

**MINUTES OF THE APRIL 9, 2024 MEETING OF THE
U.S. COMMODITY FUTURES TRADING COMMISSION'S
MARKET RISK ADVISORY COMMITTEE**

The Market Risk Advisory Committee (MRAC) convened for a public meeting on Tuesday, April 9, 2024, at 9:30 a.m., at the U.S. Commodity Futures Trading Commission, located at Three Lafayette Center, 1155 21st Street NW, Washington, DC. The MRAC considered two recommendations from the Market Risk Advisory Committee, among other presentations and updates. First, the Central Clearing Party (CCP) Risk and Governance Subcommittee considered recommendations on derivatives clearing organizations' (DCOs) recovery and resilience. Second, the Future of Finance Subcommittee presented its subcommittee work plan on artificial intelligence in financial markets. Third, the Market Structure Subcommittee considered a presentation and analysis on Futures Commission Merchant (FCM) capacity and concentration. In addition, panelists discussed U.S. Treasury cash-futures basis trades and provided updates on the block implementation workstream and post-trade risk reduction workstream. Finally, panelists on the Climate-Related Market Risk Subcommittee presented and discussed climate-related market risks.

MRAC Members in Attendance

Robert Allen, President and Global Head of Fenics Rates, FMX Futures Exchange, L.P

James Andrus, Vice President of Sustainability Global Markets, Franklin Templeton

Stephen Berger, Managing Director, Global Head of Government & Regulatory Policy, Citadel,
Shaw & Co.

Richard Berner, Clinical Professor of Management Practice in the Department of Finance and
Co-Director of the Stern Volatility and Risk Institute, NYU

Biswarup Chatterjee, Managing Director and Head of Partnerships & Innovation for the Services
Division, Citigroup

Alessandro Cocco, Senior Policy Advisor, U.S. Dept. of Treasury, Financial Stability Oversight
Council

Neil Constable, Head of Quantitative Research and Investments, Fidelity

Tim Cuddihy, Managing Director and Group Chief Risk Officer, Depository Trust and Clearing
Corporation

Alicia Crighton, Chair of MRAC, Chair of the Board of Directors, Futures Industry Association

Edward Dasso, Senior Vice President—Market Regulation, National Futures Association

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

Lindsay Hopkins, Chief Corporate Counsel MGEX Clearing, Minneapolis Grain Exchange, LLC

David Horner, Chief Risk Officer, LCH Ltd, London Stock Exchange Group

Annette Hunter, Senior Vice President and Director of Business Operations for Federal Home
Loan Bank of Atlanta, Federal Home Loan Banks

Demetri Karousos, President and Chief Operating Officer, Nodal Exchange, LLC

Eileen Kiely, Managing Director, BlackRock

Elisabeth Kirby, Managing Director and Head of Market Structure, Tradeweb Markets

Derek Kleinbauer, President, Bloomberg SEF LLC

Ernie Kohnke, General Counsel, Vitol, Commodity Markets Council

Chip Lowry, Board Member, Foreign Exchange Professionals Association

Purvi Maniar, Deputy General Counsel, FalconX Bravo Inc.
Craig Messinger, Vice Chairman, Virtu Financial, Inc.
Andrew Nash, Managing Director and Head of Regulatory Affairs, Morgan Stanley
Andrew Park, Senior Policy Analyst, Americans for Financial Reform
Jessica Renier, Managing Director, Digital Finance, Institute of International Finance
Marnie Rosenberg, Managing Director, Global Head of Central Counterparty Credit Risk and Strategy, JPMorgan Chase & Co.
Tyson Slocum, Director Public Citizen Energy Program, Public Citizen
Kristin Smith, Executive Director, Blockchain Association
Suzanne Sprague, Managing Director and Global Head of Clearing and Post-Trade Services, CME Group Inc.

CFTC Commissioners and Staff in Attendance

Kristin Johnson, Commissioner and MRAC Sponsor
Tamika Bent, Chief Counsel, Commissioner Johnson, MRAC Designated Federal Officer (DFO)
Peter Janowski, CFTC Division of Enforcement, MRAC Alternate Designated Federal Officer (ADFO)

Invited Speakers in Attendance

Cantrell Dumas, Director of Derivatives Policy, Better Markets
Jessica Garcia, Senior Climate Finance Policy Analyst, Americans for Financial Reform
Jennifer Han, Chief Counsel and Head of Global Regulatory Affairs, Managed Funds Association (Market Structure Subcommittee member)
Gary Kalbaugh, Deputy General Counsel and Director, ING Financial Holdings (Future of Finance Subcommittee member)
Elizabeth King, Global Head of Clearing and Chief Regulatory Officer, Intercontinental Exchange (CCP Risk and Governance Subcommittee member)
Dale Lewis, Chief Executive Officer, Community Markets for Conservation
Jai Massari, Cofounder and Chief Legal Officer, Lightspark (Future of Finance Subcommittee member)
Ashwini Panse, Head of Risk Oversight for ICE Clear Netherlands, and Chief Risk Officer for the North American Clearinghouses, Intercontinental Exchange (Market Structure Subcommittee member)
Holly Pearen, Lead Counsel, Environmental Defense Fund
Guy Rowcliffe, Co-CEO Chief Commercial Officer, OSTTRA (Market Structure Subcommittee member)
Paolo Saguato, Associate Professor of Law, George Mason University (CCP Risk and Governance Subcommittee member)
Nathaniel Wuerffel, Head of Market Structure, Bank of New York Mellon (Market Structure Subcommittee member)

I. Opening Remarks

Mr. Janowski called the Market Risk Advisory Committee to order. He introduced Commissioner Johnson and stated she would provide opening remarks.

Commissioner Johnson then delivered opening remarks, giving an overview of topics that would be discussed. She emphasized the Committee's role in enhancing market integrity and stability through recommendations and reports.

First, she stated the CCP Risk and Governance Subcommittee would present recommendations for enhancing resilience and recovery of CCPs. She emphasized the importance of these recommendations in shaping regulatory frameworks both domestically and internationally. Second, she stated that the Future of Finance Subcommittee would discuss the integration of artificial intelligence (AI) in financial markets, emphasizing governance, explainability, data controls, addressing bias, and the testing of AI models. The subcommittee would present its proposed workplan to explore these issues further. Third, other subcommittees, such as Market Structure and Treasury, would present on topics including FCMs, Treasury cash-futures basis trades, and post-trade risk reduction. She stated the meeting would conclude with discussions on climate-related markets risks and proposed guidance on carbon credit derivatives.

Commissioner Johnson expressed gratitude to the participants and committee members for their contributions and support in advancing the committee's work. She thanked Chair Crighton, Ms. Bent, Mr. Janowski, and members of the logistics and administrative staff, among others.

Mr. Janowski then discussed logistics and conducted a roll call for virtual attendees. He then turned the meeting over to Ms. Crighton, the MRAC Chair.

II. CCP Risk and Governance Subcommittee

Chair Crighton thanked all and highlighted the topics that would be discussed for the CCP Risk and Governance presentation. She introduced the speakers from the recovery and resolution workstream of the CCP Risk and Governance Subcommittee and outlined their agenda.

Mr. Cocco presented a comprehensive report focusing on enhancing resilience, recovery, and wind-down capabilities of CCPs. Mr. Cocco highlighted four key areas of recommendations to the support the CFTC's rulemaking efforts: (1) adopting credit and liquidity stress testing for all DCOs; (2) incorporating more detailed recovery and wind-down scenarios into regulations; (3) advocating for the inclusion of non-default losses in DCO planning; and (4) proposing an interagency task force between the CFTC and FDIC for information-sharing for resolution planning.

Ms. King discussed three critical topics relating to DCO recovery and wind-down plans: (1) supporting the report's recommendations on stress testing, emphasizing the importance of coordinated tests across multiple jurisdictions; (2) supporting the flexibility for DCOs to determine scenarios triggering recovery and wind-down, and arguing against overly prescriptive regulations that could increase risks by overlooking relevant scenarios; and (3) emphasizing the importance of porting as a tool in managing FCM failures and reducing contagion risks to other market participants.

Mr. Saguato focused on the international policy framework for CCP recovery and resolution, particularly in relation to proposed rules on DCO recovery and orderly wind-down plans. He made several key points: (1) emphasizing the global nature of CCPs and stressing the importance of global coordination in policy work to ensure a level playing field and to support CCP resilience; (2) highlighting the role of international standard-setting bodies in promoting principles for CCP resilience, recovery, and resolution; (3) emphasizing the importance of enhancing CCP resilience through participative risk management frameworks, and discussing the recent Financial Stability Board (FSB) consultation on financial resources and tool for CCP resolution; (4) underscoring that resilience is crucial for CCPs, reducing the likelihood of needing recovery or wind-down measures; and (5) supporting a principle-based regulatory approach in which stress testing is essential for operational predictability in recovery and resolution planning.

Mr. Dumas emphasized the critical role of DCOs in financial stability. He highlighted DCOs' roles as guarantors and emphasized their importance during market stress. He also supported the CFTC's proposed rulemaking on DCOs' recovery and orderly wind-down plans. Mr. Dumas stated that the proposed rules would enhance DCOs' risk management, resilience, and contingency planning; and would contribute to the overall resilience and stability of the financial systems.

Chair Crighton then opened the floor to questions and comments from the MRAC membership. Generally, the concerns and discussions raised in this section included: praise for the focus on CCP risk management; emphasis on the importance of addressing margin pro-cyclicality; enhancing transparency with international initiatives; the need to include non-default losses such as cyber and international events in recovery and resolution planning; and an emphasis on proactive planning and collaboration across regulatory and industry stakeholders.

Chair Crighton invited a motion to adopt the subcommittee's recommendation on DCO recovery and resolution, and to submit the recommendation to the Commission for consideration. Mr. Chatterjee made the motion, Mr. Berger seconded the motion, and the motion was adopted. Ms. Bent conducted a vote by roll-call with a simple majority needed to approve the recommendation. There were three votes to abstain and twenty-four votes in favor. A simple majority was achieved on the recommendation and it was adopted for submission to be considered by the Commission.

III. Future of Finance Subcommittee

Chair Crighton introduced Mr. Kalbaugh to present on behalf of the Future of Finance Subcommittee regarding the subcommittee's workplan relating to artificial intelligence.

Mr. Kalbaugh discussed two main aspects of AI: generative AI, and machine learning with low or no human supervision. He stated that the workplan included: (1) conducting a survey on the use of AI in CFTC-regulated markets to gather diverse external input; and (2) considering recommendations for the CFTC, which could include new guidance, advisories, or rulemakings related to AI models. He stated the subcommittee would gather information and input from a variety of sources for broader engagement.

Chair Crighton then opened the floor to questions and comments from the MRAC membership. Generally, the concerns and discussions raised in this section included: suggestions to have interagency discussions (between the SEC and Federal Reserve) regarding AI models, the need for comprehensive risk assessment and preparation, and the importance of leveraging existing AI regulations and to avoid adding unnecessary burdens on market participants. Chair Crighton concluded the discussion by affirming the subcommittee's intention to refine its workplan based on the feedback it received.

IV. Market Structure Subcommittee

A. FCM Concentration and Capacity Analysis

Chair Crighton introduced the next set of presenters for the Market Structure Subcommittee who would present the subcommittee's analysis on FCM concentration and capacity and then discuss two brief workstream updates.

Ms. Panse presented on behalf of the Market Structure Subcommittee regarding the subcommittee's workplan relating to artificial intelligence. She stated that the workstream's initial findings were presented at the December 2023 MRAC meeting and that on April 3, 2024, the subcommittee approved the dissemination of a detailed letter outlining its observations and conclusions.

The workstream had conducted an in-depth analysis of structural changes within the FCM industry over the past two decades. Key findings presented included a dramatic 69 percent decline in total FCMs, driven largely by independent FCMs not affiliated with banks or broker-dealers. FCMs holding customer funds for futures trading experienced a 58 percent decrease. Regulatory initiatives after the 2008 financial crisis and subsequent failures of significant FCMs due to fraud, led to increased capital and segregation requirements to safeguard customer assets and financial stability. Despite the consolidation, the remaining FCMs showed significant growth in managing client margin requirements, with holdings increasing from \$60 billion to over \$500 billion. However, the increase in minimal capital requirements and increased capital requirements impacted the cost of offering services and influenced the viability of smaller FCMs.

The report concluded by recommending further analysis to assess the impact of new mandates and reforms on FCM risk profiles, clearing capacity, efficiency, and market structure. It stressed the importance of maintaining risk-sensitive capital rules that incentivize clearing while aligning with broader policy objectives. Ms. Panse concluded by underscoring the critical need for ongoing scrutiny and regulatory responsiveness to ensure the resilience and competitiveness of the FCM industry.

Chair Crighton then opened the floor to questions and comments from the MRAC membership. Generally, the concerns and discussions raised in this section included: the recognition of the trend for consolidation among FCMs; whether Basel II regulations negatively impacted clearing operations or added stability despite increased costs; concerns about concentration risk due to FCM consolidation; debate regarding the causal links for FCM

consolidation; and support for further analysis on the minimum number of FCMs needed to maintain market stability.

Chair Crighton invited a motion to adopt the subcommittee's report on FCM Concentration and Capacity Analysis, and to submit the recommendation to the Commission for consideration. Mr. Karousos made the motion, Mr. Chatterjee seconded the motion, and the motion was adopted. Ms. Bent conducted a vote by roll-call with a simple majority needed to approve the recommendation. There were two votes of no, one vote to abstain, and twenty-four votes in favor. A simple majority was achieved on the report and it was adopted for submission to be considered by the Commission.

B. U.S. Treasury Cash-Futures Basis Trade Presentation

Chair Crighton introduced Mr. Wuerffel, who discussed U.S. Treasury cash-future basis trades. Mr. Wuerffel stated that the Treasury cash-futures basis trade gained significant attention since March 2020 due to its implications for financial stability and market functioning. The basis trade plays a critical role in the Treasury market ecosystem by influencing financing, monetary policy, and global investor liquidity.

Mr. Wuerffel stated that the Market Structure Subcommittee would aim to provide a comprehensive and balanced view of the basis trade. He explained the basis trade, noting that it involved buying a Treasury security financed in repo while simultaneously selling a Treasury futures contract. The trade leverages the small price difference between futures and cash bonds to generate returns. These trades are beneficial in that they enhance price efficiency between cash and futures markets, deepen liquidity, lower government funding costs, support portfolio optimization, and aid in capital formation. The risks associated with the basis trade include price volatility due to leverage, repo financing and rollover risks, margin volatility, security risks, and counterparty credit risks. The best practices to manage these risks include rigorous risk assessment and management, daily mark-to-market valuation, collateralization of trades, liquidity risk management, and strategies to mitigate portfolio concentration risks.

Finally, Mr. Wuerffel stated that the workstream planned to incorporate feedback on the presentation, consider developing a white paper, and explore additional data availability and regulatory considerations.

Chair Crighton opened up the discussion for member comments, and there being none, concluded the presentation.

C. Block Implementation and Post-Trade Risk Reduction Workstream Update

Chair Crighton introduced Mr. Chatterjee, who provided an update on the block implementation workstream and the post-trade risk reduction workstream.

Mr. Chatterjee acknowledged ongoing concerns from market participants regarding block sizes and their impact on swap transaction efficiency and risk hedging. He supported the CFTC's decision to extend new block thresholds until July 2024 and emphasized collaborative

efforts for data analysis. He suggested that the data analysis should focus on volume distribution across different block size ranges and should ensure accurate classification of trade types.

Mr. Chatterjee highlighted broad alignment on post-trade risk reduction benefits for market efficiency and risk reduction. He also clarified that post-trade risk reduction activities do not alter directional risk or allow bid/offer negotiations. He stated that this workstream would focus on ensuring adherence to rules and regulations while exploring exemptions from clearing, trading, registration, and reporting requirements.

Chair Crighton opened up the discussion for member comments. There was one comment regarding post-trade risk reduction and reporting being challenging in that many of the trades are both potentially in the cleared and uncleared markets.

V. Climate-Related Market Risk Subcommittee Presentation

Chair Crighton introduced the presenters for the Climate-Related Market Risk Subcommittee.

Mr. Lewis emphasized the pivotal role of forests in the carbon markets and their impact on small-scale farmers. He highlighted how deforestation due to negligence or greed exacerbates rural poverty and degrades soil quality. He encouraged focusing on sustainable agricultural practices for sustained, market-driven solutions. He stressed the importance of government collaboration with small-scale farmers for long-term impact.

Next, Ms. Pearen provided a recorded presentation. She emphasized the critical role of regulatory frameworks in attracting climate capital. She noted the growing consensus that regulatory oversight enhances certainty for buyers and sellers in carbon credit transactions, thereby increasing market participation and trust. She stated that carbon credits help corporations meet net-zero targets and bridge the estimated \$41 trillion climate funding gap. She also discussed how the voluntary carbon market has shown signs of maturity. Finally, she praised the CFTC's role in ensuring market integrity through initiatives such as the Environmental Fraud Task Force and the proposed Voluntary Carbon Credit guidelines.

Ms. Garcia began by acknowledging the Commission's attention to the voluntary carbon markets and the help it provides in reducing market risk. She also highlighted concerns about transparency and integrity within voluntary carbon markets, citing significant unaddressed challenges despite recent regulatory steps. She recommended specific enhancements to the proposed voluntary carbon credit derivatives guidance including: adding leakage risk as a separate quality standard; the need for clear requirements on social and environmental safeguards to mitigate fraud and manipulation risk; and better monitoring and increased enforcement actions against fraudulent practices in the voluntary carbon market.

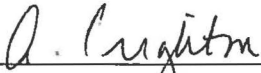
Chair Crighton opened up the discussion for member comments, and there being none, concluded the presentation.

VI. Closing Remarks

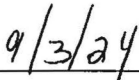
In closing, Chair Crighton expressed gratitude to all of the guest speakers and MRAC members for their efforts and insights.

Commissioner Johnson stated that all of the matters discussed were works in progress and members to the extent they would like to ensure their thoughts and viewpoints are accurately captured in any work product should feel free to do so. She stated Ms. Bent and the workstream leads were available to offer additional explanations or receive additional comments. The workstream leads for the CCP Risk and Governance Subcommittee are Mr. Cocco and Chair Crighton; for the Market Structure Subcommittee, Mr. Chatterjee and Ms. Battle; for the Future of Finance Subcommittee, Ms. Massari and Ms. Rettig; and for the Climate-Related Market Risk Subcommittee, Mr. Janowski. She also thanked all for their help in making the meeting possible. She specifically thanked many members of the logistics and administrative staff. She also thanked workstream participants.

Mr. Janowski adjourned the meeting at 11:54 a.m.



Alicia Crighton
Chair, MRAC



Date