Issues in clearing and settlement

Federal Reserve Bank of Chicago March 25th, 2016

08:00-08:15 Registration

08:15-08:30 Welcome Remarks – David Marshall, Senior Vice President, Associate Director of Research and Director of Financial Markets



David Marshall is associate director of research, director of the financial markets group and a senior vice president in the economic research department of the Federal Reserve Bank of Chicago. Previously, a vice president and economic advisor in the economic research department of the Federal Reserve Bank of Chicago. In that position, Marshall served as the team leader for the department's macroeconomics group. His research focuses on linkages between financial markets, financial institutions and macroeconomic performance.

Before coming to the Federal Reserve System, Marshall was on the faculty of the Kellogg Graduate School of Management at Northwestern University. He has also served as adjunct professor of finance at the

University of Chicago and is currently an associate editor for Macroeconomic Dynamics.

Marshall received a B.A. from Yale University and M.S. and Ph.D. degrees in economics from Carnegie-Mellon University.

08:30-09:15 Paul Glasserman, Jack R. Anderson Professor of Business, Columbia Business School

Research questions in clearing networks: Theory



Professor Glasserman's research and teaching address risk management, derivative securities, Monte Carlo simulation, statistics and operations. Prior to joining Columbia, Glasserman was with Bell Laboratories; he has also held visiting positions at Princeton University, NYU, and the Federal Reserve Bank of New York. In 2011-2012, he was on leave from Columbia and working at the Office of Financial Research in the U.S. Treasury Department, where he continues to serve as a part-time consultant.

Glasserman was senior vice dean of Columbia Business School in 2004-2008 and served as interim director of the Sanford C. Bernstein & Co. Center for Leadership and Ethics in 2005-2007. He currently serves as research director of the Program for Financial Studies. Glasserman also serves as an outside member of the risk committee of a swaps CCP.

09:15-10:00 Roundtable discussion 1: Theoretical approaches to risk assessment in clearing and settlement networks

Recommended reading and helpful resources:

- Rama Cont: The End of the Waterfall: Default Resources of Central Counterparties
- Duffie and Zhu: Does a Central Clearing Counterparty Reduce Counterparty Risk?
- Glasserman-Moallemi-Yuan: Hidden Illiquidity with Multiple Central Counterparties

10:00-11:00 Keynote – Stan Ivanov, President, ICE Clear Credit & TCC

Empirical approaches: ICE CDS Risk Management Methodology



Stan Ivanov is President of ICE Clear Credit and The Clearing Corporation which are Intercontinental Exchange wholly-owned clearing houses. 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 degree from Tulane University in the field of Quantum Mechanics. He also holds MS degree in Financial Mathematics from The University of Chicago, and MS degree in Chemical Physics from The University of Sofia, Bulgaria.

11:00-11:15 Break

11:15-12:00 Roundtable Discussion 2: Empirical approaches to risk assessment in clearing and settlement networks

Recommended reading and helpful resources:

- OCC's risk management approach http://www.optionsclearing.com/risk-management/margins/
- Select CPMI-IOSCO Public Disclosures:
 - CME Clearing Europe
 - Eurex Clearing
 - ICE Clear Credit; ICE Clear Europe; ICE Clear US
 - LCH.Clearnet LLC; LCH.Clearnet Ltd; LCH.Clearnet S.A.
 - LME Clear
 - Nasdaq Clearing
 - Options Clearing Corp

12:00-13:00 Lunch hosted by the Federal Reserve Bank of Chicago 3rd Floor - Illinois Room 1

13:00-13:45 Robert S. Steigerwald, Senior Policy Advisor, Federal Reserve Bank of Chicago

Interdependence in clearing and settlement



Robert S. Steigerwald is a Senior Policy Advisor in the Financial Markets Group at the Federal Reserve Bank of Chicago, where his work primarily focuses upon public policy issues relating to financial market infrastructure.

Robert began his legal career with Kirkland & Ellis, an international law firm based in Chicago, where he served as outside legal counsel to the Board of Trade of the City of Chicago, the Board of Trade Clearing Corporation, National Futures Association and other clients in the financial services industry. Before joining the Federal Reserve Bank of Chicago, Robert served as the chief legal officer for a central counterparty clearinghouse that cleared foreign currency transactions and was U.S. legal counsel to CLS Bank during its formation.

Robert is a graduate of the State University of New York at Stony Brook (B.A. 1979) and University of San Francisco School of Law (J.D., cum laude, 1985).

13:45-14:30 Roundtable Discussion 3: Payments vs. asset transfers vs. contracts

Recommended reading and helpful resources:



Financial Market
Infrastructure - summ

14:30-15:15 Ivana Ruffini, Senior Policy Specialist, Federal Reserve Bank of Chicago

Central clearing and financial network fragility



Ivana Ruffini is a Senior Policy Specialist in the Financial Markets Group at the Federal Reserve Bank of Chicago, where she contributes to the Federal Reserve's position on public policy issues involving derivatives markets. Her work focuses on analyzing impact and efficacy of regulatory changes and customer protections in derivatives markets, financial market infrastructure and systemic risk.

Prior to joining the financial markets group in 2013, Ruffini was a Risk Specialist at the Federal Reserve Bank of Chicago and active in the alternative investment space as a private equity investment professional and a derivatives trader. Her prior employers include Baird Capital Partners, One Equity Partners and JP Morgan.

Ruffini received a B.A. in mathematics from Denison University and an M.B.A. in finance and marketing from Kellogg School of Management at Northwestern University.

15:15-16:00 Roundtable Discussion 4: Policy Implications

Recommended reading:

• Council of Financial Regulators: Central Clearing of OTC Derivatives in Australia

16:00-16:05 Closing Remarks