

**MARKET RISK ADVISORY COMMITTEE MEETING
SPEAKER BIOGRAPHIES
MARCH 8, 2023**

ALICIA CRIGHTON, CHAIR

Alicia Crighton is a Managing Director, Global Co-head of Futures and Head of OTC and Prime Clearing at Goldman Sachs. Ms. Crighton joined Goldman Sachs in 1998 as an analyst in Global Control and was named Managing Director in 2013. Ms. Crighton joined the FIA Board of Directors in 2018, and currently serves as Chair of the Board of Directors for the Futures Industry Association. Ms. Crighton previously served as Vice Chairman in 2020, and was instrumental in the launch of FIA's board-level diversity initiative in 2019. Crighton is also a Member Director on Board of Directors at the Options Clearing Corporation (OCC) and serves on the Audit Committee.

SECTION ONE – CYBERSECURITY AND CCP RISK AND GOVERNANCE

Matthew Cronin
Director, Office of the National Cyber Director

Matthew Cronin is the Director of the Office of the National Cyber Director. The ONCD advises the President on cybersecurity policy and strategy, and Mr. Cronin helps lead the nation's efforts to overcome cybersecurity threats and ensure the United States is a leader in key emerging technologies. Mr. Cronin is on detail assignment from the U.S. Department of Justice, where he served as the National Security and Cybercrime Coordinator for the Executive Office for the United States Attorneys. Prior to these roles, Mr. Cronin served as a federal prosecutor for the U.S. Department of Justice. Mr. Cronin earned a B.A. in English and Psychology from Skidmore College, and a J.D. from the University of Michigan Law School.

Caitlin Clarke
Assistant National Cyber Director for Planning and Operations, Office of the National Cyber Director

Caitlin Clarke is the Assistant National Cyber Director for Planning and Operations in the Office of the National Cyber Director. Ms. Clarke joined ONCD from American Express, where she led efforts on cyber public-private partnerships, cyber readiness including planning and exercises, and global cyber regulatory engagements. Previously, Ms. Clarke directed all-hazards preparedness policy and planning efforts at the Federal Emergency Management Agency. In that role, she oversaw the development of the National Response Framework, the Federal Interagency Operational Plan for Response, and the National Incident Management System. She also co-led the development of the National Cyber Incident Response Plan. Ms. Clarke graduated from Providence College with a B.A. in Political Science and holds a Master's Degree in Public Policy, concentration in National Security, from George Mason University.

Panel One: Leadership Perspectives

Tom W. Sexton, III

President and Chief Executive Officer, National Futures Association

Tom Sexton is President and Chief Executive Officer of National Futures Association, a position he has held since March 2017. Mr. Sexton joined NFA in July 1991 and over the years held several legal positions with increasing responsibilities, including serving as NFA's Senior Vice President, General Counsel and Secretary from September 2001-February 2017. In his role as General Counsel, Mr. Sexton oversaw major regulatory initiatives impacting NFA's Member firms, enforcement matters, corporate governance and assisted with NFA's strategic planning and legislative affairs. Mr. Sexton currently serves on the Commodity Futures Trading Commission's Global Markets Advisory Committee and is a board member of Futures Fundamentals. Mr. Sexton holds a law degree from the University of Notre Dame Law School, an MBA degree from Loyola University Chicago and a Bachelor of Arts degree in Government from the University of Notre Dame.

Walt Lukken

President and Chief Executive Officer, Futures Industry Association

Walt Lukken is the President and Chief Executive Officer of the Futures Industry Association, a role he has held since 2012. Before joining FIA, Mr. Lukken was Chief Executive Officer of New York Portfolio Clearing. Prior to these roles, Mr. Lukken served as Acting Chairman of the CFTC from June 2007 to January 2009, and as CFTC Commissioner from 2002 to 2009. From 2003 to 2008, Mr. Lukken also served as Chairman of the CFTC's Global Markets Advisory Committee. Before joining the CFTC, Mr. Lukken served as counsel on the professional staff of the U.S. Senate Agriculture Committee under Chairman Richard Lugar. Mr. Lukken holds a B.S. degree with honors from the Kelley School of Business at Indiana University and a J.D. from Lewis and Clark Law School in Portland, Oregon.

Julie Holzrichter

Chief Operating Officer, CME Group

Julie Holzrichter is the Chief Operating Officer of CME Group. Ms. Holzrichter is responsible for leading CME Group's global operations and clearing and post-trade services divisions. She oversees CME Group's Market Operations including the Global Command Center, which is the first point of contact for customers using CME Group's Globex electronic production systems. She also leads CME Group's Trading Floor Operations, Global Market Solutions and Services, Data Centers and Critical Infrastructure, Global Security, and Business Continuity and Crisis Management functions. Over the course of her more than 25 years with the company, Ms. Holzrichter has held a variety of positions, including Senior Managing Director, Global Operations and Managing Director, CME Globex Services and Technology Integration. Ms. Holzrichter serves on the board of the National Futures Association and is a member of the Futures Industry Association.

Panel Two: Regulatory Perspectives

Amanda Olear Director, Market Participants Division, CFTC

Amanda Olear is Director of the Market Participants Division at the CFTC. In this capacity, Ms. Olear is responsible for the oversight of swap dealers, futures commission merchants, introducing brokers, commodity pool operators, commodity trading advisors, and their associated persons, and has been working in an acting capacity for this past year. Previously, she served as Deputy Director for Registration and Compliance since 2018.

Ms. Olear joined the CFTC in 2007 from Council, Baradel, Kosmerl & Nolan, P.A. in Annapolis, Maryland, where she focused on business entity formation and complex commercial litigation. Ms. Olear holds a J.D., with honors, from the University of Maryland Francis King Carey School of Law and a B.A., *summa cum laude*, from McDaniel College.

Greg Ruppert Executive Vice President, Member Supervision, FINRA

Greg Ruppert is the Executive Vice President of FINRA's Member Supervision organization, which protects investors and safeguards market integrity through surveillance and oversight of Member Firms and Registered Representatives. Mr. Ruppert sets the strategic direction of the Member Application Program, Risk Monitoring Program, Firm Examination Program, and Investigative Programs of the organization. Mr. Ruppert joined FINRA in 2020 as the Executive Vice President of FINRA's National Cause and Financial Crimes Detection Program (NCFC) within Member Supervision. In his prior role, Mr. Ruppert oversaw FINRA's National Cause Program, Financial Crimes Surveillance, and Specialized Investigative Units covering vulnerable adults and seniors, anti-money laundering and fraud, high-risk representatives, and cybersecurity.

Prior to joining FINRA, Mr. Ruppert was a Senior Vice President in Charles Schwab Corporation's Risk Management department. Prior to joining Schwab, Mr. Ruppert spent more than 17 years with the U.S. Government, serving in the Senior Executive Service and as a Special Agent in the FBI. Mr. Ruppert is a Professor of Practice at the University of the Pacific, School of Engineering and Computer Sciences. Mr. Ruppert holds a J.D. from the University of the Pacific's McGeorge School of Law and a B.A. from the University of the Pacific.

Panel Three: CCP Risk and Governance Subcommittee

Ashwini Panse Chief Risk Officer, North American Clearing, ICE

Ashwini Panse is the Chief Risk Officer for North American Clearing at ICE. Ms. Panse is also the Head of Risk Oversight for ICE Clear Netherlands and ICE Clear Singapore. Ms. Panse oversees the risk management framework at the clearing houses and provides expertise, support, and challenge to the management of all financial and non-financial risks. Prior to becoming Chief Risk Officer, Ms. Panse served in other leadership roles in Risk, Compliance, and Internal Audit across ICE's global business

units. Ms. Panse has served as the Chief Compliance Officer for ICE Trade Vault U.S., and, in her Internal Audit role, administered the Global Sarbanes Oxley 404 compliance and testing program and internal audits for ICE's U.S. subsidiaries.

Ms. Panse is Chair of the World Federation of Exchanges' CCP Working Group. She is a Board Member of the FIA Operations America Division, which promotes industry cooperation and exchange of ideas on all topics impacting the U.S. Marketplace. Ms. Panse holds an MBA in Finance from Xavier University, Williams College of Business and is a Certified Public Accountant and a Chartered Accountant.

Suyash G. Paliwal
Director, Office of International Affairs, CFTC

Suyash Paliwal is the Director of the Office of International Affairs (OIA) at the CFTC. In this role, Mr. Paliwal advises the CFTC Chairman on cross-border issues and leads the CFTC's international regulatory initiatives. OIA represents the Commission in international fora such as the International Organization of Securities Commissions (IOSCO), IOSCO's joint work with the Committee on Payments and Market Infrastructures (CPMI), and the Financial Action Task Force (FATF), and advises the Chairman on matters relating to the Financial Stability Board (FSB) and IOSCO's Financial Stability Engagement Group (FSEG).

Prior to joining the CFTC, Mr. Paliwal served at the Federal Reserve Board, where he advised on FSB matters, represented the central bank in the International Association of Insurance Supervisors and in bilateral forums, developed international and domestic policy for the supervision of systemically important financial institutions and certain financial conglomerates (insurance savings and loan holding companies), and oversaw the supervision of large financial institutions. Prior to his government service, Mr. Paliwal worked in private practice at White & Case and Allen & Overy, where he advised clients on complex international legal issues and derivatives regulations. Before entering law school, he worked in the financial services industry at Ernst & Young and Verisk Analytics, Inc. He holds a J.D. from Columbia Law School, an MBA from the University of Pennsylvania and a B.S. from the University of Pennsylvania.

Kirsten Robbins
Senior Special Counsel, Office of International Affairs, CFTC

Kirsten Robbins is the Senior Special Counsel in the CFTC's Office of International Affairs (OIA) and previously worked in the Division of Clearing and Risk. Ms. Robbins provides technical and legal advice on international and domestic policy pertaining to dynamic and highly complex financial developments. She advises the Chairman on cross-border issues and matters arising in multi-lateral standard setting groups. She represents the Commission in many international regulatory forums, including the FSB and IOSCO, and currently serves as the Co-Chair of the CPMI-IOSCO Policy Standing Group. Ms. Robbins has developed policy pertaining to a wide array of clearing house issues, including segregation, default management, recovery, and resolution.

Prior to this role, Ms. Robbins served in a variety of capacities for the Division of Clearing and Risk, including as Associate Director of International and Domestic Clearing Initiatives, Associate Chief Counsel, and Special Counsel in the Chief Counsel Branch. Prior to joining the CFTC, Ms. Robbins worked in private practice for Shearman & Sterling and Goodwin, focusing on complex civil litigation. Ms. Robbins holds a J.D. from Harvard Law School and a B.A. from Brandeis University.

SECTION TWO – THE FUTURE OF FINANCE

Chris Hayward

Chairman of Policy and Resources, City of London Corporation

Chris Hayward is the Policy Chairman of the City of London Corporation. In his role he speaks for the financial and professional services sector of the UK to Government and internationally. He is a former Deputy Leader of Hertfordshire and Dorset County Councils and was first elected to Common Council of the City of London Corporation for Broad Street Ward in March 2013 and continually re-elected since. He had a career as Managing Director of Companies in the Construction, Aviation Infrastructure and Global Events Management Sectors. He is now a Non-Executive Director of various companies in the commercial property, planning and communications sectors. Chris is an Honorary Bencher of the Inner Temple and Chairman of the Guild of the Royal Hospital of St Bartholomew. Chris is married to Alexandra. They have two children and live near Chorleywood, Hertfordshire and in the City of London.

Panel One: Developing A Regulatory Framework for Digital Assets

Timothy Massad

Research Fellow, Harvard Kennedy School

Timothy Massad is a Research Fellow at the Kennedy School of Government at Harvard University. Mr. Massad previously served as Chairman of the CFTC, from 2014 to 2017. Under his leadership, the CFTC implemented Dodd-Frank reforms of the OTC swaps market and harmonized aspects of cross-border regulation. Prior to his service at CFTC, Mr. Massad served as the U.S. Department of the Treasury's Assistant Secretary for Financial Stability. In that capacity, Mr. Massad oversaw the Troubled Asset Relief Program. Before entering public service, Mr. Massad was a partner at Cravath, Swaine & Moore. Mr. Massad is an Adjunct Professor of Law at the Georgetown University Law Center, and holds a B.A. from Harvard College and a J.D. from Harvard Law School.

Valerie Szczepanik

Director, Strategic Hub for Innovation and Financial Technology, Securities Exchange Commission

Val Szczepanik is the Director of the Strategic Hub for Innovation and Financial Technology (FinHub) at the U.S. Securities and Exchange Commission (SEC). Before that, she was the Senior Advisor for Digital Assets and Innovation and an Associate Director in the SEC's Division of Corporation Finance and, prior to that, she served as Assistant Director in the Division of Enforcement's Cyber Unit. Ms. Szczepanik has also served as a Special Assistant United States Attorney at the United States Attorney's Office for the Eastern District of New York. She clerked for federal judges on the United States District Court for the District of Columbia and the United States Court of Appeals for the Federal Circuit and, prior to clerking, practiced patent law. Ms. Szczepanik holds a J.D. from Georgetown University and a B.S. in Engineering from the University of Pennsylvania.

Eun Young Choi**Director of National Cryptocurrency Enforcement Team, U.S. Department of Justice**

Eun Young Choi is the Director of the National Cryptocurrency Enforcement Team at the U.S. Department of Justice. Prior to that role, Ms. Choi served as Senior Counsel to Deputy Attorney General Lisa O. Monaco. Ms. Choi began her career at the Department of Justice as an Assistant U.S. Attorney for the Southern District of New York, where she served as the office's Cybercrime Coordinator and investigated and prosecuted cyber, complex fraud and money laundering crimes, with a particular focus on network intrusions, digital currency, the dark web and national security investigations. She has also served as lead prosecutor in a variety of cases, including the investigation of a transnational organization responsible for the hacking of J.P. Morgan Chase and a dozen other financial companies, the operation of Coin.mx, an unlicensed virtual currency exchange, and the only U.S. prosecution brought in connection with the "Panama Papers." She holds a B.A. in Economics from Harvard College and a J.D. from Harvard Law School.

Mark Hays**Senior Policy Analyst, Americans for Financial Reform/Demand Progress**

Mark Hays is a Senior Policy Analyst with Americans for Financial Reform and Demand Progress. Mr. Hays works to ensure effective regulatory oversight of cryptocurrency and other financial technologies. Previously, Mr. Hays was the Anti-Money Laundering Campaign Director at Global Witness, where he led advocacy efforts to secure financial transparency measures, including legislation requiring shell companies to reveal their true owners. In other roles, Mr. Hays has led advocacy work at the intersection of business, human rights, and the environment for a range of organizations, including The Business and Human Rights Resource Centre, Greenpeace, Mighty Earth, NAACP, Public Citizen, The Sierra Club, Waxman Strategies, and others. Mr. Hays holds a B.A. degree from Tufts University and the New England Conservatory of Music.

Alessandro Cocco**Vice President and Head of Financial Markets Group, Federal Reserve Bank of Chicago**

Alessandro Cocco is Vice President and Head of Financial Markets Group (FMG) at the Federal Reserve Bank of Chicago. In that capacity, Mr. Cocco oversees a multidisciplinary research team that analyzes public policy issues in global financial markets. The group conducts policy research on trading, clearing, risk management and settlement of derivatives, securities, and other financial instruments.

Most recently, Mr. Cocco served as managing director and associate general counsel at a global systemically important bank, where he managed a wide range of efforts related to futures, swaps, clearing, financial technology, financial services regulation and compliance. Mr. Cocco was also an Adjunct Professor at New York Law School, where he taught courses on documentation and regulation of cleared and OTC derivatives. He holds a *Laurea in Giurisprudenza, cum laude*, from the University of Rome La Sapienza in Italy, a Diploma in Law and a Graduate Diploma in Law from the University of East Anglia in England, a Postgraduate Diploma in Legal Practice, with commendation, from The University of Law in London, England, and an LLM from New York University Law School.

Panel Two: Moving Beyond Common Use Cases: DeFi, Digital Identity, Interoperability and More on Distributed Digital Ledger or Blockchain Technology

Brad Levy
Chief Executive Officer, Symphony

Brad Levy is the chief executive officer at Symphony. Prior to Symphony, Brad was a partner and executive at a global analytics and information provider, IHS Markit, and also served as CEO of MarkitSERV. Earlier in his career, Mr. Levy spent 18 years at Goldman Sachs, serving as Managing Director and Global Head of the Principal Strategic Investments Group. Mr. Levy is also on the board of directors of LifeWorks, a human resources and technology company, publicly traded on the Toronto Stock Exchange. Mr. Levy earned a B.S. in Finance from the University at Albany, State University of New York.

Hayden Adams
Founder and Chief Executive Officer, Uniswap Labs

Hayden Adams is the Founder and Chief Executive Officer of Uniswap Labs, one of the most widely used decentralized exchanges built on the Ethereum blockchain. Prior to developing the Uniswap Protocol, Mr. Adams worked at Siemens performing engineering simulations and design exploration for clients in the automotive and aerospace industries. Before Siemens, Mr. Adams worked at Vista Wearable and the Columbia University Medical Center. Mr. Adams earned a B.E. in Mechanical Engineering from Stony Brook University.

Candace Kelly
Chief Legal Officer, Stellar Development Foundation

Candace Kelly is the Chief Legal Officer of the Stellar Development Foundation (SDF), a non-profit organization that supports the development and growth of Stellar. She leads SDF's legal team, and in that capacity is responsible for all of SDF's legal affairs and the policy team that is focused on bridging the gap between the public and private sectors, fostering dialogue and growing partnerships with global regulators and policymakers. Prior to joining SDF, Ms. Kelly worked for Uber Technologies, Inc., where she held a variety of positions, helping to navigate the company's response to regulatory investigations and advising on safety, security, privacy, consumer protection, and law enforcement response. Prior to SDF and Uber, Ms. Kelly spent 17 years at the United States Department of Justice, where she held positions as a legal and policy advisor on national security, criminal, and civil rights issues in leadership offices in Washington D.C. and as a prosecutor in the Northern District of California. Ms. Kelly holds a B.A. from Williams College, and a J.D. from the University of California, Hastings College of Law.

Linda Jeng
Chief Global Regulatory Officer and General Counsel, Crypto Council for Innovation

Linda Jeng is the Chief Regulatory Officer and General Counsel at the Crypto Council for Innovation. She has spent most of her career working on financial stability and regulatory reform at the agencies including Federal Reserve Board of Governors, the U.S. Treasury Department, the U.S. Senate, and the Financial Stability Board in Switzerland.

Linda was the Chief Policy & Regulatory Officer for the Centre Consortium, the stablecoin standards organization, and the Global Head of Policy at the startup Transparent Financial Systems. She is a Visiting Scholar on Financial Technology at Georgetown University Law Center's Institute for International Economic Law and a Senior Lecturing Fellow at Duke Law School. Ms. Jeng holds a B.A. from Duke, a Master of Advanced Studies from Université de Toulouse, and a J.D. from Columbia Law School.

Caroline Malcolm

Global Head of Public Policy, Chainalysis, Inc.

Caroline Malcolm is the Global Head of Public Policy at Chainalysis. Prior to joining Chainalysis in 2022, Ms. Malcolm was a founding Head of the OECD's Global Blockchain Policy Centre, where she led a team assessing the policy implications of DLT. Ms. Malcolm has also served at OECD as a Senior Advisor in Digitalization, a Counselor and Senior Advisor to the Director and Deputy Director, the Founding and Lead of Tax Inspectors Without Borders, and a Tax Policy Advisor for the Global Forum on Transparency and Exchange of Information for Tax Purposes. Ms. Malcolm has been a Visiting Lecturer at the Université Paris-Est Créteil since 2016. She earned a B.A. and LLB from the University of Technology Sydney, and an LLM from the University of Sydney.

SECTION THREE – CLIMATE-RELATED MARKET RISK, MARKET STRUCTURE AND INTEREST RATE BENCHMARK REFORM

Scott O'Malia

Chief Executive Officer, ISDA

Scott O'Malia is Chief Executive Officer of the International Swaps and Derivatives Association (ISDA), a position he has held since August 2014. At ISDA, Mr. O'Malia has led ISDA's drive to promote safe and efficient markets, and develop industry standards and legal documentation. Prior to joining ISDA, Mr. O'Malia was appointed by President Obama and was confirmed by the US Senate to serve as CFTC Commissioner. He served in this position from October 2009 until August 2014. While at the CFTC, Mr. O'Malia revived the Technology Advisory Committee, and led an active agenda investigating data standardization, highlighting trade execution rules and developing a better understanding of how algorithmic trading operates in regulated markets. Mr. O'Malia has also served as Professional Staff on the US Senate Energy and National Resources Committee under Chairman Pete Domenici (R-N.M.), and nearly 10 years working for US Senator Mitch McConnell (R.-Ky.), now the Senate Minority Leader.

Climate-Related Market Risk

Sonja Gibbs

Managing Director and Head of Sustainable Finance, Institute of International Finance; Member of the Board, the Integrity Council for the Voluntary Carbon Market (The Integrity Council)

Sonja Gibbs is a Managing Director and Head of Sustainable Finance at the Institute of International

Finance, and a Member of the Board for Integrity Council for the Voluntary Carbon Market. Ms. Gibbs leads the IIF's work on sustainable finance and sovereign debt policy, focusing on research and advocacy for the Institute's global membership across the financial services industry. Her policy work on behalf of the IIF includes outreach and liaison efforts vis-à-vis the G20/G7, the multilaterals, global regulators and standard setters, and the Central Banks and Supervisors Network for Greening the Financial System (NGFS), as well as the Glasgow Financial Alliance for Net Zero (GFANZ). She also serves on the boards of the Integrity Council for the Voluntary Carbon Market (IC-VCM), and of Egypt's Regional Center for Sustainable Finance (RCSF).

Ms. Gibbs has spent over 20 years in banking and financial markets, most recently with Nomura International in London, where she was Chief Equity Strategist. Earlier positions include stints as a U.S. economist and bank credit analyst in New York and Los Angeles. She is a Chartered Financial Analyst (CFA), and holds an MBA and B.A. from the University of California, Berkeley.

Tyson Slocum
Director, Public Citizen Energy Program

Tyson Slocum is Director of Public Citizen's Energy Program, covering the regulation of petroleum, natural gas and power markets. Mr. Slocum promotes an equitable energy transition that provides distributed renewable energy generation and sustainable transportation solutions for working families. He serves on the CFTC's Energy & Environmental Markets Advisory Committee, and frequently intervenes before the Federal Energy Regulatory Commission representing the interests of household consumers. Mr. Slocum presents his research in congressional testimony and appears regularly in the media. He is a member of the faculty at the University of Maryland Honors College, where he teaches energy and climate policy. Prior to joining Public Citizen in 2000, Mr. Slocum served as an analyst with the Institute on Taxation & Economic Policy. He is an expert in issues dealing with regulation and deregulation of energy markets, the impact of mergers and lax regulations over electricity, petroleum and natural gas and federal energy legislation.

Treasury Market Developments and Swaps Block Transactions

Brian Smith
Deputy Assistant Secretary for Federal Finance, U.S. Department of the Treasury

Brian Smith is the Deputy Assistant Secretary for Federal Finance for the U.S. Department of the Treasury. In that capacity, Mr. Smith is the lead career official responsible for financing the operations of the U.S. government, including cash and debt management, issuance strategy, auctions, investor relations, and regulatory policy affecting the Treasury market. Prior to that role, Mr. Smith served as the PTDO Assistant Secretary for Financial Markets, Director for the Office of Capital Markets, and a Senior Policy Advisor for the Office of Capital Markets.

Prior to his service at the U.S. Department of the Treasury, Mr. Smith worked at Bridgewater Associates as a Senior Investment Associate. Mr. Smith holds a B.A. in Economics and Government *cum laude* from Dartmouth College, and is a Chartered Financial Analyst.

Biswarup Chatterjee

Managing Director and Head of Innovation for the Global Markets Division, Citigroup

Biswarup Chatterjee is the Managing Director and Head of Innovation for the Treasury and Trade Services at Citigroup. In that capacity, Mr. Chatterjee develops business strategy for blockchain and DLT, and manages strategic investment portfolios. Mr. Chatterjee has served as a member of MRAC since 2017, a Member of the Board of Directors for ISDA since 2013, and a Member of the Board of Directors for ICE Clear Credit since 2009. Mr. Chatterjee holds a Bachelor of Technology degree from the Indian Institute of Technology Kharagpur, and an MBA from the Indian Institute of Management Ahmedabad and Columbia University.

Update on Transition Progress and Last Steps

David Bowman

Senior Associate Director, Program Direction Section, Monetary Affairs at the Board of Governors of the Federal Reserve System

David Bowman is a Senior Advisor at the Board of Governors of the Federal Reserve System. Mr. Bowman has served as the Board's senior staff liaison to the Alternative Reference Rates Committee, a group of private sector participants convened by the Board of Governors and Federal Reserve Bank of New York to help identify alternatives to LIBOR and to develop strategies to promote their use. Mr. Bowman has also served as The Federal Reserve Board's representative to the FSB's Official Sector Steering Group (OSSG). Mr. Bowman additionally serves as the Board of Governor's representative as an observer to the IBA LIBOR Oversight Committee. Mr. Bowman earned a B.A. in Economics from the University of California at Irvine, and a Ph.D. in Economics from the University of California at Berkeley.

Nathaniel Wuerffel

Senior Vice President Federal Reserve Bank of New York

Mr. Wuerffel is the Head of Domestic Markets at the Federal Reserve Bank of New York. In this role, he is responsible for the implementation of domestic monetary policy operations as directed by the FOMC in money markets, agency mortgage-backed-securities markets, and Treasury markets. He is also responsible for the Bank's administration of various reference rate benchmarks, including the Secured Overnight Financing Rate (SOFR). He serves as New York Fed's senior liaison to the Alternative Reference Rates Committee, a Fed-sponsored body tasked with facilitating the transition away from U.S. dollar LIBOR. Beginning in 2015, Mr. Wuerffel helped develop and sponsor an annual joint agency conference on the evolution of the Treasury market, and serves as the Bank's senior liaison to the Treasury Market Practices Group, a group of market professionals sponsored by the New York Fed that promotes best practices in the domestic markets. In 2008, Mr. Wuerffel transferred to the New York Fed from the Federal Reserve Bank of Chicago, where he held a variety of roles including leadership of the risk management and strategic planning functions. Mr. Wuerffel holds a B.A. from Valparaiso University and an M.A. from the University of Chicago.