MICHAEL J. FLEMING

Capital Markets Research
Federal Reserve Bank of New York
33 Liberty Street, New York, NY 10045
(212) 720-6372
michael.fleming@ny.frb.org
newyorkfed.org/research/economists/fleming

EDUCATION

Harvard University, *Ph.D. in Business Economics*, Cambridge, MA, November 1994.

- Dissertation title: "Three Essays on Corporate Governance."
- National Doctoral Fellowship in Business and Management.

Colby College, *B.A. in Economics*, Waterville, ME, May 1988.

- Magna Cum Laude, Honors in Economics, Phi Beta Kappa, Breckenridge Prize.

EMPLOYMENT

Federal Reserve Bank of New York, New York, NY, September 1994 - present.

- Current position: Vice President and Head of Capital Markets Function.

New York University, Stern School of Business, New York, NY, fall 2007.

- Adjunct Associate Professor, Debt Instruments and Markets (MBA elective).

Harvard University, Cambridge, MA, 1992 - 1993.

- Teaching Fellow, capital markets, corporate finance, econometrics, and statistics.

BayBanks, Inc., Cost Analyst**,** Boston, MA, September 1988 - August 1989.

RESEARCH INTERESTS

Market Microstructure, Financial Intermediation, Monetary Policy.

PUBLISHED PAPERS

- "Intraday Market Making with Overnight Inventory Costs" (with Tobias Adrian, Agostino Capponi, Erik Vogt, and Hongzhong Zhang). ***Journal of Financial Markets,*** *forthcoming*.
- "Liquidity and Volatility in the U.S. Treasury Market" (with Robert Engle, Eric Ghysels, and Giang Nguyen). ***Journal of Econometrics***, Vol. 217, No. 2, August 2020, pp. 207-29.
- "Price and Size Discovery in Financial Markets: Evidence from the U.S. Treasury Securities Market" (with Giang Nguyen). ***Review of Asset Pricing Studies****,* Vol. 9, No. 2, December 2019, pp. 256–95*. 2014 FMA Annual Meeting Award, Best Paper in Market Microstructure.*
- "The Microstructure of a U.S. Treasury ECN: The BrokerTec Platform" (with Bruce Mizrach and Giang Nguyen). ***Journal of Financial Markets****,* Vol. 40, September 2018, pp. 2-22*.*
- "Market Liquidity After the Financial Crisis" (with Tobias Adrian, Or Shachar, and Erik Vogt). ***Annual Review of Financial Economics***, Vol. 9, 2017, pp. 43-83*.*

- "Dealer Financial Conditions and Lender-of-Last-Resort Facilities" (with Viral Acharya, Warren B. Hrung, and Asani Sarkar). ***Journal of Financial Economics,*** Vol. 123, No. 1, January 2017, pp. 81-107.
- "The Failure Resolution of Lehman Brothers" (with Asani Sarkar). Federal Reserve Bank of New York ***Economic Policy Review,*** Vol. 20, No. 2, March 2014.
- "Trading Activity and Price Transparency in the Inflation Swap Market" (with John R. Sporn). Federal Reserve Bank of New York ***Economic Policy Review,*** Vol. 19, No. 1, May 2013, pp. 45-57
- "Federal Reserve Liquidity Provision during the Financial Crisis of 2007-2009." ***Annual Review of Financial Economics***, Vol. 4, 2012, pp. 161-77.
- "The Microstructure of the TIPS Market" (with Neel Krishnan). Federal Reserve Bank of New York ***Economic Policy Review***, Vol. 18, No. 1, March 2012, pp. 27-45.
- "Income Effects of Federal Reserve Liquidity Facilities" (with Nicholas J. Klagge). Federal Reserve Bank of New York ***Current Issues in Economics and Finance***, Vol. 17, No. 1, 2011.
- "Repo Market Effects of the Term Securities Lending Facility" (with Warren B. Hrung and Frank M. Keane). ***American Economic Review: Papers & Proceedings***, Vol. 100, May 2010, pp. 591-6.
- "The Federal Reserve's Foreign Exchange Swap Lines" (with Nicholas J. Klagge). Federal Reserve Bank of New York ***Current Issues in Economics and Finance***, Vol. 16, No. 4, April 2010.
- "The Term Securities Lending Facility: Origin, Design, and Effects" (with Warren B. Hrung and Frank M. Keane). Federal Reserve Bank of New York ***Current Issues in Economics and Finance***, Vol. 15, No. 2, February 2009.
- "Dealer Behavior in the Specials Market for U.S. Treasury Securities" (with Kenneth D. Garbade). ***Journal of Financial Intermediation***, Vol. 16, No. 2, April 2007, pp. 204-28.
- "Who Buys Treasury Securities at Auction?" Federal Reserve Bank of New York ***Current Issues in Economics and Finance***, Vol. 13, No. 1, January 2007.
- "Explaining Settlement Fails" (with Kenneth D. Garbade). Federal Reserve Bank of New York ***Current Issues in Economics and Finance***, Vol. 11, No. 9, September 2005.
- "Anomalous Bidding in Short-Term Treasury Bill Auctions" (with Kenneth D. Garbade and Frank Keane). ***Journal of Financial Research***, Vol. 28, No. 2, Summer 2005, pp.165-76.
- "What Financing Data Reveal about Dealer Leverage" (with Tobias Adrian). Federal Reserve Bank of New York ***Current Issues in Economics and Finance***, Vol. 11, No. 3, March 2005.
- "Repurchase Agreements with Negative Interest Rates" (with Kenneth D. Garbade). Federal Reserve Bank of New York ***Current Issues in Economics and Finance***, Vol. 10, No. 5, April 2004.
- "Measuring Treasury Market Liquidity." Federal Reserve Bank of New York ***Economic Policy Review***, Vol. 9, No. 3, September 2003, pp. 83-108.
- "The Repurchase Agreement Refined: GCF Repo" (with Kenneth D. Garbade). Federal Reserve Bank of New York ***Current Issues in Economics and Finance***, Vol. 9, No. 6, June 2003.

- "When the Back Office Moved to the Front Burner: Settlement Fails in the Treasury Market after September 11" (with Kenneth D. Garbade). Federal Reserve Bank of New York ***Economic Policy Review***, Vol. 8, No. 2, November 2002, pp. 35-57.
- "Are Larger Treasury Issues More Liquid? Evidence from Bill Reopenings." ***Journal of Money, Credit, and Banking***, Vol. 34, No. 3, August 2002, pp. 707-35.
- "Financial Market Implications of the Federal Debt Paydown." ***Brookings Papers on Economic Activity***, No 2, 2000, pp. 221-51.
- "The Benchmark U.S. Treasury Market: Recent Performance and Possible Alternatives." Federal Reserve Bank of New York ***Economic Policy Review***, Vol. 6, No. 1, April 2000, pp. 129-45.
- "Price Formation and Liquidity in the U.S. Treasury Market: The Response to Public Information" (with Eli M. Remolona). ***Journal of Finance***, Vol. 54, No. 5, October 1999, pp. 1901-15.
- "What Moves Bond Prices?" (with Eli M. Remolona). ***Journal of Portfolio Management***, Vol. 25, Summer 1999, No. 4, pp. 28-38.
- "Liquidity in U.S. Treasury Spot and Futures Markets" (with Asani Sarkar). In **Market Liquidity: Research Findings and Selected Policy Implications**, Committee on the Global Financial System, Bank for International Settlements, May 1999.
- "How Workers Use 401(k) Plans: The Participation, Contribution, and Withdrawal Decisions" (with William F. Bassett and Anthony P. Rodrigues). ***National Tax Journal***, Vol. 51, No. 2, June 1998, pp. 263-89.
- "What Moves the Bond Market?" (with Eli M. Remolona). Federal Reserve Bank of New York ***Economic Policy Review***, Vol. 3, No. 4, December 1997, pp. 31-50.
- "The Round-the-Clock Market for U.S. Treasury Securities." Federal Reserve Bank of New York ***Economic Policy Review***, Vol. 3, No. 2, July 1997, pp. 9-32.

WORKING PAPERS

- "Tick Size Change and Market Quality in the U.S. Treasury Market" (with Giang Nguyen and Francisco Ruela). Federal Reserve Bank of New York *Staff Report* No. 886, April 2019 (Revised November 2019).
- "An Index of Treasury Market Liquidity: 1991-2017" (with Tobias Adrian and Erik Vogt). Federal Reserve Bank of New York *Staff Report* No. 827, November 2017.
- "Trading Activity in the Indian Government Bond Market" (with Seema Saggar and Samita Sareen). Federal Reserve Bank of New York *Staff Report* No. 785, August 2016.
- "ECB Monetary Operations and the Interbank Repo Market" (with Peter G. Dunne and Andrey Zholos). Federal Reserve Bank of New York *Staff Report* No. 654, December 2013.
- "The Microstructure of China's Government Bond Market" (with Jennie Bai and Casidhe Horan). Federal Reserve Bank of New York *Staff Report* No. 622, May 2013.
- "An Analysis of OTC Interest Rate Derivatives Transactions: Implications for Public Reporting" (with John Jackson, Ada Li, Asani Sarkar, and Patricia Zobel). Federal Reserve Bank of New York *Staff Report* No. 557, March 2012 (Revised October 2012).
- "An Analysis of CDS Transactions: Implications for Public Reporting" (with Kathryn Chen, John Jackson, Ada Li, and Asani Sarkar). Federal Reserve Bank of New York *Staff Report* No. 517, September 2011.

- "How Do Treasury Dealers Manage Their Positions" (with Joshua V. Rosenberg). Federal Reserve Bank of New York *Staff Report* No. 299, August 2007 (Revised March 2008).
- "Monetary Policy Tick-by-Tick" (with Monika Piazzesi). Working paper, August 2005.
- "Heat Waves, Meteor Showers, and Trading Volume: An Analysis of Volatility Spillovers in the U.S. Treasury Market" (with Jose A. Lopez). Federal Reserve Bank of New York *Staff Report* No. 82, July 1999.
- "The Term Structure of Announcement Effects" (with Eli M. Remolona). Federal Reserve Bank of New York *Staff Report* No. 76, May 1999.
- "Preserving Firm Value through Exit: The Case of Voluntary Liquidations" (with John J. Moon). Federal Reserve Bank of New York *Staff Report* No. 8, December 1995.

BOOK CHAPTERS

- "U.S. Treasury Securities" (with Frank J. Fabozzi). In Frank J. Fabozzi, ed., ***The Handbook of Fixed Income Securities***, 9th ed., New York: McGraw Hill, forthcoming.
- "U.S. Treasury Securities" (with Frank J. Fabozzi). In Frank J. Fabozzi, ed., ***The Handbook of Fixed Income Securities***, 8th ed., New York: McGraw Hill, 2012.
- "U.S. Treasury and Agency Securities" (with Frank J. Fabozzi). In Frank J. Fabozzi, ed., ***The Handbook of Fixed Income Securities***, 7th ed., New York: McGraw Hill, 2005.
- "U.S. Treasury Securities" (with Frank J. Fabozzi). In Frank J. Fabozzi, ed., ***The Handbook of Financial Instruments***, Hoboken, NJ: John Wiley & Sons, 2002.
- "U.S. Treasury and Agency Securities" (with Frank J. Fabozzi). In Frank J. Fabozzi, ed., ***The Handbook of Fixed Income Securities***, 6th ed., New York: McGraw Hill, 2001.

BLOG POSTS

- "How Liquid Is the New Twenty-Year Treasury Bond?" (with Francisco Ruela). Federal Reserve Bank of New York *Liberty Street Economics*, July 2020.
- "Treasury Market Liquidity and the Federal Reserve during the COVID-19 Pandemic" Federal Reserve Bank of New York *Liberty Street Economics*, May 2020.
- "Treasury Market Liquidity during the COVID-19 Crisis" (with Francisco Ruela). Federal Reserve Bank of New York *Liberty Street Economics*, April 2020.
- "The COVID-19 Pandemic and the Fed's Response" (with Asani Sarkar and Peter Van Tassel). Federal Reserve Bank of New York *Liberty Street Economics*, April 2020.
- "How Does Tick Size Affect Treasury Market Quality?" (with Giang Nguyen and Francisco Ruela). Federal Reserve Bank of New York *Liberty Street Economics*, January 2020.
- "At the New York Fed: Fifth Annual Conference on the U.S. Treasury Market" (with Peter Johansson, Frank M. Keane, and Justin Meyer). Federal Reserve Bank of New York *Liberty Street Economics,* November 2019.
- "From the Vault: A Look Back at the October 15, 2014, Flash Rally" (with Peter Johansson, Frank M. Keane, and Justin Meyer). Federal Reserve Bank of New York *Liberty Street Economics,* October 2019.
- "Assessing the Price Impact of Treasury Market Workups" (with Giang Nguyen). Federal Reserve Bank of New York *Liberty Street Economics*, March 2019.

- “At the New York Fed: Fourth Annual Conference on the Evolving Structure of the U.S. Treasury Market” (with Frank M. Keane and Justin Meyer). Federal Reserve Bank of New York *Liberty Street Economics*, February 2019.
- “Customer and Employee Losses in Lehman’s Bankruptcy” (with Erin Denison and Asani Sarkar). Federal Reserve Bank of New York *Liberty Street Economics,* January 2019.
- “The Indirect Costs of Lehman’s Bankruptcy” (with Erin Denison and Asani Sarkar). Federal Reserve Bank of New York *Liberty Street Economics,* January 2019.
- “Lehman’s Bankruptcy Expenses” (with Erin Denison and Asani Sarkar*).* Federal Reserve Bank of New York *Liberty Street Economics,* January 2019.
- “Creditor Recovery in Lehman’s Bankruptcy” (with Erin Denison and Asani Sarkar). Federal Reserve Bank of New York *Liberty Street Economics*, January 2019.
- “How Much Value Was Destroyed by the Lehman Bankruptcy?” (with Erin Denison and Asani Sarkar). Federal Reserve Bank of New York *Liberty Street Economics,* January 2019.
- “Price Impact of Trades and Orders in the U.S. Treasury Securities Market” (with Bruce Mizrach and Giang Nguyen). Federal Reserve Bank of New York *Liberty Street Economics,* December 2018.
- “Breaking Down TRACE Volumes Further” (with Doug Brain, Michiel DePooter, Dobrislav Dobrev, Peter Johansson, Frank M. Keane, Michael Puglia, Tony Rodrigues, and Or Shachar). Federal Reserve Bank of New York *Liberty Street Economics,* November 2018.
- “U.S. Treasury Market Action on Election Night 2016.” Federal Reserve Bank of New York *Liberty Street Economics,* October 2018.
- “Unlocking the Treasury Market through TRACE” (with Doug Brain, Michiel DePooter, Dobrislav Dobrev, Peter Johansson, Collin Jones, Frank M. Keane, Michael Puglia, Liza Reiderman, Tony Rodrigues, and Or Shachar). Federal Reserve Bank of New York *Liberty Street Economics*, September 2018.
- “Do You Know How Your Treasury Trades Are Cleared and Settled?” (with Adam Copeland, Frank M. Keane, and Radhika Mithal). Federal Reserve Bank of New York *Liberty Street Economics*, September 2018.
- “Dealer Trading and Positioning in Floating Rate Notes” (with Amanda Wahlers). Federal Reserve Bank of New York *Liberty Street Economics,* March 2018.
- “Dealer Participation in the TSLF Options Program” (with Erin Denison, Warren B. Hrung, and Asani Sarkar). Federal Reserve Bank of New York *Liberty Street Economics,* February 2018.
- “Options of Last Resort” (with Erin Denison, Warren B. Hrung, and Asani Sarkar). Federal Reserve Bank of New York *Liberty Street Economics,* February 2018.
- “Just Released: Updated SOMA Portfolio and Income Projections” (with Gabriel Herman, Deborah Leonard, Dave Na, and Lisa Stowe). Federal Reserve Bank of New York *Liberty Street Economics,* July 2017.
- “Market Liquidity after the Financial Crisis” (with Tobias Adrian and Or Shachar). Federal Reserve Bank of New York *Liberty Street Economics,* June 2017.
- “Which Dealers Borrowed from the Fed’s Lender-of-Last-Resort Facilities?” (with Viral V. Acharya, Warren B. Hrung, and Asani Sarkar). Federal Reserve Bank of New York *Liberty Street Economics,* May 2017.
- “Advent of Trade Reporting for U.S. Treasury Securities.” Federal Reserve Bank of New York *Liberty Street Economics,* January 2017.

- “At the N.Y. Fed: Second Annual Conference on the Evolving Structure of the U.S. Treasury Market” (with Ellen Correia Golay, Frank Keane, and Nathaniel Wuerffel). Federal Reserve Bank of New York *Liberty Street Economics,* December 2016.
- “A Closer Look at the Federal Reserve's Securities Lending Program” (with Frank Keane, Jake Schurmeier, and Emma Weiss). Federal Reserve Bank of New York *Liberty Street Economics,* August 2016.
- “What’s behind the March Spike in Treasury Fails?” (with Frank Keane). Federal Reserve Bank of New York *Liberty Street Economics,* April 2016.
- “Did Third Avenue’s Liquidation Reduce Corporate Bond Market Liquidity?” (with Tobias Adrian, Erik Vogt, and Zachary Wojtowicz). Federal Reserve Bank of New York *Liberty Street Economics,* February 2016.
- “Primary Dealer Participation in the Secondary U.S. Treasury Market” (with Frank Keane and Ernst Schaumburg). Federal Reserve Bank of New York *Liberty Street Economics,* February 2016.
- “Is Treasury Market Liquidity Becoming More Concentrated?” Federal Reserve Bank of New York *Liberty Street Economics,* February 2016.
- “Further Analysis of Corporate Bond Market Liquidity” (with Tobias Adrian, Erik Vogt, and Zachary Wojtowicz). Federal Reserve Bank of New York *Liberty Street Economics,* February 2016.
- “Corporate Bond Market Liquidity Redux: More Price-Based Evidence” (with Tobias Adrian, Erik Vogt, and Zachary Wojtowicz). Federal Reserve Bank of New York *Liberty Street Economics,* February 2016.
- “Has MBS Market Liquidity Deteriorated?” (with Rich Podjasek, Linsey Molloy, and Andreas Fuster). Federal Reserve Bank of New York *Liberty Street Economics,* February 2016.
- “Continuing the Conversation on Liquidity” (with Tobias Adrian, and Ernst Schaumburg). Federal Reserve Bank of New York *Liberty Street Economics,* February 2016
- “Characterizing the Rising Settlement Fails in Seasoned Treasury Securities,” (with Frank Keane). Federal Reserve Bank of New York *Liberty Street Economics,* January 2016.
- “Dealer Positioning and Expected Returns” (with Tobias Adrian and Erik Vogt). Federal Reserve Bank of New York *Liberty Street Economics,* December 2015.
- “At the New York Fed: Conference on the Evolving Structure of the U.S. Treasury Market” (with Frank Keane, Michael McMorrow, Ernst Schaumburg, and Nathaniel Wuerffel). Federal Reserve Bank of New York *Liberty Street Economics,* December 2015.
- “Dealers’ Positions and the Auction Cycle” (with Collin Jones). Federal Reserve Bank of New York *Liberty Street Economics,* October 2015.
- “Redemption Risk of Bond Mutual Funds and Dealer Positioning” (with Tobias Adrian, Or Shachar, and Erik Vogt). Federal Reserve Bank of New York *Liberty Street Economics,* October 2015.
- “Changes in the Returns to Market Making” (with Tobias Adrian, Or Shachar, Daniel Stackman, and Erik Vogt). Federal Reserve Bank of New York *Liberty Street Economics,* October 2015.
- “Has Liquidity Risk in the Treasury and Equity Markets Increased?” (with Tobias Adrian, Daniel Stackman, and Erik Vogt). Federal Reserve Bank of New York *Liberty Street Economics,* October 2015.

- “Has Liquidity Risk in the Corporate Bond Market Increased?” (with Tobias Adrian, Or Shachar, and Erik Vogt). Federal Reserve Bank of New York *Liberty Street Economics,* October 2015.
- “Has U.S. Corporate Bond Market Liquidity Deteriorated?” (with Tobias Adrian, Or Shachar, and Erik Vogt). Federal Reserve Bank of New York *Liberty Street Economics,* October 2015.
- “Introduction to a Series on Market Liquidity: Part 2” (with Tobias Adrian and Ernst Schaumburg). Federal Reserve Bank of New York *Liberty Street Economics,* October 2015.
- “What’s Driving Dealer Balance Sheet Stagnation? (with Tobias Adrian, Daniel Stackman, and Erik Vogt). Federal Reserve Bank of New York *Liberty Street Economics,* August 2015.
- “The Evolution of Workups in the U.S. Treasury Securities Market” (with Ernst Schaumburg, and Ron Yang). Federal Reserve Bank of New York *Liberty Street Economics,* August 2015.
- “Has U.S. Treasury Market Liquidity Deteriorated? (with Tobias Adrian, Daniel Stackman, and Erik Vogt). Federal Reserve Bank of New York *Liberty Street Economics,* August 2015.
- “Introduction to a Series on Market Liquidity” (with Tobias Adrian, and Ernst Schaumburg). Federal Reserve Bank of New York *Liberty Street Economics,* August 2015.
- “Just Released: The U.S. Treasury Market on October 15, 2014” (with Nashrah Ahmed, Alain Chaboud, Dobrislav Dobrev, Joseph Fiorica, Frank Keane, Michael McMorrow, Suraj Prasanna, Ernst Schaumburg, Nathaniel Wuerffel, and Ron Yang). Federal Reserve Bank of New York *Liberty Street Economics,* July 2015.
- “What Explains the June Spike in Treasury Settlement Fails?” (with Frank Keane, Antoine Martin, and Michael McMorrow). Federal Reserve Bank of New York *Liberty Street Economics*, September 2014.
- “Measuring Settlement Fails” (with Frank Keane, Antoine Martin, and Michael McMorrow). Federal Reserve Bank of New York *Liberty Street Economics*, September 2014.
- “At the N.Y. Fed: Workshop on the Risks of Wholesale Funding” (with Dong Beom Choi, Patrick de Fontnouvelle, and Thomas Eisenbach). Federal Reserve Bank of New York *Liberty Street Economics*, September 2014.
- “Just Released: The 2013 SOMA Annual Report in a Historical Context” (with Alyssa Cambron, Deborah Leonard, Grant Long, and Julie Remache). Federal Reserve Bank of New York *Liberty Street Economics,* April 2014.
- “The Failure Resolution of Lehman Brothers” (with Asani Sarkar). Federal Reserve Bank of New York *Liberty Street Economics,* April 2014.
- “Dealer Balance Sheet Capacity and Market Liquidity during the 2013 Selloff in Fixed-Income Markets” (with Tobias Adrian, Jonathan Goldberg, Morgan Lewis, Fabio Natalucci, and Jason Wu). Federal Reserve Bank of New York *Liberty Street Economics,* October 2013.
- “Information on Dealer Activity in Specific Treasury Issues Now Available.” Federal Reserve Bank of New York *Liberty Street Economics,* August 2013.
- “Transparency and Sources of Information on the Federal Reserve’s Operations, Income, and Balance Sheet” (with Deborah Leonard). Federal Reserve Bank of New York *Liberty Street Economics,* August 2013.

- "What If? A Counterfactual SOMA Portfolio" (with Deborah Leonard, Grant Long, and Julie Remache). Federal Reserve Bank of New York *Liberty Street Economics,* August 2013.
- "The SOMA Portfolio through Time" (with Meryam Bukhari, Alyssa Cambron, Jonathan McCarthy, and Julie Remache). Federal Reserve Bank of New York *Liberty Street Economics,* August 2013.
- "The Recent Bond Market Selloff in Historical Perspective" (with Tobias Adrian). Federal Reserve Bank of New York *Liberty Street Economics,* August 2013.
- "How Liquid Is the Inflation Swap Market?" (with John Sporn). Federal Reserve Bank of New York *Liberty Street Economics*, April 2013.
- "Primary Dealers' Waning Role in Treasury Auctions" (with Sean Myers). Federal Reserve Bank of New York *Liberty Street Economics*, February 2013
- "Federal Reserve Liquidity Facilities Gross $22 Billion for U.S. Taxpayers." Federal Reserve Bank of New York *Liberty Street Economics,* November 2012.
- "The Impact of Trade Reporting on the Interest Rate Derivatives Market" (with John Jackson, Ada Li, Asani Sarkar, and Patricia Zobel). Federal Reserve Bank of New York *Liberty Street Economics,* April 2012.
- "Failure Is No Longer a (Free) Option for Agency Debt and Mortgage-Backed Securities." Federal Reserve Bank of New York *Liberty Street Economics,* March 2012.
- "How Might Increased Transparency Affect the CDS Market? (with Kathryn Chen, John Jackson, Ada Li and Asani Sarkar). Federal Reserve Bank of New York *Liberty Street Economics,* November 2011.

PRESENTATIONS

2018: Federal Reserve Bank of Atlanta Summer Financial Policy Conference (August), Norges Bank (May), University of Zurich (May), 5th International Conference on Sovereign Bond Markets (April), Wilfrid Laurier University (April), Macro Financial Modeling Winter Meeting (January).

2017: FTG Summer School (August), Federal Reserve Bank of Atlanta Summer Financial Policy Conference (August), Sacred Heart University (May), Commodity Futures Trading Commission (April), Financial Stability Board Workshop (February), New York University (February).

2016: NYU Stern Risk Management Symposium (September), Fixed Income Analysts Society (May).

2015: FINRA/Columbia Conference on Corporate Debt Market Structure, Liquidity and Volatility (November), Board of Governors of the Federal Reserve System (October), Bank of Thailand (February), Bank for International Settlements (February), AFA Annual Meeting (January).

2014: Financial Management Association Annual Meeting (October), 10th Annual Central Bank Workshop on the Microstructure of Financial Markets (October), Centre for Advanced Financial Research and Learning (July), First International Conference on Sovereign Bond Markets (June), Bank of Japan (June), Financial Management Association Applied Finance Conference (May).

2013: Darla Moore School of Business Fixed Income Conference (April).

2012: CFTC Research Conference (November), Board of Governors of the Federal Reserve System (May), Darla Moore School of Business Fixed Income Conference (April), AEA Annual Meeting (January).

2010: Federal Reserve Bank of New York auctions workshop (November), 6th Annual Central Bank Workshop on the Microstructure of Financial Markets (October), Bridgewater Associates (June), AEA Annual Meeting (January).

2009: Central Bank of Ireland (October), Cass Business School (October), Brandeis University (March), Federal Reserve Bank of New York conference on Inflation-Indexed Securities and Inflation Risk Management (February), Federal Reserve Bank of New York conference on Central Bank Liquidity Tools (February), ASSA Annual Meetings (January).

2008: Queens University Belfast (April), AFA Annual Meeting (January), Federal Reserve System Conference on Financial Markets & Institutions (January).

2007: ECB workshop on Analysis of the Money Market (November), Financial Management Association Annual Meeting (October), 3rd Annual Central Bank Workshop on the Microstructure of Financial Markets (September), Bank of Canada (May), University of Cambridge conference on High Frequency Dynamics and Bond Markets (April), Board of Governors of the Federal Reserve System (April), Federal Reserve Bank of Atlanta System Finance Conference (March), ASSA Annual Meetings (January).

2006: University of Kansas (December), NBER Market Microstructure Meeting (May), Bank of Canada Conference on Fixed Income Markets (May), Dauphine Workshop on Financial Market Quality (March).

2005: Danmarks Nationalbank Workshop on Bond Lending (November), SUERF/Bank of Finland conference on Open Market Operations and the Financial Markets (September), Vrije Universiteit Amsterdam (September).

2004: Federal Reserve Bank of San Francisco (April).

2003: University of Piraeus & Athens Derivatives Exchange (November), Third Workshop of the ECB-CFS Research Network on Capital Markets and Financial Integration in Europe (November), Rutgers University (October), Federal Reserve System Conference on Financial Structure and Regulation (September).

2002: Bank for International Settlements (September), Federal Reserve System Conference on Financial Structure and Regulation (September), Bank of Canada (May), University of Kentucky (February).

2001: Berkeley Program in Finance (October), Federal Reserve Bank of Cleveland and *Journal of Money, Credit, and Banking* Conference on Declining Treasury Debt (October), University of Aarhus Conference on Market Microstructure and High-Frequency Data in Finance (August), ABN AMRO Global Central Bankers Conference (June), ALMA Group Annual Meeting (May), Bank for International Settlements (March), Federal Reserve Bank of Boston (February), CBOE, CBOT and CME Risk Management Conference (February), European Central Bank (January).

2000: Brookings Panel on Economic Activity (September), Board of Governors of the Federal Reserve System (July), European Financial Management Association Annual Meeting (June).

1999: Federal Reserve Bank of New York conference on Fiscal Policy in an Era of Surpluses: Economic & Financial Implications (December), Goldman, Sachs & Co. (August).

1998: Bank of Japan (November), Joint Central Bank Research Conference on Risk Management & Systemic Risk (November), Financial Management Association Annual Meeting (October), ERISA U.S. Department of Labor Advisory Council (September), Eastern Economic Association Annual Meeting (February).

1997: NBER Market Microstructure Meeting (December), UCSD conference on Time Series Analysis of High Frequency Financial Data (April).

1996: Financial Management Association Annual Meeting (October).

1995: Financial Management Association Annual Meeting (October).

DISCUSSIONS

2019: NBER Conference on Big Data: Long-Term Implications for Financial Markets and Firms (March).

2018: Columbia Business School Transparency Conference: At What Speed and Cost? (panel discussion; June), NBER Long-Term Asset Management Conference (panel discussion; May).

2017: Euromoney Electronic Bond Trading Forum (roundtable discussion; June).

2016: The Evolving Structure of the U.S. Treasury Market: Second Annual Conference (panel discussion; October), Inaugural India Research Conference (May), Third International Conference on Sovereign Bond Markets (April).

2015: Conference on the Evolving Structure of the U.S. Treasury Market (panel discussion; October), Federal Reserve System "Day-Ahead" Conference on Financial Markets and Institutions (January).

2014: First International Conference on Sovereign Bond Markets (panel discussion; June), AFA Annual Meeting (January).

2012: Econometric Society Annual Meeting (January).

2011: Quantitative Easing Conference (June), WFA Annual Meeting (June), SFS Finance Cavalcade (May), Stern Microstructure Meeting (May).

2010: Financial Management Association Annual Meeting (October).

2009: 5th Annual Central Bank Workshop on the Microstructure of Financial Markets (October), Yale/RFS Financial Crisis Conference (July).

2008: AEA Annual Meeting (January).

2007: Financial Management Association Annual Meeting (October).

2006: NBER Market Microstructure Meeting (October), Dauphine Workshop on Financial Market Quality (March).

2004: NBER Market Microstructure Meeting (July).

2003: MTS Conference on Financial Markets (June).

1998: Joint Central Bank Research Conference on Risk Management & Systemic Risk (Nov.)

1996: Financial Management Association Annual Meeting (October).

1995: Financial Management Association Annual Meeting (October).

PROGRAM COMMITTEES

2020: 16th Annual Central Bank Conference on the Microstructure of Financial Markets (cancelled), 7th International Conference on Sovereign Bond Markets (postponed/TBD).

2019: 15th Annual Central Bank Conference on the Microstructure of Financial Markets (November), 6th International Conference on Sovereign Bond Markets (April).

2018: 14th Annual Central Bank Conference on the Microstructure of Financial Markets (November), 5th International Conference on Sovereign Bond Markets (April).

2017: 13th Annual Central Bank Conference on the Microstructure of Financial Markets (September), 4th International Conference on Sovereign Bond Markets (April).

2016: 12th Annual Central Bank Conference on the Microstructure of Financial Markets (September), 3rd International Conference on Sovereign Bond Markets (April).

2015: 11th Annual Central Bank Conference on the Microstructure of Financial Markets (October), 2nd International Conference on Sovereign Bond Markets (March).

2014: 10th Annual Central Bank Conference on the Microstructure of Financial Markets (October), Workshop on the Risks of Wholesale Funding (August), 1st International Conference on Sovereign Bond Markets (June).

2013: 9th Annual Central Bank Conference on the Microstructure of Financial Markets (Sept.).

2012: 8th Annual Central Bank Conference on the Microstructure of Financial Markets (Oct.).

2011: 7th Annual Central Bank Conference on the Microstructure of Financial Markets (Oct.).

2010: 6th Annual Central Bank Conference on the Microstructure of Financial Markets (Oct.).

2009: 5th Annual Central Bank Conference on the Microstructure of Financial Markets (Oct.).

2008: 4th Annual Central Bank Conference on the Microstructure of Financial Markets (Sept.).

2007: 3rd Annual Central Bank Conference on the Microstructure of Financial Markets (Sept.).

REFEREE WORK

American Economic Review, Economic Journal, Economics Letters, European Economic Review, Finance Research Letters, Financial Management, Financial Review, International Finance, International Journal of Central Banking, Journal of Applied Econometrics, Journal of Applied Finance, Journal of Banking and Finance, Journal of Economics and Business, Journal of Empirical Finance, Journal of the European Economic Association, Journal of Finance, Journal of Financial Economics, Journal of Financial Intermediation, Journal of Financial Markets, Journal of Financial and Quantitative Analysis, Journal of Financial Research, Journal of Financial Services Research, Journal of Futures Markets, Journal of International Economics, Journal of International Money and Finance, Journal of Monetary Economics, Journal of Money, Credit, and Banking, Journal of Political Economy, Journal of Portfolio Management, Management Science, National Tax Journal, Pacific-Basin Finance Journal, Quantitative Economics, Quantitative Finance, Quarterly Journal of Finance, Review of Economic Studies, Review of Finance, Review of Financial Economics, Review of Financial Studies, Swiss Journal of Economics and Statistics.

MEDIA COVERAGE

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