MINUTES OF THE MEETING OF THE U.S. COMMODITY FUTURES TRADING COMMISSION'S MARKET RISK ADVISORY COMMITTEE December 11, 2019

The Market Risk Advisory Committee (MRAC or Committee) convened for a public meeting on December 11, 2019, at 9:30 a.m., at the U.S. Commodity Futures Trading Commission's (CFTC or Commission) Headquarters Conference Center, located at Three Lafayette Centre, 1155 21st Street, NW, Washington, DC. The MRAC received reports from its subcommittees on Climate-Related Market Risk (CRMR), Market Structure, Central Counterparty (CCP) Risk and Governance (CCPRG), and Interest Rate Benchmark Reform (IRBR). Additionally, there would be a follow-up discussion on Central Counterparty Adjustments to Discounting/Price Alignment Interest Environment. The MRAC also discussed other issues involving the transition from the LIBOR to alternative risk-free reference rates (RFRs); including the recent consultation of the International Swaps and Derivatives Association (ISDA) on the final parameters for the spread and term adjustments that will apply to RFRs if derivatives fallbacks are triggered.

MRAC Members in Attendance

- Nadia Zakir, MRAC Chair and Executive Vice President and Deputy General Counsel, Pacific Investment Management Company LLC (PIMCO)
- B. Salman Banaei, Executive Director, Global Head of Clearance and Settlement, IHS Markit Stephen Berger, Managing Director and Global Head of Government & Regulatory Policy, Citadel
- Dr. 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
- Isaac Chang, Managing Director and Co-Head of Trading, AQR Capital Management, LLC Biswarup Chatteriee, Global Head of Markets BCE Management, Representing Citigroup
- Alicia Crighton, Global Co-Head of Futures and Head of OTC and Prime Clearing Businesses, Goldman Sachs, Representing Futures Industry Association
- Matthias Graulich, Member of the Executive Board and Chief Strategy Officer, Eurex Clearing AG
- Frank Hayden, Vice President, Trading Compliance, Calpine Corporation
- Lindsay Hopkins, Clearing House Counsel, Minneapolis Grain Exchange
- Annette Hunter, Senior Vice President and Director of Accounting Operations, Federal Home Loan Bank of Atlanta
- Vincent B. Johnson, Head of Commercial Advocacy & Regulatory Affairs, BP Integrated Supply and Trading
- Demetri Karousos, Chief Risk Officer, Nodal Clear, LLC, and Chief Operating Officer, Nodal Exchange, LLC
- Derek Kleinbauer, Global Head of Fixed Income & Equities Electronic Trading, Bloomberg LP and Vice President, Bloomberg SEF LLC
- Laura Kimpel, Managing Director, The Depository Trust & Clearing Corporation

Sebastiaan Koeling, Chief Executive Officer, Optiver US LLC, Representing Futures Industry Association - Principal Traders Group

Robert Mangrelli, Director, Chatham Financial

Kevin McClear, Corporate Risk Officer, Intercontinental Exchange, Inc.

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

Dr. 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 ACB

Lisa Shemie, Associate General Counsel, Chief Legal Officer – Cboe FX Markets and Cboe SEF, Cboe Global Markets

Dr. Betty Simkins, Head of Finance Department, Professor and Williams Companies Chair in Business, Oklahoma State University, Spears School of Business

Tyson Slocum, Director, Energy Program, Public Citizen

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

Kristen Walters, Global Chief Operating Officer of Risk and Quantitative Analysis Group, BlackRock

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

Rana Yared, Managing Director, Merchant Banking Division, Goldman Sachs

Scott Zucker, Chief Administrative Officer, Tradeweb

Invited Speakers and Panelists in Attendance

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

Lisa Shemie, Market Structure Subcommittee Co-Chairman, Associate General Counsel, Chief Legal Officer – Cboe FX Markets and Cboe SEF, Cboe Global Markets

Stephen Berger, Market Structure Subcommittee Co-Chairman, Managing Director and Global Head of Government & Regulatory Policy, Citadel

Alicia Crighton, CCPRG Subcommittee Co-Chairman, Chief Operating Officer, Prime Services, US Clearing, Goldman Sachs, Futures Industry Association

Lee Betsill, CCPRG Subcommittee Co-Chairman, Managing Director and Chief Risk Officer, CME Group

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

Biswarup Chatterjee, IRBR Subcommittee Initial Margin Working Group Leader, Global Head of Markets BCE Management, Citigroup

Ann Battle, IRBR Subcommittee Disclosure Working Group Leader, Assistant General Counsel, ISDA

Agha Mirza, IRBR Subcommittee Member, Managing Director and Global Head of Interest Rate Products, CME Group

Dennis McLaughlin, IRBR Subcommittee Member, Chief Risk Officer, LCH

CFTC Commissioners and Staff in Attendance

Rostin Benham, Commissioner and MRAC Sponsor

Heath P. Tarbert, Chairman

Brian D. Quintenz, Commissioner

Dawn D. Stump, Commissioner

Richard Haynes, Supervisory Research Analyst, Office of the Chief Economist Alicia Lewis, MRAC Designated Federal Officer (DFO), Special Counsel and Detailee, Division of Clearing and Risk (DCR)

I. Opening Remarks

Ms. Lewis called the meeting to order. Commissioner Behnam provided an overview of the agenda, stating that there would be updates from the MRAC's three newest subcommittees: the CRMR Subcommittee, Market Structure Subcommittee, and CCPRG Subcommittee, and he praised the accomplishments of the MRAC and the IRBR Subcommittee related to the transition away from LIBOR, specifically referencing the MRAC's approval of "plain English" disclosures for new derivatives referencing LIBOR and other IBORs. Commissioner Behnam noted that these disclosures are intended as helpful disclosures that market participants could use as appropriate, with clients and counterparties with whom they transact derivatives referencing LIBOR and other IBORS. He added that the "plain English" disclosures are not meant to undermine transition from LIBOR. Commissioner Behnam then discussed the forthcoming briefing from Richard Haynes, from the Commission's OCE, discussing an OCE-published Commission research paper, "Legacy Swaps under the CFTC's Uncleared Margin and Clearing Rules," as well as the IRBR Subcommittee's findings on the uncleared margin impact of transitioning legacy IBOR-linked derivatives to risk free rates. He added that the OCE paper's conclusions underscore the important role to be played by the Commission and other regulators in the transition away from LIBOR. Commissioner Behnam then noted there would be a discussion on ISDA's fallback consultations for benchmark fallback adjustments that have taken place as part of the larger global benchmark transition effort. Additionally, he stated that there would be current proposals from CME and LCH for transitioning price alignment interest and discounting for U.S. dollar OTC-cleared swaps to SOFR. He mentioned that the IRBR Subcommittee could play an important role by hosting a tabletop exercise on the transition. Finally, he stated that he remains committed to ensuring that the MRAC continues to play an additive role in addressing the remaining challenges in transitioning away from LIBOR.

Chairman Tarbert stated that it is critically important that the CFTC take a leadership role in helping the LIBOR-to-SOFR transition, particularly in the derivatives space. He noted that the UK FCA has been unequivocal that after 2021, LIBOR is going away. He warned that

failing to transition away from LIBOR is a source of risk to both the individual firm and a potential source of systemic risk to the global financial system. He announced that CFTC staff would be publishing no-action letters next week that will address concerns related to the amendment of legacy LIBOR swaps for the transition to SOFR. He explained that the CFTC would work to address the lurking threat of any potential "zombie LIBOR apocalypse," where LIBOR may continue to be published but is no longer a representative benchmark. In this case, swaps could still be priced against a seemingly alive rate whose integrity as a benchmark is completely dead.

Commissioners Quintenz and Stump and Chairwoman Zakir thanked Commissioners, members, and participants for their efforts and support. Chairwoman Zakir then conducted a roll call of the members participating by telephone.

II. Report from the Market Structure Subcommittee

Ms. Shemie explained that the report of the subcommittee includes a list of topics related to market structure that the subcommittee plans to address over the next six months to a year, explaining that the group was solicited to provide ideas and topics for discussion that were then whittled down to threads of principles that would provide discussion. The subcommittee members were then briefed on the initial list, and, based on feedback from the group, a final list of topics was developed. The principal subcategories relate to trading, clearing, and reporting. Separate working groups have been formed to address topics within these subcategories and come up with initial recommendations for the Commission.

Mr. Berger noted that the issues the subcommittee will be looking at are those that have been addressed by other groups and he gave examples of topics. For example, the trading working group, that is part of the subcommittee, has discussed "made available to trade" and self-certifications by SEFs, while the clearing working group, that is also part of the subcommittee, has discussed clearing member concentration in both the swaps and futures markets and how the Basel capital requirements may disincentivize client clearing services by certain clearing members. Within the reporting category—another subcommittee working group—there has been discussion of the post-trade transparency regime and possible updates to block trade thresholds.

Questions from the Committee were entertained, such as how the subcommittee intended to narrow the list of recommendations, if each of its working groups would make separate recommendations, and the timing of the recommendations for presentation to the MRAC. Other Committee members asked whether other Commission advisory committees could look at how other market aspects that the Commission looks at interact with market structure issues, as well whether the subcommittee could examine the conditions that support non-bank Swap dealers. In response to questions from the Committee, Ms. Shemie and Mr. Berger explained that the goal is to push out recommendations to the Commission within six months, and that the subcommittee will seek input from market participants and other committees.

III. Report from the CCP Risk and Governance Subcommittee

Mr. Betsill stated that the subcommittee is working to deliver actionable recommendations and where it can, detailed best practices, to enhance the safety and soundness of cleared derivatives markets. The subcommittee will form two working groups, one to focus on CCP resilience and a second to focus on governance and capital issues. Ms. Crighton added that for some topics (such as margin), it may be difficult to come to agreement on some of the recommendations, but it should be possible to come up with principles that will form the basis for some of the recommendations. Ms. Crighton said that the subcommittee will work to provide an update to the Commission on its progress by mid-2020 and substantive recommendations by the end of the year or the December 2020 meeting.

In response to questions from the Committee, Ms. Crighton explained that the topics the resilience working group wants to focus on include margin, stress testing, liquidity, and principles of default management. She said that the governance and capital working group is considering governance and transparency, including cross-border regulatory issues, CCP capital and default resources (including skin in the game), and non-default losses. The discussion by MRAC members also touched on a number of issues, including the potential for systemic risk in the central clearing space, transparency around risk management practices, whether CCPs should allocate capital for the default fund, the potential adoption of new reporting processes for data sharing, and margin requirements.

IV. Report from the Climate-Related Market Risk Subcommittee

Mr. Litterman stated that the subcommittee is tasked with writing a report by June 2020 that will focus on climate-related financial and market risks and make recommendations to the Commission. He said that he hopes that the report can play an important role in guiding the climate response of the U.S. financial community. He anticipates that at the heart of the report will be a section on the implications for market oversight policies, including disclosures, governance, strategy, risk management, and conduct. The subcommittee also intends to recommend additional market and derivatives products that may improve the identification and hedging of climate-related financial risks, and recommend policies designed to facilitate capital flows required to finance the transition to a low-carbon economy. The subcommittee members reached a consensus that the appropriate role of the public sector is not to direct investments, but to provide incentives and the appropriate regulatory framework and let the market freely allocate capital. In response to questions, Mr. Litterman stated that he believes members of the subcommittee will break up into different workstreams that will be largely consensus-driven and that any member that wants to have input on different workstreams will be able to do so. Mr. Litterman was asked by the Chairwoman how the report would be prepared, and its anticipated completion date, and he stated that the work would be broken down into different work streams for processing, with an anticipated completion date of next June.

[Break]

V. Report from the Interest Rate Benchmark Reform Subcommittee

Mr. Wipf began by recapping the key developments in the LIBOR transition since September. He mentioned a number of key regulatory developments, such as publication by U.S. Prudential Regulators of proposed amendments to uncleared margin rules to provide broadbased relief for interest rate reform; a letter from the ARRC to the CFTC requesting regulatory relief related to the transition of derivative contracts from IBOR rates to alternative risk-free rates (which Chairman Tarbert referenced above); and a letter from the Financial Stability Board's Official Sector Steering Group (OSSG) to ISDA reiterating its preference to include a pre-cessation trigger in ISDA's new fallback language. He then referenced market developments, such as ISDA's publication of the results of its consultation on final parameters for benchmark fallback adjustments; the ARRC's publication of practical implementation checklists to help market participants with the LIBOR transition; and continued refinement by the clearinghouses of their proposals for how they will adjust discounting and price alignment interest.

Mr. Wipf also introduced the three panel presentations on Legacy Libor Swaps and Initial Margin Findings, ISDA Developments, and CCP Adjustments to Discounting and Price Alignment Interest. He stated that there would be a discussion on the CFTC and MRAC's subcommittees' findings on the uncleared margin impact of transitioning certain legacy LIBORlinked derivatives to risk-free reference rates. Regarding LIBOR transition, he stated that the U.S. Prudential Regulators published proposed amendments to their uncleared margin rules to provide relief for interest rate reform; the Commission received a letter from the ARRC regarding regulatory issues regarding the transition from LIBOR He noted that both LCH and CME would give brief overviews of their current proposals on discounting and price alignment interest adjustments. Regarding LIBOR transition in the absence of any relief from the Commission, he stated that the subcommittee would attempt to quantify the impact to uncleared margin if no relief is granted, working with the Office of the Chief Economist at the Commission. The resulting published report used the regulatory grid method to estimate the initial margin that would be posted if these swaps lost their legacy status. He also mentioned that ISDA has made progress in finalizing benchmark fallback language that can be agreed to on a voluntary basis for legacy trades. Further, he stated that the subcommittee had discussed the operational challenges and potential market turbulence that could arise from differences between clearinghouses in compensation methodologies, and that both clearinghouses have coalesced around a single transition date, currently scheduled for mid-October 2020. He expects the discussion of coordination between the clearinghouses on their respective Single Step proposals will be ongoing over the next several weeks and months. He reiterated the subcommittee's request that the MRAC consider the merits of hosting a public tabletop demonstration involving both clearinghouses well before the October 2020 switch date as this could help market participants think through their respective steps to the Single Step event so they can risk-manage appropriately well in advance. He noted that the ARRC has established a Swaptions Working Group to focus on the clearing treatment for certain physically-settled swaptions, particularly after the Single Step transaction has occurred at the clearinghouses. He also discussed future steps for the subcommittee's work which would include a discussion of coordination between the clearinghouses on their respective Single Step transition proposals, as well as a request to the MRAC to consider hosting a public tabletop demonstration on how transparency into the Single Step transition would benefit the market.

VI. Legacy LIBOR Swaps and Initial Margin Findings

Mr. Haynes presented a summary of the CFTC Office of the Chief Economist's research paper titled "Legacy Swaps under the CFTC's Uncleared Margin and Clearing Rules." He commented on the implications of the markets transitioning away from LIBOR rates to other stronger rates such as SOFR. He noted that as markets adjust, market participants have asked for clarification regarding existing legacy swaps not subject to the new requirements, such as whether this would cause legacy swaps to lose their status, and possibly be faced with uncleared initial margin (IM) requirements. He noted that if the LIBOR transition causes loss of legacy status, an initial margin may need to be posted for phased in counterparties, which is likely to be significant based on timing. Mr. Haynes calculated the initial margin—using graphics—applying the so-called standardized grid method to the uncleared LIBOR-based swaps, yielding an aggregate total initial margin needed of around \$100 billion.

Mr. Chatterjee thanked Mr. Haynes for his presentation, and noted that the \$100 billion amount presented will be spread out across market participants, covering a significantly meaningful amount of market participants, and that using the Standard Initial Model Margin (SIMM) model would result in an initial margin in the \$40 billion range, rather than the \$100 billion amount, due to a number of caveats that may cause the grid model estimate to move in either direction. Mr. Chatterjee encouraged the Commission to continue examining the issue, and recommended that the MRAC approve the considerations of the Initial Margin working group and recommended that the Commission consider the findings and their recommendations regarding any relief.

VII. International Swaps and Derivatives Association, Inc. (ISDA) Developments

Ms. Battle delivered an overview of the work that ISDA is doing and has published regarding derivatives fallbacks, including timing for the implementation of these fallbacks. She explained that ISDA provided standard definitions and rate options selected by counterparties as a floating rate in OTC derivatives that have a floating rate. Ms. Battle explained that standardized publishing provided ISDA the ability to update them and include more robust fallbacks. She explained that fallbacks are part of the important effort to move the market away from LIBOR, and amending legacy LIBOR contracts to include the fallbacks, would protect market participants from potential disruptions if LIBOR is discontinued, and their contracts are without a clear fallback rate.

Ms. Battle commented on market participants concerns as to whether there should be a definitive moment to trigger the use of ISDA definitions regarding amended and restated rate options prior to the cessation of LIBOR. She commented that pre-cessation triggers should examine: the existing price source information; a statement identifying the objective triggers for a 'permanent cessation' that would activate the selective fallbacks; and a description of the fallback that would apply upon the occurrence of that trigger. She stated that ISDA is continuing with implementation of permanent cessation fallbacks while also working simultaneously with regulators and industry to increase market understanding of the implications.

Ms. Battle said that Bloomberg will publish the fallback adjustments and the relevant spread adjustment similar to that of LIBOR. Ms. Battle stated that in the first quarter of 2020, ISDA and Bloomberg will finalize the parameters for fallback rates while ISDA publishes amendments to its 2006 ISDA definitions and protocol for legacy transactions. She added that, in the second quarter of 2020, Bloomberg will publish adjustment and fallback rates.

During the discussion, Mr. Betsill commented that pre-cessation issues should be geared to the market and that the CCPs needs to provide greater clarity if it is determined that LIBOR is no longer reliable. Mr. McLaughlin stated that benchmarks need to be representative of the underlying market. Mr. Hayden and Mr. Messinger both commented on Bloomberg being selected as the vendor to publish these adjustments, agreeing that it would provide information that is commercially accessible and offer the greatest market coverage. Mr. Mangrelli inquired—given that the ARRC has recommended fallback language—if any thought had also been given to reconsidering any other topics where ISDA and ARRC language may significantly differ. Ms. Walters commented on what will happen to the cash products linked to LIBOR after the deadline, wondering if there is a clear mechanism to apply fallback language to these products, and the future of LIBOR as it pertains to these cash products.

Following the discussion, the MRAC voted on and approved the recommendation from the Interest Rate Benchmark Reform Subcommittee that the Committee approve the initial margin impact findings and for such findings to be submitted for consideration by the Commission. The recommendation was approved by unanimous vote.

VIII. Follow Up Discussion on Central Counterparty Adjustments to Discounting/Price Alignment Interest Environment

Mr. McLaughlin stated that while LCH's proposal will have further review, they attempted to design the process to be simple and straightforward. LCH is proposing that (1) compensation for the valuation and risk change will include both cash and compensating legacy swaps; (2) client accounts will have the option to elect cash-only if they choose; (3) and an auction will be used for the cash-only election. Mr. McLaughlin stated that LCH is targeting the conversion to take place on or around October 17th, 2020.

Mr. Mirza stated that the CME Group believes that transitioning to SOFR will promote liquidity. He added that CME is looking for the transition to take place on October 16th, 2020. Mr. Mirza added that in order to have a smooth transition, market participants will be presented with various options. He concluded that effective October 19th, 2020, CME will apply SOFR to all cleared USD interest rate swap products.

Following the presentations, Chairwoman Zakir opened the floor for questions and comments. The MRAC then voted to approve the recommendation from the Interest Rate Benchmark Reform Subcommittee to hold a table-top exercise simulating the October 2020 transition to SOFR. The recommendation was approved by unanimous vote.

IX. Closing Remarks

Commissioner Behnam thanked the participants and especially the Co-Chairs, and noted that the MRAC has a lot to consider going forward. He stated that to make progress on CCPs the focus should be on what can be agreed on to move the conversation forward to maintain healthy markets. Regarding the LIBOR transition, Commissioner Behnam stated that, although there are still a lot of unresolved issues, it is important to understand the CCP topic in order to make better decisions. He agreed that the tabletop exercise recommended would be good to do if a workable date and time can be determined. Ms. Lewis adjourned the meeting at 1:08 p.m.

December 4, 2020 Date

I hereby certify that the foregoing minutes are accurate.

Nadia Zakir

Chair, Market Risk Advisory Committee