

### **Address**

Beijing Institute of Mathematical Sciences and Applications (BIMSA)  
No. 544, Hefangkou Village Huaibei Town, Huairou District, Beijing 101408, China

### **Education**

Ph.D. (2014), M.A. (2012), Economics, Harvard University  
Ph.D. (2010), M.A. (2005), Mathematics, University of Rochester  
M.S., Probability & Statistics (2003), Peking University  
B.A., Economics & B.S., Mathematics (2000), Wuhan University, Highest Distinction

### **Current Appointments**

Visiting Scholar, BIMSA, 02/2025–present  
Director, China Society for Finance & Banking, 2020 to present

### **Past Appointments & Research Experience**

Associate Professor, PBC School of Finance, Tsinghua University, 2021 to 2025  
Assistant Professor, PBC School of Finance, Tsinghua University, 2014 to 2021  
Director, Monetary & Fiscal Policy Research Lab, Hang Lung Center for Real Estate, Tsinghua University, 2016–2024  
Deputy Director, Center for Finance & Development, The National Institute of Financial Research, Tsinghua University, 2018–2024  
XIN Real Estate FinTech Research Center, The National Institute of Financial Research, Tsinghua University, Deputy Director, 2016  
Department of Economics, Harvard University, Visiting Scholar, 02/2018, 01–02/2017, 07–08/2016  
JTL: The Urban Mobility Lab, MIT, Visiting Scholar, 05–06/2016, 01–02/2016, 07–09/2015  
Federal Reserve Bank of Boston, Visiting Scholar, 07–08/2017, 04–05/2015; Research Fellow, 07–11/2014  
National Bureau of Economic Research (NBER), Research Assistant, 2009–2014  
China Economics & Management Academy (CEMA), Central University of Finance & Economics, Visiting Research Fellow, 07/2012  
Faculty of Arts & Sciences, Harvard University, Teaching Fellow, 09/2010–05/2012

### **Teaching Experience**

02/2025–present	BIMSA: graduate minicourse: Time Series Analysis, Instructor
2015–2025	Tsinghua University: Ph.D. courses: Mathematical Methods in Economics, Advanced Econometrics II, Research Topics in Finance, Ph.D. Thesis Workshop; undergraduate course: Analytical Methods in Finance (Massive Open Online Course [MOOC]); Instructor
2010–2012	Harvard University: undergraduate courses: Introduction to Econometrics (Econ 1123), Macroeconomic Policy in the Global Economy (Econ 1435), Quantitative Methods in Economics (Econ 1126); Teaching Fellow
2004–2008	University of Rochester: undergraduate courses: Calculus II/III (Math 142/143), Calculus IA/IIA (Math 161/ 162, accelerated sequence), Linear Algebra with Differential Equations (Math 165), Linear Algebra (Math 235), Honors Calculus

	I/III/IV (Math 171Q/173Q/174Q), Fractals & Computer Graphics (Math 215), Theory of Numbers (Math 230), Point Set Topology (Math 240); Teaching Assistant
12/2009, 06–08/2006	Central University of Finance & Economics: graduate course: Topics in Macroeconomics (minicourse); undergraduate courses: Principles of Mathematical Analysis, Probability Theory; Instructor
2001–2003	Peking University: graduate course: Advanced Theory of Statistics; undergraduate course: Advanced Mathematics; Teaching Assistant

### **Academic Papers (In English)**

- “On Schur Algebras and Derivations of Free Lie Algebras” (with Frederick Cohen, Mohamed Elhamedi, and Minghui Liu)  
*Communications in Algebra*, Vol. 53 (2025), Issue 1, 272–292.
- “Entrepreneurial Risk Shocks and Financial Acceleration Asymmetry in a Two-Country DSGE Model”  
(with Cody Hsiao, Simon Kwok, Xi Wang, and Xin Zheng)  
*China Economic Review*, Vol. 81 (2023), 102006.
- “Language and segregation: evidence from housing markets in the United States” (with T. Dai, S. Jiang, and B. Yang)  
*Applied Economics*, 55 (2023), 1157–1183.
- “Financial Wealth, Investment, and Confidence in a DSGE Model for China” (with Simon Kwok and Xin Zheng)  
*International Review of Economics & Finance*, 79C (2022), 114–134.
- “Monetary Policy, Hot Money and Housing Price Growth across Chinese Cities” (with Xiaoyu Huang and Ji Zhang)  
*Applied Economics*, 53 (2021), 6855–6877.
- “Political Relations and Tourism: Evidence from China” (with Yinxiao Chu and Xiaoyu Huang)  
*Applied Economics*, 53 (2021), 5281–5302.
- “Rare Events and Long-Run Risks” (with Robert J. Barro)  
*Review of Economic Dynamics*, 39 (2021), 1–25 (Lead Article).
- “The Residential Real Estate Market in China: Assessment and Policy Implications” (with Ding Ding, Xiaoyu Huang, and W. Raphael Lam)  
*Annals of Economics and Finance*, Vol. 18, No. 2 (November, 2017), 411–442.
- “On the Size Distribution of Macroeconomic Disasters” (with Robert J. Barro)  
*Econometrica*, Vol. 79, No. 5 (September, 2011), 1567–1589.
- “Dual Stepsize Explicit Numerical Integration Method & Applications” (with D. Yang, Z. Wu, & H. Zou)  
*Proceedings of 2008 IEEE Power Engineering Society General Meeting—Conversion and Delivery of Electrical Energy in the 21st Century*, Pittsburgh, PA, July 2008 (doi: 10.1109/PES.2008.4596126).
- “A Decoupled Dynamical Simulation Method via Modal Partition” (with Dan Yang)  
*Proceedings of 2007 IEEE Power Engineering Society General Meeting*, Tampa, FL, June 2007 (doi: 10.1109/PES.2007.385854).

### **Academic Papers (Non-English)**

- “A Study on the Boundaries of Data Rights Confirmation and Data Governance in China in the Age of Digital Economy” (with Yuxuan Du and Qiulian Shen)  
*Global Regional Studies*, Vol. 2 (2023), 205–220.
- “Comparison Study of the Interior and Exterior Governance Mechanisms that Restrain Listed Companies from Violations” (with Feiyan Zhang and Wentao Zhang)  
*Shanghai Finance*, No. 11 (2022), 64–79.
- “Equity Concentration of Listed Companies and the Issuance Scale of Green Bonds” (with Feiyan Zhang, Chao Yang, and Wentao Zhang)  
*Review of Investment Studies*, Vol. 41, No. 8 (2022), 144–159.
- “A Model for China’s Economic Growth—Analysis Based on Land Finance” (with Wen Zhu)  
Excellent Paper Award from *Journal of Financial Research*, 2022  
*Journal of Financial Research*, No. 4 (2022), 1–17 (Lead Article).
- “Development of Green Finance in China under the Framework of UN Sustainable Development Goals” (with Lei Peng)  
*The Chinese Banker*, No.3 (2020), 101–104.
- “Comparison and Applicability Analysis of Micro-level Systemic Risk Measures: A Study Based on China's Financial System” (with Xiangpeng Chen, Hao Zhou, and Zhengwei Wang)  
*Journal of Financial Research*, No. 5 (2019), 17–36.
- “Research Progress in Rare Disaster Models” (with Huang Xiaoyu)  
*Financial Science*, No. 1 (2019), 42–58.
- “Research Progress in Systemic Risk in Financial Sector” (with Chen Xiangpeng, He Biqing, and Jia Yandong)  
*Financial Science*, No. 1 (2018), 74–93.
- “Empirical Study on Central Banks’ Balance Sheet Policy Based on a FAVAR Model—Evidence from the U.S. and Japan” (with Wan Lipeng and Huang Xiaoyu)  
*Review of Investment Studies*, Vol. 37, No. 2 (2018), 4–23 (Lead Article).
- “On the Functional Orientation and Path Choice of China’s Real Estate Tax Reform” (with Huang Xiaoyu, Jin Chao, and Zheng Siqi)  
*China Real Estate*, Academic Issue, No. 12 (2016), 15–20.

### **Books**

- One Currency, Two Markets: The Offshore Approach to RMB Internationalization* (with Tian Yuan), China Translation & Publishing House (2024).

### **Working Papers**

- “Real(istic) Time-Varying Probability of Consumption Disasters” (with Xiaoyu Huang and Hao Zhou)  
Harvard University OpenScholar Working Paper.
- “The Evolution of Productivity in the Chinese Economy” (with Keyu Jin and Xiaoyu Huang)

“A Dynamic Allocation-Execution Decision Method Based on In-APP Customer Lifetime Value Prediction” (with Yuanzun Zhao and Qian Lin)

“Machine Learning in the Cryptocurrency Market” (with Yuhan Cheng, Kwanting Leung, and Qunzi Zhang)

### **Other Publications**

“Thoughts and Outlook on Digital Finance Regulations in Hong Kong” (with Yuan Tian)  
*Tsinghua Financial Review*, No. 10 (2024), 38–40 (Cover Story).

“The Linkage Relationship between and the Adjustment Strategies for the Offshore RMB Exchange Rate and Interest Rate” (with Yuan Tian)  
*Tsinghua Financial Review*, No. 1 (2024), 58–60.

“The Development Opportunities, Challenges, and Strategic Advices for the Security Firms in China Under the Shocks of ChatGPT” (with Tianlun Zhang)  
*Tsinghua Financial Review*, No. 10 (2023), 89–93.

“The Status Quo, Problems, and Solutions of Commercial Banks Serving ‘Specialized and Special New’ Enterprises” (with Yan Wang)  
*Tsinghua Financial Review*, No. 7 (2023).

“Who will Master My Data? A New Theory on Data Right Confirmation and Governance” (with Qiulian Shen and Yuxuan Du)  
*Tsinghua Business Review*, No. 6 (2023), 42–49.

“The Analysis of the Implementation Path of the Third Distribution from the Perspective of Self-Interest and Altruism” (with Qiulian Shen)  
*Tsinghua Financial Review*, No. 11 (2022), 53–56.

“What Generates Equity Premium: Rare Events or Long-Run Risks?”  
*Tsinghua Financial Review*, No. 4 (2021), 97–98.

“Development Path for International Business of Chinese Securities Firms” (with Yu Yongcheng)  
*Tsinghua Financial Review*, No. 11 (2019), 105–108.

“Five Measures to Alleviate Risk of Local Government Debt” (with Zheng Xiaoyu)  
*Tsinghua Financial Review*, No. 7 (2019), 43–44.

“Construction and Governance of Platform-type Financial Ecosystems” (with Zhang Ran)  
*Tsinghua Financial Review*, No. 5 (2019), 101–104.

“Security and Future of the Internet Finance” (with Jin Chao)  
*Tsinghua Financial Review*, No. 2 (2017), 97–101.

“Practice and Prospect of Blockchain Technology in Finance” (with Jin Chao)  
*Tsinghua Financial Review*, No. 9 (2016), 97–101.

### **Honors, Fellowships, & Grants**

07/2023–12/2025	Principal Investigator for a Subproject, National Social Science Fund of China Project No. 23ZDA028, “Keeping the Economy Running in the Reasonable Interval: Studies on Its Scientific Meaning, Monitoring, Early Warning, and Policy System”
01/2019–12/2020	Co-Principle Investigator, National Natural Science Foundation of China Project No. 71828301, “Study on China’s Economic Growth, Opening-up and Reform in the Context of Globalization”
01/2017–12/2020	Principle Investigator, National Natural Science Foundation of China Project No. 71673166, “Rare Events in Macroeconomy and Financial Markets and Their Impacts: A Study Based on the Case of China”
01/2017–12/2020	Co-Investigator, National Natural Science Foundation of China Project No. 71671004, “A New Option Pricing Model Based on High Frequency Financial Data: Theoretical and Empirical Studies”
07/2016–06/2017	Co-Investigator, China Finance 40 Forum Research Project “Study on China Systemic Risk Assessment Model (PBC-SRAM)”
07/2016–12/2016	Co-Investigator, National Natural Science Foundation of China Project No. 71640001, “Research on Risk Analysis and Prevention in P2P Lending”
01/2016–12/2019	Co-Investigator, National Natural Science Foundation of China Project No. 71573147, “Research on Chinese Financial Literacy”
10/2015–09/2018	Principle Investigator, Tsinghua University Initiative Scientific Research Program No. 20151080450, “Urbanization, Housing Market, and Macroeconomy”
07/2015–06/2016	Co-Investigator, National Social Science Fund of China Project No. 15ZDA029, “Research on Theory, Practice, and Policy of Internet Finance”
2008–2012, 2014	Bradley Fellowship, Harvard University
2008–2013	Harvard University GSAS Fellowship
2003–2008	University of Rochester Teaching Fellowship

### **Professional Activities**

Journal Referee	<i>Econometrica; Quarterly Journal of Economics; Review of Economic Dynamics; Economic Journal; Journal of Applied Econometrics; Journal of Money, Credit and Banking; Journal of Economic Dynamics &amp; Control; Economic Modelling; Applied Economics; Data &amp; Policy; China Finance Review International; Journal of Financial Research; Review of Investment Studies</i>
External Reviewer	Research Grants Council (RGC) of Hong Kong; Cyberspace Administration of China; Social Science Foundation of Beijing City; World Finance Conference; Zhongtai Securities; China EverBright Group; National Natural Science Foundation of China; The People’s Bank of China; Postal Savings Bank of China; Renmin University of China; China Financial Research Conference; Huaxia Bank; China Investment Corporation
Presentations	2023: School of Finance, Renmin University of China, December
*By Coauthors	2023 Australasian Meeting of the Econometric Society, Sydney, August*
	2023 Asian Meeting of the Econometric Society, Beijing, July*
	2022: 2022 Asian Meeting of the Econometric Society, Tokyo, Japan, August*
	2021: 2021 Asian Meeting of the Econometric Society, Miri, Malaysia, June*
	State Administration of Foreign Exchange, Beijing, May
	School of Management and Economics, The Chinese University of Hong Kong, Shenzhen, May*
	2020: NBER-NSF SBIES Conference, Washington University in St. Louis, August*
	School of Economics, Peking University, May
	2019: Joint Tsinghua University-LSE Workshop 2019, Beijing, November*
	The Thirteenth Annual Risk Management Conference, Singapore, July

- 2017: International School of Economics and Management, Capital University of Economics and Business, October  
The 2017 China Meeting of the Econometric Society, Wuhan, June\*  
CEMA, Central University of Finance & Economics, April  
Symposium on Monetary Policy and Related Issues, The School of Finance, Renmin University of China, April\*  
Department of Public Finance, National Chengchi University, Taipei, April  
National School of Development, Peking University, March
- 2016: Symposium on Blockchain & Artificial Intelligence Technology and Their Industrial Application Scenarios, Zhengzhou, October  
Symposium on the Law and Policy on the Application of Blockchain Technology, PBC School of Finance, Tsinghua University, October  
Symposium on World Economic Situations, Ministry of Commerce of the People's Republic of China, June  
National School of Development, Peking University, April  
2016 Symposium on Real Estate Taxes, School of Public Administration & Policy, Renmin University of China, March
- 2015: National School of Development, Peking University, May  
The School of Finance, Renmin University of China, April
- 2014: MIT Department of Economics, April  
Department of Economics & Finance, City University of Hong Kong, January  
School of Economics & Finance, The University of Hong Kong, January  
PBC School of Finance, Tsinghua University, January
- 2013: Harvard Business School, October  
MIT Department of Economics, October  
MIT Sloan School of Management, October
- 2012: Harvard Business School, December  
MIT Sloan School of Management, December  
School of Economics, Peking University, July  
China Economics & Management Academy, Central University of Finance & Economics, July  
School of Economics & Finance, The University of Hong Kong, June
- Invited Participant 2021: Panelist for Colloquium on Social Value of Internet & Social Development (Tencent), Beijing, April  
2019: Panelist for Global Asset Allocation Summit, Beijing, November  
Discussant for 2019 China International Conference in Macroeconomics, Shenzhen, June  
Discussant for 2019 Wuhan University IAS Economics Workshop, June  
2018: China Government Debt Symposium, Beijing, September  
2016: Discussant for Session "International Risk" in the 14th China International Conference in Finance (CICF), Xiamen, July  
2015: Discussant for Sessions "Micro Theory of Financial Institutions & Money" and "Financial Crisis & Monetary Policy" in the 13th China International Conference in Finance (CICF), Shenzhen, July  
2013: Conference in Econometrics: Partial Identification, Weak Identification, & Related Econometric Problems, Cowles Foundation for Research in Economics, Yale University, June  
2005: Mathematical Science Research Institute (MSRI) Summer Program in CR-Geometry: Complex Analysis Meets Real Geometry & Number Theory, MSRI, Berkeley, CA, July

2004: MSRI Summer Program in Hyperplane Arrangements & Applications,  
University of Oregon, August

### **Supervision of PhD Students & PostDoctoral Researchers**

Zhang Ran (2017, PostDoc, China EverBright Group)  
Yu Yongcheng (2017, PostDoc, Zhongtai Securities)  
Zheng Chongyang (2018, PostDoc)  
Xi Yu (2018, PhD, The People's Bank of China)  
Huang Xiaoyu (2018, PhD, School of Banking & Finance, Univ. of International Business & Economics)  
Lei Peng (2018, PostDoc, Postal Savings Bank of China)  
Zhang Yangzi (2018, PostDoc, China EverBright Group)  
Zhou Xiaobo (2018, PostDoc, China EverBright Group)  
Jin Chao (2019, PhD, CCB International)  
Hou Jingya (2019, PhD, JD Digits)  
Li Wenzhe (2019, PhD, The People's Bank of China)  
Harrison Hu (2020, PhD, Autonomy Capital)  
Wan Lipeng (2020, PhD, The People's Bank of China)  
Wen Zhu (2020, PhD, China Banking and Insurance Regulatory Commission)  
Li Miao (2020, PhD, The People's Bank of China)  
Zhang Feiyan (2020, PhD, Beijing University of Chemical Technology)  
Mu Qingyu (2020, PostDoc, Zhongtai Securities)  
Zhao Lexiang (2021, PostDoc, China Investment Corporation)  
Shen QiuLian (2021, PostDoc)  
Zheng Xin (2022, PostDoc, Beijing Institute of Technology)  
Wang Yan (2022, PostDoc, China Investment Corporation)  
Zhang Ercong (2022, PostDoc, State Administration of Foreign Exchange)  
Lan Ying (2022, PostDoc, State Administration of Foreign Exchange)  
Shan Ang (2022, PostDoc, Zhongtai Securities)  
Xu Jie (2022, PostDoc, Bank of Beijing)  
Zhang Tianlun (2022, PostDoc, Zhongtai Securities)  
Xu Rong (2023, PostDoc, Zhongtai Securities)  
Zhang Liwei (2023, PhD, ICBC)  
Tian Yuan (2023, PhD, China Resources Financial Holdings Limited)  
Cheng Yuhan (2023, PhD, Shandong University)  
Su Xiaoman (2023, PostDoc, Hengfeng Bank)

### **Professional Membership**

China Society for Finance & Banking, American Economic Association, American Finance Association,  
Econometric Society, American Mathematical Society, Finance 40 Forum (CF40) - Youth Economist