

JAMES BULLARD

June 22, 2019

PRINCIPAL CURRENT POSITION¹

President and Chief Executive Officer, Federal Reserve Bank of St. Louis.

- Appointment as of April 2008.
- Member, Federal Open Market Committee, primary policy arm of the Federal Reserve.
- 8th FR District includes branch offices in Memphis, Little Rock, and Louisville.
- 1,385 employees and \$459 m. in annual operating expenses as of December 31, 2018.

CONCURRENT POSITIONS

Honorary Professor of Economics, Washington University in St. Louis, 2010-present.
Co-editor, Journal of Economic Dynamics and Control, 2007-present.

BOARD MEMBER

Central Bank Research Association, Senior Council, 2017-present.
Concordance Academy of Leadership, 2019-present.
Greater St. Louis Financial Forum, 2012-present.
St. Cloud State University School of Public Affairs, Advisory Council, 2017-present.
St. Louis Regional Chamber, 2009-present.
University of Missouri-St. Louis Chancellor's Council, 2011-2017.
United Way Worldwide Board of Trustees, 2015-2018.
United Way U.S.A. Chairman of the Board of Trustees, 2015-2018.
United Way U.S.A. Board of Trustees, 2013-present.
United Way of Greater St. Louis, 2009-2013.
Washington University in St. Louis, Olin Business School, Wells Fargo Advisors Center
for Finance and Accounting Research Advisory Board, 2010-present.
Washington University in St. Louis, Department of Economics, Advisory Council,
2010-present.
Washington University in St. Louis, Center for Dynamic Economics, Advisory Board,
2013-present.

¹The statements in this vita are made in good faith and are generally reliable, but errors cannot be ruled out. Readers spotting mistakes or needed updates are kindly requested to notify me by email.

PREVIOUS POSITIONS

Vice-President and Research Economist.

Deputy Director of Research for Monetary Analysis.

Research Department, Federal Reserve Bank of St. Louis.

—Economist at the Bank since 1990.

—Policy adviser, FOMC Class I, FOMC briefing coordinator.

—Macroeconomics section chief.

TEACHING POSITIONS

Washington University in St. Louis, Department of Economics.

Macroeconomics, PhD core level, Spring 2006, 2005, 2004, 2003.

Macroeconomic theory, PhD field level, Fall 2007, Spring 2007, 2000, and 1994.

Intermediate macroeconomics, Fall 2005, 2002, Spring 2001, 1998 (Olin School).

Macroeconomics reading group, Spring 2006 to 2008.

University of Missouri, St. Louis, Department of Economics.

Worldwide growth and development, graduate level, Summer 2003.

Topics in money and banking, graduate level, Summer 2000, 1997, 1994.

Southern Illinois University, Edwardsville, Department of Economics.

Topics in monetary and fiscal policy, graduate level, Fall 2002, 1999, 1992.

VISITING POSITIONS

Visitor, Bank of England, Monetary Assessment and Analysis Division, April-July 1996.

London, United Kingdom.

Visitor, Santa Fe Institute, November 1995.

Santa Fe, New Mexico, USA.

EDUCATION

Ph.D., Economics, Indiana University, Bloomington, Indiana, 1990.

Bachelor of Science, Quantitative Methods and Information Systems, and Economics,

St. Cloud State University, St. Cloud, Minnesota, 1984.

AWARDS

Distinguished Alumni Award, Indiana University, College of Arts and Sciences, 2014.

Weidenbaum Center Award for Excellence, Washington University, 2014.

G.R. Herberger College of Business Leadership Award, St. Cloud State University, 2009.

CITIZENSHIP

United States of America.

PUBLICATIONS IN JOURNALS

Nominal GDP Targeting with Heterogeneous Labor Supply. *Journal of Money, Credit and Banking*, 2019, forthcoming. (With A. Singh).

Incomplete Credit Markets and Monetary Policy. *Journal of Economic Dynamics and Control*, 2019, June, 103: 83-101. (With C. Azariadis, A. Singh and J. Suda).

R-Star Wars: The Phantom Menace. *Business Economics*, 2018, April, 53(2): 60-65.

Permazero. *Cato Journal*, 2016, Spring/Summer, 36(2): 415-429.

The Optimal Inflation Target in an Economy with Limited Enforcement. *Macroeconomic Dynamics*, 2016, March, 20 (Special Issue 2): 582-600. (With G. Antinolfi and C. Azariadis).

The Stability of Macroeconomic Systems with Bayesian Learners. *Journal of Economic Dynamics and Control*, 2016, January, 62(1): 1-16. (With J. Suda).

Three Challenges to Central Bank Orthodoxy. *Business Economics*, 2015, October, 50(4): 191-199. (With K.L. Kliesen).

When Does Determinacy Imply Expectational Stability? *International Economic Review*, 2014, February, 55(1): 1-22. (With S. Eusepi).

Social Learning and Monetary Policy Rules. *Economic Journal*, 2013, March, 123(567): 38-76. (With J. Arifovic and O. Kostyshyna).

Learning and the Great Moderation. *International Economic Review*, 2012, May, 53(2): 375-97. (With A. Singh).

A Model of Near-Rational Exuberance. *Macroeconomic Dynamics*, 2010, April, 14(2): 166-188. (With G. Evans and S. Honkapohja).

Monetary Policy, Determinacy and Learnability in a Two-Block World Economy. *Journal of Money, Credit and Banking*, 2009, December, 41(8): 1585-1612. (With E. Schaling).

Worldwide Macroeconomic Stability and Monetary Policy Rules. *Journal of Monetary Economics*, 2008, October, 55(Supplement 1): S34-S47. (With A. Singh).

Monetary Policy, Judgement, and Near-Rational Exuberance. *American Economic Review*, 2008, June, 98(3): 1163-1177. (With G. Evans and S. Honkapohja).

- A Leisurely Reading of the Life-Cycle Consumption Data. *Journal of Monetary Economics*, 2007, November, 54(8): 2305-2320. (With J. Feigenbaum).
- Comments on Orphanides and Williams' 'Robust Monetary Policy.' *Journal of Monetary Economics*, 2007, July, 54(5): 1436-1440.
- Determinacy, Learnability, and Monetary Policy Inertia. *Journal of Money, Credit, and Banking*, 2007, August, 39(5): 1177-1212. (With K. Mitra).
- Escapist Policy Rules. *Journal of Economic Dynamics and Control*, 2005, November, 29(11): 1841-1865. (With I-K. Cho).
- Did the Great Inflation Occur Despite Policymaker Commitment to a Taylor Rule? *Review of Economic Dynamics*, 2005, April, 8(2): 324-359. (With S. Eusepi).
- Trend-Reverting Fluctuations and the Life-Cycle Model. *Journal of Economic Theory*, 2004, December, 119(2): 334-356. (With C. Azariadis and L. Ohanian).
- Central Bank Design in General Equilibrium. *Journal of Money, Credit, and Banking*, 2004, February, 36(1): 95-114. (With C. Waller).
- Intermediaries and Payments Instruments. *Journal of Economic Theory*, 2003, April, 109(2): 172-197. (With B.D. Smith).
- The Value of Inside and Outside Money. *Journal of Monetary Economics*, 2003, March, 50(2): 389-417. (With B.D. Smith).
- Learning about Monetary Policy Rules. *Journal of Monetary Economics*, 2002, September, 49(6): 1105-1129. (With K. Mitra).
- Private and Public Circulating Liabilities. *Journal of Economic Theory*, 2001, July-August, 99(1-2): 59-116. (With C. Azariadis and B.D. Smith).
- Learning and Excess Volatility. *Macroeconomic Dynamics*, 2001, April, 5(2): 272-302. (With J. Duffy).
- An Empirically Plausible Model of Low Real Interest Rates and Unbacked Government Debt. *Journal of Monetary Economics*, 1999, December, 44(3): 477-508. (With S. Russell).
- Using Genetic Algorithms to Model the Evolution of Heterogeneous Beliefs. *Computational Economics*, 1999, February, 13(1): 41-60. (With J. Duffy).
- Learning and the Stability of Cycles. *Macroeconomic Dynamics*, 1998, March, 2(1): 22-48. (With J. Duffy).
- A Model of Learning and Emulation with Artificial Adaptive Agents. *Journal of Economic Dynamics and Control*, 1998, February, 22(2): 179-207. (With J. Duffy).
- The Transition from Stagnation to Growth: An Adaptive Learning Approach. *Journal of Economic Growth*, 1997, July, 2(2): 185-209. (With J. Arifovic and J. Duffy).
- The Long-Run Relationship between Inflation and Output in Postwar Economies. *Journal of Monetary Economics*, 1995, December, 36(3): 477-496. (With J. Keating).

- Learning Equilibria. *Journal of Economic Theory*, 1994, December, 64(2): 468-485.
- Nonlinearity and Chaos in Economic Models: Implications for Policy Decisions. *Economic Journal*, 1993, July, 103: 849-867. (With A. Butler).
- Time-Varying Parameters and Nonconvergence to Rational Expectations under Least Squares Learning. *Economics Letters*, 1992, October, 40(2): 159-166.
- Cost Functions for Symphony Orchestras. *Journal of Cultural Economics*, 1985, December, 9(2):71-85. (With M. Lange, W. Luksetich and P. Jacobs).

PUBLICATIONS IN VOLUMES

- International Monetary Stability and Policy, with Robert Kaplan, Dennis Lockhart, and John C. Williams. Chapter 7 in M.D. Bordo and J.B. Taylor, eds., *Rules for International Monetary Stability*, Hoover Press, 2017.
- Comment on “Debt and Incomplete Financial Markets: A Case for Nominal GDP Targeting,” by Kevin D. Sheedy. In D.H. Romer and J. Wolfers, eds., *Brookings Papers on Economic Activity*, Spring 2014.
- Comment on ‘Inflation and Welfare in Models with Trading Frictions,’ by G. Roucheteau and R. Wright. In D. Altig and E. Nosal, eds., *Monetary Policy in Low-Inflation Economies*, Cambridge University Press, 2009.
- Comment on “Laboratory Experiments with an Expectational Phillips Curve,” by J. Arifovic and T.J. Sargent. In D.E. Altig and B.D. Smith, eds., *Evolution and Procedures in Central Banking*, Cambridge University Press, 2003.
- Learning Equilibria. In D.A. Walker, ed., *Equilibrium*. Vol. 3. Edward Elgar Publishing, 2000.
- Learning. In D. Glasner, ed., *Business Cycles and Depressions*, Garland Publishing, 1997.
- Rethinking Rational Expectations. In G. von Furstenberg, ed., *Acting Under Uncertainty*. Kluwer Academic, 1990.

PUBLICATIONS IN THE FRB-ST. LOUIS REVIEW

- Allan Meltzer and the Search for a Nominal Anchor. *FRB-St. Louis Review*, Second Quarter 2018, 100(2): 117-126.
- Permazero. *FRB-St. Louis Review*, Second Quarter 2016, 98(2): 81-92.
- Three Challenges to Central Bank Orthodoxy. *FRB-St. Louis Review*, First Quarter 2016, 98(1): 1-16. (With K.L. Kliesen).

- The Rise and Fall of Labor Force Participation in the United States. FRB-St. Louis Review, First Quarter 2014, 96(1): 1-12.
- Demographics, Redistribution, and Optimal Inflation. FRB-St. Louis Review, 2012, November/December, 94(6): 419-440. (With C. Garriga and C. Waller).
- Death of a Theory. FRB-St. Louis Review, 2012, March/April, 94(2): 83-101.
- Measuring Inflation: The Core Is Rotten. FRB-St. Louis Review, 2011, July/August, 93(4): 223-234.
- Seven Faces of “The Peril.” FRB-St. Louis Review, 2010, September/October, 92(5): 339-352.
- Three Lessons for Monetary Policy from the Panic of 2008. FRB-St. Louis Review, 2010, May/June, 92(3): 155-164.
- Systemic Risk and the Financial Crisis: A Primer. FRB-St. Louis Review, 2009, September/October, 91(5): 403-417. (With C. Neely and D. Wheelock).
- President’s Welcome. FRB-St. Louis Review, 2009, July/August, 91(4): 179-180.
- The Role of Potential Output in Policymaking. FRB-St. Louis Review, 2009, July/August, 91(4): 389-395. (Panel discussion with C.H. Araujo and S. Honkapohja).
- Three Funerals and a Wedding. FRB-St. Louis Review, 2009, January/February, 91(1): 1-12.
- Monetary Policy as Equilibrium Selection. FRB-St. Louis Review, 2007, July/August, 89(4): 331-341. (With G. Antinolfi and C. Azariadis).
- The Learnability Criterion and Monetary Policy. FRB-St. Louis Review, 2006, May/June, 88(3): 203-217.
- How Costly is Sustained Low Inflation for the U.S. Economy? FRB-St. Louis Review, 2004, May/June, 86(3): 35-67. (With S. Russell).
- Why the Fed Should Ignore the Stock Market. FRB-St. Louis Review, 2002, March/April, 84(2): 35-42. (With E. Schaling).
- New Economy—New Policy Rules? FRB-St. Louis Review, 2001, September/October, 83(5): 57-66. (With E. Schaling).
- Testing Long-Run Neutrality Propositions: Lessons from the Recent Research. FRB-St. Louis Review, 1999, November/December, 81(6): 57-78.
- What Has Become of the ‘Stability-through-Inflation’ Argument? FRB-St. Louis Review, 1998, January/February, 80(1). (With A. Marty).
- Price Stability and Economic Growth: Editor’s Introduction. FRB-St. Louis Review, 1996, May/June, 78(3): 3-6.

- U.S. Official Forecasts of G-7 Economies, 1976-90. FRB-St. Louis Review, 1995, March/April, 77(2): 39-48. (With M. Ulan and W. Dewald).
- Measures of Money and the Quantity Theory. FRB-St. Louis Review, 1994, January/February, 76(1): 19-30.
- Samuelson's Model of Money with n-Period Lifetimes. FRB-St. Louis Review, 1992, May/June, 74(3): 67-82.
- The FOMC in 1991: an elusive recovery. FRB-St. Louis Review, 1992, March/April, 74(2): 41-61.
- The FOMC in 1990: Onset of Recession. FRB-St. Louis Review, 1991, May/June, 73(3): 31-53.
- Learning, Rational Expectations and Policy: A Summary of Recent Research. FRB-St. Louis Review, 1991, January/February, 73(1): 50-60.

EDITED VOLUMES

- Proceedings of the Tenth International Conference on Computing in Economics and Finance, Special Issue of the Journal of Economic Dynamics and Control, 2006, September/October, 30(9-10): 1441-1856. (Edited with Cees Diks and Florian Wagener).
- New Approaches to Learning in Macroeconomics. Special issue of Macroeconomic Dynamics, 2001. (Edited with J. Arifovic). With contributions by B. LeBaron; C. Hommes and J.B. Rosser, Jr.; J. Arifovic; G. Bischi and R. Marimon; J. Bullard and J. Duffy; T. Allen and C. Carroll; and B. Routledge.
- Price Stability and Economic Growth, FRB-St. Louis Review 20th Annual Conference Volume, 1996. With contributions by B. Smith, J. Boyd, and S. Choi; P. Labadie; S. Chatterjee; V.V. Chari, R. Manuelli, and L. Jones; G. Hansen; A. Stockman; R. Wright and A. Trejos; N. Wallace; J. Ritter; C. Azariadis and V. Galasso; R. Becker; R. Cooper; R. King and A. Wolman; E. Prescott; J. Rotemberg; M. Bruno and W. Easterly; J. Faust; K. West; R. Barro; N. Kocherlakota; C. Sims.

CURRENT WORKING PAPERS AND MANUSCRIPTS

- Classic Policy Benchmarks for Heterogeneous-Agent Economies. (with R. DiCecio).
- Optimal Monetary Policy for the Masses. (with R. DiCecio).
- Does a Low-Interest-Rate Regime Punish Savers?
- Monetary policy, determinacy, and learnability in the open economy. (With E. Schaling).
- Endogenous skill acquisition and Mirleesian taxation. (With Y. Zhang).
- Learning and structural change in macroeconomic data. Manuscript. (With J. Duffy).

CONFERENCES ORGANIZED

“Learning Week,” Summer 2008, co-organized with Massimo Guidolin, George Evans and Seppo Honkapohja.

Conference on “Money, Credit, and Banking,” May 2008, sponsored by the Research Department, Federal Reserve Bank of St. Louis, and the Center for Dynamic Economics, Department of Economics, Washington University, co-organized with Steve Williamson.

“Monetary Policy Under Uncertainty,” the 32nd Annual FRB-St. Louis Economic Policy Conference, October 2007, co-organized with Edward Nelson and Daniel Thornton.

“Learning Week,” Summer 2007, co-organized with George Evans and Seppo Honkapohja.

“Learning Week,” Summer 2006, co-organized with George Evans and Seppo Honkapohja.

Midwest Macroeconomics, Spring 2006 meetings, organizing committee.

Midwest Macroeconomics, Spring 1998 meetings.

“Price Stability and Economic Growth,” the 20th Annual FRB-St. Louis Economic Policy Conference, October 1995.

SPEECHES

June 2019. “Remarks on the Current Stance of U.S. Monetary Policy.” Remarks delivered at the Union League Club of Chicago, Chicago, Illinois.

May 2019. “A Successful Normalization of Monetary Policy in the U.S.” Remarks delivered at the Foreign Correspondents’ Club, Hong Kong, China.

May 2019. “The Monetary Policy Implications of a Low R-Star: An Update.” Remarks delivered at the Joint DNB/ECB Workshop on the Natural Rate of Interest, De Nederlandsche Bank, Amsterdam, Netherlands.

April 2019. “A Successful Normalization, With Challenges Ahead.” Community Development Foundation of Tupelo, Tupelo, Mississippi.

February 2019. “When Quantitative Tightening Is Not Quantitative Tightening.” Remarks delivered at the 2019 U.S. Monetary Policy Forum, New York City, New York.

February 2019. “Three Themes for Monetary Policy in 2019.” Remarks delivered at the 57th Winter Institute, St. Cloud State University, St. Cloud, Minnesota.

January 2019. “Perspectives on 2019 Monetary Policy.” Remarks delivered at Power Up Little Rock, Little Rock Regional Chamber, Little Rock, Arkansas.

December 2018. “More on Modern Monetary Policy Rules.” Remarks delivered at the Indiana Economic Outlook Forum, Indiana Bankers Association, Carmel, Indiana.

- October 2018. “Modernizing Monetary Policy Rules.” Remarks delivered at the Economic Club of Memphis, Memphis, Tennessee.
- October 2018. “Some Consequences of the U.S. Growth Surprise.” Remarks delivered at the OMFIF Foundation City Lecture, Singapore.
- October 2018. Opening remarks delivered at the 6th Annual Federal Reserve/CSBS/FDIC Community Banking Research and Policy Conference, Community Banking in the 21st Century, St. Louis, Missouri.
- September 2018. “What Is the Best Strategy for Extending the U.S. Economy’s Expansion?” Remarks delivered at the CFA Society Chicago—Distinguished Speaker Series Breakfast, Chicago, Illinois.
- September 2018. “How to Extend the U.S. Expansion: A Suggestion.” Remarks delivered at Real Return XII: The Inflation-Linked Products Conference 2018, New York City, New York.
- July 2018. “Assessing the Risk of Yield Curve Inversion: An Update.” Remarks delivered at the Glasgow-Barren County Chamber of Commerce Quarterly Breakfast, Glasgow, Kentucky.
- July 2018. “Non-Uniform Currencies and Exchange Rate Chaos.” Remarks delivered at the Alternative Money University, Cato Institute, Washington, D.C.
- June 2018. “The Case of the Disappearing Phillips Curve.” Remarks delivered at the 2018 ECB Forum on Central Banking Macroeconomics of Price- and Wage-Setting, Sintra, Portugal.
- June 2018. “Non-Uniform Currencies and Exchange Rate Chaos.” Remarks delivered at The Canon Institute for Global Studies, Conference on Macroeconomic Theory and Policy 2018, Tokyo, Japan.
- May 2018. “A Cautionary Note on U.S. Monetary Policy Normalization.” Remarks delivered at the Japan Center for International Finance, Global Finance Seminar, Tokyo, Japan.
- May 2018. “The Case of the Disappearing Phillips Curve.” Remarks delivered at the panel discussion “The Causes and Consequences of ‘Missing Inflation,’” 2018 BOJ-IMES Conference, Central Banking in a Changing World, Tokyo, Japan.
- May 2018. “Exchange Rate Volatility and Cryptocurrencies.” Remarks delivered at the panel discussion “Central Banking under the FinTech Revolution,” 2018 BOJ-IMES Conference, Central Banking in a Changing World, Tokyo, Japan.
- May 2018. “Living Standards across U.S. Metropolitan Statistical Areas.” Remarks delivered at the Civic Progress meeting, St. Louis, Missouri.
- May 2018. “Living Standards across U.S. Metropolitan Statistical Areas.” Remarks delivered at the de Tocqueville Society, St. Louis, Missouri.
- May 2018. Opening remarks delivered at the Homer Jones Memorial Lecture, Federal Reserve Bank of St. Louis, St. Louis, Missouri.

- May 2018. “Non-Uniform Currencies and Exchange Rate Chaos.” Remarks delivered at CoinDesk, Consensus 2018, New York City, New York.
- May 2018. “U.S. Monetary Policy: A Case for Caution.” Remarks delivered at the Springfield Area Chamber of Commerce, Springfield Business Development Corp. Meeting, Springfield, Missouri.
- April 2018. “Living Standards across U.S. Metropolitan Statistical Areas.” Remarks delivered at the Calhoun Lecture Series, Washington University in St. Louis, St. Louis, Missouri.
- April 2018. “The U.S. Economy Three Months into 2018.” Remarks delivered at the Arkansas Bankers Association and Arkansas State Bank Department’s Day with the Commissioner, Little Rock, Arkansas.
- February 2018. “R-Star Wars: The Phantom Menace.” Remarks delivered at the 34th Annual National Association for Business Economics (NABE) Economic Policy Conference, Washington, D.C.
- February 2018. “Remarks on the 2018 U.S. Macroeconomic Outlook.” Remarks delivered at the 29th Annual Economic Outlook Conference, Gatton College of Business and Economics, University of Kentucky, Lexington, Kentucky.
- January 2018. “A Primer on Price Level Targeting in the U.S.” Remarks delivered at the CFA Society of St. Louis, St. Louis, Missouri.
- January 2018. “Allan Meltzer and the Search for a Nominal Anchor.” Remarks delivered at the *Meltzer’s Contributions to Monetary Economics and Public Policy* conference, Philadelphia, Pennsylvania.
- December 2017. “Assessing the Risk of Yield Curve Inversion.” Remarks delivered at a Regional Economic Briefing, Little Rock, Arkansas.
- November 2017. “When Will U.S. Inflation Return to Target?” Remarks delivered at the Economic Update Breakfast, Louisville, Kentucky.
- November 2017. “An Illustrative Calculation of r^\dagger with Policy Implications.” Remarks delivered at the Federal Reserve Bank of St. Louis, Central Bank Forecasting Conference, St. Louis, Missouri.
- October 2017. “Living Standards across U.S. Metropolitan Statistical Areas.” Remarks delivered at the Bi-State Development 2017 Annual Meeting, St. Louis, Missouri.
- September 2017. “Three Questions for U.S. Monetary Policy.” Remarks delivered at Truman State University, Kirksville, Missouri.
- August 2017. “A Low Inflation Surprise for U.S. Monetary Policy.” Remarks delivered at the AMCOT 2017 Conference, Nashville, Tennessee.
- June 2017. “The Path Forward for U.S. Monetary Policy in a Global Context.” Remarks delivered at the OMFIF City Lecture, London, United Kingdom.

- June 2017. “The Path Forward for U.S. Monetary Policy.” Remarks delivered at the Illinois Bankers Association Annual Conference, Nashville, Tennessee.
- May 2017. “Current Growth, Inflation and Price Level Developments in the U.S.” Remarks delivered at Keio University, Tokyo, Japan.
- May 2017. “Recent Developments in U.S. Monetary Policy.” Remarks delivered at the Association for Corporate Growth–Monthly Breakfast Meeting, Olin Business School, Washington University in St. Louis, St. Louis, Missouri.
- May 2017. “An Illustrative Calculation of r^{\dagger} .” Remarks delivered at the Federal Reserve Bank of Atlanta 22nd Annual Financial Markets Conference, Amelia Island, Florida.
- April 2017. “The U.S. Macroeconomic Outlook.” Remarks delivered at the Reserve Bank of New Zealand, Wellington, New Zealand.
- April 2017. “The U.S. Macroeconomic Outlook.” Remarks delivered at the Reserve Bank of Australia, Sydney, Australia.
- April 2017. “The U.S. Macroeconomic Outlook.” Remarks delivered at the Australian Centre for Financial Studies International Distinguished Lecture, Melbourne, Australia.
- March 2017. “Current Monetary Policy, the New Fiscal Policy and the Fed’s Balance Sheet.” Remarks delivered at the Economic Club of Memphis, Memphis, Tennessee.
- February 2017. “The Role of the Fed’s Balance Sheet for the U.S. Monetary Policy Outlook in 2017.” Remarks delivered at the Spring 2017 George Washington University Alumni Lecture in Economics, George Washington University, Washington, D.C.
- February 2017. “The 2017 Outlook for U.S. Monetary Policy.” Remarks delivered at the St. Louis Financial Forum, Olin Business School at Washington University in St. Louis, St. Louis, Missouri.
- January 2017. “Five Macroeconomic Questions for 2017.” Remarks delivered at the Forecasters Club of New York, New York City, New York.
- December 2016. “The Low Real Interest Rate Regime Post-Election: Is There a Switch?” Remarks delivered at the 53rd Annual Economic Forecast Luncheon, W.P. Carey School of Business at Arizona State University, Phoenix, Arizona.
- November 2016. “U.S. Monetary Policy in the Aftermath of the U.S. Presidential Election.” Remarks delivered at the UBS European Conference 2016, *Monetary Policy after QE*, London, United Kingdom.
- November 2016. “Safe Real Interest Rates and Fed Policy.” Remarks delivered at the Commerce Bank 2016 Annual Economic Breakfast, St. Louis, Missouri.
- October 2016. “One Equation to Understand the Current Monetary Policy Debate.” Remarks delivered at the Association for University Business and Economic Research (AUBER) 2016 Fall Conference, Fayetteville, Arkansas.

- September 2016. Opening remarks delivered at the 4th Annual Federal Reserve/CSBS Community Banking Research Conference, Community Banking in the 21st Century, St. Louis, Missouri.
- August 2016. “Normalization: A New Approach.” Remarks delivered at the Wealth and Asset Management Research Conference, Olin Business School at Washington University in St. Louis, St. Louis, Missouri.
- July 2016. “A Tale of Two Narratives.” Remarks delivered at the OMFIF Main Meeting, *America and the world: Reflections on the United States role in the global economy*, St. Louis, Missouri.
- July 2016. “A Tale of Two Narratives.” Remarks delivered at the St. Louis Gateway Chapter of the National Association for Business Economics, St. Louis, Missouri.
- June 2016. “A New Characterization of the U.S. Macroeconomic and Monetary Policy Outlook.” Remarks delivered at the Society of Business Economists Annual Dinner, London, United Kingdom.
- May 2016. “Slow Normalization or No Normalization?” Remarks delivered at the OMFIF City Lecture, Singapore.
- May 2016. “Slow Normalization or No Normalization?” Remarks delivered at the OMFIF City Lecture, Beijing, China.
- May 2016. “International Monetary Stability: A Multiple Equilibria Problem?” Remarks delivered at the International Monetary Stability conference, Hoover Institution at Stanford University, Stanford, California.
- May 2016. “Slow Normalization or No Normalization?” Remarks delivered at the 35th Annual Economic Forecast Project, Santa Barbara County Summit, Santa Barbara, California.
- April 2016. Opening remarks delivered at the Homer Jones Memorial Lecture, Federal Reserve Bank of St. Louis, St. Louis, Missouri.
- March 2016. “Time Consistency and Fed Policy.” Remarks delivered at the New York Association for Business Economics, New York City, New York.
- March 2016. “Economic Inequality and Possible Policy Responses.” Remarks delivered at the Hyman P. Minsky Lecture, the Weidenbaum Center on the Economy, Government, and Public Policy at Washington University in St. Louis, St. Louis, Missouri.
- March 2016. “Permazero in Europe?” Remarks delivered at the International Research Forum on Monetary Policy, *Ninth Conference*, Frankfurt am Main, Germany.
- February 2016. “More on the Changing Imperatives for U.S. Monetary Policy Normalization.” Remarks delivered at the Money Marketmakers of New York University, New York City, New York.
- February 2016. “Changing Imperatives for U.S. Monetary Policy Normalization.” Remarks delivered at the CFA Society St. Louis, St. Louis, Missouri.

- January 2016. “Oil Prices, Inflation and U.S. Monetary Policy.” Remarks delivered at the 2016 Regional Economic Briefing and Breakfast, Economic Club of Memphis, Memphis, Tennessee.
- December 2015. “A Hat Trick for the FOMC.” Remarks delivered at the 20th Annual Indiana Economic Outlook Luncheon, Ball State University, Muncie, Indiana.
- December 2015. “Permazero as a Possible Medium-term Outcome for the U.S. and the G-7.” Remarks delivered at the FRB of Philadelphia Policy Forum, *The New Normal for the U.S. Economy*, Philadelphia, Pennsylvania.
- November 2015. “Answers to Five Questions Related to U.S. Monetary Policy.” Remarks delivered at UAFS and Fort Smith Regional Chamber of Commerce, Fort Smith, Arkansas.
- November 2015. “Permazero.” Remarks delivered at the Cato Institute–33rd Annual Monetary Conference, *Rethinking Monetary Policy*, Washington, D.C.
- November 2015. “Five Questions on U.S. Monetary Policy.” Remarks delivered at the St. Louis Regional Chamber Financial Forum, St. Louis, Missouri.
- October 2015. Opening remarks delivered at the 40th Annual Fall Conference, St. Louis, Missouri.
- October 2015. “More on Three Challenges to Central Bank Orthodoxy.” Remarks delivered at the 57th NABE Annual Meeting, Washington, D.C.
- October 2015. Opening remarks delivered at the symposium 529s and Child Savings Accounts, Federal Reserve Bank of St. Louis and Washington University in St. Louis, St. Louis, Missouri.
- October 2015. “Three Challenges to Central Bank Orthodoxy.” Remarks delivered at the Shadow Open Market Committee Meeting, New York City, New York.
- September 2015. Opening remarks delivered at the 3rd Annual Federal Reserve/CSBS Community Banking Research Conference, Community Banking in the 21st Century, St. Louis, Missouri.
- September 2015. “Still Very Accommodative.” Remarks delivered at New Directions in Monetary Policy, GIC and FRB-St. Louis, St. Louis, Missouri.
- September 2015. “A Long, Long Way to Go.” Remarks delivered at the Annual Meeting of the Community Bankers Association of Illinois, Nashville, Tennessee.
- August 2015. “Neo-Fisherianism.” Remarks delivered at the Expectations in Dynamic Macroeconomics Models Conference, University of Oregon, Eugene, Oregon.
- June 2015. “Perspectives on Innovation and Entrepreneurship.” Remarks delivered at the Emerging Venture Leaders Summit, St. Louis, Missouri.
- June 2015. Opening remarks delivered at the Homer Jones Memorial Lecture, Federal Reserve Bank of St. Louis, St. Louis, Missouri.

- April 2015. “Some Considerations for U.S. Monetary Policy Normalization.” Remarks delivered at the 24th Annual Hyman P. Minsky Conference on the State of the US and World Economies, Washington, D.C.
- March 2015. “U.S. Monetary Policy Normalization.” Remarks delivered at the OMFIF City Lecture, Frankfurt am Main, Germany.
- February 2015. Remarks delivered at the 2015 Economic Forecast—10th Anniversary, University of Delaware, Newark, Delaware.
- January 2015. “Ghosts and Forecasts.” Remarks delivered at the Distinguished Speakers Series, CFA Society Chicago, Chicago, Illinois.
- November 2014. “Does Low Inflation Justify a Zero Policy Rate?” Remarks delivered at the St. Louis Regional Chamber Financial Forum, St. Louis, Missouri.
- October 2014. Opening remarks delivered at the 39th Annual Fall Conference, St. Louis, Missouri.
- October 2014. “The FOMC: Ahead on Results, Behind on Rates.” Remarks delivered in Tupelo, Mississippi.
- September 2014. Opening remarks delivered at the 2nd Annual Federal Reserve/CSBS Community Banking Research Conference, Community Banking in the 21st Century, St. Louis, Missouri.
- July 2014. “Fed Goals and the Policy Stance.” Remarks delivered at the Owensboro in 2065 Summit, Owensboro, Kentucky.
- June 2014. “Income Inequality and Monetary Policy: A Framework with Answers to Three Questions.” Remarks delivered at the C. Peter McColough Series on International Economics, Council on Foreign Relations, New York City, New York.
- June 2014. “How Far Is the FOMC from Its Goals?” Remarks delivered at the Tennessee Bankers Association Annual Meeting, Palm Beach, Florida.
- May 2014. “A Tame Taper.” Remarks delivered at the Arkansas Day with the Bank Commissioner, Little Rock, Arkansas.
- May 2014. Opening remarks delivered at the Research Symposium: The Balance Sheets of Younger Americans, Federal Reserve Bank of St. Louis, St. Louis, Missouri.
- April 2014. “Two Views of International Monetary Policy Coordination.” Remarks delivered at the 27th Asia/Pacific Business Outlook Conference, USC Marshall School of Business—CIBER, Los Angeles, California.
- April 2014. Opening remarks delivered at the Homer Jones Memorial Lecture, Federal Reserve Bank of St. Louis, St. Louis, Missouri.
- March 2014. “Two Views of International Monetary Policy Coordination.” Remarks delivered at the 17th Annual Asian Investment Conference, Hong Kong, China.

- February 2014. “The Rise and Fall of Labor Force Participation in the U.S.” Remarks delivered at the Exchequer Club, Washington, D.C.
- January 2014. “Ghosts of Forecasts Past and Future.” Remarks delivered at the Economic Outlook Forum Luncheon, Indiana Bankers Association, Indianapolis, Indiana.
- December 2013. “Some Issues in Current U.S. Monetary Policy.” Remarks delivered at the CFA Society of St. Louis, St. Louis, Missouri.
- November 2013. “The Notorious Summer of 2008.” Remarks delivered at the Quarterly Business Analysis Luncheon, University of Arkansas, Rogers, Arkansas.
- November 2013. “The Tapering Debate: Data and Tools.” Remarks delivered at the Financial Forum, St. Louis Regional Chamber, St. Louis, Missouri.
- October 2013. Opening remarks delivered at the 38th Annual Fall Conference, St. Louis, Missouri.
- October 2013. Opening remarks delivered at the Federal Reserve/CSBS Community Banking Research Conference, Community Banking in the 21st Century, St. Louis, Missouri.
- September 2013. “Four Questions for Current Monetary Policy.” Remarks delivered at the New York Association for Business Economics, New York City, New York.
- August 2013. “An Update on the Tapering Debate.” Remarks delivered at the Breakfast with the Fed, Louisville, Kentucky.
- August 2013. “The Tapering Debate.” Remarks delivered at the 2013 Municipal Finance Conference, Boston, Massachusetts.
- July 2013. “Recent Developments in Monetary Policy.” Remarks delivered at the Global Interdependence Center’s 5th Annual Rocky Mountain Economic Summit, Jackson Hole, Wyoming.
- June 2013. “The U.S. Economy and Monetary Policy.” Remarks delivered at the 19th Conference of Montreal—Entering the Next Economy: New Realities, New Frontiers, Montreal, Canada.
- May 2013. “Monetary Policy in a Low Policy Rate Environment.” Remarks delivered at the OMFIF Golden Series Lecture, London, United Kingdom.
- May 2013. “Monetary Policy in a Low Policy Rate Environment.” Remarks delivered at the IMFS Distinguished Lecture House of Finance—Goethe Universität Frankfurt, Frankfurt am Main, Germany.
- April 2013. “Some Unpleasant Implications for Unemployment Targeters.” Remarks delivered at the 22nd Annual Hyman P. Minsky Conference, New York City, New York.
- April 2013. Opening remarks delivered at the 2013 Federal Reserve System Community Development Research Conference—Resilience and Rebuilding for Low-Income Communities: Research to Inform Policy and Practice, Washington, D.C.

- April 2013. Opening remarks delivered at the Homer Jones Memorial Lecture, Federal Reserve Bank of St. Louis, St. Louis, Missouri.
- February 2013. “Perspectives on the Current Stance of Monetary Policy.” Remarks delivered at the NYU Stern Center for Global Economy and Business, New York City, New York.
- February 2013. “U.S. Monetary Policy: Easier Than You Think It Is.” Remarks delivered at Mississippi State University, Starkville, Mississippi.
- February 2013. “The Recent Reduction in Global Macroeconomic Uncertainty.” Remarks delivered at the Arkansas State University Agribusiness Conference, Jonesboro, Arkansas.
- January 2013. “The Fed’s New Regime and the 2013 Outlook.” Remarks delivered at the Wisconsin Economic Forecast Luncheon, Wisconsin Bankers Association, Madison, Wisconsin.
- January 2013. “The Global Battle Over Central Bank Independence.” Remarks delivered at the NABE Panel Discussion: “Federal Reserve Independence in the Aftermath of the Financial Crisis: Should We Be Worried?” AEA/ASSA Annual Meeting, San Diego, California.
- December 2012. “Making Sense of Thresholds, Triggers, Twists, and Timelines.” Remarks delivered at the 147th Annual Meeting of the Little Rock Regional Chamber of Commerce, Little Rock, Arkansas.
- November 2012. “Shadow Interest Rates and the Stance of U.S. Monetary Policy.” Remarks delivered at the Center for Finance and Accounting Research Annual Corporate Finance Conference, Olin Business School at Washington University in St. Louis, St. Louis, Missouri.
- October 2012. “Price Level Targeting: The Fed Has It About Right.” Remarks delivered at Economic Club of Memphis, Memphis, Tennessee.
- September 2012. “A Singular Achievement of Recent Monetary Policy.” Remarks delivered at Theodore and Rita Combs Distinguished Lecture Series in Economics, University of Notre Dame, South Bend, Indiana.
- July 2012. “The Global Economy and the European Sovereign Debt Crisis.” Remarks delivered at the OMFIF Golden Series Lecture, London, United Kingdom.
- June 2012. “U.S. Monetary Policy: Still Appropriate.” Remarks delivered at Dialogue with the Fed, Little Rock, Arkansas.
- June 2012. “The Aftermath of the Housing Bubble.” Remarks delivered at Housing in America: Innovative Solutions to Address the Needs of Tomorrow, The Bipartisan Policy Center, St. Louis, Missouri.
- May 2012. Remarks delivered at the Rotary Club of Louisville, Louisville, Kentucky.
- May 2012. “The Fed on Pause.” Remarks delivered at Dialogue with the Fed, Louisville, Kentucky.

- April 2012. "Hawks, Doves, Bubbles, and Inflation Targets." Remarks delivered at the George S. Eccles Distinguished Lecture, Jon M. Huntsman School of Business, Utah State University, Logan, Utah.
- April 2012. Opening remarks delivered at the Homer Jones Memorial Lecture, Federal Reserve Bank of St. Louis, St. Louis, Missouri.
- April 2012. "The U.S. Monetary Policy Outlook." Remarks delivered at the InvestMidwest Venture Capital Forum, St. Louis, Missouri.
- March 2012. "Global Output Gaps: Wave of the Future." Remarks delivered at Monetary Policy in a Global Setting: China and the United States, Beijing, China.
- March 2012. "Monetary Policy and the U.S. Economy in 2012." Remarks delivered at the 15th Annual Credit Suisse Asian Investment Conference, Hong Kong.
- March 2012. "The U.S. Economy in the Aftermath of the Financial Crisis." Remarks delivered at the Bank of Montreal Lecture in Economics, Simon Fraser University, Vancouver, British Columbia.
- February 2012. "Inflation Targeting in the USA." Remarks delivered at the Union League Club of Chicago, Chicago, Illinois.
- January 2012. "Death of a Theory." Remarks delivered at the Edward Jones Annual Meeting, St. Louis, Missouri.
- January 2012. "SNEAK PREVIEW: Death of a Theory." Remarks delivered at the Korea-America Economic Association, Chicago, Illinois.
- November 2011. "The U.S. Macroeconomic Situation and Monetary Policy." Remarks delivered at CFA Society of St. Louis, St. Louis, Missouri.
- October 2011. Opening remarks delivered at the 36th Annual Economic Policy Conference, St. Louis, Missouri.
- September 2011. "U.S. Monetary Policy at Another Crossroads." Remarks delivered at the 2011 Dealmakers of the Year Business Breakfast, Point Loma Nazarene University's Fermanian Business & Economic Institute, San Diego, California.
- September 2011. "America's Investment Problem and Monetary Policy." Remarks delivered at Policy Making After the Crisis, New York City, New York.
- September 2011. Opening remarks delivered at Dialogue with the Fed: Beyond Today's Financial Headlines, Lessons Learned from the Financial Crisis, Federal Reserve Bank of St. Louis, St. Louis, Missouri.
- July 2011. "Views on the U.S. Economy: A Four-Part Story." Remarks delivered at the 3rd Annual Rocky Mountain Economic Summit, Jackson Hole, Wyoming.
- June 2011. "QE2: An Assessment, Opening Remarks." Remarks delivered at the Quantitative Easing (QE) Conference, Federal Reserve Bank of St. Louis, St. Louis, Missouri.

- May 2011. "Commodity Prices, Inflation Targeting, and U.S. Monetary Policy." Remarks delivered at the 2011 Joint Meeting of the Cape Girardeau and Jackson Rotary Clubs, Cape Girardeau, Missouri.
- May 2011. "Commodity Prices, Inflation Targeting, and U.S. Monetary Policy." Remarks delivered at the Mineral Area College Foundation Cozean Lecture Series, Farmington, Missouri.
- May 2011. "Measuring Inflation: The Core Is Rotten." Remarks delivered at Money Markets of New York University, New York City, New York.
- May 2011. "U.S. Monetary Policy and Commodity Prices." Remarks delivered at Arkansas Day with the Bank Commissioner, Little Rock, Arkansas.
- April 2011. "The U.S. Economic Situation and Recent Monetary Policy Developments." Remarks delivered at Kentucky Day with the Commissioner, Louisville, Kentucky.
- April 2011. Opening remarks delivered at the Homer Jones Memorial Lecture, Federal Reserve Bank of St. Louis, St. Louis, Missouri.
- March 2011. "U.S. Monetary Policy and the Path to Normalization." Remarks delivered in London, United Kingdom.
- March 2011. "U.S. Monetary Policy: Recent Developments." Remarks delivered at the 2011 European Banking and Financial Forum, Prague, Czech Republic.
- February 2011. "Quantitative Easing, Global Inflation, and Commodity Standards." Remarks delivered at the Bowling Green Area Chamber of Commerce, Bowling Green, Kentucky.
- December 2010. "The U.S. Economic Situation and Recent Monetary Policy Developments." Remarks delivered at the National Economists Club, Washington, D.C.
- November 2010. Opening remarks delivered at The Consumer Financial Protection Bureau: The Direction and Implications, Federal Reserve Bank of St. Louis, St. Louis, Missouri.
- November 2010. Opening remarks delivered at Past, Present, and Future of the Government Sponsored Enterprises, Federal Reserve Bank of St. Louis, St. Louis, Missouri.
- November 2010. "QE2 in Five Easy Pieces." Remarks delivered at the High Profile Speaker Series, New York Society of Security Analysts, New York City, New York.
- October 2010. "The Financial Stability Oversight Council: Can Systemic Risk be Contained? Opening Remarks." Remarks delivered at "The Financial Stability Oversight Council: Can Systemic Risk be Contained?" Federal Reserve Bank of St. Louis, St. Louis, Missouri.
- October 2010. "Frictions in Financial and Labor Markets, Opening Remarks." Remarks delivered at the 35th Annual Economic Policy Conference Frictions in Financial and Labor Markets, Federal Reserve Bank of St. Louis, St. Louis, Missouri.
- August 2010. "Monetary Policy and the U.S. Economy." Remarks delivered at the Fed Exchange Conference, Rogers, Arkansas.

- June 2010. “The Global Recovery and Monetary Policy.” Remarks delivered at The Institute of Regulation and Risk North Asia, The Grand Ballroom, Conrad Hotel, Pacific Place, Hong Kong.
- June 2010. “The Global Recovery and Monetary Policy.” Remarks delivered at The Institute of Regulation and Risk North Asia, The InterContinental Hotel, Tokyo Bay, Japan.
- May 2010. “Policy Challenges for Central Banks in the Aftermath of the Crisis.” Remarks delivered at the Swedbank Economic Outlook Seminar, Stockholm, Sweden.
- May 2010. “The Road to Economic Recovery Following the Financial Crisis.” Remarks delivered at the Distinguished Speakers Seminar, European Economics and Financial Centre, London, United Kingdom.
- May 2010. “The U.S. Economic Situation and Regulatory Reform.” Remarks delivered at A Day with the Commissioner, Nashville, Tennessee.
- May 2010. “Assessing the Strength of the U.S. Economic Recovery.” Remarks delivered at Olin Business School at Washington University in St. Louis, St. Louis, Missouri.
- April 2010. “Containing Risk in the New Global Financial Landscape.” Remarks delivered at the 19th Annual Hyman P. Minsky Conference on the State of the U.S. and World Economies After the Crisis: Planning a New Financial Structure, New York City, New York.
- March 2010. “The Fed at a Crossroads.” Remarks delivered at the 48th Winter Institute, St. Cloud State University, St. Cloud, Minnesota.
- February 2010. “Will Regulatory Reform Prevent Future Crises?” Remarks delivered at the Texas A&M University, Texarkana, Arkansas.
- February 2010. “Will Regulatory Reform Prevent Future Crises?” Remarks delivered at the CFA Virginia Society, Richmond, Virginia.
- February 2010. “The U.S. Economy: A Report from Main Street.” Remarks delivered at the Economic Club of Memphis, Memphis, Tennessee.
- January 2010. “The First Phase of the U.S. Recovery and Beyond.” Remarks delivered at the Global Interdependence Center 2010 International Conference Series, Shanghai, China.
- December 2009. “Three Lessons for Monetary Policy from the Panic of 2008.” Remarks delivered at the Philadelphia Fed Policy Forum, Philadelphia, Pennsylvania.
- November 2009. “The Fed and the Coming Redefinition of Government Regulation.” Remarks delivered at the Business Today, “Weathering the Storm: The Challenges and Opportunities of a Global Showdown” Conference, New York City, New York.
- November 2009. “The First Phase of the U.S. Recovery.” Remarks delivered at the Commerce Bank Economic Breakfast, St. Louis, Missouri.
- October 2009. “Three Issues for Near-Term Monetary Policy.” Remarks delivered at the 51st Annual NABE Meeting, St. Louis, Missouri.

- September 2009. “Monetary Policy Feedback Rules at the Zero Lower Bound.” Remarks delivered at the Financial Markets, Liquidity and Monetary Policy Swiss National Bank Research Conference, Zurich, Switzerland.
- August 2009. “The State of the U.S. Economy.” Remarks delivered at the University of Arkansas, Little Rock, Arkansas.
- June 2009. “Exit Strategies for the Federal Reserve.” Remarks delivered at the Federal Reserve Bank of Philadelphia, organized by the Global Interdependence Center, Philadelphia, Pennsylvania.
- June 2009. “Regulatory Reform After the Fall of Wall Street.” Remarks delivered at the Financial Regulation Reform Collaborative Conference, Washington, D.C.
- May 2009. “Financial Market Turmoil and Recession: What’s Next.” Remarks delivered at Indiana University, Bloomington, Indiana.
- May 2009. “The U.S. Financial System and Macroeconomic Performance.” Remarks delivered at the 119th Annual Arkansas Bankers Association Meeting, Hot Springs, Arkansas.
- March 2009. “Effective Monetary Policy in a Low Interest Rate Environment.” Remarks delivered at the Henry Thornton Lecture, Cass Business School, London, United Kingdom.
- February 2009. “Dial ‘M’ for Monetary Policy.” Remarks delivered at the New York Association for Business Economics, Harvard Club. New York, New York.
- November 2008. “Three Funerals and a Wedding.” Remarks delivered at the Regional Economic Summit, Evansville, Indiana.
- October 2008. “The U.S. Economy and Financial Market Turmoil.” Remarks delivered at the Economic Club of Memphis, Memphis, Tennessee.
- October 2008. “Systemic Risk and the Macroeconomy: An Attempt at Perspective.” Remarks delivered at Indiana University, Bloomington, Indiana.
- September 2008. “Near-Term Challenges for the U.S. Economy.” Remarks delivered at the 2008 Annual Economic Outlook Conference, Murfreesboro, Tennessee.
- June 2008. “Remarks on the U.S. Economy.” Remarks delivered at Macroeconomic Advisers Quarterly Outlook Conference, St. Louis, Missouri.
- June 2008. “Remarks on the U.S. Economy and the State of the Housing Sector.” Remarks delivered at the Wisconsin Housing Conference sponsored by the University of Wisconsin-Madison Graaskamp Center for Real Estate, the Wisconsin Housing and Economic Development Authority, the State of Wisconsin Bureau of Housing, Department of Commerce, and the Wisconsin Realtors Association, Madison, Wisconsin.
- June 2008. “A Perspective on the U.S. Economy.” Remarks delivered at the University of Arkansas Quarterly Business Analysis Breakfast, Fayetteville, Arkansas.

SEMINARS AND DISCUSSIONS

- June 2019. Expectations in Dynamic Macroeconomic Models, conference hosted by the Barcelona GSE and MOVE (Markets, Organizations and Votes in Economics), Barcelona, Spain. Presented “Classic Policy Benchmarks for Heterogeneous-Agent Economies.”
- May 2019. Monetary Policy and Heterogeneity Conference, Hong Kong Monetary Authority and Federal Reserve Bank of New York, Hong Kong, China. Presented “Classic Policy Benchmarks for Heterogeneous Agent Economies.”
- May 2019. Strategies for Monetary Policy: A Policy Conference, Policy Panel on “Monetary Strategies in Practice,” Hoover Institution, Stanford University, Stanford, California. Presented “Nominal GDP Targeting as ‘Optimal Monetary Policy for the Masses.’”
- April 2019. 28th Annual Hyman P. Minsky Conference, Levy Economics Institute of Bard College, Annandale-on-Hudson, New York. Presented “Optimal Monetary Policy for the Masses.”
- March 2019. Center for Research on the Wisconsin Economy, University of Wisconsin-Madison, Madison, Wisconsin. Presented “Optimal Monetary Policy for the Masses.”
- October 2018. Adam Smith Panmure House Lecture, Edinburgh, United Kingdom. Presented “Optimal Monetary Policy for the Masses.”
- September 2018. Swiss National Bank Research Conference 2018, Current Monetary Policy Challenges, Zurich, Switzerland. Presented “Optimal Monetary Policy for the Masses.”
- August 2018. University of Birmingham, Birmingham, United Kingdom. Presented “Optimal Monetary Policy for the Masses.”
- June 2018. Barcelona GSE, Summer Forum, Workshop on Monetary Policy and Central Banking, Barcelona, Spain. Presented “Optimal Monetary Policy for the Masses.”
- May 2018. 2018 Texas Monetary Conference, Austin, Texas. Presented “Optimal Monetary Policy for the Masses.”
- May 2018. Federal Reserve Bank of Dallas, Dallas, Texas. Presented “Optimal Monetary Policy for the Masses.”
- January 2018. Nonlinear Models in Macroeconomics and Finance for an Unstable World, conference hosted by Norges Bank, Oslo, Norway. Presented “Does a Low-Interest-Rate Regime Punish Savers?”
- January 2018. Norges Bank, Oslo, Norway. Presented “Optimal Monetary Policy for the Masses.”
- September 2017. Advanced Workshop for Central Bankers, Center for International Macroeconomics, Northwestern University, Evanston, Illinois. Presented “Does a Low-Interest-Rate Regime Punish Savers?”

- August 2017. New Challenges for Central Banks, conference hosted by Banco Central de Costa Rica, San José, Costa Rica. Presented “Does a Low-Interest-Rate Regime Punish Savers?”
- July 2017. Applications of Behavioural Economics and Multiple Equilibrium Models to Macroeconomic Policy Conference, London, United Kingdom. Presented “Does a Low-Interest-Rate Regime Punish Savers?”
- April 2017. University of Sydney, Sydney, Australia. Presented “Incomplete Credit Markets and Monetary Policy with Heterogeneous Labor Supply.”
- April 2017. Macro/Finance Workshop, Monash Business School, Melbourne, Australia. Presented “Incomplete Credit Markets and Monetary Policy with Heterogeneous Labor Supply.”
- November 2016. London School of Economics and Political Science, London, United Kingdom. Presented “Incomplete Credit Markets and Monetary Policy with Heterogeneous Labor Supply.”
- September 2016. Expectations in Dynamic Macroeconomic Models, conference hosted by De Nederlandsche Bank, Amsterdam, Netherlands. Presented “Incomplete Credit Markets and Monetary Policy with Heterogeneous Labor Supply.”
- June 2016. 22nd International Conference Computing in Economics and Finance, Bordeaux, France. Presented “Incomplete Credit Markets and Monetary Policy with Heterogeneous Labor Supply.”
- May 2016. Bank of Korea 2016 Conference, Employment and Growth, Seoul, Korea. Presented “Incomplete Credit Markets and Monetary Policy with Heterogeneous Labor Supply.”
- May 2016. Tsinghua-St. Louis Fed Monetary Policy and Financial Stability Conference. PBC School of Finance, Tsinghua University, Beijing, China. Presented “Incomplete Credit Markets and Monetary Policy with Heterogeneous Labor Supply.”
- May 2016. Academia Sinica, Taipei, Taiwan. Presented “Incomplete Credit Markets and Monetary Policy with Heterogeneous Labor Supply.”
- May 2016. University of California, Santa Barbara, Santa Barbara, California. Presented “Incomplete Credit Markets and Monetary Policy.”
- October 2015. W.P. Carey School of Business–Department of Economics, Arizona State University. Tempe, Arizona. Presented “Optimal Monetary Policy at the Zero Lower Bound.”
- September 2015. Monetary Policy and the Distribution of Income and Wealth Conference. Sponsored by the Center for Dynamic Economics (CEDEC) at Washington University in St. Louis and the Council on Economic Policies (CEP) in Zurich, Switzerland. Presented “Optimal Monetary Policy at the Zero Lower Bound.”

- February 2015. Federal Reserve Bank of Philadelphia, Philadelphia, Pennsylvania. Presented “Optimal Monetary Policy at the Zero Lower Bound.”
- January 2015. Federal Reserve Bank of Chicago, Chicago, Illinois. Presented “Optimal Monetary Policy at the Zero Lower Bound.”
- September 2014. Swiss National Bank Research Conference 2014, Zurich, Switzerland. Discussed S. Bhattacharai, G.B. Eggertsson and B. Gafarov “Time Consistency and the Duration of Government Debt: A Signalling Theory of Quantitative Easing.”
- June 2014. Federal Reserve Bank of Minneapolis, Minneapolis, Minnesota. Presented “Quantitative Easing as Optimal Monetary Policy.”
- March 2014. Spring 2014 Brookings Panel on Economic Activity, Washington D.C. Discussed Kevin D. Sheedy “Debt and Incomplete Financial Markets: A Case for Nominal GDP Targeting.”
- May 2013. Sveriges Riksbank, Stockholm, Sweden. Presented “Debt Overhang and Monetary Policy.”
- May 2013. Bank of Finland, Helsinki, Finland. Presented “Debt Overhang and Monetary Policy.”
- February 2012. 2012 U.S. Monetary Policy Forum. Sponsored by the Initiative on Global Markets, University of Chicago Booth School of Business. New York, New York. Discussed Michael Feroli, Ethan Harris, Amir Sufi and Kenneth West, “Housing, Monetary Policy, and the Recovery.”
- March 2011. Asset Prices, Credit and Macroeconomic Policies, organized by the Institut D’Économie Publique, Marseille, France. Presented “Reducing Deflationary Risk in the U.S.”
- March 2011. 19th Symposium of the Society for Nonlinear Dynamics and Econometrics, Institute for International Economic Policy, Elliott School of International Affairs, The George Washington University, Washington, D.C. Presented “Research in Macroeconomics after the Crisis.”
- March 2010. International Research Forum on Monetary Policy, organized by the Board of Governors of the Federal Reserve, Washington D.C. Presented “Panel Discussion: Structural Economic Modeling: Is It Useful in the Policy Process?”
- March 2009. Monetary Policy in the Current Crisis International Workshop, organized by the Bank of France, Aix-Marseille University, and Toulouse School of Economics, Paris, France. Presented “Monetary Policy in a Global Recession.”
- March 2009. 10th EABCN Workshop on Uncertainty over the Business Cycle, European Central Bank, Frankfurt. Discussed Martin Ellison and Thomas Sargent, “What Questions are Staff and FOMC Forecasts Supposed to Answer?”
- March 2009. 10th EABCN Workshop on Uncertainty over the Business Cycle, European Central Bank, Frankfurt. Presented a Panel Discussion on “Dating Business Cycles.”

- February 2009. 2009 U.S. Monetary Policy Forum. Sponsored by the Initiative on Global Markets, University of Chicago Booth School of Business. New York, New York. Discussed Ethan Harris, Bruce Kasman, Matthew Shapiro and Kenneth West, "Oil and the Macroeconomy: Lessons for Monetary Policy."
- January 2009. Annual Meeting of the American Economic Association. National Association of Business Economics, San Francisco, California. Panel on "Long-Run Economic Challenges: A Federal Reserve Perspective." Presented "A Two-Headed Dragon for Monetary Policy."
- October 2008. 33rd Annual Economic Policy Conference "Projecting Potential Growth: Issues and Measurement." Sponsored by the Federal Reserve Bank of St. Louis. Presented a Panel Discussion on the Role of Potential Output in Policymaking.
- October 2008. New Perspectives on Monetary Policy Design. Sponsored by the Bank of Canada and the Centre De Recerca en Economia Internacional. Barcelona, Spain. Presented "The Optimal Inflation Target in an Economy with Limited Enforcement."
- October 2008. Macroeconomics Seminar, Indiana University. Bloomington, Indiana. Presented "The Optimal Inflation Target in an Economy with Limited Enforcement."
- September 2008. Adaptive Learning in Macroeconomics. Sponsored by the Centre for International Macroeconomics and Finance and the Faculty of the University of Cambridge. Presented "Three Issues in Learning and Monetary Policy."
- June 2008. International Research Forum on Monetary Policy. Sponsored by the European Central Bank, the Federal Reserve Board of Governors, the BMW Center for German and European Studies at Georgetown University, and the Center for Financial Studies at the Johann Wolfgang Goethe-University. Discussed Fabio Milani, "Learning and Time-Varying Macroeconomic Volatility."
- May 2008. Conference on Frontiers in Monetary Theory and Policy. Sponsored by the Bank of Japan. Tokyo, Japan. Discussed George Evans and Seppo Honkapohja, "Robust Learning Stability with Operational Monetary Policy Rules."
- May 2008. Conference on Recognizing and Coping with Macroeconomic Model Uncertainty in Designing Monetary Policy. Sponsored by the Bank of Korea. Seoul, Korea. Presented a Roundtable Discussion on Model Uncertainty.
- March 2008. Workshop on Monetary and Macroeconomics. Sponsored by the Federal Reserve Bank of Philadelphia, the Penn Institute of Economic Research, and the International Economic Review. Discussed Aleksander Berentsen and Cylil Monnet, "Monetary Policy in a Channel System."
- November 2007. Canadian Macro Studies Group. Ottawa, Canada. Presented "Learning and the Great Moderation."
- October 2007. Workshop on Money and Payments. Sponsored by the Federal Reserve Bank of New York. New York City. Presented "The Optimal Inflation Target in an Economy with Limited Enforcement."

- October 2007. Conference in Honor of John B. Taylor. Sponsored by the Federal Reserve Bank of Dallas. Dallas, Texas. Presented “Worldwide Macroeconomic Stability and Monetary Policy Rules.”
- October 2007. Macroeconomics seminar. Federal Reserve Bank of Kansas City. Kansas City, Missouri. Presented “Worldwide Macroeconomic Stability and Monetary Policy Rules.”
- September 2007. CEPR/European Summer Institute/South African Reserve Bank Conference on “Global Imbalances, Competitiveness and Emerging Markets.” Pretoria, South Africa. Presented “Worldwide Macroeconomic Stability and Monetary Policy Rules.”
- September 2007. Monetary economics workshop. Banca d’Italia. Rome, Italy. Presented “The Learnability Criterion and Monetary Policy.”
- September 2007. Conference on “Expectations and Monetary Policy.” Sponsored by the Swiss National Bank. Zurich, Switzerland. Discussed “Monetary Policy Credibility and the Macroeconomy,” by Martin Melecki, Diego Rodriguez Palenzuela, and Ulf Soderstrom.
- August 2007. Monetary Economics Workshop. Sponsored by the Federal Reserve Bank of Cleveland. Cleveland, Ohio. Presented “The Optimal Inflation Target in an Economy with Limited Enforcement.”
- July 2007. Learning Week Workshop. Sponsored by the Federal Reserve Bank of St. Louis. St. Louis, Missouri.
- June 2007. Society for Computational Economics 13th International Conference on Computing in Economics and Finance. Montreal, Canada. Presented “Learning and the Great Moderation.”
- May 2007. Workshop on “Optimal Monetary Policy and Central Bank Communication.” Sponsored by the Bernoulli Center for Economics and the KOF Swiss Economic Institute. Ascona, Switzerland. Presented “The Optimal Inflation Target in an Economy with Limited Enforcement.”
- April 2007. Macroeconomics workshop, Federal Reserve Bank of New York. New York City. Presented “Learning and the Great Moderation.”
- March 2007. Macroeconomics workshop, Texas A&M University. College Station, Texas. Presented “Learning and the Great Moderation.”
- December 2006. International Research Forum on Monetary Policy. Washington, DC. Jointly sponsored by the European Central Bank, the Center for Financial Studies at Goethe University, the Federal Reserve Board of Governors, and Georgetown University. Discussion of “Bayesian and Adaptive Optimal Policy Under Model Uncertainty,” by Lars Svensson and Noah Williams, unable to present because of weather delays.
- November 2006. Carnegie-Rochester Conference Series on Public Policy. Pittsburgh, Pennsylvania. Discussed “Robust Monetary Policy with Imperfect Knowledge,” by Athanasios Orphanides and John Williams.

- November 2006. Conference on “Monetary Policy, Asset Prices, and Learning.” Sponsored by the European Central Bank. Frankfurt, Germany. Discussed “Learning and Model Validation,” by In-Koo Cho and Kenneth Kasa.
- October 2006. Conference on “Frontiers of Monetary Policy Research.” Sponsored by the Federal Reserve Bank of St. Louis. St. Louis, Missouri. Participated, “Monetary Policy as Equilibrium Selection,” main presentation by Costas Azariadis.
- July 2006. Learning Week Workshop. Sponsored by the Federal Reserve Bank of St. Louis. St. Louis, Missouri.
- April 2006. Conference in Honor of George von Furstenberg. Bloomington, Indiana. Discussed “Dynamic Correlation Analysis of Financial Contagion: Evidence from Asian Markets,” by Thomas C. Chiang, Bang Nam Jeon, and Huimin Li.
- April 2006. Macroeconomics seminar, University of Miami. Miami, Florida. Presented “Worldwide Macroeconomic Stability and Monetary Policy Rules.”
- March 2006. “Economics of Payments II” Conference. Sponsored by the Federal Reserve Bank of New York. Discussed “Optimal Settlement Rules for Payments Systems,” by Benjamin Lester, Stephen Millard, and Matthew Willison.
- December 2005. Macroeconomics seminar, Indiana University. Bloomington, Indiana. Presented “Near-Rational Exuberance.”
- November 2005. Macroeconomics seminar, Southern Methodist University. Dallas, Texas. Presented “Near-Rational Exuberance.”
- November 2005. Macroeconomics seminar, University of Missouri. Columbia, Missouri. Presented “Worldwide Macroeconomic Stability and Monetary Policy Rules.”
- June 2005. Eleventh International Conference on Computing in Economics and Finance. Washington, DC. Presented “Monetary Policy, Determinacy, and Learnability in the Open Economy.”
- May 2005. Third Conference of the International Research Forum on Monetary Policy. Sponsored by the European Central Bank. Frankfurt, Germany. Presented “Monetary Policy, Determinacy, and Learnability in the Open Economy.”
- May 2005. Bank for International Settlements. Basel, Switzerland. Presented “Monetary Policy, Determinacy, and Learnability in the Open Economy.”
- May 2005. Center for European Integration Studies (ZEI), University of Bonn. Bonn, Germany. Presented “Monetary Policy, Determinacy, and Learnability in the Open Economy.”
- May 2005. 36th Konstanz Seminar on Monetary Theory and Monetary Policy. Konstanz, Germany. Discussed “Structural Changes in the U.S. Economy: Bad Luck or Bad Policy?” by Fabio Canova and Luca Gambetti.
- January 2005. American Economic Association, Session on “Near-Rational Expectations and Stability in Macroeconomics.” Philadelphia, Pennsylvania. Participated, “Near-Rational Exuberance” main presentation by S. Honkapohja.

- November 2004. Canadian Macro Studies Group. Montreal, Canada. Presented “Near-Rational Exuberance.”
- October 2004. Conference on “Monetary Policy and Imperfect Knowledge.” Sponsored by the European Central Bank. Würzburg, Germany. Participated, “Near-Rational Exuberance” main presentation by S. Honkapohja.
- July 2004. Meetings of the Society for Economic Dynamics. Florence, Italy. Presented “Near-Rational Exuberance.”
- June 2004. Conference on “Dynamic Macroeconomic Theory.” Sponsored by the Institute of Economics at the University of Copenhagen. Copenhagen, Denmark. Presented “Near-Rational Exuberance.”
- May 2004. Midwest Macroeconomics Conference. Iowa State University, Ames, Iowa. Presented “Near-Rational Exuberance.”
- May 2004. Meeting of the Federal Reserve System Committee on Macroeconomics. Federal Reserve Bank of Cleveland. Cleveland, Ohio. Discussed “Learning and Shifts in Long-Run Productivity Growth,” by Rochelle Edge, Thomas Laubach, and John Williams.
- March 2004. Meetings of the Society for Nonlinear Dynamics and Econometrics. Federal Reserve Bank of Atlanta, Atlanta, Georgia. Presented “Near-Rational Exuberance.”
- January 2004. American Economic Association Meetings. San Diego, California. Discussed “The Decline of Activist Stabilization Policy: Natural Rate Misperceptions, Learning, and Expectations,” by Athanasios Orphanides and John Williams.
- November 2003. Conference on “Low Inflation Economies,” sponsored by the Federal Reserve Bank of Cleveland. Cleveland, Ohio. Discussed “Inflation and Welfare in Models with Trading Frictions,” by Guillaume Rocheteau and Randall Wright.
- October 2003. Macroeconomics seminar, Texas A&M University. College Station, Texas. Presented “Learning and Structural Change in Macroeconomic Data.”
- October 2003. Conference on “Heterogeneous Information and Modeling of Monetary Policy,” sponsored by the Bank of Finland and the Centre for Economic Policy Research. Helsinki, Finland. Presented a plenary talk, “The Learning Criterion and Monetary Policy.”
- August 2003. Conference on “Expectations, Learning, and Monetary Policy,” sponsored by the Deutsche Bundesbank and the Center for Financial Studies. Frankfurt, Germany. Presented “Escapist Policy Rules.”
- July 2003. Meetings of the Society for Computational Economics. Seattle, Washington. Presented “Did the Great Inflation Occur Despite Policymaker Commitment to a Taylor Rule?” and discussed “Shocking Escapes” by Bruce McGough.
- June 2003. Meetings of the Society for Economic Dynamics. Paris, France. Presented “A Leisurely Reading of the Life-Cycle Consumption Data.”
- May 2003. Banking and Payments Workshop. Federal Reserve Bank of Cleveland. Cleveland, Ohio. Presented “Intermediaries and Payments Instruments.”

- May 2003. Midwest Macroeconomics Conference. Federal Reserve Bank of Chicago, Chicago, Illinois. Presented "A Leisurely Reading of the Life-Cycle Consumption Data."
- May 2003. Conference in Honor of Karl Shell. Cornell University, Ithaca, New York. Presented "Intermediaries and Payments Instruments."
- May 2003. Conference on "Recent Developments in Monetary Economics," Purdue University. West Lafayette, Indiana. Discussed "Dynamic Efficiency, Risk Sharing, and Equivalent Financial Mechanisms in an Endowment Economy," by Pamela Labadie.
- April 2003. Bruce D. Smith Memorial Conference, University of Texas. Austin, Texas. Presented "Intermediaries and Payments Instruments."
- April 2003. Macroeconomics seminar, University of Pennsylvania. Philadelphia, Pennsylvania. Presented "Learning and Structural Change in Macroeconomic Data."
- March 2003. Macroeconomics seminar, Federal Reserve Bank of Philadelphia. Philadelphia, Pennsylvania. Presented "Did the Great Inflation Occur Despite Policymaker Commitment to a Taylor Rule?"
- March 2003. Conference on "Monetary Policy and Learning," sponsored by the Federal Reserve Bank of Atlanta. Atlanta, Georgia. Presented "Did the Great Inflation Occur Despite Policymaker Commitment to a Taylor Rule?"
- March 2003. Macroeconomics seminar, University of Alberta, Edmonton, Alberta. Presented "Learning and Structural Change in Macroeconomic Data."
- March 2003. Macroeconomics seminar, Simon Fraser University, Burnaby, British Columbia. Presented "Learning and Structural Change in Macroeconomic Data."
- January 2003. Macroeconomics seminar, University of California at Irvine, Irvine, California. Presented "Learning and Structural Change in Macroeconomic Data."
- January 2003. American Economic Association Meetings, Washington, DC. Discussed "Impacts of Priors on Convergence and Escapes from Nash Inflation," by T. Sargent and N. Williams, and "The Social Value of Risk-Free Government Debt," by S. Schreft and B.D. Smith.
- November 2002. Canadian Macroeconomics Study Group, Queen's University, Kingston, Ontario. Discussed "Identifying the Monetary Transmission Mechanism Using Structural Breaks," by A. Beyer and R. Farmer.
- October 2002. Federal Reserve System Committee on Macroeconomics. Federal Reserve Bank of Minneapolis, Minneapolis, Minnesota. Presented "Learning to Detrend Macroeconomic Data."
- September 2002. Macroeconomics seminar, North Carolina State University, Raleigh, North Carolina. Presented "Learning to Detrend Macroeconomic Data."
- June 2002. Meetings of the Society for Economic Dynamics. New York University, New York City, New York. Presented "Learning to Detrend Macroeconomic Data."

- June 2002. Workshop on “Economic Dynamics,” sponsored by the Center for Nonlinear Dynamics in Economics and Finance, University of Amsterdam. The Lorentz Center, Leiden, Netherlands. Presented “Learning to Detrend Macroeconomic Data.”
- April 2002. Midwest Macroeconomics Meetings. Vanderbilt University, Nashville, Tennessee. Presented “Intermediaries and Payments Instruments.”
- April 2002. Federal Reserve System Committee on Macroeconomics. Board of Governors of the Federal Reserve System, Washington, DC. Presented “Escapist Policy Rules.”
- March 2002. Macroeconomics seminar, University of Illinois, Champaign-Urbana, Illinois. Presented “Intermediaries and Payments Instruments.”
- March 2002. Macroeconomics seminar, Purdue University, West Lafayette, Indiana. Presented “Intermediaries and Payments Instruments.”
- March 2002. Texas Monetary Conference. Austin, Texas. Presented “Escapist Policy Rules.”
- August 2001. Workshop on “Money and Payments,” sponsored by the Federal Reserve Bank of Cleveland. Cleveland, Ohio. Presented “Intermediaries and Payments Instruments.”
- June 2001. Meetings of the Society for Economic Dynamics. Stockholm, Sweden. Presented “The Value of Inside and Outside Money,” and “Escapist Policy Rules.”
- May 2001. Workshop on “The Origins of Central Banking.” Sponsored by the Federal Reserve Bank of Cleveland. Cleveland, Ohio. Discussed “Laboratory Experiments with an Expectational Phillips Curve,” by J. Arifovic and T. Sargent.
- March 2001. Midwest Macroeconomics Meetings. Sponsored by the Federal Reserve Bank of Atlanta. Atlanta, Georgia. Presented “Escapist Policy Rules.”
- February 2001. Workshop on “Learning and Misspecification in Macroeconomics.” Sponsored by the Federal Reserve Bank of Cleveland. Cleveland, Ohio. Presented “Escapist Policy Rules.”
- December 2000. Macroeconomics Workshop, University of Pittsburgh. Pittsburgh, Pennsylvania. Presented “The Value of Inside and Outside Money.”
- November 2000. Economics workshop, SUNY-Binghamton. Binghamton, New York. Presented “Learning About Monetary Policy Rules.”
- November 2000. National Bureau for Economic Research, Monetary Economics Group. Cambridge, Massachusetts. Discussed L. Svensson and M. Woodford, “Indicator Variables for Optimal Policy.”
- November 2000. Canadian Macroeconomics Study Group. Hamilton, Ontario. Presented “Learning About Monetary Policy Rules.”
- October 2000. Conference on “Payment Economics,” sponsored by the Federal Reserve Bank of Richmond. Williamsburg, Virginia. Presented “The Value of Inside and Outside Money.”

- October 2000. Money and banking workshop, Ohio State University. Columbus, Ohio. Presented “The Value of Inside and Outside Money.”
- September 2000. Macroeconomics workshop, University of Texas. Austin, Texas. Presented “Learning About Monetary Policy Rules.”
- May 2000. Federal Reserve System Committee on Macroeconomics. Sponsored by the Federal Reserve Bank of St. Louis. St. Louis, Missouri. Presented “Learning About Monetary Policy Rules.”
- April 2000. National Bureau of Economic Research, Monetary Economics Program meeting. Cambridge, Massachusetts. Presented “Learning About Monetary Policy Rules.”
- April 2000. Conference on “Central Banking and Payments,” sponsored by the Federal Reserve Bank of Cleveland. Cleveland, Ohio. Presented “Private and Public Circulating Liabilities.”
- March 2000. Conference on “Structural Change and Monetary Policy,” sponsored by Stanford University and the Federal Reserve Bank of San Francisco. San Francisco, California. Discussed “Learning About a Shift in Trend Output: Implications for Monetary Policy and Inflation,” by Kevin Lansing.
- January 2000. Conference on “Expectations Formation and Nonlinear Dynamics in Economics and Finance,” sponsored by the Center for the Study of Nonlinear Dynamics in Economics and Finance, University of Amsterdam. Amsterdam, Netherlands. Presented “Learning and Excess Volatility.”
- December 1999. Macroeconomics workshop, University of Melbourne. Melbourne, Australia. Presented “Learning About Monetary Policy Rules.”
- December 1999. Conference on “Expectational and Learning Dynamics in Financial Markets,” sponsored by the University of Technology, Sydney. Sydney, Australia. Presented “Learning and Excess Volatility.”
- October 1999. Macroeconomics workshop, Iowa State University. Ames, Iowa. Presented “Learning About Monetary Policy Rules.”
- October 1999. Economics workshop, Southern Illinois University at Carbondale. Carbondale, Illinois. Presented “Learning About Monetary Policy Rules.”
- October 1999. Macroeconomics workshop, University of Kansas. Lawrence, Kansas. Presented “Learning About Monetary Policy Rules.”
- September 1999. Conference on “Expectations, Economic Theory, and Economic Policy,” sponsored by the European University Institute, the Bank of Italy, and the Center for Economic Policy Research. Perugia, Italy. Presented “Learning About Monetary Policy Rules.”
- September 1999. Federal Reserve System Committee on Macroeconomics. Cleveland, Ohio. Discussed “Optimal Taxation in Life-Cycle Economies,” by Martin Gervais and Andrés Erosa.

- July 1999. North American Summer Meetings of the Econometric Society. University of Wisconsin, Madison, Wisconsin. Presented "Complex Eigenvalues and Trend-Reverting Fluctuations."
- July 1999. Meeting of the Society for Computational Economics. Boston College, Boston, Massachusetts. Presented "Learning and Excess Volatility."
- April 1999. Midwest Macroeconomics Conference, University of Pittsburgh. Pittsburgh, Pennsylvania. Presented "Private and Public Circulating Liabilities."
- January 1999. Macroeconomics workshop, Federal Reserve Bank of Richmond. Richmond, Virginia. Presented "Complex Eigenvalues and Trend-Reverting Fluctuations."
- October 1998. Macroeconomics workshop, University of Kentucky. Lexington, Kentucky. Presented "Learning and Excess Volatility."
- October 1998. Money and Banking workshop, University of Chicago. Chicago, Illinois. Presented "Complex Eigenvalues and Trend-Reverting Fluctuations."
- October 1998. Midwest Macroeconomics Conference, Invited Plenary Session. Indiana University, Bloomington, Indiana. Presented "Complex Eigenvalues and Trend-Reverting Fluctuations."
- June 1998. Meetings of the Society for Economic Dynamics. University of Pennsylvania, Philadelphia, Pennsylvania. Presented "Central Bank Design in General Equilibrium."
- May 1998. Federal Reserve System Committee on Macroeconomics. Federal Reserve Bank of Chicago, Chicago, Illinois. Presented "Central Bank Design in General Equilibrium."
- March 1998. Macroeconomics workshop, Rutgers University. New Brunswick, New Jersey. Presented "How Costly is Sustained Inflation for the U.S. Economy?"
- October 1997. Conference on "Macroeconomic Theory and Monetary Policy," sponsored by the Federal Reserve Bank of Philadelphia. Philadelphia, Pennsylvania. Presented "How Costly is Sustained Low Inflation for the U.S. Economy?"
- October 1997. Conference on "Dynamic Models of Economic Policy," sponsored by the University of Rochester, UCLA, and the Federal Reserve Bank of Minneapolis. Rochester, New York. Presented "How Costly is Sustained Low Inflation for the U.S. Economy?"
- October 1997. Macroeconomics workshop, University of Western Ontario. London, Ontario. Presented "How Costly is Sustained Low Inflation for the U.S. Economy?"
- September 1997. Macroeconomics workshop, University of Texas. Austin, Texas. Presented "How Costly is Sustained Low Inflation for the U.S. Economy?"
- July 1997. North American Summer Meetings of the Econometric Society. California Institute of Technology, Pasadena, California. Presented "How Costly is Sustained Low Inflation for the U.S. Economy?"
- May 1997. Economic theory workshop, Washington University. St. Louis, Missouri. Presented "The Transition from Stagnation to Growth: An Adaptive Learning Approach."

- April 1997. Midwest Macroeconomics Conference, Pennsylvania State University. University Park, Pennsylvania. Presented "How Costly is Sustained Low Inflation for the U.S. Economy?"
- March 1997. Conference on "Recent Developments in Macroeconomics," sponsored by Stanford University and the Federal Reserve Bank of San Francisco. San Francisco, California. Discussed "Learning Dynamics" by George Evans and Seppo Honkapohja.
- March 1997. Macroeconomics workshop, Simon Fraser University. Burnaby, Canada. Presented "How Costly is Sustained Low Inflation for the U.S. Economy?"
- February 1997. Macroeconomics workshop, Indiana University-Purdue University at Indianapolis. Indianapolis, Indiana. Presented "The Transition from Stagnation to Growth: An Adaptive Learning Approach."
- February 1997. Macroeconomics workshop, Indiana University. Bloomington, Indiana. Presented "How Costly is Sustained Low Inflation for the U.S. Economy?"
- October 1996. Conference on "Expectations and Macroeconomics," sponsored by the Federal Reserve Bank of Philadelphia. Philadelphia, Pennsylvania. Discussed "Calculation, Adaptation, and Rational Expectations," by George Evans and Garey Ramey.
- November 1996. Macroeconomics workshop, University of Pittsburgh. Pittsburgh, Pennsylvania. Presented "Central Bank Design in General Equilibrium."
- July 1996. Macroeconomics workshop, University of Warwick. Coventry, United Kingdom. Presented "The Transition from Stagnation to Growth: An Adaptive Learning Approach."
- June 1996. Theory workshop, sponsored by CEPREMAP and DELTA. Paris, France. Presented "The Transition from Stagnation to Growth: An Adaptive Learning Approach."
- May 1996. Macroeconomics workshop, the European University Institute. Florence, Italy. Presented "The Transition from Stagnation to Growth: An Adaptive Learning Approach."
- May 1996. Macroeconomics workshop, the Bank of England. London, United Kingdom. Presented "The Transition from Stagnation to Growth: An Adaptive Learning Approach."
- April 1996. Macroeconomics workshop, Universitat Pompeu Fabra. Barcelona, Spain. Presented "The Transition from Stagnation to Growth: An Adaptive Learning Approach."
- April 1996. Economics workshop, University of Bielefeld. Bielefeld, Germany. Presented "The Transition from Stagnation to Growth: An Adaptive Learning Approach."
- April 1996. Macroeconomics workshop, University of Tilburg. Tilburg, Netherlands. Presented "The Transition from Stagnation to Growth: An Adaptive Learning Approach."
- March 1996. Macroeconomics workshop, Cornell University. Ithaca, New York. Presented "An Empirically Plausible Model of Low Real Interest Rates and Unbacked Government Debt."
- November 1995. Workshop, Sante Fe Institute. Santa Fe, New Mexico. Presented "The Transition from Stagnation to Growth: An Adaptive Learning Approach."

- October 1995. Federal Reserve System Committee on Macroeconomics, Federal Reserve Bank of New York. New York, New York. Presented “An Empirically Plausible Model of Low Real Interest Rates and Unbacked Government Debt.”
- October 1995. Macroeconomics workshop, University of Missouri. Columbia, Missouri. Presented “An Empirically Plausible Model of Low Real Interest Rates and Unbacked Government Debt.”
- July 1995. Meetings of the Society for Economic Dynamics and Control. Barcelona, Spain. Presented “A Model of Learning and Emulation with Artificial Adaptive Agents.”
- April 1995. Macroeconomics Workshop, Board of Governors of the Federal Reserve System. Washington, DC. Presented “On Learning and the Stability of Cycles.”
- April 1995. Macroeconomics Workshop, University of Iowa. Iowa City, Iowa. Presented “On Learning and the Stability of Cycles.”
- November 1994. Macroeconomics Workshop, University of California at Riverside. Riverside, California. Presented “An Empirically Plausible Model of Low Real Interest Rates and Unbacked Government Debt.”
- November 1994. Macroeconomics Workshop, University of Southern California. Los Angeles, California. Presented “A Model of Learning and Emulation with Artificial Adaptive Agents.”
- October 1994. Macroeconomics Workshop, Rutgers University. New Brunswick, New Jersey. Presented “An Empirically Plausible Model of Low Real Interest Rates and Unbacked Government Debt.”
- October 1994. Midwest Mathematical Economics, Pennsylvania State University. University Park, Pennsylvania.
- September 1994. Conference on “Finance, Fluctuations, and Development,” co-sponsored by the Federal Reserve Bank of Minneapolis, Cornell, and UCLA. Presented “A Low Real Interest Rate Economy.”
- June 1994. North American Summer Meetings of the Econometric Society. Quebec City, Canada. Presented “A Model of Learning and Emulation with Artificial Adaptive Agents.”
- June 1994. Meetings of the Society for Economic Dynamics and Control. Hosted by UCLA. Los Angeles, California. Presented “A Model of Learning and Emulation with Artificial Adaptive Agents.”
- May 1994. Midwest Mathematical Economics Association. Hosted by the University of Michigan. Ann Arbor, Michigan. Presented “A Model of Learning and Emulation with Artificial Adaptive Agents.”
- February 1994. National Bureau of Economic Research, Macroeconomic Complementarities Group. Stanford University, Palo Alto, California. Presented “A Model of Learning and Emulation with Artificial Adaptive Agents.”

- September 1993. Macroeconomics workshop, Indiana University. Bloomington, Indiana. Presented "A Low Real Interest Rate Economy."
- September 1993. Macroeconomics workshop, Washington University. St. Louis, Missouri. Presented "Learning Equilibria."
- September 1993. Federal Reserve System Inflation Project, Board of Governors. Washington, DC. Presented "Superneutrality in Postwar Economies."
- June 1993. Econometric Society, North American Summer Meetings, Boston University. Boston, Massachusetts.
- May 1993. Midwest Mathematical Economics Association, University of Kentucky. Lexington, Kentucky. Presented "Learning in a Large Square Economy."
- March 1993. Midwest Economics Association, Indianapolis. Presented "A Low Real Interest Rate Economy."
- February 1993. Macroeconomics workshop, Pittsburgh/Carnegie-Mellon. Presented "Learning in a Large Square Economy."
- October 1992. Macroeconomics workshop, UCLA. Los Angeles, California. Presented "Learning Equilibria."
- June 1992. Econometric Society, North American Summer Meetings, University of Washington. Seattle, Washington.
- June 1992. Meetings of the Society for Economic Dynamics and Control.
- November 1991. System Committee on Financial Analysis, Federal Reserve Bank of Boston. Boston, Massachusetts.
- June 1991. Meetings of the Society for Economic Dynamics and Control. Capri, Italy. Presented "Learning Equilibria."
- May 1991. Midwest Mathematical Economics Association, Northwestern University. Evanston, Illinois. Presented "Learning Equilibria."
- November 1990. System Committee on International Economics, Federal Reserve Bank of Atlanta. Atlanta, Georgia. Presented "Collapsing Exchange Rate Regimes: A Reinterpretation."
- April 1990. System Committee on Business Conditions, Federal Reserve Bank of Chicago. Chicago, Illinois. Discussed "Collateralized Debt as the Optimal Contract," by Jeffrey Lacker.

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