovery process, spreads, price quotes, and liquidity, and specifically trading behavior to understand how emerging trading strategies could be predatory that would benefit unfairly to this increased retail engagement and bring about policy recommendations, as well as work closely with market participants, major market participants, in ensuring fairness across our markets.

That concludes this update. Chairman Karna, back to you.

CHAIRPERSON KARNA: Thank you, Mr. Gunewardena and Mr. Kunda.

Our second panelist is Jonathan Lave, Associate Director in the CFTC's Division of Market Oversight. Mr. Lave will present on some of the CFTC's core principles for designated contract markets and their particular relevance to retail market participants.

Please go ahead.

MR. LAVE: Good morning. As was said, my name is Jonathan Lave. And I am an Associate Director in the Market Review Branch in the Division of Market Oversight. I have been asked to speak about certain of the CFTC's designated contract market core principles and their particular relevance to retail market participants.

Before I begin, let me make the usual disclaimer that the views expressed are mine and do not necessarily reflect the views of the Commodity Futures

Trading Commission, any of the Commissioners, the Division of Market Oversight, or other staff at the Commission.

First slide, please. Thank you. So what is a retail market participant? The Commodity Exchange Act does not define the term "retail market participant," and there are no DCM regulations specifically directed at a class of market participants known as retail market participants. The Commodity Exchange Act, however, uses the term "retail" in the context of retail commodity transactions and retail forex customers. In both of these contexts, retail refers to a counterparty or customer that is not an eligible contract participant.

Next slide. So, for purposes of discussion, when I use the term "retail market participant," I am referring to a market participant that is not an ECP. But what is an ECP? An entity such as a financial institution, insurance company, or commodity pool is classified by the Commodity Exchange Act as an ECP based upon its regulated status or amount of assets. This classification permits these persons to engage in transactions not generally available to non-eligible contract participants.

The specific guidelines for ECPs are spelled out in Section 1a(18) of the Commodity Exchange Act and Commission regulation 1.3. Generally, when we think of ECPs, we think of more sophisticated participants.

Next slide, please. So retail market participants are generally not members of an exchange or a clearinghouse. Instead, they use intermediaries like introducing brokers to access markets and futures commission merchants to clear trades. Retail market participants that use intermediaries are protected by provisions of the Commodity Exchange Act and Commission regulations that govern these intermediaries.

A discussion of these protections is outside the scope of this presentation. However, anyone interested in fully understanding retail market participant protections should familiarize themselves with these provisions.

Next slide. So because retail market participants are not ECPs, they are prohibited from trading on swap execution facilities. As such, in the

United States, trading occurs on designated contract markets. Designated contract markets have a number of core principles and regulations that may assist retail market trading and protect retail market participants. Let's begin by looking at some of the ways they assist retail market trading.

Next slide, please. One way the law assists retail market trading is by ensuring DCMs provide open access to members, persons with trading privileges, and independent software vendors. As a general matter, retail market participants are usually in the category of persons with trading privileges. Specifically, DCM core principle 2 and Commission regulation 38.151 require DCMs to establish, monitor, and ensure compliance with rules to provide open access. Under these provisions, a DCM's access rule should be based on the financial and operational soundness of a participant and not on factors that could bar access and result in discriminatory access or act as a barrier to entry.

A DCM must set nondiscriminatory fee classes for those receiving access to the DCM. And a DCM must establish and impartially enforce rules governing any decision by the DCM to deny, suspend, or permanently bar a member’s or market participant’s access to the contract market.

Next slide, please. DCM core principle 8 and Commission regulations, like 16.01, assist retail market trading by requiring DCMs to make certain information public and specify that certain information must be provided free of charge. These provisions ensure that retail market participants have access to market information about settlement prices, volume, open interest, and opening and closing ranges for actively traded contracts in the contract market, information to which they might not otherwise have access. This information allows retail market participants to make well-informed investment decisions. In addition, well-functioning markets depend on well-informed participants.

Next slide, please. DCM core principle 9 requires that DCMs provide a competitive, open, and efficient market and mechanism for executing transactions that protects the price discovery process of trading in the centralized market of the board of trade. To qualify as a board of trade, the market must be an electronic trading facility, as that term is defined in 1a(16) of the Act; or a trading facility, as that term is defined in section 1a(51) of the Act.

Next slide, please. So I will now turn to DCM protections of retail market participants by focusing on the protections of participants that use intermediaries. DCM core principle 2 requires DCMs to establish, monitor, and enforce rules prohibiting abusive trade practices. Under Commission regulation 38.152, DCMs that permit intermediation must prohibit customer-related abuses, including, but not limited to, trading ahead of customer orders, trading against customer orders, accommodation trading, and improper cross trading.

Next slide, please. Similarly, core principle 12 requires that DCMs establish and enforce rules to protect markets and market participants from abusive practices committed by any party, including abusive practices committed by a party acting as an agent for a participant; and to promote fair and equitable trading on the contract market. Commission Regulation 38.651

requires DCMs to have and enforce rules that are designed to promote fair and equitable trading and to protect the market and market participants from abusive practices, including fraudulent, noncompetitive, or unfair actions committed by any party.

Next slide, please. So, as we noted, retail market participants tend to use intermediaries, like introducing brokers and futures commission merchants, to trade and clear trades. DCM core principle 11 requires DCMs to establish and enforce rules and procedures for ensuring the financial integrity of transactions entered into on or through the DCM and to ensure the financial integrity of any futures commission merchant or introducing broker and to ensure the protection of customer funds.

Next slide, please. A number of regulations set forth requirements for complying with core principle 11. Commission Regulation 36.603 requires DCMs to have rules that protect customer funds. Commission Regulation 38.604 requires DCMs to monitor members’ compliance with the DCM’s minimum financial standards.

This includes a requirement to continually survey the obligations of each futures commission merchant created by the positions of its customers and take appropriate steps to use this information to protect customer funds.

Next slide, please. Commission Regulation 38.605 requires a DCM's financial surveillance program to comply with Commission Regulation 1.52.

And, finally, Commission regulation 38.607 regulates direct access by FCM customers. That is, where FCMs allow their customers to enter orders directly into a DCM's trade-matching system for execution. The rule requires that DCMs have in place effective systems and controls reasonably designed to facilitate the futures commission merchant's management of financial risk, such as automated pre-trade controls that enable member FCMs to implement appropriate financial risk limits.

That's what I have to say. Thank you.

CHAIRPERSON KARNA: Thank you, Mr. Lave.

Our final panelist for panel 1 is Alison Beer, Senior Legal Counsel, Derivatives Branch, at the Ontario Securities Commission.

Please go ahead, Ms. Beer.

MS. BEER: Thank you. First, I just want to confirm that you are able to hear me.

CHAIRPERSON KARNA: We can. Thank you, Ms. Beer.

MS. BEER: Great. I want to thank the CFTC Commissioners; CFTC staff; in particular, Commissioner Stump; and Andrée Goldsmith for the honor of being invited to speak at today's GMAC meeting and for the opportunity to share a Canadian perspective on retail investors' participation in derivatives markets.

Next slide, please. The views expressed in this presentation are my personal views and do not necessarily represent the views of the Ontario Securities Commission, the Commissioners, or of Commission staff.

Next slide, please. In the short time that we have together this morning, I am going to provide, first, an overview of the regulatory framework for retail derivatives trading in Ontario. Next, I will share some of the comparative insights we have regarding the retail derivatives market and recent trading volatility linked to the retail-led meme trading. And, finally, I will highlight some of the developments with respect to the products retail investors can trade in Ontario that gives them exposure to crypto assets on a regulated basis.

Next slide, please. As a regulatory agency, the OSC oversees retail derivatives trading by administering and enforcing the Ontario Securities Act as well as the Commodity Futures Act. And it is through a combination of these two statutes that the OSC derives its jurisdiction over the securities and derivatives markets. Similar to the U.S. framework, under the oversight of the OSC, we have exchanges and other SROs that are responsible for certain aspects of the regulation of market viewers and advisors. And for IIROC, which is essentially the equivalent of FINRA and the NFA, this includes, among other things, along with OSC oversight, responsibility for examining the qualifications of proficiency of the dealers and advisers; establishing technical criteria relating to the financial integrity of its members, including capital requirements and margin requirements; as well as conduct-oriented oversight relating to retail sales practices as well as product and client relationship disclosure.

For those of you who are familiar with the Canadian landscape, either on the regulatory side or because you do business in Canadian markets and you are looking at the screen, you will be aware that while all of this looks very straightforward, in practice, it is not. We essentially need to multiply this slide by 13 to represent all of the independent regional regulators who together oversee securities and derivatives markets in Canada.

And one thing I should also add is that our concept of what constitutes a retail market participant is somewhat similar to the CFTC's concept, at least as it relates to derivatives. And so it is through this entire framework that retail investors can use an intermediary to trade a variety of exchange-traded products as well as OTC derivatives.

Next slide, please. In Ontario, we have similarly witnessed an evolution over the last decade in retail market participation. And there has certainly been a significant rise during this period in the number of online trading platforms that offer derivatives products to retail investors.

A few of the interesting features that distinguish the Ontario market from the U.S. market currently relate to certain product offerings. So, for example, retail investors can trade contracts for difference, which are leveraged over the-counter products that allow them to speculate on the future direction of a market's price without taking ownership of the underlying asset. And they can do so through a regulated dealer on a large universe of underliers, which includes oil, currencies, stock indices, the VIX, commodities, as well as single-name securities, like we had seen in BlackBerry.

Individual retail investors, however, cannot trade contracts that are structured as binary options. So those are the contracts that are structured as a simple yes or no bet on how the cost of an asset will finish at the close of the contract. A prohibition was introduced in Ontario a few years ago and several other CSA jurisdictions on the offering of these products to retail individual investors, largely as a result of the sheer magnitude of fraud that was occurring during that period.

In terms of other differences, we thought it was important to note that there is a much greater degree of consolidation in our markets. So the retail dealer space is relatively consolidated for exchange-traded derivatives products. And for the most part, these brokerages are owned by the large Canadian banks; whereas, the Canadian bank-owned dealers are not active in the retail over-the-counter space. And in that space, there are almost a dozen independent dealers offering the OTC products at the retail level.

In terms of this past year in particular, as Mel and Gene from the Market Intelligence Branch indicated in their presentation, we have also, similarly, seen significant acceleration in the number of retail investors, primarily a much younger demographic, that are opening trading accounts for the very first time. What is interesting and although not surprising is how this cohort accesses the information, and how they are coordinating their actions. Plus, they bring in such large numbers.

Next slide, please. Obviously the internet has had trading chatrooms for decades at this point, but until recently, we certainly haven't witnessed this exact type of trading monoculture that is amplified through social media. And Subreddits like WallStreetBets and its Canadian parallel, BayStreetBets. And some of the research that our investor office has done sort of talked a lot about these new trends.

While much of the meme-driven trading activity occurred in securities that are listed in the U.S., there were a small number of Canadian-listed securities that saw notable price increases towards the end of January and early February. That included BlackBerry Limited, which is inter-listed on the New York Stock Exchange and trades in Canada on the TSX. So we thought that would be an interesting example to have a closer look at.

Next slide, please. Now, if you look at the figures on the graph and you look at the line graph, the blue, the color blue, represents the activity on Canadian exchanges. And the orange represents the activity on U.S. exchanges. You will see that both countries where BlackBerry is listed show similar characteristics in the sense that there is a spike in the trading volume in late January and early February, but this spike is so much larger in the U.S. During normal times, there is much more activity in the States, but during this relevant period, trading volumes grew exponentially larger in the U.S. And the visual differences don’t tell the whole story because you will note on the top graph, relating to the stock trading volume, there is one legend and one scale. If you look below on the options graph, we had to use different scales. That is how significant the difference in the volume is.

At the very peak, options trading volumes in the U.S. hit around one million contracts. Our peak trading volumes didn’t even cross 20,000 contracts. If you actually put those charts together on the same graph and used the same scale, you wouldn’t see the Canadian line.

So what does that mean? Well, one take on this could be that retail-driven trading activity based on the meme stock phenomenon is mainly a U.S. phenomenon. However, another way to look at it is that in North America or beyond, what it could mean is that this type of trading, this short-term trading, attracts people looking for liquidity, both in the stock itself, and it is a similar story for options. And the liquidity that was to be had really is found in U.S. markets, not Canadian markets. And since Canadian investors can trade equities futures and options in U.S. markets, and that includes retail investors, any added Ontario retail investor activities primarily took place on U.S. exchanges and, therefore, instead may be reflected in U.S. trading volumes. And I think what this story tells us from an Ontario perspective is just how integrated our investors are to the markets and not beating on Canadian stocks that happen to be inter-listed, right? Almost all of the relevant trading activity that takes place takes place on U.S.-based exchanges.

Next slide, please. So this graph relates to the trading volumes in contracts for difference. You could see, similarly, a spike in late January and early February. If you look at the commodities line, which is where equities are captured in our data, even though it’s a little flatter than we expected, there was a sixty percent increase in trading volume. There was a 60,000-contract rise in a very short period of time that correlated to the period when we saw similar spikes in both the equities and options markets. We did find some underliers involving GameStop, BlackBerry, and the other meme stocks, but otherwise, there is not too much to tell here other than these are fairly mainstream retail products that allow Ontario investors to get exposure to the market without having to hold the actual stock.

Next slide, please. Any discussion about retail trading would be incomplete without talking about their appetite for products that give them exposure to cryptocurrencies. In Ontario, retail investors can currently trade the following products on a regulated basis: bitcoin and ether-linked futures contracts and bitcoin options on certain U.S.-based exchanges through registered dealers, investment funds offering exposure to bitcoin and ether and ETFs linked to bitcoin. And, just as a reflection of how quickly this space is moving, I submitted my slides two days ago, and the second bullet is already out of date. It’s more than one ETF linked to bitcoin. There are now two, and potentially more on the way.

And then the third one relates to crypto rights contracts that are linked to bitcoin and ether. And so far, there is one registered dealer that’s registered in the category of a restricted dealer, subject to a host of terms and conditions, including investment limits, that can offer bitcoin and ether contracts to Ontario retail investors.

Next slide, please. With respect to crypto rights contracts and crypto asset trading platforms, in 2019, the OSC, along with the rest of the CSA, consulted on a proposed framework to regulate crypto asset trading. In 2020, the CSA issued guidance, which explained that platforms that facilitate the buying and selling of crypto assets, including crypto assets that are more closely analogized to commodities, fall within the Commission’s jurisdiction when the crypto asset is not delivered. And that is because the users' contractual rights to the crypto asset itself constitutes a security and/or a derivative.

Though there is certainly a lot of similarity in our guidance to the CFTC's final interpretive guidance concerning retail commodity transactions that involve digital currencies, however, there is a noteworthy distinction. And that is that the transactions do not need to involve leverage in margins to engage the CSA's jurisdiction and otherwise require platforms that are offering these products to be registered as dealers. And, as a result, there are cryptocurrency exchanges that might consider themselves as thought exchanges or facilitating cash market transactions whose activities would fall within the parameters of the guidance and that we may expect to be registered as dealers with the OSC to the extent they are offering those services to Ontario customers.

With respect to the crypto asset trading platforms, I think it is fair to say there is more to come from us as regulators and that we're building this bridge as we cross it. It raises lots of interesting issues relating to custody, how one can properly safeguard customer assets, as well as interesting developments that we are following closely, including in the U.S., with respect to product classification, so lots to come on that front. And, again, as I mentioned, we are certainly watching very closely both the SEC's and the CFTC's developments in this space.

Next slide. That was the last slide in my presentation. And, with that, I would like to thank you again for inviting me to contribute to today's discussion. Thanks very much.

CHAIRPERSON KARNA: Thank you, Ms. Beer.

The floor is now open for questions and comments on all of the presentations we have heard today. As a reminder, please use the WebEx chat icon and select all panelists in order to indicate that you have a question or a comment. I will then call on you. Mr. Corcoran? Mr. Corcoran, I believe you have a comment. Please go ahead. Mr. Corcoran, you may need to unmute yourself.

Andrée, I think we may be having some technical difficulties with Mr. Corcoran's line. Perhaps we could reach out to him separately and address that. In the meantime, does anybody else have any questions or comments on these presentations?

MR. SEXTON: Chair Karna?

CHAIRPERSON KARNA: Yes? Mr. Corcoran, are you available?

MR. SEXTON: Chair Karna?

CHAIRPERSON KARNA: Yes?

MR. SEXTON: This is Tom Sexton. I have just a comment while you are working on Mr. Corcoran's audio if that's okay.

CHAIRPERSON KARNA: Yes. Please go ahead, Mr. Sexton.

MR. SEXTON: Thank you. And I certainly want to thank the panelists for their very informative presentations.

As I said, this is more by way of a comment than a question for the panelists. And I know it was touched upon by our panelists: the importance of education. And education in our view is a very important cornerstone of customer protection, particularly when we are talking about retail participants, government regulators, SROs, the exchanges, industry trade associations. And registrants can and do assist with educational efforts to the point of regulators taking the lead on education.

I would certainly note that the sponsor of this committee, Commissioner Stump, wrote an excellent op-ed in Monday’s Roll Call explaining the risk management importance of the derivatives markets. This article referencing her children and their friends was creative, was written with humor, and was straightforward in explaining the real-world utility of derivatives through, of all things, hamburgers, which I think we can all relate to.

So to the point of other types of resources, look, many market users and potential market users need this type of simple and straightforward education to help them understand the markets, their products, the type of market participants, and certainly the regulatory protections that are available to them. And I wanted to take this opportunity to bring to the attention of this committee and today's meeting participants an excellent educational online resource that delivers this type of simple and straightforward educational content and particularly designed for those that are new to our markets. And the name of this resource is Futures Fundamentals. It is an industry-wide initiative, and it is designed as a one-stop educational resource. Futures Fundamentals educational resources are many and diverse, including educational packages that instructors can use to deliver engaging content to their students. It has an interactive website. It is open to all. The website breaks down the very complexity of the topics and explains the role of the futures markets in everyday life, various participants in the marketplace, and the basics of how market participants can use futures and options.

This resource continues to evolve. And I will note that and certainly want to thank the CFTC staff for working with us recently to include more content regarding the importance of well-regulated markets and investor protection.

The basic point I am trying to make is I encourage everyone to explore this resource and pass it on to others who would benefit from understanding or teaching others about our markets and their regulatory protections. You can find the resource and the site by going to futuresfundamentals.org. In our view, Futures Fundamentals is just another key initiative and an extremely beneficial resource and an important tool for education and customer protection, particularly as it relates to those that are unfamiliar with our markets and potentially retail investors.

So that's the point I wanted to make. It was more of a comment. And I thank you for allowing me to do so.

CHAIRPERSON KARNA: Thank you very much, Mr. Sexton.

Mr. Corcoran, do you have a comment?

MR. CORCORAN: I am here. Can you hear me?

CHAIRPERSON KARNA: Yes, we can. Thank you very much.

MR. CORCORAN: Thanks, everybody, for your patience on the little technical issue I had here. So first, let me -- for background purposes for everyone, I am the CEO of R.J. O'Brien & Associates. And we have been around a long, long time. And through a very diverse client base, we serve farmers and ranchers. We serve fixed-income institutions, energy interests. We have a very large introducing broker network. And we serve the retail client base on a widespread basis.

First, I would like to commend the report presented earlier by the CFTC Market Intelligence Branch. Very, very informative and probably apropos for the time we are in today.

Retail participation in the futures markets has always been both substantial and important. And that is key, importance, to the success of the futures markets. Retail participation provides important elements, the price discovery mechanism, along with the liquidity that futures market participants provide the markets. Both very, very important.

I think it is also important to take a look back in history related to retail futures market participants. Almost since the onset of the National Futures Association, which I am on the board, they have been the champions of retail participants' interests.

You could go back and look at history. And they have cleared out the options trap houses. They cleared out the churning schemes and even Ponzi schemes. And then in the late ’90s, they also cleaned up the retail forex fraudsters. And that job is never complete. As retail participants join the industry and if we are having retail participants join at an accelerated pace, protecting retail customers will always be an omnipresent process. So I really commend the topic we have here today.

But I would also like to say that FCMs and other intermediaries, such as IBs, have for a long time and continue to take important steps to protect retail customers. This may even include, you know, the regulatory mandated steps as requiring risk disclosure documents to be executed by customers. Other ways include retail education, as Tom just mentioned. FCMs and IBs pay attention to excessive trading; the churning risk; trading within margin parameters; blocking retail customers from trading in illiquid markets, including crypto products, until those markets develop. Many times, the intermediaries require the retail customers to exit before delivery dates and in some cases, the block on trading of naked short options, which in many, many cases, the retail customer is too naive to understand the risks associated with naked short options.

So we have a situation that has evolved, I think, in industry with less fraud but more need for education because of the risk of the markets. It is important to know that futures markets themselves are highly leveraged markets. And retail customers that may be migrating from trading stocks and moving into retail futures products don't understand the risks that are associated with them.

A great example of that was what happened with the CME WTI crude contract earlier this year that everyone is very well-familiar with, that went negative on price. No one ever thought that could happen, and it did. Well, what did the intermediaries do? For the most part, I would say all of the intermediaries blocked retail participation in front-lumped WTI products until, you know, the market came back to a stabilization factor. So intermediaries play a critical role in protecting retail customers, and they do it in real time. Okay? And so this is really an interesting process that is taking on. This has been going on for years for intermediaries taking these types of steps.

So I am just going to wrap up my comments. And, you know, I concur with the conclusions in the report, but I also would reinforce that substantial protections are already in place for the retail participants. Intermediaries, along with the NFA, really remain vigilant in addressing and protecting the retail participation.

That concludes my thoughts and comments. Thank you for letting me make these comments. And I will turn the call back to Andrée.

CHAIRPERSON KARNA: Thank you very much, Mr. Corcoran.

Mr. Cutinho?

MR. CUTINHO: Hi. Can you hear me?

CHAIRPERSON KARNA: Yes, we can. Thank you, Mr. Cutinho.

MR. CUTINHO: Excellent. So I will compliment Mr. Corcoran's views. Very quickly, I echo Gerry's comments. You know, thank you to the presenters, very informative presentation. But I wish to compliment based on what the exchanges have in terms of protections and the general structure.

So Gerry touched upon the, you know, education, risk protections. So from the exchanges' perspective, you know, we provide risk tools to our members to control exposures at the order level prior to execution. They are both at a product level and then at an account level. So this allows market participants and even our members to control risks. This is not necessarily true in all cases in the securities markets because execution can take place away from exchanges. And they can take place in pools of liquidity. So it is an important distinction to keep in mind.

The second is, you know, there are -- as the Commission presented, there are a lot of protections for customers. In addition to that, from an exposure perspective, you know, the Commissioners put in place gross margining requirements. Why is that relevant in this case? In addition to gross margining, our members or FCMs are required to collect from their customers margin, you know. So this is an important aspect of protection because, you know, once customers take positions, whether they are retail or non-retail, their margin increases. So the more directional they are, the more the margins increase. So it acts as a dampener in many ways to their desire to actually increase their exposures.

At the same time, because we have customer protections all the way to the exchange and the clearinghouse, our members can actually pass on that margin all the way to the CCP so they don't end up in the liquidity situation where they are forced to finance their clients' exposures until settlement.

And, lastly, I would say we need to be very careful when we draw connections or causal relationships between social media and market events. You know, it is very hard to know if the market events are driving social media interest or social media interest is driving market activity.

As far as CME is concerned, we have a team that is monitoring social media. We actually like the transparency because it gives us information. And we use that information for risk management purposes. So if it is a counterparty that is in the social media or a specific product, it is of great value for risk managers and not just for an exchange. It should be true, even for our clearing members.

So, with that, I yield my time. thank you.

CHAIRPERSON KARNA: Thank you very much, Mr. Cutinho.

All three of our comments so far have done an excellent job of highlighting existing protections that are in place and including educational resources that are available to retail market participants. Our panelists presented very interesting data about retail market participation and how that has increased substantially in recent time. So a question for all of our panelists as well as our GMAC participants, what changes, if any, should be considered from a policy perspective to ensure that derivatives markets are better suited to cater to these new retail market participants?

As a reminder, if anyone has any thoughts, please just highlight that you have some feedback in the

WebEx chat function.

MR. GUNEWARDENA: Chairman Karna, it's Mel here. If I may just respond to your question briefly if that's okay?

CHAIRPERSON KARNA: Yes. Yes. That would be perfect. Thank you very much.

MR. GUNEWARDENA: I think in our analysis, one of the areas that we have to do a lot more work -- and I am not necessarily saying there is policy that can be clearly defined -- is really around the indirect influence in derivatives markets through intermediaries and how that can potentially affect market conditions.

So, as I mentioned, we analyze those participants who directly access futures markets at a retail level. We also analyze those that traded in other retail products and those managers, both in the U.S. and internationally, kind of use other markets in the U.S. to hedge. And we have been looking at this, obviously both kind of where we have seen kind of increased retail participation, like in the silver and WTI and in other market moves.

And I think we have a lot of work to do there, and I think while our focus and discussion here is around retail education and protections, which I completely support and agree and I think they are very important, the effects of the microstructure of the markets through intermediaries in that translation needs to also be talked through. And there is a lot of work out there.

It's just my thoughts.

CHAIRPERSON KARNA: Great. Thank you very much, Mr. Gunewardena.

Does anyone else have any questions or comments for our panelists or on this very timely topic? Mr. Cutinho?

MR. CUTINHO: Thank you for giving me the floor. I think silver markets were mentioned a couple of times. So I will give a risk manager's perspective.

As far as the activity in silver markets were concerned and the price moves were concerned, as the Commission has pointed out, the retail participants' activities were, you know, not as material as institutional participants. You know, as far as their entry in the market is concerned, you know, as you can see from the graphs that the Commission presented, the moves were not driven by retail market participation but mostly institutional participants.

It is also important to note that we focus our activity, focus our attention on market activity during this period, but the moves in silver were of similar nature to just six months back, so the October-November timeframe of 2020. So it's not easy to discern if these moves are the result of greater interest in silver or it is as a result of macroeconomic environment.

So the Commission did point out about a commodity super cycle. Some of our market participants are talking about it. Commodities in general have been quite volatile. And this is not unique to silver. This is true of even our ag products. So it is important to actually, you know, not draw any causal relationships between the activity in silver markets and the moves in silver markets to retail participants.

CHAIRPERSON KARNA: Thank you very much, Mr.

Cutinho.

We will now move on to the second agenda item for this morning, which is a series of presentations on the impact of the coronavirus pandemic on global clearing. We will start with a presentation from Pedro Gurrola-Perez, Head of Research at the World Federation of Exchanges.

Please go ahead, Mr. Gurrola-Perez.

MS. GOLDSMITH: Angie, this is Andrée. We are a little bit ahead of schedule. I think it might make sense if everyone is okay to take about a 10-minute break and resume back just after 10:30. Does that make sense?

CHAIRPERSON KARNA: Yes. Sounds perfect. Thank you.

MS. GOLDSMITH: Great.

So everyone please remember to mute your lines while we are on break. And we will resume just after 10:30. Thank you.

(Recess taken.)

MS. GOLDSMITH: Hi, everyone. Welcome back. This is Andrée. I am just going to do a quick attendance update for the GMAC members just to note a few GMAC members we did not hear earlier during the roll call. So present today on the call are Ted Backer from Morgan Stanley; Gerry Corcoran, whom we heard earlier, from R.J. O'Brien and Associates; and Adam Kansler from IHS Markit.

And, with that, I am going to turn it over to Angie to start panel 2. Thank you.

CHAIRPERSON KARNA: Thank you, Andrée.

We will now move on to the second agenda item for this morning, which is a series of presentations on the impact of the coronavirus pandemic on global clearing. We will start with a presentation from Pedro Gurrola-Perez, Head of Research at the World Federation of Exchanges.

Please go ahead, Mr. Gurrola-Perez.

MR. GURROLA-PEREZ: Thank you very much. I hope you can hear me.

CHAIRPERSON KARNA: Yes, we can. Thank you.

MR. GURROLA-PEREZ: Thank you. Thank you, Commissioners and the CFTC, for the opportunity to present our research work on procyclicality.

Can we move to the next slide, please? And to the next one. Let me start by saying that this research originated when, despite the fact that CCPs have different procyclicality mitigation tools and measures in place, after the March events, we saw renewed and sometimes incorrect claims about the procyclicality of initial margin models. So the purpose of the research was to show why the focus on initial margin is misplaced.

Can we move to the next one, please? There are five main reasons. First of all, we all know margin requirements are driven by variation margin, not initial margin. And they also depend on changes in the portfolio.

I want to focus on four other points. First of all, there are unavoidable tradeoffs and constraints. Trying to reduce the impact on liquidity in the system to the calibration of CCPs' initial margin models has the obvious limitation that market risk models, irrespective of whether they are used for central clearing, bilateral clearing, or the banking sector, cannot simply ignore changes in market conditions. In addition to that, central clearing needs to be kept economically viable.

Then we have randomness, which means that the same calibration may produce different outcomes under different initial conditions. So prescribing calibrations does not always guarantee the outcome. And we will see an example of this.

We also face what I think is a change. We need to distinguish between long-term properties, which, for example, extending the lookback period may be useful, from those needed to model market conditions at a specific point in time.

And, finally, the problem is that feedback loops are amplified through system interactions. We should look for solutions that address system-wide robustness. This calls for a complex systems approach, rather than a narrow reductive approach.

Next slide, please. So we will illustrate these points. We are going to give an example. What we will do is show how these limitations played out with the March 2020 stress. We will consider Standard and Poor's 500 portfolio for the prices, 15 years of prices. And we will consider some typical CCP risk models. They do not reflect any individual CCP. They are sufficiently representative to capture the nature of the problem.

In particular, I will be presenting results using a filtered historical simulation, value at risk.

These are models -- the idea behind them is to give more weight to recent observations to allow for sensitivity to changes in volatility. Calibration is quite standard: market period of one day, lookback period of 1, 10, or 12 years, and confidence level of 99 percent.

Next slide, please. So, first of all, to set the scene, let me show you an estimation of volatility through the periods. So two things to highlight here: first, volatility changes a lot. It changes in clusters. This is why risk models need to be sensitive to short-term changes in market conditions. And it is easy to forget this difference. Like sometimes here and sometimes it's out of that -- they were too many breaches in March. And this will get the fact that the number of breaches is a long-term statistic. And it knows how volatility clusters.

Another thing that I want to point out from this is that the spike that we observed in March 2020, which was a maximum, which is 6.5 times larger than the long-term volatility. So this is something we probably should bear in mind when assessing model procyclicality.

Next slide, please. Because of the tradeoffs involved, any discussions about procyclicality should take into account the impact on costs and on coverage. So to assess the models, what we did is to use some standard measures of coverage and of procyclicality. And we also introduced a measure of the cost of over-margining.

So next slide, please. Let's look at the performance of these models using different lookback criteria, that is, the different risk sensitivities. We can see just looking at the graph that the more reactive model is the filtered historical simulation model with one-year lookback. This is the line, the highest line, the one that – I think it is in red.

After that, we have the same filtered historical simulation, but we have 10-year lookback period. Clearly it is less sensitive. The 12-year lookback period is very similar to the 10-year. So it is difficult to distinguish. And the dotted line, we see is a basic non-filtered 10-year historical simulation VaR.

So we have three models with different risk sensitivities, all of them reacting to a different extent, to the change in volatility that we saw in March. If we look at the statistics on the right-hand side, you see that, as expected, among the filtered models, the 10 year is less procyclical but produces, of course, larger breaches. This is a very simple example, and it is just to illustrate why asking for lower procyclicality and at the same time for less or smaller breaches is to be a contradictory request.

Now, is it true that increasing a period of stress guarantees an improvement to the model's procyclical behavior? Well, not in this case. The 10-and the 12-year, as you can see, are almost indistinguishable besides the fact that the 12-year lookback period still captures the 2008 stress and the 10-year doesn't.

Another question is whether introducing a floor would make any significant difference. Well, let's see that. Next slide, please. Here we quantify the tradeoff between procyclicality and costs. We assume that we have a 10-year floor. That is the dotted line that we saw before.

We use it to measure how procyclicality is reduced in those circumstances. It turns out that we would need to increase the floor by a factor of around two before we see any significant reduction in procyclicality. So, clearly, there is a limit to what can be achieved by increasing the floor if we want to keep clearing economically efficient.

There are additional risks of the CCP that we have to take into account. Next slide, please. And that is what will happen in the event of default. So let's zoom in to the worst days of the crisis and assess the effect of the standard anti-procyclicality tools. The 25 percent, a margin buffer of 25 percent; stress VaR; and the floor, for which we use the 10-year historical VaR, the dotted flat line that we saw before.

Next slide, please. So what we see when we assess the performance of these models with and without the existing measures is that, first, the stress VaR, which is the line that is at the beginning of the period above the rest, pushes margins up at the start, but then it ends dragging the margin down. This is an example of a prescription going wrong.

The floor stops having an impact after the 27th of February. And the buffer is consumed by the 6th of March.

So, in summary, while we see that these tools mitigate margin changes at the start of the period, none of them will be able to prevent having a large margin increase later, a result which coincides to some observations that came out recently from the SEC.

Next slide, please. So here is the same

situation but using the less sensitive model, the 10-year lookback period. The pattern is very similar. But, of course, we have less sensitivity and larger margin shortfalls.

Now the question is, well, how worse could this get if we are thinking of the worst-case scenario, where the member defaults on day T?

Next slide, please. So let's look at this worst-case scenario and measure the losses to the CCP due to margin shortfalls had the member defaulted on day T. What we have here is on the left-hand side the one-year case and on the right-hand side the 10-year case. And, not surprisingly, a CCP using the less sensitive 10-year model, we face higher losses. But what is to note is that such losses are really high. They are something between 48 and 99 percent higher compared with 1-year; on average, 64. So I think a CCP using the less procyclical 10-year filtered historical simulation model would effectively be subsidizing the risk of the portfolio, providing an incentive for the member to assume more risk.

Next slide, please. So, in summary, we face a three-way set of tradeoffs, which are here represented graphically. You have to choose between procyclicality and more risk to the CCP on the system or higher costs of clearing.

And we have a hard set of constraints. Models have to provide adequate coverage. And clearing must remain economically viable. We are trapped in some ways. The limits that we can achieve either by increasing the floor or by smoothing the risk model, we can only move if you can see the little kind of solution set, which is the green rectangle. That's where we can move given the constraints and the conditions that we cover.

In addition to that, the relations between different factors are not linear. They are subject to randomness, as we saw before. So differing sets of events will produce different solution sets. The extensions and tradeoffs will not go away. Therefore, we argue, instead of insisting on local solutions, the problems will be better addressed by acknowledging that procyclicality is a systemic property and, as such, require solutions that consider the system as a whole.

So next slide, please. So this is why we emphasize the importance of approaches which are more akin, for example, to those used in engineering or to assess the safety of complex systems; for example, nuclear And, of course, this is not new. We all know that the financial system is a complex system.

But it implies looking at interdependencies and to interactions across a system and to incentives and behaviors as well. In complex systems, safety requires several lines of defense. In our case, procyclicality mitigation has been a first line of defense, but other lines of defense are needed that consider how liquidity risk is managed and transmitted across the system.

Next slide, please. In conclusion, we all agree that initial margin models should be calibrated to address procyclicality to the extent that it is prudent and practical. But if at the end of the day fragilities in the system remain that contribute to adverse liquidity feedback loops, what else do we need to do?

Well, given the limitations that we have discussed, the answer cannot simply be to impose further constraints into initial margin models.

At least, these constrain or in general constrain the ability of the CCP to set prudent but adequate margins could have the double negative effect of incentivizing risk-taking on one side while curtailing the ability of the CCP to correctly collateralize its exposures.

So let me finish here. And thank you very much for your attention.

CHAIRPERSON KARNA: Thank you, Mr. Gurrola-Perez.

The second presentation will be from Nicholas Lincoln, Group Head of Market Risk and Liquidity Risk at LCH Group.

Please go ahead, Mr. Lincoln.

MR. LINCOLN: Thank you. I assume you can hear me.

CHAIRPERSON KARNA: Yes, we can.

MR. LINCOLN: Excellent. Well, good morning or good afternoon from London. Thank you for inviting me here today and to the Committee and the Commissioners.

Now, I know there has been a lot of debate and chat about the initial margins increasing at the CCPs during the period of COVID. So I thought you might like to get a little bit of insight into why that happens. And I put together two examples where I have performed an attribution analysis, a very simple attribution, of the change, what's driving the change in initial margins in two of the markets that we clear. So the first market we are going to look at is the European cash equity market, and the second market we will look at is the global rates market, or interest rate swap market. I hope you will find it very interesting.

And I think we can probably move to the next slide. So, first of all, we will start with European equity clearing at LCH. This is actually provided in our service called EquityClear. And this provides clearing for cash equities and cash equity equivalents. The service clears on average of about 7 million trade sides per day across 18 different trading venues throughout western Europe. It is multi-currency, multi-

CSD type of business.

We are going to look at the critical two-month period from the 1st of March to the 30th of April, 2020 because this was where most of the volatility was observed.

Over the period, we chart the initial margin requirements at the service level. And then we will chart the same initial margin requirements but keeping the positions constant from the start of March. Now, the purpose of this calculation is to attempt to isolate the effect of the LCH margin calculation on the participant portfolios. So hopefully you can see this chart in front of you now.

So this is EquityClear. So along the x-axis is the time, the two months, March and April. And then on the left-hand axis, the y-axis, that's the initial margin. So typically the service would be around three or four billion in margin. And if you follow the blue line, through early March, that increased right up to about 8.2 billion by the 20th of March. That, you know, almost doubled, doubled increase in margin.

When you strip out the volume impacts to all of the increase in trading and positions through that period and then measure the increase in margin on that constant portfolio, around the same date, that would have risen to about 4.6 billion, on the 20th of March, which is about a 16 percent increase from the start of the month. So that when you read this analysis, you know, it’s quite stunning, actually, how little the margin increased. And that, by far, the biggest driver of the headline margin was just the activity, which shouldn’t really come as much of a surprise given what was going on at the time.

And then as you follow through to the end of March and into April, you can see the volume then return back to more normal levels. And so do the initial margin requirements, which sort of get back to about four billion. But, you know, we found this chart interesting.

And just on the volume side, as I said, typically we might clear around seven million a day. During that first 2 weeks of March, in that particular service, we were up to around 20 million trades a day, so a little over 3 times the normal volume.

And to compare to prior crises because, you know, we have been through a few, what was interesting, it did persist. The volumes persisted, you know, beyond one or two days. It really was almost every day for about two weeks we were seeing persistently high volumes compared to the average.

So if we move on, the second market which we looked at was the global interest rate swap market, which is cleared in a service called SwapClear. So SwapClear services, literally hundreds of interest rate products in 27 currencies, encompassing tenors stretching from 1 month to 51 years and referencing literally dozens of different benchmark rates. Obviously, it is a market that has very deep liquidity and serves, you know, a broad range of participants who have access to the vanilla IRS markets.

So given the signs that go with that service, it has been a good candidate to examine how the margins evolved during the volatility of March and April 2020. You should see a chart now that is the same calculations that we ran on the equity business, but here we run it on SwapClear. The first thing you will notice is that on the y-axis, the left-hand side, the numbers are much bigger. So we are starting at around 149 billion in margins in the service. And then that grows to an initial peak of around 170 billion at about the 12th of March. It is about a 14 percent increase, close to 20 billion increase in margin.

Again, however, if you struck out the volume impact and look at the margin increase on the constant portfolio, which is the orange line, you can see at around the same time, the 12th of March, it was about +4 percent. Now, that continued to rise, peaking at about +14 percent towards the last week of March. And then you can see by the end of March and through April, it starts to settle down again. Volumes return to more normal levels. And the service sort of readjusts to around about 160 billion.

So, again, you see a striking impact of that volume, which is the dotted line, and the right-hand side scale, you know, contributing close to 10-20 billion in additional margins just from amended activity.

So, you know, when you look at that, you think to yourself, well, obviously, any margin call to a clearing member is a draw on the liquid resources of that clearing member. It is a liquidity drawdown. And clearing members, you know, they stress that the liquidity requirements, you know, on a daily basis, they try and estimate, you know, what is the worst margin call that could happen, you know, on the CCP that I'm a member of? And what this analysis shows is that during those stress test models, you just won't be looking at volume or position size as one of the risk factors. And if you are stressing the volumes, particularly in an equity market, you know, you want to be stressing that probably at least to double, maybe even triple the volumes because that will have a big bearing on the margin calls from the CCP.

So maybe to wrap up, the point today was really just to share with yourselves some analysis to provide a little bit more insight into two significant markets that a CCP serves, in this case LCH. Both cases show that the activity from market participants will have a considerable bearing on the margin requirements demanded from the CCP. As far as adding volume effects to participant liquidity stress-testing regimes, it may be beneficial to better size the potential liquidity draws from CCP margin calls.

And, of course, the CCP risk models themselves, they will also have an influence, as Pedro has pointed out, on the required margins. But in these two cases, during March 2020, you can see that the impact has actually been unexceptional.

So I will pause now. And that is the end of my presentation. Thank you very much.

CHAIRPERSON KARNA: Thank you very much, Mr. Lincoln.

The third presentation will be from Ulrich Karl, head of clearing services at ISDA.

Please go ahead, Mr. Karl.

MR. KARL: Good morning, everybody. So I would like to start by thanking Commissioner Stump and the Global Markets Advisory Committee for the opportunity to present our paper.

And can I have the next slide, please, Andrée? So the ISDA Clearing Member Committee after the market events in March was very interested in how CCP risk management frameworks performed during the crisis. And we talked to quite a lot of CCPs, most of the larger CCPs. We sent questionnaires to all of the other CCPs. So our analysis was pretty much based on 97 percent of CCPs by risk. So we essentially counted the default fund contributions as per public quantitative disclosures.

So, as you might know, kind of we dealt with the crisis very well. So we had three member defaults globally. The one is one from Ronin Capital at CME and DTCC. There were two smaller defaults at small European energy CCPs. None of them threatening financial stability. And we also didn’t get any issues reported in our calls with CCPs about key participants that maybe didn’t meet their margin calls in time, other than a few isolated operational delays, which were apparently in one case not able to redeem team member sales but paying for it.

So I think overall CCPs and their participants or team members and clients did very well with the record volume and volatility. And that is while pretty much everybody was working from home.

I think one factor that came into that very much was that financial institutions are now much better capitalized and have higher liquidity reserves. And obviously the central bank intervention also had mitigated stress.

So, overall, we think the system held up very well. And, however, we would like to make recommendations in two areas. One is to introduce measures to mitigate procyclicality. And the other one is to enhance CCP public quantitative disclosures.

Before I get to them, next slide, please. I would like to sum up the findings from the CCP feedback we got in our calls or from questionnaires.

So, overall, most CCPs are actually very happy with the performance of their margin frameworks. So CCPs using frameworks, their model picked up on increased volatility automatically more or less. Other CCPs either used scheduled or unscheduled reviews for parameter update or in minor model changes. And one CCP reported that they applied an add-on to their margin while they were recalibrating their margin model.

As to be expected, all CCPs observed increased number of back-testing breaches, but, overall, CCPs told us that their margin coverage was within their risk appetite, so they had a kind of pre light or if they had issues, they applied changes very quickly after, also confirmed later by public quantitative disclosures.

In terms of offsets between products, most CCPs stated they didn’t apply any, at least not outside the regular reviews anyway. They said that these offsets are very conservative anyway. And one CCP told us that they classified a small list of products differently to remove them from the portfolio margining. That’s pretty much that.

When we put our questionnaire together, that was fairly soon after the WTI futures price trended negative. So we also asked CCPs about impact of negative prices. And most CCPs we talked to had already reviewed their systems and processes. And, in fact, they were all ready to deal with negative prices.

Others were in the process to do so; there were quite a few CCPs where negative prices wouldn't happen.

In terms of investment, that is not so much an issue for the U.S.; that is more a European topic. If CCPs use the repo market to invest cash, none of the CCPs actually told us that they did encounter problems doing so.

And talking about cash liquidity requirements, most CCPs told us that their liquidity requirements had not changed during the crisis, a recommended course based on strategy anyway, or if they had, had increased, they were covered by available resources.

Moving to default management, all CCPs said they would be able to manage default, either remotely or some of them had staff levels in the office if that was required. One CCP even told us that they had rented a hotel to make it easier for the staff in the office. Quite a lot of CCPs told us--and I reckon it is by now even more--told us that they had already run trials under the working-home conditions and confirmed that they would be able to manage the default. And all CCPs said that they could continue with the working arrangements indefinitely.

We had these calls mostly in summer last year. So I think maybe, back then most people were maybe a little bit more optimistic that staff could come back. I think maybe they are quite near to indefinitely already.

So in terms of default management groups, if a CCP had one or required one, it usually had to be in-person in the office so the CCPs you talked to that used default management groups either had or were working on virtual ways to convene the default management group in a safe way.

And, finally, there were some reports of defaults or closeout of clients, but there was hardly anything made public. So we can pretty much only know about the fact but not about the content or details.

Next slide, please. So, going back to our proposals, procyclical margin first. And before I start, I really want to highlight that we don't blame CCPs or say that margin models were blindsided, as is sometimes reported in the press. Key participants knew how margin models would work and what would happen if volatility would spike up. I think in a real-life procyclicality, in a real-life crisis, maybe why a sense that the topic should be based on their experience.

So we are not talking about variation margin because that reflects the profits and losses of members and redistributes liquidity. And given the large market swings, that was pretty much unavoidable that we had large increases in variation margin. But you have to pay your profits and losses. You can't do anything about it.

And, as Nick already said, initial margin if it is procyclical can drain liquidity from the markets at greater levels during times of stress. And we saw for some products, margin rates increased by more than 300 percent.

Something that surprised me when we had the discussions with CCPs is how many CCPs around the world actually aligned their anti-procyclicality tools with EMIR requirements. But, nevertheless, even doing so with these anti-procyclicality tools were insufficient to mitigate procyclicality.

As a side comment, giving it up for ISDA, in the uncleared margin markets, that margin is the ISDA SIMM model, which didn't really show that much procyclicality in tests performed very well last year. The estimate of the service in including a buffer on top of the margin that would have been required by the regulation. But, explicitly, I just mention that we do not propose CCP models to be calibrated in a similar way.

So next slide, please. So Pedro has already shown some of the issues with anti-procyclicality tools. So the 10-year floor, while it is easy to calculate and to apply, given it was 10 years, that meant that the 2008 stress period has already rolled off the lookback period. So that potentially should be extended or at least reviewed. And, once margin is above the floor, as Pedro showed, this tool has no impact whatsoever.

The 25 percent buffer, if you see that for certain products, margin rates increase by 300 percent. It was maybe not the right number. It seems pretty arbitrary anyway. So we think that this buffer needs to be calibrated dynamically and based on the underlying contracts.

And there is also some insufficient guidance when the buffer can be released or should be released. And we believe that some CCPs didn’t release them at all.

And, finally, stressed scenarios in the lookback period. We believe that CCPs who used this tool seemed to have experienced lesser margin increases or not as significant ones as other CCPs. And I think that is pure math. It is if 25 percent of your scenarios are stressed, then they will very likely try for 99 percentile or whatever percentile you use. And if not, then you're in stress periods at the moment.

So in terms of recommendations, the first recommendation is to review and recalibrate anti-procyclicality tools so that similar products exhibit comparable levels of procyclicality. That is not to say that they should necessarily require prescriptive regulation but potentially would be better if the market plus regulators agree on an outcome; for instance, maximum rates of increase over 1 day and 30-day, maybe like in a sense since we are moving portfolio changes into measures. If an outcome like that could be agreed, then CCPs could design their models accordingly as they see fit without prescriptive regulation.

There should be also some additional guidance on governance and measurement of the effectivity of anti-procyclicality tools and especially adding transparent standardized measurements of metrics of anti-procyclicality tools into the public quantitative disclosures and also into CCP disclosures to clearing participants.

Next slide, please. And, then, finally, the second set of recommendations is about the frequency of public quantitative disclosures. And you will know that the public quantitative disclosures, as prescribed by CPMI-IOSCO, they are quarterly. So they report always for a quarter. And there is a three-month time lag.

And given the March stress, quite a lot of key members were very keen to understand more about back-testing of breaches, how many, how big, but they had to wait until the end of June to get data on them. And for April back-testing breaches, we had to wait even longer, five months, until the end of September.

Also, there are some differences in how CCPs report or measure of back-testing breaches. So some include margin add-ons, others not. And accounts, the populations on which back-testing is aggregated, that seems to differ between CCPs as well.

So in terms of recommendations, so the first recommendation is that CCPs should report some data points from the public quantitative disclosures; for instance, initial margin, default fund, and especially back-testing breaches, monthly with a one-week time lag.

We think that should be part of CPMI-IOSCO guidance because otherwise if it is not regulatorily prescribed, it will be a first mover disadvantage. And there might be also disadvantages or issues for CCPs in terms of their financial reporting. So if it is a regulatory requirement, it would be easier for the CCPs as well.

And the second one, as I just mentioned, to further standardize reporting of back-testing breaches or, actually, the calculation of them and focus a bit more on also more granularity.

Yes. That concludes my presentation. Thanks for listening.

CHAIRPERSON KARNA: Thank you very much, Mr. Karl.

The floor is now open for questions and comments on the presentation. And, again, as a reminder, if you have any questions or comments, please use the chat function on the WebEx to indicate that you would like to speak. Ms. Koh, do you have any comments to add?

MS. KOH: Yes, I do. I am Agnes from the Singapore Exchange. I would like to thank the Commissioner and Andrée for organizing and giving me the opportunity to speak tonight on a topic that is very close to my heart; that is, on CCP margining. I would like to complement on what Pedro and Nick had mentioned and also to address some of the points that Ulrich has mentioned.

I think the issue around anti-procyclicality measures included in the margin are to enable predictability is really for participants, believing that doing so will lessen the liquidity risk and funding risk on themselves. But, really, for me, when I look at the further guidance that has come about in 2017 from CPMI, many of the CCPs have already instituted much of the guidance on margin models, be it APC cost and many, many other factors that have been dropped in.

As Pedro mentioned, having that procyclical margin and APC floor is really just one aspect of margin models. We do as a CCP really need to also be responsive to the current risk. And it is really a -- we could be assigned to an art of striking a healthy balance between having margin floors and the responsiveness of risk.

And, then, we mustn’t forget that the floors as recommended or guided by the regulators, CPMI, was really to make sure that in periods of low volatility, margins are not set too low and, hence, the various recommendations. And we know that in ISDA, they have prescribed certain models to abide by. But it was never intended to cover all periods of volatility. And there was no possibility perhaps of even setting floors at such a level that you could have covered the COVID risk that we saw in March. So I see it as, how do we strike a balance?

The experience we had in Singapore Exchange with regards to March 2020 was very much the increase in margin calls. I would say about 85 percent of the calls during that period came from variation margin calls, rather than from an increase in initial margin. But, nonetheless, I would agree that tweaking the margin model has had a positive impact for us. Prior to 2018, our margin models were possibly extremely responsive to current events. And with a tweak where we have put in margin flows, that was not so much a direct usage of the 25 percent 10-year --

(Technical interruption.)

CHAIRPERSON KARNA: Yes. Please go ahead, Ms. Koh.

MS. KOH: Sorry. But we set a dynamic floor using both of these tools. At a minimum, it has to be 25 percent. And then we look at where it is versus the 10-year threshold, and then we will define the floor. And that changes as volatility increases and we were exhausted.

So these are tools that when we look at our margin models, we actually worked with our membership. So that creates that buy-in, that transparency, which helps in the discussion. So that’s one area I think that could help bring the dialogue between CCPs and the participants.

The second area was when I look at the discussions that have been going on around the funding and liquidity because it all leads to that point, it perhaps in some of the discussions around liquidity, maybe some of the operational things that could be done -- at least if I could share what we do in Singapore Exchange. For one, we schedule all of our intraday calls. So participants are very aware that these are the scheduled calls and the timing by which the payments have to be made. There are no ad hoc calls per se. We do it sufficiently frequently so that there are two calls in the day and another one in what we call the late cycle.

Then the other thing that was done in more recent years is because we operate in an offshore market where the underlying currencies by which we settle are not our domestic currency, we have always been conscious that it might be challenging sometimes for our participants. So over the years, we have let through collateralization of our intraday calls. Essentially, we require -- we do allow the gains to be credited against the margin requirements, but losses can be collateralized with the excess margins or even government securities that we have with us. So that lessens the liquidity impact.

So I am just looking at, how do we move forward on this because there is no possibility that we could actually set margin floors at such a level that it can be conducive to clearing. It will certainly increase the cost, but perhaps look for what ways that we can find a middle ground that really helps ensure that CCPs cover the risk because that is essential and still for participants to be aware of what they need to do to manage that liquidity as well.

That is all my comments for the moment. Thank you.

CHAIRPERSON KARNA: Thank you very much, Ms. Koh.

Ms. VedBrat?

MS. VedBRAT: Thank you, Angie.

This was a very informative session. I just wanted to make a few comments looking at the impact, you know, from the buy-side perspective.

I think it is important, you know, for us to be able to essentially look at the margin methodology models and see if there could be something, you know, done to those models in order to make the increase of, you know, IM on the clients a little bit, you know, more gradual than what might have been experienced in March. So, you know, recognizing that there is a balance on risk management and cost and, you know, the fundamental reason why we have increased use of clearing is to help mitigate some of the bilateral risks that we have and it’s a very important element of our overall market.

So if we could, you know, potentially look at our models to see if there was a way that we could give more transparency to the end clients, you know, such as ourselves because we have intermediaries through the FCM as well as adjust the IM margin methodology so that, you know, we can avoid a material spike in a matter of a very short period because, you know, that can have an unintended consequence, especially since the assets that we are allowed to post, the list of assets, are very limited. You know, another way would be if we can increase, you know, the list of assets that we could use to post collateral and, you know, adhere to the margin calls, to include, like, some of the very liquid, more acceptable, you know, products that have been introduced and more mainstream over the last decade.

Angie, back to you.

CHAIRPERSON KARNA: Great. Thank you very much, Ms. VedBrat.

Does anyone else have any comments, either on how derivatives clearing worked during the pandemic or any other suggestions for regulators to consider with respect to addressing any concerns relating to the market volatility that we saw in the pandemic?

MS. KONG: Yes. If I may?

CHAIRPERSON KARNA: Yes, please, go ahead, Ms. Koh.

MS. KONG: Sure. Yes. This is Janet from bp.

CHAIRPERSON KARNA: Oh, sorry. Go ahead.

MS. KONG: I would like to thank all of the panelists for their excellent presentations. They have basically brought to the front a tradeoff we might face if we want to review the procyclicality in the margin requirements versus providing the right safeguards for the stress and safeguarding in central clearing.

From a market participant's perspective, our participation in the futures market throughout March, April, last year's volatile trading period, has been that we are comfortable with the way the margin has been set. And we were prepared for increased requirements as volatility spiked during those volatile times.

What I find, the point made by Mr. Karl, was a very relevant one as, going forward, key people won't accept the tradeoff and tradeoff is in vain. If we want to reduce the initial margin procyclicality, that probably necessitates a relatively increased initial margin during the low-volatility period that increases the cost of all market participants. Is that efficient? Maybe, in other words, if we don't want to make the call prior for people to be essentially cleared participants in the futures market, can we give more transparency to the market participants in anticipating what kind of funding needs might arise during the volatility spike so they can prepare their funding, anticipating and watching the volatility spikes up, as what happened in last March.

So, in other words, the clearing member needs more information about the correlation between volatility spikes and a margin requirement changing based on the model used, adopted by CCP. So that transparency probably could go a long way in helping address some of the stress caused by the margin call and give participating members time to understand and prepare for that.

That is my comment.

CHAIRPERSON KARNA: Great. Thank you very much, Dr. Kong.

Mr. Yamada?

MR. YAMADA: Yes. Thank you, Angie.

First off, we wanted to thank you and Commissioner for, frankly, putting these important topics back on the agenda. And I know we addressed them a bit at the last meeting. But it definitely requires a bit more granularity and a deeper understanding. So thank you again for adding this to the agenda.

The first thing I wanted to acknowledge was that, on the whole, we very much agree with the ISDA view that, overall, the global clearing infrastructure remains generally very resilient. And from an operational, technological, and business resilience standpoint, during the dynamic stress, which in many ways is greater than the financial crisis of ’08, the system held up relatively well.

And now, that said, we also agree with ISDA’s assessment that, while not universal in certain instances, certain CCPs, the initial margin increases were clearly quite procyclical and did exacerbate some of the stress we saw in the system and may have increased market dislocations and funding stress for some of our participants and, frankly, some of our clients. And as participants in multiple pieces of that and both in the listed space and the OTC space, we did see some discrepancies across those client sets.

Now, on the whole, we very much support ISDA's recommendations to enhance the anti-procyclicality measures and, frankly, the other recommendation for CCPs to provide more timely and transparent accountability on the effectiveness of some of these measures. We do think that will go a long way to at least allow more reactiveness to some of these stresses. But more broadly, the WFE correctly pointed out in its presentation, this isn't solely a procyclicality issue. It is one of the issues for sure, and it is worthy of addressing. But the overall interconnectiveness of the system and, you know, frankly, the ongoing efforts under Commissioner Behnam's leadership at the MRAC, they are addressing some of the enhancements to CCP risk management, transparency in government, as well as some of the capital requirements. Well, we believe that's part of this overall picture. And we are very supportive of a comprehensive view across this and the procyclicality issue to make improvements to enhance the stability of the overall system.

More specifically, if you will allow me, we did notice the WFE presentation did present a pretty clear tradeoff between commercial and, frankly, competitiveness and the robustness of this procyclicality or anti-procyclicality measurement. Well, we certainly agree that these tradeoffs exist. As a participant in both the OTC market and the futures market, we did notice a very broad and clear distinction. And some of that was highlighted in the LCH presentation, where they -- I think the measurement was like something on the order of adjustment for volume only a 14 percent general increase in the IA; whereas, in some of the WFE statistics, I think those numbers were between 150 and 300. So that is a very significant divergence across the portfolios of WFE members.

And, very frankly, our view is that in those -- not to call attention to one particular market, but the ETD market, in particular, did cause our clients and our system quite a bit more systemic stress and disruption and a lot more follow-on effects and interconnectedness effects than the derivatives market.

So, to that end, I actually want to pose a question perhaps to our LCH colleagues. You know, it was very clear that, in our minds at least, the LCH framework definitely helped calm the OTC derivatives market a bit and lead to less disruption. So my question would be, you know, are there lessons to be gained and best practices to be shared? I know this is a significant divergence, maybe not significant but there is a notable divergence between the methodologies used and the procyclicality modeling across the LCH and some of the other members.

Perhaps if the LCH could help illuminate -- what is it that they thought was the most impactful difference in their methodologies that helped reduce some of that and that stress and volatility? And if they could spend some time maybe illuminating for the committee, I think that would be very, very helpful.

CHAIRPERSON KARNA: Thank you, Mr. Yamada.

Mr. Lincoln, do you have some feedback?

MR. LINCOLN: Sure, sure. Excellent question, by the way. I certainly don't want to create a divide between OTC and futures -- I mean, we clear both. Our clearinghouse in Paris cleared the Euronext markets. And there we have the CAC 40 futures contracts. And these are what I would call marquis contracts; right? Every CCP, every market has their – I would call marquis contracts.

And you will find when you dig into it, you know, I'm generalizing here, that a large portion of the risk is probably tied to literally a handful of contracts. So if there's equity volatility, you know, futures on S&P or options on S&P, you know, that could be a big part of everyone's risk. So, therefore, you know, the behavior of those risk models or margin could actually have quite a big impact while the behavior of the other contracts, which I'm sure are in the hundreds, may have no impact. That is the first thing you need to look at, though. You know, it's looking at the market and the contracts in those markets where your exposures are and where you are most prone to a jump in margin and, therefore, a draw on your liquidity.

Now, in LCH's case, yeah. We looked at this back as early as 2015 and put together a risk policy. Now, I won't bore you on the details, but essentially we do apply the long-term floor. In Pedro's paper, we are probably closer to that 10- and 12-year floor. In some markets, it is actually the 12-year and the 2-year, the fixed period in our case, the GFC.

So that means, you know, for swap clearing, that rates business, before we entered COVID, a lot of the margins were already on that floor. Again, I'm speaking broadly. We have many risk factors. But for the most part, the major risk factors were already on the floor. So, therefore, when the volatility began, it actually had no impact on our margins at all. And it took quite some time for the volatility to sort of pierce, pierce that floor and for our margins to start to rise.

Obviously, as a few people today have pointed out, there is a tradeoff to that. If you don't react fast enough, you might actually be putting yourself at some sort of prudential risk, right? So that is the balance. And that balance is -- yeah, it's not easy to find; it requires testing, lots of testing, refinement, testing under different conditions. And when you do find a good balance, which is what we have at LCH, that may not hold across every market. So that is really important because there is no one size fits all here. You can't prescribe standards and expect them all to work on every product and every contract around the world. You really need to look at the individual behaviors and the characteristics and the features of those contracts and markets that you operate in.

I think today someone had a very nice chart on the WTI. That is a deliverable contract, which brings delivery risk. You know, that's quite a unique risk. You know, the CCP or the risk manager or the model developer has to cope with in their model, which might not necessarily fit some sort of prescribed APC, you know, regulation. So I think you need to look at each market, each contract, and how it behaves under different conditions and design your models to cope with that bas best they can.

And that is sort of what we managed to achieve in LCH and including the futures market in Paris, which did move but certainly not more than we would expect in our case.

That was a longwinded answer, but I hope that answered your question.

CHAIRPERSON KARNA: Thank you very much, Mr. Lincoln.

Mr. Cutinho? Mr. Cutinho, do you have a comment? If so, you may be on mute.

SPEAKER: Hello?

CHAIRPERSON KARNA: Yes. We can hear you now.

SPEAKER: Yes? Hello?

CHAIRPERSON KARNA: Mr. Cutinho?

SPEAKER: Who?

MR. CUTINHO: Can you hear me?

CHAIRPERSON KARNA: Yes, Mr. Cutinho, we can hear you.

MR. CUTINHO: Okay. So I would like to respond to the comments that were just made. I know that, you know, we all take our most convenient viewpoints from every study. So this is true with the WFE study as well. So let’s put a few things in perspective.

So I know some of us have anchored in our comments to a 10-year floor or a 12-year floor or periods of stress. Just to establish some facts, for our contracts, we do have those floors. In fact, going into the pandemic in the February-March timeframe, we were -- our margins were in excess of those floors. So the floors themselves are not a panacea.

The second thing to point out is I think what is interesting in the WFE analysis is a difference between conditional variants and long-term variants, unconditional variants. So from a risk manager’s perspective, it is important to make sure your margins have risk sensitivity. We need to cover our exposures.

A very narrow focus -- okay -- on anti-procyclicality is systemically risky. And that is an important takeaway from the WFE study. And that was true during the global financial crisis as well. You know, conditional variance is what affected the co-relations between the different underlying assets in a collateralized, you know, security. And that was mispriced. The correlations were mispriced.

Conditional correlations and conditional variance is an important factor and must be taken into account for margin.

Finally, I think one of the most important things, facts that was presented was around speed with which margins react. And here –I'll add to Janet's, you know, comments. As far as our futures markets are concerned, ETD markets are concerned, I know it is convenient to blame them for all problems. Most of the changes or increases in margin were variation margin, not initial margin. The ways with which margins increased were moderated. There were no ad hoc calls. There were no ad hoc intraday calls. There were no dramatic increases in margin rates day over day. In fact, the margins were changed. The entire market was given at least one day's, 24 hours', notice and complete transparency with margin rates on our website. Okay. So market participants could actually react to it.

So in many ways, I think let's put some numbers to some of these changes. If you look at S&P markets or even ETD in general, our open interest increased dramatically. Our open interest in S&P

contracts alone increased by about 23 percent. In spite of that increase in open interest, in spite of the volatility, in spite of our actions, the portfolio-level margin increases were muted -- okay? -- at most about 6 percent.

If clients were expecting or experiencing increased margins, one of the areas that we cannot speak to is what some members do with their own clients. They can charge more margin than what an exchange charges. So we have less transparency into them.

What would be interesting to know is, are there institutions that are financing exchange margins? And did they experience stresses during this period? So those are the questions that are interesting, but very little data is presented here.

So when it comes to exchanges, you know, I think that -- and how majority of the CCPs behaved, the WFE paper is spot on. And those are the tradeoffs that are important to take into account. And I think most people think of costs. I don't think cost is an equation that enters into our mind. Our issue generally is, you know, the impact of a CCP's actions on our members. And this is what drove our actions during the period of March and April.

CHAIRPERSON KARNA: Thank you very much, Mr. Cutinho.

Mr. Yamada?

MR. YAMADA: Yes. If I could address that, actually? I don’t have any disagreement with anything you said. The one thing that I would ask for potentially, which would help me personally understand it, is the WFE qualifiers are -- the members and the level of activity and cost in front of the dispersion of different product sets is pretty significant. And I think -- and, frankly, forgive me because I have much more of a rates background. But when I look at things like “rates treasury futures” and “rates swaps markets” and I look at the kind of very different IM -- and VM obviously very similar, but the IM regimes were the things that were quite different. And the relative speed and scale of the increase in IM in the treasury market versus in the rates derivatives market was pretty starkly different. So perhaps it is not an overall WFE problem or concern.

And I think, on the whole, you may be correct, but I think there is a subset of products, which, frankly, if you ask a rates market participant, many of them will be a futures as a -- and maybe depending on the types of risks they manage, but at least a substitute for using interest rate swaps. But they are under very different regimes and have different capital, different, you know, IM and capital requirements during times of stress.

And I don't think necessarily that -- and this may again not be the exchange problem. This may be a client education problem, your earlier point. But some harmonization of that and, frankly, education around that may be required here. And, frankly, and again to go back to the point of maybe best practices. Some of the lessons learned from the LCH, which clearly had a slightly smoother experience versus the rates treasury market we heard from our participants here.

There might be pockets where perhaps we can take a different approach while the overall approach, to your point, does seem relatively robust. The overall system did help on the whole, but some almost product-specific alignment and consistency might be required. So there could be an additional focus area going forward.

MR. CUTINHO: The rates market and the rates treasury market and the rates swap market are not the same. They are two different markets. Treasury market and -- no. It's too general a comparison that you draw. They are not the same market. They don't mean behave the same way.

MR. YAMADA: Well, I would say they are much more the same market than the S&P and VIX market, the rates market.

MR. CUTINHO: They have just about the same similarity as the word "rates." They are two different markets. One is LIBOR-based, and the other is treasury futures market, that the underlyings are treasuries. So the activity profile of the market participants, the market themselves are very different . The markets didn't move in a similar way. So to draw that comparison is to ignore the differences between the markets.

MR. YAMADA: Part of the reason why traditionally markets that did move much more in a similar way might be because of the increased stress caused in the futures market.

So, again, it's not something that -- I mean, it's just something worthy of further analysis in my mind. And I'm not saying that that is a conclusion to be drawn.

CHAIRPERSON KARNA: Thank you, Mr. Yamada. Thank you, Mr. Cutinho.

Does anyone else have any questions or comments for our panelists?

(No response.)

CHAIRPERSON KARNA: Great. I will now turn it over to Andrée to finish out the day's agenda.

MS. GOLDSMITH: Thank you so much, Angie, for moderating today's discussion. As always, we are so grateful for your chairmanship of this committee and your expertise in moderating these discussions.

I am now going to turn it over to the Commissioners for any closing remarks they may have. So

I will start with Chairman Behnam.

CFTC ACTING CHAIRMAN BEHNAM: Hi, Andrée. Thanks for the conclusion. And thanks to Angie for chairing. And thanks to Commissioner Stump for her leadership.

This is a tremendous conversation, a lot of issues that are obviously, like I said in the morning, very ripe for discussion and different points of view but things that we need to analyze. And I can say for certain a lot of these issues are being discussed on a global scale and a global level among certainly different regulators but also multilateral organizations, specifically with CCP risk and margin. But certainly this morning's discussion on retail trading was excellent as well. A lot more work to be done for sure.

But I just want to thank Commissioner Stump again for her leadership and looking forward to more work from the GMAC. Thanks to the participants, the guests, and all of the staff from the CFTC, who put together excellent presentations. Thank you.

MS. GOLDSMITH: Thank you, Chairman.

Commissioner Quintenz? Commissioner Quintenz, are you on the line?

(No response.)

MS. GOLDSMITH: Okay. I will move forward, then, with Commissioner Berkovitz.

COMMISSIONER BERKOVITZ: Thank you, Andrée. And I would really like to thank all of the panelists and all of the participants in today's discussion, extremely informative, really provided a lot of information about the contribution in our markets, really insightful about retail participation, potential impacts, things to watch for, and really excellent discussion on margin and 2020 and the performance of clearing during the period of stress. So I really want to express my appreciation for everybody who participated truly across the globe on this. I'm very thankful to a lot of our technology staff who made this possible and thank everybody in the various time zones around the world. I am sure it is evening and early morning where some folks are.

So, again, thank you, everybody. And thank you, Commissioner Stump, for putting together this excellent agenda.

MS. GOLDSMITH: Thanks, Commissioner Berkovitz.

Commissioner Stump?

COMMISSIONER STUMP: Thanks, Andrée.

As all of the other Commissioners have said, what a great benefit it is for us to have these timely conversations. And I completely agree. I just wanted to point out that I think we are particularly well-served by the diverse viewpoints that are represented by this particular committee, not only diverse in market representation but also in the global representation. And I think it is a tremendous benefit for us to hear from the clearing members and the clearing infrastructure and the market participants, whether located in Asia, London, Europe, United States. And today we had the pleasure of having a presentation from a fellow regulator in Canada. So I am so thankful that you all are willing to take time from your busy schedules to work with us and work within this committee.

And so I also want to recognize the tremendous amount of work that goes into those who present for these types of meetings, some today from our own CFTC. I am very grateful for the time and energy that you all devoted to preparing presentations and also to answering and fielding questions as well as those who represent various industry viewpoints. Thank you all for the time you put into the discussion and the prep.

And with regard to prep, I also want to thank those who don’t always get recognition at the CFTC. We have been doing this for a year. And it is never without some challenges when we have these types of virtual meetings, but I really am grateful for the folks at the CFTC who work behind the scenes to make these meetings happen. I feel as though we are able to do them on a more regular basis. And I think that serves the public quite well.

And, lastly, I am so grateful, as always, to Chair Angie Karna for her remarkable ability to facilitate a meeting, and we always tend to end on time, which is quite remarkable; and Andrée Goldsmith for her tremendous organizational skills. So I hope, with that, everyone has a great weekend. And we look forward to continuing this discussion and drilling down further on potential areas in which the CFTC can focus and adapt.

Thank you.

MS. GOLDSMITH: Thank you, Commissioner Stump. And thank you, everyone, for attending today's GMAC meeting and to all of our presenters. This meeting is now adjourned. Thank you.

(Whereupon, at 11:49 a.m., the meeting was adjourned.)