MINUTES OF THE U.S. COMMODITY FUTURES TRADING COMMISSION'S MARCH 11, 2021 MEETING OF THE GLOBAL MARKETS ADVISORY COMMITTEE

The Global Markets Advisory Committee (GMAC or Committee) convened for a public meeting on Thursday, March 11, 2021, at 9:00 a.m., via teleconference hosted by the U.S. Commodity Futures Trading Commission (CFTC or Commission). The meeting consisted of two panels. The first panel addressed trends in retail investing and impact on global derivatives markets. The second panel looked back at derivatives clearing in 2020, with particular focus on the impact of the COVID-19 pandemic on global clearing.

GMAC Members in Attendance

Angie Karna, GMAC Chair and Nomura Securities International, Inc., Managing Director, Legal Department and Head of Legal for Global Markets, Americas

Chris Allen, Standard Chartered Bank, General Counsel, Clients & Products

Ted Backer, Morgan Stanley, Global Head of Listed Derivatives Execution

Ashley Belich, RBC Capital Markets, Head of Global OTC Derivatives & Dodd Frank Advisory

Darcy Bradbury, D.E. Shaw & Co., L.P., Managing Director

Maria Chiodi, Credit Suisse Securities (USA) LLC, Managing Director

Jim Colby, Coalition for Derivatives End-Users, Representative

Gerry Corcoran, R.J. O'Brien & Associates, LLC, Chairman of the Board and Chief Executive Officer

Sunil Cutinho, CME Clearing, President

David Goone, Intercontinental Exchange, Inc., Chief Strategy Officer

Paul Hamill, Citadel Securities, Global Head of Fixed Income, Currencies and Commodities

John Horkan, LCH Group, Group Chief Operating Officer and Head of North America

Adam Kansler, IHS Markit, President - Financial Services

Robert Klein, Citigroup Global Markets, Managing Director & General Counsel

Agnes Koh, Singapore Exchange Limited, Chief Risk Officer

Janet Kong, BP Americas, Chief Executive Office, Trading & Shipping

Ben MacDonald, Bloomberg LP, Global Head of Enterprise Products & President of Bloomberg's SEF and SDR

Erik Tim Muller, Eurex Clearing AG, Chief Executive Officer

Murray Pozmanter, DTCC, Managing Director & General Manager

Thomas Sexton, National Futures Association, President & Chief Executive Officer

Jessica Sohl, HC Technologies, Partner & President

Thane Twiggs, Cargill Risk Management, Chief Compliance Officer

Supurna VedBrat, BlackRock, Managing Director & Global Head of Trading

Masahiro Yamada, JP Morgan Securities, LLC, Managing Director & Head of America's Cross Asset Structuring

CFTC Commissioners and Staff in Attendance

Dawn D. Stump, Commissioner and GMAC Sponsor

Rostin Behnam, Acting Chairman

Dan Berkovitz, Commissioner

Brian D. Quintenz, Commissioner

Andrée Goldsmith, GMAC Designated Federal Officer (DFO)

Dr. Mel Gunewardena, Chief Market Intelligence Officer, Market Intelligence Branch, Division of Market Oversight

Eugene Kunda, Market Analyst, Market Intelligence Branch, Division of Market Oversight Jonathan Lave, Associate Director, Division of Market Oversight

Invited Speakers in Attendance

Alison Beer, Senior Legal Counsel, Derivatives Branch, Ontario Securities Commission Pedro Gurrolo-Perez, Head of Research, World Federation of Exchanges Ulrich Karl, Head of Clearing Services, International Swaps and Derivatives Association (ISDA) Nicholas Lincoln, Group Head of Market Risk and Liquidity Risk, LCH Group

I. Opening Remarks

Ms. Goldsmith called the meeting to order.

Commissioner Stump gave her opening remarks, welcoming and thanking all who were attending. She introduced the panelists and discussed the two-panel agenda, noting that the panels would feature presentations about recent trends in retail investing activity and the impact of the COVID-19 pandemic on the global derivatives markets. With respect to the second panel, she stated that she hoped these meetings would lead to productive dialogues that would help ensure that the global clearing system remains resilient in the face of future market stresses.

Commissioner Stump also discussed the GMAC's contributions to the CFTC's work in the area of margin requirements on transactions not subject to central clearing. She noted that the Commission, as well as regulators around the world, have extended the compliance dates of phases 5 and phase 6 of the uncleared margin rules to September 1, 2021, and September 1, 2022, respectively. She expressed concerns that some firms are not preparing for the implementation dates and encouraged those firms to do so.

Next, Acting Chairman Behnam gave his opening remarks. He stated that the GMAC had been phenomenal during the COVID-19 crisis, particularly with regard to the discussions around market fragility and stability. He also thanked Commissioner Stump, Ms. Goldsmith,

and Ms. Karna for their leadership, as well as all members of the GMAC, panelists, and participants for their participation.

Commissioner Quintenz then gave his opening remarks. He thanked Commissioner Stump, Ms. Goldsmith, and Ms. Karna for their leadership of the GMAC. He also thanked all of the members of their GMAC and all those participating in the meeting. In particular, he stated he was looking forward to hearing from the Market Intelligence Branch and stressed the importance of its work.

Finally, Commissioner Berkovitz thanked Ms. Goldsmith, Ms. Karna, and Commissioner Stump for their leadership. He thanked the GMAC for the excellent and timely agenda, the CFTC staff for presenting, and also those staff that worked to support the presentations.

II. Panel I: Trends in Retail Investing and Impact on Global Derivative Markets

Ms. Goldsmith then turned the program over to Ms. Karna, who introduced the first panel.

Dr. Gunewardena and Mr. Kunda gave the first presentation, which discussed data surrounding the recent retail investment activity and the effect of such activity in the markets that the CFTC oversees.

Mr. Kunda explained the growth of retail accounts and stated that the daily transaction volume of U.S. futures and options across all exchanges has increased dramatically over the past fourteen years. Notably, in the past ten years, there has been a stronger correlation between volatility and trading volumes, with daily trading volumes increasing along with higher volatility. Additionally, at the beginning of the COVID-19 pandemic in March of 2020, the number of retail participants trading in the derivatives markets peaked, with over 85,000 new participants. In analyzing the trading data, several trading behavioral patterns emerged. First, retail participants do not typically trade regularly or uniformly; instead, they tend to seek specific market opportunities. Second, most retail traders are short-term traders.

Dr. Gunewardena, examining the microstructure of derivative markets, stated that there are three specific ways futures markets are affected by a sizeable retail engagement in the securities markets. First, many exchange traded fund (ETF) and exchange traded note (ETN) managers directly manage risk using the futures markets. Second, ETF and ETN managers and other asset managers who provide retail-type products use swaps to hedge their exposure. Third, ETF and ETN managers may trade swap or cash markets.

Dr. Gunewardena summarized that over the past fourteen months, there was a growth in retail interest across derivatives markets, fueled by easier market access (direct and indirect), social media hype, smaller and retail-friendly contracts, and retail-friendly terms at new and

existing exchanges. Despite this growth, he noted that trade volumes of retail traders are still relatively small, representing between 10 and 15% of total activity.

Dr. Gunewardena stated that retail trading is here to stay, and will continue to influence the futures markets. However, for the retail sector to develop fully, he noted that two areas need enhancement. The first area to be developed should be investor protection, disclosures, education, suitability standards, and establishing unambiguous obligations on the FCMs and introducing brokers in terms of protecting investors. Second, he stressed further analyzing the microstructure of our markets to understand how emerging trading strategies could be predatory or unfair.

Next, Mr. Lave provided an overview of some of the CFTC's Core Principles (CPs) for designated contract markets (DCMs) and their particular relevance to retail market participants. He started by noting that, for purposes of his presentation, a retail market participant is a market participant that is not an eligible contract participant. He stated that retail participants generally use intermediaries like introducing brokers to access derivatives markets, and futures commission merchants to clear trades.

Mr. Lave discussed several DCM CPs that are relevant to retail market participants. For example, DCM CP 8 and its associated regulations assist retail market trading by requiring DCMs to make certain information public and specify that certain information must be made available free of charge. This information allows retail market participants to make well-informed decisions and ensure better functioning markets. DCM CP 9 and its associated regulations require 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. Additionally, DCM CP 2 and its associated regulations require DCMs to establish, monitor, and enforce rules prohibiting abusive trade practices, and DCM CP 12 and its associated regulations require DCMs to establish and enforce rules that protect markets and market participants from abusive practices. Finally, DCM CP 11 and its associated regulations require DCMs to establish and enforce rules and procedures for ensuring the financial integrity of transactions entered on or through a DCM.

Finally, Ms. Beer described how the Ontario Security Commission (OSC) oversees transactions by retail market users and the differences in the OSC's approach versus that of the CFTC. She stated that the OSC has witnessed a similar evolution over the last decade in retail market participation, and a significant rise in the number of online trading platforms that offer derivatives products to retail investors.

Ms. Beer described a couple of the differences between the Ontario derivatives market as compared to the U.S. For example, she noted that retail participants can trade contracts for difference, but that they are prohibited from trading binary options. There is also a much greater degree of consolidation in Ontario markets in terms of retail dealers.

While much of social media-related trading activity has been U.S.- based, there were also some Canadian securities that saw price increases as a result of social media activity, including BlackBerry. She highlighted the stark differences in volume, with the U.S. social media-related, "meme-driven" trading activity being much higher than similar Canadian trading activity. She stated that it could be inferred from this data that liquidity is generally found in the U.S markets. In addition, because Canadian retail traders can trade in U.S. markets, it is possible that added retail activity by Ontario traders would be reflected in U.S. trading volumes.

Ms. Beer then discussed retail investors' increasing appetite for cryptocurrencies. She stated that the OSC, along with the rest of the Canadian Securities Administrators (CSA), has issued cryptocurrency guidance analogizing crypto assets to commodities and securities, and subjected these assets to OSC's jurisdiction. She noted that one distinction between OSC's guidance and the CFTC's is that transactions do not need to involve leverage to engage the CSA's jurisdiction and otherwise require platforms that are offering these products to be registered as dealers.

Ms. Karna next opened the floor for questions. Among other items, topics discussed included: the importance of education for retail investors, the importance of retail participation for the success of futures markets, the existing protections for retail market participants, and the need for additional research and analysis on the effects of the microstructure of the markets through intermediaries.

[Break]

III. Derivatives Clearing: 2020 in Review

Ms. Goldsmith welcomed all attendees back and updated the attendance record. Ms. Karna then introduced the next panel, a series of presentations on the impact of the coronavirus pandemic on global clearing.

Mr. Gurrolo-Perez highlighted why the focus on initial margin in the research on procyclicality is misplaced, highlighting five main points: 1) margin requirements are driven by variation margin and not initial margin; 2) there are unavoidable tradeoffs and constraints in modelling changing market conditions; 3) randomness leads to the same calibration, at times, producing different outcomes under different initial conditions; 4) there is a need to distinguish between long-term properties from those that reflect market conditions at a given point in time; and 5) feedback loops are amplified through system interactions and there is a need to look for solutions that address systemwide robustness.

Mr. Gurrolo-Perez discussed examples of risk models based on twelve-, ten-, and one-year timespans, specifically addressing the significant market events in March of 2020 and 2008. He also discussed whether a margin floor would be a viable way to reduce procyclicality, and noted that there is a limit to what can be achieved by increasing the margin floor if we want to

keep clearing economically viable. He concluded by stating that initial margin models should be calibrated to address procyclicality to the extent that it is prudent and practical, but that we need to look at system-wide approaches that look at interdependencies and interactions across the financial system in order to better address procyclicality.

Next, Mr. Lincoln demonstrated how LCH's margin model responded to pandemic-related market volatility with two specific examples, one from the European cash equity market and the other from the global rates market. By stripping out the volume impacts, he demonstrated how both examples show that activity from market participants was the biggest driver in terms of increasing the margin required by LCH. He emphasized that the impact of the CCP's risk model on the size of margin requirements during the height of the pandemic-related volatility was actually quite small and "unexceptional."

Finally, Mr. Karl presented a clearing member's perspective on CCP margin requirements during the pandemic, including recommendations for decreasing the procyclicality of CCP margin calls in times of increased volatility. Overall, he stated that CCPs and their participants did very well during the pandemic, even with record volume and volatility.

Mr. Karl made recommendations in two areas. First, he suggested introducing measures to mitigate procyclicality. He recommended reviewing and recalibrating anti-procyclicality tools so that similar products exhibit comparable levels of procyclicality. He also recommended additional guidance on governance and measurement of the effectiveness of anti-procyclicality tools, including transparent standardized measurement metrics for these tools. Second. Mr. Karl suggested increasing the frequency of public quantitative disclosures. He recommended that CCPs report certain data points from public quantitative disclosures, including initial margin, default fund, and back-testing breaches, monthly with a one-week time lag. He also recommended further standardizing reporting of back-testing breaches and their calculation.

Ms. Karna next opened the floor for questions. Among other items, topics discussed included: how CCPs can be responsive to risk levels, promoting transparency, how to increase liquidity while still being responsive to risk, examining margin methodology models to see how they can be adjusted for risk management, and giving clearing members additional information regarding the correlation between volatility spikes and margin requirements changing so they may understand this information and prepare for the future.

IV. Closing Remarks

In closing, Acting Chairman Behnam, Commissioner Stump, and the remaining Commissioners thanked all who participated, expressed enthusiasm for the excellent discussion, and stated they were looking forward to future discussions.

Ms. Goldsmith adjourned the meeting at 11:49 a.m. EST.

Angie Karna GMAC Chair

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Date