MINUTES OF THE DECEMBER 10, 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, December 10, 2024, at 9:30 a.m., at the U.S. Commodity Futures Trading Commission ("CFTC" or "Commission") Headquarters Conference Center, located at Three Lafayette Centre, 1155 21st St., NW, Washington, DC. The meeting consisted of one keynote address and four panel discussions. The first panel consisted of the Market Structure Subcommittee's perspectives on Treasury markets and recommendations on the Treasury cash-futures basis trade and effective risk management practices. The next panel covered presentations on cyber resilience, and recommendations from the Central Counterparty (CCP) Risk and Governance Subcommittee on DCO system safeguards for third-party service providers, and legal entity identifiers (LEIs) at the beneficial account holder level. The MRAC also heard panels on topics related to the Future of Finance Subcommittee and the Climate-Related Market Risk Subcommittee. The meeting adjourned at 12:39 p.m.

MRAC Members in Attendance

Alicia Crighton, Chair of MRAC, Chair of the Board of Directors, Futures Industry Association ("FIA")
Robert Allen, President and Global Head of Fenics Rates, FMX Futures Exchange, LP
James Andrus, Vice President of Sustainability Global Markets, Franklin Templeton
Ann Battle, Senior Counsel, Market Transitions & Head of Benchmark Reform, International Swaps and Derivatives Association ("ISDA")
Stephen Berger, Managing Director, Global Head of Government & Regulatory Policy, Citadel LLC
Richard Berner, Clinical Professor of Management Practice in the Department of Finance and Co-Director of the Stern Volatility and Risk Institute (Speaker)
Alessandro Cocco, Vice President and Head of Financial Markets Group, Federal Reserve Bank of Chicago, on detail at the U.S. Department of the Treasury (Speaker)
Biswarup Chatterjee, Managing Director and Head of Innovation for the Global Markets Division, Citigroup
Tim Cuddihy, Managing Director and Group Chief Risk Officer, Depository Trust and Clearing Corporation (Speaker)
Ed Dasso, Senior Vice President, Market Regulation, National Futures Association
Graham Harper, Head of 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 Accounting Operations, Federal Home Loan Bank of Atlanta
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 Market Council
Chip Lowry, Board Member, Foreign Exchange Professionals Association (FXPA)
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
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.
Dmitrij Senko, Chief Risk Officer, Eurex Clearing AG
Tyson Slocum, Director, Public Citizen Energy Program, Public Citizen
Kristin Smith, Chief Executive Officer, 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 N. Johnson, Commissioner, MRAC Sponsor
Christy Goldsmith Romero, Commissioner
Danielle Abada, Senior Counsel to Commissioner Johnson, MRAC Designated Federal Officer ("DFO")
Chris Lamb, Senior Counsel to Commissioner Johnson, MRAC Alternate Designated Federal Officer for the Future of Finance and Climate-Related Market Risk Subcommittees

Invited Speakers

Josh Frost, Assistant Secretary for Financial Markets, U.S. Department of the Treasury ("Treasury")
Deidre Dunn, Head of Global Rates, Citigroup; Chair, Treasury Borrowing Advisory Committee (TBAC)
Scott Rofey, Global Head of Rates, Macro and Commodities Risk, Millenium; Member, TBAC
Dave Rogal, Managing Director, BlackRock; Member, TBAC
Nate Wuerffel, Head of Market Structure, BNY Mellon (Market Structure Subcommittee member)
David Bowman, Senior Associate Director, Board of Governors of the Federal Reserve System (Market Structure Subcommittee member)
Jennifer Han, Chief Counsel and Head of Global Regulatory Affairs, Managed Funds Association (Market Structure Subcommittee member)
Sanjeev Bhasker, Deputy General Counsel, Office of the National Cyber Director
Todd Conklin, Chief Artificial Intelligence Officer & Deputy Assistant Secretary of Cyber, Treasury
Steve Pugh, Chief Information Security Officer, Intercontinental Exchange
Don Byron, Head of Global Industry Operations and Execution, FIA
Juan Blackwell, Director, Risk, Head of Credit & Counterparty Risk Management, Ontario Teachers' Pension Plan (CCP Risk and Governance Subcommittee member)
John Bottega, President, EDM Council
Sandra Lee, Deputy Assistant Secretary, Financial Stability Oversight Council, Treasury

Christopher Odinet, Professor of Law & Mosbacher Research Fellow, Texas A&M University School of Law
Kim Ratliff, Chair, U.S. Department of Agriculture Advisory Committee on Minority Farmers; Board Member, Capital Farm Credit Advisory Committee; Treasurer and Board Member, Independent Cattlemen Association

I. Opening Remarks:

Ms. Abada called the meeting to order and introduced Commissioner Johnson, the MRAC Sponsor, who gave her opening remarks.

Commissioner Johnson welcomed attendees to the final MRAC meeting of 2024 and highlighted the MRAC's impact on regulations, industry standards, and best practices that govern global derivatives markets. She thanked the invited speakers, MRAC members, and attendees before giving an overview of the meeting agenda that covered three formal recommendations and presentations on the U.S. Treasury cash futures basis trade, cyber security and system safeguards for third-party service providers, artificial intelligence in the financial markets, and climate-related market risk.

Commissioner Goldsmith Romero followed with remarks that emphasized the importance of the Treasury markets and ongoing dialogue with registered entities. As sponsor of the Technology Advisory Committee (TAC) Committee, she highlighted two agenda items that are also within TAC's purview: cyber resilience and responsible artificial intelligence (AI) development.

II. Keynote Remarks by Assistant Treasury Secretary Frost

Mr. Frost's remarks described the critical roles of the Treasury market, including financing the U.S. government, implementing monetary policy, serving as a fixed-income asset for investors, acting as collateral for various transactions, and as a reference benchmark for global asset prices. He mentioned Treasury's evaluation of policy options to enhance market resilience and discussed the SEC's finalized rules requiring central clearing of certain Treasury securities and repo transactions. Additionally, Mr. Frost emphasized the importance of distinguishing between private costs to individual market participants and systemic costs to the broader financial system. He also discussed the cash futures basis trade, highlighting the roles of asset managers and hedge funds. He also noted the importance of dynamics on both sides of the trade, with asset managers preferring futures to repo for operational and reporting reasons, and hedge funds engaging in the basis trade opportunistically. He concluded by emphasizing the importance of balancing the benefits of leverage with resilience in periods of stress.

After Mr. Frost's remarks, Ms. Abada explained meeting logistics, Q&A format, and took roll call of committee members who were attending virtually. Ms. Crighton, the MRAC Chair, reiterated the meeting agenda and introduced the Market Structure Subcommittee Speakers' Panel.

III. Market Structure Subcommittee Presentations

A. Perspectives on Treasury Markets

Ms. Dunn discussed the Treasury cash futures basis trade, highlighting the growth of the U.S. Treasury market and the shift towards more price-sensitive investors, including hedge funds. She emphasized the importance of understanding market dynamics and the role of opportunistic players. She also discussed TBAC's role in providing a complete narrative of the basis trade and the need for continued monitoring of leverage in the Treasury market.

Mr. Rogal discussed why utilizing Treasury futures over repo might be preferable in certain scenarios, explaining that his firm, BlackRock, uses Treasury futures to manage interest rate risk, take positions on interest rates and curves, and to hedge interest rate risk in different parts of the firm's portfolios in different fixed income securities and sectors. He also stated that futures are favored for financing floating-rate or non-USD assets due to their operational simplicity, term finance benefits, leverage flexibility, and favorable interest expense reporting treatment under the Financial Industry Regulatory Authority (FINRA) guidelines. Mr. Rogal emphasized that the leverage used by asset managers in this approach is typically lower compared to the basis trade, noting that the increasing Treasury weight in indices like the AGG index has driven the demand for futures. He concluded by mentioning that BlackRock actively monitors the costs associated with using futures, including the CTD basis and liquidity premium.

Mr. Rofey provided a further explanation of the Treasury basis trade and discussed the role of hedge funds in particular. He also touched on leverage, market risk management, and liquidity management in the context of the Treasury basis trade, noting that some techniques for understanding how futures and bonds of different characteristics may move under stress, similar to the techniques used to develop regulatory margin models applicable to derivatives regulated by the CFTC. He also highlighted that his firm, Millennium, manages liquidity through its operating structure, with external investors committing capital via a share class that may only be redeemed over a five-year period.

B. Recommendations on the Treasury Cash-Futures Basis Trade and Effective Risk Management Practices

Mr. Wuerffel gave an overview of the goals of the Market Structure Subcommittee's report and recommendations on the Treasury cash futures basis trade, which includes a background white paper on the basis trade, a set of effective risk management practices, and additional considerations.

Mr. Cocco highlighted contents of the paper, such as the key components of the basis trade and the reasons behind the demand for the long futures position. Mr. Cuddihy outlined key areas for managing basis risk, including market risk, liquidity risk, and counterparty credit risk.

Ms. Han discussed the importance of studying the basis trade and having diverse markets, and expressed concern about the mandated timeline for clearing Treasury securities, stating that there is not enough time to build the proper infrastructure before the mandate goes into effect in 2026. Mr. Bowman highlighted the importance of establishing sound practices for engaging in the basis trade, including holding enough liquid resources, assessing extreme risks, and

understanding the potential for others to unwind trades simultaneously. Noting that some regulatory accounting practices incentivize the use of futures over repo, he argued that these practices should be reviewed to ensure that they treat similar positions in the same way economically.

Mr. Wuerffel reiterated the subcommittee's considerations, namely: (1) reviewing regulatory accounting or reporting practices, (2) improving the available data to the official sector, and (3) continually evaluating the basis trade and risk management practices in light to reflect changes in market structure.

C. MRAC Discussion and Vote

Member discussion followed the presentations. Mr. Slocum had a question about the potential impact of affiliate transactions between BlackRock and Millennium on the Treasury market. Mr. Wuerffel responded that the Report does not specifically address this issue.

Ms. Crighton then opened the floor for a motion to vote on the subcommittee's recommendations and to submit the recommendations to the Commission for consideration. Dr. Berner made the motion, and Mr. Karousos seconded the motion. Ms. Abada conducted a vote by show of hand with a simple majority needed to approve the recommendations. There were 23 votes in favor, zero no votes, and one abstention. The motion carried, and the recommendations were adopted.

IV. The CCP Risk & Governance Subcommittee Presentations

A. Ensuring Cyber Resilience

Mr. Bhasker's presentation highlighted the White House's perspective on cyber resilience, emphasizing the need to shift the cybersecurity burden from less equipped entities to those more capable of handling it and realigning incentives to balance immediate threat defense with long-term resilience planning.

Mr. Pugh highlighted the industry's increasing reliance on third-party vendors for critical business functions and the need for a proactive and structured approach to manage associated risks, stressing the importance of audits, compliance rights, and incident response planning, including tabletop exercises and participation in industry groups for information sharing and collective resilience.

Mr. Conklin's discussion focused on the importance of cybersecurity as a team sport, highlighting the collaborative efforts between the Treasury Department, regulatory bodies, and financial institutions in ensuring cyber resilience. He emphasized the role of public-private partnerships and information sharing in identifying and addressing cyber threats.

Mr. Byron discussed the work of FIA in response to the cyberattack on a single provider in the industry in March 2023. He highlighted the formation of a task force and the release of an after-action report with recommendations for improving industry resilience. Mr. Byron also

discussed the establishment of the Industry Resilience Committee (IRC) as one of the task force's recommendations, to serve as a forum for discussing cyber incident management, resilience planning, and best practices. He also previewed the development of a CCP incident response and data questionnaire to provide transparency on incident response plans, access to clearing records and data, data format, and data retention. The responses to the questionnaire will be provided to clearing members and third parties to improve future incident responses.

B. Preparedness for Third-Party Service Providers

Mr. Cocco then presented the CCP Risk and Governance Subcommittee report that would require DCOs to introduce a third-party relationship management program pertaining primarily to critical third-party service providers. The report's recommendations are intended to draw from lessons learned from industry-led exercises and be consistent with national and international regulatory standards. For support, Mr. Cocco cited to the federal banking agencies' interagency guidance on third-party relationships, the Federal Reserve Board's Regulation HH, the SEC's Regulation SCI, the EU's Digital Operational Resilience Act (DORA), as well as reports from the Financial Stability Board (FSB) and its principles for financial market infrastructures (PFMIs), , and the NFA interpretive notice on members' use of third-party service providers, among other sources. Mr. Cocco thus presented the recommendation that the Commission maintain a principles-based approach and build upon the framework already set out in the system safeguards rule found in Part 39, but also add third-party relationship management program requirements into the current wording of Part 39 and discussed key characteristics of such a program.

Dr. Berner reiterated the need to bring U.S. regulatory framework in line with internationally accepted standards, since the financial system is interconnected across borders. He believed the subcommittee recommendations would give the Commission the flexibility to engage with those entities adopting a principles-based approach, notwithstanding the differences across jurisdictions and legal arrangements.

Mr. Blackwell emphasized that DCOs should be held accountable for the performance and reliability of their third-party providers, similar to how traders are responsible for their own delivery mechanisms. He believed this is crucial for the CFTC's regulatory oversight and the overall stability of the financial system.

C. MRAC Discussion and Vote

After Mr. Blackwell's presentation, MRAC members engaged in a discussion about the recommendations.

Ms. Renier sought clarification on the connection between fraud and cyber resilience, emphasizing the importance of not conflating the two issues in the recommendations.

Mr. Conklin responded that the issue lies in the lack of clear jurisdiction and coordination in addressing fraud, particularly with the increasing use of AI tools. He highlighted the data gap

between larger and smaller institutions, emphasizing the need to support smaller institutions in accessing and securing data for fraud modeling.

Mr. Cocco clarified that the report does not conflate fraud with cybersecurity, and Ms. Rosenberg expressed JP Morgan's support for the recommendations, emphasizing the importance of third-party risk management and further encouraging the CFTC to align any future third-party risk management obligations for DCOs with the FSB's 2023 third-party risk management toolkit.

Mr. Slocum raised a question about disclosure of third-party service providers to the CFTC. Commissioner Johnson responded that the Commission is considering enhanced cyber regulations in the context of swap dealers but has not formally introduced any proposed rulemaking with respect to DCOs.

After member discussion, Ms. Crighton opened the floor for a motion to vote on the recommendations and to submit the recommendations to the Commission for consideration. Dr. Berner made the motion, and Mr. Reiner seconded the motion. Ms. Abada conducted a vote by show of hand with a simple majority needed to approve the recommendations. There were 24 yes votes, zero no votes, and one abstention. The motion carried, the recommendations were adopted and submitted to the Commission for consideration.

D. LEIs at the Beneficial Account Holder Level

Dr. Berner presented the CCP Risk and Governance Subcommittee's recommendations on LEIs at the beneficial account holder level, providing background on the history of LEIs and then emphasizing the importance of standardization and transparency, and especially in light of the 2023 ION cyber incident. He presented the proposal to amend CFTC Part 39 to mandate the use of LEIs or equivalent identifiers by the beneficial account owner level for daily reporting by DCOs.

Mr. Bottega attributed the challenges faced during the 2008 financial crisis in identifying and assessing exposures to Lehman Brothers to the lack of standardized identifiers, thus emphasizing LEIs' ability to gauge systemic risk by enabling identification of transactions, legal obligations, and risk concentrations — critical data during times of crisis. He also highlighted the global adoption of LEIs, particularly in regulatory reporting under MiFID II, where the "no LEI, no trade" rule mandates the use of LEIs for investment firms.

E. MRAC Discussion and Vote

MRAC members discussed the subcommittee recommendations, including challenges related to LEI implementation. Ms. Rosenberg expressed JP Morgan's support of the LEI for compliance with regulatory requirements, but that the recommendation to hold a roundtable should be implemented before changing the wording in the current CFTC regulation. Following further discussion, an amendment was proposed to modify the recommendation regarding the removal of the "where available" language in Part 39.19(c)(1)(i)(A), pending further discussion at a future roundtable. After member discussion, and following Commissioner Johnson's

suggestion to present the voting process in two steps, first on the amendment, and secondly on the amended recommendation itself. Ms. Crighton opened the floor for a motion to vote on the amendment, and Ms. Abada conducted a vote by show of hand with a simple majority needed to approve it. The amendment was voted on and passed with 18 yes votes, 2 no votes, and 5 abstentions. Ms. Abada then conducted a second vote, by a show of hand with a simple majority needed to approve it, on the amended subcommittee recommendation regarding LEIs at the beneficial account holder level. The amended recommendation was then voted on and adopted with 21 yes votes, 0 no votes, and 4 abstentions, and submitted to the Commission for consideration.

V. Future of Finance Subcommittee Presentation

Mr. Conklin discussed the key findings of a Treasury report on AI that was based on interviews with over 50 financial institutions. The report finds that existing regulations do not inhibit AI innovation, and that AI tools have been used in cybersecurity for two decades. However, there were requests for further refinement, and the report also identified a data gap between larger and smaller institutions, which could lead to consolidation in favor of larger institutions.

According to Mr. Conklin, generative AI tools are still being adopted cautiously, mainly for backroom functions, since AI's ability to mimic customers' audiovisual data presents a significant risk to authentication processes. Other challenges include gaps in human resources, the need for better digital identity solutions, and inconsistent terminology across the industry. To conclude, Mr. Conklin outlined various workstreams to address these challenges, including developing an AI lexicon, enhancing fraud prevention, creating an operational roadmap for smaller institutions, and developing AI nutrition labels and a detailed perspective on explainability to provide more transparency about how AI models are used. The goal is to complete this work by November of 2025.

There was no member discussion following Mr. Conklin's presentation.

VI. Climate-Related Market Risk Presentations

Ms. Lee discussed the work of the Financial Stability Oversight Council (FSOC) on climate-related financial risk, mentioning its 2021 report that provided 35 recommendations to financial regulators and the subsequent progress made by FSOC members in advancing these recommendations, including the formation of a new staff-level committee and an external advisory committee. Additionally, Ms. Lee emphasized the need for additional focus on insurance affordability and availability, the impact of insurance market shifts on the housing market, and the management of climate-related financial risk by the banking sector. Lastly, Ms. Lee highlighted the importance of collaboration among financial regulators to manage these risks.

Mr. Odinet discussed his experience as an appointed reporter for the Uniform Law Commission Project that is studying the commercial law framework around voluntary carbon credits. He described the distinction between regulatory and voluntary carbon credit markets,

comparing the California cap-and-trade program and the Regional Greenhouse Gas Initiative to the voluntary carbon credit market, which is driven by private initiative companies and their emissions reduction goals. To conclude, he emphasized the need for a legal framework in the voluntary carbon credit market, since fundamental legal issues in this area remain largely unaddressed.

Ms. Ratliff discussed her work to bridge the gap between minority producers and financial institutions, and the challenges faced by minority farmers in accessing financial markets, particularly in the context of carbon offsets. She highlighted issues such as access to capital, lack of standardization, and the technology gap that hinder minority farmers from benefiting from these markets. In conclusion, she emphasized the need for increased support, collaboration, and trust-building to enable minority farmers to participate in carbon offset programs and other financial opportunities.

There was no member discussion following the above presentations.

VII. Adjournment

In closing, Chair Crighton expressed gratitude to all of the guest speakers and MRAC members for a productive session.

Commissioner Johnson expressed gratitude to all MRAC members and acknowledged the significant work ahead in understanding and addressing market risks, particularly climate-related risks. She also thanked Commissioner Goldsmith Romero, Chair Crighton, Ms. Abada, and other attendees.

Ms. Abada thanked all attendees and adjourned the meeting at 12:39 p.m.

A. Crighton
Alicia Crighton, Chair, MRAC

4/14/25
Date