MINUTES OF THE JULY 17, 2023 MEETING OF THE U.S. COMMODITY FUTURES TRADING COMMISSION'S GLOBAL MARKETS ADVISORY COMMITTEE

The Global Markets Advisory Committee ("GMAC") convened for a public meeting on Tuesday, July 17, 2023, at 9:00 a.m. (eastern daylight time), at the New York Stock Exchange, located at 11 Wall Street, New York, NY. The meeting consisted of three panels. Panel I provided an overview of implications for and lessons learned from derivatives market and how they could be applied to treasury markets. Panel II provided an overview of the impact of CFTC swap block thresholds on market liquidity and execution quality. Panel III provided an overview of real-world use cases for tokenization of financial products and services as well as the application of tokenization to non-financial activities.

GMAC Members in Attendance

Perianne Boring, Chief Executive Officer, Chamber of Digital Commerce

Darcy Bradbury, Vice-Chair, GMAC, and Managing Director and Head of Public Policy, D.E. Shaw & Co.

Isaac Chang, Head of Central Execution, Global Fixed Income, Citadel

Adam Farkas, Chief Executive Officer, Global Financial Markets Association and Association, and Chief Executive Officer, Association of Financial Markets Europe

Amy Hong, Co-Chair, GMAC, and Head of Market Structure and Strategic Partnerships, Global Banking and Markets, Goldman Sachs

Steven Kennedy, Global Head of Public Policy, ISDA

Christopher R. Perkins, President, CoinFund

Bill Bolton, Chief Financial Officer, Refining, Products, and Low Carbon Americas Trading and Shipping, bp

Jason Chlipala, Chief Operating Officer, Stellar Development Foundation

Gerald Corcoran, Chief Executive Officer and Chairman of the Board, R.J. O'Brien & Associates

Adam Farkas, Chief Executive Officer, GFMA and Chief Executive Officer, AFME, GFMA John W. Horkan, LSEG Post Trade and LCH Group Chief Operating Officer and LCH Head of Americas, LSEG

Angie Karna, Managing Director and Head of Legal for Global Markets, Americas, Nomura

Jackie Mesa, Chief Operating Officer and Senior Vice President, Global Policy, FIA

Erik Tim Muller, Chief Executive Officer, Eurex Clearing AG, Eurex

Tetsuo Otashiro, Senior Head of Global Policy and Regulation, JSCC

Thomas Pluta, President, Tradeweb

Sachiyo Sakemi, Global Head of Legal for BlackRock Global Markets Group, BlackRock

Thomas Sexton, President and Chief Executive Officer, NFA

Thane Twiggs, Chief Compliance Officer, Cargill Risk Management, Cargill

Jason Vitale, Global Head of Foreign Exchange, Fixed Income & Equities, BNY Mellon

Stuart Williams, Chief Operating Officer, ICE

Julie Winkler, Chief Commercial Officer, CME Group

Jason Swankoski, Executive Director, Morgan Stanley

Chris Zuehlke, Partner and Global Head of Cumberland, DRW (virtual)

Nadine Chakar, Chief Executive Officer, Securrency (virtual)

Agnes Koh, Chief Risk Officer, SGX Group (virtual)

Mary-Catherine Lader, Chief Operating Officer, Uniswap Labs (virtual)

Ben MacDonald, Global Head of Enterprise Products and President of Bloomberg SEF LLC, Bloomberg LP (virtual)

CFTC Commissioners and Staff in Attendance

Caroline D. Pham, Commissioner and GMAC Sponsor

Christy Goldsmith Romero, Commissioner

Kristin N. Johnson, Commissioner

Summer K. Mersinger, Commissioner

Phil Raimondi, Senior Counsel and Policy Advisor, Commissioner Goldsmith Romero, GMAC Alternate Designated Federal Officer ("ADFO")

Invited Speakers in Attendance

Caroline Butler, Co-Chair, GMAC Digital Assets Market Subcommittee ("DAMS"), and Global Head of Digital Assets, BNY Mellon

Tim Crowley, GMAC Global Market Structure Subcommittee ("GMSS") member and Senior Vice President, Portfolio Management, PIMCO

Brian Fitzsimmons, Head of North America Rates Securities Trading, J.P. Morgan

Stuart Giles, GMAC Technical Issues Subcommittee ("TIS") member and Chief Strategy Officer, Tradition Americas

Tom Jessop, DAMS member and President, Fidelity Digital Assets

Sandy Kaul, Co-Chair, DAMS, Senior Vice President, Head of Digital and Industry Advisory Services, Franklin Templeton

Tara Kruse, Co-Chair, TIS member, Global Head of Infrastructure, Data, and Non-Clear Margin

Adam Lister, Interest Rate Swaps Electronic Trading Product Manager, North America, Bloomberg

Allison Lurton, Co-Chair, TIS, and General Counsel and Chief Legal Officer, FIA

Lynn Martin, President, NYSE Group and Chair, ICE Fixed Income & Data Services

Bhas Nalabothula, Head of US Institutional Rates, Tradweb

John O'Neill, DAMS member and Global Head of Digital Assets Strategy, HSBC

Max Segal, Vice President, Global Trading, BlackRock

Julian Sevillano, Partner, McKinsey & Company

Nicole Valentine, Esq., DAMS member and Fintech Director, Milken Institute

Matthieu de Vergnes, Associate Partner, McKinsey & Company

Tyler Wellensiek, Managing Director, Global Head of Rates Market Structure and Business Strategy, Barclays

Michael Winnike, Co-Chair, GMSS, and Director, Head of U.S. Market Structure, Global Trading Group, BlackRock

Peter von Zelowitz, Director, New York Innovation Center, Federal Reserve Bank of New York York

I. Opening Remarks

Mr. Raimondi called the meeting to order and turned the meeting over to Ms. Hong, the GMAC Chair. Ms. Hong welcomed the speakers, Commissioners, and Commissioner Pham as the sponsor of the GMAC. She introduced Commissioner Pham and noted that this was the second meeting under the latter's leadership, as well as the first meeting since the Commission voted to approve the three new GMAC subcommittees (global market structure, technical issues, and digital asset markets), and the appointment of 128 members across the three subcommittees.

Commissioner Pham gave her opening remarks. She emphasized the significance of global capital markets to financial stability and the need for global collaboration to promote regulatory cohesion and stability. She thanked the GMAC and subcommittee members as well as Commission staff, and praised Ms. Hong and Ms. Bradbury for their roles as chair and vice-chair of the GMAC. Finally, she introduced the panels, stating they would cover critical issues including treasury market reforms, swap block thresholds, and the tokenization of digital assets.

Commissioner Johnson then gave her opening remarks and thanked Commissioner Pham, Ms. Hong, and the meeting organizers. She discussed the evolution of financial markets from paper-based trading to electronic systems. She emphasized the global, interconnected nature of financial markets, acknowledging the importance of collaboration and intellectual sharing among experts. She also raised concerns about systemic risk in non-bank financial institutions and the need to focus on market resilience.

Commissioner Mersinger then gave her opening remarks and thanked Commissioner Pham, the CFTC staff, GMAC members, and the NYSE for their contributions to the GMAC meeting. She stressed the importance of government engagement with market participants and with the public for effective policy-making. She also focused on the CFTC's upcoming rulemaking regarding block size thresholds for swap data reporting. She voiced concerns about relying on outdated percentages and the need to reconsider the rulemaking to avoid negative outcomes for swap markets and end users.

Finally, Commissioner Goldsmith Romero welcomed Ms. Hong and the members of the GMAC and thanked Commissioner Pham for her sponsorship. She emphasized the need to examine potential reforms in the treasury market and to consider the proposal and considerations of other federal regulators, especially in the repo market. She also discussed the possibility of expanding central clearing in treasury cash transactions to improve transparency and reduce systemic risk.

Ms. Hong then introduced Ms. Martin, who began by thanking the Commissioners for holding the meeting at the NYSE, highlighting the historical significance of the exchange and discussing the evolution of the exchange through technology. She stressed the importance of system safeguards, collaboration across frameworks, and reliability and resiliency in today's financial systems. She thanked the GMAC members for their work and congratulated Ms. Hong on becoming chair.

The Global Market Structure Subcommittee then provided updates. Mr. Winnikie thanked Commissioner Pham and her staff for establishing the subcommittee. He also thanked the other Commissioners for their participation. He reported that the subcommittee had its first

meeting, and outlined its major areas of work, including formulating recommendations for global standards on market volatility, risk controls, and circuit breakers; examining the impact of treasury market reform on derivative markets; improving liquidity across asset classes; exploring the role of derivatives in asset liability management and funding markets; and providing recommendations for international alignment of trading and clearing obligations.

II. Panel I: Treasury Markets Reform: Implications for and Lessons Learned from Derivatives Markets

Ms. Bradbury then introduced the first set of panelists. Mr. Fitzsimmons discussed two main topics: (1) transparency, and (2) clearing in the treasury market. He also emphasized the importance of adding resiliency, and of protecting liquidity in the treasury market.

Mr. Fitzsimmons mentioned the importance of the "do no harm" approach when considering transparency and clearing reforms. He discussed the differences in liquidity profiles between on-the-run and off-the-run treasuries and the importance of the ownership profile of U.S treasuries when considering how to protect liquidity. He also stressed the importance of analyzing appropriate volume caps and reporting time, which should be risk-adjusted and flexible.

Regarding central clearing, Mr. Fitzsimmons discussed the benefits and potential costs associated with clearing treasury securities. He also highlighted the importance of considering concentration risks and systemic risks associated with clearing in the treasury market. Finally, he encouraged creating incentives to support market resiliency (e.g., cross margining).

Mr. Segal discussed the potential implications of expansion of cleared repo in the treasury market, with a focus on its impact on derivatives liquidity. He stated that these changes could impact funding costs to investors, liquidity (considering trace reporting and impact on the derivatives and block futures market), the frequency and size of basis trades, the likelihood of dislocation across the treasury curve, and the trading activities of high-frequency trading firms.

Mr. Chang underscored the need for central clearing, transparency, and careful consideration of regulatory proposals to ensure the efficiency and stability of the U.S. treasury market and its related markets. He emphasized the importance of the role of central clearing in reducing systemic risk and promoting market transparency, the need to consider the capacity for intermediation, the benefits of increased electronic trading and all-to-all trading models, the benefits of greater transparency in the treasury markets, concerns about the SEC's deal proposal and how it could disrupt trading activities across various markets, and the importance of basis trades in stabilizing prices and ensuring liquidity in the treasury markets.

Finally, Mr. Giles provided insights regarding being a global market aggregator and the importance of efficient regulatory structures and plumbing in enhancing market liquidity. He noted that the regulatory changes such as those brought about by swap execution facility regulations take time to implement successfully and introduce new risks. He stressed the importance of regulatory structures being adaptable to market changes, and emphasized the significance of efficient infrastructure and processes to facilitate market functioning.

Ms. Bradbury then opened the floor to questions and comments from the GMAC membership. Generally, the concerns and discussions raised in this session included: the need for adequate infrastructure to address the increase in clearing in repo markets and the changes in risk management practices by buy-side participants; the need for improved access to liquidity and cash for the buy side; concerns about the declining capacity of intermediaries in the financial industry; and the need for the CFTC to better assess and manage inherent risks in clearinghouses.

[Break]

III. Panel II: Swap Block Implications on Market Structure

Ms. Hong then introduced the second set of panelists. Mr. Kennedy discussed the upcoming changes in block thresholds and volume cap sizes in CFTC regulations and their impact on reporting and trading practices in the swaps market. He explained the history of block rules, described the method for determining block thresholds, and discussed the current and proposed thresholds for interest rate swaps.

Mr. Crowley discussed how the swap market and liquidity have evolved over the past ten years. He noted the transition from bilateral to cleared swaps, the emergence of SEFs, the variability in clearinghouse curves, the transition from LIBOR to SOFR, the electronification of markets, changing liquidity provisions, the shift to hedge funds, the rise of high-frequency proprietary trading firms, the impact of quantitative easing and tightening, and realized volatility regimes. He highlighted the fact that current market is characterized by high volatility and low market depth. He also noted that market depth for the cash treasury market serves as a proxy for liquidity in swaps. Generally speaking, higher volatility results in reduced market depth.

Mr. Winnike discussed the changes in the swap market and the impact of transparency on block sizes. He stressed the importance of carefully considering the balance between transparency and liquidity when setting block size thresholds in the current market environment. He discussed the benefits of SEF trading, balancing transparency and liquidity, the impact of volatility on liquidity, resetting block sizes, transparency advances, swap market impact on trading activity, and the need for further study.

Ms. Wellensiek stressed the importance of balancing transparency and flexibility to meet the diverse needs of clients in the swaps market. She focused on several key points related to the Dodd-Frank reforms and the importance of execution protocols and flexibility for the clients in the swaps market. She discussed the success of Dodd-Frank reforms, SEFs' attractiveness to global clients, swaps as principally a risk-taking market, the need for client flexibility, and the support of flexibility in global regulatory frameworks.

Mr. Lister then discussed the journey and impact of SEFs over the past decade and highlighted how SEF usage has revolutionized markets.

Finally, Mr. Nalabothula emphasized the importance of a balanced approach that considers the trade-off between transparency and market efficiency when making decisions about block sizes in the interest rate swaps market. He discussed the importance of engaging

with market participants to gather their views, considering a global perspective, engaging in thorough data analysis, and examining RFQ execution.

Ms. Hong then opened the floor to questions and comments from the GMAC membership. Generally, the concerns and discussions raised in this session included: the impacts of volatility, the need for data transparency, balancing transparency and liquidity, the long-term benefits of transparency, the needs of different types of market participants, post-trade reporting as a tool for assessing execution quality, and the need to further study new block thresholds to make sure they are appropriately calibrated.

The Technical Issues Subcommittee then provided an update. Ms. Kruse began by thanking the GMAC for the opportunity to co-chair the subcommittee. She stated that the subcommittee aimed to provide meaningful recommendations related to global market challenges that can be addressed through technology-based standards and solutions. She highlighted two of the four key areas of focus of the subcommittee: (1) amalgamation of trade reporting data for market oversight, and (2) improving efficiencies in post-trade processes. Ms. Lurton discussed the other two areas of focus for the subcommittee: (1) global coordination of market events, and (2) addressing unexpected market disruptions. She also mentioned other topics the subcommittee plans to work on. These included standardizing communication around planned events, monitoring CCP-leg global fire drill efforts related to default simulation, developing a playbook for handling the debt ceiling issue, and raising preparedness for the impact of a transition to T+1 settlement.

[Lunch]

Mr. Raimondi called the meeting back to order. The Digital Asset Markets Subcommittee then provided an update. Ms. Kaul discussed the rapid advancement in the digital assets ecosystem and highlighted key developments including the emergence of bitcoin, introduction of blockchain technology, the evolution of layer-one blockchains, the proliferation of layer-one blockchains, the introduction of layer-two blockchains, the global accessibility of this new ecosystem, tokenization of physical and digital assets, and an exploration of regulated digital assets use cases. Ms. Butler stated that the subcommittee aims to leverage diverse experiences and perspectives to address industry challenges related to adopting new technology. She highlighted the importance of 24/7 availability in digital asset markets, which can enhance transparency and real-time monitoring. She stated that the committee currently has five workstreams. Four of these workstreams focus on tokenized assets, including infrastructure, nomenclature, pre-trade, and post-trade considerations, as well as governance, risk, and control frameworks. The fifth workstream is for NFTs and utility tokens.

IV. Panel III: Tokenization of Real Assets and Institutional Adoption

Ms. Hong introduced the third set of panelists. The first presentation was by Mr. Sevillano, who discussed the fundamentals and benefits of tokenization, challenges, the current state of the industry, and collaboration within the industry. He emphasized the resilience of digital assets and blockchain technology despite market volatility. He stated that the technology was still maturing, and highlighted the importance of balancing security and reliability. He also

discussed the convergence of Web2 and Web3 technologies. While he highlighted the potential of these technologies, he also emphasized the need for adequate governance.

Mr. de Vergnes further described tokenization, the process of creating digital representation of an asset on the blockchain. The steps of tokenization include sourcing the asset, issuing the token and custody, distribution of the token, and asset servicing. He stated that tokenization had the benefits or continuous 24/7 operation, atomic settlement which increases capital efficiency, and the programmability of assets on the blockchain which can increase transparency and reduce errors. He also acknowledged the challenges in adopting tokenization, including lack of infrastructure and standards, market immaturity, short-term business case limitations, varied regulatory frameworks across regions, and lack of industry alignment.

Mr. Sevillano concluded by recommending the industry re-examine the underlying business case for tokenization, build the technology further to account for risks, form ecosystem relationships to reduce fragmentation, and focus on regulatory and technical standard setting.

Ms. Hong then opened the floor to questions and comments from the GMAC membership. Ms. Boring praised the presentation and highlighted the commercial applications. She offered to share research from the Chamber of Digital Commerce regarding NFTs and expressed interest in collaborating with the subcommittee.

Ms. Hong then introduced Mr. Farkas. Mr. Farkas stated he would focus on specific cases where Distributed Ledger Technology ("DLT") could be utilized in capital market transactions including collateral management, tokenization of financial assets, and sovereign bond issuance in tokenized format.

Mr. O'Neill emphasized the strong potential of DLT technology to drive growth and innovation in financial markets. He provided five key calls to action including harmonizing global regulatory frameworks, enabling interoperability, prioritizing resources for assets classes with high DLT potential, collaborating on technical solutions, and continuing the development of DLT-based payment solutions.

Mr. von Zelowitz presented findings from a proof of concept known as the regulated liability network ("RLN"). The RLN experiment focused on facilitating the exchange and settlement of regulated digital assets and was conducted in collaboration with various private sector organizations. The research was aimed to validate six benefits, including 24/7 atomic settlement, operational efficiency, interoperability, resilience, and programmability of assets. The experiment used two use cases—a domestic interbank payment between U.S. banks, and a single-currency cross-border payment denominated in U.S. dollars. The research demonstrated positive performance improvements, particularly in the cross-border use case, which highlighted more opportunities for enhancing cross-border payment systems compared to domestic systems. A question and answer session followed, which discussed the timeline of the experiment, the differences between domestic and cross-border use cases, a comparison to FedNow, and whether partitioning was used to control data access.

Mr. O'Neill presented on HSBC's digital asset platform. He emphasized the importance of interested buyers and sellers, solid legal and regulatory frameworks, and payment certainty as key components of any financial transaction including those involving digital assets. Finding issuers willing to issue digital assets is a challenge. Additionally, legal certainty and choice of jurisdiction play a vital role in determining the success of digital asset platforms. HSBC's digital asset platform focuses on fixed income markets, supports the fractionalization of assets, allows participants to access the platform via custody relationships for ease of access and enhanced security, allows for the tokenization of bonds and commercial bank money to enable digital delivery versus payment, facilitates secondary market transaction and repo operations to enhance liquidity, and is designed to connect with various custodians in different currencies and markets.

Ms. Hong stated the last segment of the day would comprise of member presentations, followed by open discussion. Ms. Kaul began by discussing Franklin Templeton's approach towards digital assets and provided a brief overview. They tokenized a U.S. government money market fund and have over \$300 million in assets under management in tokenized government bond funds. They view blockchain ecosystems as digital nation-states with their own currencies, governance, and transaction systems. Mr. Jessop then discussed Fidelity's approach in the digital asset space. They have explored public and enterprise blockchains, and launched a commercial business in 2018 to allow clients to buy and sell native digital assets like Bitcoin and Ether. He also emphasized the need for standards, cooperation, and integration with existing business processes. Mr. Perkins highlighted CoinFund's work with crypto-native staking rate benchmarks and discussed how they serve as global financial benchmarks and reference rates for risk transfer. Finally, Ms. Valentine discussed the Milken Institute's emphasis on the role of tokenization in building trust by reducing counterparty risk, preventing fraud, and fighting financial crime. She also discussed the inclusion opportunities created by tokenization. Overall, these speakers discussed their experiences and perspectives on digital assets, blockchain, and the potential benefits and challenges associated with their adoption in the financial sector.

V. Closing Remarks

In closing, Commissioner Pham thanked the participants for the excellent discussions and said she was looking forward to future discussions. Ms. Hong and Ms. Bradbury also thanked everyone for their contributions. Mr. Raimondi thanked Commissioner Pham, Ms. Hong, and Ms. Bradbury. He also thanked Commissioner Mersinger and Commissioner Johnson for attending the meeting.

Mr. Raimondi adjourned the meeting at 3:30 p.m. (eastern daylight time)

Amy Hong
October 18, 2023

Amy Hong
Chair, GMAC