

WFE Clear 2026

Conference Programme

Day 1 - Tue 21 Apr

08:30 - 09:00:	Registration
09:00 - 09:15:	Opening Remarks
	Moderators  John McKenzie Chief Executive Officer, TMX Group Chair, The World Federation of Exchanges  Nandini Sukumar Chief Executive Officer World Federation of Exchanges (WFE)  Dr. Pedro Gurrela Perez Head of Research World Federation of Exchanges (WFE)
09:15 - 10:15:	Panel 1: Technology Transformation: Evolving Infrastructure in Central Clearing Market infrastructures are under pressure to support extended trading hours, faster risk cycles, and higher operational resilience on technology stacks often designed for batch processing and manual intervention. These pressures are being intensified by the move towards 24/7 trading models, the growing use of AI and advanced analytics in risk management, and emerging tokenisation and DLT-based market structures. Where do legacy systems actively constrain resilience and scalability, and where do modern architectures genuinely improve them? What are the concrete advantages and trade-offs of cloud adoption, modular system design, and increased reliance on third-party providers, and how can we be confident that transformation results in greater resilience rather than new points of fragility? How should MiS manage concentration and geopolitical dependencies on global technology providers, including the risk of service disruption, jurisdictional constraints, or loss of access, while maintaining auditability, operational control, and supervisory confidence? Moderator  Amandeep Reihon Head of FMI Portfolio, Committee on Payments and Market Infrastructures (CPMI) Bank for International Settlements (BIS) Speakers  Cindy Hull Vice President and Head of Financial Markets Group Federal Reserve Bank of Chicago  Christian Sjöberg President, Nasdaq Clearing AB Nasdaq, Inc.  Michael Carty Chief Executive Officer, LME Clear London Metal Exchange (LME)  Vikram Kothari Managing Director & CEO, NSE Clearing National Stock Exchange of India (NSE)
10:15 - 10:45:	Coffee Break
10:45 - 11:30:	Academic Paper Presentation 1: Expanded Value at Risk (eVaR) - Risk Management for Multi-Asset and Multi-Product Portfolios at CCPs by Fernando Cerezetti, George Kapetanios, and Alexia Ventouri As markets evolve and technology advances, market integration enables not only larger-dimension portfolios but also more complex financial contracts. Any risk metric that fails to correctly measure these two dimensions will deliver biased risk estimates. When multivariate distributions are considered, traditional risk metrics used by central counterparties (CCPs) are typically deployed using a simplified characterisation of the probability space. This raises the question of whether these metrics could be enhanced to capture the risks of today's portfolios. The objective of this paper is to propose an alternative method for assessing the market risk of multi-asset and multi-product portfolios, namely an expanded Value at Risk (eVaR). There are two key benefits of the eVaR. First, loss of information is reduced by defining the metric at the risk-factor level. Traditional risk methods assess probability based on a portfolio's profit and loss (PnL), which can underestimate risk for non-outright exposures. Second, the eVaR is a portfolio-specific risk metric. The method inverts the traditional logic whereby all portfolios are assessed under the same set of states of the world, even though they may have substantially different risk profiles. The proposed method can be used to complement existing risk tools used by CCPs by locally expanding estimates already available, or it can be used as a standalone, end-to-end risk calculation. Download Paper Moderator  Fernando Cerezetti Researcher, King's College London, and Chief Risk Officer ClearToken Discussant  Dr. Radoslav Raykov Principal Researcher, Financial Stability Department Bank of Canada
11:30 - 12:15:	Practitioner Session 1: Clearing For Extended Hours Trading This practitioner session will explore the operational, strategic, and economic realities of extending trading and clearing hours. This discussion will examine why momentum toward near-24/5 markets is accelerating, and what it takes to deliver it in practice. Drawing on experience across post-trade infrastructures, the session will unpack key dependencies, including operational readiness, industry coordination, and unresolved design questions such as defining the trading day, managing outliers, and handling corporate actions. It will also challenge assumptions around demand, assessing whether extended hours create new liquidity or simply redistribute it, and what lessons can be drawn from existing overnight derivatives markets. Speakers  Ariane M. Collette Managing Director, Head of US Equities Depository Trust and Clearing Corporation (DTCC)  Yuse Hatten Chief Clearing and Settlement Services Officer Options Clearing Corporation (OCC)
12:15 - 13:45:	Lunch
13:45 - 14:45:	Panel 2: Tokenisation and Digital Collateral in Clearing & Settlement Tokenisation initiatives and digital asset sandboxes are accelerating, raising fundamental questions about their relevance for clearing and settlement. What near-term benefits are genuinely achievable, such as improved collateral mobility, faster settlement, or intraday liquidity optimisation? What new risks emerge around legal certainty, interoperability, cyber resilience, and governance? And how can lessons from pilot regimes and sandboxes be translated into durable improvements for core clearing and settlement processes? Moderator  Dr. Martin Diehl Head of Financial Market Infrastructure Analysis Deutsche Bundesbank Speakers  Val Wotton Managing Director and Global Head of Equities Solutions Depository Trust and Clearing Corporation (DTCC)  Barry King Head of Post-Trade Policy Bank of England  Dr. Eithimia Kafalou Executive Director, Clearing Market Development Eurex Clearing, Deutsche Börse Group  John McPartland Independent financial regulation and market infrastructure policy advisor
14:45 - 15:30:	Academic Paper Presentation 2: Clearing Markets and Client Clearing Services by Salil Gadgil, Robin L. Lumsdaine, and Mark Padrick This paper examines client clearing, which now accounts for the majority of risk managed in centrally cleared markets. Using confidential transaction-level data on credit default swaps, we show that client clearing enhances netting efficiency for dealers and generates pricing advantages for clients. Adoption of central clearing leads clients to expand their sets of dealer trading partners, thereby enhancing market access and competition. To access central counterparties, clients depend on clearing member firms, favoring those with stronger credit quality and with whom they have established trading relationships. Offering these services creates spillover benefits for member firms' market making activity by improving client retention and pricing power. Clients' reliance on clearing members creates operational fragilities under stress, however, especially for those with limited member relationships. The findings provide novel insights about the economic consequences of client clearing and are particularly relevant in light of recent clearing mandates, most notably in U.S. Treasury markets. Download Paper Moderator  Salil Gadgil Professor Office of Financial Research (OFR) Discussant  Laura Kimpel Managing Director, Head of Fixed Income and Financing Solutions Depository Trust and Clearing Corporation (DTCC)
15:30 - 15:45:	Coffee Break
15:45 - 16:45:	Panel 3: Exchanges & FMIs: Design Choices and Market Alignment As new central counterparties emerge and existing clearing structures evolve across both developed and growing markets, exchanges are revisiting a core strategic question: what does need from an FMI to underpin liquidity and provide long-term resilience? This session examines the exchange perspective when establishing or reshaping clearing arrangements, including governance models, ownership structures, and service design. Drawing on practical experience, we will share insights on sequencing a new FMI build, aligning with regulatory expectations, and shaping clearing ecosystems - offering a view of how exchanges and FMIs can align incentives and market objectives from the outset. Moderator  Bruce Butterill Executive Director America's Central Securities Depository Association (ACSDA) Speakers  Stan Ivanov President, ICE Clear Credit Intercontinental Exchange, Inc. (ICE)  Francesco Mazzafiero Head of Secretariat European Systemic Risk Board (ESRB)  Ante Romić Managing Director, Market Infrastructure Ecbac (Qatar CSD)  John Fennell Chief Risk Officer & Head of Clearing Operations EDX Markets
17:30 - 19:30:	Opening Reception
Day 2 - Wed 22 Apr	
08:30 - 09:00:	Registration
09:00 - 09:45:	Academic Keynote: Do we need a clearing system for stablecoins? Speaker  Rod Garratt Professor of Economics University of California at Santa Barbara
09:45 - 09:50:	Market Opening Ceremony
	Speakers  John McKenzie Chief Executive Officer, TMX Group Chair, The World Federation of Exchanges  Nandini Sukumar Chief Executive Officer World Federation of Exchanges (WFE)
09:50 - 10:50:	Panel 4: The Future of FMI Risk Management: How Will It Evolve? This panel will explore how CCP risk frameworks are evolving beyond historical stress scenarios and end-of-day processes, as markets shift towards more continuous trading and intraday risk management. Is risk management becoming a genuinely real-time activity, with more dynamic monitoring of exposures, margin requirements, and stress testing? We will examine how stress testing should adapt, and how CCPs can balance procyclicality controls with timely, risk-sensitive response times. The discussion will also consider the role of advanced analytics and AI, including what evidence exists that they materially improve risk outcomes, and where their benefits may be limited, particularly in terms of governance and accountability. Looking ahead, the panel will reflect on whether regulatory scrutiny around model approvals will intensify, or whether more flexible regimes will emerge, to support innovation and competitiveness. Moderator  Robert Steigerwald Independent policy advisor Speakers  Massimo Cutuli Chief Financial Risk Officer Options Clearing Corporation (OCC)  Tao Chen Group Head of Quantitative Risk Management Hong Kong Exchanges & Clearing (HKEX)  Huan Zhang Chief Risk Officer Nodal Clear  Roberto Bermejo Aparicio Head of CCP Supervision & Post-Trading Division Deputy Director Spanish National Securities Market Commission (CNMV)
10:50 - 11:15:	Coffee Break
11:15 - 12:00:	Academic Paper Presentation 3: Deepening the Secondary Market: Integrating Trade Credit into Market Clearing with the Cycles Protocol by Tomaz Fleischman and Ethan Buchman Current post-trade clearing systems rely almost exclusively on cash or cash-like collateral, leaving vast reserves of short-term liquidity embedded in trade credit outside formal settlement infrastructures. This paper introduces a clearing framework that integrates accounts receivable and payable (AR/AP) into secondary market settlement via the Cycles Protocol, a distributed, multilateral mechanism based on double-entry accounting and atomic cycle execution. By representing both past obligations and future commitments as edges on a unified obligation graph, the protocol enables direct offsetting of interlocking balances—sheet claims across firms, exchanges, and clearinghouses without novation and without a central counterparty (CCP). Compared with liquidity-saving mechanisms (LSMs) in RTGS systems, this approach extends liquidity optimisation beyond interbank payments to real-economy financing networks, reducing systemic reliance on scarce collateral and central intermediaries. Download Paper Moderators  Tomaz Fleischman Principal Scientist and Co-Founder Cycles Protocol SA  Ethan Buchman Chief Executive Officer and Co-Founder Cycles Protocol SA Discussant  John Fennell Chief Risk Officer & Head of Clearing Operations EDX Markets
12:00 - 13:30:	Lunch
12:15 - 13:15:	CCP Working Group Meeting - Roundtable on CCP Resolution Preparedness & Coordination WFE members and invited speakers only Moderators  Charlie Ryder Senior Manager, Regulatory Affairs World Federation of Exchanges (WFE)  Louise Waterhouse Managing Director, Business Management & Strategic Initiatives, The Canadian Depository for Securities Limited (CDS) TMX Group Speakers  Craig Logan Principal Economist, Financial Stability Department Bank of Canada  Barry King Head of Post-Trade Policy Bank of England  Amandeep Reihon Head of FMI Portfolio, Committee on Payments and Market Infrastructures (CPMI) Bank for International Settlements (BIS)  Roberto Bermejo Aparicio Head of CCP Supervision & Post-Trading Division Deputy Director Spanish National Securities Market Commission (CNMV)  Vikram Kothari Managing Director & CEO, NSE Clearing National Stock Exchange of India (NSE)  Nathan Igo Managing Director, Financial & Operational Risk Oversight Options Clearing Corporation (OCC)  Val Wotton Managing Director and Global Head of Equities Solutions Depository Trust and Clearing Corporation (DTCC)  Huan Zhang Chief Risk Officer Nodal Clear
13:30 - 14:15:	Practitioner Session 2: Risk Modelling This session discusses how approaches to risk modelling evolve in a world shaped by changing regulation, increasing product complexity, and expanding uncertainty. What are critical failure points when designing a risk model? What are the main challenges when modelling risk factor dynamics? Are we over-reliant on historical data in environments that are fundamentally forward-looking and uncertain? When do correlations break down—and what does that imply for models built upon them? More fundamentally, how should risk modelers think about the boundary between measurable risk and irreducible uncertainty? What principles should guide model design? Finally, the session will explore whether emerging technologies — from advanced analytics to AI — can meaningfully transform risk modelling, or whether they risk reinforcing the same underlying assumptions in more sophisticated forms. Speakers  Dr. Pedro Gurrela Perez Head of Research World Federation of Exchanges (WFE)  Stan Ivanov President, ICE Clear Credit Intercontinental Exchange, Inc. (ICE)
14:15 - 14:45:	Coffee Break
14:45 - 15:45:	Panel 5: Launching New Derivatives Markets and Kickstarting Liquidity Developing liquid and resilient derivatives markets remains a priority for many, yet the road to success is often uneven and non-linear. What conditions need to be in place for a new derivatives market to gain traction? How can we design products, margin frameworks, and access models that manage risk and attract participation? How should consumer protections be implemented without impeding access to those who need derivatives to hedge risks? This panel explores practical lessons from markets that have launched new derivatives or successfully scaled liquidity, and examines how clearing, market structure, and regulatory design can enable sustainable growth. Moderator  Richard Metcalfe Head of Regulatory Affairs World Federation of Exchanges (WFE) Speakers  Jiyooi Ueda Executive Director of CCPs, Securities and Derivatives Grupo Bolsa Mexicana de Valores (Grupo BMV)  Ahmed Aharabi Chief Executive Officer of CCP Morocco, Chief Operating Officer Casablanca Stock Exchange  Cristina Di Luigi Deputy Head of Post-Trading Division, Markets and Payment Systems Oversight Directorate Banca d'Italia  Neeraj Kulkarni Managing Director and CEO, NSE International Clearing Corporation, National Stock Exchange of India (NSE)
15:45 - 16:30:	Academic Paper Presentation 4: Climate Risk Premium: Evidence from Commodity Options by Xin Gao, Bingxin Li, Kaitao Lin, and Rui Liu This paper investigates the pricing of climate-related risks in the commodity derivatives market. Leveraging a proprietary dataset of "brown" and "green" iron ore options traded on the Singapore Exchange, we document the existence of significant climate-specific variance and skewness risk premia. Our analysis reveals a nonlinear, inverted U-shaped relationship between climate policy uncertainty and these risk premia. Low-to-moderate uncertainty elevates premia by destabilising market expectations, whereas extreme uncertainty suppresses them by reducing market activity. We also find that the impact of climate policy uncertainty is asymmetric, with sustained levels having a stronger effect than transient shocks. These effects are concentrated in short-maturity options, highlighting the transitional nature of policy-induced risks. By employing a novel dual-differencing methodology, our study provides a direct and robust measure of climate-specific risk premia. This advances the understanding of climate risk pricing in commodity derivatives and offers valuable insights for policymakers and investors. Download Paper Moderator  Dr. Kaitao Lin Senior Financial Economist World Federation of Exchanges (WFE) Discussant  Dr. Xuhui (Nick) Pan Assistant Professor of Finance University of Oklahoma
18:00 - 22:00:	Gala Dinner
Day 3 - Thu 23 Apr	
09:00 - 09:30:	Registration
09:30 - 10:50:	Innovation Award Presentations
	Moderator  Nandini Sukumar Chief Executive Officer World Federation of Exchanges (WFE) Speakers  Dale Michaels Head of Cboe Clear U.S. Cboe Global Markets  Gina Usorin Chief Operating Officer, NSE Clearing National Stock Exchange of India (NSE)  Benjamin Landis Senior Associate Vice President Deutsche Börse
10:50 - 11:15:	Coffee Break
11:15 - 12:00:	Academic Paper Presentation 5: Factor Model Analysis of Margin Backtesting for CCPs by Rama Kumanduri and Shahrazad Karimi Central counterparties (CCPs) globally conduct backtesting of margin model performance for clearing member accounts to ensure models meet the required 99% coverage threshold. The Principles for Financial Market Infrastructures (PFMI) provide guidance on aggregate coverage and the analysis of backtesting exceptions to inform model enhancement decisions. CCPs typically employ traditional statistical tests, such as Kupiec and Christoffersen tests, alongside distributional approaches, such as probit or quantile tests to assess model performance. While regulatory guidance exists for core model backtesting using representative portfolios, there is limited direction on how to link backtesting performance at the level of individual risk factor portfolios to overall model performance. This paper proposes a method to estimate the expected number of margin backtesting exceptions using a factor model framework, enabling model developers and risk managers to stress test margin model performance. Backtesting without dependencies can be decomposed into systematic and idiosyncratic components, allowing deviations from expected performance to highlight potential model deficiencies, including issues in modelling risk factor volatilities and correlations. Additional scenario analysis, particularly under stress conditions, can further inform decisions on mitigating margin procyclicality, based on expected model performance at the targeted 99% confidence level. Moderators  Rama Kumanduri Managing Director & Head of Model Risk Management Options Clearing Corporation (OCC)  Shahrazad Karimi Director in Model Risk Management Options Clearing Corporation (OCC) Discussant  Roberto Bermejo Aparicio Head of CCP Supervision & Post-Trading Division Deputy Director Spanish National Securities Market Commission (CNMV)
12:00 - 13:30:	Lunch
13:30 - 14:30:	Panel 6: Prediction Markets and Event-Based Trading Prediction markets and event-based contracts are gaining visibility across jurisdictions, raising new questions for market infrastructures about product design, risk management, and investor treatment. How should we assess the risk characteristics of event-driven products that settle on discrete, binary outcomes rather than continuous price returns? Do existing margin models, default management tools, and stress frameworks adequately capture jump risk, concentration, and information asymmetries inherent in these markets? And what lessons can we draw from early experiences to determine where central clearing adds value, where guardrails are needed, and how to engage constructively with regulators as these markets continue to evolve? Moderator  John Lothian Executive Chairman John J. Lothian & Company, Inc. Speakers  Robert Tarca Managing Director, Derivatives Products and Services, Montreal Exchange TMX Group  Prof. Paolo Squatito Professor of Law, Antonin Scalia Law School George Mason University  Dr. Julie Schoening Global Chief Operating Officer Garrison Research Capital  Angelina Kwan Chief Executive Officer Stratford Finance
14:30 - 15:15:	Practitioner Session 3: General Business Risks and Non-Default Losses - Operational Resilience at CCPs Central counterparties have developed robust frameworks to manage non default losses and general business risks alongside their well established default management arrangements. This session will explore how CCPs structure and operationalise these safeguards in practice, covering risks arising from operational disruption, cyber incidents, legal exposures, investment activity, and third party dependencies. How are capital buffers calibrated and governed? How do recovery planning tools interact with general business risk frameworks? And what does effective operational resilience look like in an environment of increasing technological complexity, interconnection, and geopolitical uncertainty? Speakers  Ashwini Panse Chief Risk Officer, North American Clearing, Managing Director, ICE India Intercontinental Exchange, Inc. (ICE)  Olivier Léon Vice-President & Chief Risk Officer, TMX Post-Trade Services TMX Group
15:15 - 15:45:	Coffee Break
15:45 - 16:30:	Academic Paper Presentation 6: Risk Management for Options Using Deep Generative Modelling of Risk-Neutral Distributions by Rohit Barve, Aniket Bhanu, and Rejaul Barthuyan Risk management models for cleared options at Central Counterparties (CCPs) conventionally rely on simulations of risk factors such as underlying prices and implied volatilities to generate option price returns. These models compress rich market information and introduce model dependent biases. This paper presents a model-independent methodology for simulating option price returns by capturing changes in risk-neutral distributions (RNDs) derived from historical option prices. The approach involves training a Tabular Variational Autoencoder (TVAE), a deep generative model, to learn and generate daily variations in RND based on observed historical patterns. The approach is evaluated on Indian options market data and demonstrates superior performance to Monte Carlo simulations in capturing option price return distributions. This method provides CCPs with a more accurate framework for risk measurement, margin setting, stress scenario design, and model validation. Download Paper Moderator  Rohit Barve Deputy Manager, Research & Policy, NSE Clearing National Stock Exchange of India Discussant  Dr. Jorge Cruz Lopez Managing Director, Head of Research Global Risk Institute
16:30 - 16:45:	Concluding Remarks & Announcement of WFEclear 2027
	Moderators  John McKenzie Chief Executive Officer, TMX Group Chair, The World Federation of Exchanges  Nandini Sukumar Chief Executive Officer World Federation of Exchanges (WFE)  Dauletbek Kussaliev Ambassador Extraordinary and Plenipotentiary of the Republic of Kazakhstan to Canada Embassy of the Republic of Kazakhstan  Yekaterina Andryushina Managing Director for International Cooperation & Sustainability Kazakhstan Stock Exchange (KASE)
17:00 - 18:00:	Farewell Reception