MINUTES OF THE ELEVENTH MEETING OF THE COMMODITY FUTURES TRADING COMMISSION'S MARKET RISK ADVISORY COMMITTEE
June 12, 2019

The Market Risk Advisory Committee (MRAC) convened for a public meeting on Wednesday, June 12, 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 St., NW, Washington, DC. The meeting consisted of two panels. Panel 1 discussed the financial market risks related to climate change, including current domestic and international policy initiatives and supervisory approaches to address such risks, and the potential impact of climate change on the future stability of the global financial system. Panel 2 discussed market participants' management and ongoing efforts to mitigate climate-related financial market risks, including key risk management, governance, and disclosure considerations, and the challenges ahead for regulators and market participants. The panel discussions were followed by discussion of a report from the MRAC Interest Rate Benchmark Reform Subcommittee and remarks from Steven Maijoor, European Securities and Markets Authority Chair.

MRAC Members in Attendance

Nadia Zakir, MRAC Chair, Pacific Investment Management Company LLC (PIMCO), Executive Vice President and Deputy General Counsel
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
Lee Betsill, Managing Director and Chief Risk Officer, CME Group
Isaac Chang, Managing Director and Co-Head of Trading, AQR Capital Management, LLC
Biswarup Chatterjee, Global Head of Electronic Trading & New Business Development, Credit Markets, Citigroup
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 Regulatory & Policy Affairs, BP Products North America
Demetri Karousos, Chief Risk Officer, Nodal Clear LLC, and Managing Director, Market Administration and Surveillance, Nodal Exchange LLC
Derek Kleinbauer, Global Head, Rates and Equity e-Trading, Bloomberg LP and Vice President, Bloomberg SEF LLC
Laura Klimpel, Managing Director, Clearing Agency Services at the Depository Trust & Clearing Corporation (DTCC)
Sebastiaan Koeling, Chief Executive Officer, Optiver US LLC, FIA Principal Traders Group
Kevin McClear, Chief 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, Commodity Markets Council
Christina Norland, Managing Director, Chatham Financial
Sam Priyadarshi, Principal, Head of Portfolio Risk and Derivatives, Vanguard
Jonathan Raiff, Senior Managing Director, Nomura Holdings, 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, Cboe's Legal Division, Chief Legal Officer, FX and Cboe SEF
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
Marcus Stanley, Policy Director, Americans for Financial Reform
Robert Steigerwald, Senior Policy Advisor, Financial Markets, Federal Reserve Bank of Chicago
Kristen Walters, Global Chief Operating Officer of Risk and Quantitative Analysis Group, BlackRock

<u>Speakers in Attendance</u>
Sarah Breeden, Executive Director of International Banks Division, Prudential Regulation Authority, Bank of England (Panel 1)
Stacy Coleman, Managing Director, Promontory Financial Group, Secretariat, Financial Stability Board's Taskforce on Climate-related Financial Disclosures (Panel 1)
Dave Jones, Director, Climate Risk Initiative, Center for Law, Energy & the Environment at the University of Berkeley School of Law; Former California Insurance Commissioner (Panel 1)
Nancy Meyer, Director of Corporate Engagement, Center for Climate and Energy Solutions (Panel 2)
Kristen Walters, MRAC Member, Global Chief Operating Officer of Risk and Quantitative Analysis Group, BlackRock (Panel 2)
Matthias Graulich, MRAC Member, Member of the Executive Board and Chief Strategy Officer, Eurex Clearing AG (Panel 2)
Dr. Stefano Giglio, Professor of Finance, Yale School of Management (Panel 2)
Thomas Wipf, MRAC Interest Rate Benchmark Reform Subcommittee Chairman, Vice Chairman, Institutional Securities, Morgan Stanley
Biswarup Chatterjee, MRAC Interest Rate Benchmark Reform Subcommittee, Initial Margin Working Group Leader, Global Head of Electronic Trading & New Business Development, Credit Markets, Citigroup
Marnie Rosenberg, MRAC Interest Rate Benchmark Subcommittee, Clearing Working Group Leader, Managing Director and Global Head of Clearinghouse Risk & Strategy, JP Morgan
Steven Maijoor, European Securities and Markets Authority (ESMA), Chairman

<u>CFTC Commissioners and Staff in Attendance</u>
Rostin Behnam, Commissioner and MRAC Sponsor
J. Christopher Giancarlo, Chairman
Dan M. Berkovitz, Commissioner

Dawn DeBerry Stump, Commissioner
Brian D. Quintenz, Commissioner
Alicia Lewis, Designated Federal Officer (DFO), Special Counsel, Office of Commissioner Behnam

I. Opening Remarks

Ms. Lewis called the meeting to order. Commissioner Behnam in opening remarks acknowledged the designation of Ms. Zakir as the new MRAC chair, and stated that the meeting agenda would focus heavily on climate-related financial market risk. Commissioner Behnam noted that the impacts of climate change affect every aspect of the American economy, and believes that it is time to examine the relationship between climate related events to financial market risk and market stability, noting that the failure to address financial market risks associated with climate change will impede economic growth.

He stated that acknowledged the work of international counterparts, such as the Network of Greening the Financial System (NGFS), a group of more than 40 central banks and supervisors from around the world, to understand and manage the financial risks of climate change. He stated that many oversee the same registrants as the Commission. Commissioner Behnam also acknowledged the work of the Financial Stability Board's (FSB) Task Force on climate-related Financial Disclosure (TCFD), acknowledging its value in enhancing how climate-related risks are assessed, priced, disclosed, and managed, stating that assessing such risks must be a priority, that he hoped would start with the current MRAC meeting. Commissioner Behnam advised that the MRAC would receive a status report from its Interest Rate Benchmark Reform Subcommittee.

The Commissioner then welcomed Chairman Maijoor, who would be discussing European Market Infrastructure (EMIR) 2.2, central counterparty stress testing, and the withdrawal of the United Kingdom (UK) from the European Union (EU) (Brexit). He stressed the importance of building a consensus across borders and finding ways to maintain and promote deference where appropriate. Finally, Commissioner Behnam recognized the leadership of outgoing Chairman Giancarlo, noting that this meeting would be the Chairman's last advisory committee meeting before he departs from the Commission. In closing, Commissioner Behnam dedicated the meeting to the late Commissioner Bartholomew (Bart) Chilton.

Chairman Giancarlo, in opening remarks, also commented on the passing of Commissioner Chilton. He then offered a brief explanation of the Commission's advisory committee process, acknowledged the importance of the meeting's subject, noting that the committees are composed of market experts and key stakeholders, that they set their own agendas, and are bipartisan, and have the essential mission of supporting the Commission's mission, and have the full support of the Commission.

Commissioner Quintenz in opening remarks commented on the U.S. Environmental Protection Agency (EPA) fall release of its latest Greenhouse Gas Reporting Program data which indicated a decline in carbon emissions. The Commissioner attributed the decline in part to liquid energy derivatives and hedging markets that supported private sector ingenuity and production of cleaner energy resources. Commissioner Quintenz noted however, that some proposed regulations could have a profound negative impact on the derivatives markets and energy end-users, but he supported the pending EPA proposal on Renewable Identification Numbers (RIN) to strengthen the integrity of the RIN market. Commissioner Quintenz embraced the opportunity that the meeting presented to explore how the derivatives market can be used to address risks in general and climate-related risks specifically. Finally, the Commissioner remarked on the anticipated testimony from the Chairman of the European Securities and Markets Authority.

Commissioner Stump thanked Commissioner Behnam for putting together the interesting and timely agenda, noting that it is extremely beneficial to the Commission and to market participants given that the risk to hedge and mitigate is always shifting, and so too must the agenda for such meeting.

Commissioner Berkovitz's welcome remarks noted his interest in the meeting's topic and that it addressed emerging trends, whereas political systems may not be immediately responsive to such emerging trends. The Commissioner noted his interest in the discussion about the impacts that climate change may actually have on financial market stability and the financial system, since he had read a number of reports and news items about such potential threats.

II. Panel I: Domestic and International Policy Initiatives regarding Climate-related Market Risks to the Financial System

Ms. Breeden opened the panel by discussing the various risks associated with climate change, such as weather-related losses, that may also cause increased insurance claims, as well as risks that may lead to adjustments in business models and strategies in the economy. She added that assessing risk is "highly complex," and that the Prudential Regulatory Authority and Financial Conduct Authority established a forum whose aim is publishing "practical" guidance for such purposes. Ms. Coleman noted the limited discussion on climate risk and discussed the FSB's task force of public and private participants to pull together information about climate risks to factor into their decision making. In this regard they examined governance, strategy, risk management, and metrics and targets. Mr. Jones used the recent California wildfires and mudslides as examples when discussing the National Association of Insurance Commissioners' (NAIC's) climate risk disclosure survey that showed how insurers are addressing climate risk in underwriting insurance.

Following the presentation, Chairwoman Zakir opened the floor to questions and comments from the membership.

Mr. Slocum asked whether mandatory uniform reporting of climate change-associated financial risk should be the standard. Ms. Coleman replied affirmatively, and stated that FSB may have to move toward mandatory disclosure rather than voluntary disclosure to ease receiving information. Ms. Breeden agreed, emphasized the need for disclosures to be comprehensive, comparable, and coherent. Mr. Jones discussed future challenges for regulators stating that there is a "fair degree" of communication internationally and consensus among financial regulators that the TCFD recommendations are "some of the best work" regarding the types of disclosure needed. Chairman Giancarlo stated that the Commission has participated in discussions on climate risk disclosure, with other regulators. He noted that such discussions are "challenging" because the regulators "all have unique operating regimes."

III. Panel II: Market Participant Approaches to the Management and Mitigation of Climate-Related Financial Market Risks

Ms. Meyer presented first in the next panel and noted that managing physical risk usually falls under risk management, and that most companies are looking for ways for "framing the uncertainty." She is seeing some progress in implementing the TCFD recommendations. Ms. Walters stated BlackRock has integrated certain data allowing investors and risk managers to access risk data. Mr. Graulich discussed the public attention on climate change and the global goal to limit global warming and how Europe has integrated these targets into action. Dr. Giglio discussed hedging climate risks from a conceptual perspective, emphasizing that it is hard to define the right target of the hedge. He emphasized that important considerations should be to consider how to hedge long-term risks, and whether short-term portfolios to hedge long-term climate change can be used. Dr. Giglio concluded his remarks by discussing the derivatives market and climate risk, explaining that climate risk occurs heterogeneously across geographical markets and that risk sharing should be viewed as affecting a global market, rather than as affecting localized markets, but he also explained that markets need different exposures and different products.

Following the presentation, Chairwoman Zakir opened the floor to questions and comments from the membership.

Mr. Chang asked how Environmental, Social and Governance (ESG) is defined. Ms. Meyer defined it as meaning "greenhouse gas management," but noted that it is not currently well defined, and that they are "still trying" to define what ESG means, "especially with the TCFD recommendations." Ms. Walters added that while the science is known, the link to financial services is not. Dr. Giglio added that the markets should focus on producing and integrating the information, and then determine how to use it.

IV. MRAC New Business – Establishment of Subcommittees

Chairwoman Zakir turned to MRAC new business and proposed the establishment of four subcommittees to examine CCP Risk and Governance, Operational Risk, Market Structure, and Climate-Related Financial Risk. All members voted in favor and none opposed.

V. Report from the MRAC Interest Rate Benchmark Reform Subcommittee

Mr. Wipf discussed the important developments regarding the London Inter-bank Offered Rate (LIBOR) transition that has occurred since December 2018, in particular the publication in the cash markets of "fallback language" for those that continue to use LIBOR and cash products. He stated that the International Swaps and Derivatives Association (ISDA) is working on fallback language for derivative contracts, and will be seeking feedback on the market's views on the implementation. Mr. Wipf stated that Secured Overnight Financing Rate (SOFR) based products continue to grow in the U.S. markets and that the Federal Reserve's Alternative Reference Rates Committee (ARRC) has published a user's guide to SOFR showing how market participants can start using SOFR in contracts today. He stated that the FSB had a roundtable with global regulators to discuss the LIBOR transition, and how they are "willing to entertain relief within reason." Mr. Wipf noted that the subcommittee's goal was to "remove hurdles to the transition to SOFR, and therefore the subcommittee has focused on discussing uncleared margin, clearing, and disclosures, as they could all cause potential impediments to adoption of rates and that the subcommittee intends to write a letter to the MRAC with their recommendations in greater detail.

Following the presentation, Chairwoman Zakir opened the floor to questions and comments from the membership.

Mr. Chatterjee responded to a comment from Mr. Berger about the potential unintended consequences concerning the proposal to provide relief from initial margin requirements for uncleared swaps, by explaining that the relief or modifications are within reason, and short term. He also responded to a comment from Mr. Stanley about an estimate of transaction volumes would be helpful, by replying that the subcommittee tried to ensure that any of the recommendations put forward all have some level of analysis, with a large part of their discussions being focused on whether they can provide data. Mr. Shanahan stated that temporary relief may be needed to encourage activity, and Chairman Giancarlo agreed that short-term relief may be needed, adding that he is confident that the Commission will find the right balance and ultimately get to a market-based benchmark.

[Lunch Break]

VI. Remarks by Mr. Maijoor

Following the lunch break, Ms. Lewis called the meeting back to order, and gave the floor to Chairwoman Zakir, who introduced Mr. Maijoor to give his remarks. Mr. Maijoor explained that the European Union (EU) regulatory supervisory framework has focused on sustainability for two important reasons. First, sustainability risk can affect the risk returns and valuations of investments and issuers. Second, ESMA is aware that the investment community is changing their preferences and wants to take sustainability into account when selecting their investments and their issuers. He further explained that ESMA has been asked to provide advice to the European Commission, and is working on the integration of sustainability risks and sustainability factors regarding relevant asset management and investment firm legislation; political agreement on a disclosure regulation on the sustainability issues; and integration of sustainability into the benchmark regulation and making sure for carton benchmarks there are common factors.

Mr. Maijoor then discussed Cross-Border issues. He explained that cross-border regulation presents national and regional challenges, with market participants wanting the same regulations for both, but that regulators are limited by their "regulatory framework and their supervisory mandates." Mr. Maijoor discussed a recently published report that gives an account of the use of tools to address cross-border challenges. He stated that the EU has been at the forefront of these developments for third-country firms fully relying on the rules and supervision in the home country. Mr. Maijoor noted that there might be full reliance on third-country supervision and regulation as a result of Brexit, and that the improved EU approach towards cross-border regulation and supervision is already reflected in EMIR 2.2. He noted that in technical consultation papers implementing EMIR 2.2, the areas of focus would be 1) classifying a CCP as tier 1 or 2; 2) comparable compliance; and 3) fees for third country CCPs.

Regarding stress testing, Mr. Maijoor noted that ESMA completed the first stress test of CCPs in 2016. He then discussed Brexit noting that it will have a negative impact for the EU and UK. Responding to a question on comparable compliance, Mr. Maijoor stated that ESMA is actively working towards publishing specific advice on this issue. He addressed such questions as comparable compliance, consequences that may flow from a no-deal Brexit, and about the issue of determining liquidity in the event that the Markets in Financial Instruments Directive (MiFID) is destroyed because of Brexit.

Commissioners Berkovitz, Stump, and Quintenz offered closing remarks voicing praise for the agenda and the speakers. Chairman Giancarlo thanked the members of the committee and the distinguished guests for the work done and their contributions. Commissioner Behnam thanked all of the guests and participants and stated that he hoped the meeting could serve as a starting point for a larger conversation about financial market risk and the changing climate.

Ms. Lewis adjourned the meeting at 2:43 p.m.

I hereby certify that the foregoing minutes are accurate.

Nadia Zakir
Chair, Market Risk Advisory Committee

11/26/19
Date