



CCP

**Fifth Annual
Risk Management Conference:
Examining Regulatory Initiatives**
Federal Reserve Bank of Chicago
October 16, 2018

- 7:30 AM **Registration and Continental Breakfast**
- 8:00 AM – 8:10 AM **Master of Ceremonies**
John McPartland, Senior Policy Advisor, *Federal Reserve Bank of Chicago*
- 8:10 AM – 8:30 AM **Welcoming Remarks**
Charles L. Evans, President and Chief Executive Officer, *Federal Reserve Bank of Chicago*
- 8:30 AM – 9:00 AM **Introduction and Keynote Speaker**
Rostin Behnam, Commissioner, *U.S. Commodity Futures Trading Commission*
- 9:00 AM – 10:30 AM **Panel 1: Governance**
Speaker: Ruben Lee, Chief Executive Officer, *Oxford Finance Group*
Moderator: Robert Steigerwald, Senior Policy Advisor, *Federal Reserve Bank of Chicago*
Panelists
Juan A. Blackwell, Senior Principal, *Ontario Teachers' Pension Plan*
Lee Betsill, Chief Risk Officer, *CME Group*
Susan O'Flynn, Global Head of Clearing and Collateral Strategy and Optimization, *Morgan Stanley*
Til Schuermann, Partner, *Oliver Wyman*
Erik Tim Müller, Chief Executive Officer, *Eurex Clearing AG*
- 10:30 AM – 10:45 AM **Coffee Break**
- 10:45 AM – 12:15 PM **Panel 2: Supervisory Stress Testing**
Speaker: Kimmo Soramäki, Founder and Chief Executive Officer, *Financial Network Analytics (FNA)*
Moderator: Lise Estelle Brault, Senior Director, *Autorité des marchés financiers*
Panelists
Edward Anderson, Principal Quantitative Analyst, *Federal Reserve Board of Governors*
Eszter Tanai, Principal Market Infrastructure Expert, *European Central Bank*



Jorge Cruz Lopez, Principal Researcher, *Bank of Canada*
Mark Manning, Manager, Primary Markets Policy, *Financial Conduct Authority*
Richard Haynes, Supervisory Research Analyst, *U.S. Commodity Futures Trading Commission*
Stan Ivanov, President, *ICE Clear Credit*
Ketan B. Patel, Deputy Group Risk Officer, *Hong Kong Exchanges and Clearing Ltd.*

12:15 PM – 1:30 PM

Lunch and Fireside Chat

Keynote: John P. Davidson, President and Chief Operating Officer, *The Options and Clearing Corporation*

Moderator: Walt Lukken, President and Chief Executive Officer, *Futures Industry Association*

1:30 PM – 3:00 PM

Panel 3: Regulatory Risk

Speaker: Randall S. Kroszner, Norman R. Bobins Professor of Economics, *University of Chicago Booth School of Business*

Moderator: Dan Day-Robinson, Chairman, *International Commodities and Derivatives Association*

Panelists

Ananda Radhakrishnan, Vice President, Center for Bank Derivatives Policy, *American Bankers Association*

John P. Davidson, President and Chief Operating Officer, *The Options and Clearing Corporation*

Hester M. Peirce, Commissioner, *U.S. Securities and Exchange Commission*

Kazunari Mochizuki, Director for International Financial Markets (Settlements), *Financial Services Agency of Japan*

Kim Taylor, Former President, *CME Clearing*

Matthew F. Andresen, Chief Executive Officer and Founder, *Headlands Technologies LLC*

Michael Voisin, Global Head of Capital Markets, *Linklaters LLP*

3:00 PM – 3:15 PM


Closing Remarks

3:15 PM – 4:00 PM

Ice Cream Social

4:00 PM

Adjourn



Edward Anderson is a principal quantitative analyst at the Federal Reserve Board in Washington, DC, where he focuses on quantitative risk issues pertaining to the policy and supervision of central counterparties and other financial market infrastructures. Prior to joining the Federal Reserve Board in 2013, Anderson held quantitative front-office positions at U.S. banks, buy-side asset management firms, and energy-trading firms, where he focused on the valuation and risk management of derivatives and complex products. Anderson received an MS in computational finance from Carnegie Mellon University in 2000 and is a CFA charterholder.

Matthew F. Andresen is CEO of Headlands Technologies LLC, a global quantitative proprietary trading firm headquartered in Chicago, with offices in San Francisco and London. Headlands Technologies is active on many of the world's largest markets. He is also CEO of Headlands Tech Global Markets LLC (HTGM), a FINRA-registered broker-dealer that has grown into one of the leading liquidity providers in the municipal bond market. Before joining Headlands Technologies and HTGM, Andresen was co-CEO of Citadel Derivatives Group (CDG), an affiliate of Citadel Investment Group LLC. During his five years at CDG, he helped build the world's premier market-making and trading firm. In 2008 CDG accounted for 10 percent of all stock-trading volume and over 30 percent of all option-trading volume in the United States. Prior to Citadel, Andresen was president and CEO of Island ECN ("Island"), the largest electronic stock market in the United States. Under his leadership, Island grew from a start-up into the largest market for the trading of Nasdaq-listed stocks, ETF securities, and many NYSE-listed names. In 2002, he sold Island to its largest competitor, Instinet. After the merger, he served as COO of the combined market.

Currently, Andresen serves on the Securities and Exchange Commission's (SEC) Fixed Income Market Structure Committee (FIMSAC), advising the Commission on bond-trading issues. Previously, he served on the SEC's Equity Market Structure Committee (EMSAC), advising the Commission on stock-trading issues. He served on the board of directors of the International Securities Exchange, the Direct Edge Exchanges, and Lava Trading LLC. He also served on the Commodity Futures Trading Commission's Global Markets Advisory Committee. Andresen has appeared as an expert before U.S. Congressional Committees more than 20 times, testifying on a wide array of trading-related topics, such as the future of electronic markets, the impact of technology on commodity markets, and the effect of September 11 on financial markets. Andresen holds a BA in economics and political science from Duke University in Durham, North Carolina.


Rostin Behnam was nominated by President Trump as a commissioner of the U.S. Commodity Futures Trading Commission (CFTC) on July 13, 2017, unanimously confirmed by the U.S. Senate on August 3, 2017, and sworn in to serve for a term expiring in June 2021. Prior to joining the CFTC, Behnam served as senior counsel to U.S. Senator Debbie Stabenow of Michigan, a ranking member of the Senate Committee on Agriculture, Nutrition, and Forestry. Behnam served as counsel to Senator Stabenow since 2011, focusing on policy and legislation related to the CFTC and the Department of Agriculture. Prior to serving Senator Stabenow, Behnam practiced law in New York City and worked at the New Jersey Office of the Attorney General. Behnam is a graduate of Georgetown University and earned a JD from the Syracuse University College of Law.



Lee Betsill serves as managing director and chief risk officer for CME Clearing. He is responsible for advancing the company's risk-management framework, including all associated procedures, policies, and controls. Previously, he served as managing director, Global Clearing Operations, and as chief executive officer of CME Clearing Europe (CMECE). Under his leadership, CMECE grew to list a broad range of cash-settled and physically delivered OTC and exchange-traded derivatives, including interest rate swaps, foreign exchange, energy, metals, and commodities. It also provides clearing services for CME Europe, CME Group's London-based derivatives exchange. Prior to joining CME Group in 2010, Betsill served as managing director of EDX London. He joined the London Stock Exchange in 1995 after serving as head of clearing at Options Market London Exchange for seven years. His first job was on the trading floor of the Chicago Mercantile Exchange. Betsill holds a bachelor's degree in finance from the University of Wyoming and a master's degree in international management from the American Graduate School of International Management.

Juan A. Blackwell leads credit and counterparty risk management (CCRM) at Ontario Teachers', a pioneering pension plan that invests globally via derivatives and other alternative investments. CCRM at Teachers' entails using market-implied metrics and fundamental analysis to assess the probability of default for a global portfolio of the largest and most complex financial institutions, measuring PFEs, and then structuring collateralized derivative and securities financing agreements to ensure losses given failure are *de minimis* after accounting for entity-specific default probabilities. Prior to joining Teachers' in May 2013, Blackwell spent eight years at the Toronto-Dominion Bank and TD Securities. As a vice president in corporate and investment banking, he led lenders focused on direct, margin, toe-hold, and structured financings. Blackwell's global experience includes structured financings in over 42 countries. Blackwell studied economics at Ave Maria University's campus in Nicaragua and obtained his MBA from L'École des Hautes Études Commerciales (HEC) de Montréal. Blackwell pursues global views of capital markets, market infrastructures, and investment risks.

Lise Estelle Brault is senior director of derivatives oversight at the Autorité des marchés financiers (AMF). Her department is responsible for the implementation of derivatives regulatory policy in Quebec, including the ongoing development of over-the-counter derivatives oversight following the financial crisis. Her team is also responsible for developing the AMF expertise in the analysis of trade repository derivatives data. In her current role, she is responsible for qualifying counterparties who offer derivatives to Quebec retail clients and for approving the products on offer. Moreover, she chairs the AMF Derivatives Advisory Committee, a forum to gain insight into relevant issues and maintain an open dialogue between sector participants and the AMF with respect to the efficiency of the exchange-traded and over-the-counter derivatives framework. Brault co-chairs the Canadian Securities Administrators' Derivatives Committee, whose mandate is to develop a common regulatory approach for Canada's derivatives markets.



Brault is a member of the AMF Fintech Steering Committee and leads the workstream dedicated to study the blockchain technology and its potential impacts on financial markets. She initiated the development of an internal laboratory to experiment with various new technologies with a view to anticipate regulatory and consumer protection issues. She has also contributed to the Women's Development and Leadership Committee at the AMF, in particular with the implementation of a mentoring program. In 2017, she won the Étoile Montante Prize offered by the Association des femmes en finance du Québec.

Prior to joining the Autorité des marchés financiers, Brault gained ten years of experience in financial risk management at the Caisse de dépôt et placement du Québec and at PSP Investments, during which she developed a thorough knowledge of investment strategies involving derivatives. She has also designed and implemented risk-management policies for portfolios of liquid and illiquid assets. Brault holds a master's degree from the London School of Economics and Political Science, where she studied finance and economics. She also has a bachelor's degree in mathematics and economics from the University of Montreal.

Jorge Cruz Lopez is a principal researcher at the Bank of Canada and a lecturer at the Telfer School of Management at the University of Ottawa and the Sprott School of Business at Carleton University. He is also a member of the advisory board of the New York Institute of Finance. Cruz Lopez joined the Bank of Canada in 2011. In his current role he conducts and oversees research and policy work in the areas of asset pricing, risk management, and financial market infrastructures. He has participated in multiple working groups relating to financial stability and regulatory reforms in derivatives markets and payment systems. He has also served as the associate editor of the *Financial System Review*, the main publication of the Bank of Canada devoted to the assessment of systemic risks in Canada and globally. His recent work proposes new techniques for improving the management of payment systems and derivatives central counterparties (CCPs) through the efficient use of collateral and default resolution arrangements. He has also worked on optimizing foreign reserve portfolios and lately on assessing structural risks in distributed ledger technologies (DLTs) and e-money transactions. Cruz Lopez has published in both academic and practitioner journals and has been a speaker at several conferences, universities, and policy institutions, including the Bank for International Settlements (BIS) and most of the central banks in the G10. Prior to joining the Bank of Canada, Cruz Lopez worked as a finance lecturer at the Beedie School of Business at Simon Fraser University in Vancouver, Canada. He holds a PhD from the same university and has been a visiting scholar at HEC Paris in France and at Queensland University of Technology in Australia.

John P. Davidson is the president and chief operating officer at OCC, the world's largest equity derivatives clearing organization and the foundation for secure markets. OCC is regulated by the Securities and Exchange Commission as a covered clearing agency and by the Commodity Futures Trading Commission as a derivatives clearing organization.




Davidson is responsible for the organization's Information Technology and National Operations business units and shares responsibility with the chief administrative officer for OCC's Financial Risk Management function. These are part of OCC's responsibilities as a systemically important financial market utility.

Davidson has over 35 years of experience in the global financial industry. Prior to joining OCC he served as chief compliance officer at Citigroup. In that role, he led the global 2,400-person, 87-country compliance organization, responsible for proactively identifying, evaluating, mitigating, and reporting on compliance, conduct, regulatory, and reputation risks across the institution. Previously he served as Citi's Risk Division's chief administrative officer, helping rebuild the risk function during the financial crisis, and subsequently as head of Enterprise Risk Management, where he was responsible for managing Citi's operational risk across businesses and geographies.

Before his tenure at Citi, Davidson spent two years as chief business development officer at CME Group, a global exchange holding company. He spent 12 years at Morgan Stanley, serving as managing director for its Institutional Operations Division. He rebuilt the firm's global institutional processing system and opened new processing centers on four continents, away from major financial centers. Early in his career, Davidson worked for ten years as head of the CME Clearing House, successfully guiding it through the 1987 stock market crash and leading the initiatives to substantially enhance its financial safeguards based on lessons from that period. Among other accomplishments, he was instrumental in developing and implementing the Standardized Portfolio Analysis of Risk (CME SPAN®) margining system as well as the Globex® Control Center.

Davidson earned an MBA in financial management and international business from the University of Chicago and graduated from the University of Illinois–Urbana with a bachelor's degree in political science.

Dan Day-Robinson is chairman of the International Commodities and Derivatives Association (ICDA). ICDA is an association serving the international exchange-traded and OTC-cleared derivatives community founded in the late 1970s. Prior to ICDA, Day-Robinson was at the United Nations in Geneva, working for UNCTAD between 2009 and 2010 as economic affairs officer for a unit reporting to the secretary-general. From 1998 to 2010, Day-Robinson was managing director of a UK commodity risk management, project, and training consultancy advising major clients, including the UK government, Dubai government, Qatar Investment Authority, and the World Bank. After leaving London University, Day-Robinson started his career at Cargill as a grain trader, and then went on to work at Kleinwort Benson as an equities market-maker. Since 2004 Day-Robinson has given independent evidence as an expert witness in a number of commodity and warehouse finance cases, notably in the English High Court and the Dutch Court of Arbitration.



Charles L. Evans has served as president and chief executive officer of the Federal Reserve Bank of Chicago since September 2007. In that capacity, he serves on the Federal Open Market Committee (FOMC), the Federal Reserve System's monetary policymaking body. Before becoming president Evans served as director of research and senior vice president, supervising the Bank's research on monetary policy, banking, financial markets, and regional economic conditions. His personal research has focused on measuring the effects of monetary policy on U.S. economic activity, inflation, and financial market prices, and has been published in peer-reviewed journals. Evans is active in the civic community. He is a trustee at Rush University Medical Center, a director of the Chicago Council on Global Affairs, a governing board member of Econ Illinois, a member of the Economic Club of Chicago board of directors, and a member of the Civic Committee of the Commercial Club of Chicago and Civic Consulting Alliance Board. Evans has taught at the University of Chicago, University of Michigan, and University of South Carolina. He received a bachelor's degree in economics from the University of Virginia and a doctorate in economics from Carnegie Mellon University in Pittsburgh.

Richard Haynes joined the U.S. Commodity Futures Trading Commission in 2014. He works on various rulemakings and policy matters, most recently including the Commission's Concept Release on Automated Trading and the *Joint Report on the U.S. Treasury Market*. His research interests are market microstructure, high-frequency and automated trading, trading networks, derivatives market liquidity, and trends in derivatives clearing and execution. Prior to joining the Commission, he worked as a derivatives policy advisor at the U.S. Treasury and as a commodities trader/quantitative analyst at Credit Suisse. His research has been published in journals such as the *Journal of Financial and Quantitative Analysis*, *Journal of Mathematical Sociology*, and *Journal of Management Inquiry*. Haynes received a PhD in mathematics from the University of Chicago.

Stan Ivanov is president of ICE Clear Credit, an Intercontinental Exchange Inc. (NYSE: ICE) wholly owned clearing house. He previously served as chief risk officer at ICE Clear Credit and ICE Trust US. He was responsible for the design, implementation, and execution of all credit default swap (CDS) risk management efforts. Ivanov was instrumental to the launch of the CDS clearing services at ICE Trust US and ICE Clear Europe in 2009. Prior to joining ICE, Ivanov held the position of chief risk officer at LJM Partners, where he was responsible for the development of new investment strategies and portfolio hedging trading. From April 2000 to April 2007, Ivanov managed and supervised the quantitative risk management modeling efforts at The Options Clearing Corporation (OCC). He was the architect of OCC's risk-management approach known as System for Theoretical Analysis and Numerical Simulations (STANS). Ivanov received his PhD in quantum mechanics from Tulane University. He also holds a master of science in financial mathematics from the University of Chicago and masters' degrees in chemical physics and international relations from the University of Sofia, Bulgaria.




Randall S. Kroszner is the Norman R. Bobins Professor of Economics and deputy dean for executive MBA programs at the Booth School of Business of the University of Chicago. From 2006 to 2009, he served as a Governor of the U.S. Federal Reserve System, where he took a leading role in developing responses to the financial crisis. He chaired the Fed's Committee on Supervision and Regulation and the Committee on Consumer and Community Affairs. He represented the Fed on the Financial Stability Board, the Basel Committee on Banking Supervision, and the Committee of Central Bank Governors of the Americas. He chaired the OECD Working Party of deputy central bank governors and deputy finance ministers on international macroeconomic policy. From 2001 to 2003, Kroszner was a member of the U.S. President's Council of Economic Advisers, where he worked on issues including sovereign debt restructuring, currency crisis management, terrorism risk insurance, financial regulation, corporate governance, and IMF reform.

Kroszner currently serves as the chair of the Financial Research Advisory Committee to the Office of Financial Research at the U.S. Treasury. He is a member of the Federal Reserve Bank of Chicago's Academic Advisory Council and the advisory board of the Paulson Institute. He is a research associate of the National Bureau of Economic Research.

Kroszner has more than 100 publications, including his book with Nobel laureate Robert J. Shiller, *Reforming U.S. Financial Markets: Before and Beyond Dodd-Frank*, which appeared on the *Washington Post's* "Book World" political bestsellers' list. His paper on corporate ownership won the Brattle Prize for Best Corporate Finance Paper in the *Journal of Finance*. Kroszner is a much sought-after media commentator and consults with financial institutions, government organizations, and central banks throughout the world. Kroszner received an ScB from Brown University and a PhD from Harvard University.

Ruben Lee is the CEO and founder of Oxford Finance Group, a consulting firm which concentrates on business, economic, legal, political, regulatory, and strategic aspects of financial markets. From 1989 to 1992, Lee was a fellow of Nuffield College, Oxford University, where he specialized in financial economics and law. He worked from 1980 to 1984 in the capital markets in New York and London for Salomon Brothers International. Lee has published widely on many topics concerning financial markets, including on exchanges, clearing and settlement, market data, regional integration, and regulation. He has written two books: *Running the World's Markets: The Governance of Financial Infrastructure* (Princeton University Press) and *What Is an Exchange? The Automation, Management and Regulation of Financial Markets* (Oxford University Press).

Walt Lukken is the president and CEO of the FIA, the leading global trade organization for the futures, options, and centrally cleared derivatives markets, with offices in London, Singapore, and Washington, DC. FIA's membership includes clearing firms, exchanges, clearinghouses, trading firms, and commodities specialists from more than 48 countries as well as technology vendors, lawyers, and other professionals serving the industry. FIA's mission is to support open, transparent, and competitive markets; protect and enhance the integrity of the financial system; and promote high standards of professional conduct. As the principal members of derivatives clearinghouses worldwide, FIA's clearing firm members play a critical role in the reduction of systemic risk in global financial markets.



Lukken previously was CEO of New York Portfolio Clearing, the derivatives clearinghouse jointly owned by NYSE Euronext and the Depository Trust and Clearing Corp. Before joining the private sector in 2009, Lukken served as acting chairman of the Commodity Futures Trading Commission for 18 months, a period that included the financial crisis of 2008, and as CFTC Commissioner since 2002. Prior to joining the CFTC, Lukken served for five years as counsel on the professional staff of the U.S. Senate Agriculture Committee under Chairman Richard Lugar. He received his BS from the Kelley School of Business at Indiana University and his Juris Doctor from Lewis and Clark Law School in Portland, Oregon.

Mark Manning recently joined the Markets Policy Function of the UK's Financial Conduct Authority (FCA), after a period in industry leading Euroclear's work on recovery and resolution. Prior to joining Euroclear, Mark spent 15 years as a central banker, holding a number of senior positions at both the Bank of England and the Reserve Bank of Australia. His particular area of interest was financial market infrastructure supervision, policy, and research. Manning spent several years as a member of the Committee on Payments and Market Infrastructures, contributing to a number of working groups and leading workstreams on implementation monitoring of the *Principles for Financial Market Infrastructures* and supervisory stress testing of CCPs. Manning has published a number of articles and research papers on payments and financial market infrastructure issues, and is co-editor of a book entitled *The Economics of Large-Value Payments and Settlement: Theory and Policy Issues for Central Banks*. He holds an MSc in economics from University College London, an MSc in finance from the London Business School, and a BSc in economics from the University of London.

John McPartland is a senior policy advisor in the Economic Research Department at the Federal Reserve Bank of Chicago. He advises the Chicago Fed's senior management on matters involving international netting systems; settlement systems for fixed income and equity securities in G5 countries; exchange-traded derivatives; privately negotiated derivatives; risk-mitigation techniques, especially bilateral collateralization of foreign exchange and derivatives instruments; margining systems of derivatives exchanges in G10 countries; idiosyncrasies affecting U.S. securities markets; payment initiatives; and issues relevant to collateralizing or clearing over-the-counter (OTC) derivatives instruments or issues raised by high-frequency trading. McPartland also contributes to the Federal Reserve's position on public policy issues involving netting systems, supervisory oversight of exchange-traded and OTC derivatives, international competitiveness, and appropriate regulatory structure of domestic financial markets. He serves as a technical expertise resource that can be seconded to other national authorities.




Kazunari Mochizuki is director for International Financial Markets (Settlements) at the Financial Services Agency of Japan (JFSA). Mochizuki joined JFSA in 2006 in the Office of International Affairs and, for the past several years, he has been involved in issues related to OTC derivatives reforms and to regulation/supervision of financial market infrastructures. In this context, he has been actively involved in the work of FSB as well as CPMI-IOSCO. Before joining JFSA, he had worked for several investment banks in Tokyo. Mochizuki holds a Master of Economics from the Graduate School of Kobe University (1996).

Erik Tim Müller, CEO of Eurex Clearing AG, has over 20 years of experience in capital markets and is a member of the executive board of Eurex Clearing AG since April 2013. He is also a member of the management board of Eurex Deutschland. As managing director of Deutsche Börse Group, he has been previously responsible for corporate strategy and mergers and acquisitions (M&A) for many years. Since the IPO of Deutsche Börse in 2001, Müller has been a manager of Deutsche Börse Group. He has been responsible for group treasury and investor relations, including all treasury activities of the two bank-licensed businesses of Deutsche Börse Group, Eurex Clearing in Frankfurt/Main and Clearstream in Luxembourg, since 2008. He was a member of the supervisory board of Eurex Clearing AG from October 2010 until March 2013. Müller holds a dual-degree MBA from Goethe University in Frankfurt/Main, Germany, and the Fuqua Business School in North Carolina, USA.

Susan O’Flynn is global head of clearing and collateral strategy and optimization and recently was also appointed European head of bank resource management for Morgan Stanley. She is responsible for strategy and optimization of the firm’s global risk exposure to CCPs and associated resource usage across all products, including listed and OTC derivatives and securities finance transactions (SFTs), as well as collateral optimization of all other derivatives exposures. From 2012 to 2017, O’Flynn has held a number of roles, including global head of CCP strategy and optimization and global head of firm secured funding. Prior to that, she ran the firm cross-asset structured funding business, raising long-term secured financing for all asset classes.

Before joining Morgan Stanley in 2008, O’Flynn worked in the structured funding business at Goldman Sachs in London and New York for three years, predominantly focusing on fixed-income financing of vanilla and less-liquid assets. O’Flynn previously practiced as a debt capital markets lawyer for two years at White & Case LLC, focusing primarily on emerging markets. O’Flynn holds a master’s degree in intellectual property law (LLM) and a bachelor’s degree in law (LLB).

O’Flynn has been a member of the board of LCH Limited since early 2016. She also was an original member of the CFTC Market Risk Advisory Committee and chair of the Risk Management Sub-Committee focusing on market conditions. She has spoken at several conferences in recent years on the importance of central clearing of SFTs, including the RMA, IMN, and GFF Conference as well as CCP recovery and resolution in various regulatory forums.



Ketan B. Patel is a managing director in group risk management at Hong Kong Exchanges and Clearing Ltd; in 2016 he became the deputy group risk officer. Patel heads up the HKEX Group Credit and Quantitative Analysis Function as well as serving as chief risk officer for OTC Clear. He also oversees risk policy and risk system development. He was the head of risk management from January 2015 through January 2016, where he oversaw the ERM Function and established governance of HKEX's Risk Management Functions. Prior to that, he was co-head of clearing risk management as well as chief risk officer for OTC Clear at HKEX. Prior to joining HKEX, Patel worked at the CME Group, where he led quantitative modeling and risk-policy efforts—internally known as risk research. His other risk-management roles encompassed exchange-traded and OTC FICC products, as well as equity derivative products. This experience incorporates risk-managing events such as REFCO, the Sentinel Investments collapse, the Lehman Brothers bankruptcy, as well as the general financial crisis of the prior decade. Before entering the CCP realm, Patel worked in various trading, research, and risk-management roles in fixed income and equity financial products. He earned his MBA, with concentrations in analytical finance and economics, from the University of Chicago. Patel earned his bachelor's degree in management, with concentrations in finance, international business, and economics, from Purdue University.

Hester M. Peirce was appointed by President Donald Trump to the U.S. Securities and Exchange Commission (SEC) and was sworn in on January 11, 2018. Prior to joining the Commission she served as senior research fellow and director of the Financial Markets Working Group (now Program on Financial Regulation) at the Mercatus Center at George Mason University. While at the Mercatus Center, her research explored how financial markets foster economic growth and prosperity and the role well-designed regulation plays in protecting investors and consumers while promoting financial stability and innovation. Peirce co-edited two books, authored publications, testified before Congress, and served on the SEC's Investor Advisory Committee. Before joining the Mercatus Center, she worked on Senator Richard Shelby's Committee on Banking, Housing, and Urban Affairs staff as senior counsel. In that position, she oversaw financial regulatory reform efforts following the 2008 financial crisis and conducted oversight of the regulatory implementation of the Dodd–Frank Act. From 2004 to 2008, Peirce worked as counsel to SEC Commissioner Paul S. Atkins. Prior to serving Atkins, she worked as a staff attorney in the Division of Investment Management. Before working at the SEC, Peirce was an associate at Wilmer, Cutler & Pickering (now WilmerHale) and clerked for Judge Roger Andewelt on the Court of Federal Claims. Peirce earned her BA in economics from Case Western Reserve University and her JD from Yale Law School.


Ananda Radhakrishnan is vice president of the Center for Bank Derivatives Policy at the American Bankers Association. He is responsible for developing policy and advocating, before U.S. prudential and market regulators, for sensible risk-based regulation of derivatives activity by banks of all sizes. He was previously a partner at a global law firm where he focused his practice on all matters relating to U.S. commodities and derivatives law and regulations. Radhakrishnan served for 12 years at the Commodity Futures Trading Commission (CFTC). He was the founding



director of the CFTC's Division of Clearing and Risk for three years after having served as director of the former Division of Clearing and Intermediary Oversight for six years. Radhakrishnan was instrumental in implementing key provisions of the Dodd–Frank Wall Street Reform and Consumer Protection Act. Specifically, Radhakrishnan drafted the statutory provisions that contain the core principles for derivatives clearing organizations, regulations implementing the core principles, clearing determinations issued by the CFTC, regulations governing clearing member risk management, regulations governing the investment of customer funds, regulations mandating the straight-through-processing of swaps executed on futures exchanges and swap execution facilities, and regulations enhancing the protection of customer funds.

During his tenure at the CFTC, Radhakrishnan testified twice before the U.S. Congress on clearing-related matters and has made numerous presentations to foreign regulatory authorities and industry panel discussions on the CFTC's program for the oversight of clearing organizations and the protection of customer funds. As the CFTC's lead representative on CPMI-IOSCO, he was instrumental in the promulgation of that body's *Principles for Financial Market Infrastructures* (PFMIs). Prior to joining the CFTC in 2002, Radhakrishnan worked for seven years at the CME Clearing House Division, where he was responsible for strategic planning, business development, pricing, and project management. Radhakrishnan is licensed to practice law in the District of Columbia and State of New York.

Til Schuermann is a partner and co-head of the Risk & Public Policy Practice for the Americas at Oliver Wyman. He advises private and public sector clients on stress testing, capital planning, enterprise-wide risk management, model risk management, and corporate governance, including board effectiveness. His project work includes stress testing and capital planning support for large global and regional banks and large nonbank financials; stress testing of Spanish (2012) and Slovenian (2013) banking systems, ECB (European AQR: 2014), and Greece (2015); evaluation of Bank of England stress-testing program (with IMF); risk-governance reviews and effective board oversight; and climate risk. Schuermann also is a member of the Federal Reserve Bank of New York's Financial Advisory Roundtable. Until March 2011 Schuermann was a senior vice president at the Federal Reserve Bank of New York, where he held numerous positions, including head of Financial Intermediation in Research and head of Credit Risk in Bank Supervision. In spring 2009 he played a leadership role in the design and execution of the Supervisory Capital Assessment Program and the subsequent Comprehensive Capital Analysis and Review Programs. Schuermann received his BA in economics from the University of California, Berkeley in 1988 and his PhD in economics from the University of Pennsylvania in 1993. From 1993 to 1996 he worked at Bell Laboratories. He has numerous publications in both academic and practitioner journals, is an associate editor of the *Journal of Financial Services Research* and *Journal of Risk*, is on the FRM exam committee for GARP, a member of the advisory board of the NYU Courant Institute Mathematical Finance Program, and has taught at Columbia University and the Wharton School, where he is a research fellow.



Kimmo Soramäki is the founder and CEO of Financial Network Analytics (FNA) and the founding editor-in-chief of the *Journal of Network Theory in Finance*. Soramäki started his career as an economist at the Bank of Finland, where in 1997 he developed the first simulation model for interbank payment systems. In 2004, while at the Research Department of the Federal Reserve Bank of New York, he was among the first to apply methods from network theory to improve our understanding of financial systems. During the financial crisis of 2007–08, Soramäki advised several central banks, including the Bank of England and European Central Bank, in modeling interconnections and systemic risk. This work led him to found FNA in 2013 to solve important issues around financial risk and to explore the complex financial networks that play a continually larger role in the world around us. Soramäki holds a Doctor of Science in operations research and a Master of Science in economics (finance), both from Aalto University in Helsinki.

Robert Steigerwald is a senior policy advisor in the Economic Research Department at the Federal Reserve Bank of Chicago. Steigerwald began his legal career in Chicago with Kirkland & Ellis, where he represented the Chicago Board of Trade, the Board of Trade Clearing Corporation, and other clients in both litigation and regulatory matters. After serving as legal counsel for a clearinghouse for foreign exchange transactions and developing a global, multicurrency payment system, Steigerwald joined the Federal Reserve Bank of Chicago in 2000. Steigerwald's primary research interests concern financial regulation; central counterparty clearinghouses (CCPs) and other financial market infrastructures; and systemic interconnectedness in the financial system. He also represents the Federal Reserve Bank of Chicago on the U.S. Commodity Futures Trading Commission's Market Risk Advisory Committee (MRAC) and has participated in the work of the OTC Derivatives Regulators' Forum, an international forum for information-sharing and regulatory cooperation among central banks, prudential supervisors, and market regulators. Steigerwald is a member of the American Bar Association and the American Bankruptcy Institute. He is a 1985 graduate of the University of San Francisco School of Law.

Eszter Tanai is a principal market infrastructure expert in the Oversight Division of the Directorate General of Market Infrastructure and Payment at the European Central Bank (ECB). She has previously worked for the Hungarian central bank with tasks and responsibilities for monetary policy operational framework and for oversight of financial market infrastructures, including central counterparties (CCP). She joined the ECB in 2013. Since then she has been representing the Eurosystem as a central bank of issue for euros in several cooperative supervisory/oversight arrangements established for EU CCPs. Tanai contributes to various policy workstreams in relation to CCPs, including the ones on analyzing global central clearing interdependencies and CCP supervisory stress testing. Tanai participates in the CCP Stress Test Task Force of ESMA on behalf of the ECB, in particular to contribute to the development of the component on liquidity risk.



Kim Taylor was president of Clearing and Post-Trade Services at CME Group until the end of 2017. Taylor was appointed to that role in 2016. She was responsible for the company's clearing house, post-trade, and digitization businesses. From 2014 to 2016, she served as president of Global Operations, Technology & Risk of CME Group. She was president of CME Clearing from 2004 to 2014. Taylor led CME's efforts to establish its historic clearing agreement with the Chicago Board of Trade (CBoT) in 2003 and to complete the integration of NYMEX clearing systems in 2009, following CME Group's 2008 acquisition of NYMEX. She was also instrumental in developing the expansion of CME's over-the-counter clearing services. Taylor joined CME in 1989 and held roles of increasing responsibility in the Clearing House Division, including managing director, risk management, vice president, and senior director. She also served on the Commodity Futures Trading Commission's Global Markets Advisory Committee. She currently serves on the Board of Directors of Eventus Systems Inc. and Alma College.

Michael Voisin is global head of Linklaters LLP's Capital Markets practice. He advises on sophisticated financial products, including repackagings, securitized, OTC, and exchange-traded derivatives, investment fund products (including CPPI products), collateralized debt obligations, regulatory capital raising for financial institutions, and note and warrant programs. Voisin's particular specialisms include clearing of derivatives, regulatory capital treatment of derivatives, equity derivatives (including investment fund derivatives), longevity derivatives, hybrid (multi-asset class) derivatives, proprietary financial indexes/benchmarks, and synthetic products. Voisin led the firm's derivatives and structured products practice between 2002 and 2010 and was also the firm's global knowledge and learning partner for four years until 2012. He developed the firm's knowledge and thought leadership relating to the Eurozone crisis. He was appointed to the global board of the Futures Industry Association in March 2016. Voisin has led on many market-leading derivatives-related activities. These include advising on OTC and exchange-traded derivatives clearing, benchmark reform, FIA and ISDA initiatives, and the resolution of Lehman Brothers International (Europe).

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