MINUTES OF THE MEETING OF THE U.S. COMMODITY FUTURES TRADING COMMISSION'S MARKET RISK ADVISORY COMMITTEE JULY 21, 2020

The Market Risk Advisory Committee ("MRAC") convened for a public meeting, via teleconference, on Tuesday, July 21, 2020, at 9:34 a.m. EDT. The meeting consisted of reports from the MRAC Interest Rate Benchmark Reform (IRBR), Climate-Related Market Risk (CRMR), Market Structure (MS), and CCP Risk and Governance (CCPRG) Subcommittee. There were also two panel discussions. The first panel discussed market function and performance during the early months of COVID-19 and the second panel discussed COVID-19's impact on margin, processing and operational health in cleared derivatives.

MRAC Members in Attendance

Nadia Zakir, MRAC Chair and Executive Vice President and Deputy General Counsel, Pacific Investment Management Company, LLC (PIMCO)

Salman Banaei, Executive Director, Global Head of Clearance and Settlement, IHS Markit Stephen Berger, Managing Director and Global Head of Government & Regulatory Policy, Citadel

Richard Berner, Clinical Professor of Management Practice in Finance and Co-Director of the Stern Volatility and Risk Institute, NYU Stern School of Business (Special Government Employee)

Lee Betsill, Managing Director and Chief Risk Officer, CME Group

Peter Borish, Chief Strategist, Quad Group

Biswarup Chatterjee, Global Head of Markets BCE Management, Citigroup

Alicia Crighton, Global Co-Head of Futures and Head of OTC and Prime Clearing Businesses, representing Futures Industry Association (FIA)

Shelly Goodwin, Regional Compliance Director, BP IST Global Americas

Matthias Graulich, Member of the Executive Board and Chief Strategy Officer, Eurex AG

Graham Harper, Head of Public Policy and Market Structure, DRW representing FIA Principal Traders Group

Frank Hayden, Vice President, Trading Compliance, Calpine

Lindsay Hopkins, Clearing House Counsel, Minneapolis Grain Exchange

Annette Hunter, Clearing House Counsel, Federal Home Loan Bank

Demetri Karousos, Chief Risk Officer, Nodal Clear, LLC, and Chief Operating Officer, Nodal Exchange, LLC

Eileen Kiely, Managing Director, Deputy Head of Counterparty & Concentration Risk, BlackRock

Derek Kleinbauer, Global Head of Fixed Income & Equities Electronic Trading, Bloomberg LP and Vice President, Bloomberg SEF LLC, Bloomberg

Laura Klimpel, Managing Director, The Depository Trust & Clearing Corporation (DTCC)

Robert Mangrelli, Director, Chatham Financial (Chatham)

Kevin McClear, Corporate Risk Officer, Intercontinental Exchange, Inc. (ICE)

Dennis McLaughlin, Group Chief Risk Officer, LCH Group

Craig Messinger, Senior Advisor, Virtu Financial

Dale Michaels, Executive Vice President, Financial Risk Management, The Options Clearing Corporation

John Murphy, Managing Director and Global Head of the Futures Division, Mizuho Americas representing Commodity Markets Council

Sam Priyadarshi, Principal, Global Head of Portfolio Risk Management and Derivatives, Vanguard

Jonathan Raiff, Senior Managing Director and Deputy Head of Global Markets, Nomura Global Financial Products, Inc.

Marnie Rosenberg, Managing Director and Global Head of Clearinghouse Risk & Strategy, JP Morgan

James Shanahan, Vice President, Financial Regulatory Compliance, CoBank

Lisa Shemie, Associate General Counsel, Chief Legal Officer, Cboe Global Markets

Betty Simkins, Head of Finance Department, Professor and Williams Companies Chair in Business, Oklahoma State University, Spears School of Business (Special Government Employee)

Tyson Slocum, Director, Energy Program, Public Citizen

Sujatha Srinivasan, Co-Head of Market Risk Specialists, Securities Division, Goldman Sachs Dr. Marcus Stanley, Policy Director, Americans for Financial Reform

Robert Steigerwald, Senior Policy Advisor, Financial Markets, Federal Reserve Bank of Chicago Janine Tramontana, Vice President and Senior Counsel, Federal Reserve Bank of New York

Suzy White, Chief Risk Officer, Global Banking & Markets and Commercial Banking, Americas HSBC

Scott Zucker, Chief Administrative Officer, Tradeweb

Speakers and Panelists in Attendance

Thomas Wipf, Vice Chairman, Institutional Securities, Morgan Stanley, IRBR Subcommittee Chair

Bob Litterman, Founding Partner & Risk Committee Chairman, Kepos Capital, CRMR Subcommittee Chair

Lisa Shemie, Associate General Counsel, Chief Legal Officer, Cboe Global Markets, MS Subcommittee Co-Chair (First Panel)

Stephen Berger, Managing Director and Global Head of Government & Regulatory Policy, Citadel, MS Subcommittee Co-Chair (First Panel)

Chris Barnes, Clarus Financial Technology (First Panel)

Elisabeth Kirby, Head of Rates Product and Strategy, Tradeweb (First Panel)

Adam Peralta, Head of Rates Electronic Trading, Bloomberg LP (First Panel)

Lee Betsill, Managing Director and Chief Risk Officer, CME Group, CCPRG Subcommittee Co-Chair (Second Panel)

Alicia Crighton, Global Co-Head of Futures and Head of OTC and Prime Clearing Businesses, FIA, CCPRG Subcommittee Co-Chair (Second Panel)

Robert Steigerwald, Senior Policy Advisor, Financial Markets, Federal Reserve Bank of Chicago, CCPRG Subcommittee Member (Second Panel)

CFTC Commissioners and Staff in Attendance

Rostin Behnam, Commissioner and MRAC Sponsor

Heath P. Tarbert, Chairman

Dan Berkovitz, Commissioner

Brian D. Quintenz, Commissioner

Dawn D. Stump, Commissioner

Alicia Lewis, Designated Federal Officer, MRAC, Special Counsel and Detailee, Office of International Affairs (OIA)

Richard Haynes, Supervisory Risk Analyst, Risk Surveillance Branch, Division of Clearing and Risk (DCR) (Second Panel)

Sayee Srinivasan, Deputy Director, Risk Surveillance Branch, DCR (Second Panel)

I. Opening Statements

Ms. Lewis called the meeting to order. She outlined the sequence of the opening statements, starting with Commissioner Behnam, followed by Chairman Tarbert, Commissioner Quintenz, Commissioner Stump, Commissioner Berkovitz, with MRAC Chairwoman Zakir concluding the meeting's introductory phase.

Commissioner Behnam welcomed the meeting attendees, thanking past members and introducing new members. He mentioned that during the meeting, participants will hear updates from the four MRAC subcommittees on a variety of timely issues related to the derivatives markets, including interest rate benchmark reform, climate-related market risk, market structure, and market function during the pandemic. In addition, he noted that the European Capital Markets Institute (ECMI) and the International Swaps and Derivatives Association (ISDA) have published a paper on the role of derivatives in sustainable finance, discussing how firms can hedge risks related to the environment, social, and governance (ESG) factors.

Specifically, Commissioner Behnam said that the pandemic has not slowed the parallel efforts of the Alternative Reference Rates Committee (ARRC) and MRAC with regard to cross border efforts that pushed forward to the end of LIBOR. He continued that the pandemic has highlighted the resilience of robust reference rates, including the Secured Overnight Financing Rate (SOFR), and highlighted that ISDA plans to publish a supplement to the 2006 ISDA Definitions and a protocol to allow firms to incorporate fallbacks that would apply to covered derivatives referencing LIBOR following permanent cessation of the benchmark or a "non-representative" pre-cessation date – whatever occurs first – into new and legacy derivatives. He noted the new protocol is voluntary but important.

Lastly, Commissioner Behnam indicated that the Commission, DCR, the Division of Market Oversight, and the Division of Swap Dealer and Intermediary Oversight (DSIO), in response to a recent ARRC request, have issued No-Action relief to swaps referencing IBORs, revising existing relief to better align with current market changes. He stated the Commission believes transitioning away from LIBOR should be market driven, and market participants are encouraged to focus on and invest resources in the transition away from LIBOR.

In his opening statement, Chairman Tarbert discussed market volatility during the early months of the pandemic. He recounted a historic drop in the May futures contract for West Texas Intermediate Crude which traded negative for the first time in April 2020. He indicated this was

not a surprise as the CFTC had expected this price aberration and was in close contact with the exchanges prior to its occurrence. From this experience, Chairman Tarbert noted the necessity of laying the groundwork to help markets prepare for similar events in the future, indicating the Commission has issued a joint Staff Advisory to remind market participants of their responsibility to prepare for contracts that may continue to experience low liquidity, extreme market volatility, and possibly negative trading.

Chairman Tarbert acknowledged that the derivatives market has performed well and acted as a shock absorber during this time, boosted in part by the CFTC's tools designed to internalize the impact of COVID-19 and market swings. He said the agency will continue to closely monitor the agriculture and energy markets, issuing targeted, temporary relief to market participants, and by bolstering the CFTC's customer education efforts.

Commissioners Quintenz, Commissioner Stump, and Commissioner Berkovitz gave thanks to all present but did not specifically address topics on the meeting's agenda.

Chairwoman Zakir said the agenda would address the impact of COVID-19 on various aspects of the derivatives market. She indicated there would be a number of important updates from each of the Subcommittees, including two moderated discussions. Her remarks were followed by Ms. Lewis taking roll call of attendees.

II. Report from the Interest Rate Benchmark Reform Subcommittee

For the IRBR report, Mr. Wipf discussed progress made towards an orderly global transition away from LIBOR by the end of 2021. He recounted some of the developments in LIBOR transition since the Committee's December 2019 meeting. He then discussed the results of the IRBR tabletop exercise held on June 2, 2020, which involved CME Clearing (CME) and LCH Limited's (LCH's) single-step proposals for the transition of discounting and price alignment interest for certain products to the secured overnight financing rate (SOFR) which is scheduled for October 2020. The key issues noted from the exercise included:

- Gaps in understanding among market participants about the precise timing of discounting transition milestones, as well as dynamics of CME and LCH auction processes;
- Potential disruptions that may be caused by an auction where discounting risk swaps cannot be liquidated despite the end user's election to offload these swaps;
- A lack of consistency between CCP-mandated dates by which market participants must finalize elections to offload discounting risk swap compensation; and
- Major differences between CCP plans that could create significant operational and market risk for participants over the discounting transition period.

Key considerations offered to help mitigate these concerns included risk mitigation strategies such as trade compression and re-couponing by market participants, better industry education, and proactive engagement by all stakeholders. Mr. Wipf also discussed the Subcommittee's recommendations for CME and LCH, futures commissions merchants, buy-side

participants and regulators to improve the likelihood of a successful discounting transition in October 2020.

After Chairwoman Zakir opened the floor for discussion, members discussed the importance of having regular and robust dialogue with the CFTC to address new and continuing relief for IBOR transition mechanisms.

Mr. Berger noted the transition to SOFR is predicated upon a greater need for transparency benchmarks and a principle of transparency should apply to the transition steps being taken. He continued that there is going to be an active secondary market in the same base of swaps, subject to post-trade transparency before, during, and after the auction, which raises concerns of information asymmetry. The exemption from post-trade transparency is notably not contemplated for CCP's default management options for parallel comparison. Thus, Mr. Berger concluded that the area needs more scrutiny.

Following the discussion, the MRAC voted on the IRBR Subcommittee's recommendation that the Committee approve the Subcommittee's Report and that it be submitted to the Commission for consideration. The recommendation was approved by the Committee with 27 "yes" votes and 3 abstentions.

III. Report from the Climate-Related Market Risk Subcommittee

Mr. Litterman reported that due to the pandemic, CRMR Subcommittee members had not completed their report, but hoped to provide recommendations for the MRAC in the near future that would create a comprehensive roadmap for managing climate-related risks facing global financial markets, participants, and regulators, but with guidance tailored to the U.S. financial community.

According to Mr. Litterman, the report would seek to address two challenges: (1) how to safeguard the soundness and stability of the financial system in the face of climate change; and (2) how to facilitate the transition of the financial system to a low-carbon, climate-resilient economy.

During the discussion, Ms. Zakir asked whether Mr. Litterman would share his thoughts on the impact of COVID-19 as it pertains to climate-related risks. He said the differences between the pandemic and climate change are that the pandemic would have an effect for a few years while climate change would play out over decades; but, he added that since both are global risk management challenges, a delay in responding to such risks can be devastating in terms of lost lives, lost opportunities, and irreversible harm to the environment.

IV. Report from the Market Structure Subcommittee and Panel Discussion

Ms. Shemie indicated the MS Subcommittee's final report to the MRAC would address two main issues: (1) the "swap dealer landscape;" and (2) the made-available-to-trade (MAT) process. Additionally, she indicated today's presentation would discuss COVID-19 effects on

market conditions, in order to inform meeting participants on how the markets performed and whether any market structure issues arose.

Ms. Zakir asked how the MS Subcommittee had selected the above issues as topics for their report. Ms. Shemie responded that the two issues were distilled from many discussions among the Subcommittee. Regarding the swap dealer landscape, she said the Subcommittee wished to address how to reduce the concentration of swap dealers via a close examination of the swap definition, the swap dealer de-minimis requirements, and the floor trader exemption.

Addressing the MAT process issue, Mr. Berger noted there has not been any new MAT process filings since late 2013 which raised concerns about its approval and denial procedure. He indicated that, moving forward, the Subcommittee would like to address (1) the MAT process criteria; (2) entities qualified to initiate filings; and (3) the process for public comment when a filing is submitted. In summary, Mr. Berger hoped to refine the MAT process to facilitate its adaptation to evolving liquidity conditions, the emergence of new products as well as the phasing out of existing contracts.

V. Market Function and Performance during the Early Months of COVID-19

Mr. Barnes presented a broad overview of global market volatility related to COVID-19, showing data indicating that clearing usage remained at very high levels for standardized OTC interest rate swaps during this period.

Mr. Peralta and Ms. Kirby offered insights on the impact of the pandemic on market quality metrics for the swap market, such as liquidity, transaction numbers, and "hit" ratios for Request-For-Quote (RFQ) trades. They also affirmed that the OTC rates markets remained liquid throughout the crisis despite very high volatility and large increases in transactions.

A different perspective was offered by several buy-side representatives, led by Mr. Priyadarshi. He noted that there was a short period when much of the fixed income markets became "dysfunctional" with limited liquidity available from dealers and very wide bid-ask spreads. He pointed in particular to what he called the "unraveling" of the futures basis, which tracks the spread between Treasury futures and cash Treasuries that was caused by multiple simultaneous demands for liquidity. He further stated that it was only after the Federal Reserve intervened with "extraordinary levels of balance sheet accommodation" for the banking system that these markets stabilized.

Mr. Betsill stated that exchange-traded markets during March 2020 demonstrated that the ability to manage exposures and conduct transactions in larger than normal size exist.

Mr. Chatterjee noted that while the flexibility of trading protocols on SEFs really helped move larger block trades, traders had trouble with trades that were just below the block size. There were some challenges with executing long duration trades (15-20 years). The lack of liquidity in the treasury market hurt swaps traders trying to hedge and compounded the lack of liquidity in the swaps market. Finally, he noted that volumes and liquidity did pick back up over time after the Fed's action.

Mr. Mangrelli noted that there were some instances where dealer liquidity providers failed to respond to RFQs, and that there was a widening of the bid/offer spread.

Ms. Kiely echoed Dr. Priyadarshi's comments and requested that the Commission consider the following issues: (1) separating block size from real-time reporting requirements; (2) amending the RFQ to 3 requirement; and (3) introducing a mechanism where block sizes can be quickly recalibrated during times of high volatility-- perhaps sizing them as liquidity- and risk-specific issues rather than just notional.

VI. Report from the CCP Risk and Governance Subcommittee

Mr. Betsill discussed the status of the Subcommittee's five workstreams: (1) Margin; (2) Default Management Practices; (3) Governance and Transparency; (4) Stress Testing and Liquidity Frameworks; and (5) CCP Capital and Skin-in-the-game.

With respect to margin, Mr. Betsill said the CCPRG Subcommittee would discuss the importance of pricing and fees, margin period of risk in CCP IM models, margin and volatility floors in times of low volatility, and best practices around intraday margin calls. On default management practices, the Subcommittee would be reviewing recommendations made in 2015-2016 and provide updates on progress made toward those recommendations.

With respect to governance and transparency, Mr. Betsill said the group would focus on each element separately, and more specifically, current CFTC Regulations 40.5, 40.6, and 40.10. Concurrently, a separate subgroup would review a number of reference materials in the workstream including best practices for stress testing, CFTC supervisory stress tests, and other papers including stress testing frameworks published in December 2019.

Lastly, Mr. Betsill stated the CCPRG Subcommittee planned to establish a subgroup to define commonly used terms, review CCP capital regulations, as well as recent developments in the EU.

VII. COVID-19's Impact on Margin, Processing and Operational Health in Cleared Derivatives

Mr. Haynes presented high level observations of the derivatives markets over the last few months. According to the CFTC, initial margin (IM) levels increased 40% during the first quarter of 2020 and have remained high since then. Variation margin hit their highest levels in March, and there was a strong relationship between variation margin levels and the volatility index. However, Mr. Haynes noted that given the differences between certain derivatives products, they should not be considered a homogenous bucket of assets when conducting an analysis. Mr. Haynes then presented data on the aggregate change in IM requirements for IRS customer accounts during the first quarter of 2020, noting that the aggregate change was much higher for entities like insurance companies and pensions, compared to asset managers and hedge funds.

Ms. Crighton presented the results of an FIA industry survey conducted in June 2020. According to the survey, the number of futures and options traded on U.S. exchanges reached 1.43 billion contracts in March, the highest volume on record. She noted this led to many futures commission merchants (FCMs) requesting clearing window extensions. The survey also found that there was a record setting increase in customer funds in March. In addition, FCMs in the U.S. collected an additional \$136 billion in collateral in March, which, as Ms. Crighton noted, was more than ever, including the 2008 crisis. With respect to margin, IM requirements for many

widely-used futures contracts rose dramatically in the first quarter. Ms. Crighton concluded by listing certain key themes and takeaways from the FIA survey, including the need to improve guidelines around workflows, limiting the impact on reactivity to volatility changes, and addressing unpredictable changes in margin.

Mr. Betsill presented data drawn from a paper produced by CCP-12 earlier this month. According to the paper, CCPs successfully demonstrated their resilience during the past and present crisis. Specifically, CCPs managed market and operational risks and mitigated credit and liquidity risks, fulfilling their purpose as designed, despite extraordinary volumes and high volatility.

With respect to operational resilience, most CCPs implemented their business continuity plans and despite these measures and significant increase in volumes, core systems at CCPs remained resilient. On margin, Mr. Betsill stated that across the board IM increases were observed during the crisis, consistent with the design of margin models which are intended to reflect price movements at a certain confidence interval. According to Mr. Betsill, the data had thus suggested that the countercyclical characteristics of CCP margin models worked and maintained appropriate coverage.

VIII. Closing Remarks and Adjournment

Ms. Zakir thanked all meeting participants and yielded the floor to Chairman Tarbert and the Commissioners, who all made brief closing remarks and applauded the considerable breadth of topics covered and all the efforts involved. In particular, Commissioner Berkovitz noted the higher level of transparency and market resilience on the tenth anniversary of Dodd-Frank. Commissioner Behnam summed up the highlights of the meeting and indicated that going forward he would like to have an in-depth and positive discussion on the issue of diversity in the industry.

Ms. Lewis adjourned the meeting at 1:32 pm.

Nadia Zakir

MRAC Chair

December 4, 7020
Date