# **Zheng Liu**

September 2016

Federal Reserve Bank of San Francisco

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#### **Education**

Ph.D. in Economics, University of Minnesota, 1997

M.A. in Economics, University of Minnesota, 1994

B.A. and M.A. in Economics, Renmin University of China, 1988 and 1991

#### Research Areas

Macroeconomics, Monetary policy, Credit and housing, International finance, Chinese economy

## **Professional Experience**

Director, Center for Pacific Basin Studies, Federal Reserve Bank of San Francisco, April 2016 –

Senior Research Advisor, Federal Reserve Bank of San Francisco, April 2014 –

Research Advisor, Federal Reserve Bank of San Francisco, August 2008 - March 2014

Associate Professor of Economics (with tenure), Emory University, Sept. 2006 - August 2009

Assistant Professor of Economics, Emory University: Sept. 2001 – August 2006

Assistant Professor of Economics, Clark University, Worcester, MA: 1997 – 2001

### **Other Professional Experience**

Technical Advisor, IMF Institute for Capacity Development, 2016 –

Special Term Professor, Shanghai Advanced Institute of Finance, 2012 –

Instructor, Dept. of Econ, University of Minnesota, Minneapolis, MN: 1994 – 1997

Visiting Scholar, Research Department, Federal Reserve Bank of Atlanta, Sept. 2001 – July 2008

Visiting Scholar, Federal Reserve Bank of Minneapolis: Summer 2007; 2005 – 2006; Summer 1999; Summer 1998; Winter 1998

Visiting Scholar, Department of Economics, University of Minnesota: 2005 – 2006; Spring and Summer 2004

Visiting Scholar, Department of Economics, Boston University, 2000 – 2001

Research Visitor, European Central Bank, Frankfurt, Germany: Summers 2001, 2002, and 2003

## **Editorial Services**

Associate Editor, Journal of Economic Dynamics and Control, 2014 -

Associate Editor, Journal of Money, Credit and Banking, 2013 –

#### **Publications in Refereed Journals**

- 1. "Uncertainty Shocks Are Aggregate Demand Shocks" (with Sylvain Leduc), *Journal of Monetary Economics* 82, September 2016, pp. 20-35
- 2. "Land Prices and Unemployment" (with Jianjun Miao and Tao Zha), *Journal of Monetary Economics* 80, June 2016, pp. 86-105
- 3. "Capital Controls and Optimal Chinese Monetary Policy" (with Chun Chang and Mark Spiegel), Journal of Monetary Economics 74, September 2015, pp. 1-15 (lead article, awarded the 2016 Sun Yefang Prize, China's highest award for economics research)
- 4. "Optimal Monetary Policy and Capital Account Restrictions in a Small Open Economy" (with Mark M. Spiegel), *IMF Economic Review* 63, September 2015, pp. 298-324.
- 5. "Temptation and Self-Control: Some Evidence and Applications" (with K. Huang and Q. Zhu), *Journal of Money, Credit and Banking* 47(4), June 2015, pp.581-615.
- 6. "Discussion of Notarpietro and Siviero," *Journal of Money, Credit and Banking*, Supplement to Vol. 47, No. 1, March-April 2015, pp. 411-417.
- 7. "Credit Constraints and Self-fulfilling Business Cycles" (with Pengfei Wang), *American Economic Journal: Macroeconomics*, 6(1), January 2014, pp. 32-69.
- 8. "Land-Price Dynamics and Macroeconomic Fluctuations" (with Pengfei Wang and Tao Zha), *Econometrica* 81(3), May 2013, pp. 1147-1184.
- 9. "The Transmission of Productivity Shocks: What Do We Learn about DSGE Modeling?" (with Louis Phaneuf), *Annales d'Economie et de Statistique (Annals of Economics and Statistics)*, 109/110, June 2013, 283-304.
- 10. "Should the Central Bank be Concerned about Housing Prices?" (with Karsten Jeske), *Macroeconomic Dynamics* 17(1), January 2013, pp. 29-53.
- 11. "Sources of the Macroeconomic Fluctuations: A Regime-Switching DSGE Approach" (with Tao Zha and Dan Waggoner), *Quantitative Economics* 2(2), July 2011, pp. 251-301.
- 12. "Asymmetric Expectation Effects of Regime Shifts in Monetary Policy" (with Dan Waggoner and Tao Zha), *Review of Economic Dynamics* 12, April 2009, pp. 284-303.
- 13. "Learning, Adaptive Expectations, and Technology Shocks" (with Kevin Huang and Tao Zha), *Economic Journal* 119, March 2009, pp. 377-405.
- 14. "Gains from International Monetary Policy Coordination: Does It Pay to be Different?" (with E. Pappa), *Journal of Economic Dynamics and Control*, Vol. 32(7), July 2008, pp. 2085-2117
- 15. "Investment-Specific Technological Change, Skill Accumulation, and Wage Inequality" (with Hui He), *Review of Economic Dynamics*, Vol. 11(2), April 2008, pp. 314-334.
- 16. "Technology Shocks and Labor Market Dynamics: Some Evidence and Theory" (with L. Phaneuf), *Journal of Monetary Economics*, Vol. 54(8), November 2007, pp. 2534-2553.
- 17. "Business Cycles with Staggered Prices and International Trade in Intermediate Inputs" (with K. Huang), *Journal of Monetary Economics*, Vol. 54(4), May 2007, pp. 1271-1289.
- 18. "Sellers' Local Currency Pricing or Buyers' Local Currency Pricing: Does It Matter for International Welfare Analysis?" (with K. Huang), *Journal of Economic Dynamics and Control*, Volume 30(7), July 2006, pp. 1183-1213.
- 19. "Inflation Targeting: What Inflation Rate to Target?" (with K. Huang), *Journal of Monetary Economics*, Volume 52(8), November 2005, pp. 1435-1462.

- 20. "Does Trade Openness Matter for Aggregate Instability?" (with F. De Fiore), *Journal of Economic Dynamics and Control*, Volume 29(7), July 2005, pp. 1165-1192 (**lead article**).
- 21. "Why Does the Cyclical Behavior of Real Wages Change Over Time?" (with K. Huang and L. Phaneuf), *American Economic Review*, Volume 94 (4), September 2004, pp. 836-856.
- 22. "Input-Output Structure and Nominal Rigidity: The Persistence Problem Revisited" (with K. Huang), *Macroeconomic Dynamics*, Volume 8 (2), April 2004, pp. 188 206.
- 23. "Staggered Price-Setting, Staggered Wage-Setting, and Business Cycle Persistence" (with K. Huang), *Journal of Monetary Economics*, Volume 49 (2), March 2002, pp. 405 433.
- 24. "Production Chains and General Equilibrium Aggregate Dynamics" (with K. Huang), *Journal of Monetary Economics*, Volume 48 (2), October 2001, pp. 437 462.
- 25. "Seasonal Cycles, Business Cycles, and Monetary Policy," *Journal of Monetary Economics*, Volume 46 (2), October 2000, pp. 441 464.

#### **Federal Reserve Publications**

- 1. "Slow Credit Recovery and Excess Returns on Capital" (with Andrew Tai), *FRBSF Economic Letter* 2016-28, September 26, 2016, Federal Reserve Bank of San Francisco.
- 2. "Is China's Growth Miracle Over?" *FRBSF Economic Letter* 2015-26, August 10, 2015, Federal Reserve Bank of San Francisco.
- 3. "Global Aging: More Headwinds for U.S. Stocks?" (with Mark Spiegel and Bing Wang), *FRBSF Economic Letter* 2014-38, December 22, 2014, Federal Reserve Bank of San Francisco.
- 4. "Job Uncertainty and Chinese Household Savings," *FRBSF Economic Letter* 2014-03, February 3, 2014, Federal Reserve Bank of San Francisco.
- 5. "Uncertainty and the Slow Labor Market Recovery" (with Sylvain Leduc), *FRBSF Economic Letter* 2013-21, July 22, 2013, Federal Reserve Bank of San Francisco. Media mentions: Bloomberg (7/22/2013), Reuters (7/22/2013), Reuters (MacroScope, 7/23/2013), Wall Street Journal (9/24/2013), Economics One (John Taylor, 07/31/2013).
- 6. "External Shocks and China's Monetary Policy" (with Mark Spiegel), *FRBSF Economic Letter* 2012-36, December 3, 2012, Federal Reserve Bank of San Francisco.
- 7. "Uncertainty, Unemployment, and Inflation" (with Sylvain Leduc), *FRBSF Economic Letter* 2012-28, September 17, 2012, Federal Reserve Bank of San Francisco. Media mentions: Bloomberg (09/17/2012), Christian Science Monitor (09/18/2012), The Economist (10/06/2012, print edition), and others.
- 8. "Boomer Retirement: Headwinds for US Equity Markets?" (with Mark Spiegel), *FRBSF Economic Letter* 2011-26, August 22, 2011, Federal Reserve Bank of San Francisco. Reprints: Merrill Lynch, Ludeman Capital Management, and Weir Financial. Media mentions: Bloomberg (08/22/2011), The Economist (9/24/2011 and 9/29/2012, print editions), Financial Times (11/23/2012), US News and World Report, The Times, Forbes, CNN Money, MSNBC, Reuters, Christian Science Monitor, and others.
- 9. "Does Headline Inflation Converge to Core?" (with Justin Weidner), *FRBSF Economic Letter* 2011-24, August 1, 2011, Federal Reserve Bank of San Francisco.
- 10. "Inflation: Mind the Gap" (with Glenn Rudebusch), FRBSF Economic Letter 2010-02, January 19, 2010, Federal Reserve Bank of San Francisco.

## **Working Papers**

- "Breaking the 'Iron Rice Bowl' and Precautionary Savings: Evidence from Chinese State-Owned Enterprises Reform" (with Hui He, Feng Huang, and Dongming Zhu), Federal Reserve Bank of San Francisco Working Paper 2014-04, April 2014. Revision requested by *Journal of Monetary Economics*
- 2. "The Slow Job Recovery in a Macro Model of Search and Recruiting Intensity" (with Sylvain Leduc), Federal Reserve Bank of San Francisco Working Paper 2016-09, May 2016. Under journal review
- 3. "Reserve Requirements and Optimal Chinese Stabilization Policy" (with Chun Chang, Mark M. Spiegel, and Jingyi Zhang), Federal Reserve Bank of San Francisco Working Paper 2016-10, June 2016
- 4. "Measuring the Effects of Dollar Appreciation on Asia: A FAVAR Approach" (with Mark M. Spiegel and Andrew Tai), unpublished manuscript, September 2016. Revision requested by *Journal of International Money and Finance*.
- 5. "Interest Rate Liberalization and Capital Allocation" (with Pengfei Wang and Zhiwei Xu), work in progress

# **Awards and Recognitions**

The 2016 Sun Yefang Financial Innovation Award for the paper "Capital Controls and Optimal Chinese Monetary Policy" (with Chun Chang and Mark Spiegel), published in Journal of Monetary Economics in September 2015. The Sun Yefang Prize is China's highest award in economics and finance. FRBSF press release: <a href="http://www.frbsf.org/our-district/press/news-releases/2016/zheng-liu-mark-spiegel-receive-sun-yefang-economics-award/">http://www.frbsf.org/our-district/press/news-releases/2016/zheng-liu-mark-spiegel-receive-sun-yefang-economics-award/</a>

Best Paper Award (second prize) for "Asymmetric Expectation Effects of Regime Shifts and the Great Moderation," presented at the conference on "The Phillips Curve and the Natural Rate of Unemployment" organized by the Kiel Institute for the World Economy, Kiel, Germany, June 3 – 4, 2007

Distinguished Instructor, Department of Economics, University of Minnesota, 1994, 1995, 1996

Who's Who in Social Sciences Higher Education, 2004 –

Marquis Who's Who in America, 2007 –

#### **Professional Services**

Panel Member, Research Grants Council (RGC) of Hong Kong, 2016 –

#### Referee:

American Economic Review, Econometrica, Journal of Political Economy, Review of Economic Studies, Journal of Monetary Economics, Journal of International Economics, Review of Economic Dynamics, Journal of Economic Dynamics and Control, Journal of Money, Credit, and Banking, International Economic Review, National Science Foundation, and other academic journals

## Session organizer:

AEA session on "Capital Controls and Macro-Prudential Policies," Philadelphia, January 2014 AEA session on "Capital Controls," San Francisco, January 2016

## Panel speaker:

- Peterson Institute for International Economics and Sasakawa Peace Foundation, High-Level Working Group on Japan-US Common Economic Challenges, January 3-4, 2016 (San Francisco)
- IMF and Chinese University Hong Kong (Shenzhen), Conference on Housing and Financial Stability in China, Dec 17-19, 2015 (Shenzhen, China)
- Shanghai Development Research Foundation (SDRF), Reinventing Bretten Woods Committee (RBWC), PBC School of Finance Tsinghua University (PBCSF), and SAIF, Conference on "Shift in Global Financial Governance and China's Financial Reform," Oct 31-Nov 1, 2015 (Shanghai)
- CF40 and Peterson Institute for International Economics, Conference on "Financial Stability in China," October 6, 2015 (New York City)

#### Conference discussant:

- First Research Workshop on China's Economy, IMF and FRB Atlanta, Washington, DC, April 28-29, 2016
- ASSA meetings in San Francisco, January 3-5, 2016
- Conference on Housing Affordability, UCLA, September 17-18, 2015
- JIMF-USC Conference on Financial Adjustment in the Aftermath of the Global Crisis 2008-9: New Global Order? Los Angeles, April 18-19, 2014
- Northwestern-SAIF Conference on Business Cycles and Macroeconomic Policies, Shanghai, March 24-25, 2014
- *JMCB* Conference on Housing, Stability and the Macroeconomy: International Perspectives, Dallas, November 14-15, 2013
- NBER Chinese Economy Meeting, Oct 4-5, 2013
- Conference on Monetary Policy in a Global Setting: China and the United States, Beijing, April 15-16, 2013
- ASSA-AFA Conference in Chicago, January 8, 2012
- Macro Conference on Financial Market Imperfections and Macroeconomics, Federal Reserve Bank of San Francisco, March 5, 2010
- International Conference on Financial System and Monetary Policy Implementation, Bank of Japan, Tokyo, May 2009

#### 2016

IMF research seminar (April 6), IMF 1<sup>st</sup> Workshop on China's Economy (Washington, DC, April 28-29), National University of Singapore Institute of Real Estate Studies 7<sup>th</sup> International Symposium (Singapore, May 19-20), Macroeconomics Conference at HKUST (Hong Kong, June 21-22), AFR Summer Institute of Economics and Finance (Hang Zhou, June 25-26), Conference on Business Cycles, Financial markets, and Monetary Policy with Special Applications to China (Beijing, August 30-31), Arizona State University (September 16), George Washington University annual conference on China (November 11), Central Bank of Chile conference on China (December 15)

#### 2015

USC Conference on China Financial Sector (Feb), Wash U and St Louis Fed HULM conference (Apr), Bank of Canada and U of Toronto conference on Chinese economy (Apr), LAFE CYCLE conference (May), SED (June), NBER Summer Institute (July), Vienna Macro Workshop (Oct), IMF (Nov), UC Davis (Nov), CUHK (Dec)

## 2014

ASSA Meetings in Philadelphia (January), Renmin University of China (January, March), University of Wisconsin-Madison (April), Philadelphia Fed (April), NBER Chinese Economy Meeting (April), People's Bank of China (June), NBER Summer Institute (July), FRBSF-UCLA Housing Conference (September), University of Toronto (September), Bank of Canada (October), University of San Francisco (October)

## 2013

Atlanta Fed (Jan), UCLA/FRBSF Housing Conference (Feb), Utah State University (Mar), Texas Monetary Conference (Apr), Peking University (Apr), San Francisco Fed (May, July, and August), AFR Summer Institute (Hangzhou, Jun), SED meeting (Seoul, Jun), Tsinghua Macroeconomics Workshop (Beijing, Jul)

#### 2012

ASSA Meeting in Chicago (January), Sveriges Riksbank (June), ECB (June), SED Annual meeting in Cyprus (June), Goethe University (June), NBER Summer Institute Macro and Productivity Workshop (July), IMF (September), Emory University (October), South West Search Workshop in UCLA (November), UC Davis (November), Shanghai University of Finance and Economics (December), Shanghai Advanced Institute of Finance (December).

## 2011

Bank of France (April), European University Institute (April), Shanghai Macroeconomics Workshop (June), CEF Conference in San Francisco (July), UQAM (Sep), Conference on Research on Money and Markets (RMM 2011) in Toronto (Sep), Boston University (December).

### **Graduate Students Supervised (role; student placement)**

Berrak Buyukkarabacak, Ph.D. 2008 (member of dissertation committee; Assistant Prof at University of Richmond: 2008-2010; Assistant Prof at University of Georgia: 2010-)

Andy Bauer, Ph.D. 2007 (Co-Chair of committee; Economist at the Baltimore Branch of the Richmond Federal Reserve)

Qi Zhu, Ph.D. 2007 (Co-Chair of committee; Assistant Prof at Shanghai Jiao Tong University 2007-)

Yan Liu, Ph.D. 2007 (member of committee; OTA Asset Management)

Debdulal Mallick, Ph.D. 2007 (member of committee; Senior Lecturer at Deakin University, Australia, 2007-)

Hisham Foad, Ph.D. 2006 (member of committee; Assistant Professor at San Diego State University, 2006-13; Associate Prof, 2013-)

Andrew Young, Ph.D. 2005 (member of committee; Assistant Professor at University of Mississippi: 2003-09; Associate Professor at West Virginia U: 2011-)

Constantine Alexandrakis, Ph.D. 2002 (member of committee; Assistant Prof at U Mass Dartmouth: 2003-2004; Assistant Prof at Hofstra University: 2004-2014; Associate Prof: 2014-)

Socrates Karidis, Ph.D. 2001 (member of committee; Bentley College)