Zhenyu Wang

Kelley School of Business, Indiana University
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Specialties

Financial Institutions	Financial markets	Derivative securities
Risk management	Financial econometrics	Portfolio management

Employment History

Kelley School of Business, Indiana University at Bloomington
Edward E. Edwards Professor, May 2015 – current
Professor of Business Finance, July 2012 – current

Federal Reserve Bank of New York
Head of Financial Intermediation Function, January 2009 – June 2012
Vice President, June 2005 – June 2012
Senior Economist, June 1999 – August 2000

McCombs School of Business, University of Texas at Austin
Associate Professor of Finance (with tenure), July 2004 – May 2005

Graduate School of Business, Columbia University
Associate Professor of Finance (tenure track), July 1998 – June 2004
Assistant Professor of Finance (tenure track), July 1995 – June 1998

Publications

- Zhenyu Wang (2023): "CoCo Bonds: Are They Debt or Equity? Do They Help Financial Stability? — Lessons from Credit Suisse NT1 Bonds." European Corporate Governance Institute. (Link to the article)
- Zhenyu Wang (2023): "Are CoCo Bonds Better Than Common Equity as Capital for Financial Stability?" Blog post at European Corporate Governance Institute. (Link to the blog)
- Suresh Sundaresan and Zhenyu Wang (2022): "Strategic Bank Liability Structure Under Capital Requirements," *Management Science*, forthcoming. (Link to the publication)
- Leonardo Gambacorta, Giacomo Ricotti, Suresh Sundaresan, Zhenyu Wang (2021): "Tax Effects on Bank Liability Structure," *European Economic Review*. (Link to the publication)
- Catherine Bonser-Neal and Zhenyu Wang (2020): "Financial Markets in 2021: Recovery to a New Normal?", *Indiana Business Review*, volume 95, No 4. (Link to the publication)
- James McAndrews, Asani Sarkar, Zhenyu Wang (2017): "The Effect of the Term Auction Facility on the London Interbank Offered Rate." *Journal of Banking and Finance*, 83, 135–152.
- Suresh Sundaresan and Zhenyu Wang (2015): "On the Design of Contingent Capital with a Market Trigger." *Journal of Finance*, 70 (2) 881–920.
- Zhenyu Wang and Xiaoyan Zhang (2012), "Empirical Evaluation of Asset Pricing Models:

Arbitrage and Pricing Errors in Contingent Claims." *Journal of Empirical Finance*, 19 (1), 65–78.

- Paolo Guasoni, Gur Huberman, Zhenyu Wang (2011): "Performance Maximization of Actively Managed Funds." *Journal of Financial Economics*, 101 (3), 574–595.
- Paul Glasserman and Zhenyu Wang (2011): "Valuing the Treasury's Capital Assistance Program." *Management Science*, 57 (7), 1195–1211.
- Suresh Sundaresan and Zhenyu Wang (2009): "Y2K Options and the Liquidity Premium in Treasury Markets." *Review of Financial Studies*, 22 (3), 1021–1056.
- Ravi Jagannathan, Georgios Skoulakis, Zhenyu Wang (2009): "Analysis of Large Cross Sections of Security Returns." *Handbook of Financial Econometrics*, volume 2, edited by Yacine At-Sahalia and Lars Hansen, Chapter 14, 73–134.
- Gur Huberman and Zhenyu Wang (2005): "Arbitrage Pricing Theory." *The New Palgrave Dictionary of Economics*, 2^{nd} edition, edited by L. Blume and S. Durlauf (London: Palgrave Macmillan).
- Zhenyu Wang (2005): "A Shrinkage Approach to Model Uncertainty and Asset Allocation." *Review of Financial Studies*, 18 (2), 673–705.
- Edward Green, Jose A. Lopez, Zhenyu Wang (2003): "Formulating the Imputed Cost of Equity Capital for the Priced Services at Federal Reserve Banks." *Economic Policy Review*, 9 (3), 55–81.
- Kai Li, Asani Sarkar, Zhenyu Wang (2003): "Diversification Benefits of Emerging Markets Subject to Portfolio Constraints." *Journal of Empirical Finance*, 10 (1-2), 57–80.
- Ravi Jagannathan and Zhenyu Wang (2002): "Empirical Evaluation of Asset Pricing Models: A Comparison of the SDF and Beta Methods." *Journal of Finance*, 57 (5), 2337–2367.
- Ravi Jagannathan, Georgios Skoulakis, Zhenyu Wang (2002): "Generalized Method of Moments: Applications in Finance." *Journal of Business and Economic Statistics*, 20 (4), 470–481.
- Zhenyu Wang (2001): "Discussion" (on 'The Equity Premium and Structural Breaks' by Pastor and Stambaugh). *Journal of Finance*, 56 (4), 1240–1245.
- Ravi Jagannathan and Zhenyu Wang (1998): "An Asymptotic Theory for Estimating Beta-Pricing Models Using Cross-Sectional Regression." *Journal of Finance*, 53 (4), 1285–1309.
- Zhenyu Wang (1998): "Efficiency Loss and Constraints on Portfolio Holdings." *Journal of Financial Economics*, 48 (3), 359–375.
- Ravi Jagannathan and Zhenyu Wang (1998): "A Note on the Asymptotic Covariance in Fama-MacBeth Regression." *Journal of Finance*, 53 (2), 799–801.
- Ravi Jagannathan and Zhenyu Wang (1996): "The Conditional CAPM and the Cross-Section of Expected Returns." *Journal of Finance*, 51 (1), 3–53.
- Zhenyu Wang and Jan Werner (1994): "Portfolio Characterization of Risk Aversion." *Economics Letters*, 45 (2), 259–265.

Presentations and Speaches Since Joining IU

2023 *Institute for Corporate Governance*
Invited lecture: "CoCo Bonds: Are They Debt or Equity?
Do They Help Financial Stability?"

2023 *UNCC Mathematical Finance Program*
Invited Lecture:: "Contingent Capital in Bank Liability Structure"

2023 *University of North Carolina at Charlotte*
Invited seminar:: "Bank Liability Structure: Strategic Use of Non-Deposit Debt"

2022 *The 30th Annual Conference on Pacific Basin Finance, Economics, Accounting and Management*
Keynote speech: "Strategic Bank Liability Structure under Capital Requirements"

2021 *5th Young Scholars Finance Consortium*
Discussion: "The Effects of Financial Deregulation on Wage Inequality"

2020 *Midwest Finance Association Conference*
Track chair for banking theory
Session chair for "Theory of Bank Regulation and Bank Bailout"
Presentation: "OIS Pricing with FOMC Meeting Schedule: Understanding the Dynamics of the OIS Curve"

2019 *4th Young Scholars Finance Consortium*
Discuss paper: "Credit Migration and Covered Interest Rate Parity" by Gordon Liao

2019 *Midwest Finance Association Conference*
Session chair for "Term Structure of Interest Rates"

2018 *Dalian University of Technology, School of Mathematics*
Invited presentation: "A Thin Thread of Math in the Financial Crisis"

2018 *Dalian University of Technology, School of Management*
Invited presentation: "Bank Liability Structure"

2018 *Georgia State University*
Invited seminar presentation: "The Market Expectation in the OIS Curve"

2018 *Canadian Derivative Institute Conference*
Presentation: "The Market Expectation in the OIS Curve"

2018 *Western Finance Association Annual Conference*
Discussion: "The Use of Collateral in Bilateral Repurchase and Securities Lending Agreements"

2018 *MoFiR Workshop on Banking by European Commission*
Invited presentation: "Tax Effects on Bank Liability Structure"

2018 *Fudan University*
Invited seminar presentation: "Tax Effects on Bank Liability Structure"

2018 *Shanghai Advanced Institute of Finance*
Invited seminar presentation: "Tax Effects on Bank Liability Structure"

2018 *Financial Intermediation and Fixed-Income Conference*
Discussion: "Bank Bailouts, Bail-ins, or No Regulatory Intervention? A Dynamic Model

and Empirical Tests of Optimal Regulation"

2018 *Short-Term Funding Markets Conference*
Discussion: "Monetary Transmission through Shadow Banks"

2018 *Annual Young Scholars Finance Consortium*
Discussion: "The Rise of Shadow Banking: Evidence from Capital Regulation"

2018 *American Finance Association Annual Conference*
Presentation: "Tax Effects on Bank Liability Structure"

2017 University of Pennsylvania, Wharton School, Executive Program (invited talk)

2017 European Finance Association Annual Conference (presentation & discussion)

2017 State University of New York at Stony Brook (invited seminar)

2017 Western Finance Association Annual Conference (presentation & discussion)

2017 Shanghai Advanced Institute of Finance (invited speech at industry forum)

2017 Financial Intermediation Research Society Annual Conference (presentation)

2017 International Association of Deposit Insurers Conference (presentation)

2017 Bank Capital Regulation Conference of TCH and Columbia University (presentation)

2017 Young Scholar Finance Consortium (discussion)

2016 UNC at Charlotte Mathematical Finance Program (invited speech)

2016 UNC at Charlotte & Federal Reserve Bank of Richmond (invited seminar)

2016 Tsinghua University, the PBC School of Finance (invited seminar)

2016 University of Pennsylvania, Wharton School, Executive Program (invited talk)

2016 Texas A&M University, Finance Department (invited seminar talk)

2016 Southwest Jiaotong University, Center of Financial Big Data (invited seminar)

2016 Exeter Workshop on Macroeconomics and Banking (invited presentation)

2016 Cheung Kong Graduate School of Business (invited seminar)

2016 Shanghai Advanced Institute of Finance (invited seminar)

2016 Texas A&M Finance Consortium (discussion)

2016 BIS Meeting on Financial Intermediation and Macroeconomic Stability

2016 American Finance Association Annual Meeting (presentation)

2015 Yale Unviersity Financial Crisis Conference (invited presentation)

2015 University of British Columbia Summer Finance Conference (discussion)

2015 U.S. Department of Treasury, Office of Financial Research (invited seminar)

2015 Purdue University, Finance Department (invited seminar)

2014 Federal Deposit Insurance Corporation (invited seminar)

2014 Conference on the Future of Large Financial Institutions (invited presentation)

2014 University of Illinois in Chicago, Finance Department (invited seminar)

2014 Moody's Credit Market Research Conference (presentation & discussion)

2014 University of North Carolina at Charlotte, Finance Department (invited seminar)

2014 Federal Reserve Bank of New York (invited seminar)

2013 University of Houston, Finance Department (invited seminar)
2013 China International Conference in Finance (session chair & presentation)
2013 City University of New York, Finance Department (invited seminar)
2013 FMC2 Bank Resolution Mechanism Conference (invited presentation)
2013 The Florida State University SunTrust Beach Conference (discussion)
2012 Drexel University, Finance Department (invited seminar)
2012 University of Washington at Seattle, Finance Department (invited seminar)
2012 The Chinese Finance Association Best Paper Symposium (invited presentation)
2012 The State of Indiana Conference (discussion)
2012 University of British Columbia Summer Finance Conference (presentation)
2012 Western Finance Association Meeting (discussion)
2012 Financial Intermediation and Research Society (session chair & discussion)
2012 Exeter University, School of Business (invited seminar)

Conference Presentations and Speaches Before Joining IU

2011 Moody's Credit Risk Conference (invited presentation)
2011 Financial Intermediation Research Society (2 presentations & 2 discussions)
2010 Federal Reserve Bank of New York Conference on Contingent Capital (presentation)
2009 American Economic Association Annual Meeting (presentation)
2008 Conference of the Society for Financial Econometrics (presentation)
2008 Bank of Canada Conference on Fixed Income Markets (discussion)
2008 American Finance Association Annual Meeting (discussion)
2006 American Finance Association Meeting (presentation)
2005 Institutional Assoc. of Financial Engineering Liquidity Symposia (presentation)
2005 NY Fed–Princeton University Liquidity Conference (presentation)
2005 Texas Finance Festival (discussion)
2004 Western Finance Association Annual Meeting (presentation & discussion)
2004 American Finance Association Annual Meeting (discussion)
2004 Annual Meeting of the Econometrics Society (discussion)
2003 Western Finance Association Annual Meeting (discussion)
2003 American Finance Association Annual Meeting (discussion)
2002 National Bureau of Economic Research Summer Institute (presentation)
2001 Princeton Conference on Financial Econometrics (presentation)
2001 Western Finance Association Annual Meeting (presentation)
2001 American Finance Association Annual Meeting (presentation)
2000 Western Finance Association Annual Meeting (presentation)
2000 National Bureau of Economic Research Asset Pricing Conference (presentation)
2000 American Finance Association Annual Meeting (presentation)

2000 Western Finance Association Annual Meeting (presentation)
1998 American Finance Association Annual Meeting (presentation & 2 discussions)
1998 Western Finance Association Annual Meeting (discussion)
1997 Western Finance Association Annual Meeting (presentation)
1997 Columbia-NYU Finance Workshop (discussion)
1996 International Society of Bayesian Analysis (session chair & invited presentation)
1996 American Finance Association Annual Meeting (discussion)
1995 Columbia-NYU Finance Workshop (presentation)
1995 Asia-Pacific Finance Association Annual Meeting (presentation & 2 discussions)
1995 Conference on Emerging Trends in Japanese Financial Market (discussant)
1994 Chicago Quantitative Alliance Conference (presentation)
1994 Western Finance Association Annual Meeting (presentation)
1993 Annual Conference of Financial Economics & Accounting (presentation)

Invited Seminar Talks Before Joining IU

Northwestern University
University of Michigan
University of Texas at Austin
University of North Carolina
University of Minnesota
University of British Columbia
Pennsylvania State University
Purdue University
Ohio State University
University of Houston
University of Texas at Dallas
State U of NY at Binghamton
Texas A&M University
Federal Reserve Bank of New York
Federal Reserve Bank of Atlanta
Federal Reserve Bank of Richmond
Shanghai Advanced Institute of Finance
Columbia Law School
Columbia Engineering School
Columbia Business School
Massachusetts Institute of Technology
Cornell University
Boston College
University of Southern California
Washington University at St. Louis
Vanderbilt University
Rice University
Case Western Reserve University
Math Dept., Oklahoma State U
Indiana University
Bank of England (London)
Goldman Sachs (New York)
Lehman Brothers (New York)
Galaxy Securities (Beijing)

Professional Services

- Associate editor, *Journal of Banking and Finance*, 2012–2023
- Associate editor, *Management Science*, 2001–2013
- Associate editor, *Journal of Empirical Finance*, 2005–2012
- Associate editor, *Quarterly Journal of Finance*, 2010–2020
- Associate editor, *J. of International Finance, Markets, Institutions & Money*, 2004–2012
- Chair, FMA Committee of Best Paper Award for Financial Institutions and Markets, 2022
- Chair, FMA Committee of Best Paper Award for Asset Pricing and Investments, 2018

- Track chair of banking theory, Midwest Finance Association, 2020
- Program track chair, Financial Management Association, 2007, 2018
- Program co-chair, China International Conference in Finance, 2013
- Program committee, Western Finance Association, 2004–2023
- Program committee, European Finance Association, 2014–2019
- Program committee, Young Scholar Finance Consortium, 2018, 2020
- Program committee, Financial Intermediation Research Society, 2010–2014
- Program committee, Financial Management Association, 2011
- Academic Committee, Lehman Brothers PhD Fellowship, 2000–2001
- Referee for

  Journal of Finance
  Review of Financial Studies
  Journal of Financial Economics
  Management Science
  Journal of Political Economy
  American Economic Review
  Econometrica
  Journal Financial and Quantitative Analysis
  Journal of Empirical Finance
  Journal of Financial Intermediation
  Journal of Banking and Finance
  Journal of Financial Markets
  Journal of Risk
  Journal of Financial Research
  Journal of Econometrics
  Journal of Business and Economic Statistics
  Journal of Economic Dynamics and Control
  Journal of International Money and Finance
  Journal of Applied Econometrics

Services to Indiana University

- Faculty Coordinator, Southwest Hedge Funds Competition, 2018–2021
- Faculty Advisor, Undergraduate Research and Trading Club, 2017–2021
- Member, Business Outlook Committee of Kelley School of Business, 2020
- Chair, Research Policy Committee of Kelley School of Business, 2016–2019
- Member, Research Policy Committee of Kelley School of Business, 2014–2015
- Member, MBA Policy Committee of Kelley School of Business, 2013

Teaching Experience

- *Asset Pricing Theory*, PhD program, F600
  Indiana University, Kelley School of Business, 2015–2021

- *Derivative Securities*, MBA program, F526
  Indiana University, Kelley School of Business, 2012–2020
- *Derivative Securities and Corporate Risk Management*, UG program, F421
  Indiana University, 2012–2021
- *Investment Theory and Practice*, MBA program, FIN397
  University of Texas at Austin, McCombs School of Business, 2005
- *Options Markets*, executive MBA program, B7311
  Columbia University, Graduate School of Business, 2002–2007
- *Options Markets*, MBA program, B8311
  Columbia University, Graduate School of Business, 2001–2008
- *Capital Markets and Investments*, MBA program, B6302
  Columbia University, Graduate School of Business, 1996–1999
- *Econometric Analysis of Finance*, PhD program, B9311
  Columbia University, Graduate School of Business, 1996–1998

Honors and Awards

- Distinguished Teaching Award, Indiana Univ, School of Business, Doctoral Programs, 2023
- Finalist, Harry C. Sauvain Teaching Award, Indiana University, School of Business, 2021
- Best Associate Editor Award, *Quarterly Journal of Finance*, 2020
- Trustees Teaching Award, Indiana University, School of Business, 2020
- Harry C. Sauvain Teaching Award, Indiana University, School of Business, 2017
- Finalist, Harry C. Sauvain Teaching Award, Indiana University, School of Business, 2015
- Trustees Teaching Award, Indiana University, School of Business, 2014
- Associate Editor Service Award, *Management Science*, 2012
- Best Paper Award, The Chinese Finance Association, 2012
- Associate Editor Service Award, *Management Science*, 2011
- Associate Editor Service Award, *Management Science*, 2010
- WFA Best Paper on Investments, American Association of Individual Investors, 1994
- Doctoral Dissertation Fellowship, Alfred P. Sloan Foundation, 1994–1995
- Third Prize in the Academic Competition, Chicago Quantitative Alliance, 1994
- Doctoral Dissertation Fellowship, University of Minnesota, 1994
- Distinguished Teaching Assistant, University of Minnesota, 1991
- Graduate School Fellowship, University of Minnesota, 1990

Education

- Ph.D., Economics, University of Minnesota at Twin Cities, U.S., 1995
- M.A., Economics, University of Minnesota at Twin Cities, U.S., 1993
- M.S., Mathematics, Dalian Institute of Technology, China, 1985
- B.S., Mathematics, Dalian Institute of Technology, China, 1982