

Curriculum Vitae  
November 11, 2009

**Tao Zha**

---

Research Department  
Federal Reserve Bank of Atlanta  
1000 Peachtree Street N.E.  
Atlanta, Georgia 30309-4470  
USA

Phone: 404-498-8353  
Fax: 404-498-8956  
Email (primary): [tzha@earthlink.net](mailto:tzha@earthlink.net)  
Email: [tzha@frbatlanta.org](mailto:tzha@frbatlanta.org)

Department of Economics  
Emory University  
Atlanta, Georgia 30322-2240  
USA

Phone: 404-498-8353  
Fax: 404-727-4639  
Email (primary): [tzha@earthlink.net](mailto:tzha@earthlink.net)  
Email: [tzha@emory.edu](mailto:tzha@emory.edu)

**Home Page**

[http://home.earthlink.net/~tzha\\_center/](http://home.earthlink.net/~tzha_center/) (Primary)  
<http://www.atl-res.com/~zha/>

**Personal**

Born in December 1962  
U.S. citizen  
Married with two children

**Education**

University of Minnesota, Ph.D., Economics, December 1992  
Washington State University, M.A., Economics, May 1988  
Southwest University of Economics and Finance (China), M.A., Statistics, June 1985  
Chengdu University of Technology (China), B.S., Mathematics, June 1982

**Major Fields of Ph.D. Study**

Econometrics  
Financial Economics

**Doctoral Dissertation**

“Business Cycles, Asymmetric Information, and Bankruptcy Law”. Thesis committee members: Edward Green (Chair), Hidehiko Ichimura, Ravi Jagannathan, Christopher Sims, and Neil Wallace.

**Areas of Recent Research Interest**

Macroeconomics; Econometrics; Learning and Escape Dynamics

## **Positions Held**

Director, Center for Quantitative Economic Research, Federal Reserve Bank of Atlanta, 2008-present.

Professor of Economics, Emory University, 2009-present.

Visiting Distinguished Professor, Economics Department, Emory University, 2008-2009.

Adjunct Professor, Economics Department, Emory University, 2007-2008.

Senior Policy Adviser, Research Department, Federal Reserve Bank of Atlanta, 2006-2008.

Policy Adviser, Research Department, Federal Reserve Bank of Atlanta, 2002-2006.

Assistant Vice President, Research Department, Federal Reserve Bank of Atlanta, 2000-2002.

Senior Economist, Research Department, Federal Reserve Bank of Atlanta, 1999-2000.

Economist II, Research Department, Federal Reserve Bank of Atlanta, 1995-1999.

Assistant Professor of Economics, University of Saskatchewan, 1992-1995.

Visiting Researcher, Department of Economics, Yale University, 1990-1992.

Research Assistant, Institute for Empirical Macroeconomics, Research Department, Federal Reserve Bank of Minneapolis, 1989-1990.

Intern Economist, Asian Department, International Monetary Fund, 1987.

Staff Member, Head Office, People's Bank of China, 1985-1986.

## **Professional Activities and Honors**

Keynote speaker, 5th annual DYNARE conference on "Monetary Policy, DSGE Modeling, and Computational Methods," 31 August - 1 September 2009, Norges Bank, Norway.

Member, Macroeconomics, Econometric Society Program Committee, 2009 North American Winter Meeting, January 3-5, 2009, San Francisco, CA.

Co-organizer, workshop on "Markov Switching Time Series Models," August 25-27, 2008, Universite de la Mediterranee Aix Marseille 2, Aix-en-Provence, France.

Member, Program Committee, 14th International Conference on Computing in Economics and Finance, June 26-29, 2008, University La Sorbonne, Paris, France.

Invited Speaker and Visiting Scholar, Bank of Korea, May 21-25, 2008.

Invited Lectures for Advanced Graduate Students, Department of Economics, UCLA, November 26-30, 2007.

Visiting Scholar, Reserve Bank of New Zealand, July 2007.

Second prize for best papers in the “The Phillips Curve and the Natural Rate of Unemployment,” conference at the Kiel Institute for the World Economy, “Asymmetric Expectation Effects of Regime Switches and the Great Moderation,” June 2007.

Invited Lectures, Bank of Israel, May 2007.

Visiting Scholar, European Central Bank, October 2006.

Member, Advisory Committee of Dynare, CEPREMAP, Center for Economic Research and its Applications, France, 2005–.

Invited Lectures, Dynare Workshop on Learning and Monetary Policy, Paris, October 2005.

Co-organizer, conference on “Macroeconomics and Reality, 25 Years Later,” in honor of Christopher A. Sims, Barcelona, April 2005.

Invited Speaker, European Central Bank, February 2005.

Co-organizer, conference on learning and monetary policy, Atlanta, March 2003.

Invited Speaker, conference on “Monetary Policy and VAR analysis,” Sveriges Riksbank, September 2002.

Abramson Scroll Award for outstanding articles in Business Economics, “Evaluating Wall Street Journal Survey Forecasters: A Multivariate Approach,” 2002.

Visiting Scholar, Congressional Budget Office, Washington D.C., December 2000.

Visiting Scholar, Reserve Bank of Australia, Sydney, February-March 2000.

Visiting Scholar, Federal Reserve Bank of Chicago, February 1997.

Walter Helen Fellowship for Public Policy, 1991-1992.

Referee, NSF, SSHRC, and academic journals.

### **Editorial Boards**

Associate Editor, *Journal of Econometrics*, 2007-present.

Associate Editor, *Macroeconomic Dynamics*, 2007-present.

Associate Editor, *Journal of Applied Econometrics*, 2004-present.

Co-Editor, *Annals of Economics and Finance*, 2000-present.

### **Working Papers**

“Asset Pricing and Income Inequality in a Heterogenous Agent Production Economy”, June 2009. With Zheng Liu and Pengfei Wang.

“Asset Prices, Credit Constraints, and Macroeconomic Fluctuations”, June 2009. With Zheng Liu and Pengfei Wang.

“Sources of the Great Moderation: Shocks, Frictions, or Monetary Policy?”, January 2009. With Zheng Liu and Dan Waggoner.

“Global Identification of Linearized DSGE Models”, November 2008. With Martin Fukač and Dan Waggoner.

“Markov-Switching Structural Vector Autoregressions: Theory And Application”, October 2005. With Juan Rubio-Ramirez and Dan Waggoner.

”Minimal State Variable Solutions to Markov-Switching Rational Expectations Models”, March 2006. With Roger Farmer and Dan Waggoner.

### **Published Research Articles**

“Structural Vector Autoregressions: Theory of Identification and Algorithms for Inference”, *Review of Economic Studies*, forthcoming. With Juan Rubio-Ramirez and Daniel F. Waggoner.

“Generalizing the Taylor Principle: A Comment”, *American Economic Review*, forthcoming. With Roger E.A. Farmer and Daniel F. Waggoner.

“Understanding Markov-Switching Rational Expectations Models”, *Journal of Economic Theory*, 2009, volume 144, pages 1849-1867. With Roger E.A. Farmer and Daniel F. Waggoner.

“The Conquest of South American Inflation”, *Journal of Political Economy*, 2009, volume 117, number 2, pages 211-256. With Thomas J. Sargent and Noah

Williams.

“Asymmetric Expectation Effects of Regime Switches in Monetary Policy”, *Review of Economic Dynamics*, 2009 (April), volume 12, number 2, pages 284-303. With Zheng Liu and Daniel F. Waggoner.

“Learning, Adaptive Expectations, and Technology Shocks”, *Economic Journal*, 2009 (February), volume 119, issue 536, pages 377-405. With Kevin X.D. Huang and Zheng Liu.

“Indeterminacy in a Forward Looking Regime Switching Model”, *International Journal of Economic Theory*, 2009, volume 5, pages 69-84. With Roger E.A. Farmer and Daniel F. Waggoner.

“Methods for Inference in Large Multiple-Equation Markov-Switching Models”, *Journal of Econometrics*, 2008, volume 146, issue 2, pages 255-274. With Christopher A. Sims and Daniel F. Waggoner.

“Normalization in Econometrics”, *Econometric Reviews*, 2007, volume 26, numbers 2-4, pages 221-252. Special issue on “Bayesian Dynamic Econometrics.” With James D. Hamilton and Daniel F. Waggoner.

“Shocks and Government Beliefs: The Rise and Fall of American Inflation”, *American Economic Review*, 2006 (September), volume 96, number 4, pages 1193-1224. With Thomas J. Sargent and Noah Williams.

“Does Monetary Policy Generate Recessions?”, *Macroeconomic Dynamics*, 2006 (April), volume 10, number 2, pages 231-272. With Christopher A. Sims.

“Were There Regime Switches in US Monetary Policy?”, *American Economic Review*, 2006 (March), volume 96, number 1, pages 54-81. With Christopher A. Sims.

“Modest Policy Interventions”, *Journal of Monetary Economics*, 2003 (November), volume 50, issue 8, pages 1673-1700. With Eric M. Leeper.

“A Gibbs Sampler for Structural Vector Autoregressions”, *Journal of Economic Dynamics and Control*, 2003 (November), volume 28, issues 2, pages 349-366. With Daniel F. Waggoner.

“Likelihood Preserving Normalization in Multiple Equation Models”, *Journal of Econometrics*, 2003 (June), volume 114, issue 2, pages 329-347. With Daniel F. Waggoner.

“Evaluating Wall Street Journal Survey Forecasters: A Multivariate Approach”,

*Business Economics*, 2002 (July), volume 37, issue 3, pages 11-21. With Robert A. Eisenbeis and Daniel F. Waggoner.

“Quantifying the Uncertainty about the Half-Life of Deviations from PPP”, *Journal of Applied Econometrics*, 2002 (March-April), volume 17, issue 2, pages 107-125. With Lutz Kilian.

“Bankruptcy Law, Capital Allocation, and Aggregate Effects: A Dynamic Heterogeneous Agent Model with Incomplete Markets”, *Annals of Economics and Finance*, 2001 (November), volume 2, issue 2, pages 379-400.

“Assessing Simple Policy Rules: A View from a Complete Macroeconomic Model”, Federal Reserve Bank of St. Louis *Review* (the symposium on monetary policy rules sponsored by Federal Reserve Bank of St. Louis and Stanford University), 2001 (July-August), volume 83, issue 4, pages 83-110. With Eric M. Leeper.

“Conditional Forecasts in Dynamic Multivariate Models”, *Review of Economics and Statistics*, 1999 (November), volume 81, issue 4, pages 639-651. With Daniel F. Waggoner.

“Error Bands for Impulse Responses”, *Econometrica*, 1999 (September), volume 67, issue 5, pages 1113-1155. With Christopher A. Sims.

“Block Recursion and Structural Vector Autoregressions”, *Journal of Econometrics*, 1999 (June), volume 90, issue 2, page 291-316.

“Trends in Velocity and Policy Expectations”, *Carnegie-Rochester Conference Series on Public Policy*, 1998 (December), volume 49, pages 265-304. With David B. Gordon and Eric M. Leeper.

“Bayesian Methods for Dynamic Multivariate Models”, *International Economic Review*, 1998 (November), volume 39, issue 4, pages 949-968. With Christopher A. Sims.

“Identifying Monetary Policy in a Small Open Economy under Flexible Exchange Rates”, *Journal of Monetary Economics*, 1997 (August), volume 39, issue 3, pages 433-448. with David O. Cushman.

“What Does Monetary Policy Do?”, *Brookings Papers on Economic Activity*, 1996, issue 2, pages 1-63. With Eric M. Leeper and Christopher A. Sims.

### Other Publications

“Vector Autoregressions,” *New Palgrave Dictionary of Economics*, September 2008, 2nd edition, eds. Steven N. Durlauf and Lawrence E. Blume. Palgrave Macmillan

([http://www.dictionaryofeconomics.com/article?id=pde2008\\_V000066](http://www.dictionaryofeconomics.com/article?id=pde2008_V000066))

“Normalization”, *International Encyclopedia of the Social Sciences*, 2008, 2nd edition, volume 5, pages 533-534, ed. William A. Darity, Jr. Macmillan Reference/Thomson Publishing, Detroit, USA.

“Comment on An and Schorfheide’s Bayesian Analysis of DSGE Models”, *Econometric Review*, 2007, volume 26, numbers 2-4, pages 205-210. Special issue on “Bayesian Dynamic Econometrics.”

“Transparency, Expectations, and Forecasts”, Federal Reserve Bank of Atlanta *Economic Review*, First Quarter 2006, volume 91, number 1, pages 1-25. With Andy Bauer, Robert Eisenbeis, and Daniel Waggoner.

“Introduction: Monetary Policy and Learning”, *Review of Economic Dynamics*, April 2005, volume 8, number 2, pages 257-261. With Lee E. Ohanian and Marco Del Negro.

“Forecast evaluation with cross-sectional data: The Blue Chip Surveys”, Federal Reserve Bank of Atlanta *Economic Review*, 2003, issue Q2, pages 17-31. With Andy Bauer, Robert Eisenbeis, and Daniel Waggoner.

“Monetary Policy and Racial Unemployment Rates”, Federal Reserve Bank of Atlanta *Economic Review*, 4th Quarter 2000, volume 85, issue 4, pages 1-16. With Madeline Zavodny.

“Evaluating the Effects of Monetary Policy with Economic Models”, Federal Reserve Bank of Atlanta *Economic Review*, 4th Quarter 1999, volume 84, issue 4, pages 4-15.

“A Dynamic Multivariate Model for Use in Formulating Policy”, Federal Reserve Bank of Atlanta *Economic Review*, 1st Quarter 1998, volume 83, issue 1, pages 16-29.

“Identifying Monetary Policy: A Primer”, Federal Reserve Bank of Atlanta *Economic Review*, 2nd Quarter 1997, volume 82, issue 2, pages 26-43.

### **Unpublished Papers, Notes, Slides**

“Understanding the New-Keynesian Model When Monetary Policy Switches Regimes”, *NBER Working Paper* 12965, 2007. With Roger Farmer and Dan Waggoner.

“Bayesian Econometrics of Learning Models”, *Lecture Notes for the October 2005 Dynare Workshop on Learning and Monetary Policy*.

“MCMC Method for Markov Mixture Simultaneous-Equation Models: A Note”, October 2004. With Christopher A. Sims.

“Identification Issues in Vector Autoregressions”, 1997. With Daniel F. Waggoner.